



University of
**Southern
Queensland**

**ORGANISATIONAL CULTURE AND
ORGANISATIONAL OUTCOMES: AN INQUIRY INTO
VIETNAMESE ORGANISATIONS**

A thesis submitted by

Todd William Rogers

BCom (Finance), MBA

For the award of

Doctor of Business Administration

2023

ABSTRACT

The study of organisational culture and the linkages that it has with both organisational outcomes and national culture is a crucial topic in management literature and a gap in this research was identified in Vietnam. This research took an Explanatory Sequential Mixed Methods approach so that a qualitative stage could verify and explore the quantitative results in the Vietnamese context. The Denison Organizational Culture Survey (DOCS) was used to collect responses from 123 Vietnamese employees to understand the nature of organisational culture in Vietnamese organisations and to predict the relationship with performance using PLS-SEM. The quantitative results informed the development of interview questions for the qualitative stage which then involved interviewing ten Vietnamese employees and categorising their responses using NVivo. The findings showed that traditional Vietnamese cultural characteristics are important in forming the organisational culture in contemporary Vietnamese organisations while contemporary Western management values are also influencing the organisational cultural dynamics. Collectivist and family values were shown to be a key part of Vietnamese organisational culture while more contemporary Western values such as empowerment are seen as increasingly important against a backdrop of continued respect for hierarchies. The strongest drivers of performance are a focus on the mission, and goals and objectives of the organisations supported by the internal focus of teams being well coordinated and aligned in achieving these objectives. An increasing focus on the customer and employee capability development are also important drivers of performance while the nature of organisational culture is internally focussed while demonstrating characteristics of both stability and flexibility. This study contributes to the broader body of research related to organisational culture, organisational performance, and Vietnamese culture and to these areas in the Vietnamese context. It adds to research employing the Denison Model (DM) and contributes to the growing body of mixed methods research in business and in organisational culture and performance studies. The findings add validity to the application of the DM to test these relationships and for the use of PLS-SEM as a tool that demonstrates predictive validity. The research also makes practical contributions to managers in Vietnamese organisations through better understanding organisational culture and the relationships between national culture and performance to allow for more informed managerial decision making in shaping the culture of organisations in Vietnam with an aim of improving performance outcomes.

CERTIFICATION OF THESIS

I Todd William Rogers declare that this Thesis entitled *ORGANISATIONAL CULTURE AND ORGANISATIONAL OUTCOMES: AN INQUIRY INTO VIETNAMESE ORGANISATIONS* is not more than 100,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references, and footnotes. The thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, the thesis is my own work.

Date: 28/11/2023

Endorsed by:

Professor Tapan Sarker

Principal Supervisor

Associate Professor Syed Shams

Secondary Supervisor

Dr Giang Hoang

External Supervisor

Students and supervisors' signatures of endorsement are held by the University.

ACKNOWLEDGEMENTS

I would like to acknowledge all of those who have helped me on this journey. This includes my Primary Supervisor Professor Tapan Sarker and my Secondary Supervisor Associate Professor Syed Shams. I would also like to especially acknowledge the significant assistance offered by my External Supervisor Dr Hoang Giang whose rigor and responsiveness provided me with important direction, motivation, and inspiration. I would also like to acknowledge the contributions of my original Primary Supervisor Professor Jeffrey Soar, my original Secondary Supervisor Associate Professor Khorshed Alam and my original Associate Supervisor Dr Matthew McDonald and their help in the development of my original research proposal. In addition, my acknowledgement also includes the assistance that I had from my research assistant Van Nguyen in helping to translate required documents and to connect with participants as required which were both vital to the data collection process. I would also like to thank all my peers and colleagues in academia who often spent time to discuss my research and the unique journey of a doctoral researcher and who very often provided me with the insights and inspiration that I needed to keep moving ahead.

I wish to acknowledge the University of Southern Queensland (USQ) for providing me with the opportunity to study this program and the Graduate Research School for their support through out my enrolment. I wish to also extend this acknowledgement to the USQ Human Ethics Research office who always provided prompt guidance and support in the different versions of ethics applications submitted and the compliance reports that were submitted. I would also like to acknowledge the support of the Australian Commonwealth Government via the Research Training Program (RTP) that made it possible for me to participate in this program and achieve this degree. In addition, I would like to acknowledge the support of my employer RMIT University Vietnam throughout the duration of my program in the allocation of time for my study as part of my role as an Associate Lecturer.

Finally, I would like to thank my family for their love and support on this long journey, especially my wife Vân who always understood when I needed time to work on my research, and my daughter Lucy, who has been on this journey with me for her entire life and often provided me with the motivation that I needed to keep forging ahead.

TABLE OF CONTENTS

ABSTRACT.....	i
CERTIFICATION OF THESIS.....	ii
ACKNOWLEDGEMENTS.....	iii
TABLE OF CONTENTS.....	iv
LIST OF ABBREVIATIONS.....	xv
GLOSSARY OF TERMS.....	xvii
LIST OF TABLES.....	xviii
LIST OF FIGURES.....	xxii
CHAPTER 1: INTRODUCTION.....	1
1.1 Introduction.....	1
1.2 Background.....	1
1.3 Research problems.....	3
1.4 The research aims.....	4
1.4.1 Research questions.....	5
1.5 Contributions and significance of the research.....	6
1.6 Context of this study.....	7
1.6.1 Scope of the research.....	7
1.7 Overview of the methodology.....	7
1.7.1 Research paradigm.....	7

1.7.2	Research design	7
1.7.3	Research strategy	8
1.7.4	Selection of research participants	8
1.7.5	Quantitative data collection	8
1.7.6	Quantitative data analysis	9
1.7.7	Qualitative data collection	9
1.7.8	Qualitative data analysis	10
1.7.9	Research ethics.....	10
1.8	Structure of the thesis	10
1.8.1	Chapter 1 – Introduction	11
1.8.2	Chapter 2 – Literature Review	11
1.8.3	Chapter 3 – Methodology	11
1.8.4	Chapter 4 – Findings	12
1.8.5	Chapter 5 – Discussion	12
1.9	Summary	12
CHAPTER 2:	LITERATURE REVIEW	13
2.1	Introduction	13
2.1.1	Objective of the chapter	13
2.2	Organisational Culture	14
2.2.1	Importance of Organisational Culture	16
2.2.2	Development of Organisational Culture theory	17

2.2.3	Contemporary Organisational Culture theory	19
2.2.4	Organisational Culture in Vietnam	23
2.2.4.1	Importance of Organisational Culture in Vietnam	24
2.2.4.2	Vietnamese Organisational Culture Studies	24
2.2.5	Conclusion	27
2.3	Vietnamese Culture	27
2.3.1	Importance of Vietnamese Culture	28
2.3.2	Historical influences on Vietnamese Culture	28
2.3.3	Contemporary Vietnamese Culture	30
2.3.4	Conclusion	32
2.4	Organisational Outcomes	33
2.4.1	Importance of Organisational Outcomes	33
2.4.2	Development of Organisational Outcomes measurement	34
2.4.3	Measuring Organisational Outcomes today	35
2.4.4	Measuring Organisational Outcomes and culture.....	36
2.4.5	Conclusion	37
2.5	Development of the Denison Model (DM)	37
2.5.1	Dimensions of the Denison Model	40
2.5.2	Indexes of the Denison Model	42
2.5.3	Application of the Denison Model in research	43
2.5.3.1	Assessing Organisational Culture and relationships	43

2.5.3.2	Assessing Organisational Culture and performance.....	48
2.6	Literature review summary	49
2.7	Hypotheses Development.....	52
2.7.1	Key considerations in hypotheses development	52
2.8	Hypotheses	54
2.8.1	Hypothesis 1: Mission.....	54
2.8.1.1	Hypothesis 1a: Strategic Direction and Intent	55
2.8.1.2	Hypothesis 1b: Goals and Objectives	55
2.8.1.3	Hypothesis 1c: Vision.....	56
2.8.2	Hypothesis 2: Consistency	57
2.8.2.1	Hypothesis 2a: Coordination and Integration	58
2.8.2.2	Hypothesis 2b: Agreement	58
2.8.2.3	Hypothesis 2c: Core Values	59
2.8.3	Hypothesis 3: Involvement	59
2.8.3.1	Hypothesis 3a: Capability Development	60
2.8.3.2	Hypothesis 3b: Team Orientation.....	61
2.8.3.3	Hypothesis 3c: Empowerment.....	62
2.8.4	Hypothesis 4: Adaptability	63
2.8.4.1	Hypothesis 4a: Creating Change	63
2.8.4.2	Hypothesis 4b: Customer Focus	64
2.8.4.3	Hypothesis 4c: Organisational Learning	65

2.9	Summary	66
CHAPTER 3: METHODOLOGY		67
3.1	Introduction	67
3.1.1	Objective of chapter	67
3.2	Research Paradigm	68
3.3	Research Design	70
3.3.1	Research aims and questions	71
3.3.2	Mixed Methods research	71
3.4	Research strategy	73
3.5	Quantitative data collection	75
3.5.1	Measures	75
3.5.2	Piloting	77
3.5.3	Sample design	78
3.5.4	Sampling process	79
3.5.5	Quantitative research participants	81
3.6	Quantitative data analysis	83
3.7	Qualitative data collection	85
3.7.1	Interview question development	86
3.7.2	Interview participants	88
3.7.3	Interview administration	88
3.8	Qualitative data analysis	90

3.9	Discussion	92
3.10	Quality and trustworthiness.....	93
3.10.1	Dependability and reliability.....	93
3.10.2	Construct validity.....	94
3.11	Research ethics process.....	94
3.12	Summary	96
CHAPTER 4:	FINDINGS.....	97
4.1	Introduction	97
4.1.1	Objective of the chapter	97
4.2	Descriptive statistics.....	98
4.2.1	Demographics of respondents.....	99
4.2.2	Organisational Culture Map – Vietnam.....	102
4.2.2.1	Mission	104
4.2.2.2	Consistency.....	107
4.2.2.3	Involvement.....	109
4.2.2.4	Adaptability	112
4.2.2.5	Performance.....	115
4.3	Quantitative testing	117
4.3.1	Reflective model	117
4.3.2	Measurement model evaluation	117
4.3.2.1	Factor Loadings	117

4.3.2.2	Internal Consistency Reliability	121
4.3.2.3	Convergent Validity	123
4.3.2.4	Discriminant Validity	125
4.3.3	Structural model evaluation	133
4.3.3.1	Collinearity Issues	134
4.3.3.2	Structural Model Relationships	135
4.3.3.3	Level of R^2	136
4.3.3.4	Level of f^2	137
4.3.3.5	Level of Q^2	138
4.3.3.6	Effect size Q^2	139
4.4	Indexes Hypotheses testing results.....	140
4.5	Higher Order Model	144
4.5.1	HCM measurement model evaluation	146
4.5.1.1	Assess Collinearity	146
4.5.1.2	Assess the Significance and Relevance of the Formative Indicators	148
4.5.2	HCM Structural model evaluation	150
4.5.3	Dimensions hypotheses testing results.....	150
4.6	Qualitative research question development.....	152
4.7	Qualitative findings	154
4.7.1	Interview question one – Organisational Culture	157
4.7.2	Interview Question two – Strong Organisational Culture.....	162

4.7.2.1	Interview question two themes	162
4.7.3	Interview Question three – Organisational Culture and performance	165
4.7.3.1	Interview main question three – Organisational Culture.....	166
4.7.3.2	Interview question three – Sub questions	170
4.7.3.2.1	Interview sub question 3.1 - Mission.....	173
4.7.3.2.2	Interview sub question 3.2 – Capability Development.....	178
4.7.3.2.3	Interview sub question 3.3 – Customer Focus.....	182
4.7.3.2.4	Interview sub question 3.4 – Goals and Objectives.....	187
4.7.4	Interview question four –Vietnamese Culture and Organisational Culture.....	191
4.7.5	Interview question five – National culture and Organisational Culture	196
4.7.6	Interview question six – Additional information	200
4.8	Summary	200
CHAPTER 5: DISCUSSION AND CONCLUSION		201
5.1	Introduction	201
5.1.1	Objective of the chapter	201
5.2	Research question 1 discussion	202
5.2.1	Dimensions and Indexes in Vietnamese organisations	202
5.3	Research sub-question 1a discussion	209
5.3.1	Secondary Studies Comparisons.....	210
5.3.2	Other study comparisons.....	214
5.4	Research Question 2 discussion	217

5.4.1	Indexes of the Denison Model and performance	217
5.4.1.1	Strategic Direction and Intent and performance	219
5.4.1.2	Goals and Objectives and performance	220
5.4.1.3	Vision and performance.....	222
5.4.1.4	Coordination and Integration and performance	223
5.4.1.5	Agreement and performance	224
5.4.1.6	Core Values and performance	225
5.4.1.7	Capability Development and performance	226
5.4.1.8	Team Orientation and performance	227
5.4.1.9	Empowerment and performance.....	228
5.4.1.10	Creating Change and performance	229
5.4.1.11	Customer Focus and performance	230
5.4.1.12	Organisational Learning and performance	231
5.4.2	Dimensions of the Denison Model and performance	233
5.4.2.1	Mission and performance	234
5.4.2.2	Consistency and performance.....	235
5.4.2.3	Involvement and performance	236
5.4.2.4	Adaptability and performance	237
5.5	Research sub-question 2a discussion	238
5.5.1	Primary studies comparisons	240
5.6	Research question 3 discussion	252

5.7	Conclusions	256
5.8	Summary of the contribution to knowledge.....	258
5.9	Theoretical Implications.....	259
5.10	Practical Implications	262
5.11	Limitations of the research.....	264
5.12	Directions for future research.....	266
5.13	Concluding Remarks	267
	LIST OF REFERENCES	270
	APPENDICES	293
	Appendix A: Lewin’s 3 step change model	293
	Appendix B: Competing Value Sets and Effectiveness Model.....	294
	Appendix C: Theoretical Model of Cultural Traits	295
	Appendix D: Research Worldviews	296
	Appendix E: Ethics approval.....	297
	Appendix F: Questionnaire invitation letter	299
	Appendix G: Participant information sheet – Questionnaire	301
	Appendix H: Interview invitation letter	303
	Appendix I: Interview Protocol Pack	305
	Appendix J: Interview consent form	314
	Appendix K: Demographic questions (Quantitative and qualitative)	315
	Appendix L: Denison Organizational Culture Survey (DOCS) items	318

Appendix M: Questionnaire performance questions.....	322
Appendix N: Raw DOCS data (Cleaned and coded)	323
Appendix O: Raw performance survey questions data (Cleaned and coded)	328

LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
BC	Before Christ
CVF	Competing Values Framework
CSR	Corporate Social Responsibility
CR	Composite Reliability
DM	Denison Model
DOCS	Denison Organizational Culture Survey
ESG	Environmental, Social and Governance
FDI	Foreign Direct Investment
HCMC	Ho Chi Minh City
HCM	Higher Construct Model
HOC	Higher Order Construct
HR	Human Resources
HRM	Human Resource Management
HTMT	Heterotrait-Monotrait
IT	Information Technology
LOC	Lower Order Construct
PLS	Partial Least Squares
PVC	Polyvinyl Chloride
SEM	Structural Equation Modelling
ROA	Return on Assets
ROI	Return on Investment
ROS	Return on Sales

TQM	Total Quality Management
SOE	State Owned Enterprise
TOL	Tolerance
TQM	Total Quality Management
VIF	Variance Inflation Factor
WWII	World War Two

GLOSSARY OF TERMS

Đổi Mới	In English, ‘renovation’ or ‘innovation’ in reference to the Vietnamese economic reform of 1986.
Asian Financial Crisis	In reference to the large financial crisis in East and Southeast Asia in the late 1990s that impacted the world economy.
1954 partition	In reference to the 1954 division of French Indochina into Laos, Cambodia, and Vietnam as it is today divided into The Democratic Republic of Vietnam in the North, and the State of Vietnam in the South.

LIST OF TABLES

Table 2.1 - Key considerations from the literature in hypotheses development.....	53
Table 4.1 - Demographic Survey Responses	99
Table 4.2 - Dimension and Index scores of Vietnamese Organisations from the DOCS	104
Table 4.3 - Mission Dimension scores of Vietnamese Organisations from the DOCS	105
Table 4.4 - Consistency Dimension scores of Vietnamese Organisations from the DOCS ..	108
Table 4.5 - Involvement Dimension scores of Vietnamese Organisations from the DOCS..	110
Table 4.6 - Adaptability Dimension scores of Vietnamese Organisations from the DOCS..	113
Table 4.7 - Organisational Performance scores of Vietnamese Organisations from the questionnaire	116
Table 4.8 - Indicators removed from the model showing loadings less than 0.4	118
Table 4.9 – Retained indicators and their respective loadings.....	119
Table 4.10 - Internal Consistency Reliability results of the Indexes	122
Table 4.11 - Average Variance Extracted (AVE) for each Index	124
Table 4.12 - Cross loadings	125
Table 4.13 - Fornell & Larcker Criteria.....	128
Table 4.14 - Heterotrait-Monotrait (HTMT) Ratio.....	129
Table 4.15 - Indicators removed from the final model	130
Table 4.16 - Collinearity assessment of the structural model VIF	134
Table 4.17 - Results of structural model testing	135
Table 4.18 - Level of R^2	136

Table 4.19 - Suggested R^2 strength	137
Table 4.20 - Effect size (f^2) for each latent variable	138
Table 4.21 - Q^2 Predict Score.....	139
Table 4.22 - Levels of R^2 , f^2 , and Q^2 for the model	140
Table 4.23 - Results of hypothesis testing for Denison Model Indexes	144
Table 4.24 - Variance Inflation Factor (VIF) of the outer model	147
Table 4.25 - Variance Inflation Factor (VIF) of the inner model	148
Table 4.26 - Results of HCM validity.....	149
Table 4.27 - Statistical relationships between dimensions and performance	150
Table 4.28 - Results of hypothesis testing of relationships between dimensions and performance in Vietnamese organisations	151
Table 4.29 - Demographic Information of Interview Respondents	154
Table 4.30 – Descriptions of organisational culture	157
Table 4.31 - Comments categorised according to the Dimensions of the Denison Model....	161
Table 4.32 - Benefits of Strong Organisational Culture	163
Table 4.33 - Organisational culture Indexes associated with performance	167
Table 4.34 - Comments of Organisational performance categorised by Dimension	170
Table 4.35 - Comments related to the themes for Interview Question 3 sub questions	171
Table 4.36 - Comments related to changing organisational cultural values	192
Table 5.1 - Comparative rankings of the quantitative and qualitative findings according to the Indexes of the Denison Model	205

Table 5.2 – Comparative rankings of the quantitative and qualitative findings according to the Dimensions of the Denison Model	206
Table 5.3 - Vietnamese Organisational Cultural Dimensions compared to other regions.....	210
Table 5.4 - Vietnamese Organisational Cultural Dimensions compared to India	211
Table 5.5 - Vietnamese Organisational Cultural Dimensions compared to Ecuador	213
Table 5.6 - Organisational Dimension scores according to the Denison Model in other studies	215
Table 5.7 - Composite comparison of results across all similar studies	216
Table 5.8 - Quantitative relationships between Dimensions and performance	233
Table 5.9 - Qualitative comments categorised according to Dimensions of the Denison Model	234
Table 5.10 - Beta Coefficients (β) between Dimensions of the Denison Model and Performance in Russia, USA, and Vietnam	241
Table 5.11 - Beta Coefficients (β) between Indexes of the Denison Model and Performance comparison of Countries	245
Table 5.12 - Beta Coefficients (β) between Dimensions of the Denison Model and Performance comparison of Vietnam and India.....	246
Table 5.13 - Beta Coefficients (β) between Indexes of the Denison Model and Performance comparison of Vietnam and India.....	247
Table 5.14 - Beta Coefficients (β) between Indexes of the Denison Model and Performance comparison of Vietnam and Columbia	249
Table 5.15 - Composite comparison of Beta Coefficients (β) between Dimensions of the Denison Model and Performance across all similar studies	251

Table 5.16 - Composite comparison of Beta Coefficients (β) between Indexes of the Denison Model and Performance across all similar studies.....	251
Table 5.17 - Summary of the contribution of knowledge of this research project	258

LIST OF FIGURES

Figure 2.1 - Schein's Model	20
Figure 2.2 – The Competing Values Framework (CVF)	21
Figure 2.3 - The Denison Model (DM).....	22
Figure 2.4 - Vietnamese scores for Hofstede’s cultural dimensions	30
Figure 2.5 - Vietnamese cultural influences	31
Figure 2.6 - Denison Model (DM) associated with performance indicators	41
Figure 3.1 - Research Paradigms	69
Figure 3.2 - Research Strategy Conceptual Framework	74
Figure 3.3 - Types of Sampling Methods	80
Figure 3.4 - Considerations for use of PLS-SEM or CB-SEM.....	84
Figure 4.1 - Organisational Culture map of Vietnamese Organisations from the DOCS.....	103
Figure 4.2 - Mission Dimension map of Vietnamese Organisations from Indexes of the DOCS	105
Figure 4.3 - Consistency Dimension map of Vietnamese Organisations from the Indexes of the DOCS	107
Figure 4.4 - Involvement Dimension map of Vietnamese Organisations from the Indexes of the DOCS	110
Figure 4.5 - Adaptability Dimension map of Vietnamese Organisations from the Indexes of the DOCS	113
Figure 4.6 - Organisational Performance map of Vietnamese organisations from the questionnaire	116

Figure 4.7 - Structural model	132
Figure 4.8 - Steps in assessing the structural model in SmartPLS 4	133
Figure 4.9 - Representation of a Type II: Reflective Formative model	145
Figure 4.10 - Type II: Reflective Formative model to assess the impact of the Dimensions on performance using two step analysis method.	146
Figure 5.1 - DOCS Index scores in Vietnamese organisations.....	203
Figure 5.2 - Categorisation of comments reflecting organisational culture in Vietnamese organisations according to Indexes of the Denison Model	204
Figure 5.3 - Rankings for quantitative and qualitative results respectively for each Index and Dimension plotted on the Denison Model	208
Figure 5.4 - Comparison of Hofstede's cultural dimensions between India and Vietnam.....	212
Figure 5.5 - Comparison of Hofstede's cultural dimensions between Ecuador and Vietnam	214
Figure 5.6 - Numbers of qualitative comments linking Indexes to performance categorised by Index	218
Figure 5.7 - Cultural comparison between Russia & Vietnam.	242
Figure 5.8 - Cultural comparison between USA & Vietnam.....	243
Figure 5.9 - Cultural comparison between India & Vietnam.....	248
Figure 5.10 - Cultural comparison between Columbia & Vietnam	250

CHAPTER 1: INTRODUCTION

1.1 Introduction

Chapter one discusses the underpinning basis for this research study and provides an overview of this dissertation. Firstly, section 1.2 provides a background to the research which presents the motivation for this research and an overview of organisational culture, organisational outcomes, and Vietnamese culture that underpin this research study. Section 1.3 outlines the research problems with a focus on the gaps in literature in relation to the broader body of research that were identified as the motivation to undertake this research. Section 1.4 then goes on to outline the aims of the research with respect to the gap that has been identified and presents the research questions and sub-questions. Section 1.5 presents a broad overview of the contributions to knowledge that this research provides. This is followed by a discussion of the context of the study in section 1.6 before an overview of the research methodology in section 1.7 that includes a discussion of the research paradigm, the research design, and the research strategy. Section 1.8 outlines the structure of the thesis and a brief overview of each chapter. Finally, a summary of the chapter is presented in section 1.9.

1.2 Background

The title for this dissertation is ‘Organisational Culture and Organisational Outcomes: An Inquiry into Vietnamese Organisations’ which indicates the broad purpose of the research. With roots in anthropology, social psychology, and sociology; research directly related to organisational culture and outcomes is still a relatively recent field of study having largely only emerged in the 1980s (Kummerow & Kirby 2014; Schein 1990). Research by Hofstede (1980) is often considered as pioneering in contemporary studies in business aiming to understand the impact of national cultures on organisational culture. Since around the same time, interest started to grow in understanding different cultures that exist within organisations with works by Pettigrew (1979), Schein (1981), and Peters and Waterman (1984) igniting interest in understanding these organisational dynamics. In understanding the difference in cultures of organisations, researchers’ interest in the relationship between organisational culture and organisational outcomes also began to grow with models of organisational culture

being linked to different areas of performance (Quinn & Rohrbaugh 1981) while Denison (1984) sought to directly link dimensions of organisational culture with indicators of performance to understand the relationships.

Since these pioneering studies of the early 1980s, there has been an explosion in research aimed at better understanding organisational culture across organisations, industries, national cultures, and regional cultures with thousands of studies now having been conducted (Williams 2022). Organisational culture has come to be seen as a key driver of organisational outcomes and studies have sought to assess relationships between a wide range of organisational culture in a multitude of contexts and against ever expanding range of quantitative and qualitative outcome metrics (e.g. Cao 2019; El Emary, Brzozowska & Bubel 2020; Firestone 2020; Hodges 2018; Panda 2022; Snyder 2002).

Vietnam is at a unique stage of economic and social development where since ‘Đổi mới’ (English: Renovation) (Bodewig & Badiani-Magnusson 2014) and a move from a centrally controlled economy to a social market economy, there has been rapid growth in Foreign Direct Investment (FDI) and the internationalisation of Vietnamese organisations (Anwar 2011; Kalra 2015; Steer & Sen 2010). This positions Vietnam in a unique position where there is a clash of traditional and contemporary cultural influences driving changes in the culture of people and its organisations.

Overall, upon exploration of the literature, the number of studies in the field of organisational culture in Vietnam was relatively limited and is only recently beginning to grow largely owing to this economic stage of Vietnam’s development (e.g. Ha, Bui & Tung 2020; Moslehpour et al. 2016; Nguyen et al. 2018; Nguyen et al. 2019; Ralston, Nguyen & Napier 1999; Rowley & Truong 2009). Research has been increasing in recent years however these studies have been focused on specific industries or geographic locations rather than trying to build a broader picture of organisational culture and the links between organisational culture and national culture (e.g. Mai & Nguyen 2015; Nguyen et al. 2018; Tuan 2010). Therefore, research of this nature is timely from both a practical and theoretical standpoint to contribute to the extensive body of research into these topics that have been conducted in many other countries and regions around the world and to guide managers and organisations as Vietnam continues to emerge economically in an increasingly globalised business environment.

With respect to the link between these three overarching areas; Organisational culture, Organisational performance, and Vietnamese culture form the three parent theories that underpin the basis for this thesis. The coming together of these three parent theories is driven by the gaps in knowledge related to the context of this study in Vietnamese organisations.

The gaps in knowledge related to the general understanding of the nature of organisational culture in Vietnamese organisations, the relationship that exists between organisational culture and performance in Vietnamese organisations, and the relationships between national culture and organisational culture in Vietnamese organisations are the motivations for this research study.

1.3 Research problems

There has been extensive research in attempting to understand differences in national cultures and how this can be applied to management, with seminal works by Hofstede (1980) and Trompenaars (1993) focussing on national cultural dimensions. However, there has been comparatively less research aimed at understanding how national culture impacts on organisational culture and outcomes, especially in rapidly developing economies and Vietnam.

Notable research aimed at better understanding the link between organisational culture and organisational outcomes emerged in the early 1980s led by researchers such as Quinn and Rohrbaugh (1981), developing the Competing Values Framework (CVF), and by Denison (1984), developing the Denison Model (DM). The research of Denison has focussed on the relationship between organisational culture and organisational outcomes and in comparing these across cultures (Denison 1984; Denison 1990; Denison, Haaland & Goelzer 2004; Denison & Mishra 1995; Fey & Denison 2003; Gillespie et al. 2008). Such research could provide managers with valuable insights in improving organisational outcomes in Vietnam through understanding the impacts of traditional cultural influences on organisational culture and may provide insights into this relationship in developing economies and/or countries with similar broader cultural similarities.

The recent rapid economic development in Vietnam has created a unique situation where businesses look to emulate Western management philosophies against a backdrop of a complex make-up of traditional Vietnamese values that continue to permeate management and

organisational culture (Nguyen 2016). This situation creates an opportunity to conduct research that can provide a picture of contemporary organisational culture in Vietnamese organisations while then also developing an understanding of the influences on organisational culture in Vietnamese organisations as well as the links between organisational culture and performance.

1.4 The research aims

The primary aim of this study is to develop new knowledge in understanding organisational culture and the relationship to organisational performance in Vietnamese organisations. In addition, this research sets out to understand the impact of traditional Vietnamese values on organisational culture in a rapidly developing socialist market economy and how this potentially impacts on organisational outcomes within Vietnamese organisations. The research will specifically explore organisational culture, Vietnamese culture, and organisational outcomes to develop this knowledge. There are three broad research aims.

Firstly, the research aims to build a picture of the characteristics of organisational culture in Vietnamese organisations. This should provide an understanding of the attributes of organisational culture that are prominent in Vietnamese organisations along with those that are lacking. This will also add to the body of research that has developed pictures of organisational culture in different national and regional cultural contexts while providing an opportunity for a comparison and discussion of all the results.

Secondly, the research aims to better understand the impact of organisational culture on performance in Vietnamese organisations. The literature review focuses on the three parent theories to better understand organisational culture, organisational performance, and Vietnamese culture. This allows for hypotheses to be developed into the relationships between traits of organisational culture in Vietnamese organisations and organisational performance in Vietnamese organisations. By establishing the current organisational cultural traits within Vietnamese organisations according to the DM (Denison & Mishra 1995), relationships with performance are also able to be tested. This can be achieved through surveying employees across a cross section of Vietnamese organisations and testing the hypotheses using quantitative analysis to predict the relationships between dimensions and sub-dimensions of organisational culture and performance. The results of these analyses also enable for a

comparison of the relationships between attributes of organisational culture and performance in Vietnamese organisations to organisations in other cultural contexts.

Thirdly, the study seeks to better understand the influence of Vietnamese culture on organisational culture in Vietnam. An understanding of Vietnamese cultural characteristics is explored in detail in the literature review while the relationships to specific cultural dimensions are discussed in the development of the hypotheses and then quantified via the DM. The influence of Vietnamese culture on organisational culture in Vietnamese organisations is further explored through the qualitative study that seek to better explain the relationship that are explored in the literature review and quantified by the DM. The outcome of this part of the research enables a more informed approach to organisational cultural development aimed at improving performance in Vietnamese organisations with respect to the underlying national cultural influences.

This research will provide an important guide for Vietnamese managers in understanding the relative importance of organisational culture in impacting organisational outcomes. The research attempts to look forward as to identify how organisations can develop the organisational culture within Vietnamese organisations in a way that can maximise organisational performance while considering the unique and diverse make-up of the workforce within the organisations operating in Vietnam. This contributes to guiding industry best practice and the integration into processes and policies driving organisational management and governance.

1.4.1 Research questions

The research questions are directly related to the three main research aims previously discussed and seek to understand the impact of Vietnamese culture upon organisational culture and to quantify and explore the outcomes of these relationships to guide organisational cultural development. The sub-questions are designed to add to the broader body of literature that has been conducted in other cultural contexts that is directly related to the objectives of this research. The three research questions and respective sub-questions are presented below:

1. What is the nature of organisational culture in Vietnamese organisations?

1a. How do the organisational cultural dimensions of Vietnamese organisations compare to those in other cultures?

2. To what extent do organisational culture and its subdimensions influence organisational performance in the Vietnamese context?

2a. How do the effects of organisational culture on organisational performance in Vietnam compare to those effects in other cultures?

3. What role does Vietnamese national culture play in influencing organisational culture in Vietnamese organisations?

1.5 Contributions and significance of the research

This research has valuable implications for both theory and practice. Contributions of this research to theory include the advancement of research into organisational culture and the relationships with national culture and performance in general and in the specific Vietnamese context. This research also adds to and advances the application of the DM in research and provide new insight into validating the use of PLS-SEM predictive modelling as well as the application of Explanatory Sequential Mixed Methods research in organisational culture. Contributions to practice are especially valuable in Vietnam by providing insight to managers in Vietnamese organisations that can guide the development of organisational culture with an understanding of the relationships to national culture and desired performance outcomes.

The Explanatory Sequential Mixed Method approach is appropriate for these research aims and questions given that the quantitative data will provide a picture of organisational culture in Vietnamese organisations while the qualitative data will then provide detail to explain and verify these findings via triangulation (Creswell 2014; Denscombe 2010). In addition, the second qualitative stage will serve to specifically address research question three in understanding the links between national culture and organisational culture more broadly and in the specific Vietnamese context.

1.6 Context of this study

The context of this study is the assessment of organisational culture in Vietnamese organisations and exploring the relationships between national culture and organisational performance.

1.6.1 Scope of the research

The scope for this research project is broad in developing an overall picture of organisational culture in Vietnamese organisations and understanding the influence of Vietnamese culture on organisational culture and of organisational culture on organisational outcomes. This research was open to participants who were employed in any organisation in Vietnam.

1.7 Overview of the methodology

The methodology in this study is driven by the nature of the research problem and the worldview of the primary researcher.

1.7.1 Research paradigm

The realism (pragmatic) paradigm was chosen for this study in line with the world view of the principal researcher and the nature of the research. This paradigm aligns with the belief that reality is “real” but imperfectly apprehensible with findings that are probably true (Parry & Healy 2000). An Explanatory Sequential Mixed Methods methodology was chosen to also align with this paradigm which has the flexibility incorporate qualitative and quantitative methods to present the findings in the context of the research that are probably true (Parry & Healy 2000). The research paradigm is discussed in detail in section 3.2 and its suitability justified with consideration to the other research paradigms.

1.7.2 Research design

The purpose of choosing an Explanatory Sequential Mixed Methods design is in accommodating the fact that this is one of the first times that such research has been done in Vietnam or that the survey tool has been translated into Vietnamese. Therefore, the outcomes of the quantitative stage could be unexpected, and the qualitative stage provides an opportunity

to further clarify and understand the findings. In addition, the constraints of data collection with consideration to the population for the study related to the sample may also present results that are better understood with the additional qualitative stage. The research design for this study is discussed in full in section 3.3 of this thesis.

1.7.3 Research strategy

The Explanatory Sequential Mixed Methods approach to support the realism paradigm was the most suitable research strategy for to address the research questions through surveying and interviewing employees in Vietnamese organisations. The justification and discussion of the research strategy is in section 3.4 of this thesis.

1.7.4 Selection of research participants

Selection of the research participants required two approaches for each stage of the research owing to the mixed methods design and the requirement for a survey tool for the quantitative stage and interviews for the qualitative stage. The sampling frame was established for the quantitative stage as employees in any Vietnamese organisation. From this frame, owing to the constraints in data collection ability for this project, non-probability convenience sampling was employed. There was an aim to recruit at least 120 participants to allow for proper analysis of data (Hair et al. 2017) with the chosen data analysis methodology. For the qualitative stage, it is important in this research design to ensure that the interview participants are drawn from the quantitative stage to validate the findings (Creswell 2014). Therefore, participants in the second stage are employees in Vietnamese organisations who also participated in the first quantitative stage with the addition of two respondents who did not participate in the first stage. There was an aim to recruit ten participants in this stage in line with the rule of thumb for this type of research (Creswell 2014). The selection of participants for this research is discussed in sections 3.5.5 and 3.7.2 of this thesis.

1.7.5 Quantitative data collection

The existing and well-established Denison Organizational Culture Survey (DOCS) was utilised to assess organisational culture while eight demographic questions were also included along with five questions to assess organisational performance. The DOCS questions utilised Likert scaling (1= Strongly disagree to 5 = Strongly agree) while the performance questions utilised

a six-point scale. After translation into Vietnamese, these questions were combined into a single survey using Qualtrics where all questions were presented in Vietnamese and English, and an anonymous link could be used for access. The survey was first piloted and then survey respondents were sought from locations throughout Vietnam through the primary researchers existing network of industry contacts and via LinkedIn. Potential participants were supplied with appropriate information about the research project to allow for informed consent to participate along with an anonymous link to the survey in line with the University of Southern Queensland's human ethics process (University of Southern Queensland 2022). A total of 175 respondents participated in the survey and a total of 123 responses were able to be used in data analysis following the cleaning of the data. A detailed discussion of the quantitative data collection stage is found in section 3.5 of this thesis.

1.7.6 Quantitative data analysis

The quantitative data analysis utilises Partial Least Squares Structural Equation Modelling (PLS-SEM) to assess the relationship between the Dimensions and Indexes of the DM and performance. Bootstrapping (5000 samples) (Hair et al. 2017) is utilised to assess these relationships to test the hypotheses that were developed from the literature review with an aim towards answering the research questions. This process required the construction of two models. Firstly, the relationship between the Indexes and Performance were assessed with appropriate tests of the measurement model and structural model presented. A two-step approach is then employed to use the results from the first model to create Higher Order Constructs (HOCs) to represent the Dimensions of the DM and allowed for testing of the relationships between the Dimensions and Performance. The results from the hypotheses are then presented. A detailed discussion of the quantitative data analysis stage is found in section 3.6 of this thesis.

1.7.7 Qualitative data collection

Owing to the Explanatory Sequential Mixed Methods research design for this study, the qualitative data collection follows the quantitative data collection and analysis (Creswell 2014). The purpose of the qualitative stage of data collection is to build on the results of the quantitative stage (Creswell 2014). Therefore, it was necessary to interview participants from the quantitative stage and ask questions that were related to the findings from the quantitative

stage. In addition, to broaden and verify the results from the first stage, some participants not involved in the first stage were added. The research questions were developed after reviewing the findings of the quantitative stage with an aim to verify and better understand those results (Creswell 2014). A detailed discussion of the qualitative data collection stage is found in section 3.7 of this thesis.

1.7.8 *Qualitative data analysis*

The qualitative data analysis sought to categorise comments and identify themes related to the quantitative data that helped to paint a picture of the respondents' findings that is consistent. NVivo was utilised as a qualitative research tool to look for these themes in the transcripts of the interviews to categorise comments to assist in building this picture. A detailed discussion of the qualitative data collection stage is found in section 3.8 of this thesis.

1.7.9 *Research ethics*

The University of Southern Queensland's human research ethics process (University of Southern Queensland 2022) was followed in conducting research for this study and is discussed in section 3.11. This included generally applicable ethical approaches such as informed consent and anonymity of participants (Bryman 2016; Cozby & Bates 2012; Wiles 2013) as well as issues specific to the Vietnamese context such as ensuring appropriate translations and grading of language to ensure understanding along with sensitivity to unique cultural sensitivities such as power distance relationships and 'face' (Hofstede Insights 2022; Nguyen 2015). Documents related the ethics process in the administration of this research are presented in appendices E to K.

1.8 Structure of the thesis

The thesis is structured with an introduction chapter presented first, followed by an extensive literature review in chapter two, justification, and outline of the research methodology in chapter three, quantitative and qualitative findings in chapter four, and discussions and conclusions in chapter five. A reference list and appendices are provided at the end of the thesis.

1.8.1 Chapter 1 – Introduction

The first chapter provides a background to the motivation and reasoning for commencing this research. The aim of the research is presented along with the justification. Brief overviews of the methodology and data analysis are provided along with an overview of the structure of the thesis.

1.8.2 Chapter 2 – Literature Review

The second chapter presents a detailed literature review that is built around the three parent theories of Organisational Culture; Organisational Outcomes; and Vietnamese Culture. This chapter explores the development of the study of organisational culture with a particular focus on models that have been developed to assess and describe organisational culture that are predominant in contemporary research and practice. The exploration of organisational performance also explores the development of organisational performance measures in organisations with a focus on the link to organisational culture. The exploration of Vietnamese culture looks at the influences of traditional cultural drivers mixed with contemporary cultural drivers to build an understanding of the current culture in Vietnam and how this may relate to changing organisational culture in Vietnamese organisations. The chapter concludes with the development of hypotheses that draw from these parent theories to predict relationships between Dimensions and Indexes of organisational culture and performance in Vietnamese organisations.

1.8.3 Chapter 3 – Methodology

The third chapter provides a detailed description and justification for the research methodology chosen for this research project. The research paradigm of the primary researcher is explored to set the context for the development of the research strategy before presenting the research design. The quantitative and qualitative research methods are then discussed in the context of the Explanatory Sequential Mixed Methods approach for this study. This includes detailed discussions of the data collection and data analysis processes and justification for each for each stage of the research.

1.8.4 Chapter 4 – Findings

The fourth chapter presents the findings of the research. Following the Explanatory Sequential Mixed Methods design, this chapter presents the findings from the quantitative stage of the research first, followed by the presentation of the findings from the qualitative stage of the research. These sections are linked by the development and presentation of the qualitative questions which were developed from the results of the quantitative analysis and the context of the research questions.

1.8.5 Chapter 5 – Discussion

The final chapter presents the discussions of the findings that are presented in chapter four. This chapter links the literature review to the hypotheses' development in the context of the findings. Discussions related to each research question and associated sub-questions with regard to the Dimensions and Indexes of organisational culture and the relationships between national culture and organisational culture are presented which are followed by conclusions. In addition, this chapter presents the key contributions of this research to both theory and practice, the limitations of this research, and the future directions of research as a result of the findings of this research.

1.9 Summary

Chapter one gave an overview to the field of this study and the gaps in literature that provided the motivation to conduct this research. This led to the discussion of the development of the research questions and the subsequent development of a research strategy with consideration of the research problem and the worldview of the primary researcher. Details of the Explanatory Sequential Mixed Methods research strategy chosen for this study were then outlined. This included an overview of the quantitative and qualitative approaches to the data collection and analysis. The chapter concluded with an overview of the structure of the thesis which included a brief overview of each of the chapters presented in this dissertation.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The previous chapter introduced the background of this study and the research problems that were developed into three research questions. An overview of this research project was provided with relation to the research strategy and methodology. This chapter will explore the literature related to the three parent theories that were identified to develop hypotheses that can be tested and provide a strong background with links to the discussions that will conclude the thesis in the final chapter. The objective of the literature review chapter is to provide a solid context for the research in this project and the contribution that it makes to the existing body of research and to Vietnamese organisational development. The chapter will conclude with the development of specific hypotheses that will then be tested as per the methodology outlined in chapter three with an overarching goal to answer the research questions and that have been proposed in chapter one.

2.1.1 *Objective of the chapter*

The literature review highlights the gaps in knowledge as it relates to the research questions. These gaps owe to the developmental stage of Vietnam's economy; the rapid and dynamic changes of policy and investment, and to the quality and breadth of the research conducted in the field, specifically in Vietnam. The transformative change away from more traditional agricultural jobs since 'Đổi mới' (Bodewig & Badiani-Magnusson 2014) has seen a move from dominant Government control to privatisation with rapid growth in Foreign Direct Investment (FDI) and the Internationalisation of Vietnamese companies (Steer & Sen 2010; Anwar 2011; Kalra 2015). This has driven a rapid shift in the knowledge and skills demanded by businesses and will continue to drive further change in demand into the future (Bodewig & Badiani-Magnusson 2014; Salt 2017). This has created an environment where traditional Vietnamese values collide with contemporary Western business values.

Therefore, the chapter examines the three relevant parent theories that were identified in the preliminary stages of research. Section 2.2 discusses organisational culture, section 2.3 discusses Vietnamese culture, and section 2.4 discusses organisational outcomes. In addition,

the chapter then goes on in section 2.5 to discuss and examine the development of the DM and its application in similar research to provide a robust background into the application of the model for this research project and provide a basis of comparison for the findings. The literature review concludes in section 2.8 with the development of hypotheses that can then be tested by the application of the DM to organisations in Vietnam which will then be built upon through the collection of qualitative data. Both stages of data analysis are mixed in the discussions chapter in the context of the topics explored in the literature review.

2.2 Organisational Culture

The discussions and definitions of organisational culture are not universally agreed upon and have formed a great source of debate within the business field even after decades of research (Williams 2022). This is generally attributed to the broader study of organisational behaviour existing in a space occupied by various social sciences including anthropology, social psychology, psychology, and sociology (Robbins et al. 2020; Schein 1990).

From the perspective of social psychology, early researchers did not refer to organisational culture specifically, however, their focus on groups dynamics was the beginnings of understanding organisational behaviour and the eventual discussions of organisational culture (Schein 1990). From an anthropological perspective, Geertz (1973) noted that the acknowledgement of culture superseded the idea of a uniformitarian view of man and that human behaviour cannot and has not ever existed in the absence of the customs of places. This notion can be extended to the ‘place’ of work and the idea that organisations would indeed have their own unique customs. In this vein, Bolman and Deal (2017) place culture in the ‘symbolic’ frame of their four-frame model alongside other symbols such as ritual, ceremony, stories, and heroes.

Although there is no universal definition of organisational culture, scholars have attempted to define this concept from different perspectives (Ashkanasy, Broadfoot & Falkus 2000). For instance, Deal and Kennedy (1982, p. 2) described organisational culture as ‘the way we do things around here’. Peters and Waterman (1982, p. 103) described organisational culture as ‘A dominant and coherent set of shared values conveyed by such symbolic means as stories, myths, legends, slogans, anecdotes, and fairy tales’. Schein (1995 p. 222) described

organisational culture as ‘The pattern of basic assumptions that a given group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration’. Smith Yellowley, and McLachlan. (2020, p. 164) described organisational culture as ‘the shared values, norms, and behaviours that guide how employees work within an organisation and act as a cohesive force’.

Underlying these differing definitions, it is generally agreed that organisational culture consists of levels, much in line with Schein’s model that can be divided into artefacts, values, and assumptions (Robbins et al. 2020). Through acknowledgement of these levels and drawing on the commonalities of these various definitions, Robbins et al. (2020 p. 390) describe organisational culture as ‘A system of shared meaning held by members that distinguishes an organisation from other organisation’.

The definition of organisational culture for the purposes of this research is taken from Schein and Schein (2017, p. 6):

‘The accumulated shared learning of that group as it solves its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems’

This definition is appropriate for this study for several reasons. Firstly, Schein and Schein’s (2017) definition brings together the various definitions that acknowledge the levels that are central to Schein’s model of organisational culture (Robbins et al. 2020). In doing so, it provides a more comprehensive definition of organisational culture that integrates aspects of all these definitions. This definition clearly indicates the development of shared values (Deal & Kennedy 1982; Peters & Waterman 1982; Robbins et al. 2020; Smith, Yellowley & McLachlan 2020) while giving insight into how this occurs. Secondly, the definition explicitly includes the statement ‘...solves its problems of external adaptation and internal integration’ (Schein & Schein 2017) which is pertinent to this research owing to the attempt to identify external influences from traditional and contemporary cultural influences while also attempting to understand how influences from traditional and contemporary influences internally drive the achievement of outcomes. Finally, this definition is well aligned to the model that will be used to assess organisational culture and links to performance in Vietnamese organisations in this study as it divides internal and external drivers of organisational culture into Dimensions and

Indexes that also align with stability or flexibility (Denison & Neale 1999) and can be used to relate to specific cultural traits and influences.

2.2.1 Importance of Organisational Culture

Despite any debate or difficulty as to defining organisational culture, the importance of organisational culture in business is widely agreed upon and thousands of studies have now been conducted (Hartnell, Ou & Kinicki 2011; Williams 2022). Highlighting the importance of organisational culture, Peter Drucker is often credited with the quote ‘culture eats strategy for breakfast’ to emphasise the point that without getting the organisational culture right, other aspects of business such as strategy and finance have little chance of success (Bolman & Deal 2017; Robbins et al. 2020). This sentiment has been echoed by contemporary leaders of numerous organisations including Lou Gerstner from IBM who stated that ‘...culture is not just one aspect of the game – it is the game’; Jim Sinegal from Costco who asked rhetorically ‘What else have we got besides stories? It’s what brings meaning to the work we do’; and Howard Shultz from Starbucks who opined that ‘A company can grow big without losing the passion and personality that built it, but only if it’s driven not by profits but by the values and people’ (Bolman & Deal 2017).

Although earlier studies were primarily interested in understanding organisational culture within specific organisations, the emergence of culture types have driven interest in linking organisational culture and organisational effectiveness (Hartnell, Ou & Kinicki 2011). The idea that organisational culture is an important driver of performance in organisations in line with the quote credited to Drucker is reflected in the wide body of research that aims to tie organisational culture to the outcomes of many facets of business. Research linking organisational culture to success across a wide range of the facets of business can be found.

This includes studies that link organisational culture to performance in specific industry types such as government (Grahovac & Pandrc 2018; Prowle, Kalar & Barrow 2016; Zubko & Karkovska 2022), information technology (Criveanu & Ivanescu 2019), supply chain (Alamsjah & Yunus 2022), healthcare (Cleemput, et al. 2020; Jiménez et al. 2020; Kourakos & Kafkia 2019; Ross 2011), family businesses (Nguyen et al. 2014; Sindakis, et al. 2022), aviation (Diacanu & Maxim 2015; Owen 2017), construction (Nukic & Matotek 2014), and hospitality (Nazarian, Atkinson & Foroudi 2017; Pantelescu & Maniu 2015).

It also includes research that links organisational culture to performance in a vast array of business management areas such as strategic planning (Panda 2022), engagement (Hodges 2018; Moran 2019; Sayma, Treharne & Williams 2016; Uhunoma, Lim & Kim 2021), change (El Emary, Brzozowska & Bubel 2020; Omazic, Mihanovic & Sopta 2020), projects (Snyder 2002), risk (Tangsgaard 2021), clusters (Bembenek 2014), brand (de Chernatony 2010), leadership (Firestone 2020; Sackmann 2021), management (Baragan, Ionescu & Roxana 2013; Jurcevic 2022), sustainability (Carro-Suarez, Sarmiento-Paredes & Rosano-Ortega 2017; Negi & Dangwal 2019), Corporate Social Responsibility (Cao 2019), and growth (Zupan & Kaše 2010).

The examples given show organisational culture is important across a diverse range of industries while also being linked to almost all facets of business management. This serves to demonstrate the fundamental idea that organisational culture is key to maximising the performance of organisations and that by understanding and maximising the culture within organisations, performance will be improved.

2.2.2 Development of Organisational Culture theory

Early, pioneering studies including ‘The Division of Labour in Society’ (Durkheim 1893) and studies that focussed on social facilitation by Ringelmann (1913; cited in Moede 1927) and Allport (1924) showed an understanding between the way people worked together and group outcomes. Although these very early studies pre-date the concept of human relations and organisational culture, they show an understanding that the relationships between individuals was understood to be a driver in performance outcomes. Perhaps of greatest note was the emergence of the ‘Humans Relations Movement’ from Mayo’s research and the Hawthorne studies (Porter & Beyerlein 2000). While understanding the dynamics of individuals working in groups and the impact on outcomes, they were not yet discussing the broader concept of organisational culture. While these studies caused a divide between researchers down ideological lines related to proponents of ‘Human Relations’ and those of ‘Industrial Sociology’ (Muldoon 2018b), it is clear today that regardless, these studies form a foundation of the study of organisational culture as we know it today.

The changing culture within a factory (Jaques 1951) was the first research to discuss the concept of organisational culture explicitly. This research was interested in looking beyond the

theoretical underpinnings that had been the basis for the strong development of scientific management concepts in the previous half century and wanted to understand the reality of how social systems impacted on the application of these principles (Jaques 1951). Relative to the post WWII era of booming full employment, this research suddenly brought the influence of these social interactions into new light (Jaques 1951). Although this was a pioneering study into organisational culture, Jaques (1951) was looking for ‘concepts of measure’ in the same way that dimensions would later be used in models such as the Competing Values Framework (Cameron & Quinn 2011) and the DM. These later models would eventually be considered the predominant models of the late 20th and early 21st century studies of organisational culture.

Within the field of social psychology, groundbreaking research into group dynamics was also being conducted around this time by pioneering researcher Kurt Lewin (Lewin 1947; Ramage & Shipp 2009). Following the work of earlier researchers such as Durkheim, Ringelmann, Alport, Mayo, and Jaques; Lewin’s research was conducted with an understanding that group dynamics shape organisational outcomes and that these could be ‘changed’ to align with desired outcomes as demonstrated by ‘Lewin’s Change Management Model’ (Appendix A) through a process of ‘unfreezing’, ‘changing’, and then ‘refreezing’ behaviours (Schein 1996). Lewin’s change model has been considered one of the most important models for organisational development (Levasseur 2001) and is still often applied and discussed in research in this field today (Crosby 2020; Cummings, Bridgman & Brown 2016; Hussain et al. 2018; Rothwell, Imroz & Bakhshandeh 2021). Although the focus of Lewin’s research was on change management, the research was essentially referring to organisational culture when discussing group dynamics.

Despite this early research into group dynamics, it was not until the 1970s and 1980s and the influences that were being seen on outcomes in organisations that the concept of organisational culture began to emerge (Linnenluecke & Griffiths 2010). At this time managers began to develop an understanding that organisational culture could improve various dimensions of organisations such as turnover and employee satisfaction by seeing it as something that could be purposefully developed in a way that could influence organisational outcomes (Luoma-aho & Canel 2018).

2.2.3 Contemporary Organisational Culture theory

The importance of organisational culture to managers came to prominence in the late 1970s and early 1980s which gave way to a greater interest into research in this field with an aim to understanding its impact upon organisational outcomes (Coffey 2010; Kotter & Heskett 1992). This interest was driven by a group of universities and consulting firms who started to push the importance of organisational culture in relation to performance owing to increased competition and performance of Japanese organisations (Kotter & Heskett 1992). Prior to this, organisational culture was considered from the perspective of social anthropology (Coffey 2010; Hartnell, Ou & Kinicki 2011). This newfound desire to understand and exemplify the importance of organisational culture was largely popularised in the early 1980s by seminal publications such as Peters and Waterman's 'In Search of Excellence' and Deal and Kennedy's 'Corporate Cultures' (Kotter & Heskett 1992). Kotter and Heskett (1992) conducted research in the late 1980s and early 1990s to determine a definitive relationship between organisational culture and performance and found that it had significant impact of long-term performance, would be more important in the future, poor organisational culture is not rare, and that performance can be enhanced through organisational cultural change. Around the same time, research emerging in the 1990s was quite critical of prior research as being observational as opposed to attempting to determine objective measures of how good or bad organisational culture impacted organisational outcomes (Denison 1990).

During this time, researchers became interested in the different types of cultures that existed within organisations and the relationships that these differing organisational types have with other dimensions of the organisation such as the structure, responsiveness, turnover, productivity, etc. These interactions with these organisational dimensions helped to form what have become the basis for understanding organisational culture such as the Schein's Model of Organisational Culture (Schein 1981), the Competing Values Framework (CVF) (Cameron & Quinn 2011) and the Denison Model (DM) (Denison 1990).

Schein's model (Figure 2.1) built three layers of levels of culture and interaction that were divided into Artefacts and Creations, Values, and Basic Assumptions and demonstrated the interactions between these levels while also dividing them between being observable or not (Schein 1981).

1. Artefacts
<ul style="list-style-type: none"> • Visible and feelable structures and processes • Observed behaviour <p>Hard to decipher</p>
2. Espoused Beliefs and Values
<ul style="list-style-type: none"> • Ideals, goals, values, aspirations • Ideologies • Rationalisations <p>May or may not be congruent with behaviour and other artifacts</p>
3. Basic Underlying Assumptions
<ul style="list-style-type: none"> • Unconscious, taken-for-granted beliefs and values <p>Determine behaviour, perception, thought, and feeling</p>

Figure 2.1 - Schein's Model

(Source: Adapted from Schein & Schein 2017, p. 18)

The CVF (Figure 2.2) began as a visual summary of research that showed ‘competing value sets and effectiveness models’ (Quinn & Rohrbaugh 1981, p. 136) (Appendix B). This developed into the CVF and today has become a dominant framework for assessing organisational culture (Cameron & Quinn 2011). The CVF divides organisations into four types arranged in dimensions that are more internally or externally focussed and associated with either flexibility or stability (Cameron & Quinn 2011).

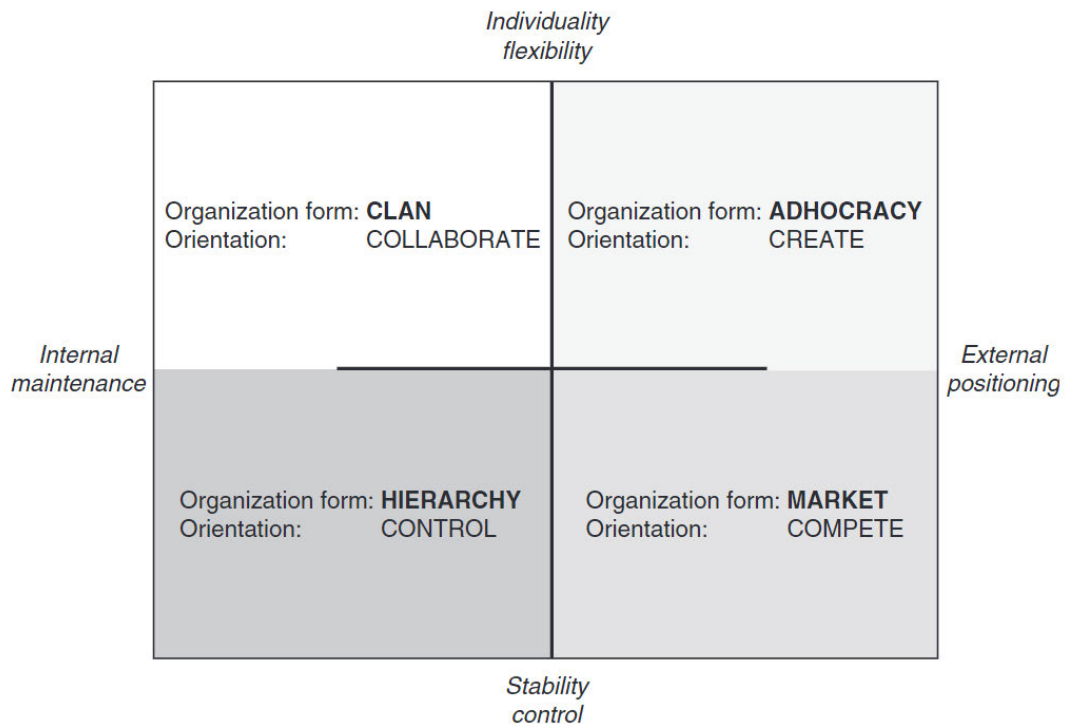


Figure 2.2 – The Competing Values Framework (CVF)

(Source: Cameron et al. 2006 p. 7)

The DM (Figure 2.3) (Denison 1990) was developed building on the CVF and Schein's Model's ideas of values to represent cultural characteristics of an of an organisation related to organisational Dimensions with these characteristics mapped on axes of internal versus external focus and flexibility versus stability (Denison 1990) (Appendix C). However, it is important to note that while the CVF is used to classify different organisational types, the DM has a focus on the balance between the Dimensions (Denison, Nieminen & Kotrba 2014). Therefore, when interpreting the DM, it is important to understand that the most effective organisational cultures should display strong results across all Dimensions (Denison 1990).

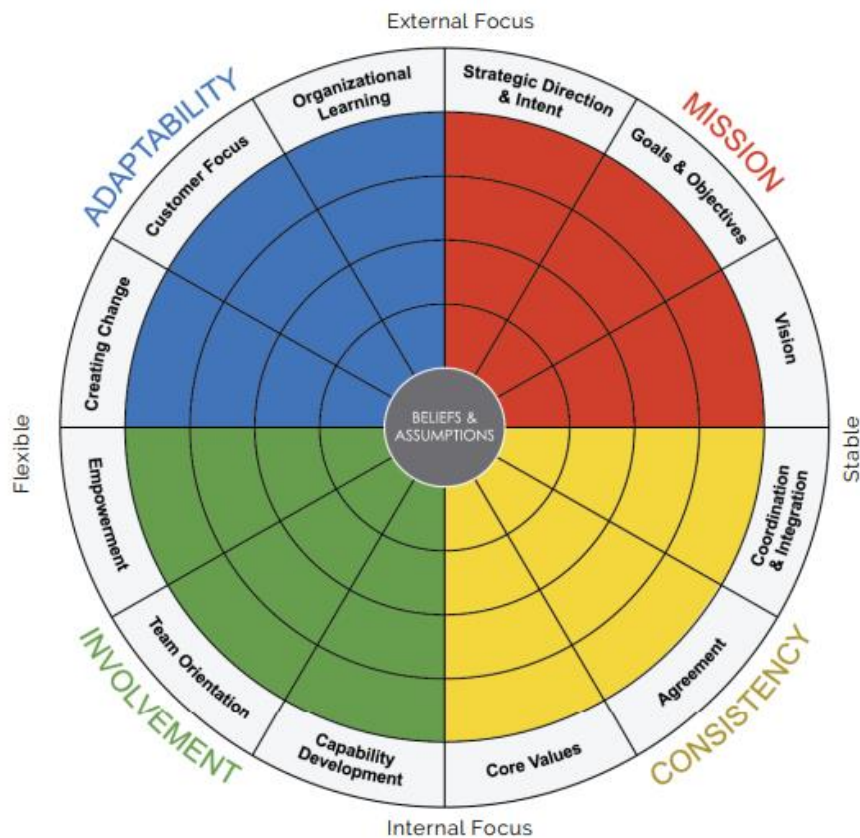


Figure 2.3 - The Denison Model (DM)

(Source: Denison Consulting 2021)

The previous section showed that more contemporary studies of organisational culture have sought to develop models that categorise different aspects and types of organisational culture. Three of the most popular and influential of these models are Shein's model, the CVF, and the DM. These different models show that while organisational culture is important to understand and that it can be moulded to influence organisational performance, there is not a one size fits all model for all organisations. Organisations exist in a multitude of types across a multitude of industries and cultures. Each organisation is unique, and the organisational culture needs to meet the needs of the organisation with consideration to an extensive variety of factors.

The DM was chosen as the organisational culture assessment tool for this research for several reasons. Firstly, the DM and the DOCS were developed for over twenty years in the business environment rather than the academic environment with a specific goal of practical application

in real world businesses (Denison & Neale 1999). As such, it has been designed in a way that allows for fast and easy implementation, uses business language, and can be applied across all levels of the organisation (Denison & Neale 1999). Secondly, the design is behaviourally based rather than psychologically based to provide a more robust measure of organisational cultural traits rather than perceptions or feelings of employees (Denison & Neale 1999). Thirdly, as well as the ability to provide a picture of organisational cultural traits, it is also able to connect these directly to organisational performance (Denison & Neale 1999). Fourthly, unlike other popular models such as the CVF, the DM does not aim to classify cultural types – the aim is to instead build a picture of organisational culture according to the scores related to the specific Indexes and Dimensions with the ability to link these directly to performance measures. This is especially important considering the aims of this research to understand the links between national culture and organisational culture and the links between organisational culture and performance in Vietnamese organisations. Furthermore, the DOCS is a well-developed tool that has been administered and verified across dozens of studies in different cultural contexts which provides strong validation of the tool as well as allowing for this research to add to this growing body of extensive literature. This allows for the results of this research to build on the literature that has also the DOCS and for comparison between similar studies. Finally, as this model aligns Dimensions and Indexes with attributes of external or internal focus and stability or flexibility, it allows for robust discussions with how these are related to Vietnamese culture, which is also a key aim of this research. It is also important to consider the knowledge of organisational culture specifically in the Vietnamese context.

2.2.4 *Organisational Culture in Vietnam*

Research into organisational culture in Vietnam is limited in volume and methodology but varied with respect to the relatively recent decentralisation of the Vietnamese economy and the unique traits that this imparts of organisational cultural development in Vietnam. Early studies focussed on comparing and understanding the values and attitudes of managers in Vietnam (Ralston, Nguyen & Napier 1999; Rowley & Truong 2009) while later studies have come to focus more on organisational culture, in line with the developmental stage of Vietnam's economy (Ha, Bui & Tung 2020; Mai & Nguyen 2015; Moslehpour et al. 2016; Nguyen et al. 2018; Nguyen et al. 2019; Tuan 2010). Methodologies of these studies are dominated by a variety quantitative surveys and questionnaires (e.g Ralston, Nguyen & Napier 1999;

Moslehpour et al. 2016; Nguyen et al. 2018; Ha, Bui & Tung 2020). There is a large gap in the research for qualitative studies, mixed methods studies, and the use of a well-established quantitative measurement tool addressing organisational culture and performance specifically. In addition, the application of varying methodologies creates great potential for future directions of research that can look more in depth across industries, regions, and organisations.

2.2.4.1 Importance of Organisational Culture in Vietnam

The overview of organisational culture in Vietnam shows the importance of developing a more comprehensive understanding of organisational culture in Vietnam to maximise performance that will drive the economic development and transformation that will help to shift Vietnam from a developing nation to a fully developed nation in the future. This is of particular importance given the Vietnamese economies heavy reliance on manufacturing and the requirement to develop service sectors in the economy to help make this transition (Salt 2017).

2.2.4.2 Vietnamese Organisational Culture Studies

In one of the earliest studies, Ralston, Nguyen, and Napier (1999) looked for comparisons between managers in North and South Vietnam compared to managers in China and the USA. This study focussed on dimensions of individualism versus collectivism and attempted to place Vietnamese managers from the North and the South on a continuum with managers from China and the USA (Ralston, Nguyen & Napier 1999). This study found, unexpectedly, that Northern Vietnamese managers were higher in individualism than Southern Vietnamese managers and hypothesised that this was owing to a greater influence from doing business with more cosmopolitan Chinese managers who also scored higher in individualism (Ralston, Nguyen & Napier 1999). Subsequent research to understand this finding more comprehensively revealed that these lower levels of individualism were directly influenced by re-education in the south following reunification and a reluctance to step out of line with Hanoi authority in the north (Ralston, Nguyen & Napier 1999). At the time, Ralston, Nguyen, and Napier (1999) hypothesised that an ‘Asian Paradox’ may exist where there is a melting pot of old and new values with a move from Confucianism to western values and from collectivism to individualism.

Rowley and Truong (2009) explored the changing nature of management in one of the most comprehensive studies across a range of industries including HRM, financial services, and marketing while also looking at the emergence of female managers in small and medium enterprises. The case studies explored by Rowley and Truong (2009) were aimed at especially understanding Vietnamese management practices in the rapidly growing economy considering the economic liberalisation at the end of the 20th century. Major findings in Rowley and Truong's (2009) research were that development of HR quality would be very important for continued development while the sharing of skills from international firms in marketing would be vital in continuing the transfer of knowledge and skills. Overall, Rowley and Truong (2009) found that continued changes in traditional thinking and ways of doing business would be vital to Vietnam's global competitiveness.

While Ralston, Nguyen, and Napier (1999) and Rowley and Truong (2009) consider the changing culture more explicitly from a management point of view, other studies look more specifically at organisational culture itself.

Studies by Tuan (2010) and Mai and Nguyen (2015) attempt to understand the impact of management practices on organisational culture in the plastics manufacturing and tourism industries, respectively. Tuan (2010) sought to understand the impact of organisational cultures on organisational performance using the CVF model and more subjective measures of performance. Tuan (2010) found that transactional leadership promoted hierarchy and clan culture while transformational leadership promoted adhocracy and market culture. These findings interestingly highlight the juxtaposition between more traditional and contemporary business management practices in Vietnam. Transformational leadership was also found to be more positively associated with integrated performance measurement (Tuan 2010). Mai and Nguyen (2015) looked specifically at the effects of ethical leadership and organisational culture with relation to employee sociability and commitment. Mai and Nguyen (2015) applied the cultural dimensions of the DM and found that a stronger correlation with ethical leadership and the Dimensions of Involvement, Mission, and Adaptability indicated ethical leadership and organisational culture positively impacted organisational commitment. In addition, the study found that recruitment that favoured those that were higher in sociability would more positively impact organisational commitment under ethical leadership and organisational culture (Mai & Nguyen 2015).

More recently, Ha, Bui, and Tung (2020) also explored the relationship between organisational culture and employee commitment in the telecom industry in Vietnam. The research found positive relationships between six dimensions of organisational culture and organisational commitment with innovativeness and teamwork being the most impactful while empowerment was the least (Ha, Bui & Tung 2020). While these studies focussed on organisational culture within specific industries, other research has been conducted to make comparisons against organisational culture in Vietnam. Moslehpour et al. (2016) compared organisational culture differences between Vietnam and Taiwan while another study looked at the differences in organisational culture between industries (hospital) (Nguyen et al. 2018).

Moslehpour et al. (2016) used Trompenaars and Turner's (2012) four main culture types (Family, Eiffel Tower, Guided missile, Incubator) to classify corporate culture while they developed a survey based on the dimensions of the CVF. The study found significant differences between corporate culture in Vietnam and Taiwan in three out of four of the culture types (Moslehpour et al. 2016). Specifically, it was found that Family culture was stronger in Vietnam while Guided missile and Incubator cultures were weaker (Moslehpour 2016). These findings align well with Hofstede's dimensions for Vietnam relating to collectivism and power distance (Hofstede Insights 2022). These findings highlight the importance of understanding corporate culture in Vietnam and raise questions as to the connectedness of organisational outcomes.

Nguyen et al. (2018) also used the CVF to understand organisational culture amongst hospital workers in Central Vietnam. This research showed a mix among the four cultural traits of the CVF while a clear difference was noted between managers and non-managers with the former more market oriented and the latter more clan oriented (Nguyen et al. 2018). Overall, it was shown that clan and hierarchy cultures were the strongest which also aligns well with Hofstede's dimensions of collectivism and power distance for Vietnamese culture (Hofstede Insights 2022). It was suggested that a better shared understanding of future directions of the organisation through enhanced communication could better align stakeholders and manage expectations of future directions for enhanced commitment (Nguyen et al. 2018).

Nguyen et al. (2019) used a modified and adapted version the DOCS and the DM that featured an additional dimension of Well-being and four-point Likert scaling. The survey was used to

assess the relationship between the four Denison Dimensions of organisational culture with the addition of well-being as a fifth dimension and employee innovation in the IT industry in Vietnam. This study found that overall organisational culture has a positive impact on employee innovation however, it found that only the Dimensions of Adaptability, Well-being, and Mission had a significant positive relationship with employee innovation. The Nguyen et al. (2019) study shares commonality with this study in that it used a modified and translated version of the DOCS in Vietnam although it was looking specifically at the IT industry and the relationships between only the Dimensions and employee innovation.

2.2.5 Conclusion

While the number of studies on organisational culture in Vietnam over this period is limited, the results are interesting in the context of understanding the historical and modern influences as drivers of organisational cultural change in Vietnam. As may be expected, these studies share a common theme that is mostly focussed on the cultural dimensions of individualism versus collectivism as Vietnam continues the transition from a centrally planned economy to a social-oriented market economy. This research will contribute to these studies and serve to help identify opportunities and threats to the continued economic development of Vietnam with relation to the effects of organisational culture on organisational performance. This research will also allow the comparison to the earlier research discussed here to confirm or counter themes and conclusions that were identified especially in relation to changing culture. In order to better understand the nature of organisational culture in Vietnamese organisations, an exploration of Vietnamese culture is important.

2.3 Vietnamese Culture

Vietnam has a strong and unique cultural heritage that has developed over thousands of years through the influence of foreign cultures, geography, religions, philosophy, conflict, and politics (Corfield 2008; Dutton, Werner & Whitmore 2012; Murray 2008). While the previous section discussed organisational culture in Vietnam, it is important to explore the unique drivers of the national culture to understand the relationship to the culture within Vietnamese organisations.

2.3.1 Importance of Vietnamese Culture

It was noted in the discussion introducing organisational culture that from an anthropological perspective, customs of places influence human behaviour (Geertz 1973). Therefore, it is important to explore the customs of Vietnam and the Vietnamese people to gain a better understanding of how these customs may influence behaviours within organisations. The unique Vietnamese culture would in turn be expected to impact aspects of organisational culture differently than in other cultural contexts and therefore have varying impacts of organisational outcomes. Therefore, an insight and understanding of these influences will provide important context to understanding and exploring the relationship with organisational culture.

The discussion of Vietnamese culture will first discuss the historical influences behind what is considered today as more traditional Vietnamese culture before moving on to discuss the more modern cultural influences that give rise to contemporary Vietnamese culture as it is today. It is important to explore and discuss these traditional and contemporary aspects of Vietnamese culture to gain an insight into the nature of the often-conflicting values that may be evident in modern Vietnamese organisational culture owing to these influences.

2.3.2 Historical influences on Vietnamese Culture

Historically, artifacts found in Vietnam date back to at least 10,000 BC with cultural influences from the Chinese identifiable from over 1000 years ago while more recently, in the past 300 years, there has been influence from French culture (Corfield 2008). However, throughout this period of historical development there has been influence through a mix of regional cultures which linguists can identify through the fusion of the Mon-Khmer or Thai languages which points to a common ancestry of the Vietnamese and the Muong (Corfield 2008). These older cultural influences draw heavily on Confucianism, Buddhism, and Taoism while the more recent French influence has seen these traditional beliefs infused with elements of European culture and Catholicism (Murray 2008). However, the more recent French cultural influence has also created a divide in cultural values and traits across Vietnam with greater influence in urban areas compared to rural areas, and in the South as opposed to the North, owing to the 1954 partition (Murray 2008).

In addition to broader cultural influences, the development of modern Vietnamese culture has also been influenced by conflict and political ideology. There has been a consistent theme of North and South conflict from within Vietnam since at least the first century AD while throughout more recent history of the last millennia Vietnam has fought off foreign invaders from China, Europe, and the West (Dutton, Werner & Whitmore 2012). These conflicts are heavily rooted in Vietnamese culture and the Vietnamese leaders of the defence are icons and heroes of the Vietnamese people with tales of their triumphs passed through generations and their names adorning city streets across the country along with statues honouring them common in public places. These events, stories, and heroes create an extraordinarily strong nationalistic pride exhibited by the people (Murray 2008).

The political structures and ideologies have also created a complex and unique influence that ranges from generations of family dynasties and Kings through to colonial European government control to the Communist revolution led by the greatest hero of modern Vietnamese culture, Ho Chi Minh (Dutton, Werner & Whitmore 2012). Evidence of these influences abound in architecture, language, literature, philosophy, and cuisine while the people themselves exhibit unique and complex cultural traits as a result.

When attempting to define these traits to give an insight into this complex nature of Vietnamese culture we can look to cultural models to help shed light of how this affects behaviour in its own unique way. Hofstede Insights (2022) (Figure 2.4) show that upon the dimensions developed by Hofstede, the Vietnamese have a relatively higher degree of power distance while having relatively lower levels of masculinity and indulgence with particularly low levels of individualism and uncertainty avoidance.

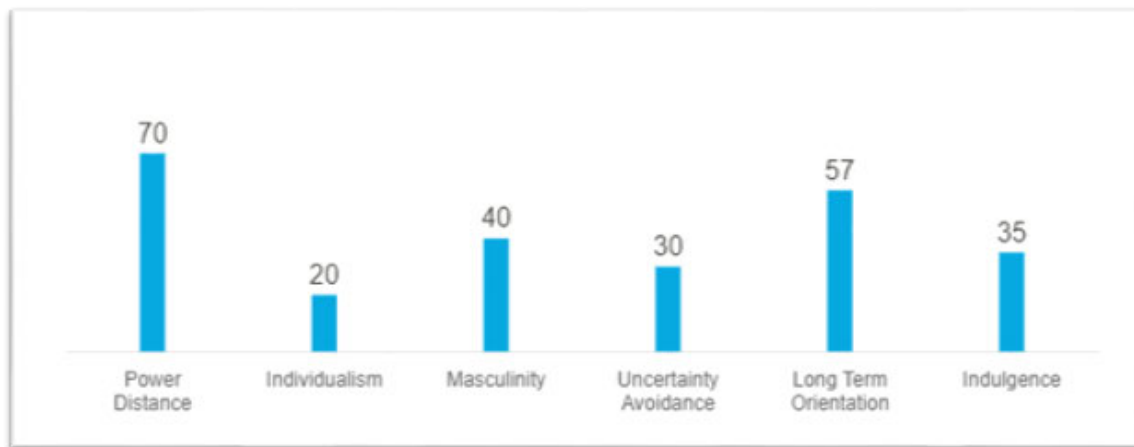


Figure 2.4 - Vietnamese scores for Hofstede's cultural dimensions

(Source: Hofstede Insights 2022)

These views of Vietnamese cultural traits are also similarly noted in literature discussing Vietnamese culture which note strong family values and responsibility to the family; strict family, and community hierarchies; conservative attitudes towards behaviour; and a generally happy and relaxed approach to life (Murray 2008; Nguyen 2023; World Trade Press 2010). This cultural development provides Vietnam with a rich and unique culture that is now being rapidly influenced by more global influences creating a clash of tradition and contemporary outside influences.

2.3.3 Contemporary Vietnamese Culture

While the historical context provides a solid insight into traditional Vietnamese culture, the rapid development of Vietnam is fast challenging these traditional cultural traits and creating a juxtaposition in society that can also be observed in organisations.

In 1986 the Vietnamese government implemented *Đổi mới* (English: Renovation) to move away from a centrally controlled economy (Murray 2008). *Đổi mới* and the move to a Socialist-Oriented Market Economy has created an environment where there is a collision of cultural and political values. Prior to *Đổi mới* in 1986, the economy was almost entirely centralised under strict Government control which included a monopoly for State Owned Enterprises

(SOEs) and Government ownership of the means of production (Collins 2009). The post Đổi mới period can be divided into three distinct stages that include the reformation of SOEs from 1986 to 1994, the pre Asian Financial Crisis until 1997, which saw the tremendous growth on the back of the influx of Foreign Direct Investment (FDI), and the post Asian Financial Crises from 1997 onwards which has seen continued reforms, liberalisations of the market, increased FDI, and sustained strong economic growth to reach lower middle income country status today (Collins 2009; The World Bank 2020).

This has led to a situation where contemporary Vietnamese culture represents an intersection of influences from traditional Vietnamese values, Confucianism and Taoism, Buddhism, Catholicism, Western values, and Socialist values (Figure 2.5) (Kieth 2012; Nguyen 2016).

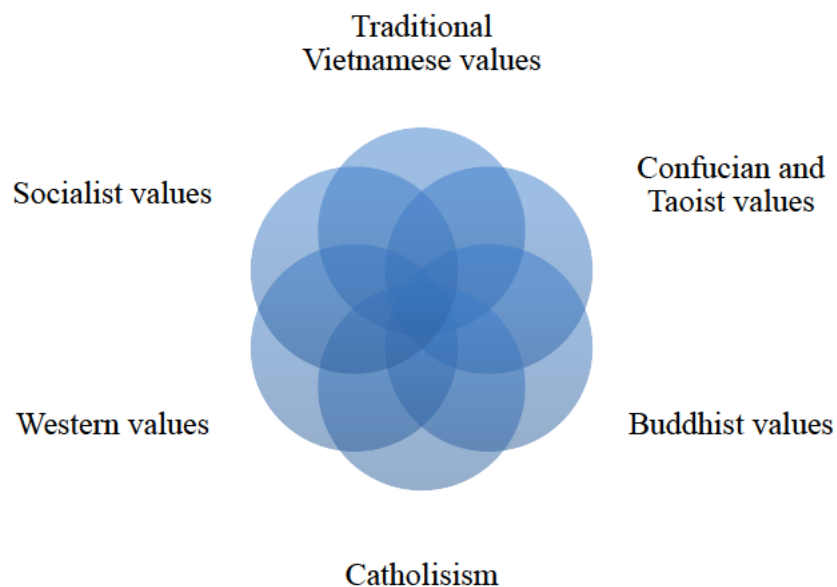


Figure 2.5 - Vietnamese cultural influences

(Source: Adapted from Nguyen 2016, p. 34.)

From an organisational perspective this creates an environment where management is influenced by a unique set of cultural and business drivers. Now operating in a global economy more than ever, this creates challenges in moving from what would be considered a more

traditional view of business management to a more contemporary view. In addition, in organisations that are pushing a drive towards more Westernised contemporary business management, they are still challenged by the cultural paradigms that are engrained in management through culture and education where traditional influences have been found to be more predominant in Vietnamese managers' style with a resistance to more modern approaches (Phan 2008). Dang (2017) notes that this is particularly apparent in gender equality where despite policy decisions aiming to move more in line with Western values, traditional Vietnamese values prevail and undermine these efforts. Traditional culture that draws from Confucianism places a greater emphasis on interpersonal relationships and hierarchy compared to contemporary management ideas (Edwards & Phan 2013). This also includes certain cultural characteristics rooted in traditional influences such as saving 'face' and teacher centred 'rote' learning approaches that persist and continue to heavily influence modern relationships (Nguyen 2015; Vo 2014). Overall, many facets of traditional culture remain relatively unchanged despite the economic liberalisation and global influences with family values still reflecting the traditional collectivist cultural values (Nguyen 2023) and traditional power distance relationships still reflected in community hierarchies (Murray 2008).

It can be argued that the necessity to modernise management from a Western viewpoint has not been present while comparatively low costs of labour in an economy dominated by manufacturing industries has propelled growth, however, as Vietnam develops and this competitive advantage dissipates coinciding with an inevitable move towards a more service-based economy, there may need to be an increased focus on modernising some of the more traditional management practices (Rowley & Truong 2009).

2.3.4 Conclusion

In conclusion, the research reflects the developmental stage of Vietnam very much as it moves from a closed economy with very traditional values to a more open economy with more Western influence on values. This developmental stage creates a unique mix of influences on Vietnamese culture that could affect organisational culture in Vietnam in ways that may be both conflicting and complementary. Where complementary values exist, it may be expected that the outcomes of Vietnamese organisations may be positively impacted. Where conflicting values exist, it may be expected that the influence on the outcomes of Vietnamese organisations

may be negatively affected and that there is still room for development to ensure more positive impacts on performance. With an understanding of cultural drivers of performance, it is important to consider the measurement of organisational outcomes to better understand the relationships that exist.

2.4 Organisational Outcomes

Measuring organisational outcomes is universally undertaken by organisations and can include a wide variety of both objective and subjective measures depending on which outcome is deemed of importance for measurement with a focus on measuring key factors that impact on achieving organisational goals (Jenkins 2012; Singh, Darwish & Potocnik 2016). Organisational outcomes can also be referred to as organisational performance. In the context of this research, it is critical to understand why it is important to be able to measure organisational outcomes and to understand how this can be achieved. It is also vital to understand how this is related to organisational culture and how attempting to find this link can drive potential improvements in organisational outcomes.

2.4.1 Importance of Organisational Outcomes

Early research in social psychology linked group performance to outcomes, however, these scientists were interested in human behaviour rather than the impact on organisations. Similar to the research conducted into organisational culture, researchers and organisations began to seek a much wider array of metrics in the late 20th century to understand more dimensions of performance and how it could be viewed and quantified (Neely 2002). Today, there is an abundance of data available and utilised to assess organisational performance with Richard et al. (2009) identifying 207 different measures of performance used by private sector organisations. A trend toward Corporate Social Responsibility (CSR) began occurring in second half of the 20th Century (Dolan & Barrero Zalles 2021) with a broad shift noted around the beginning of the 21st Century towards triple bottom line reporting and more recently the evolution of this idea to Environmental, Social and Governance (ESG) (Duque-Grisales & Aguilera-Caracuel 2021) measures being advocated by some organisations today.

2.4.2 Development of Organisational Outcomes measurement

From the earliest observations of group facilitation that were discussed earlier, a connection to the outcomes has been observed to understand the dynamics of those groups. In the 1880's, Ringelmann was able to measure the collective efforts of individuals by measuring the amount of weight pulled on a rope to establish the theory of social loafing (Kravitz & Martin 1986) while Triplett (1898) observed the effect of group dynamics in athletes on performance. The Hawthorne Experiments in the 1920s and 1930s led by Elton Mayo famously studied groups reactions to external stimuli and used production output as a measure of this stimuli (Gillespie 1993). However, much of the criticism of earlier work on organisational culture from the perspective of anthropology and social psychology lies in the fact that it was too observational and failed to attach performance measures or quantify the research.

Measuring outcomes in organisational settings came to prominence with Taylor (1911) and his seminal work on 'Scientific Management'. Taylor's research focussed on measurement of time and motion and was subsequently developed by researchers such as the Gilbreth's and entrepreneurs such as Ford (Muldoon 2018a; Muldoon 2018b). These early researchers understood that to improve organisational outcomes, first you had to measure outcomes so that the effect of changes to processes and practices could be demonstrably exhibited.

While Taylorism focussed on improving the performance of individual's tasks and processes, later researchers began to look at how the organisations could be arranged to create greater efficiency. Weber proposed the bureaucracy as a way for organisations to most effectively arrange themselves to improve performance while Fayol developed a set of 'universal' principles that organisations could apply as a General Administrative Theory (Robbins & Coulter 2018). Improved outcomes through application of this theory could be expected to be seen and measured in the rationalisation of human and physical resources which could be measured in terms of time and cost savings (Robbins & Coulter 2018).

Like organisational culture, the focus on organisational outcomes has seen rapid development since the 1980s (Neely 2002). The 1980s saw the emergence in popularity of the quantitative approach and particularly the application of Total Quality Management (TQM) in Japan (Robbins & Coulter 2018). TQM focussed on applying mathematical and statistical measurements to improve outcomes (Robbins & Coulter 2018).

During the 1970s and 1980s, the focus on performance management was linked most closely with the financial outcomes of organisations in line with the management focus of the time being more short term oriented (Halachmi 2005). As the importance of strategy and a more long-term focus began to come into prominence in the later 1980s, focus on how to measure performance began to focus on other measurable outcomes and led to the emergence of tools such as The Balanced Scorecard which evolved to be more strategically focussed (Halachmi 2005).

2.4.3 Measuring Organisational Outcomes today

More recently, researchers have begun to investigate more and more connections between a diverse range of influences on organisational outcomes. These include influences such as gender demography (Frink et al. 2003), individuals' spirituality (Karakas 2010), learning orientation (Baba 2015), manager effects (Hall & Pedace 2016), big data (Rogge, Agasisti & De Witte 2017), and considering the recent large-scale shift towards remote working, flexible work performance (Chatterjee, Chaudhuri & Vrontis 2022).

Today, organisations employ a variety of financial and non-financial performance indicators (Waggoner, Neely & Kennerley 1999). These include feedforward/concurrent/feedback controls, financial controls, information controls, and instruments such as the balanced scorecard and benchmarking (Robbins & Coulter 2018).

Over this time this has created a situation where a wide variety of subjective and objective measures of performance have been used to assess organisational outcomes. This creates a situation where different measures may take on different value for different organisations in different contexts. This adds to the difficulty in applying a universal set of performance indicators and therefore furthermore complicates the understanding of the relationship between organisational culture and organisational outcomes. Historically, emphasis was placed on objective financial measures such as Return of Equity (ROE) or earnings (Singh, Darwish & Potocnik 2016), however, today, with the rise of the role of Corporate Social Responsibility (CSR) in organisations, performance is very often viewed from a triple bottom line perspective that incorporates outcomes in the context of economic, social, and environmental outcomes (Wickert & Risi 2019). Several researchers have sought to evaluate the differences in subjective and objective measures of organisational performance as it is not always possible to

collect similar objective metrics given the variation in the size and reporting standards of organisations and the availability of data in different contexts (Real, Roldán & Leal 2014).

2.4.4 Measuring Organisational Outcomes and culture

As can be seen from the previous discussion, a situation exists where there is argument between a wide variety of both objective and subjective metrics being used to assess organisational performance. In the context of this research, it is important to find appropriate metrics for assessing organisational performance so that the relationship to organisational culture can be assessed.

Looking at the Denison studies, the use of both objective (Denison 1984) and subjective (Denison & Mishra 1995) measures can be noted. In particular, the study by Denison and Mishra (1995) sought to explore different findings in relation to organisational culture and organisational performance across different organisations using both objective and subjective metrics. The study found that objective measures were size dependent on the organisations in the study and suggested that therefore subjective measures of performance were more suitable when comparing a range of different organisations (Denison & Mishra 1995).

Denison, Nieminen, and Kotrba (2014) conducted a meta-analysis of studies linking organisational culture and performance and found many issues in the use of both objective and subjective indicators and the failure to often validate such measures. The use of subjective measures related to sales growth, profitability, quality, employee satisfaction, and overall performance (Denison, Nieminen & Kotrba 2014; Gillespie et al. 2008) were shown to be reliable and valid in assessing the relationship between organisational culture and performance and could overcome issues when comparing a variety of organisation types in a variety of contexts.

Singh, Darwish, and Potocnik (2016) further support a case for subjective measures successfully being used to assess organisational performance. While noting that a portion of literature exists which supports the use of objectives measures of performance, a large proportion of differentials in performance using such measures remains unexplained (Singh, Darwish & Potocnik 2016). Singh, Darwish, and Potocnik (2016) refute the notion that subjective measures are often overestimated and that therefore common method bias can make

subjective measures inaccurate by arguing that it is dependent on the appropriate collection of the data. Further, Singh, Darwish, and Potocnik (2016) also note the advantages of subjective data that were also highlighted by Denison and Mishra (1995) in overcoming disparities between organisations and the objective data available for comparison.

2.4.5 Conclusion

While the desire to measure organisational outcomes came to prominence with Taylorism in the early 20th century, it was not until the latter decades of the century that researchers began to explore the diverse connections between organisational inputs and outcomes. Since this time there has been an emergence of a vast amount of literature related to which inputs affect organisational outcomes as well as development in the way that these outcomes are measured. There has been a distinctive shift away from more objective traditional metrics to include more subjective metrics such as wellbeing as well as a move towards measurement of more sustainable objectives that go beyond bottom-line performance.

There has been significant debate in research regarding the measurement between organisational culture and performance and the use of objective and subjective methods of performance management. Research presents advantages and disadvantages to both types of metrics however, in the context of a wide variety of organisation types, sizes, and cultures it has been demonstrated that subjective measures of performance are valid and present advantages over objective measures. This is particularly evident in the use of the DM which will form the basis of the cultural and performance measures for this research.

2.5 Development of the Denison Model (DM)

The DM was developed over more than twenty years in a professional setting with the explicit aim of being able to identify specific traits of organisational culture and make links between these traits and measures of organisational performance (Denison & Neale 1999). Today, the Denison Organizational Culture Survey (DOCS) and the DM has become both a commercialised tool for organisational culture assessment as well as a popular tool for research into organisational culture in different cultural settings (Denison Consulting 2021; Denison, Nieminen & Kotrba 2014). The research can be broadly divided into the research conducted

by Denison to validate the tool across industries and global contexts and research conducted by others to use the tool as an assessment of organisational culture for a variety of purposes.

The foundation for this research began in 1984 with the publication of 'Bringing Corporate Culture to the Bottom Line' by Daniel Denison in 1984 (Denison 1984). This research led to the later development of the DOCS and the emergence of the DM in seeking to address the relative lack of attention devoted to understanding the effect of culture on the performance of organisations (Denison 1984). Whilst acknowledging the difficulties and debate surrounding the ability to measure corporate culture, Denison sought to use survey techniques and the Likert scaling that he hypothesised could give an insight into organisational culture that is common across organisations and industries, and that could be measured (Denison 1984).

Denison and Mishra (1995) published 'Toward a Theory of Organizational Culture and Effectiveness' which presented a theoretical model of cultural traits that would go on to be developed as the DM. The model presented was based on the testing of four hypotheses related to cultural Dimensions which were believed to be aligned with positive outcomes for the organisation (Denison & Mishra 1995). The testing of these hypotheses showed that these Dimensions could be used to correlate with organisation effectiveness in a quantifiable manner (Denison & Mishra 1995).

The DM is built around four Dimensions of organisational culture: Involvement, Consistency, Adaptability, and Mission (Figure 2.3) (Denison & Mishra 1995). Each Dimension is formed by three Indexes which are reflective of values held by employees within organisations (Denison & Mishra 1995). The Dimensions link Adaptability and Mission to external orientation while linking Involvement and Consistency to internal integration (Denison & Mishra 1995). At the same time, the model links Adaptability and Involvement with degree of change and flexibility and Mission and Consistency with stability and direction (Denison & Mishra 1995). Several case studies of organisations were used to construct and validate this model using an exploratory mixed methods approach that built quantitative measures from qualitative surveys (Creswell 2014; Denison & Mishra 1995).

By 1998 the DM had been fully developed and formed the basis of much subsequent research by Denison and others and became a commercial tool for the assessment of organisational

cultures with an aim to help organisations improve performance by identifying and addressing areas of negative organisational cultural influence (Denison Consulting 2021).

Subsequent studies by Denison sought to validate the model across a broader range of organisations, industries, and cultures (Denison, Haaland & Goelzer 2004; Fey & Denison 2003). This was first done in Russia with a paper titled 'Organizational Culture and Effectiveness: Can American Theory Be Applied in Russia' in 2003 (Fey & Denison 2003) and then more globally with the paper titled 'Corporate Culture and Organizational Effectiveness: Is Asia Different from the Rest of the World' (Denison, Haaland & Goelzer 2004). The Russian study sought to validate the model in the Russian context especially by examining the hypothesis that owing to the transitional nature of the Russian economy at the time that effectiveness would be more reliant flexibility and change and the Dimension of Adaptability (Fey & Denison 2003). The findings of the study supported the researcher's hypothesis that Adaptability would be most important Dimension to understand the overall effectiveness of organisations given the transitional nature of the Russian economy while also supporting the significance of the Dimension of Involvement owing to the collectivist culture (Fey & Denison 2003). In addition, this paper was important in demonstrating that the DM could not only be used as a predictor of organisational cultural traits and their link to organisational outcomes across cultures but that it could also be used as a valid tool to measure these organisational cultural Dimensions across cultures (Fey & Denison 2003).

These findings were then supported with the subsequent aforementioned research that sought to validate the model across an even broader range of organisations, industries, and cultures. This research sought to identify cultural differences within Asian firms compared to those in the rest of the world (Denison, Haaland & Goelzer 2004). With the regions in the study divided into North America, Asia, and Europe, Middle East & Africa (EMEA), the link between organisational culture and effectiveness was found to be strong and consistent despite the known cultural differences of the regions (Denison, Haaland & Goelzer 2004). This study therefore further validated the DM as an effective tool to measure and predict organisational effectiveness across a variety of organisations, industries, and cultures while noting that while the characteristics align, the behaviour contributing to the characteristics was not necessarily the same (Denison, Haaland & Goelzer 2004).

Denison, Nieminen, and Kotrba (2014) also sought to better understand the validity and reliability of a broad range of organisational culture surveys and found that most surveys were not adequate. The DOCS was found to be the most effective and well researched of the nine instruments that were assessed and evidence to support this finding was presented through an in-depth discussion (Denison, Nieminen & Kotrba 2014). While noting that the DOCS has underpinnings related to similar models such as the CVF, the discussion highlights the ways in which the DM is differentiated in by using a profile approach that seeks a balance of the cultural elements of the organisation as being critical to the long-term effectiveness of the organisation (Denison, Nieminen & Kotrba 2014). Denison, Nieminen, and Kotrba (2014) highlight the importance of establishing predictive validity in the development of the DOCS and how this has been demonstrated across industries and cultures in subsequent studies. In addition, Denison, Nieminen, and Kotrba (2014) provide support for the DOCS internal reliability and validity, ability to differentiate culture at an organisational level, and the validity of the specific cultural Index measures and the measures of organisational effectiveness.

2.5.1 Dimensions of the Denison Model

The four Dimensions of the DM are each formed by the values of three Indexes which are each a reflection of five indicators formed by the survey questions (Denison & Neale 1999). Dimensions are either internally or externally focussed while also being either associated with stability or flexibility (Denison & Neale 1999). In addition, these attributes are also associated with specific indicators of performance as shown in figure 2.6 below.

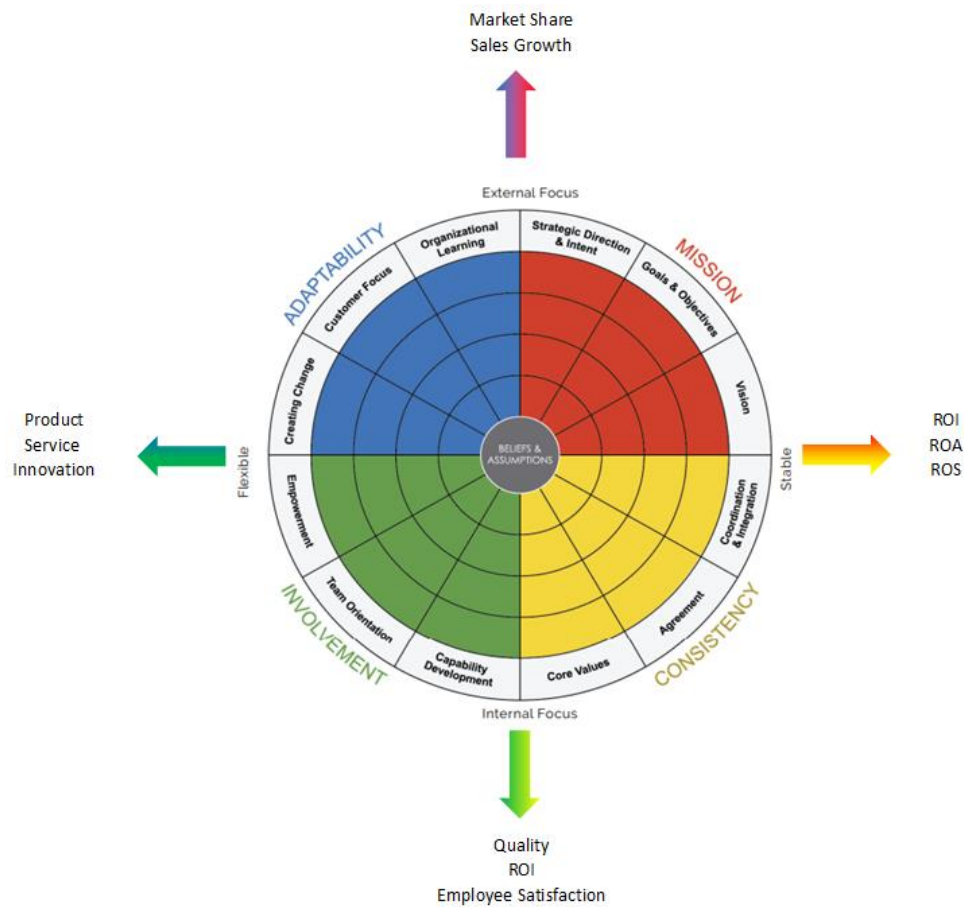


Figure 2.6 - Denison Model (DM) associated with performance indicators

(Source: Reproduced from Denison & Neale 1999, p. 2-5)

The following definitions of the Dimensions of the DM come from the facilitator guide (Denison & Neale 1999, p. 1-14) and will be used in this research to develop the hypotheses with relation to the literature review and then used in the analysis in the discussion of the quantitative and qualitative results.

Involvement	(by employees in decisions and day to day tasks)
Consistency	(of organizational procedures)
Adaptability	(organizational change in response to customers and markets)
Mission	(a sense of direction and performance expectations)

2.5.2 Indexes of the Denison Model

Each Index of the DM reflects five indicators which are measured via the DOCS questions (Denison & Neale 1999). The following definitions of the Indexes of the DM come from the facilitator guide (Denison & Neale 1999, pp. 2-8 – 2-15) and will be used in this research to develop the hypotheses with relation to the literature review and then used in the analysis in the discussion of the quantitative and qualitative results.

Empowerment	Individuals have the authority, initiative, and ability to manage their own work. This creates a sense of ownership and responsibility toward the organization.
Team Orientation	Value is placed on working cooperatively toward common goals for which all employees feel mutually accountable. The organization relies on team effort to get work done.
Capability Development	The organization continually invests in the development of employees' skills in order to stay competitive and meet ongoing business needs.
Coordination and Integration	Different functions and units of the organization are able to work together well to achieve common goals. Organizational boundaries do not interfere with getting work done.
Agreement	The organization is able to reach agreement on critical issues. This includes both the underlying level of agreement and the ability to reconcile differences when they occur.
Core Values	Members of the organization share a set of values which create a sense of identity and a clear set of expectations.
Creating Change	The organization is able to create adaptive ways to meet changing needs. It is able to read the business environment, quickly react to current trends, and anticipate future changes.
Customer Focus	The organization understands and reacts to their customer, and anticipates their future needs. It reflects the degree to which the organization is driven by a concern to satisfy their customer.
Organizational Learning	The organization receives, translates, and interprets signals from the environment into opportunities for encouraging innovation, gaining knowledge and developing capabilities.

Strategic Direction and Intent	Clear strategic intentions convey the organization's purpose and make it clear how everyone can contribute, and “make their mark” in the industry.
Goals and Objectives	A clear set of goals and objectives can be linked to the mission, vision, and strategy, and provide everyone with a clear direction in their work.
Vision	The organization has a shared view of a desired future state. It embodies core values and captures the hearts and minds of the organization's people, while providing guidance and direction.

2.5.3 Application of the Denison Model in research

The validation of the DM in the previously discussed studies has led to the DM being accepted as a useful tool for researchers and organisations to gain insights into organisational culture and the link between culture and performance across the spectrum of organisations, industries, and cultures around the world.

Since 1999 researchers around the world have used the DM as a basis for various research studies for a variety of purposes. These studies have ranged from simply assessing organisational culture within organisations, industries, or regions to the assessment of the relationships between the cultural Dimensions and Indexes to organisational effectiveness and a wide range of other organisational outcomes. To align with this research, these studies can roughly be divided into categories of assessing organisational culture and various relationships with an exogenous variable and assessing organisational culture and the relationship with organisational performance.

2.5.3.1 Assessing Organisational Culture and relationships

Most of the studies applying the DM have sought to assess organisational culture in various contexts and to link the Dimensions and Indexes of organisational culture with a variety of different outcomes other than a broad measure of organisational effectiveness or performance. These contexts include different cultures, regions, industries, or organisational types. These include studies such as customer satisfaction in the USA (Gillespie et al. 2008), the ‘Human Synergistics Organizational Culture Inventory (OCI)’ (Cercel & Marina 2011; Cercel 2012), on CSR in the Automotive Industry in Iran (Daraei & Parsaamal 2012), Knowledge Management in Dubai and Iran (Ahmady, Nikooravesh & Mehrpour 2016; Kia, Danaei &

Oroei 2013), the education sector in Shiraz, Iran (Hosseini 2014), the food industry in Iran (Salajeque & Naderifar 2014), Enterprise Project Culture in China (Zeng et al. 2015), organisational culture in China (Caraballo 2016), Work Team Commitment in Healthcare in Hamedan Province, Iran (Hamidi et al. 2017), hotels in Jogjakarta, Indonesia (Wahyuningsih et al. 2019), Risk Management in Hungary (Abuzarqa 2019), across industries and geographic locations in Serbia (Kirin, Gavric & Kirin 2019), and local Government employees in Ghana and Iran (Abane, Adamtey & Ayim 2022; Mohammadi 2020). Each of these studies and their findings will be briefly discussed in more detail.

Gillespie et al. (2008) compared the relationship between organisational culture and customer satisfaction in the regional home-building markets and automotive dealerships across the USA. The study found that the four Dimensions of organisational culture of the DM had a significant relationship to customer satisfaction although the significance of these effects differed for each of the Dimensions and in the two different industries (Gillespie et al. 2008). Interestingly, it was found that when looking at the contribution of the Indexes towards customer satisfaction in the automotive dealerships that while Coordination and Integration, and Customer Focus related positively to customer satisfaction, Vision and Creating Change were found to have a negative relationship (Gillespie et al. 2008). Overall, this study demonstrated how better understanding of organisational culture can be an important and effective way to better develop organisational culture to provide better customer satisfaction in different industries (Gillespie et al. 2008).

Cercel and Marina (2011) aimed to understand how different national cultures aligned with organisational culture within a multinational organisation in Romania by using the Human Synergistics model to assess the management culture and the DM to assess the broader organisational culture. The research concluded that the cultural traits of Romanian managers and employees (e.g., high power-distance; tolerance for uncertainty) negatively impacted the performance of the organisation and that improvements in these areas of organisational culture could be beneficial to the performance of the organisation (Cercel & Marina 2011).

Cercel (2012) again used both the DM and the Human Synergistics model with an aim to understand the accuracy and usefulness of the two models in practice as two of the most used organisational culture evaluation models. Organisational profiles were developed from the

ground up and assessed against the model's depiction of the organisational culture (Cercel 2012). The organisational profiles were found to align well with the models, and it was proposed that by using these models in combination, organisational culture could be transformed to benefit the performance of the organisation (Cercel 2012).

Daraei and Parsaamal (2012) used the DM to assess the workplace culture within the automobile industry in Iran and to understand the effects of organisational culture on Corporate Social Responsibility (CSR). The study found that the effect of organisational culture was significant and recommended that efforts to develop organisational culture could be effective in producing desired outcomes (Daraei & Parsaamal 2012).

Kia, Danaei, and Oroei (2013) and Ahmady, Nikooravesh, and Mehrpour (2016) both conducted studies to assess the impact of organisational culture on knowledge management in Iran and Dubai respectively. Kia, Danaei, and Oroei (2013) found a positive and meaningful association between all Dimensions of organisational culture and knowledge management in the PVC (Polyvinyl Chloride) industry in Iran. Ahmady, Nikooravesh, and Mehrpour (2016) similarly found a positive correlation between organisational culture and knowledge management. Both studies proposed that understanding and developing organisational culture in a way that promotes communication and builds trust and commitment could positively impact knowledge management within organisations while demonstrating that the DM could be used as an appropriate tool to do so (Ahmady, Nikooravesh & Mehrpour 2016; Kia, Danaei & Oroei 2013).

Hosseini (2014) conducted research using the DM to assess whether organisational culture was at or above ideal levels in the region of Shiraz, Iran, among high school principals. Hosseini (2014) found that the four Dimensions from the DM rated the levels of organisational culture among these principals as greater than ideal. This study was also able to rank these Dimensions of organisational culture and determine that Consistency was rated the highest and while Mission was rated the lowest, and at the same time determine that employment experience or education level were not significantly correlated with a strong organisational culture (Hosseini 2014). Hosseini (2014) was able to make several practical recommendations to facilitate a strong organisational culture as a result of this study.

Salajeqe and Naderifar (2014) used an adapted DOCS questionnaire to investigate organisational culture in the food industry in Iran. This study was a simple assessment of the culture within a single organisation and found no significant difference in internal versus external focus while also finding higher degrees of Involvement and organisational compatibility with lower levels of Consistency and Mission (Salajeqe & Naderifar 2014).

Zeng et al. (2015) sought to build an enterprise project culture evaluation model by optimising the existing DM. Through application of the DM, Zeng, et al. (2015) were able to build a new tool that identified twelve factors that could be scaled and used in a preliminary manner for Chinese enterprise project culture construction. The researchers noted that this tool could be dynamic and could be the basis for further research that would allow for greater refinement of the tool (Zeng et al. 2015).

Caraballo (2016) conducted research for a PhD dissertation that sought to compare organisations in China and the USA via evaluation using the DM. Caraballo (2016) ensured closed matching of the organisations used in terms of founding year, type, number of participants, and the year the DM survey was conducted. It was shown that these organisations were similarly matched on the Dimensions of the model, although there was no link to performance added (Caraballo 2016). This research suggests that organisations with certain similar characteristics develop similar organisational cultures despite slight differences in organisational behaviour which may be influenced by broader national cultural traits (Caraballo 2016). These findings supported the earlier research conducted by Denison, Haaland, and Goelzer (2004).

Hamidi et al. (2017) sought to determine the relationship between organisational culture and organisational commitment using the DM questionnaire and the Meyer and Allen organisational commitment questionnaire. The study was conducted among administrative employees of health care centres and concluded that increased focus on all Dimensions of organisational culture could be correlated with an improvement in organisational commitment and that factors promoting continuance commitment would increase levels of organisational commitment (Hamidi et al. 2017).

Abuzarqa (2019) explored the link between organisational culture, risk management, and organisational performance within the banking industry in Hungary. This study varied

somewhat from the similar studies being discussed here in that it incorporated linkages with risk management into the study and that in addition to the DM it also applied the Matis model (Abuzarqa 2019). Also, unlike other studies, this research did not use primary data collection and instead relied on secondary data and literature review (Abuzarqa 2019). The findings of this research indicated that organisations who were more effective at developing their organisational culture and managing risk could operate more efficiently and effectively (Abuzarqa 2019).

Kirin, Gavric, and Kirin (2019) used the DM to assess organisational culture in Serbia with an aim to provide information that could be useful to policymakers in understanding how to improve business efficiency. The research took a large sample across a variety of enterprises in Serbia and was able to identify those improvements in areas of Involvement and Adaptability in particular could be effective in increasing the competitiveness of organisation (Kirin, Gavric & Kirin 2019).

Wahyuningsih et al. (2019) conducted research using the DM to understand the relationship between organisational culture and enhancing business competitiveness. The research focussed on an international hotel in Yogyakarta with the aim of understanding how to develop specific culture types that could be used to increase competitiveness (Wahyuningsih et al. 2019). The findings indicated that the DM was useful for assessing organisational culture in this setting and that in particular was useful to help organisations align internal factors and place that an emphasis on promoting factors related to Empowerment, Team Orientation, Capability Development, Core Values, and Agreement components of the model would be most beneficial (Wahyuningsih et al. 2019).

Mohammadi (2020) used the DM to assess organisational culture withing District 19 Municipality employees in Iran and to find gaps to improve organisational performance. Mohammadi (2020) found that the strongest Dimension of organisational culture was Mission while Involvement was the weakest and was able to make recommendations that organisational mission and strategic goals need to be well formulated within the municipality to maximise organisational performance. More specifically, Mohammadi (2020) was able to recommend that managers focus on increasing staff awareness of goals, courses to increase employee collaboration, and skill enhancement through personal development.

Abane, Adamtey, and Ayim (2022) used the DM to test the relationship between organisational culture and employee productivity in the local government sector in Ghana. This study found strong and positive culture across each of the Dimensions while the relationships between employee productivity and the Dimensions showed significant positive relationships with Mission and Involvement and a statistically significant negative relationship with Adaptability (Abane, Adamtey & Ayim 2022).

2.5.3.2 Assessing Organisational Culture and performance

In line with the original intent of the Denison studies previously discussed (Denison, Haaland & Goelzer 2004; Denison & Mishra 1995; Fey & Denison 2003), numerous studies have sought to explore the relationship between organisational culture and organisational effectiveness in the context of different industries or, national and geographic cultures. This has included studies conducted in India (Nazir & Lone 2008), Columbia (Avella & Ernesto 2010), Iran (Taheri, Monshizadeh & Kordiani 2015), and Ecuador (Tulcanaza-Prieto, Rodriguez & Artieda 2021). Some of these studies have looked broadly at organisational culture on a regional or national level while others have looked at specific industries in specific locations.

Nazir and Lone (2008) conducted research with the aim to validate the effectiveness of the DM in demonstrating organisational effectiveness in the Indian context. This study supported previous validation studies such as the Russian study conducted by Fey and Denison (2003) and the Denison and Mishra (1995) study (Nazir & Lone 2008). Overall, the study found that measures between culture and effectiveness were strong and that in particular the relationship between Mission and organisational outcomes were particularly significant (Nazir & Lone 2008). As a result, the authors concluded that Mission should be the most important cultural trait for organisations to focus on to improve organisational effectiveness (Nazir & Lone 2008).

Avella and Ernesto (2010) conducted a study on Colombian firms to assess the links between organisational culture and organisational outcomes. Similarly, to the Indian study, Avella and Ernesto (2010) found a significant relationship between Mission and performance measures. However, the Colombian study did not find significant relationships between the other traits and performance measures (Avella & Ernesto 2010).

Taheri, Monshizadeh & Kordiani (2015) looked at a group of different departments within Khorasan Razavi in Iran to assess links between organisational culture and organisational effectiveness. The study showed a positive correlation between organisational culture and organisational effectiveness in all the departments surveyed (Taheri, Monshizadeh & Kordiani 2015). However, there was a variation in findings when looking at different factors of the DM across the different departments with results showing different levels of influence for different factors in different departments (Taheri, Monshizadeh & Kordiani 2015). The findings of this study indicated that sustainable competitive advantage could be obtained through the development of these factors of organisational culture (Taheri, Monshizadeh & Kordiani 2015).

Tulcanaza-Prieto, Rodriguez, and Artieda (2021) surveyed organisations in the Ecuadorian service sector using a self-designed performance assessment questionnaire that incorporated concepts from the DM and Triguero et al. The research found a significant positive correlation between organisational culture and organisational performance and that cultural characteristics that motivate employees could be used to enhance performance (Tulcanaza-Prieto, Rodriguez & Artieda 2021).

These studies vary widely in their size and scope as well as the quality of publications in which they have been published. However, in the context of the studies, they seek to replicate the model developed by Denison by including the same, or in some cases adapted, survey questions to ensure reliability while in studies where they seek to draw links with organisation culture, the similar or the same subjective measures of performance based on previous Denison studies have been used.

2.6 Literature review summary

Denison began research into the connection between organisational culture and organisational outcomes in his 1984 research 'Bringing Corporate Culture to the Bottom Line' (Denison 1984). This large study sought to quantify connections between organisational culture and the outcomes of organisations (Denison 1984). Denison noted that there was great debate over the ability to objectively measure organisational culture and to quantify a connection to organisational outcomes (Denison 1984). However, Denison saw value in attempting to

measure culture and outcomes in search of a connection and this original study showed that there was merit in doing so (Denison 1984). The study, using survey data to gauge organisational culture and financial ratios to gauge outcomes, indicated that a model could be developed for this purpose (Denison 1984). As a result, a model that could measure organisational culture with reliability and validity to make comparisons to organisational outcomes was developed (Denison 1990). This model has since formed the basis on numerous studies measuring organisational outcomes in relation to organisational culture (Denison & Mishra 1995) and been applied to further across a variety of organisations and broader cultural settings.

Denison's research has evolved through several large studies and today comprises a commercial framework for consulting of the Denison Consulting Group (Denison Consulting 2021). Some of the larger studies of note include comparing the supermarket industry in six countries in comparison to Japan (Denison, Haaland & Goelzer 2004) and a study comparing the impact of culture and performance between US and Russian organisations (Fey & Denison 2003). In addition, the DM has also been applied in numerous smaller studies in a variety of industry settings (Hospitals, Government, Education, PVC Industry) in a number of countries (Iran, Latvia, China) (Barati et al. 2009; Kia, Danaie & Oroei 2013; Kokina & Ostrovska 2013; Mozaffari, Soltani & Bozorgzad 2012; Zeng et al. 2015).

The review of the literature for this research showed that there are large gaps in research that attempts to link organisational culture and outcomes in Vietnam. However, in recent years there has been a dramatic increase in research aimed at looking into various aspects of organisational culture and organisational outcomes in Vietnamese organisations.

Nguyen and Teo (2018) examined the impact of the effectiveness of the HR department on the performance of Vietnamese organisations while Nguyen et al. (2019) looked at the relationship between organisational culture and employee innovation. Huynh et al. (2020) studied the effects of organisational culture on human resource management while Nguyen et al. (2023a) studied the impact of the environmental and task uncertainty on the relationship between performance management systems and organisational performance. Nguyen and Ngo (2021) examined the relationship between job performance of individuals in relation to their psychological capital and organisational commitment and found a positive relationship.

Nguyen et al. (2020a) found a positive relationship between organisational mindfulness and the performance of the firm.

This represents a good opportunity for a large study that incorporates the well-established DM in a way that will provide a broad range of valuable insights as proposed by the research questions. This is of importance when considering the rapidly developing economy of Vietnam and the range of established and emerging industries and the complex variety of organisational types influenced by Vietnam's historic economic policies merging with rapid internationalisation and privatisation. This opportunity is exemplified when considering the cultural drivers previously discussed and when considering the changing industry demands that will be driven through modernisation over the coming two decades (Salt 2017). This is predicted to see a shift over the next generation that will begin with urbanisation in the 2020s with a continued shift towards middle class prosperity and coinciding with a continued decline in agriculture, strength in manufacturing and growth in pharmaceuticals and technology (Salt 2017). There is also an additional opportunity, to develop guidelines in business governance and management in Vietnam that can direct businesses towards closing any gaps in organisational culture that are compromising organisational outcomes.

As a result of this literature review, the value of improving the understanding of organisational culture in Vietnam can be seen. The value of understanding organisational culture and its link to performance is well established in the literature and given that Vietnam is a rapidly developing country that is at a cultural crossroads the timing is especially important. From this literature review it is possible to develop hypotheses regarding the connections between the four Dimensions of the DM as well as the twelve Indexes that comprise these Dimensions and the perceptions of organisational performance in Vietnamese organisations. These hypotheses are based largely on the relationship to Vietnamese culture and the transition from more traditional values towards more contemporary values that have influenced business since the opening of the economy. While this transition is occurring, it is still noted in the literature that has been reviewed with relation to organisational culture in Vietnam, that we can still expect to see a reflection of more traditional values.

2.7 Hypotheses Development

To gain an understanding of the how organisational culture affects organisational outcomes in Vietnam, the DOCS and the DM can be utilised. Through the collection of survey data, it will be possible to link the Dimensions and the Indexes of the DM to the performance of organisations to understand how each of these Dimensions and Indexes impacts organisational performance in Vietnam. First, hypotheses need to be developed to predict these relationships.

The literature related to each of these Dimensions and Indexes will be briefly discussed in the context of the literature already reviewed in this chapter and hypotheses will be formed in relation to the Dimensions and the Indexes of the DM and their link to organisational performance. The focus in the development of these hypotheses is especially related to Vietnamese culture and the shifting paradigm from traditional values to more contemporary values as discussed in the previous section on Vietnamese culture and Vietnamese organisational culture.

Three main considerations were the focus of the hypotheses development:

1. The characteristics of the Dimensions and the Indexes of the DM as described in the Denison Survey Facilitator Guide (Denison & Neale 1999);
2. The influences of traditional and contemporary Vietnamese culture on characteristics of each Dimension and Index; and
3. Theory that is related to the characteristics of each Dimension and Index

2.7.1 Key considerations in hypotheses development

The key considerations as to how each of these Indexes and Dimensions more broadly relate to Vietnamese culture as a result of the literature review is summarised in Table 2.1 below.

Table 2.1 - Key considerations from the literature in hypotheses development

Dimension	Index	Attributes	Key Considerations in Vietnam
Mission	Strategic Direction & Intent	External Focus / Stable	Close alignment between traditional and contemporary values. Stability and a focus on external goals would align well with traditional Vietnamese cultural values.
	Goals & Objectives		
	Vision		
Adaptability	Coordination & Integration	Internal Focus / Stable	Close alignment with traditional values that emphasise stability and bureaucracy but could be conflicted with a mixture of contemporary values.
	Agreement		
	Core Values		
Involvement	Capability Development	Internal Focus / Flexible	Strong traditional cultural drivers could be seen to make some of these factors challenging in contemporary work culture in Vietnam.
	Team Orientation		
	Empowerment		
Adaptability	Creating Change	External Focus / Flexible	These are more contemporary oriented values that have some contradiction to traditional Vietnamese cultural values.
	Customer Focus		
	Organisational Learning		

Hypotheses will be developed related to each of the Dimensions and each of the Indexes that comprise these Dimensions like other Denison studies such as Denison, Haaland and Goelzer (2004) and Gillespie et al. (2008) that sought to understand the broader relationships between the Dimensions and outcomes as well as the relationship between each of the Indexes and the outcomes.

2.8 Hypotheses

The hypotheses are presented in the following sections divided into the four Dimensions (numbered 1 to 4) with the three corresponding Indexes of each Dimension presented following the hypothesis for each Dimension (lettered a, b, c).

2.8.1 Hypothesis 1: Mission

The Dimension of Mission is externally focussed while being aligned with stability. This Dimension shares characteristics with the traditional culture of Vietnam and their history of achievement over adversity and against the odds (Murray 2008) while also being a critical contemporary characteristic of performance in organisations today (Taghi Alavi & Karami 2009). The focus on stability for this Dimension aligns with the collectivist, long-term orientation, and hierarchical values seen in Vietnamese culture (Hofstede Insights 2022). These cultural traits are also reflected in the strong responsibility to the family, community hierarchies, and conservative attitudes to behaviour that are observed in Vietnamese society (Murray 2008).

The research by Tuan (2010) also supports these cultural dimensions and observations as transactional leadership would support hierarchy and clan culture which could be considered in alignment with more traditional values while transformational leadership would promote adhocracy and market culture which would align well with the external focus. This is supported by Nguyen et al. (2018) who found that while managers are more market oriented and workers are more clan oriented, these characteristics would align well with the external outcome focus of this Dimension.

While Dang (2017) found that these traditional values prevail despite the contemporary changes in the economic environment and Rowley and Truong (2009) found that modernising

some traditional business practises in certain areas would be required for competitive advantage in some respects, the alignment with the external focus and stability characteristics of this Dimension would not be compromised.

Therefore, good alignment with the dimension of Mission should be expected regardless of the more predominant influences of traditional or contemporary culture. It is expected that the Dimension of Mission positively impacts performance in Vietnamese organisations and is expected to be the Dimension with the strongest relationship to performance in Vietnamese organisations.

H1: Mission has a positive impact on performance in Vietnamese organisations

2.8.1.1 Hypothesis 1a: Strategic Direction and Intent

In the Vietnamese context, Strategic Direction and Intent are closely aligned in terms of traditional and contemporary cultural values. Examples of this in the traditional culture of Vietnam as seen in the continued ability over thousands of years to come together collectively to contribute to the defence and advancement of national interests in the face of adversity with leadership from dynastic Kings (Dutton, Werner & Whitmore 2012; Murray 2008). In more recent history this can be seen in the unification of the people against the odds under the direction of Ho Chi Minh to overcome French and American adversaries (Dutton, Werner & Whitmore 2012). This aligns well with Hofstede's dimensions and the strong collectivist and hierarchical values exhibited (Hofstede Insights 2022) as well as being reflected in the literature (Murray 2008; Nguyen 2023). Therefore, it is deduced that organisations remain clearly aligned on this Index across the transition between generations and that this is one of the stronger Indexes associated with organisational performance in Vietnamese organisations in the DM.

H1a: Strategic Direction and Intent has a positive impact on performance in Vietnamese organisations

2.8.1.2 Hypothesis 1b: Goals and Objectives

In the Vietnamese context, examination of history and the development of Vietnamese culture, adversity is overcome and as discussed previously, this is often a source of national identity

and pride (Murray 2008). This steely determination is driven with a goal and objective focused orientation, and it would be expected to complement traditional and contemporary values.

With clear goals and objectives in an organisation, it would be expected that the cultural dimensions related to collectivism and family values, long term focus, and power distance relationships and community hierarchies (Murray 2008; Hofstede Insights 2022) would be positively associated with performance.

It is expected that there is a positive relationship between the Index of Goals and Objectives, and organisational performance in Vietnamese organisations.

H1b: Goals and objectives has a positive impact on organisational performance in Vietnamese organisations

2.8.1.3 Hypothesis 1c: Vision

Vision is the final Index in the Dimension of Mission, again it could be deducted that the link between Vision in traditional and contemporary culture is more aligned than other Indexes in the model. However, unlike Strategic Direction and Intent, and Goals and Objectives; Vision relies on the leaders of the organisation to effectively communicate and inspire in line with the other Indexes.

In line with the expectations of this Index in the DM, David (2020) notes that a clear vision acts as a foundation towards the mission of the organisation and is positively associated with organisational performance. This is supported by James and Lahti (2011) who also found a positive link between vision and organisational performance while exploring key influences of organisational vision. Similarly, Slåtten, Mutonyi and Lien (2021) also found that work performance is enhanced by vision which would be expected to improve organisational outcomes.

In the historical cultural context of Vietnam, it has been shown that the leaders' vision, from the dynastic kings to modern heroes like Ho Chi Minh, is a strong guiding light for aligning the people to the direction, goals, and objectives of the leadership (Dutton, Werner & Whitmore 2012; Murray 2008). Therefore, the Vision Index in Vietnamese organisations could be positively impacted owing to the traditional power distance relationships and collectivism that

exist in Vietnamese culture (Hofstede Insights 2022) while some variation across industries, geographic locations, and age groups could be expected (Ralston, Nguyen & Napier 1999). While this may mean that it is not expected to have as strong a positive impact on performance as the other Indexes of the Mission Dimension as it determined largely by the ability of individual leaders, it is still expected that Vision would have a positive impact on performance in Vietnamese organisations.

H1c: Vision has a positive impact on performance in Vietnamese organisations

2.8.2 Hypothesis 2: Consistency

The Dimension of Consistency is internally focused while also aligned with stability. It would be expected that this dimension would align well with traditional Vietnamese organisations that rely heavily on bureaucratic operations, collectivism, long term orientation, and traditional power distance in relationships (Hofstede Insights 2022; Murray 2008). Nguyen et al. (2018) also found that using the CVF, Vietnamese organisational culture in hospitals was strongest in the dimensions of clan and hierarchy which both align with Internal focus while hierarchy also aligns with stability.

However, organisations could experience disruptions to this consistency when these more traditional values are challenged and there is conflict across each of the Indexes which was described by Ralston, Nguyen, and Napier (1999) as an ‘Asian Paradox’. This ‘Asian Paradox’ could be expected to increase over time as more Western values permeated the national culture and the culture of organisations. However, Ralston, Nguyen, and Napier (1999) only found this to be the case among some managers in the North and regardless, the consistency of the subordinates should lead the organisation in a positive direction regardless of individualistic managers owing to the power distance relationships and community hierarchies that exist in Vietnamese culture (Hofstede Insights 2022; Murray 2008). This idea is supported by the findings by Nguyen et al. (2018) that while managers tend to be more market orientated, non-managers are more clan orientated which in turn could be expected to bring consistency and positively impact performance.

H2: Consistency has a positive impact on performance in Vietnamese organisations

2.8.2.1 Hypothesis 2a: Coordination and Integration

With Coordination and Integration being associated with stability and internal focus, it could be expected that Coordination and Integration brings good alignment between traditional and contemporary culture in Vietnam although some issues may exist. While the history of Vietnamese people in overcoming adversity and the collectivist nature of the culture would be seen as drivers to strengthen this Index, power distance relationships could at times interfere with communication across levels in the organisation and negatively impact coordination (Hofstede Insights 2022; Murray 2008). This could potentially stifle performance owing to the organisational boundaries that could be created by the nature of the power distance relationships and the potential for essential information or ideas to move up the hierarchy. While research in the Vietnamese context is limited, Nguyen et al. (2018) found different perceptions at different organisational levels could potentially impact Coordination and Integration and that communication would be a key determinant of effectiveness. However, at the same time the power distance relationship would also create a situation of alignment in the hierarchy, albeit of a top-down nature, that could facilitate strong Coordination and Integration. This was demonstrated by Ralston, Nguyen, and Napier (1999) when discussing the ‘Asian paradox’ where in spite of the more individualistic approaches of some managers, the top-down approach to management meant that this did not impact further the Coordination & Integration of subordinates. Overall, it is expected that this would impact performance positively in Vietnamese organisations.

H2a: Coordination and Integration has a positive impact on performance in Vietnamese organisations

2.8.2.2 Hypothesis 2b: Agreement

In the Vietnamese context, agreement can be interpreted in a very different context than in Western cultures. Often, agreement is given or implied despite not agreeing owing to the strong power distance culture (Hofstede Insights 2022). Cultural norms that include a higher power distance relationship (Hofstede Insights 2022) and a strong focus on maintaining ‘face’ (Nguyen 2015) often mean that agreement comes not from agreeing but instead from the power of the relationship or to preserve ‘face’.

Tafvelin, von Thiele Schwarz, and Hasson (2017) found that differences in perceptions of organisational issues between leaders and their teams could negatively impact work performance. However, unlike Western cultures where disagreement, either expressed or not, could generate dissent, the nature of the power distance relationship in Vietnam (Hofstede Insights 2022) would be expected to align those within the organisation from the top down and contribute positively to organisational outcomes. Ralston, Nguyen, and Napier (1999) found that even when managers were adapting to more contemporary trends and displaying greater levels of individualism there were no significant differences found in achievement which supports no impact on outcomes. Therefore, although agreement may be superficial, the nature of the hierarchical values would provide for a positive impact regardless of the perceptions between the leaders and their teams.

H2b: Agreement has a positive impact on performance in Vietnamese organisations

2.8.2.3 Hypothesis 2c: Core Values

In the Vietnamese context, core values have been found to be compromised by individual values in some contexts (Ralston, Nguyen & Napier 1999). This is a contrast to many cultural indicators that suggest the collective nature of Vietnam (Hofstede Insights 2022), however, it is evident in the contrasting ethical values (Mai & Nguyen 2015) that often result in higher levels of corruption and nepotism than would be acceptable in Western cultures. In addition, the low level of uncertainty avoidance evident in Vietnamese culture shows a level of flexibility and adherence to rules or values that do not seem important (Hofstede Insights 2022). In this sense, an Index such as Goals and Objectives would be expected to drive performance rather than an Index such as Core Values which may appear unnecessary and disconnected from daily work tasks and goals. Therefore, it is not expected that core values would always guide organisations in Vietnam towards success as often these can be compromised by individuals with conflicting values and a focus on measurable achievements.

H2c: Core Values has a negative impact on performance in Vietnamese organisations

2.8.3 Hypothesis 3: Involvement

The Dimension of Involvement is internally focused while also aligned with flexibility. While the internal focus should provide a positive link between traditional Vietnamese culture which

emphasises hierarchy and interpersonal relationships, these are less aligned with contemporary management values (Edwards & Phan 2013). Nguyen et al. (2018) found that clan culture was the strongest when applying the CVF to workers in hospitals in Vietnam which aligns with the internal focus and flexibility characteristics of Involvement in the DM. Clan culture aligns closely with the collectivist values of Vietnamese culture (Hofstede Insights 2022). This is expected to align strongly with the Team Orientation Index of this Dimension, while Capability Development could be expected to align well with the cultural trait of long-term orientation (Hofstede Insights 2022). Karatepe and Aga (2016) found that work engagement fully mediated the relationship between worker performance and mission. Given the expected positive relationship between Mission and organisational performance in Vietnamese organisations, this would also support that involvement via engagement would contribute positively. Similarly, this is also supported by findings from Macedo, Pinho and Silva (2016) who found that organisational commitment was enhanced via organisational mission statements.

It could be argued that the Indexes of Capability Development and Empowerment could potentially be negatively impacted by the cultural characteristics related to the power distance relationships and uncertainty avoidance (Hofstede Insights 2022). However, the cultural traits that support Vietnamese collectivism and the ability of the people to come together to achieve common goals aligned with strong leadership (Dutton, Werner & Whitmore 2012; Murray 2008) would support strong Involvement in organisations. Overall, considering the close relationship between the Dimension and the attributes of clan culture, it is expected that the Dimension of Involvement will have a positive impact on organisational performance in Vietnamese organisations.

H3: Involvement has a positive impact on performance in Vietnamese organisations

2.8.3.1 Hypothesis 3a: Capability Development

In the Vietnamese context learning is still deeply influenced by Confucian values and, capability development may be different to in the West where the emphasis on learning is different (Vo 2014). Western learning places a far greater emphasis on problem solving and is learner centred as opposed to rote learning and teacher centred in the Vietnamese context as a broader East Asian characteristic (Liu & Littlewood 1997). Often, in Vietnam, the emphasis is on the perceived outcome as opposed to the process which is reflected in the cultural trait of

low uncertainty avoidance (Hofstede Insights 2022). This can hamper the true nature of capability development where capabilities are not truly developed so much as an appearance of capability development exists for the sake of social harmony (Vo 2014). This is further compounded by the traditional power distance relationships and preservation of ‘face’ (Hofstede Insights 2022; Nguyen 2015) where, even if capabilities are developed at lower levels of the organisation, there may not be opportunity for these capabilities to be effectively utilised within the organisation. However, Vietnamese culture also exhibits a strong long-term orientation (Hofstede Insights 2022) which would align with developing the capability of employees for success in alignment with goal orientation. Furthermore, the alignment of strategic direction and goal orientation seen in Vietnamese culture (Dutton, Werner & Whitmore 2012; Murray 2008) supports an understanding of the importance of collective Capability Development regardless of the effectiveness of the learning methodology. Overall, it is expected that the Index of Capability Development would have a positive impact on organisational performance in Vietnam.

H3a: Capability Development has a positive impact on performance in Vietnamese organisations

2.8.3.2 Hypothesis 3b: Team Orientation

In the Vietnamese context, Team Orientation closely aligns with the collectivist values while complementing the power distance values (Hofstede Insights 2022) and is a general feature of cultural and organisational cultural studies in the Vietnamese context as has been shown in the literature review. The strong relationship with clan culture found by Nguyen et al. (2018) aligns closely with Team Orientation. Similarly, Moslehpour et al. (2016) found that teamwork was one of the most impactful dimensions on organisational commitment in Vietnamese organisations. This is further supported by the observations in society related to the family values and community hierarchies while also having strong alignment with goals and overcoming adversity (Murray 2008) that would require strong alignment of individuals working together.

Ralston, Nguyen, and Napier (1999) showed that this could vary in relation to various levels of organisational hierarchy and may be affected by factors such as geographic location. This could mean that the Team Orientation may provide a positive relationship with performance in

certain contexts, but this may be undermined in other contexts owing to changing cultures and individualistic desires (Ralston, Nguyen & Napier 1999). However, at the same time it would be expected that the power distance relationship, clan culture, and commitment to community hierarchies (Hofstede Insights 2022; Murray 2008; Nguyen et al. 2018) would override any disconnect between employees at different organisational levels and that the teams would align from a top-down perspective with a focus on the goals. Overall, it is expected that Team Orientation is strong and that it has a positive impact on performance in Vietnamese Organisations.

H3b: Team Orientation has a positive impact on performance in Vietnamese organisations

2.8.3.3 Hypothesis 3c: Empowerment

In the Vietnamese context, empowerment runs up against the power distance relationship that is evident in more traditional culture (Hofstede Insights 2022). While contemporary organisations may attempt to empower employees in line with modern Western management practices, resistance still exists, and younger generations are still very respectful of the power distance relationship that is predicated on age and gender in Vietnam (Dang 2017; Murray 2008; Phan 2008). It would also be expected that seniority in organisations is still dominated by older members of the workforce whose expectations are even more closely aligned with these traditional values. This could create a top-down vision for the organisation which has been found to create a misalignment in the dynamic between employees and management (Fey & Denison 2003). This is further supported by Denison, Haaland, and Goelzer (2004 p. 103) who noted that ‘organisations with a top-down vision often find it difficult to focus on the empowerment...’ Research by Ha et al. (2020) also found that the relationship between organisational commitment and empowerment was the weakest of the six dimensions studied which could also be expected to mirror in the relationship with performance. Therefore, it is expected that attempts to empower employees create issues that result in a negative impact on performance in Vietnamese organisations.

H3c: Empowerment has a negative impact on performance in Vietnamese organisations

2.8.4 Hypothesis 4: Adaptability

The Dimension of Adaptability is externally focused and aligned with flexibility. While the characteristics of this Dimension oppose characteristics of traditional Vietnamese culture in the context of a collectivist and conservative culture that is tied to tradition, at the same time, an extraordinary level of adaptability has been displayed historically in the many adversities that the Vietnamese people have had to face and overcome and aligns with the long-term pragmatism evidenced in Vietnamese culture (Hofstede Insights 2022; Murray 2008). Fey and Denison (2003, p. 701) found that in Russia, the ‘...turbulent and unpredictable environment’ contributed to Adaptability having the most use in understanding organisational effectiveness overall. When considering the historical context as mentioned, there could be an expectation that Vietnam could also potentially share this connection between Adaptability and organisational performance.

In addition, Vietnamese culture shows a low degree of uncertainty avoidance which aligns with the high degree of long-term orientation (Hofstede Insights 2022) indicating that there is a fair degree of scope to adapt to present situations in pursuit of long-term goals. While there may be a move towards embracing these more contemporary values in young and dynamic organisations it would be expected that the more traditional values stifle or conflict with these in more conservative Vietnamese organisations (Phan 2008). However, ironically, it may be expected that the characteristic to adapt to overcome adversity, such as a stifling of the ability of the organisation to adapt caused by more traditional views could be overcome by the very nature of the Vietnamese culture to adapt to these obstacles and succeed despite them. While there may be some variation in the consistency of Adaptability across the Indexes of this Dimension, overall, it is expected that Adaptability will have a positive impact on Performance.

H4: Adaptability has a positive impact on performance in Vietnamese organisations

2.8.4.1 Hypothesis 4a: Creating Change

In the Vietnamese context, moving from a collectivist to more liberalised marketplace means that the ability for organisations to create change should promote significant competitive advantage. Vietnamese cultural values feature a more long-term pragmatist approach that

aligns with flexibility and adaptability which has also been seen throughout Vietnamese history in the achievement of goals (Hofstede Insights 2022; Murray 2008). However, Vietnamese cultural drivers of power distance and collectivism could stifle the ability to create change from the bottom up or without open contemporary leadership (Hofstede Insights 2022). Furthermore, research specifically related to Creating Change in the Vietnamese context is limited however, it was noted by Nguyen et al. (2018) that communication would be an important driver in organisational outcomes with relation to differing values at different organisational levels. At the same time. However, the overall external alignment and historical evidence of adaptability combined with a pragmatic long-term orientation and continued support for hierarchy in Vietnamese culture indicates that there should be a positive relationship between an organisations ability to create change and organisational performance.

H4a: Creating Change has a positive impact on performance in Vietnamese organisations

2.8.4.2 Hypothesis 4b: Customer Focus

Customer Focus also belongs to the Dimension of Adaptability which indicates flexibility and external focus according to the DM. The external focus on customer needs could be seen as at odds with the broader hierarchical nature of society displayed in the high-power distance and the collectivist nature of employees which is also reflected in the bureaucracy of organisations, but at the same time Vietnamese traditions show strong focus on external objectives (Hofstede Insights 2022; Murray 2008). Although, the developmental stage of the Vietnamese economy is still largely manufacturing focussed while service industries are still developing (Salt 2017), the success of the manufacturing industry in Vietnam owes in part to a strong focus on customer satisfaction (Nguyen 2019). This is also seen carrying over into other service based industries such as transportation, retail, and airlines as their development rapidly continues and competition intensifies (Nguyen et al. 2020b; Nguyen et al. 2023b; Pham & Hoang 2021) Drive comes from customers in adaptable organisations (Fey & Denison 2003) and the power distance relationships and process-oriented operations of business could create a negative impact on Customer Focus. However, the adaptability to uncertainty and change reflected in the historical context of Vietnamese culture (Murray 2008) is aligned with flexibility which is also supported by the low level of uncertainty avoidance seen in the Vietnamese cultural dimensions (Hofstede Insights 2022). Furthermore, it may be expected that a Customer Focus

that is directly tied to the Goals and Objectives of the organisation could create a positive impact on performance given the previous discussions related to the expected positive relationship with Goals and Objectives and Mission. Therefore, owing to the external focus and alignment with flexibility, Customer Focus overall would be expected to positively impact Vietnamese organisations.

H4b: Customer Focus has a positive impact on performance in Vietnamese organisations

2.8.4.3 Hypothesis 4c: Organisational Learning

Organisational Learning also has a strong external focus and requires managers to react effectively to the marketplace. These characteristics align well with Vietnamese cultural dimensions of long-term orientation and low levels of uncertainty avoidance (Hofstede Insights 2022). However, this is another Index that would be expected to be conflicted by traditional and contemporary values owing to power distance relationships and a greater focus of family values and harmonious work environments (Hofstede Insights 2022; Murray 2008). Owing to the clash between traditional and contemporary values, Organisational Learning would be expected to contribute less to more traditional organisations while contributing more to contemporary organisations (Pham & Hoang 2019) and rapidly developing industries such as tourism (Mai, Do & Le 2023) and hospitality (Han et al. 2023) that focus more on external opportunities to create competitive advantage rather than focussing on internal processes and top-down management practices. Overall, it is expected that while Organisational Learning could be disruptive to the relationships dominated by hierarchy and family values in more traditional organisations that, overall, owing to the traditional external focus and flexibility of the Vietnamese people (Hofstede Insights 2022; Murray 2008) combined with the rapid development and modernisation of Vietnamese organisations (Salt 2017), there would be a positive impact the relationship between Organisational Learning and performance.

H4c: Organisational Learning has a positive impact on performance in Vietnamese organisations

2.9 Summary

This chapter began with the literature review which explored the three parent theories of organisational culture, organisational outcomes, and Vietnamese culture. The review of the literature highlighted the DM and the DOCS as appropriate instruments that were then used as the basis for the development of hypotheses that will predict the relationships between organisational cultural Dimensions and Indexes according to the DM and organisational culture in Vietnamese organisations. As well as its importance of developing the hypotheses in answering the research questions, the exploration of the parent theories provides valuable background and support for the qualitative stage of this research in better understanding and explaining the quantitative results as well as the connections between Vietnamese culture and organisational culture in Vietnamese organisations. Overall, the hypotheses that were developed predict that positive relationships will be found between all Dimensions of the DM and performance and all Indexes of the DM and performance with the exception of the Indexes of Core Values and Empowerment.

CHAPTER 3: METHODOLOGY

3.1 Introduction

Chapter one gave an overview of the research problem and an introduction to the relevant parent theories and areas that are connected to these for the purposes of this research. Gaps in the literature were highlighted and the research questions were presented. Chapter two used the basis of the three identified parent theories as the building blocks of an extensive literature review. The parent theories presented were organisational culture, organisational outcomes (performance), and Vietnamese culture. The parent theories were then further explored in relation to the research questions with a focus on organisational culture in Vietnam and the development of, and body of research, using the DM. The literature review was able to demonstrate the gaps in the research relative to the research questions and allowed for the development of the hypotheses which can be tested by the research. This chapter will guide the development of the methodology for this research.

3.1.1 Objective of chapter

The objective of chapter three is to detail the design of the research and the research methods that will be used to answer the research questions and to test the hypotheses that have been developed. Firstly, section 3.2 justifies the research paradigm while section 3.3 then discusses the research design with consideration to the research aims and questions and the research paradigm related to the primary researcher and the mixed methods design. Section 3.4 then presents the research strategy which includes a conceptual model of the research to illustrate research strategy from identification of the research problem through to the final discussion of results. Section 3.5 presents the quantitative data collection process which includes discussion of the measures, piloting, sample design, sampling process, and participants. Section 3.6 discusses the quantitative data analysis process including justification for the use of PLS-SEM and the development of the required models. The qualitative data collection process is presented in section 3.7 which includes sections related to the interview question development, interview participants, and interview administration. Section 3.8 discusses the qualitative data analysis process before a final discussion of the process is presented in section 3.9 which

includes details of the quality and the trustworthiness of the findings. The research ethics process is presented in section 3.11 with a summary of the chapter presented in section 3.12.

3.2 Research Paradigm

The realism (pragmatic) paradigm was the basis for this research which is justified in this section. Giddings and Grant (2006) highlight the importance of the researcher's worldview aligning with the research methods chosen. This is further supported by Hesse-Biber (2014) who asserts that understanding our worldview before embarking on our research can help to offset the tendency to let the method drive the research and by Creswell (2014) who notes that the philosophical assumptions of the researcher should be part of informing the research methodology and design. Therefore, it is firstly important to understand the worldview of the primary researcher, how this aligns with different research paradigms, and how this can be related to the goals of this research.

It is agreed that there are generally four different scientific paradigms or worldviews (Creswell 2014; Parry & Healy 2000). While these four different paradigms often use varying terminology, the categories fit within the same definitions (Appendix D). According to the four categories of scientific paradigms as adapted from Parry and Healy (2000) (Figure 3.1), in line with the world view of the primary researcher and the nature of the study, the research took a 'realism' approach which is referred to as a 'pragmatism' worldview according to Creswell (2014).

Element	Paradigm			
	Positivism	Critical Theory	Constructivism	Realism
Ontology	Reality is real and apprehensible	“Virtual” reality shaped by social, economic, ethnic, political, cultural, and gender values	Multiple local and specific “constructed” realities	Reality is “real” but only imperfectly and probabilistically apprehensible
Epistemology	Objectivist: Findings true	Subjectivist: Value mediated findings	Subjectivist: Created findings	Modified objectivist: findings probably true
Common Methodologies	Experiments / Surveys: Verification of hypothesis, chiefly quantitative methods	Dialogic / Dialectical: Researcher is a “transformative intellectual” who changes the social world within which participants live	Hermeneutical / Dialectical: Researcher is a “passionate participant” within the world being investigated	Case studies / Convergent interviewing: Triangulation, interpretation of research issues by qualitative and some quantitative methods
Suitability for this research	Not suitable This research is not only testing a hypothesis or measuring objective facts	Not suitable This research is not seeking to provide transformational change to society or a virtual view of reality	Not suitable This research builds on multiple realities of participants and does not seek to portray constructed realities	Suitable This research aims to use quantitative and qualitative methods to build a picture within the context of the cohort that is probably true

Figure 3.1 - Research Paradigms

(Source: Adapted from Parry & Healy 2000, p. 119)

Creswell (2014) notes that the pragmatist worldview is not confined to a particular philosophy and is driven by finding what works best to provide solutions with respect to the research problems. From an ontological perspective this means taking the view of a shallow realist where the challenge is to discover and describe observable phenomena that exists independently of the researcher (Blaikie & Priest 2019). This takes a Parmenidean perspective of the world as 'being' while understanding that this interpretation is imperfect, we still have a good chance of being able to understand and interpret it. Epistemologically, this follows an empiricism approach where the findings are verified through their observation from a neutral perspective to produce reliable knowledge (Blaikie & Priest 2019). By taking a modified objectivist approach the research will endeavour to find what is probably true (Creswell 2014) through integrating methods that can be verified through both measurement and experience (Trochim & Donnelly 2008). Giddings and Grant (2006) highlight the Axiological frame as perhaps the most important in guiding the research paradigm as they are related to the personal values that we hold and, in this sense, the 'realism' or 'pragmatism' approach is best suited to the primary researcher for the purposes of this research and aligns with the research aims of the study. Pragmatism (realism) gives researchers more freedom to choose the methods based on the purpose and needs of their research (Creswell 2014). This approach allows researchers to use both quantitative and qualitative methods in a way that allows for the best understanding of the research problem from a consequence driven, problem centred, and real-world practice orientation (Creswell 2014).

With an understanding of the research paradigm, it was important to develop a research strategy that aligned with the world view of the primary researcher and the objectives of the research and research questions.

3.3 Research Design

The research design can be informed by the worldview of the primary researcher as discussed in the previous section with consideration to the research aims and the research questions that were presented in chapter one.

3.3.1 Research aims and questions

Gaps in knowledge related to the understanding of the contemporary nature of organisational culture in Vietnam, the relationship between Vietnamese culture and organisational culture, and the link between organisational culture and organisational performance in Vietnamese organisations led to questioning whether an improved understanding of these relationships could be valuable in understanding where gaps may exist that could be used as a focus to drive improvements in organisational performance. The research questions relate to understanding the unique position that Vietnam is in with relation to its economic and social development and the gaps in research that were presented.

The literature review uncovered ways to measure organisational culture and the relationship with performance and particular focus was given to the DOCS and the DM owing to its purpose in alignment with the research questions and the wide-spread use of the DM that has established the validity and reliability of the model in a wide range of contexts and cultures. However, the results of the quantitative analysis, while identifying potential gaps and issues, may not be sufficient to answer the research questions comprehensively and Teddlie and Tashakkori (2009) note that a second qualitative stage should be undertaken when this is the case. In addition, to explore the link between Vietnamese culture and organisational culture in Vietnam, a qualitative tool was also required. Therefore, in line with the world view of the primary research and the research aims and questions, a mixed methods design was well suited.

3.3.2 Mixed Methods research

Three broad research approaches are most used and discussed in research literature: quantitative, qualitative, and mixed methods (Creswell 2014). Quantitative research dominated the social sciences up until the middle of the 20th century before qualitative research became more popular which then led to the development of the mixed-methods approach (Creswell 2014). Mixed method approaches to research became popular in the 1980s and 1990s from a range of different fields, including management (Creswell 2014; Tashakkori & Teddlie 2003). Tashakkori and Teddlie (2003) described mixed-methods research as the third methodological movement and mixed methods research is now well established as a third major research approach that has been endorsed across numerous fields by methodologists (Molina & Cameron 2016). Mixed methods involve the mixing of quantitative and qualitative data, which

is suitable for this study as discussed, however, this mixing can occur in a variety of assorted designs.

Creswell, and Plano-Clark (2017) note that many authors in many fields describe numerous mixed method design typologies. However, Creswell (2014) maintains that mixed methods research can generally be classified as descriptive, exploratory, or explanatory depending on the purpose. Descriptive research aims to describe what can be observed by building on exploratory research which aims to understand what is happening now while explanatory research goes further with an objective to explain why this is happening (Creswell 2014). The order of the data collection can be concurrent or sequential with data gathered in earlier stages of research informing the direction of the later stages of the research (Creswell 2014). Creswell (2014) notes three generally used approaches; Convergent Parallel Mixed Methods Design, Explanatory Sequential Mixed Methods Design, and Exploratory Sequential Mixed Methods Design. The primary difference in these methods is the order in which the data is collected with concurrent collection happening at the same time, exploratory collection happening with qualitative data collection being followed by quantitative data collection, and explanatory collection happening with quantitative data collection being followed by qualitative data collection (Creswell 2014).

An Explanatory Sequential Mixed Methods approach involves the collection of quantitative data first, with an aim to inform the researcher as to the types of questions and participants that can be used for the qualitative stage (Creswell 2014). The objective of the qualitative data is then to add more detail in explaining the results of the quantitative data collection (Creswell 2014). Finally, the findings can examine all the data so that it can be connected and mixed (Creswell 2014). This is often also referred to as methodological triangulation of the data in mixed methods research to provide a better understanding of results through combining two or more perspectives (Denscombe 2010). Given the researcher's world view and the purpose of this study, an Explanatory Sequential Mixed Methods approach was well suited. This approach allows for a picture of Vietnamese organisational culture to be established and the relationship between organisational culture and organisational performance to be quantified which can be followed by a qualitative stage to confirm and better understand these relationships. In addition, the second qualitative stage will provide an opportunity to verify and understand organisational culture in Vietnamese organisations and the relationship to Vietnamese national culture. These

discussions can then be expanded to compare to other similar studies to expand the knowledge of organisational culture and the relationships with performance in different broader national and regional cultural contexts. In addition, this methodology allows for the qualitative stage to also take on a confirmatory role of the quantitative results (Creswell 2014) which is important considering this is one the first studies that the DOCS has been translated into Vietnamese and administered in Vietnam. This approach is also well suited with consideration to the constraints of this research study where a very large sample size representative of the population was not attainable.

Taking this into account, this research takes an Explanatory Sequential Mixed Methods approach incorporating the use of both quantitative and qualitative data where the analysis of the data from the quantitative stage is used to inform the qualitative stage of data collection before a final mixing and discussion of the results (Creswell 2014; Hesse-Biber 2014; Ivankova & Kawamura 2010).

3.4 Research strategy

Having justified the research design in the previous section, a conceptual framework can be developed to illustrate the research strategy (Figure 3.2). The conceptual framework articulates the connections between the research questions and how these will be answered through exploration of the parent theories and application of appropriate methodological approaches (Ravitch & Riggan 2016). The conceptual framework uses quantitative analysis to test the hypotheses developed from the parent theories explored in the literature review. The quantitative results are then used to develop the qualitative questions to confirm and explain the results of the quantitative analysis. Finally, a discussion mixes and triangulates the results of each stage in line with the Explanatory Sequential Mixed Methods design (Creswell 2014; Denscombe 2010).

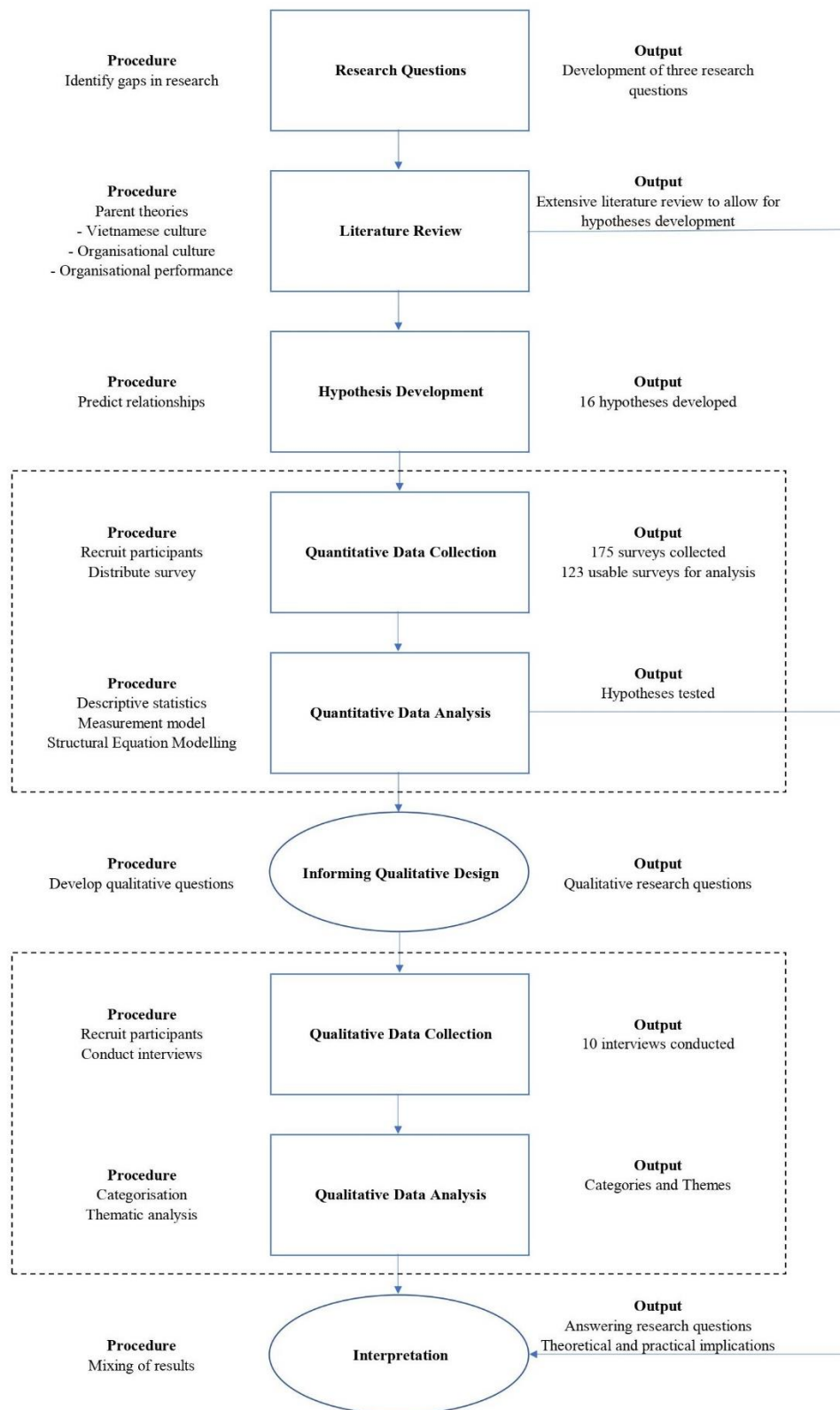


Figure 3.2 - Research Strategy Conceptual Framework

3.5 Quantitative data collection

An observational tool was required, and a survey was well suited to collect the required data (McClave & Sincich 2017). A survey such as the DOCS is a well-established and appropriate tool for measuring owing to factors such as the economy of the design in identifying attributes from a large population and has a short turnaround time (Denison & Neale 1999). It is important to understand that a sample of a relative sub-set of the population should be used either drawing from a probability or non-probability approach (Hair, Page & Brunsveld 2020). As this research has both a quantitative and qualitative stage, different approaches were required for the selection of participants for each stage. The following sections describe the process and methodology of the quantitative stage of this research project.

3.5.1 Measures

The previous section outlined the requirements of the data collection. This section will provide a greater level of detail of the quantitative data collection tools and measures. The survey contained a total of 73 questions that can be divided into three parts.

1. Demographic data questions (8 questions)
2. Denison Organisational Culture Survey (DOCS) questions (60 questions)
3. Organisational performance questions (5 questions)

The demographic data of the research participants was collected to allow for interpretation of the responses in relation to the demographics of the population and for more meaningful comparison between results from each stage of the research. The demographic data categories were adapted from previous research using the Denison Organisational Culture Survey (DOCS) (Kirin, Gavric & Kirin 2019) to allow also for comparison to other studies and to allow for the consideration of bias in the sample data collected with relation to the population. The demographic data questions used for both the quantitative and qualitative stages is shown in Appendix K.

The next sixty items were statements that mirrored the Denison Organisational Culture Survey (DOCS) questionnaire in line with the research objectives and guided by the 'Facilitator Guide'

(Denison & Neale 1999). The questionnaire used Likert scaling in line with Denison's research following a standard five scale rating (Strongly disagree, Disagree, Neutral, Agree, Strongly Agree) (Denison & Neale 1999; Trochim & Donnelly 2008). While the modern DOCS used for commercial purposes is modified from the original sixty item survey (Denison Consulting 2021) and numerous studies have modified these statements, the original statements were unaltered to allow for comparison with the most comprehensive and highest quality studies that have been published across the broadest range of cultures (Denison, Haaland & Goelzer 2004; Fey & Denison 2003). The DOCS questionnaire items are shown in Appendix L.

The final five questions were aimed at getting a perception of the performance of the respondents' organisations. This was important in relation to the second research question to be able to interpret the relationship between the Dimensions and Indexes of the DM and organisational performance. It was also important to answer research questions one and two and sub-questions to be able to compare this study in Vietnam with other studies in other nations and regions. The questions that were used reflect those used in the study by Denison, Haaland, and Goelzer (2004) which compared the relationship between the Indexes and Dimensions of the DM to performance across multiple regions and seven individual nations. These questions were aimed at assessing the perceptions of respondents to develop measures of performance; sales growth, profitability, quality, and employee satisfaction (Denison, Haaland & Goelzer 2004). These questions were verified as effective measures of performance (Denison & Mishra 1995; Denison, Nieminen & Kotrba 2014; Gillespie et al. 2008) and have also been used in other studies such as Avella & Ernesto (2010) and Nazir and Lone (2008) which showed a high level of reliability and validity. The performance questions allowed for the development of hypotheses of the relationship between each of the Indexes and Dimensions in the DM to performance to gain a deeper understanding of how each element of organisational culture related to performance in the Vietnamese context. These questions were vital to allow for the testing of hypothesis and the findings of this analysis was necessary in the Explanatory Sequential Mixed Methods design for the development of the qualitative interview questions. The performance questions are shown in Appendix M.

Following the translation of all survey questions into Vietnamese with the assistance of a Vietnamese research assistant, the survey was built and conducted using Qualtrics to allow for ease of distribution of the survey (an anonymous link) and to allow for ease and accuracy of

the data collected. This also allowed for the data to be anonymised easily while still allowing for in depth analysis of each individual response. This in-depth analysis was important to allow to check for biases in the data and to clean the data.

3.5.2 *Piloting*

Pilot testing is important to allow for any errors in the design of the survey and to allow for refinement before conducting the final survey (Schindler 2021). The questionnaire was first piloted among a group of eleven colleagues in mid-2022 with a mixture of first and second languages that included both English and Vietnamese. Schindler (2021) notes that one of the important opportunities that this provides is to revise scripts which was of special importance in this instance owing to the translation of the survey from English to Vietnamese. Piloting ensured that the translation was valid and allowed for any corrections to be made that ensured the intended meaning was appropriately conveyed in each question and that the elicited answers match the intended meaning.

The survey remained open for ten days to collect responses and provide the opportunity for feedback from the participants. The survey was completed by seven of the participants and some written feedback was provided by three of the participants. Most of the feedback received was related to the questions in the survey that were part of the DOCS. Some suggestions included adding an N/A option to the Likert scale while others related to the terminology used. While this feedback was well received, the survey was not changed as it was important to administer the survey in parallel with other Denison studies and the original DOCS. Other feedback also noted the difference in the Likert scale between the organisational culture questions and the performance-related questions. It was also noted in the feedback that the Likert scale for the organisational performance questions appeared to be missing some data. Again, this was not changed as this was intentional to align with the other studies and allow for an equal comparison. Finally, some feedback suggested the addition of more explicit questions related to the demographic data collection; specifically, it was suggested that in addition to years of work experience that years of work experience in the current organisation and industry could also be collected. This suggestion prompted a review of other studies to find out if this information would allow for any additional meaningful analysis. Ultimately, it was decided that there would be no additional benefit in adding this data to this study with relation

to the research questions. However, the review of the other studies did prompt for the addition of demographic data collection questions that would allow for better alignment with other studies, specifically, the inclusion of a question to allow for a specific selection of the industry type of the participant. Following the piloting of the survey, the next steps were to select and recruit respondents so that the survey could be administered.

3.5.3 *Sample design*

Hair, Page, and Brunsveld (2020 p.180) list three considerations for helping to determine the sampling design:

1. Should a sample or census be used
2. If a sample, then which sampling approach is best?
3. How large a sample is necessary?

Given that the aim of this research was to assess a general view of organisational culture and the relationship between organisational culture and organisational performance in Vietnam, the population consisted of all people employed in an organisation in Vietnam and a sample of this population was the most appropriate. Secondly, the sampling approach needed to consider the accessibility to potential respondents and the limited resources available in this study (Hair, Page & Brunsveld 2020). For the quantitative stage, a random procedure should be utilised to ensure objectivity with the findings then applied to the population (Hair, Page & Brunsveld 2020). This approach required a large sample for the quantitative stage compared to a much smaller sample for the qualitative stage. (Hair, Page & Brunsveld 2020). For the purposes of this research and considering the limitations, an aim of one-hundred and twenty or more respondents was established for the quantitative stage. The sample size is further discussed and justified in subsequent sections.

3.5.4 Sampling process

Hair, Page, and Brunsveld (2020 p.182) list the following procedures for the sampling process:

1. Defining the target population
2. Choosing the sampling frame
3. Selecting the sampling method
4. Determining the sample size
5. Implementing the sampling plan

The following sections will address each of the stages in the sampling process.

Firstly, it was important to identify the target population which the sample would be representative of (Nardi 2018). Given the broad aim of the first research question in this study, the target population for this study was current employees in organisations in Vietnam. Secondly, Hair, Page, and Brunsveld (2020, p.183) describe the sampling frame as ‘...a comprehensive list of elements from which the sample is drawn’. Given the broad nature of this research to assess the nature of organisational culture and the relationship between organisational culture and organisational performance in Vietnamese organisations, the sampling frame consisted of only one required element:

1. Participants employed in an organisation in Vietnam

Thus, a specific list was not required to be developed for the sampling frame and potential flaws in the sampling frame such as accuracy of the list (Hair, Page & Brunsveld 2020) could be eliminated. Flaws such as including participants from outside the sampling frame (Hair, Page & Brunsveld 2020) could also be mitigated via the demographic responses; those who did not fit the employment criteria could be excluded from the analysis. Thirdly, the sampling method needed to consider both theoretical and practical issues with the data collection (Hair, Page & Brunsveld 2020). Given the nature of this research with consideration to the population size and resources available, it was not possible to develop a list that would be an accurate representation of the population to allow for probability sampling. Therefore, this research used nonprobability sampling. While noted by Hair, Page, and Brunsveld (2020) that this means that not every person in the target population had an equal chance of being selected, this was mitigated to some extent via the selection process.

Types of Sampling Methods	
Probability	Nonprobability
Simple random	Convenience
Systematic	Judgement
Stratified	Snowball / referral
Cluster	Quota
Multistage	

Figure 3.3 - Types of Sampling Methods

(Source: Reproduced from Hair, Page & Brunsveld 2020 p. 185)

This research used convenience sampling for the quantitative stage as a broad range of attitudes and opinions were desirable, the relatively limited timeframe, and access to such a wide range of industries. This methodology also allowed for easier dissemination of the survey via email and social media through the network of people that could be accessed by the primary researcher and industry connections. Convenience sampling has drawbacks related to the bias and sampling error (Nardi 2018) contained in the network that can be accessed, and this is discussed in the limitations section in the discussion chapter.

Fourth, Hair, Page, and Brunsveld (2020) note that the appropriate sample size of the population may be influenced by a variety of factors that include time, budget, generalisability, precision, and confidence which need to be balanced. While statistical methods can be employed to determine the sample, often other methods such as rule of thumb, personal experience, previous studies, or affordability may be employed (Hair, Page & Brunsveld 2020). For the purposes of this research and the limitations in data collection ability, it was also only possible to conduct a prospective estimation of the sample size rather than a retrospective estimation which may have required the collection of additional data (Kock & Hadaya 2018).

Also, it is recommended that prospective estimations are used although there is debate as to the use of prospective and retrospective estimates (Nakagawa & Foster 2004). Therefore, the sample size aimed to meet the requirements for analysis using PLS-SEM. As noted, a prospective method was needed for this research and most commonly in PLS-SEM modelling the '10 times rule method' is employed widely as a rule of thumb (Hair et al. 2017). The minimum sample size specified for PLS-SEM according to the '10 times rule method' specifies that the sample size should be ten times number of arrow heads pointing towards the endogenous construct (Hair et al. 2017). In this case, given the that we want to test the relationship of twelve Indexes of the DM as exogenous latent variables, the minimum sample size needed to be 120 respondents. This allowed for the limited sampling frame to still provide a good proxy for the population from which credible and representative results could be assessed (Hair, Page & Brunsveld 2020). However, it is acknowledged that while this is the minimum sample size for the purposes of meaningful analysis using PLS-SEM, this itself does not ensure that the data is a meaningful representation of the population which sometimes researchers attempt to portray (Hair et al. 2017). The final stage was to implement the sampling plan via the data collection process. With the sample size determined, it was possible to move onto the quantitative data collection process.

3.5.5 *Quantitative research participants*

For the quantitative stage, a random procedure was utilised to ensure objectivity with the findings then applied to the population (Hair, Page & Brunsveld 2020). This approach required a large sample for the quantitative stage compared to a much smaller sample for the qualitative stage. (Hair, Page & Brunsveld 2020). Given the extremely broad and exploratory nature of this stage of the research, the only requirement for people to participate was that they were currently working in an organisation in Vietnam. Therefore, while a convenience sampling method was employed, it was purposeful in the context that respondents needed to fulfil the criteria of working in Vietnam. As this research aimed to gather an overall picture of organisational culture in Vietnam it was desirable to distribute the survey to a wide variety of participants from all the demographic categories as there were no restrictions on industry, geographic location, age etc. However, it was recognised that owing to limited means to distribute the survey widely among the population in a way that would accurately reflect the

demographics of the working population, that there would inevitably be some degree of selection bias related to the distribution of the survey. This was dealt with in two ways.

Firstly, the survey was distributed through the primary researcher's network with an aim for some degrees of separation from the relatively limited network of the primary researcher. Secondly, it was important to include questions relating to such demographic data in the survey to give the results more meaning and allow for a more robust analysis in the context of the respondents and to better explain the limitations of the research. For example, owing to the geographic location of the network of the primary researcher, it was expected that there is a geographic bias towards Ho Chi Minh city in the data collection compared to other locations in Vietnam. By collecting demographic data of the respondents, it was possible to compare the results of this study to the broader population and to consider the bias in the survey respondents compared to the population.

Self-completed surveys were used to be able to gather more data and meet the minimum requirements for meaningful PLS-SEM analysis of at least 120 usable responses with a trade-off that the quality of data collected may not be as good as interviewer administered surveys (Cozby & Bates 2012). While self-completed surveys can result in problems with language translation and cultural interpretation; recording errors; authenticity of respondents; and reduced completion rate; these problems had been mitigated through professional translation, piloting, and data cleaning (Bryman and Bell 2015; Peterson 2009). In addition, this method of survey completion mirrored that of the comparative studies for the relevant research questions of this study which allows for more meaningful comparison of the data. The questionnaires, after translation and piloting, were administered via self-completed web surveys using Qualtrics. Individuals were contacted by email, messaging app, or LinkedIn with information containing links to the Questionnaire Invitation Letter (Appendix F), the Participant Information Sheet – Questionnaire (Appendix G) and the link to the Qualtrics survey which contained the Demographic questions (Appendix K), the DOCS items (Appendix L), and the performance questions (Appendix M).

The survey was opened for a total of three months at the end of 2022 and was closed once the number of usable responses had been achieved. This research gathered data from a variety of organisation types in a diverse range of industries and geographic locations in Vietnam and a

total of 175 responses were received. Following cleaning and coding of the data a total of 123 responses were valid, achieving the goal of more than 120 survey respondents to provide a good picture of organisational culture in Vietnam and allows for the comparison of data between the different types, locations, and industries.

3.6 Quantitative data analysis

With the quantitative data collected, cleaned, and coded it was possible to begin the analysis of the data that would allow for the demographics of the respondents to be presented, a picture of organisational culture in Vietnam to be established, and for the hypotheses that were developed to predict the relationships between the Dimensions and Indexes to be tested.

Descriptive statistical analysis was first performed to build a picture of organisational behaviour in Vietnam. This included measures of central tendency and measures of dispersion (Bryman & Bell 2015) so that a map of organisational results could be presented. This map included an overall map incorporating all the results from the twelve sectors and four quadrants of the DM as well as maps of each of the quadrants according to the questions in each quadrant. This allowed for an overall picture of the organisational culture as well as looking more deeply as to the contributions to this culture in each sector. These analyses also allowed for comparisons against parallel studies.

To assess the relationship between the dependent and independent variables, it was necessary to conduct Partial Least Squares Structural Equation Modelling (PLS-SEM). For this research, SmartPLS 4 was chosen to predict these relationships. The choice for analysis required the consideration of either PLS-SEM or CB-SEM (Covariance Based Structural Equation Modelling). The rules of thumb as presented by Hair et al. (2017) to help guide this decision are presented in Figure 3.4 below.

Use PLS-SEM when	Use CB-SEM when
<ul style="list-style-type: none"> • The goal is predicting key constructs • Formative constructs form part of the model • Many indicators • Small sample • Using Latent variable scores to form Higher Order Constructs 	<ul style="list-style-type: none"> • Testing or confirming theory • Error terms require additional specification • The structural model contains circular relationships • The research requires a global goodness of fit criterion

Figure 3.4 - Considerations for use of PLS-SEM or CB-SEM

(Source: Adapted from Hair et al. 2017, p. 23)

Using the rules of thumb presented in Figure 3.4, the choice to use PLS-SEM analysis can be justified as follows:

1. The goal of the analysis was to predict the relationships between the variables, not to confirm these relationships
2. To test the hypotheses related to the dimensions of the DM, formative constructs were required for a Type II reflective-formative model and these Higher Order constructs required the use of the latent variable scores
3. The model contained many indicators (up to 65)
4. The sample size was small (Greater than 120)
5. There were no circular relationships

In addition, PLS-SEM is recommended for use with non-parametric data rather than CB-SEM (Hair et al. 2017). As demonstrated above, the choice of SmartPLS 4 for PLS-SEM analysis is

well justified for the requirements of this research methodology in the context of this study and its design and limitations.

Therefore, bootstrapping (5000 samples as recommended) was conducted to assess the relationship between each of the Indexes in the DM and performance (Hair et al. 2017). PLS-SEM tests for the significance of the coefficients through application of the non-parametric bootstrapping procedure (Hair et al. 2017). The data provided measures of the beta coefficients between the endogenous and exogenous variable along with t-values and p-values that allowed for the assessment of the significance of these relationships. In addition, the level of *R* square, *f* square, and *Q* square was also provided to assess the relationships between the variables, the effect of the exogenous variables on the endogenous variables, and the predictive relevance of the model respectively.

These latent variable scores allowed the development of Higher Order Constructs (HOCs) to create a Type II Reflective Formative model (Sarstedt et al. 2019) that allowed for the assessment of the relationships between the Dimensions of the DM and performance by also conducting bootstrapping (5000 samples). The significance of these relationships was presented via the beta coefficients along with the t scores and p values to confirm or refute the hypotheses developed from the literature review. In addition, the overall predictive power of the model that has been developed was assessed and reported to give the results greater context in this study and to assist in the development of future studies. The results of the hypotheses that were developed because of the literature review could then be presented.

3.7 Qualitative data collection

In line with the Explanatory Sequential Mixed Methods, the qualitative data collection was built as a result of the analysis and findings of the quantitative data collection (Creswell 2014). The quantitative data was analysed to test the hypotheses that were developed as a result of the literature review. The results of these hypotheses testing allowed questions to be developed that could explain the data in more depth by using purposively selected participants from the first quantitative stage (Creswell 2014). Interviews were attended by the primary researcher and conducted in English. Each interview was scheduled for a twenty-minute duration and took place via Microsoft Teams.

3.7.1 Interview question development

Inductive reasoning is the basis for the qualitative research where the focus is on unexplored areas for discovery to generate theories and ideas or build on previous research (Court & Abbas 2018; Hair, Page & Brunsveld 2020). This contrasts with the previous quantitative stage which used deductive reasoning to test hypotheses (Hair, Page & Brunsveld 2020). This second stage of qualitative research was seen as a necessary part of this research in order to validate and explain the quantitative findings in the Vietnamese context and given that the quantitative research ‘...incompletely explains the research question’ (Hair, Page & Brunsveld 2020, p.306). The qualitative research adds validity and insight to the quantitative findings in answering research questions one and two and is essential to answer research question three. Tashakkori and Teddlie (2016) note that mixing questions are often used in mixed methods research in a way that indicates the procedure of integrating the results. Creswell and Plano-Clark (2007) note that these questions should be tied to the design being used and be indicative of the procedure for mixing. For research questions one and two, where the Explanatory Sequential Mixed Methods design is being applied, the mixing question that the research aims to answer is:

How do the qualitative responses enhance the interpretation of the quantitative results showing a picture of organisational culture and the relationship between the Dimensions and Indexes of the Denison Model to organisational performance in Vietnamese organisations?

Therefore, these questions needed to be directly related to the organisational culture of the organisations in which the respondents were employed, how respondents perceive any relationship between strong culture and performance, and to explore specific Dimensions and Indexes in relation to respondents’ organisations to better understand the relationships that these have to performance in Vietnamese organisations.

In developing the qualitative interview questions, while aiming to build on, validate, and expand the findings of the quantitative stage, it is important to look back to the research questions of this study as the primary drivers to ensure alignment with the purpose of the study (Agee 2009; Creswell 2014). Given that the quantitative survey provides us with a picture that provides answers to the research questions, the primary goal of the qualitative questions is to

support or to contrast these findings to provide a greater level of validation and insight. Therefore, the research questions were aimed at exploring the same themes as the quantitative questions to provide support or contrast and allow for transparency and reproducibility.

To formulate appropriate qualitative questions, Court and Abbas (2018) recommend that the questions be open and broad enough to allow for unexpected discoveries yet are well formulated and robust in relation to the focus of the research. Creswell (2014) recommends that to be able to evaluate the themes that emerge, it is important to formulate questions in a way that allows for the emergence of these themes by ensuring that open ended questions begin with words like 'how' or 'what'. In addition, Creswell (2014) encourages the use of verbs with an intent that seeks to describe and explore. However, at the same time it was important to ensure that the development of the questions allowed a view from the participants perspective to be gathered without any bias from the researchers experience or expectations (Court & Abbas 2018). Court and Abbas (2018) further note that the number of questions asked is critical and that while at time just one question may be adequate while more than seven would be too many while Miles and Huberman (1994) advise no more than twelve questions in total. Creswell (2014) advises that one or two central questions are appropriate with five to seven sub-questions in addition to the central questions.

With these guidelines to qualitative question development in mind, the goal in development of the qualitative questions for this study was to develop one or two central questions for each of the research questions and additional appropriate sub questions more specifically related to specific quantitative findings. The results of the hypothesis testing showed whether relationships between Indexes or Dimensions of the DM were significant or not however, while this indicates that there is potential for development of organisational culture to improve outcomes, it does not tell us how or whether it is possible. To understand how or to what extent improvement in these Indexes and Dimensions can improve organisational outcomes, broader considerations of the ability to change these elements must be considered in the broader context of Vietnamese culture. In order to enhance the reproducibility of the qualitative study and to provide reliability it was important that both the questions and the themes be based on the Dimensions and Indexes of the DM.

Given the requirements for a small number of open-ended questions and considering the required alignment with the DOCS items and the DM, the questions needed to reflect the Indexes and Dimensions of the DM. Therefore, questions were developed to reflect the Dimensions of the model and the wording of these questions sought to gain insight into the three Indexes that form each Dimension. In line with the research questions, these questions related to the performance of organisations in the Vietnamese context and culture.

3.7.2 Interview participants

The recruitment of interview participants for the qualitative stage in Explanatory Sequential Mixed Methods research should include participants from the first quantitative stage of the research to build on, validate, and expand upon the findings (Creswell 2014). Owing to the limitations of the quantitative stage in the sampling method for the selection of participants, the qualitative stage will aim to take a more purposeful sample of participants to add depth to the demographics of the sample with respect to the population (Creswell 2014). The number of participants can be guided by heuristics which suggest that the number should be largely determined by the type of qualitative research being conducted (Creswell 2014). This stage aimed for ten interview participants that were purposefully selected to best represent the demographics of the population within the sample of quantitative survey participants.

This research was gathered via qualitative interviews with a selection of participants from the quantitative stage of the research to build on, validate, and expand upon the findings (Creswell 2014) as well as other participants to broaden the range of responses. Owing to the limitations of the quantitative stage in the sampling method for the selection of participants, the qualitative stage aimed to take a more purposeful sample of participants to add depth to the demographics of the sample with respect to the population (Creswell 2014).

3.7.3 Interview administration

A total of eight respondents from the first quantitative stage and two new respondents were contacted by email where they were provided with a research Invitation Letter (Appendix H). All the respondents indicated willingness to participate in the interviews and were subsequently emailed a proposed interview time, calendar link for the Microsoft Teams meeting,

instructions, and an Interview Protocol Pack (Appendix I) and Consent Form (Appendix J) attached.

The Interview Invitation Letter (Appendix H) provided respondents with an overview of the study. The Consent Form (Appendix J) was to be filled in by each respondent to indicate consent to take part in the interview. The Interview Protocol Pack (Appendix I) was to allow the respondents to be adequately prepared to answer the questions in the interview and to collect demographic information for each respondent. The Interview Protocol Pack was divided into three parts:

Part 1 – Provided respondents with an overview of the DM and definitions of the Dimensions and Indexes as well as an overview of the Hofstede Dimensions of Culture for Vietnam and explanations of each of these dimensions in the Vietnamese context.

Part 2 – Respondents were provided with demographic questions that were also administered in the quantitative data collection phase.

Part 3 – Provided respondents with the interview questions in advance to allow for contextualisation with the information provided and an opportunity to ask for any clarification prior to the commencement of the interview. Respondents were asked a total of six questions.

After acceptance of the calendar invites, all interviews were conducted over a two-week period in mid-2023 online via Microsoft Teams. Prior to commencing the interviews all participants were asked whether they required any clarification of information provided and that they were aware that the interview was being recorded and transcribed to allow for analysis of the data. All interviews were conducted between the primary researcher and each participant and lasted between eleven and twenty-five minutes. Participants were thanked for their participation at the conclusion of the interviews and reminded to return the Consent Form and demographic information in the Interview Protocol Pack if they had not already done so. Following the conclusion of the qualitative interviews it was possible to move on to the qualitative data analysis.

3.8 Qualitative data analysis

Freeman (2016, p. 6) asserts that the mode of thinking should drive the strategy for analysis and advises that five modes of thinking can be considered.

1. Categorical
2. Narrative
3. Dialectical
4. Poetical
5. Diagrammatical

In line with the worldview of the primary researcher, the methodology, and the aims of the research questions, a combination of modes mode of thinking should guide the analysis for this study. Freeman (2016) notes that categorical thinking is essential in helping to make sense of the world and that it allows us to group things together. This will be essential owing to the research design employed to allow for a clear comparison between the qualitative and quantitative findings. As such, the themes for the research questions seeking to validate and explore the quantitative findings are directly derived from the Dimensions and Indexes of the DM to allow for direct comparison and to enhance the reproducibility of the study. These themes will also allow for a focus on the relevant data to be extracted from the vast qualitative responses while irrelevant data in relation to the quantitative data can be excluded (Creswell 2014). In addition, a narrative will be essential for the research questions that are not related to the quantitative findings to tell a story from a Vietnamese perspective regarding the contribution of Vietnamese culture to organisational culture within Vietnamese organisations and whether there is a perception that this influence is similar in other cultures. The themes emerging from the narrative qualitative data will be guided by the purpose of the relevant research questions which seek to aggregate essential data related to the two themes (Creswell 2014) related to traditional and contemporary culture in Vietnamese organisations.

Firstly, all interviews needed to be transcribed to allow for the analysis of the interviews to identify themes according to the categorical approach (Freeman 2016). All interviews were conducted on Microsoft Teams with the recording and transcription feature activated. This allowed for simultaneous recording and automatic transcription of the interviews. In addition,

this allowed for appropriate clarification of poorly pronounced and transcribed words when analysing the transcripts.

The interview transcripts were analysed to identify and categorise the themes that could be related to answering the research questions in line with both the Dimensions and Indexes of the DM and with relation to contemporary and traditional influences on the culture in Vietnamese organisations. This allowed for the appropriate mixing of the results (Creswell 2014) with a discussion of the alignment between the hypotheses developed from the literature review, the quantitative data, and the qualitative findings to answer the research questions and determine meaningful impacts on practice, theory, and directions of future research.

To allow for the identification of and categorisation of themes for the qualitative analysis, it was possible to utilise specialised qualitative analysis software. The primary researcher chose to use both Excel and NVivo to aid in the categorisation of comments into themes and sub themes that aligned with the Indexes and Dimensions from the quantitative study to allow for data consolidation and merging in line with the research method (Caracelli & Green 1993; Creswell 2014). For exploration of the qualitative research question, the related interview questions utilised themes when discussing cultural influences that could be divided into the typologies of traditional or contemporary.

Firstly, Excel was used for a preliminary analysis and familiarisation with the data. The transcripts were roughly divided into themes and sub-themes that aligned with the Dimensions and Indexes of the DM for the questions related to the quantitative analysis and into broad themes related to traditional or contemporary influences for questions related to the qualitative research question.

Following this preliminary analysis and familiarisation with the data, NVivo was utilised to analyse each of the questions separately. For interview questions one and two the themes related to the Dimensions of the DM became the parent nodes and the sub-themes related to the Indexes became the child nodes. This allowed for the number of comments related to the Dimensions and Indexes to be directly compared to the quantitative findings while each of the comments could also be explored in more detail to show relationships and develop more comprehensive understanding. For interview question three and the sub-questions, the themes were created as parent nodes that related to the Indexes of the DM. This allowed for the

calculation of the number of comments related to each of the Indexes and for the calculation of the number of comments related to each Dimension. The sub-questions used themes that were explicitly related to the significant findings of the quantitative stage by creating parent nodes that were aligned with each of the significant Indexes and Dimension. This allowed for a deeper exploration of the comments to help confirm the findings and to develop a deeper understanding of the results in line with the methodological purpose.

Question four used the themes of traditional and contemporary influences by creating parent nodes so that comments could be allocated accordingly. This allowed for an assessment of the number of comments that reflected more traditional or contemporary influences on the organisational culture while also allowing for connections to Vietnamese culture to be explored and understood in more detail.

Question five simply looked at the comments to establish broadly whether there was a perception between the influence of traditional cultures on organisational culture. Comments were presented to allow for a discussion that demonstrated the opinions of the respondents while making links between specific cultural characteristics and the influences perceived on organisational culture in various contexts related to the respondents' experience.

All the qualitative analysis in NVivo was completed twice to improve the reliability and validity of the results and to reduce bias of the primary researcher.

3.9 Discussion

Finally, all the data collected could be analysed for discussion in the thesis in line with the Explanatory Sequential Mixed Methods approach (Creswell 2014) and the conceptual framework which has been presented. This allowed for an in-depth discussion surrounding the relationship between the performance and organisational culture in Vietnamese organisations that can answer the research question and sub-questions. It is anticipated that this analysis provides both strong validity in the explanatory approach (Creswell 2014; Trochim & Donnelly 2008) while also providing an in-depth discussion that will adequately address the research questions while also providing a basis for further research in the future.

3.10 Quality and trustworthiness

The Explanatory Sequential Mixed Methods approach using quantitative and qualitative data was justified and presented in the previous section. This section will discuss the dependability, reliability, and validity of the research to ensure the quality and trustworthiness of the study and the results presented. Owing to the mixed methods design of this study, this requires discussions in both the context of the quantitative and the qualitative phases which requires a shift in thinking owing to the different nature of these methodologies (Bhattacharya 2017).

3.10.1 Dependability and reliability

Dependability and reliability should be thought of in terms of their respective relationships with qualitative and quantitative research (Bhattacharya 2017). Reliability is associated with quantitative research methods and refers to consistency related to the ability for studies to be reproduced using similar methodology (Saunders, Lewis & Thornhill 2015; Seale 1999; Trochim & Donnelly 2008;). Dependability is a more appropriate measure of qualitative research methods owing to the interpretations of the researcher (Highfield & Bisman 2012) and should instead be regarded more in terms of trustworthiness, transferability, and triangulation in line with the purpose of the research (Bhattacharya 2017). The quantitative data collection provides strong reliability as the methodology replicates data collection methods that have already been proven (Denison Consulting 2019; Denison, Haaland & Goelzer 2004; Fey & Denison 2003) which ensures it will be a robust instrument of measure (Creswell 2014) that can be replicated. This validity of the DM and the Denison Organisational Culture Survey (DOCS) have also been evaluated and confirmed in separate independent studies (Denison & Neale 1999; Denison, Nieminen & Kotrba 2014; Nazir & Lone 2008; Zeng et al. 2015). In addition, and of importance considering that this is the first time this questionnaire has been translated and administered in Vietnam, statistical tests measuring Composite Reliability (CR) could be performed when building the model in SmartPLS 4.

The dependability of the qualitative research in this study is supported using the Interview Protocol Pack (Appendix I) which was approved by a research supervisor and the USQ Human Research Ethics Committee and demonstrates a consistent approach to data collection and repeatability in potential future studies. In addition, participants were sought from the

quantitative phase to validate the findings (Creswell 2014) while additional participants were also sought to further extend this validation beyond the quantitative cohort and allow for additional perspectives. Interview participants were asked the same questions and at times where answers were not clear, participants were asked for clarification of their responses or questions were clarified to ensure understanding. To ensure the best reflection of the qualitative data was presented in the findings, the primary research analysed the transcripts multiple times using both Microsoft Excel and NVivo software with a focus on the themes that were relevant to each of the different research questions. Therefore, the quantitative phase of this study was able to ensure reliability while the qualitative phase was able to demonstrate dependability.

3.10.2 Construct validity

Construct validity is not relevant to the qualitative phase of this study but is important to understanding that the measures used in the quantitative phase are measuring what they intended to measure (Saunders, Lewis & Thornhill 2015). The construct validity of the DM has been proven in previous Denison studies and contributes to the popularity of the use in so many studies as already reviewed in the literature. However, to confirm the construct validity of the model in this study, statistical tests of convergent and discriminant validity were performed using SmartPLS 4 to confirm the validity of the model construct (Hair et al. 2017; Saunders, Lewis & Thornhill 2015). The Average Variance Extracted (AVE) was assessed to ensure convergent validity of the model while the Heterotrait-Monotrait (HTMT) was assessed to ensure the discriminant validity of the model (Hair et al. 2017). In addition, specific tests of R^2 , f^2 , and Q^2 relevant to PLS-SEM were conducted to assess and confirm the predictive relevance of the model (Hair et al. 2017). These tests ensured the construct validity and reliability of the quantitative model and are presented in the findings section.

3.11 Research ethics process

George (2016) notes ethical issues that are properly considered ensures that researchers, organisations, and participants are protected while increasing value of the research outcomes. Ethical issues that needed to be considered for this research mostly revolved around principlist approaches (informed consent, anonymity, confidentiality), virtue ethics (researcher integrity), and ethical regulations and guidelines (ethics committee and university guidelines)

(Wiles 2013). Cozby & Bates (2012) note the importance of providing research participants with the necessary information to allow them to make an informed decision whether they wish to participate in the research project. In addition, most higher education institutions also generally have guidelines regarding providing participants with the required information to allow them to give informed consent to participate (Cozby & Bates 2012). The University of Southern Queensland provides guidelines and processes for researchers to facilitate this aspect of data collection in their research (University of Southern Queensland 2022). To ensure informed consent, participants must have a clear idea of the nature and purpose of the research and what their involvement will entail (Wiles 2013). Linked to informed consent, the degree to which the participants' anonymity and confidentiality will be protected must also be ensured (Bryman 2016). This also involves the participants understanding their right to refuse to answer questions and involve an interview consent form (Bryman 2016).

In accordance with the USQ human research ethics process (University of Southern Queensland 2022), a participant information sheet and invitation to participate letter were drafted and submitted for ethics review in line with the research proposal for the project. The ethics application was approved (Appendix E) and the information in these documents was sent in the emails and messages to recruit potential participants and attached to social media postings for participants. For participants in the questionnaire, the consent to participate was inferred based on the information provided and the participation of the participant in answering the questions. For participants in the interviews, a participant protocol pack was also issued along with a consent form that was required to be returned to the Principal Researcher. Ethics approvals were sought from the USQ Human Research Ethics Committee prior to the commencement of any primary data collection.

a) This research project was approved by the USQ Human Research Ethics Committee (Appendix E).

b) Participants completing the questionnaire in the quantitative stage were supplied with a letter of invitation (Appendix F), and information sheet (Appendix G) to enable them to make an informed decision about their participation in the research.

c) Participants participating in the interviews in the qualitative stage were supplied with a letter of invitation (Appendix H), an interview protocol pack (Appendix I), and a consent form

(Appendix J) to enable them to make an informed decision about their participation in the research.

d) Participants in both stages of the research were not coerced or pressured to participate by the Principal Researcher.

e) Confidentiality of the participants completing the questionnaire in the quantitative stage was maintained using an anonymous survey link.

f) Confidentiality of the participants in the qualitative interviews was maintained via coding of the participants and storage of information in a password secured drive.

g) All findings were reported accurately in an ethical and unbiased manner.

h) All appropriate reports on the collection and outcome of data collection were presented to the USQ Human Research Ethics office.

3.12 Summary

This chapter presented the methodology for this research project in relation to the research questions that were presented in chapter one and the hypotheses that were developed in chapter two. A pragmatist approach to this research was justified owing to the worldview of the Primary Researcher with respect to the nature of the research questions and the hypotheses development and an Explanatory Sequential Mixed Methods approach was justified. The quantitative stages of data collection and analysis were then presented including the process of participant recruitment and justification for the use of PLS-SEM for the data analysis using SmartPLS4. The process for the development of the qualitative interview questions was then outlined. The qualitative data collection and analysis methodology was then presented which also outlined the process for the recruitment of participants and the approach to the data analysis and the use of NVivo software. Finally, the ethical considerations for the project were explored and the specific items to address these considerations were presented. The findings of the processes outlined are presented in the following chapter.

CHAPTER 4: FINDINGS

4.1 Introduction

The purpose of this research is to answer the main research questions relating to the nature of organisational culture in Vietnamese organisations and the relationships between Vietnamese organisational culture and national culture and organisational performance. In addition, in answering the main questions, the sub questions can also be answered that allow for the contribution of these finding to the broader body of research assessing the nature of organisational culture and the relationships to performance in various cultural settings.

The literature review focused on the parent theories related to these questions and identified and focused on the Denison Organisational Culture Survey (DOCS) and the DM as useful tools to gather and assess quantitative data related to the hypotheses that were developed to aid in answering these questions. In particular, the DM can be used to map the Dimensions of organisational culture in Vietnam and provide a picture related to the Dimensions and Indexes (Sub dimensions) while Partial Least Squares Structural Equation Modelling (PLS-SEM) can be applied using the responses to the DOCS to demonstrate the relationship between these Indexes and Dimensions of organisational culture and organisational performance in Vietnamese organisations. These quantitative findings can then be verified and explored for a better understanding of the nature and relationships with the addition of a second qualitative stage. The second qualitative stage also allows for the exploration of the relationship between national culture and organisational culture.

4.1.1 Objective of the chapter

The objective of this chapter is to present the findings of both the quantitative and qualitative data analysis to test the hypotheses that were developed from the literature review and to categorise themes that were identified in the semi-structured interviews to answer the research questions. Section 4.2 presents the descriptive statistics which include the demographics of the respondents and the analysis of the quantitative survey data to present a picture of the Dimensions and Indexes of organisational culture in Vietnam. Section 4.3 goes on to present the quantitative testing using PLS-SEM to build a reflective model to predict the relationships between the Indexes of organisational culture and performance according to the DM and to

assess the predictive validity of the model. The results of the hypotheses testing for the Indexes of the DM and performance are then presented in section 4.4 before these results are then used to construct a Type II Reflective Formative HOC model to predict the relationships between the Dimensions and performance in section 4.5. The development of the qualitative interview questions as a result of the quantitative findings that will be used to confirm the quantitative results and to gain a deeper understanding as related to the research questions are then presented in section 4.6. The findings of the qualitative data analysis are then presented in section 4.7 beginning with the demographic data and followed with analysis of each of the interview questions before a summary of the findings is presented in section 4.8.

4.2 Descriptive statistics

The DOCS data was downloaded from Qualtrics into an Excel spreadsheet to show each response. A total of 175 participants responded to the questionnaire. Of these responses, 52 were removed from the final data collection due to an insufficient response rate (>15% of questions were not answered) (Hair et al. 2017). The responses were then coded according to the Likert scaling (Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly agree = 5).

Care was taken to ensure that each response was accurately coded and that the negative statements were identified (questions code SDI3, V3, CI5, A5, CD5, CC4, CF5, and OL3) and reverse coded. Some responses from some respondents were missing but below the 15% of total responses threshold required for the entire respondent to be removed (Hair et al. 2017). A total of 47 of the 7995 responses were missing. For responses with less than 15% of responses missing, the data was filled in using mean value replacement for that specific question (Hair et al 2017). The result of the data cleaning was a reduction in the total responses that could be used from 175 surveys down to a total of 123 (Appendix N).

The descriptive statistics are presented first. This shows the demographics of the survey respondents followed by the maps of the Dimensions and Indexes of organisational culture which will include the mean scores and standard deviations for each Dimension and Index according to the DM.

4.2.1 *Demographics of respondents*

Demographic data for each respondent was also collected and is presented in Table 4.1 below.

Table 4.1 - Demographic Survey Responses

Criterion	123 participants	Number	Percentage
Age	18 - 24	35	28%
	25 - 34	40	33%
	35 - 44	33	27%
	45 - 54	12	10%
	55+	2	2%
	Nonresponse	1	1%
Gender	Male	56	46%
	Female	62	50%
	Prefer not to say	4	3%
	Nonresponse	1	1%
Level of employment	Senior Manager	12	10%
	Manager	41	33%
	Non manager	69	56%
	Nonresponse	1	1%
Years of work experience	0 - 5	58	47%
	6 - 15	41	33%
	16 - 25	15	12%

Criterion	123 participants	Number	Percentage
	26 - 35	3	2%
	More than 35	0	0%
	Nonresponse	6	5%
Work location	HCMC	74	60%
	Hanoi	9	7%
	Danang	13	10%
	Other	25	20%
	Nonresponse	2	2%
Organisation Type	Foreign	57	46%
	Vietnamese	65	53%
	Nonresponse	1	1%
Native Language	Vietnamese	115	93%
	English	3	2%
	Nonresponse	5	4%
Industry type	Services	22	18%
	Government	4	3%
	Production	15	12%
	Education	20	16%
	Finance & Insurance	12	10%
	Logistics	6	5%
	Hospitality	7	6%
	Healthcare	7	6%

Criterion	123 participants	Number	Percentage
	Communications	4	3%
	Administration	3	2%
	Professional	1	1%
	Entertainment	5	4%
	Real estate	14	11%
	Nonresponse	3	2%

The demographic statistics show a that the age distribution and years of work experience broadly reflected the population. Vietnam has a younger population with the workforce comprised of 61% of employees under the age of 45 compared to 87% in the survey (General Statistics Office 2021). The youngest age group of 18 to 24 was overrepresented in the sample with 28% compared to 10% in the workforce population. The age group 45 years and older was underrepresented in the survey with 13% of respondents compared to 39% in the workforce population (General Statistics Office 2021). The other age groups were well represented in the survey with 25 to 34-year-old respondents representing 33% compared to 25% in the workforce population and 35 to 45-year-old respondents representing 27% which is the same as the workforce population (General Statistics Office 2021). The age distribution in the survey is also reflected in the years of work experience with a majority of the respondents having less than twenty-five years work experience.

The gender responses showed that 50% of respondents were female, 46% were male, while 4% chose not to disclose. This compares with the population of Vietnam with 53.5% males and 46.5% females making up the workforce population (General Statistics Office 2021).

A good distribution of employment level was seen with some skew towards more managers. Senior level managers were the fewest number of respondents with twelve which overall gives a good proportion of representation.

Nearly all respondents' native language was Vietnamese while there was a relatively even split between foreign and Vietnamese organisations.

The responses were skewed towards Ho Chi Minh City with 60% of the respondents as was predicted. However, the remaining forty percent represent a good cross section with 10% from Danang, 7% from Hanoi, and 20% from other places.

Respondents came from all industry types represented in the questions with the largest number coming from services and education while few were from government, professional, communications, or entertainment. The responses were largely skewed to the services sector overall with a total of 69% of respondents working in service industries compared to 37.8% in the population (General Statistics Office 2021). Industry and construction sector industries accounted for 28% of respondents in the survey compared to 33.1% in the population while no respondents were from the agriculture, fishing, and forestry sector which accounts for 29.1% of workers in Vietnam (General Statistics Office 2021). This is to be expected given the skew in responses from urban workers compared to rural workers in this survey compared to 63.3% of workers in the population belonging to rural areas (General Statistics Office 2021).

4.2.2 Organisational Culture Map – Vietnam

Based on the DOCS, it was possible to develop a model that reflects the aspects of organisational culture tested by the DM. The Dimension of Involvement had the highest mean score of 3.89 and contained the highest two mean Index scores of 4.06 for Empowerment and 3.97 for Team Orientation. The Dimensions of Mission and Consistency had the same mean score of 3.75. Adaptability had the lowest mean score of 3.58 with each of the Index items of this Dimension having the three lowest mean scores of 3.62 for Customer Focus, 3.60 for Organisational Learning, and 3.52 for Creating Change. These results are shown in Figure 4.1 and Table 4.2.



Figure 4.1 - Organisational Culture map of Vietnamese Organisations from the DOCS

Table 4.2 - Dimension and Index scores of Vietnamese Organisations from the DOCS

Dimension	Mean	Std. Dev.	Index	Mean	Std. Dev.
Mission	3.75	0.182	Strategic Direction and Intent	3.73	0.508
			Goals and Objectives	3.94	0.092
			Vision	3.57	0.796
Consistency	3.75	0.137	Coordination and Integration	3.66	0.482
			Agreement	3.67	0.504
			Core Values	3.90	0.096
Involvement	3.89	0.229	Capability Development	3.63	0.533
			Team Orientation	3.97	0.199
			Empowerment	4.06	0.066
Adaptability	3.58	0.051	Creating Change	3.52	0.587
			Customer Focus	3.62	0.450
			Organisational Learning	3.60	0.708

4.2.2.1 Mission

The Dimension of Mission in the DM is formed by the three Indexes of Strategic Direction and Intent, Goals and Objectives, and Vision. Mission is associated with an external focus and stability on the DM. The three Indexes of the Mission Dimension are reflected by five survey questions each. The responses to the questions associated with the Mission Dimension shows that the Goals and Objectives Index had the highest mean score of 3.94, followed by Strategic Direction and Intent with a mean score of 3.73, and Vision with a mean score of 3.57. These results are shown in Figure 4.2 and Table 4.3.



Figure 4.2 - Mission Dimension map of Vietnamese Organisations from Indexes of the DOCS

Table 4.3 - Mission Dimension scores of Vietnamese Organisations from the DOCS

Index	Code	Statement	Mean	Std. Dev.
Strategic Direction and Intent	SDI1	This organization has a clear mission that gives meaning and direction to our work.	3.90	0.918
	SDI2	This organization has a long-term purpose and direction.	4.05	0.904
	SDI3	The strategic direction of this organization is unclear to me.	2.90	1.327
	SDI4	This organization has a clear strategy for the future.	4.18	0.958

Index	Code	Statement	Mean	Std. Dev.
	SDI5	Our organization's strategy is leading other firms to change the ways that they compete.	3.63	0.936
Goals and Objectives	GO1	There is widespread agreement about the goals of this organization.	3.91	0.849
	GO2	The leaders of this organization set goals that are ambitious, but realistic.	3.80	0.975
	GO3	The leadership of this organization has "gone on record" about the objectives we are trying to meet.	3.96	0.863
	GO4	We continuously track our progress against our stated goals.	4.05	0.838
	GO5	The people in this organization understand what needs to be done for us to succeed in the long run.	3.97	0.839
Vision	V1	We have a shared vision of what this organization will be like in the future.	3.83	0.866
	V2	The leaders in this organization have a long-term orientation.	4.15	0.915
	V3	Short-term thinking often compromises long-term vision.	2.17	0.930
	V4	Our vision creates excitement and motivation for our employees.	3.85	1.000

Index	Code	Statement	Mean	Std. Dev.
	V5	We are able to meet short-term demand without compromising our long-term vision.	3.87	0.896

4.2.2.2 (Statement Source: Denison & Neale 1999, pp. 2-14 – 2-15)Consistency

The Dimension of Consistency in the DM is formed by the three Indexes of Coordination and Integration, Agreement, and Core Values. Consistency is associated with an internal focus and stability on the DM. The three Indexes of the Consistency Dimension are reflected by five survey questions each. The responses to the questions associated with the Consistency Dimension shows that the Core Values Index had the highest mean score of 3.90, followed by Agreement with a mean score of 3.67, and Coordination and Integration with a mean score of 3.66. These results are shown in Figure 4.3 and Table 4.4.



Figure 4.3 - Consistency Dimension map of Vietnamese Organisations from the Indexes of the DOCS

Table 4.4 - Consistency Dimension scores of Vietnamese Organisations from the DOCS

Index	Code	Statement	Mean	Std. Dev.
Coordination and Integration	CI1	Our approach to doing business is very consistent and predictable.	3.73	0.933
	CI2	There is good alignment of goals across levels of this organization.	4.02	0.849
	CI3	People from different organizational units still share a common perspective.	3.87	0.887
	CI4	It is easy to coordinate projects across functional units in this organization.	3.87	0.849
	CI5	Working with someone from another part of this organization is like working with someone from a different company.	2.82	1.208
Agreement	A1	When disagreements occur, we work hard to achieve "win-win" solutions.	3.86	0.890
	A2	This organization has a strong culture.	3.98	0.882
	A3	There is clear agreement about the right way and the wrong way to do things in this organization.	3.94	0.994
	A4	It is easy for us to reach consensus, even on difficult issues.	3.80	0.955
	A5	We often have trouble reaching agreement on key issues.	2.78	1.163

Index	Code	Statement	Mean	Std. Dev.
Core Values	CV1	There is a clear and consistent set of values in this company that governs the way we do business.	3.8	0.955
	CV2	This company has a characteristic management style and a distinct set of management practices.	3.95	0.948
	CV3	The managers in this company "practice what they preach."	3.80	0.997
	CV4	This organization has an ethical code that guides our behavior and tells us right from wrong.	4.01	0.864
	CV5	Ignoring the core values of this organization will get you in trouble.	3.95	0.876

(Statement Source: Denison & Neale 1999, pp. 2-10 – 2-11)

4.2.2.3 Involvement

The Dimension of Involvement in the DM is formed by the three Indexes of Capability Development, Team Orientation, and Empowerment. Involvement is associated with an internal focus and flexibility on the DM. The three Indexes of the Involvement Dimension are reflected by five survey questions each. The responses to the questions associated with the Involvement dimension shows that the Empowerment Index had the highest mean score of 4.06, followed by Team Orientation with a mean score of 3.97, and Capability Development with a mean score of 3.62. These results are shown in Figure 4.4 and Table 4.5.



Figure 4.4 - Involvement Dimension map of Vietnamese Organisations from the Indexes of the DOCS

Table 4.5 - Involvement Dimension scores of Vietnamese Organisations from the DOCS

Index	Code	Statement	Mean	Std. Dev.
Capability Development	CD1	This organization delegates authority so that people can act on their own.	3.82	0.915
	CD2	The capability of the people in this organization is viewed as an important source of competitive advantage.	4.02	0.824
	CD3	This organization continuously invests in the skills of its employees.	3.87	1.086
	CD4	The "bench strength" of this organization is constantly improving.	3.72	0.978

Index	Code	Statement	Mean	Std. Dev.
	CD5	Problems often arise in my organization because we do not have the skills necessary to do the job.	2.69	1.216
Team Orientation	TO1	Cooperation and collaboration across functional roles are actively encouraged in this	4.16	0.814
	TO2	Working in this organization is like being part of a team.	4.11	0.828
	TO3	Work is sensibly organized in this organization so that each person can see the relationship between his/her work and the goals of the organization.	3.97	0.923
	TO4	Teams are the primary building block of this organization.	3.98	0.854
	TO5	This organization relies on horizontal control and coordination to get work done, rather than hierarchy.	3.65	0.967
Empowerment	E1	Most employees in this organization are highly involved in their work.	4.11	0.960
	E2	Decisions in this organization are usually made at the level where the best information is available.	4.04	0.927
	E3	Information is widely shared in this organization so that everyone can get the information s/he needs when it is needed.	4.14	0.908

Index	Code	Statement	Mean	Std. Dev.
	E4	Everyone in this organization believes that s/he can have a positive impact.	4.02	0.834
	E5	Business planning in our organization is ongoing and involves everyone in the process to some degree.	3.98	0.949

(Statement Source: Denison & Neale 1999, pp. 2-8 – 2-9)

4.2.2.4 Adaptability

The Dimension of Adaptability in the DM is formed by the three Indexes of Creating Change, Customer Focus, and Organisational Learning. Adaptability is associated with an external focus and flexibility on the DM. The three Indexes of the Adaptability Dimension are reflected by five survey questions each. The responses to the questions associated with the Adaptability dimension shows that the Customer Focus Index had the highest mean score of 3.62, followed by Organisational Learning with a mean score of 3.60, and Creating Change with a mean score of 3.52. These results are shown in Figure 4.5 and Table 4.6.



Figure 4.5 - Adaptability Dimension map of Vietnamese Organisations from the Indexes of the DOCS

Table 4.6 - Adaptability Dimension scores of Vietnamese Organisations from the DOCS

Index	Code	Statement	Mean	Std. Dev.
Creating Change	CC1	This organization is very responsive and changes easily.	3.38	1.004
	CC2	This organization responds well to competitors and other changes in the external business	3.82	0.869
	CC3	This organization continually adopts new and improved ways to do work.	3.98	0.896
	CC4	Attempts to change this organization usually meet with resistance.	2.55	1.103

Index	Code	Statement	Mean	Std. Dev.
	CC5	Different units in this organization often cooperate to create change.	3.86	0.843
Customer Focus	CF1	Customer comments and recommendations often lead to changes in this organization.	3.80	0.868
	CF2	Customer input directly influences our decisions.	3.80	0.920
	CF3	All members of this organization have a deep understanding of customer wants and needs.	3.76	1.066
	CF4	We encourage direct contact with customers by members of the organization.	3.91	1.000
	CF5	The interests of the final customer often are ignored in our decisions.	2.82	1.268
Organisational Learning	OL1	This organization encourages innovation and rewards those who take risks.	3.67	0.989
	OL2	We view failure as an opportunity for learning and improvement.	3.98	0.936
	OL3	Lots of things "fall between the cracks" in this organization.	2.37	1.067
	OL4	Learning is an important objective in our day-to-day work.	4.14	0.793

Index	Code	Statement	Mean	Std. Dev.
	OL5	We make certain that the "right hand knows what the left is doing. "	3.83	0.921

(Statement Source: Denison & Neale 1999, pp. 2-12 – 2-13)

4.2.2.5 Performance

The performance questions mirrored those used in the largest Denison study (Denison, Haaland & Goelzer 2004) and measured five traits of performance as perceived by respondents in relation to their current organisation. These questions are shown in Appendix M and the cleaned and coded data is shown in Appendix O. The responses showed that respondents rated profitability / ROI and sales growth as the weakest with mean scores of 3.44 and 3.50 respectively, while they rated the quality of their products and services as the highest with a mean score of 3.89. Employee satisfaction and the overall organisational performance were rated similarly between the other measures at 3.65 and 3.66 respectively. These results are shown in Figure 4.6 and Table 4.7.

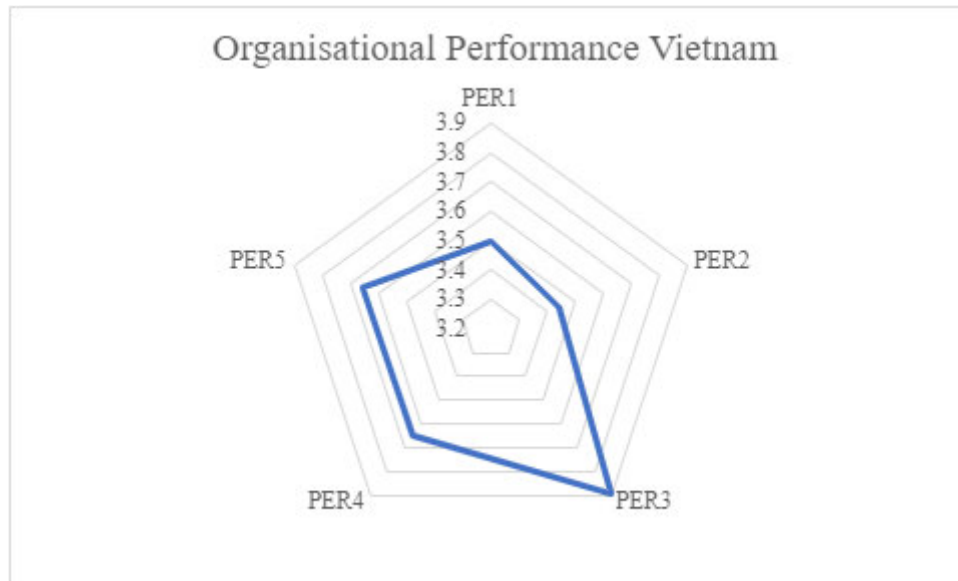


Figure 4.6 - Organisational Performance map of Vietnamese organisations from the questionnaire

Table 4.7 - Organisational Performance scores of Vietnamese Organisations from the questionnaire

Index	Code	Indicator	Mean	Std. Dev.
Performance	PER1	Sales Growth	3.50	1.375
	PER2	Profitability / ROI	3.44	1.461
	PER3	Quality of Products and Services	3.89	1.253
	PER4	Employee Satisfaction	3.65	1.287
	PER5	Overall organisational performance	3.66	1.247

While the data presented can give us an idea of the shape of organisational culture in Vietnam and provide a basis for comparison to the shape of organisational culture in other cultural contexts, it does not inform us of the link to organisational performance. In order to understand this relationship, it is necessary to build a structural model linking the Indexes as Lower Order Constructs (LOCs) exogenous variables to the endogenous variable of performance and to then

build a second structural model that links the Dimensions as Higher Order Constructs (HOCs) as endogenous variables to the endogenous variable of performance (Hair et al. 2017; Sarstedt et al. 2019). To assess the relationship between each of the twelve Indexes and the four Dimensions of the DM, SmartPLS 4 was utilised to build the required models as discussed in the methodology chapter.

4.3 Quantitative testing

To assess all the hypotheses, it is required to first build a model that assess the relationship between each of the Indexes and performance. The results of this model can then be used to build a Hierarchical Component Model (HCM) to assess the hypotheses related to the Dimensions of the model (Hair et al. 2017; Hair et al. 2018). The models are constructed using SmartPLS 4. Firstly, the model to assess the relationships between the Indexes and Performance will be presented followed by the model to assess the relationships between the Dimensions and performance.

4.3.1 Reflective model

A reflective model is appropriate to test the relationships between the Indexes and performance as the Indexes of the model reflect the responses to the five survey questions for each Index, which will act as the indicators in the model (Diamantopoulos & Siguaw 2006). This is the appropriate model as each of the survey questions (indicators) are interchangeable and designed to reflect the construct (Hair et al. 2017).

4.3.2 Measurement model evaluation

It is necessary to assess the measurement model so that the results of the structural model can be considered. Factor loadings, reliability, and validity of the outer measurement model must first be evaluated, and the model must be adjusted to ensure the reliability and validity of the construct (Hair et al. 2017).

4.3.2.1 Factor Loadings

Firstly, the PLS-SEM algorithm was run to look at the loadings between the indicators and the latent variables. It is advised to retain indicators with loadings above 0.7 and to remove those

with loadings below 0.4 while considering loadings between 0.4 and 0.7 according to their impact on the reliability and validity of the model (Hair et al. 2017). Therefore, the first step was to remove indicators that showed factor loadings of less than 0.4. In this step a total of eight indicators were removed. Table 4.8 shows these indicators and their respective loadings. It is noteworthy that these eight indicators were all the negative statements in the questionnaire which were reverse coded in the analysis.

Table 4.8 - Indicators removed from the model showing loadings less than 0.4

Indicator	Loading
SDI3	0.087
V3	-0.410
CI5	-0.109
A5	0.065
CD5	-0.355
CC4	-0.117
CF5	-0.356
OL3	0.048

This totalled 12.3% (8 / 65) of the responses in the survey. It was then necessary to assess the impact of loadings between 0.4 and 0.7 on the reliability and validity of the measurement model to determine whether they should be included or excluded. Other factors were systematically removed from the model as discussed in the following sections. The reasons for the removal of these factors are then summarised in Table 4.15. Below in Table 4.9 is a list of the final factors and their loading in the model.

Table 4.9 – Retained indicators and their respective loadings

Indicators and Indexes	Outer loadings
A3 <- Agreement	0.876
A4 <- Agreement	0.849
CC1 <- Creating Change	0.651
CC2 <- Creating Change	0.700
CC3 <- Creating Change	0.722
CC5 <- Creating Change	0.670
CD1 <- Capability Development	0.566
CD2 <- Capability Development	0.580
CD3 <- Capability Development	0.798
CD4 <- Capability Development	0.811
CF1 <- Customer Focus	0.582
CF2 <- Customer Focus	0.560
CF3 <- Customer Focus	0.781
CF4 <- Customer Focus	0.657
CI1 <- Coordination & Integration	0.753
CI2 <- Coordination & Integration	0.809
CI3 <- Coordination & Integration	0.755
CV1 <- Core Values	0.719
CV2 <- Core Values	0.741
CV3 <- Core Values	0.794
CV4 <- Core Values	0.678

Indicators and Indexes	Outer loadings
E2 <- Empowerment	0.776
E3 <- Empowerment	0.822
E4 <- Empowerment	0.735
GO1 <- Goals & Objectives	0.659
GO2 <- Goals & Objectives	0.776
GO3 <- Goals & Objectives	0.776
GO4 <- Goals & Objectives	0.765
GO5 <- Goals & Objectives	0.663
OL1 <- Organisational Learning	0.824
OL2 <- Organisational Learning	0.835
OL5 <- Organisational Learning	0.711
PER1 <- Performance	0.699
PER2 <- Performance	0.779
PER3 <- Performance	0.776
PER4 <- Performance	0.757
PER5 <- Performance	0.818
SDI1 <- Strategic Direction & Intent	0.730
SDI2 <- Strategic Direction & Intent	0.819
SDI4 <- Strategic Direction & Intent	0.885
TO1 <- Team Orientation	0.707
TO2 <- Team Orientation	0.677
TO3 <- Team Orientation	0.763

Indicators and Indexes	Outer loadings
TO4 <- Team Orientation	0.754
V1 <- Vision	0.744
V4 <- Vision	0.845
V5 <- Vision	0.717

4.3.2.2 *Internal Consistency Reliability*

Internal consistency reliability needs to be assessed to judge the consistency of the results across the items (Hair et al. 2017). Cronbach's alpha is the traditional measure of internal consistency reliability that uses the intercorrelations of the indicators to provide an estimate (Hair et al. 2017). However, Cronbach's alpha applies equal loadings to each of the indicators (tau equivalency) while ‘...PLS-SEM prioritizes the indicators according to their individual reliability’ (Hair et al. 2017, p. 111). In addition, Cronbach’s alpha also generally underestimates the internal consistency reliability as it is sensitive to the number of items on the scale (Hair et al. 2017). Therefore, Hair et al. (2017) advises that Cronbach's alpha is not the most appropriate measurement of internal consistency reliability and tends to be too conservative. Hair et al. (2017) advise that it is more appropriate to use Composite Reliability (rho c) to measure internal consistency reliability as it provides a better measure owing to the consideration of different loadings in the calculation. However, it is also noted (Hair et al. 2017) that while the Cronbach’s Alpha can give an estimate of internal reliability that is too conservative, the Composite Reliability (rho c) can have the opposite effect. Therefore, Composite Reliability (rho a) is also provided by Smart-PLS to mediate this occurrence. Hair et al. (2017) advises reporting Cronbach’s Alpha and Composite Reliability (rho c) while acknowledging that tendency of underestimation and overestimation, respectively. Therefore, tests were conducted to assess the Cronbach's alpha (α), Composite reliability (rho a), and Composite reliability (rho c). The final results of the model are shown in Table 4.10 below (these results are also after issues of discriminant validity were resolved).

Table 4.10 - Internal Consistency Reliability results of the Indexes

Index	Cronbach's alpha (α)	Composite reliability (rho a)	Composite reliability (rho c)
Agreement	0.657	0.660	0.853
Capability Development	0.656	0.698	0.787
Coordination & Integration	0.663	0.668	0.816
Core Values	0.717	0.727	0.823
Creating Change	0.629	0.635	0.781
Customer Focus	0.569	0.600	0.743
Empowerment	0.673	0.690	0.803
Goals & Objectives	0.781	0.797	0.850
Organisational Learning	0.703	0.720	0.834
Performance	0.825	0.830	0.877
Strategic Direction & Intent	0.746	0.788	0.854
Team Orientation	0.705	0.714	0.817
Vision	0.667	0.703	0.814

As discussed, there is some debate around which measures are acceptable and what a lack of perceived reliability or validity may suggest. As can be seen from the final reliability measures that were used in the model, some issues exist if considering the reliability of the data from the Cronbach's alpha score alone where a score greater than 0.7 is generally desirable and a score of 0.6 can be acceptable when first used in a new culture (Churchill & Peter 1984; Nunnally 1978). However, as noted, the alpha score applies equal loadings (tau equivalence) and is not considered the most appropriate score, which is why composite reliability should be considered (Hair et al. 2017) and in this model is used to demonstrate internal reliability consistency.

Hair et al. (2017) advise that Composite reliability scores should range between 0.7 to 0.9 in well-established research while a lower cut-off of 0.6 is acceptable in exploratory research. Therefore, considering the exploratory nature of this research (translated and used in a new culture), a cut-off score of 0.6 for Composite Reliability can be accepted to establish the Internal Consistency Reliability. The Composite Reliability (ρ_c) shows all measures greater than 0.7 and if acknowledging the tendency of overestimation in this score and considering the Composite Reliability (ρ_a), all scores are 0.6 and above.

In conclusion, while the Cronbach's alpha and Composite Reliability (ρ_a) are reported here and discussed, ultimately the Composite Reliability (ρ_c) establishes the reliability of the measurement model (All indexes above 0.7) in this research in-line with contemporary literature and the nature of this exploratory research in a new culture.

The removal and inclusion of indicators not only affects the reliability but also the convergent and discriminant validity of the model and therefore it is also necessary to consider the impacts on these measurements when assessing whether to retain or discard indicators to improve the performance of the model construct (Hair et al. 2017).

4.3.2.3 Convergent Validity

The convergent validity of the indicators on the latent construct are measured by the Average Variance Extracted (AVE) to establish the degree to which the indicators converge to measure the construct (Hair et al. 2017). The value of the AVE should be greater than 0.5 as an indication that the indicators are meaningfully measuring the same construct and explain greater than half of the variance between the indicators (Hair et al. 2017). The Table below shows the AVE for each of the indicators (these results are also after issues of discriminant validity were resolved).

Table 4.11 - Average Variance Extracted (AVE) for each Index

Index	Average variance extracted (AVE)
Agreement	0.744
Capability Development	0.488
Coordination & Integration	0.597
Core Values	0.539
Creating Change	0.471
Customer Focus	0.424
Empowerment	0.509
Goals & Objectives	0.533
Organisational Learning	0.627
Performance	0.588
Strategic Direction & Intent	0.663
Team Orientation	0.528
Vision	0.594

While it was possible to remove and present other indicators that improved the AVE where it was less than the desirable measure of 0.5, doing so very severely impacted measurements of internal consistency reliability and discriminant validity. The AVE values in the final model represent the best AVE values that could be achieved in consideration of the other reliability and validity measures. While an AVE less than 0.5 is not desirable, because the composite reliability of the construct has already been established, an AVE between 0.4 and 0.5 can still be accepted and the convergent validity can be considered adequate (Fornell & Larcker 1981). However, it is still important to acknowledge that these measurements are less than desirable and measures to improve these in future studies to ensure greater robustness of the

measurement model should be taken. It is also important to consider these issues with the measurement model when discussing the findings of the structural model with relation to these indexes. This will be further discussed in the limitations section of the discussions chapter.

4.3.2.4 Discriminant Validity

The inclusion or removal of indicators also requires the consideration of the discriminant validity of the indicators in the measurement model. Discriminant validity issues indicate that the latent variables are distinct and that indicators for each of the latent variables are not measuring other variables in the model (Hair et.al 2017). Traditionally, cross loadings and the Fornell and Larcker criteria have been used as measures of discriminant validity (Hair et al. 2017). The cross loadings and results of the Fornell and Larcker criteria demonstrate discriminant validity in this model and are shown below in Tables 4.12 and 4.13 respectively.

Table 4.12 - Cross loadings

	A	CC	CD	CF	CI	CV	E	GO	OL	PER	SDI	TO	V
A3	0.875	0.414	0.524	0.329	0.400	0.399	0.441	0.484	0.483	0.367	0.624	0.479	0.419
A4	0.850	0.420	0.538	0.404	0.442	0.475	0.413	0.476	0.479	0.336	0.427	0.473	0.449
CC1	0.252	0.651	0.388	0.447	0.375	0.179	0.347	0.335	0.391	0.223	0.221	0.324	0.307
CC2	0.300	0.700	0.306	0.266	0.263	0.285	0.187	0.254	0.341	0.257	0.154	0.183	0.245
CC3	0.395	0.723	0.410	0.308	0.396	0.375	0.330	0.550	0.468	0.304	0.483	0.302	0.386
CC5	0.366	0.670	0.359	0.426	0.329	0.288	0.300	0.386	0.441	0.23	0.257	0.231	0.308
CD1	0.247	0.352	0.566	0.252	0.284	0.175	0.268	0.291	0.347	0.202	0.265	0.265	0.313
CD2	0.379	0.334	0.580	0.245	0.197	0.239	0.256	0.371	0.225	0.294	0.399	0.325	0.437
CD3	0.537	0.47	0.798	0.440	0.569	0.447	0.437	0.537	0.490	0.429	0.486	0.521	0.465
CD4	0.485	0.348	0.811	0.269	0.528	0.438	0.393	0.474	0.468	0.435	0.401	0.497	0.447

	A	CC	CD	CF	CI	CV	E	GO	OL	PER	SDI	TO	V
CF1	0.272	0.334	0.343	0.582	0.277	0.189	0.240	0.239	0.305	0.196	0.289	0.250	0.275
CF2	0.275	0.232	0.197	0.560	0.139	0.190	0.124	0.271	0.134	0.197	0.173	0.150	0.220
CF3	0.348	0.526	0.397	0.781	0.392	0.230	0.245	0.513	0.338	0.403	0.357	0.305	0.268
CF4	0.211	0.184	0.185	0.657	0.183	0.191	0.264	0.271	0.27	0.296	0.113	0.207	0.226
CI1	0.349	0.408	0.466	0.296	0.753	0.355	0.379	0.382	0.481	0.295	0.391	0.456	0.446
CI2	0.415	0.352	0.458	0.304	0.809	0.396	0.514	0.433	0.454	0.343	0.355	0.554	0.356
CI3	0.362	0.400	0.472	0.329	0.755	0.305	0.387	0.346	0.358	0.305	0.258	0.412	0.375
CV1	0.449	0.265	0.309	0.144	0.299	0.719	0.337	0.426	0.367	0.285	0.472	0.420	0.474
CV2	0.254	0.277	0.358	0.238	0.243	0.741	0.331	0.492	0.207	0.372	0.257	0.232	0.318
CV3	0.448	0.447	0.431	0.317	0.392	0.794	0.410	0.415	0.500	0.321	0.455	0.456	0.449
CV4	0.361	0.231	0.362	0.178	0.447	0.678	0.468	0.315	0.439	0.25	0.347	0.395	0.399
E2	0.423	0.332	0.413	0.227	0.430	0.344	0.722	0.411	0.430	0.305	0.319	0.426	0.402
E3	0.394	0.250	0.318	0.255	0.368	0.415	0.817	0.424	0.513	0.329	0.403	0.367	0.371
E4	0.236	0.336	0.328	0.162	0.453	0.386	0.709	0.408	0.406	0.282	0.232	0.45	0.489
E5	0.356	0.301	0.377	0.346	0.338	0.327	0.587	0.357	0.345	0.235	0.411	0.466	0.279
GO1	0.350	0.478	0.491	0.298	0.283	0.423	0.381	0.659	0.470	0.325	0.510	0.473	0.448
GO2	0.460	0.431	0.452	0.439	0.429	0.434	0.418	0.776	0.468	0.445	0.542	0.419	0.484
GO3	0.401	0.384	0.423	0.432	0.341	0.419	0.390	0.776	0.472	0.474	0.517	0.389	0.446
GO4	0.369	0.432	0.471	0.391	0.342	0.421	0.472	0.765	0.417	0.511	0.406	0.324	0.485
GO5	0.474	0.367	0.441	0.349	0.458	0.403	0.382	0.663	0.454	0.347	0.377	0.333	0.384
OL1	0.457	0.516	0.471	0.317	0.479	0.445	0.503	0.483	0.824	0.338	0.405	0.325	0.492
OL2	0.464	0.488	0.548	0.375	0.556	0.436	0.57	0.519	0.835	0.35	0.428	0.572	0.525

	A	CC	CD	CF	CI	CV	E	GO	OL	PER	SDI	TO	V
OL5	0.400	0.412	0.283	0.281	0.250	0.286	0.322	0.466	0.711	0.263	0.284	0.251	0.429
PER1	0.274	0.201	0.349	0.543	0.274	0.277	0.255	0.389	0.209	0.699	0.253	0.25	0.281
PER2	0.304	0.205	0.404	0.277	0.249	0.343	0.274	0.391	0.231	0.779	0.305	0.244	0.249
PER3	0.377	0.239	0.383	0.315	0.397	0.383	0.321	0.431	0.318	0.777	0.416	0.398	0.379
PER4	0.291	0.466	0.425	0.335	0.322	0.322	0.383	0.576	0.476	0.758	0.389	0.294	0.384
PER5	0.311	0.274	0.386	0.246	0.298	0.298	0.297	0.429	0.259	0.817	0.281	0.311	0.277
SDI1	0.416	0.325	0.414	0.289	0.333	0.433	0.294	0.500	0.336	0.313	0.730	0.417	0.356
SDI2	0.468	0.301	0.438	0.304	0.275	0.32	0.318	0.514	0.288	0.291	0.819	0.544	0.375
SDI4	0.590	0.391	0.516	0.304	0.423	0.476	0.504	0.549	0.499	0.437	0.885	0.563	0.484
TO1	0.464	0.315	0.372	0.146	0.362	0.477	0.523	0.375	0.385	0.274	0.498	0.707	0.465
TO2	0.488	0.294	0.412	0.320	0.485	0.279	0.380	0.384	0.381	0.215	0.438	0.677	0.372
TO3	0.343	0.27	0.465	0.256	0.502	0.302	0.410	0.425	0.299	0.324	0.482	0.763	0.463
TO4	0.355	0.237	0.489	0.328	0.451	0.388	0.405	0.336	0.396	0.316	0.412	0.754	0.416
V1	0.438	0.360	0.440	0.227	0.373	0.436	0.419	0.51	0.485	0.313	0.519	0.454	0.744
V4	0.366	0.347	0.523	0.299	0.423	0.430	0.448	0.506	0.477	0.397	0.356	0.499	0.845
V5	0.373	0.371	0.404	0.361	0.371	0.417	0.384	0.394	0.465	0.221	0.289	0.409	0.717

Table 4.13 - Fornell & Larcker Criteria

	A	CD	CI	CV	CC	CF	E	GO	OL	PER	SDI	TO	V
A	0.863												
CD	0.615	0.698											
CI	0.487	0.601	0.773										
CV	0.504	0.498	0.457	0.734									
CC	0.483	0.533	0.497	0.402	0.686								
CF	0.423	0.437	0.400	0.305	0.515	0.651							
E	0.495	0.498	0.556	0.517	0.422	0.339	0.713						
GO	0.556	0.617	0.502	0.571	0.566	0.528	0.561	0.730					
OL	0.557	0.561	0.557	0.499	0.599	0.412	0.599	0.617	0.792				
PER	0.408	0.511	0.408	0.426	0.374	0.446	0.406	0.588	0.404	0.767			
SDI	0.614	0.565	0.432	0.512	0.422	0.365	0.474	0.639	0.477	0.438	0.814		
TO	0.552	0.601	0.616	0.498	0.378	0.358	0.589	0.520	0.496	0.396	0.627	0.726	
V	0.500	0.590	0.500	0.550	0.457	0.371	0.542	0.616	0.611	0.418	0.506	0.593	0.771

While traditionally cross-loadings and the Fornell and Larcker criteria have been used to assess discriminant validity, and they are included in SmartPLS 4 as presented above, Hair et. al (2017) advise that these are not appropriate measures of discriminant validity. Henseler, Ringle, and Sarstedt (2022) demonstrated that a more appropriate and accurate measure of discriminant validity should be used; the Heterotrait-Monotrait Ratio (HTMT). Further, it is advised by Hair et al. (2017) that cross-loadings and the Fornell and Larcker criteria do not provide an accurate reflection of discriminant validity and that the HTMT should be used.

The HTMT ratio requires that all loadings be less than 0.9 to establish discriminant validity (Hair et al. 2017). Therefore, while it was possible to achieve appropriate levels of discriminant

validity using the cross-loadings and the Fornell and Larcker criteria following the removal of items to achieve internal consistency reliability and convergent validity, issues remained with discriminant validity when assessing using the HTMT Ratio. Therefore, it was necessary to systematically assess the model to ensure the most robust model could be used which required considering internal consistency reliability, convergent validity, and the discriminant validity according to the HTMT. The HTMT ratio table is shown below in Table 4.14 and demonstrates the discriminant validity of the model with all loading less than 0.9.

Table 4.14 - Heterotrait-Monotrait (HTMT) Ratio

	A	CD	CI	CV	CC	CF	E	GO	OL	PER	SDI	TO
A												
CD	0.895											
CI	0.737	0.855										
CV	0.752	0.670	0.678									
CC	0.744	0.833	0.772	0.602								
CF	0.688	0.692	0.610	0.463	0.827							
E	0.746	0.738	0.831	0.758	0.662	0.547						
GO	0.786	0.842	0.702	0.755	0.798	0.728	0.775					
OL	0.819	0.785	0.793	0.713	0.891	0.623	0.848	0.846				
PER	0.550	0.654	0.541	0.539	0.495	0.607	0.533	0.705	0.507			
SDI	0.855	0.786	0.600	0.698	0.584	0.546	0.654	0.844	0.625	0.533		
TO	0.833	0.832	0.898	0.719	0.574	0.549	0.877	0.719	0.695	0.502	0.862	
V	0.767	0.876	0.761	0.81	0.709	0.624	0.801	0.840	0.894	0.526	0.696	0.851

The final results of this analysis which maximised internal consistency reliability, convergent validity, and discriminant validity resulted in the removal of a total of eighteen indicators from the model. The reasons for the removal of these indicators are summarised in Table 4.15 below.

Table 4.15 - Indicators removed from the final model

Indicator removed	Reason
OL3	Loading <0.4
OL4	To improve internal consistency reliability and resolve discriminant validity issues with CC, V, GO, and E
SDI3	Loading <0.4
SDI5	To improve internal consistency reliability and resolve discriminant validity issues with OL
V2	To improve internal consistency reliability and improve discriminant validity
V3	Loading <0.4
CI4	To improve internal consistency reliability and resolve discriminant validity issues with OL
CI5	Loading <0.4
A1	To improve internal consistency reliability and improve discriminant validity

Indicator removed	Reason
A2	To improve internal consistency reliability and resolve discriminant validity issues
A5	Loading <0.4
CV5	To improve internal consistency reliability
CD5	Loading <0.4
TO5	To improve internal consistency reliability
E1	To improve internal consistency reliability
CC4	Loading <0.4
CF5	Loading <0.4

A rule of thumb for removal of no more than 20% of indicators from a model are often cited (Hair et al. 2017). However, this is not a hard rule and when considering the use of SmartPLS for its ability to generate results from smaller sample sizes with accurate results from as little as two indicators per variable. In addition, with the role of the indicators as reflective variables designed to measure the same thing, there is an argument the values presented in the measurement model evaluation demonstrate the reliability and validity of the model. The final structural model with retained indicators is shown on the following page in Figure 4.7.

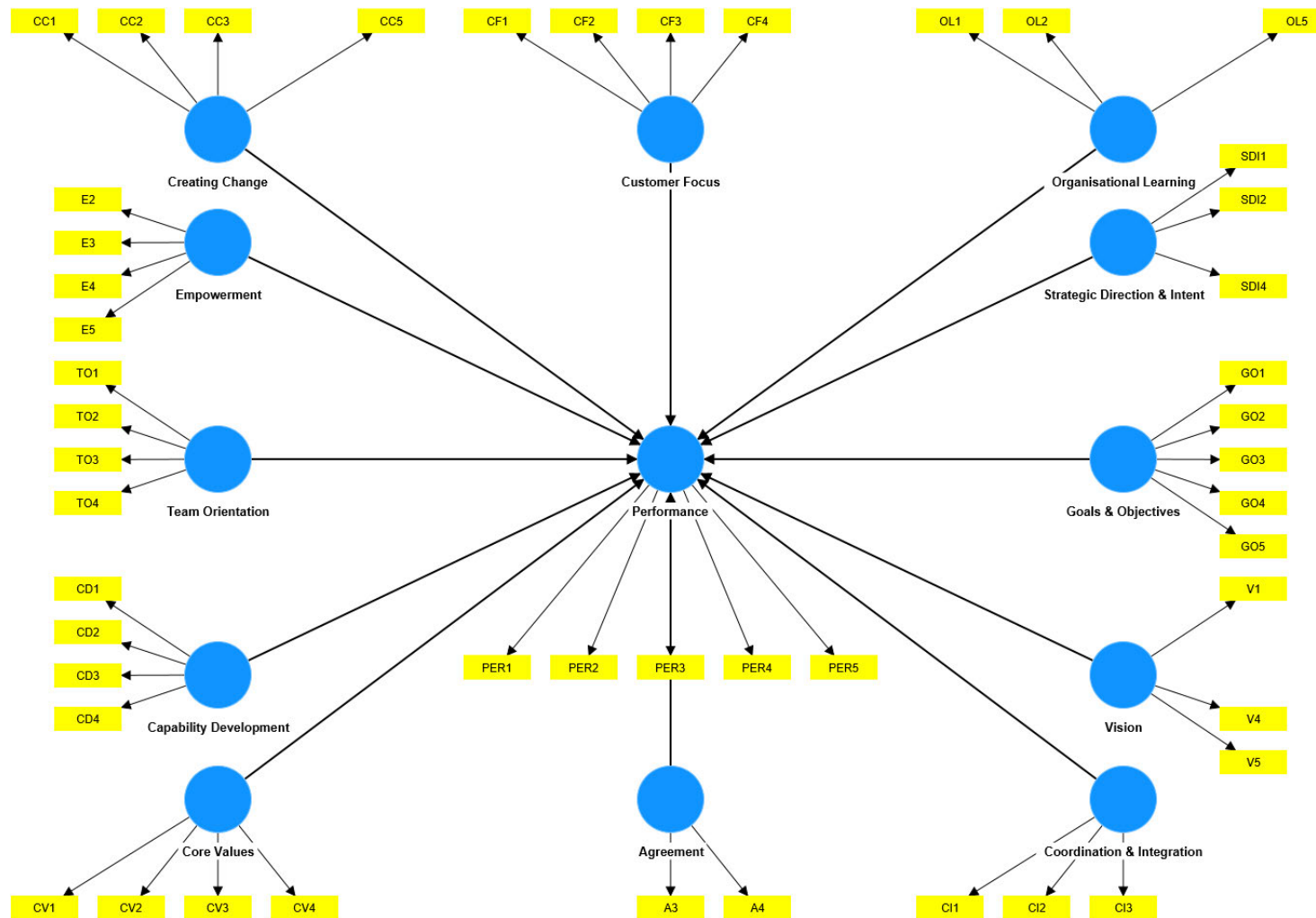


Figure 4.7 - Structural model

4.3.3 Structural model evaluation

Using SmartPLS 4 it is necessary to consider, in addition to the significance of the relationships of the exogenous and endogenous variables, the predictive value of the model constructed (Hair et al. 2017). Hair et al. (2017) recommends the following procedure in assessing the structural model.

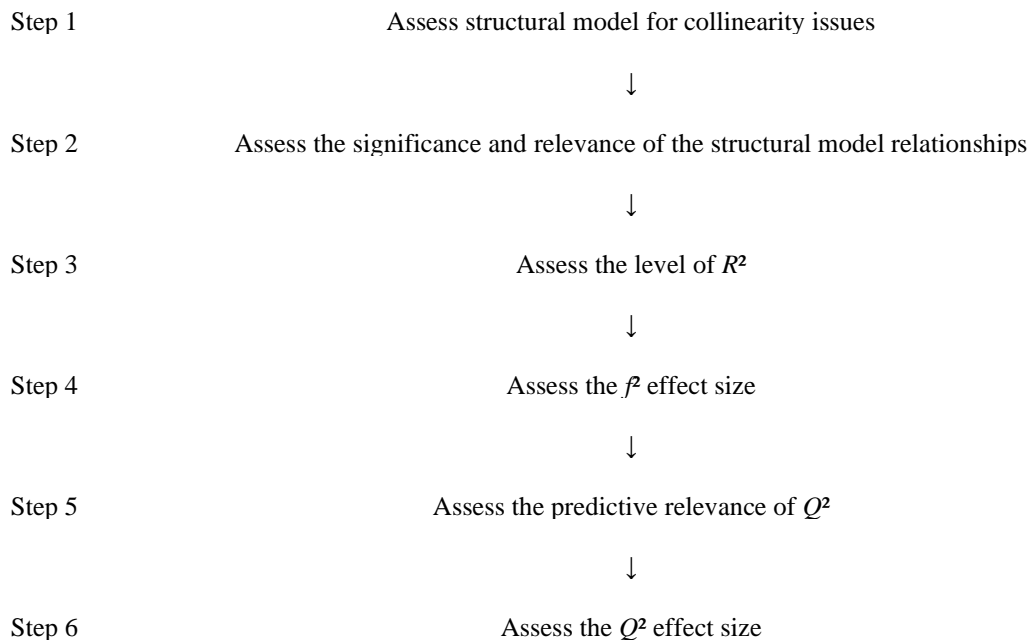


Figure 4.8 - Steps in assessing the structural model in SmartPLS 4

(Source: Reproduced from Hair et al. 2017 p. 191.)

The structural model can be assessed for collinearity issues using the Variance Inflation Factor (VIF) while the significance of the structural model relationships can be assessed by applying bootstrapping which is used to assess the standard error of the path coefficients (Hair et al. 2017). Next, the predictive value of the model constructed using SmartPLS 4 can be assessed by the R squared (predictive power of the model), the f square (the predictive value of the indexes), and the Q squared ($>$ than 0 indicates predictive power) (Hair et al. 2017). These steps are followed and presented in the following sections.

4.3.3.1 Collinearity Issues

The Variance Inflation Factor (VIF) has become the standard practice in PLS-SEM reporting and is based on the tolerance measure (TOL) (Hair et al. 2017). The VIF can be used to assess the collinearity issues of the model. It is necessary to assess the multicollinearity of the model presented to ensure the ability of the model to reduce the standard errors to ensure the significance of the estimated weights (Hair et al. 2017). This is especially important for models that have smaller sample sizes such as the one presented in this research (Hair et al. 2017). A high level of collinearity could indicate that the weights are not correctly indicated and/or that their signs are reversed (Hair et al. 2017). A VIF greater than five in the context of PLS-SEM indicates issues with collinearity in SmartPLS 4 (Hair, Ringle & Sarstedt 2011; Hair et al. 2017) while some researchers apply an even stricter measure of 3.3 (Kock 2019).

Table 4.16 - Collinearity assessment of the structural model VIF

Index	Performance (VIF)
Agreement	2.163
Capability Development	2.455
Coordination & Integration	2.146
Core Values	1.819
Creating Change	1.986
Customer Focus	1.582
Empowerment	2.078
Goals & Objectives	2.841
Organisational Learning	2.451
Strategic Direction & Intent	2.370
Team Orientation	2.593
Vision	2.255

All indexes showed a VIF below three and the cut-off of five that is advised indicating that there are no issues with multicollinearity in the model. Therefore, each independent variable is distinct from each other and not measuring the same thing (Hair et al. 2017).

4.3.3.2 *Structural Model Relationships*

In SmartPLS 4 the Bootstrapping procedure (5000 sub-samples) is utilised to test the significance of the path coefficients (β) between the dependent and independent variables (Hair et al. 2017). As only the relationship of the independent variables on the dependent variable is being considered, a one tailed p -value test was conducted.

Table 4.17 - Results of structural model testing

	β	Std. Dev.	t -value	p -value
Agreement -> Performance	-0.014	0.117	0.122	0.451
Capability Development -> Performance	0.202*	0.105	1.918	0.028
Coordination & Integration -> Performance	0.049	0.103	0.474	0.318
Core Values -> Performance	0.094	0.123	0.766	0.222
Creating Change -> Performance	-0.073	0.105	0.692	0.245
Customer Focus -> Performance	0.191*	0.092	2.068	0.019
Empowerment -> Performance	0.052	0.12	0.432	0.333
Goals & Objectives -> Performance	0.338*	0.123	2.753	0.003
Organisational Learning -> Performance	-0.045	0.112	0.405	0.343
Strategic Direction & Intent -> Performance	0.027	0.125	0.218	0.414
Team Orientation -> Performance	-0.032	0.117	0.269	0.394
Vision -> Performance	-0.016	0.104	0.158	0.437

Note: * $p < 0.05$

The results of the test are shown in Table 4.17. It is important to note that in PLS-SEM, path coefficients closer to one indicate stronger relationships between variables (Hair et al. 2017). The results show the significant relationships were found between the exogenous variables of Goals and Objectives, Capability Development, and Customer Focus with the endogenous variable of performance. The strongest relationship is between Goals and Objectives and performance with a path coefficient of 0.338 followed by Capability Development with a path coefficient of 0.202 and Customer Focus with a path coefficient of 0.191. While these values can be used to test the hypotheses, it is also important to understand the predictive value of the model (Hair et al. 2017).

4.3.3.3 Level of R^2

The level of R squared can be used to assess the level at which the construct can predict the values in the path model and to explain the amount of variance of the endogenous variable (Hair et al. 2017). The higher level of R^2 , indicates that the exogenous variables in the model better explain the results of the endogenous variable (Hair et al. 2017). The results of the R^2 for this model are presented in Table 4.18 below.

Table 4.18 - Level of R^2

Endogenous Variable	R-square	R-square adjusted
Performance	0.409	0.345

Different authors interpret this number in different ways, but it is also important to consider the nature of the research and what you are attempting to measure (Hair et al. 2017). Falk and Miller (1992) state that the value should exceed 0.10 while other researchers interpret the value obtained as either substantial, moderate, or weak according to different thresholds as summarised in Table 4.19 below (Adapted from: Cohen 1988; Chin 1988; and Hair et al. 2017).

Table 4.19 - Suggested R^2 strength

Author	R^2 Value		
	Substantial	Moderate	Weak
Cohen (1988)	0.26	0.13	0.02
Chin (1998)	0.67	0.33	0.19
Hair et al. (2017)	0.75	0.50	0.25

As can be seen in Table 4.19, these values vary quite substantially, and Cohen (1988) sets particularly low thresholds. According to the more substantial thresholds set by Chin (1988) and Hair et al. (2017), the value obtained in this research of 0.409 indicates a moderate relationship between the exogenous and endogenous variables.

Therefore, the model has moderate power in predicting the relationships between the endogenous and exogenous variables. This adds to the validity of the DM as a model that is useful in predicting the relationships between the Indexes and performance. This number will be useful in future research to compare to other groups using the same or similar models.

4.3.3.4 Level of f^2

The level of f^2 is also called the effect size and is used to determine the effect of each of the exogenous variables on the endogenous variable. The f^2 represents the change in the R value for each exogenous variable is removed from the model (Hair et al. 2017). Cohen (1992) determines these effect sizes large (>0.35), medium (>0.15), or small (>0.02). The f^2 values for each of the exogenous variables in the model are shown below.

Table 4.20 - Effect size (f^2) for each latent variable

Predictor	f Squared
Agreement	0.000
Capability Development	0.026
Coordination & Integration	0.002
Core Values	0.008
Creating Change	0.004
Customer Focus	0.033
Empowerment	0.002
Goals & Objectives	0.069
Organisational Learning	0.001
Strategic Direction & Intent	0.001
Team Orientation	0.001
Vision	0.000

As can be seen from the results table, the f^2 values for Goals & Objectives, Customer Focus, and Capability Development are determined to have a small effect size. Goals and Objectives has the greatest effect on performance followed by Customer Focus and Capability Development. In this research in the context of Vietnamese organisations these results show that the other Indexes that were less than 0.02 do not have an effect on performance.

4.3.3.5 Level of Q^2

The level of Q^2 determines whether a model has predictive relevance (Hair et al. 2017). A value of Q^2 should be greater than zero to indicate that the model has predictive relevance (Hair et

al. 2017). The level of Q^2 can be obtained in SmartPLS 4 by running the PLS predict algorithm. The level of Q^2 for this research model is shown below.

Table 4.21 - Q^2 Predict Score

	Q^2 predict
Performance	0.217

The Q^2 score obtained in this research model is greater than zero and therefore indicates that the model has predictive relevance.

4.3.3.6 Effect size Q^2

The Q^2 can also be used to assess the level of predictive relevance of the model (Hair et al. 2017). Predictive relevance can be assessed as small, medium, or large using respective values of 0.02, 0.15, and 0.35 (Hair et al. 2017). With a Q^2 value of 0.217 in this model, the predictive relevance can be assessed as moderate to strong. Table 4.22 below summarises these values in the final model.

Table 4.22 - Levels of R^2 , f^2 , and Q^2 for the model

Predictor	Outcome	R^2	f^2	Q^2
Agreement	Performance	0.409	0.000	0.217
Capability Development			0.026	
Coordination & Integration			0.002	
Core Values			0.008	
Creating Change			0.004	
Customer Focus			0.033	
Empowerment			0.002	
Goals & Objectives			0.069	
Organisational Learning			0.001	
Strategic Direction & Intent			0.001	
Team Orientation			0.001	
Vision			0.000	

4.4 Indexes Hypotheses testing results

Following the assessment of the structural model, the results of the hypotheses testing can be presented.

H1a: Strategic Direction and Intent has a positive impact on organisational performance in Vietnamese organisations

H1a posits that Strategic Direction and Intent has a positive impact on organisational performance in Vietnamese organisations. The results show that Strategic Direction and Intent

does not have a significant positive impact on performance in Vietnamese organisations (*H1a*: $\beta = 0.027$, $t = 0.218$, $p = 0.414$). *H1a* is therefore not supported.

H1b: Goals and objectives has a positive impact on organisational performance in Vietnamese organisations

H1b posits that Goals and Objectives has a positive impact on organisational performance in Vietnamese organisations. The results show that Goals and Objectives has a significant positive impact on performance in Vietnamese organisations (*H1b*: $\beta = 0.338$, $t = 2.753$, $p = 0.003$) and is therefore supported.

H1c: Vision has a positive impact on performance in Vietnamese organisations

H1c posits that Vision has a positive impact on organisational performance in Vietnamese organisations. The results show that Vision does not have a significant positive impact on performance in Vietnamese organisations (*H1c*: $\beta = -0.016$, $t = 0.158$, $p = 0.437$). *H1c* is therefore not supported.

H2a: Coordination and Integration has a positive impact on performance in Vietnamese organisations

H2a posits that Coordination and Integration has a positive impact on organisational performance in Vietnamese organisations. The results show that Coordination and Integration does not have a significant positive impact on performance in Vietnamese organisations (*H2a*: $\beta = 0.049$, $t = 0.474$, $p = 0.318$). *H2a* is therefore not supported.

H2b: Agreement has a positive impact on performance in Vietnamese organisations

H2b posits that Agreement has a positive impact on organisational performance in Vietnamese organisations. The results show that Agreement does not have a significant positive impact on performance in Vietnamese organisations (*H2b*: $\beta = -0.014$, $t = 0.122$, $p = 0.451$). *H2b* is therefore not supported.

H2c: Core Values has a negative impact on performance in Vietnamese organisations

H2c posits that Core Values has a negative impact on organisational performance in Vietnamese organisations. The results show that Core Values does not have a significant negative impact on performance in Vietnamese organisations ($H2c: \beta = 0.094, t = 0.766, p = 0.222$). H2c is therefore not supported.

H3a: Capability Development has a positive impact on performance in Vietnamese organisations

H3a posits that Capability Development has a positive impact on organisational performance in Vietnamese organisations. The results show that Capability Development has a significant positive impact on performance in Vietnamese organisations ($H3a: \beta = 0.202, t = 1.918, p = 0.028$). H3a is therefore supported.

H3b: Team Orientation has a positive impact on performance in Vietnamese organisations

H3b posits that Team Orientation has a positive impact on organisational performance in Vietnamese organisations. The results show that Team Orientation does not have a significant positive impact on performance in Vietnamese organisations ($H3b: \beta = -0.032, t = 0.269, p = 0.394$). H3b is therefore not supported.

H3c: Empowerment has a negative impact on performance in Vietnamese organisations

H3c posits that Empowerment has a negative impact on organisational performance in Vietnamese organisations. The results show that Empowerment does not have a significant negative impact on performance in Vietnamese organisations ($H3c: \beta = 0.052, t = 0.432, p = 0.333$). H3c is therefore not supported.

H4a: Creating Change has a positive impact on performance in Vietnamese organisations

H4a posits that Creating Change has a positive impact on organisational performance in Vietnamese organisations. The results show that Creating Change does not have a significant positive impact on performance in Vietnamese organisations ($H4a: \beta = -0.073, t = 0.692, p = 0.245$). H4a is therefore not supported.

H4b: Customer Focus has a positive impact on performance in Vietnamese organisations

H4b posits that Customer Focus has a positive impact on organisational performance in Vietnamese organisations. The results show that Customer Focus has a significant positive impact on performance in Vietnamese organisations ($H4b: \beta = 0.191, t = 2.068, p = 0.019$). H4b is therefore supported.

H4c: Organisational Learning has a positive impact on performance in Vietnamese organisations

H4c posits that Organisational Learning has a positive impact on organisational performance in Vietnamese organisations. The results show that Organisational Learning does not have a significant positive impact on performance in Vietnamese organisations ($H4c: \beta = -0.045, t = 0.405, p = 0.343$). H4c is therefore not supported.

Table 4.23 below shows the results of the hypothesis testing for the Indexes of the model.

Table 4.23 - Results of hypothesis testing for Denison Model Indexes

Hypotheses	Relationship	β	SD	<i>t</i>-value	<i>p</i>-value	Decision
H1a	SDI > PER	0.027	0.125	0.218	0.414	Not supported
H1b	GO > PER	0.338*	0.123	2.753	0.003	Supported
H1c	V > PER	-0.016	0.104	0.158	0.437	Not supported
H2a	CI > PER	0.049	0.103	0.474	0.318	Not supported
H2b	A > PER	-0.014	0.117	0.122	0.451	Not supported
H2c	CV > PER	0.094	0.123	0.766	0.222	Not supported
H3a	CD > PER	0.202*	0.105	1.918	0.028	Supported
H3b	TO > PER	-0.032	0.117	0.269	0.394	Not supported
H3c	E > PER	0.052	0.12	0.432	0.333	Not supported
H4a	CC > PER	-0.073	0.105	0.692	0.245	Not supported
H4b	CF > PER	0.191*	0.092	2.068	0.019	Supported
H4c	OL > PER	-0.045	0.112	0.405	0.343	Not supported

Note: * $p < 0.05$

4.5 Higher Order Model

It is necessary to use the results of the model previously presented to construct a Higher Order Construct (HOC) model (Sarstedt et al. 2019), referred to as a hierarchical component model (HCM) in PLS-SEM (Hair et al. 2017) to test the hypotheses related to the Dimensions of the DM. Using a HCM allows for the summarising of the ‘...independent constructs in a higher order construct’ (Sarstedt et al. 2019, p. 198). In the case of this research, it enables the use of the Indexes of the DM to form the Dimensions of the model to understand the relationship between the Dimensions and performance as well as the relationship between the Indexes and

performance. First, the design of the model must be considered to determine the process of construction and evaluation of the model.

While the indicators from the survey were used to reflect the Indexes of the model, the Indexes are used to form the Dimensions of the model. Therefore, in this case, the appropriate model for testing the relationship between the Dimensions of the DM and the Performance measure is at Type II – Reflective Formative model (Hair et al. 2018; Sarstedt et al. 2019). In this type of model, the latent variable scores from the first model can be used as indicators to form the HOCs which represent the Dimensions of the DM by applying a two-step approach (Hair et al. 2018; Sarstedt et al. 2019). Figure 4.9 below shows these relationships with $x_1 - x_9$ representing the indicators from the first model, $LOC_1 - LOC_3$ representing the Indexes from the first model, and with HOC representing a Dimension of the DM.

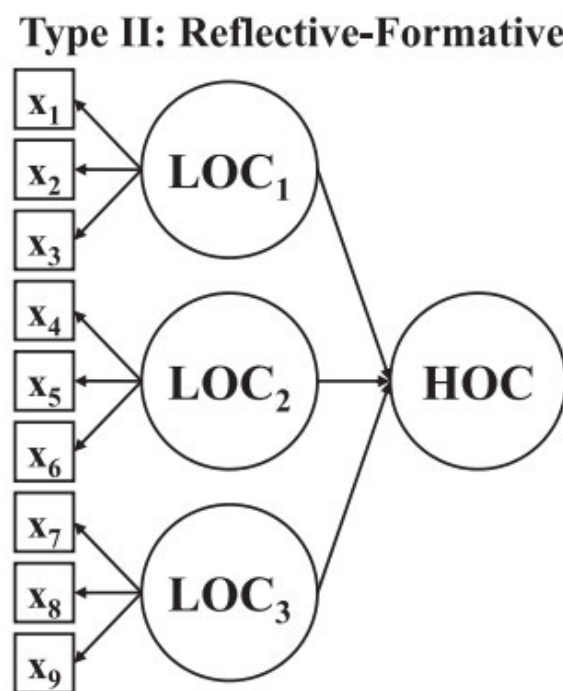


Figure 4.9 - Representation of a Type II: Reflective Formative model

(Source: Sarstedt et al. 2019, p. 198)

Figure 4.10 below represents the model as outlined for this research where the LVs (Indexes) become the indicators for the HOCs (Dimensions) of the model to assess their impact on performance.

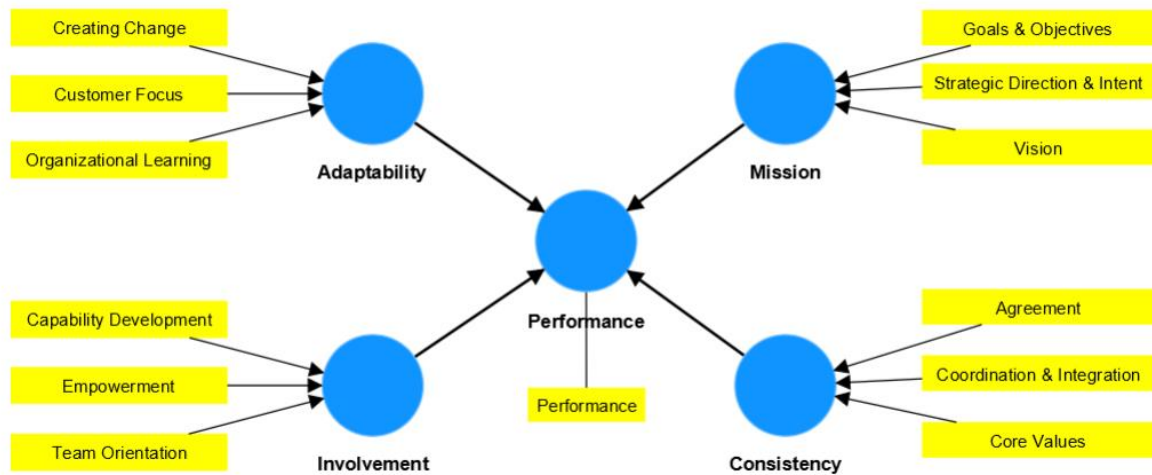


Figure 4.10 - Type II: Reflective Formative model to assess the impact of the Dimensions on performance using two step analysis method.

4.5.1 HCM measurement model evaluation

Before interpreting the results of the model, the collinearity of the model and the significance and relevance of the indicators must be assessed (Hair et al. 2018).

4.5.1.1 Assess Collinearity

Multicollinearity exists if there is a high degree of similarity between indicators in a formative model (Hair et al. 2018). This is not desirable in a formative model as, unlike a reflective model, the indicators should not be interchangeable, and should instead be forming the different aspects of the HOC (Hair et al. 2018).

The Variance Inflation Factor (VIF) is used to assess the multicollinearity of the model to ensure that each of the indicators is distinct from each other in forming the higher order constructs. As mentioned in the previous discussion of the first model presented, in PLS-SEM

scores greater than five or often more strictly 3.3 should be used for cut-offs in assessing collinearity issues (Hair, Ringle & Sarstedt 2011; Hair et al. 2017; Kock 2019).

The VIF for the indicators of both the outer and inner model are below these cut-offs and indicate no issues with collinearity in the model. The VIFs for each of the indicators of the outer model and the HOCs for the inner model are presented in Table 4.24 and Table 4.25 respectively below.

Table 4.24 - Variance Inflation Factor (VIF) of the outer model

Index	VIF
Agreement	1.829
Capability Development	1.656
Coordination & Integration	1.679
Core Values	1.453
Creating Change	1.644
Customer Focus	1.319
Empowerment	1.602
Goals & Objectives	2.267
Organizational Learning	1.604
Strategic Direction & Intent	2.044
Team Orientation	1.923
Vision	2.297

Table 4.25 - Variance Inflation Factor (VIF) of the inner model

Dimension	VIF
Adaptability	2.477
Consistency	3.170
Involvement	3.169
Mission	2.930

4.5.1.2 Assess the Significance and Relevance of the Formative Indicators

Hair et al. (2018) note that it is important to assess the value of the indicators relative and absolute importance in the model. Therefore, if the outer weight of the indicator is not significant (relative importance), the indicators loading must then be assessed to determine if the indicator has absolute importance (Hair et al. 2018). The absolute importance of an indicator can be determined by the outer loading which provides evidence of the contribution of the indicator to the model without consideration of the other indicators (Hair et al. 2018). If an indicator has a weighting above 0.5 it should be retained as it is considered to have relative importance while indicators with a loading below 0.5 should be considered for removal or retainment based on the potential overlap with other indicators and the relevance of the indicator in the model from a theoretical perspective (Hair et al. 2018).

Bootstrapping (5000 samples) was conducted with one tailed at the 0.05 level of significance to assess the results of the model. Table 4.26 shows that seven of the twelve indicators had significant outer weights (Agreement (0.597; $p = 0.000$), Capability development (0.739; $p = 0.000$), Core Values (0.365; $p = 0.030$), Customer Focus (0.588; $p = 0.000$), Empowerment (0.331; $p = 0.029$), Goals & Objectives (0.790; $p = 0.000$), Organisational Learning (0.452; $p = 0.004$)) while five of the indicators did not show significant outer weights (Coordination & Integration (0.217; $p = 0.145$), Creating Change (0.180; $p = 0.159$), Strategic Direction & Intent (0.118; $p = 0.277$), Team Orientation (0.076; $p = 0.336$), and Vision (0.168; $p = 0.150$)).

Therefore, while the weights with significant value should be retained, it was necessary to look at the outer loadings of the non-significant indicators to assess whether they had absolute importance. Table 4.26 also shows the outer loadings of the indicators and shows that they all have an outer loading greater than 0.5 and thus demonstrate absolute significance and should be retained. Therefore, the measurement model can be validated, and the results of the structural model can be assessed.

Table 4.26 - Results of HCM validity

HOCs	LOCs	Outer Weight	<i>t</i>-value	<i>p</i>-value	Outer Loading	VIF
Mission	Strategic Direction & Intent	0.118	0.592	0.277	0.747	2.044
	Goals & Objectives	0.790	5.78	0.000	0.985	2.267
	Vision	0.168	1.039	0.15	0.801	2.297
Consistency	Coordination & Integration	0.217	1.059	0.145	0.753	1.679
	Agreement	0.597	3.333	0.000	0.923	1.829
	Core Values	0.365	1.886	0.03	0.782	1.453
Involvement	Capability Development	0.739	5.06	0.000	0.948	1.656
	Team Orientation	0.076	0.424	0.336	0.720	1.923
	Empowerment	0.331	1.899	0.029	0.739	1.602
Adaptability	Creating Change	0.180	0.997	0.159	0.709	1.644
	Customer Focus	0.588	4.208	0.000	0.862	1.319
	Organisational Learning	0.452	2.639	0.004	0.808	1.604

4.5.2 HCM Structural model evaluation

To assess the results of the structural model it is required to conduct bootstrapping (5000) samples in SmartPLS 4 (Hair et al. 2018). The results of the bootstrapping (5000 samples) of the structural model can be seen in Table 4.27 below. The table shows the path coefficients (β), the t statistics, and the p statistics. The results indicate that Adaptability, Consistency, and Involvement do not have a significant impact on performance while Mission has a significant positive impact on performance.

Table 4.27 - Statistical relationships between dimensions and performance

	β	t -value	p -value
Adaptability -> Performance	0.084	0.785	0.216
Consistency -> Performance	0.132	1.089	0.138
Involvement -> Performance	0.142	1.142	0.127
Mission -> Performance	0.336*	2.331	0.010

Note: * $p < 0.05$

4.5.3 Dimensions hypotheses testing results

The results of the hypothesis testing for the Dimensions of the DM and their impact on performance in Vietnamese organisations are presented below.

H1: Mission has a positive impact on performance in Vietnamese organisations

H1 posits that Mission has a positive impact on performance in Vietnamese organisations. The results show that Mission has a significant positive impact on performance in Vietnamese organisations ($H1: \beta = 0.336, t = 2.331, p = 0.010$). H1 is therefore supported.

H2: Consistency has a positive impact on performance in Vietnamese organisations

H2 posits that Consistency has a positive impact on performance in Vietnamese organisations. The results show that Consistency does not have a significant positive impact on performance in Vietnamese organisations ($H1: \beta = 0.132, t = 1.089, p = 0.138$). H2 is therefore not supported.

H3: Involvement has a positive impact on performance in Vietnamese organisations

H2 posits that Involvement has a positive impact on performance in Vietnamese organisations. The results show that Involvement does not have a significant positive impact on performance in Vietnamese organisations ($H1: \beta = 0.142, t = 1.142, p = 0.127$). H3 is therefore not supported.

H4: Adaptability has a positive impact on performance in Vietnamese organisations

H2 posits that Adaptability has a positive impact on performance in Vietnamese organisations. The results show that Adaptability does not have a significant positive impact on performance in Vietnamese organisations ($H1: \beta = 0.084, t = 0.785, p = 0.216$). H4 is therefore not supported.

The results of the hypothesis testing for the Dimensions are summarised in Table 4.28 below.

Table 4.28 - Results of hypothesis testing of relationships between dimensions and performance in Vietnamese organisations

Hypothesis	Relationship	β	t -value	p -value	Decision
H1	Mission > Performance	0.336*	2.331	0.010	Supported
H2	Consistency > Performance	0.132	1.089	0.138	Not supported
H3	Involvement > Performance	0.142	1.142	0.127	Not supported
H4	Adaptability > Performance	0.084	0.785	0.216	Not supported

Note: $*p < 0.05$

The results of the quantitative stage allow for the development of interview questions for the qualitative stage that are designed to increase confidence in the quantitative data results and to explore and understand the results more completely (Denscombe 2010).

4.6 Qualitative research question development

The qualitative research question development is required in line with the purpose of the Explanatory Sequential Mixed Methods design of this research (Creswell 2014). This process allows for a more complete understanding of the research questions, comparison of the results from each stage, explanation, and insights into the quantitative results, and incorporating the perspectives of individuals (Creswell 2014). Given the methodology of this research, the quantitative results are used as a basis for the development of the qualitative questions (Creswell 2014).

The first question was developed to elicit perceptions of the organisational culture of employees in Vietnamese organisations. This allowed for these perceptions to be categorised to the DM Dimensions and Indexes to compare to the quantitative assessment of the Dimensions and Indexes. The first interview question was:

Q1. How would you describe the organizational culture in your current organization?

The second question was developed to assess the perception of the benefits of strong organisational culture and the relationship to the Dimensions and Indexes of the DM. This allowed for these perceptions to be discussed in the context of the results of the quantitative findings related to the characteristics of organisational culture and their links to performance in Vietnamese organisations. This also provided insights into the specific outcomes that are perceived as linked to strong aspects of organisational culture in Vietnamese organisations. The second interview question was:

Q2. In your opinion, what are some benefits of having a strong organizational culture?

The third question was developed to assess the perception of the relationship between the organisational culture and performance in Vietnamese organisations and to further explore specific results from the quantitative analysis with an aim to better understand the significant

positive relationships that were found between specific Dimensions and Indexes of the DM and performance. This allowed for the confirmation of the quantitative findings while providing insight that allowed for the development of a better understanding of these results in a Vietnamese context.

The third interview question therefore contained a main general question related to organisational culture and performance and sub questions that were directly related to the significant findings from the quantitative analysis. The quantitative analysis showed significant positive relationships between performance and the Dimension of Mission and the Indexes of Capability Development, Customer Focus, and Goals and Objectives. Links with other Dimensions and Indexes were also elicited in these responses to also allow for an enhanced understanding of the relationships that they may also have with performance in the Vietnamese context. The third interview question and sub-questions were:

Q3. What are the effects of the organizational culture on organizational performance in your current organization? Specifically, could you please discuss the effects of the following aspects on organizational performance: (Q3.1) Mission; (Q3.2) Capability development; (Q3.3) Customer focus; and (Q3.4) Goals and objectives.

The fourth question was related to understanding the link between Vietnamese culture and organisational culture in Vietnam directly related to research question three. This was not tested in the quantitative analysis, so this part of the research forms an exploratory role aimed at understanding the relationship between Vietnamese culture and the organisational culture in Vietnamese organisations. The fourth research question was:

Q4. How would you describe the impact of the Vietnamese cultural characteristics, such as individualism, power distance, uncertainty avoidance, and masculinity, on the culture of your organisation?

The fifth question was aimed at understanding the perception of respondents as to the effects of national culture on organisational culture related directly to research question three. The question draws on the experience of Vietnamese employees in multicultural contexts to explore the perceptions of the relationship between national cultural traits and the organisational

cultures that exists within organisational in their respective national and regional cultures. The fifth research question was:

Q5. In your opinion, what are the similarities and differences in terms of the contribution of national culture to organizational culture between Vietnam and other countries?

The sixth and final research question was to allow the respondents an opportunity to add to the responses that they had provided that they feel may make an extra valuable contribution to the research in the context of the study and the questions that they had been asked. The sixth interview question was:

Q6. Is there something we have not asked you that we should?

4.7 Qualitative findings

The qualitative research findings will firstly present the demographic data of the respondents followed by the categorical thematic analysis of the responses in context of the research questions and the corresponding interview questions. The findings draw from six semi-structured interviews that were conducted with ten employees working in organisations in Vietnam.

Table 4.29 - Demographic Information of Interview Respondents

Respondent	Age	Gender	Employment level	Years work experience	Organisation type	Work location	Native language	Industry
R1	35-44	F	Manager	6-15	Foreign	HC MC	Vietnamese	Real Estate

Respondent	Age	Gender	Employment level	Years work experience	Organisation type	Work location	Native language	Industry
R2	35-44	F	Manager	16-25	Foreign	HC MC	Vietnamese	Real Estate
R3	25-34	F	Manager	6-15	Foreign	HC MC	Vietnamese	Services
R4	25-34	M	Manager	6-15	Vietnamese	HC MC	Vietnamese	Services
R5	45-54	M	Senior Manager	16-25	Foreign	HC MC	Vietnamese	Education
R6	45-54	F	Senior Manager	16-25	Vietnamese	HC MC	Vietnamese	Services
R7	45-54	F	Senior Manager	16-25	Foreign	HC MC	Vietnamese	Real Estate
R8	35-44	M	Senior Manager	6-15	Foreign	HC MC	Vietnamese	Services
R9	25-34	M	Senior Manager	6-15	Vietnamese	HC MC	Vietnamese	Entertainment

Respondent	Age	Gender	Employment level	Years work experience	Organisation type	Work location	Native language	Industry
R10	35-44	F	Non manager	16-25	Foreign	HC MC	Vietnamese	Services

Creswell (2014) notes that in studies employing Explanatory Sequential Mixed Methods design it is important to use participants from the quantitative stage in the qualitative stage to be able to provide confirmation of the results. This was important in this study; however, it was also important to broaden the respondents to also see if the themes carried over outside of the sample. Ultimately, the respondents were comprised of eight participants from the first stage of the research while two participants (respondents R4 and R9) were recruited from outside of the initial quantitative sample.

The primary researcher endeavoured to recruit a diverse range of participants that could represent different demographics. This was somewhat challenging owing to the anonymity of the original survey. Known participants were sought and recruited through the primary network that was used in recruiting participants for the quantitative stage. Ultimately it was possible to recruit a diverse group of respondents with a varying age, years' work experience, position, and genders. There was less diversity among the distribution of the business type, industry, and location but overall, the demographics align well with the larger sample from the quantitative stage. Interviews were conducted over a three-week period on MS Teams in mid-2023.

The qualitative data analysis sought to identify categories and themes that related to each of the research questions directly. Research question one was addressed with interview questions one and two and the themes and sub-themes correspond directly to the Indexes and Dimensions of the DM to allow for a comparison and verification of the quantitative results. Interview question three and the sub-questions are directly related to research question two and also uses the themes and sub-themes directly related to the Indexes and Dimensions of the DM to allow

for direct comparison and verification of the quantitative results. Interview questions four and five are designed to explore the relationship between national cultures and organisational culture to understand the influences and importance of national cultural characteristics in forming organisational culture. These themes will be divided into traditional and contemporary cultural influences.

4.7.1 Interview question one – Organisational Culture

The first interview question was designed to elicit the perceptions of organisational culture within the respondents' organisations to provide a comparison for the maps of the Indexes and Dimensions that were developed from the quantitative analysis. The qualitative results allow for the comparison and confirmation of the quantitative results which provided a picture of organisational culture in Vietnam according to the Denison Organisational Culture Survey. These results will be useful in discussions related to all the research questions. The first interview question was:

Q1. How would you describe the organisational culture in your current organization?

Responses were categorised according to alignment with Indexes and Dimensions of the DM which act as the sub themes and themes respectively. Once comments were categorised according to the sub theme Indexes, the number of comments related to each of the theme Dimensions could also be assessed.

Table 4.30 – Descriptions of organisational culture

Theme	Sub Theme	No. of respondents	No. of comments	Exemplar comments
Mission	Strategic Direction & Intent	1	1	<i>Communicated quite well;</i>

Theme	Sub Theme	No. of respondents	No. of comments	Exemplar comments
	Goals & Objectives	3	4	<i>They all know that their contribution to the company matters; all the goals and objectives; the same goal with the company; we also want to transform communities;</i>
	Vision	1	1	<i>They show then guide the vision to the people</i>
Consistency	Coordination & Integration	5	6	<i>Happiness means that we achieve something together; everyone is very supportive; the department will solve...if they have a conflict; in combination have to work; across departments; everybody supports</i>
	Agreement	5	5	<i>Address things up front if there is conflict; it is really supportive; talk together to solve the issues; safe environment for all employees to freely feedback and discuss; compliance</i>
	Core Values	4	4	<i>Follow quite a few core values of the company and stick to that; we want to get the best fit; the company living through the value proposition that has been stated; the culture is driven by the values</i>

Theme	Sub Theme	No. of respondents	No. of comments	Exemplar comments
Involvement	Capability Development	1	1	<i>Support employees career aspirations</i>
	Team Orientation	9	11	<i>Culture as a team; open, friendly, and...equal; people value the relationship among colleagues; always striving to offer inclusive environment; define my business as a family business; like a family member; the culture here is supportive; friendly, family departments in my company; tolerance and group collaboration; it's like a little family</i>
	Empowerment	3	4	<i>Employees can have empowerment; people from different job levels are treated the same; encouraging younger employees to raise their ideas; don't adhere to strict hierarchy</i>
Adaptability	Creating Change	1	2	<i>Encouraging everyone in the company to contribute new ideas; help people to brainstorm and come up with new ideas</i>
	Customer Focus	2	2	<i>Have a strong customer focus; customer obsession culture</i>

Theme	Sub Theme	No. of respondents	No. of comments	Exemplar comments
	Organisational Learning	1	1	<i>Culture of innovation and growth mindset</i>

The qualitative results showed that the Index of Team Orientation was the most prominent, followed by Coordination and Integration, Agreement, and Core Values. The number of comments categorised for Goals and Objectives and Empowerment were in the middle of the grouping while only one or two comment were categorised for the remaining Indexes.

When describing the organisational culture of their organisations, nearly all respondents indicated the importance of the group harmony and a feeling of family, supportiveness, and friendliness which resulted in Team Orientation being by far the most prominent and common feature of all respondents' organisations. The comments that were categorised to Coordination and Integration also reflect aspects of Team Orientation in that the importance of Coordination and Integration is dependent of teams being able to work together to further support the harmonious, supporting, and happy working environment. These comments have clear links to the Vietnamese cultural characteristic of collectivism and demonstrate a clear link to the organisational culture of Vietnamese organisations. Both of these Indexes are associated with an internal focus on the DM and suggest that organisational culture in Vietnamese organisations has a strong internal focus.

When assessing the Dimensions of organisational culture according to the sum of the classification of the comments for each of the Indexes, the Dimensions of Consistency and Involvement were ranked highest with the greatest number of comments from the greatest number of respondents. The Dimensions of Adaptability and Mission had far fewer comments and respondents categorised as describing the organisational culture with five comments each from four and three respondents respectively. These results are shown in Table 4.31 below.

Table 4.31 - Comments categorised according to the Dimensions of the Denison Model

	No. of respondents	No. of comments
Mission	3	6
Consistency	9	15
Involvement	9	15
Adaptability	4	5

When categorised according to the Dimensions, it further illustrates the internal focus of Vietnamese organisational culture with the Dimensions of Consistency and Involvement each having around three times more comments from three times more respondents than both of the other two Dimensions. A total of nine respondents provided a total of fifteen comments that were classified as belonging to both the Dimensions of Consistency and Involvement.

The responses show a wide variety of categories represented, with comments being categorised according to every Index of the DM. The Indexes of Coordination and Integration and Team Orientation had the most responses categorised and the greatest number of respondents commenting. Coordination and Integration was the only Index which had a comment from every participant categorised. The Indexes of Empowerment, Core Values, and Strategic Direction and Intent each had comments categorised from around half of the respondents. The remaining Indexes elicited responses from three or less respondents that were categorised in each Index.

When grouped by corresponding themes related to the Dimensions of the DM, the Dimensions of Involvement and Consistency were closely ranked in number of respondents with nine and ten respectively and the number of comments with twenty-two and twenty-five respectively. These Dimensions are both aligned with an internal focus on the DM while the Dimension of Involvement has a flexible orientation while the Dimension of Consistency has a stable orientation.

The Dimensions of Mission and Adaptability both had far fewer respondents and number of comments categorised according to the sum of the Index comments. Eleven comments from five respondents were categorised in the Dimension of Adaptability while eight comments from six respondents were categorised in the Dimension of Mission. These Dimensions are both aligned with an external focus on the DM while the Dimension of Adaptability has a flexible orientation while the Dimension of Mission has a stable orientation

4.7.2 Interview Question two – Strong Organisational Culture

The second interview question was designed to elicit the perceptions of the benefits of strong organisational culture within the respondents' organisations to gain an understanding of which Dimensions and Indexes of organisational culture are perceived to have an impact on a strong organisational culture in Vietnamese organisations while also seeking to understand whether respondents associate a strong organisational culture with performance. The second interview question was:

Q2. In your opinion, what are some benefits of having a strong organizational culture?

Responses were categorised according to alignment with Indexes of the DM which act as the themes. Once comments were categorised according to the Indexes, the number of comments related to each of the Dimensions could also be assessed.

4.7.2.1 Interview question two themes

The themes relating to research question two were related to the development of the general questions and to a specific question related to understanding more about the impact of Vietnamese culture on the organisational culture of organisations in Vietnam.

Table 4.32 - Benefits of Strong Organisational Culture

Theme	Sub Theme	No. of respondents	No. of comments	Exemplar comments
Mission	Strategic Direction & Intent	5	5	<i>when now we know that what's happening in our company; so that everyone is aligned and on the same page; Operation can control; With a strong organization, culture can guide; Company culture decides the power of the organizations</i>
	Goals & Objectives	2	2	<i>of what we need to do; Goal for them to wake up in the morning</i>
	Vision	2	3	<i>will help us have more like a clear vision; vision is communicated well within the company; how we can communicate that culture message to everyone at every level in the organization</i>
Consistency	Coordination & Integration	4	5	<i>and how we can deliver in our daily task; we must follow, and we have some guidance from the management; people will work harder for the company; performing our job and doing our work every day but expressing that culture; it can escalate down easy</i>
	Agreement	1	1	<i>they will try to hard then without complaining</i>

Theme	Sub Theme	No. of respondents	No. of comments	Exemplar comments
	Core Values	2	3	<i>something we can be proud; What we do is ethical; That identity of, you know, people working into that organization</i>
Involvement	Capability Development	1	2	<i>also have good training and learning objective; The upgrade of skills continuously</i>
	Team Orientation	2	2	<i>the long time working of the employment; we are in the team, not individual</i>
	Empowerment	4	5	<i>strong organizational cultures will motivate staff to volunteer to work; they can freely speak their mind and they can easily; Proposed new ideas and they are not afraid of being criticized or having bad ideas; everyone can share openly; no one will be bully at my company</i>
Adaptability	Creating Change	1	3	<i>guiding the way that we're going because given the disruption of technology; Given a highly competitive environment in the sector; something new and that helps the organization going forward and not fall behind compared to other competitors</i>

Theme	Sub Theme	No. of respondents	No. of comments	Exemplar comments
	Customer Focus	1	1	<i>for the external customer as well</i>
	Organisational Learning	0	0	

The results found that describing the benefits of strong organisational culture in Vietnamese organisations, the most comments were categorised as related to the Indexes of Strategic Direction and Intent, Coordination and Integration, and Empowerment with five comments each. Strategic Direction and Intent had the greatest number of respondents providing comments with five respondents while Coordination and Integration and Empowerment each had four respondents providing comments. The Indexes of Agreement and Customer Focus each only had one comment from one respondent categorised as being a benefit of strong organisational culture while Organisational Learning had no comments. All other Indexes had two or three comments from one or two respondents that were categorised as being a benefit of strong organisational culture.

4.7.3 Interview Question three – Organisational Culture and performance

The third interview question was designed to confirm and provide a deeper understanding of the relationship between organisational culture and performance in Vietnamese organisations as well as the relationships between Dimensions and Indexes of the DM and performance that were found to be significant in the quantitative stage. Therefore, the third interview question had a main question related to organisational culture and four sub questions related to the significant relationships that were found in the quantitative stage. The third interview question and sub questions were:

Q3. What are the effects of the organisational culture on organizational performance in your current organization? Specifically, could you please discuss the effects of the following aspects on organizational performance: (Q3.1) Mission; (Q3.2) Capability development; (Q3.3) Customer focus; and (Q3.4) Goals and objectives.

The responses to the main question and sub questions allow for perceptions of relationships between all Dimensions and Indexes of the DM to be considered. While the analysis of the main question seeks to categorise comments related to performance according to the Dimensions and Indexes of the DM, the sub questions seek to develop further insights into the Dimensions and Indexes that were found to have a significant positive relationship in the quantitative stage. The qualitative results from interview question three will be useful in the discussions for all research questions. The following sections discuss the findings of interview question three and the related sub questions.

4.7.3.1 Interview main question three – Organisational Culture

The main question and sub questions sought to elicit responses that could identify aspects of organisational culture that could be linked to performance in Vietnamese organisations. The main theme of organisational culture was then further divided by themes that corresponded with Indexes of the DM. This provides an insight to Dimensions and Indexes of organisational culture linked to performance within Vietnamese organisations regardless of the relationships identified in the quantitative stage. Thematic content analysis was conducted on the main question and the sub questions to identify all instances in which comments related to the performance of the organisations could be categorised according to the Indexes of the DM. Table 4.33 shows the sub themes related to the Indexes that were used to categorise the comments under the main theme of organisational culture while also showing the number of respondents who commented, the number of comments linked to each subtheme, and the corresponding exemplary comments.

Table 4.33 - Organisational culture Indexes associated with performance

Sub themes	No. of respondents	No. of comments	Exemplary comments
Strategic Direction & Intent	8	14	<i>Communicated to the employer; they all try to achieve; they will know very, very clearly; always trying to pull for that company direction; making effort, without me telling them to make effort; how to achieve the mission; they have that strategy, everyone has to perform; the employee ourselves needs some real action</i>
Goals & Objectives	9	15	<i>Goals and objectives or KPI set very clear; what is the goal of this year; leaders communicate those goals and objectives; we have objectives for the whole organisation; cascades down to the lower level; consideration of that strategy in their daily work; step by step mission is just a goal; knowledge to the set of missions to control; the top ten best company in Vietnam</i>
Vision	5	7	<i>The company has a clear vision communicated; share this year's vision; people really understanding the company mission; trained about the mission; everybody believes in that</i>
Coordination & Integration	7	9	<i>We try our best to reach that objective; all of us work towards that goal; collaboration between departments; plan that they have in meeting; how you organise your work; same way in my company; everyone is going the right way</i>
Agreement	1	1	<i>Cooperate with corporate processes and policies</i>

Sub themes	No. of respondents	No. of comments	Exemplary comments
Core Values	3	3	<i>Happy and proud to work here; motivating way; follow the one way of my company culture</i>
Capability Development	10	14	<i>Many learning platforms; conduct a lot of course training; they can develop further skills; and then they actually improve; you need to develop capability of staff; improve the next generation; every employee has a target to learn; is quite important; we are thinking how to reskill or upskill; we have coaching...mentoring; when you have a plan to grow...you need more skills; more certificates</i>
Team Orientation	4	4	<i>We help people; this is a group effort; knowledge in teams; most effective team</i>
Empowerment	4	5	<i>Encourage people to have new ideas; they can follow their ideas; it can be individualistic; encourage people to go for it; everybody has a right to speak</i>
Creating Change	5	10	<i>Develop the service or the product; focus on this innovation; what they want along with that product; trying to find out the problem to improve; improve the governance; in a transforming process</i>
Customer Focus	9	11	<i>What the customers need; we want to focus on the customers; create a positive experience for the customer; because they pay us; the customers feel good...they choose my company; if they say something good...we will get more customers; part of our company values; everything you do, you should focus on your customer need;</i>

Sub themes	No. of respondents	No. of comments	Exemplary comments
			<i>you need to know the purpose of the customer; if you take care of the customer, it will bring</i>
Organisational Learning	8	15	<i>Predict their needs; trying to come up with new initiatives; what's the problem with the market; research now; strong learning culture; gap in knowledge...need to understand; bring my work in America back to Vietnam; We come to ask them</i>

A total of 108 comments were categorised according to the sub themes that correspond to the Indexes of the DM. The sub theme Indexes with the most comments were Goals and Objectives and Organisational Learning with fifteen comments each. Capability Development and Strategic Direction and Intent each had fourteen comments while Customer Focus, Creating Change, and Coordination and Integration each had eleven, ten, and nine comments respectively. Each of the remaining sub theme Indexes had seven or fewer comments each with seven comments for Vision; five comments for Empowerment; and four comments for Team Orientation. Core Values and Agreement on had three and one comment respectively categorised according to the sub theme Indexes.

These responses can further be categorised according to the Dimensions of the DM. When categorised according to Dimensions of the DM the number of respondents and comments can be shown in Table 4.34.

Table 4.34 - Comments of Organisational performance categorised by Dimension

	No. of respondents	No. of comments
Mission	9	36
Consistency	8	13
Involvement	10	23
Adaptability	10	36

The results show that most respondents provided descriptions of aspects of organisational culture in their organisations that related to each of the Dimension of the DM. The Dimensions of Mission and Adaptability had the most comments categorised from there relevant sub theme Indexes with a total of thirty-six each. The Dimension of Involvement had a total of twenty-three comments and Consistency had the least number of comments categorised with a total of thirteen.

4.7.3.2 Interview question three – Sub questions

The four sub questions in interview question three were developed specifically to further explore and confirm the Dimension and Indexes that were found to have a significant positive impact on performance in the quantitative stage. Table 4.35 shows the number of respondents and comments that were related to each of the themes that were associated with the question three sub questions and were based on the significant positive relationships that were found between the Dimension of Mission and the Indexes of Capability Development, Customer Focus, and Goals and Objectives.

Table 4.35 - Comments related to the themes for Interview Question 3 sub questions

Theme	No. of respondents	No. of comments	Exemplary comments
Mission	9	15	<i>the company has a clear vision or mission communicated to the staff, we have something like goals and objectives; the management team will share this year's vision and mission; So, we will focus on that result; really understanding the company mission...working in the same direction...on the same page; it affects the manager; it is indirectly influenced through my management style; translates the mission from higher in the university that it cascades down to the lower level; through mission for sure; they always follow the one way of my company culture; without the mission, the top management cannot escalate down; make known to every employee so everyone is going the right way; all employee in the company was trained about the mission; it's a bit high and far away from the daily operation; so even though in our daily life we haven't seen that; our mission, our slogan, is to speak and to be heard</i>
Customer Focus	10	15	<i>They dig very deep inside what the customer needs; we can understand more about what they need; focus on customers in all of the projects will be customer centric; quite new direction, new initiative or new focus; we talk about customer centric or customer obsession; for the experience of the external customer we also have to start from within; instead of focussing of the competitors in the market...focus more on the customer; we focus on catering to a specific group of customers; it reflects in everything we do; that have been a focus; want the long term contract with the customer; the customer service is a priority; customer focus is part</i>

Theme	No. of respondents	No. of comments	Exemplary comments
			<i>of our company values; we always go from the customer because their needs style everything; if you take care of the customer it will bring the company more referrals</i>
Goals & Objectives	7	12	<i>If they keep achieving the short term goals and objectives at the end they can achieve the long term goals and vision as well; it's very important to let all the staff know that this year we need to achieve; all of us need to focus on those result; walking towards the goals and objectives, it will help us go directly to the goal; important to us and going to impact the performance positively; to be alive and all the same page on what the direction that the company is trying to achieve; motivating way so that the people will have the energy and enthusiasm; have goals and objectives for the whole organisation; we don't really connect them to performance; everyone has to perform and everyone has to take into consideration that strategy into their daily work; everybody has to believe in one goal they have; they all try to achieve</i>
Capability Development	10	19	<i>Our company has five learning platforms; it improves my skills and helps me in my daily work; they conduct a lot of courses and training for all the staff; all of us have an account of LinkedIn learning; we need to complete at least four hours per quarter; the most important aspect when it comes to the performance of the company; can change over time or can develop or grow over time; development is very important and it's important for the manager to recognise that; Vietnamese staff are less likely to confront the manager...so they need to provide adequate training; you train and they leave, is far better than you</i>

Theme	No. of respondents	No. of comments	Exemplary comments
			<i>don't train, and they stay; you cannot perform in the complex world which requires a lot of new skills and knowledge; we always have a mission...to the next generation; they promote learning culture; capability development is quite important, especially in the transforming process; we are also looking at the current workforce to see...how far the gap between the current skill and the new skill set; we have coaching, we have monitoring, mentoring; performance reviews...define the gap between their current performance and expected performance; you have to have more when you need and when you have a plan to grow; the staff have more certificates and stuff</i>

The following sections explore these themes in detail in order to find evidence of support for the findings from the quantitative phase and to provide a deeper insight into those results.

4.7.3.2.1 Interview sub question 3.1 - Mission

The Dimension of Mission was the only Dimension that was found to have a significant positive relationship with performance in Vietnamese organisations in the quantitative analysis and provided support for the hypothesis that was developed as a result of the literature review and according to the definition of Mission (Denison & Neale 1999). The Dimension of Mission has an external focus and aligns with stability in the DM.

Of the three Indexes of the DM that were found to have a significant positive relationship with performance in Vietnamese organisations, Goals and Objectives was the only Index which also belonged to a Dimension that was found to also have a significant positive relationship.

Interview sub question 3.1 and the theme of Mission is directly related to the significant relationship that was found in the quantitative stage of the research between the Dimension of Mission and performance and was explored with interview questions 3.1:

Specifically, could you please discuss the effects of the following aspects on organizational performance: (Q3.1) Mission

A total of nine respondents provided a total of fifteen comments that were categorised as adding understanding between the Dimension of Mission and performance in Vietnamese organisations. These responses reflected support that aligns with the hypothesis developed from the literature review and the findings of the quantitative stage. The comments also provide insight into how the Indexes that belong to the Dimension contribute to the positive impact on performance in Vietnamese organisations. In addition, the comments demonstrated numerous links to other Indexes and their relative Dimensions that provide insight into how different aspects of organisational culture in Vietnamese organisations contribute to the Mission having a positive impact on performance. These findings are analysed in more detail in the following sections.

All of the respondents provided comments that supported a positive relationship between the Mission of their organisations and performance. For example:

“The company has a clear vision or mission communicated to the staff, we have something like goals and objectives or KPIs set very clearly, and we have that one KPI to reach to, so we try our best to reach that KPI objective” (R1)

“At the beginning of the year, our company always has a town hall and then the management team will share this year's vision and mission. So, all of all the staff will know very clearly what the goal of this year is. So, the mission is very clear at the beginning. So, all of us work toward that goal” (R2)

“I think it's a very important mission, very important and crucial in terms of how it's going to affect the business performance because it's only when the people really understand the company mission, then they wouldn't be able to work in the same direction, be allowed on the same page. When everyone is allowed on the same page, then the collaboration between departments, is going to be just smoother” (R3)

“So, my organization is the higher organization, it is the school then this is broken down to the lower level that's a department” (R5)

“Long term employment and when we build the culture, it is the culture of my company” (R6)

“The mission is important because without the mission, the top management cannot escalate down the KPIs for everyone to work on. So, mission is important, and it is also important that it is made make known to every employee. So, everyone is going the right way” (R7)

“Our mission is our slogan, it is to speak and to be heard, so my opinion is that everybody; they have the right to speak” (R9)

These comments all support a link between the Dimension of Mission to performance in the respondents' organisations when considering the definition that Mission is ‘a sense of direction and performance expectations’ (Denison & Neale 1999, p. 1-14). The sense of direction is illustrated with comments such as:

“Set very clearly” (R1)

“All the staff will know very clearly” (R2)

“Able to work in the same direction” (R3)

“So, everyone is going the right way” (R7)

The comments also indicate a clear connection to understanding the performance expectations as illustrated with comments such as:

“We have something like goals and objectives or KPIs” (R1)

“Very clearly what is the goal of this year” (R2)

“Escalate down the KPIs for everyone” (R7).

In addition, the comments reflect the importance the Mission being clearly communicated (R1; R2; R3; R5; R7) to all levels of the organisation (R1; R2; R3; R5; R7) while being clearly and

specifically linked to the specific objectives of individuals (R1; R3; R7) for the organisation to perform. Furthermore, all comments reflected how a common understanding of the mission and values of the organisation are important to impact performance by aligning the employees.

The comments also offer extra insights into how performance is connected to the broader Dimension of Mission via the corresponding Indexes that belong to that Dimension. The Index of Goals and Objectives was found to have a significant positive impact on performance in the quantitative analysis and the relationship to Mission was demonstrated in numerous comments, for example:

“We have something like goals and objectives....set very clearly” (R1)

“So, all of us work toward that goal” (R2)

“Escalate the KPIs down for everyone to work on” (R7)

“Senior leaders keep talking about the goal” (R8)

In addition, numerous comments reflected how the other two Indexes of Vision, and Strategic Direction and Intent also contribute to Mission and performance. For example, comments showing a relationship with the Index of Vision:

“The company has a clear vision or mission communicated to the staff” (R1)

“Always have a town hall and the management team will share this year's vision and mission” (R2)

“When the people really understand the company mission” (R3)

“When we build the culture is the culture of my company” (R5)

“Important that it is made make known to every employee” (R7)

And comments showing a relationship with Strategic Direction and Intent:

“They will know very, very clearly what is the goal of this year” (R2)

“Working in the same direction” (R3)

“Always follow the one way of my company culture” (R6)

“So, everyone is going the right way” (R7)

“But without the direction, we don't know how to reach the goal” (R8)

As well as reflecting the Indexes associated with Mission, comments also demonstrated connections between the Mission and other Indexes of the DM. Some comments could be linked to other Indexes. For example, Coordination and Integration:

“So, all of us knows what the result is” (R2)

“When there is collaboration between departments, we're going to just going to be smoother” (R3)

“Cascades down to the lower level” (R5)

And empowerment:

“Everybody; they have the right to speak” (R9)

While nine respondents provided support for a positive relationship between the Dimension of Mission and performance in Vietnamese organisations, two of these respondents' comments expressed that the Mission of the organisation is distant from daily operations, for example:

“Personally think that the mission doesn't really affect the employee that much, but it affects the manager” (R4)

“Somehow the mission and the vision in the organization is a bit far away from the daily operation” (R8)

“It is very high...but without the direction, we don't know how to reach the goal” (R8)

However, while these comments noted that the Mission was distant from daily operations, they noted the importance of manager's role in ensuring that the mission is reflected in the daily operations. For example, the same two respondents also commented:

‘We translate that into how we manage, how we interact with the employees and how we create, how we build the culture’ (R4)

“We need something real, need to see the facts step by step...” (R8)

Therefore, while these employees may feel that the Dimension of Mission is quite disconnected from the daily operations of the organisations, the additional comments note that there is a strong connection through elements of Strategic Direction and Intent and Goals and Objectives that would support the finding that the Dimension of Mission has a positive impact on organisational performance.

4.7.3.2.2 Interview sub question 3.2 – Capability Development

The Index of Capability Development was found to have a significant positive relationship with performance in Vietnamese organisations in the quantitative analysis and provided support for the hypothesis that was developed as a result of the literature review and according to the model’s definition of Capability Development (Denison & Neale 1999). Of the three Indexes of the DM that were found to have a significant positive relationship with performance in Vietnamese organisations, Capability Development was the only Index which belonged to the Dimension of Involvement. The Dimension of Involvement was not found have a significant positive relationship with performance in the quantitative stage. Interview sub question 3.2 and the theme of Capability Development is related to the significant relationship that was found in the quantitative stage of the research between the Index of Capability Development and performance and was explored with interview questions 3.2:

Specifically, could you please discuss the effects of the following aspects on organizational performance: (Q3.2) Capability Development

All ten respondents provided a total of nineteen comments that were categorised as adding understanding between the Index of Capability Development and performance in Vietnamese organisations. All respondents provided support for a positive relationship between the Index of Capability Development and performance in Vietnamese organisations that aligns with the hypothesis that was developed from the literature and the findings of the quantitative stage. Additionally, the comments also provide insights into how the Index of Capability

Development impacts performance as well as providing links to other Indexes in the DM that give indications of the drivers and facilitators of this Index in Vietnamese organisations.

All the respondents provided comments that supported a positive relationship between the Capability Development of their organisations and performance. For example:

“Our company has five learning platforms like LinkedIn or Workshop. They hold it quite frequently so we can choose what is needed to upgrade yourself. Like myself, I can attend some business writing classes or a negotiation course. I can attain so that it improves my skills, and it helps me in my daily work and at the end, it had increased my performance as well.” (R1)

“All of us can access to the same database and then we can just sign up and study online in our own time. So, it will help us to improve our skills a lot.” (R2)

“This is for me the most important aspect when it comes to the performance of the company, because I think the people at the end are still the core focus.” (R3)

“I think quite a lot... I just trained them and after training, both of them have talked about their skills and knowledge actually improved. So, I think the development is very important and it's important for the manager to recognize that.” (R4)

“You need to develop capability of staff because that directly impacts the performance of the organization because if you don't have the talent, if you don't reskill and upskill the staff, then they fail to perform in the high level or cannot perform in the complex world which requires a lot of new skills and knowledge nowadays.” (R5)

“We always have a mission., in my position, to the next generation. I am a deputy manager, managing director and I have a mission to make the director of the department have the same thing, the same way.” (R6)

“A strong learning culture which every employee has the target to learn and regardless of your level, regardless of the age, so everyone had to learn, and it also helps some of the Vietnamese lower-level staff to learn to write English and also communication. So, I think it helps the organization to go further and achieve that target.” (R7)

“There's a gap in knowledge in teams so we are thinking of how to reskill or upskill current employees to meet the new skill set of the new business.” (R8)

“If the employees themselves can improve the performance, can meet the objectives and we think that they will leverage the whole performance of the team and the organization also.” (R8)

“Short term about less than three years, you don't need a lot of knowledge or skills, but now you have to have more when you have a plan to grow. In the Vietnam market, you need more skills and more knowledge together with the mission and then you are in control of the people, and you do more. So more with me is creating products you need more than just a little skill or a little knowledge.” (R9)

“So, my company has more people higher, qualified people to work, and the staff have more certificate and stuff who work here.” (R10)

These comments all support a link between the Index of Capability Development to performance in the respondents' organisations when considering the definition that Capability Development is that ‘The organization continually invests in the development of employees' skills in order to stay competitive and meet ongoing business needs’ (Denison & Neale 1999, p. 2-9).

For example, links related to investing in the development of employees:

“Our company has five learning platforms” (R1)

“All of us can access to the same database” (R2)

“I just trained them” (R4)

And links related to staying competitive and meeting ongoing business needs:

“Directly impacts the performance of the organization” (R5)

“Cannot perform in the complex world which requires a lot of new skills and knowledge nowadays.” (R5)

“It helps the organization to go further and achieve that target.” (R7)

“Meet the new skill set of the new business.” (R8)

“Leverage the whole performance other team and the organization also.” (R8)

“You have to have more when you have a plan to grow” (R9)

The comments indicated some relationship with the Index of Team Orientation which also belongs to the Dimension of Involvement, for example:

“Leverage the whole performance of the team” (R8)

The comments also indicated relationships with other Indexes of the DM that contribute to the performance of the organisations. For example, Creating Change:

“Especially we are in a transforming process” (R8)

“With me it is creating products you need more than just a little skill or a little knowledge” (R9)

Organisational Learning:

“To meet the new skill set of the new business” (R8)

Strategic Direction and Intent:

“Have the same thing, the same way.” (R6)

And Goals and Objectives:

“Achieve that target.” (R7)

“Can meet the objectives” (R8)

The two Indexes of Organisational Learning and Creating Change both belong to the Dimension of Adaptability on the DM. These Indexes are also aligned with flexibility on the DM; however, they are associated with an external focus as opposed to the internal focus associated with Capability Development.

The two Indexes of Strategic Direction and Intent both belong to the Dimension of Mission on the DM. These Indexes are oppositely opposed to the attributes of Capability Development in the Dimension of Involvement with an external focus and stability. As well as comments directly related to these Indexes, some comments are related more broadly to the Dimension of Mission, for example:

“I have a mission” (R6)

“Together with the mission” (R9)

The qualitative analysis shows support for the positive impact of the Index of Capability Development on performance in Vietnamese organisations as well as providing evidence as to how this happens and is driven by externally focused Indexes and facilitated via internally focused Indexes.

4.7.3.2.3 Interview sub question 3.3 – Customer Focus

The Index of Customer Focus was found to have a significant positive relationship with performance in Vietnamese organisations in the quantitative analysis and provided support for the hypothesis that was developed as a result of the literature review and according to the model’s definition of Customer Focus (Denison & Neale 1999). Of the three Indexes of the DM that were found to have a significant positive relationship with performance in Vietnamese organisations, Customer Focus was the only Index which belonged to the Dimension of Adaptability. The Dimension of Adaptability was not found have a significant positive relationship with performance in the quantitative stage. Interview sub question 3.3 and the theme of Customer Focus is related to the significant relationship that was found in the quantitative stage of the research between the Index of Customer Focus and performance and was explored with interview questions 3.3:

Specifically, could you please discuss the effects of the following aspects on organizational performance: (Q3.3) Customer Focus

All ten respondents provided a total of fifteen comments that were categorised as adding understanding between the Index of Customer Focus and performance in Vietnamese organisations. All respondents provided support for a positive relationship between the Index

of Customer Focus and performance in Vietnamese organisations that aligns with the hypothesis that was developed from the literature and the findings of the quantitative stage. Additionally, the comments also provide insights into how the Index of Customer Focus impacts performance as well as providing links to other Indexes in the DM that give indications of the drivers and facilitators of this Index in Vietnamese organisations.

In addition, all respondents provided support for a positive relationship between the Index of Customer Focus and performance in Vietnamese organisations. For example:

“Get more customer insight and from that we can develop the service or the product that satisfies the customer needs and it helps us get more revenue.” (R1)

“We want to focus on customers in all of the projects, will be customer centric. So, it will play an important role in the performance.” (R2)

“So that we were going to be in the good position to design and develop products or services that actually make a positive impact to the external customer, the one that was going to be willing to pay us a premium price for our products. I think that's the way to go. I actually believe in it, so yeah.” (R3)

“We focus on catering to a specific group of customers, so we know who they are.” (R4)

“It influences all the performance and the focus in the organization, because if you fail to deliver the right or good or high-quality learning experience, they will not purchase your service and then you fail if you don't have revenue, how can you operate right?” (R5)

“Build the factories and offer for lease. The customer lease we always want the long-term contract with the customer because when we change the customer, we have many things to rebuild...So in my company, the customer always wants the long-term contract and I seek the customer.” (R6)

“So, the customer service is a priority, it's very important to us and it affects the sales, it affects our image of the brand.” (R7)

“That's why we form a team called customer experience from group level to the whole country also to understand the customer inside, to push the customer satisfaction ourselves. And then even our senior leaders say, you desire process, but if you don't look inside the customer, what's process for?” (R8)

“We always go from the customer because their needs style everything so, we have to understand first. We have to need to know the purpose of the customer and why they need us.” (R9)

“It will bring customers, if you take care of the customer, it will bring the customers. It's like you have more referral customers for all.” (R10)

These comments all support a link between the Index of Customer Focus to performance in the respondents' organisations when considering the definition that Customer Focus is that ‘The organization understands and reacts to their customer and anticipates their future needs. It reflects the degree to which the organization is driven by a concern to satisfy their customer’ (Denison & Neale 1999, p. 2-13).

For example, links related to understanding and reacting to their customer:

“That we can develop the service or the product that satisfies the customer needs” (R1)

“To design and develop products or services that actually make a positive impact to the external customer” (R3)

“To understand the customer inside” (R8)

“Their needs style everything so, we have to understand first” (R9)

And links related to a concern to satisfy their customers:

“We want to focus on customers in all of the projects” (R2)

“We have to think, will our customer like that?” (R4)

“To deliver the right or good or high-quality learning experience” (R5)

“Customer service is a priority” (R7)

“If you take care of the customer, it will bring the customers” (R10)

The comments also indicated numerous relationships with the Indexes of Creating Change and Organisational Learning which also belong to the Dimension of Adaptability. For example, the Index of Creating Change:

“We can develop the service or the product that satisfies the customer” (R1)

“This is actually quite new direction, a new initiative or new focus from the senior leaders” (R3)

“In the good position to design and develop products” (R3)

“We always go from the customer” (R9)

And Organisational Learning:

“Develop the service or the product that satisfies the customer needs” (R1)

“Design and develop products or services that actually make a positive impact to the external customer” (R3)

“To understand the customer inside” (R8)

“We have to understand first. We have to need to know the purpose of the customer” (R9)

Some comments also link to other Indexes and their corresponding Dimensions of the DM. For example, numerous comments can be linked to the Index of Goals and Objectives:

“It has to improve the company sales and at the end increase the revenue for the company” (R1)

“End goal to become true is that we're going to create a positive experience for the for the customer” (R3)

“You fail if you don't have revenue” (R5)

“My company and the customer always want the long-term contract” (R6)

“It affects our sales; it affects our image of the brand” (R7)

Comments were also linked to Core Values:

“It reflects everything that we do” (R4)

“Customer focus is a part of our company values” (R8)

And Coordination and Integration”

“How to create the awareness about customer centricity” (R3)

“We have to work together, have to have a lot of alignment and collaboration” (R3)

As well as comments directly related to these Indexes, some comments are related directly to the Dimension of Mission, for example:

“We have the mission that we want to focus on the customers” (R2)

“We serve our mission” (R5)

The Indexes of Organisational Learning and Creating Change both belong to the Dimension of Adaptability along with the Index of Customer Focus. The Dimension of Adaptability is associated with flexibility and an external focus on the DM. The Index of Goals and Objectives belongs to the Dimension of Mission which is also externally focused while being aligned with stability. The Indexes of Core Values and Coordination and Integration both belong to the Dimension of Consistency which is oppositely opposed to the Dimension of Adaptability with an internal focus that is aligned with stability.

Question 3.3 also gave some insights into the broader cultural drivers that suggest a shift towards Customer Focus that was not previously emphasised as being associated with performance in Vietnamese organisations. These comments suggest a shift from traditional cultural influences to contemporary cultural influences on organisational culture in Vietnamese organisations, for example:

“Customer experience has been in China for a number of years...our customer experience is a new department...just established for two years” (R3)

“This is actually quite a new direction, new initiative, or new focus” (R3)

The qualitative analysis shows support for the positive impact of the Index of Customer Focus on performance in Vietnamese organisations as well as providing evidence as to how this happens and is driven by externally focused Indexes and Dimensions while being facilitated via internally focused Indexes. In addition, it provides some evidence of a shift in values with influence from contemporary cultural influences driving this impact in Vietnamese organisations.

4.7.3.2.4 Interview sub question 3.4 – Goals and Objectives

The Index of Goals and Objectives was found to have a significant positive relationship with performance in Vietnamese organisations in the quantitative analysis and provided support for the hypothesis that was developed as a result of the literature review and according to the model’s definition of Customer Focus (Denison & Neale 1999). Of the three Indexes of the DM that were found to have a significant positive relationship with performance in Vietnamese organisations, Goals and Objectives was the only Index which belonged to the Dimension of Mission. The Dimension of Mission was also the only Dimension that was found to have a significant positive relationship with performance in the quantitative stage. Interview sub question 3.4 and the theme of Goals and Objectives is related to the significant relationship that was found in the quantitative stage of the research between the Index of Goals and Objectives and performance and was explored with interview questions 3.4:

Specifically, could you please discuss the effects of the following aspects on organizational performance: (Q3.4) Goals and Objectives

Additionally, the comments also provide insights into how the Index of Customer Focus impacts performance as well as providing links to other Indexes in the DM that give indications of the drivers and facilitators of this Index in Vietnamese organisations.

Seven respondents provided a total of twelve comments that were categorised as adding understanding between the Index of Goals and Objectives and performance in Vietnamese

organisations. All seven respondents provided support for a positive relationship between the Index of Goals and Objectives and performance in Vietnamese organisations that aligns with the hypothesis that was developed from the literature and the findings of the quantitative stage. Additionally, the comments also provide insights into how the Index of Goals and Objectives impacts performance as well as providing links to other Indexes in the DM that give indications of the drivers and facilitators of this Index in Vietnamese organisations.

Seven of the respondents provided comments that supported a positive relationship between the Index of Goals and Objectives and performance in Vietnamese organisations. For example:

“We have the goals and objectives in the short term and a vision, long term in the company. If they like keep achieving the short-term goals and objective at the end, they can like achieve the long-term goals and vision as well. So, at the end it can improve the company performance.” (R1)

“It's very important to let all the staff know that this year we need to achieve a certain amount of money. So, all of us need to focus on those results and then just walking towards the goals and objectives, it will help us to go directly to that goal and then we will not go far from our directions. So of course, we will impact the performance.” (R2)

“Yeah, I think this is important and it's going to impact the performance positively.” (R3)

“He wants to everyone to be aligned and all the same page on what the direction that the company is trying to achieve. Otherwise, if we are not at least aligned on what we are trying to achieve, then it's going to be hard for everyone to work well together during the year.” (R3)

“Any specific goals or object objectives, especially not for individual. We only have an objective for the whole organization that you know basically every month we have to achieve a certain red level of revenue.” (R4)

“That affects a lot to our organization and when they have that strategy, everyone has to perform, and everyone has to take into consideration of that strategy into their daily work.” (R7)

“Everybody believes in that, you know the basically a company with me, it's based on believing, it's not based on money and stuff and people that's based on believing everybody has to believe in one goal they have, they need to have one dream just like Elon Musk everybody and SpaceX believe that people can go to Mars. So now my company, everybody right now believes we can win Vietnam markets and they work every day for that dream.” (R9)

“Everyone’s happy, at first will be hard, but they all try to achieve because they always have a key action.” (R10)

These comments all support a link between the Index of Goals and Objectives to performance in the respondents’ organisations when considering the definition that Goals and Objectives is that ‘A clear set of goals and objectives can be linked to the mission, vision, and strategy, and provide everyone with a clear direction in their work.’ (Denison & Neale 1999, p. 2-15).

For example, links related to linking the goals clearly to the mission, vision, and strategy:

“Goals and objectives in the short term and a vision, long term” (R1)

“Let all the staff know that this year we need to achieve a certain amount of money” (R2)

“at least aligned on what we are trying to achieve” (R3)

“Have an objective for the whole organization” (R4)

“Consideration of that strategy into their daily work” (R7)

“Everybody has to believe in one goal they have” (R9)

And links related to a clear direction of work:

“Will help us to go directly to that goal and then we will not go far from our directions” (R2)

“Everyone to work well together during the year” (R3)

“Everybody right now believes we can win Vietnam markets and they work every day for that dream” (R9)

“But they all try to achieve” (R10)

The Index of Goals and Objectives was unique in that it was the only Index in the quantitative phase that was found to have a significant positive impact on performance that also belonged to a Dimension that was found to have a significant positive impact on performance.

The other two Indexes belonging to the Dimension of Mission; Vision and Goals and Objectives were found to have numerous links to the comments related to the Index of Goals and Objectives. For example, the following comments can also be linked to Vision:

“We have the goals and objectives in the short term and a vision, long term in the company” (R1)

“How the leaders communicate” (R3)

“A company it's based on believing” (R9)

While the following comments can be linked to Strategic Direction and Intent:

“It will help us to go directly to that goal and then we will not go far from our directions” (R2)

“All the same page on what the direction that the company is trying to achieve” (R3)

“If we are not at least aligned on what we are trying to achieve, then it's going to be hard” (R3)

“Everyone has to take into consideration of that strategy into their daily work” (R7)

In addition to the links found to Indexes belonging to the Dimension of Mission, links were also seen with other Indexes. Notably, several links with the Index of Coordination and Integration can be seen. For example:

“So, all of us need to focus on those results” (R2)

“Otherwise...hard for everyone to work well together during the year” (R3)

“Because the whole group organizational effort” (R4)

“Everybody has to believe in one goal” (R9)

In addition, links can be seen to the Index of Team Orientation, for example:

“This is a group effort” (R4)

“And as a collective improve” (R4)

The Index of Coordination and Integration is similarly aligned with stability in the DM in line with the Dimension of Mission and its Indexes. However, Coordination and Integration are aligned with an internal focus opposed to the external focus of the Dimension of Mission and its Indexes. Team Orientation belongs to the Dimension of Involvement while being aligned with flexibility and an internal focus on the DM.

These results demonstrate the importance of the Index of Coordination and Integration in supporting the achievement of Goals and Objectives and for teams to work together in Vietnamese organisations.

4.7.4 Interview question four –Vietnamese Culture and Organisational Culture

Interview question four was developed specifically to contribute to answering research question three while adding understanding to research question one in linking drivers of organisational culture which are linked to performance:

Q4. How would you describe the impact of the Vietnamese cultural characteristics, such as individualism, power distance, uncertainty avoidance, and masculinity, on the culture of your organisation?

The interview question aims to elicit how the traditional and contemporary Vietnamese cultural influences that were explored in the literature review impact on organisational culture in Vietnamese organisations.

Responses were simply categorised according to two themes indicative of aligning more with traditional Vietnamese cultural values or aligning more with changing contemporary values with influences from outside of traditional Vietnamese culture.

Table 4.36 shows the results of the categorical analysis of responses.

Table 4.36 - Comments related to changing organisational cultural values

Theme	No. of respondents	No. of comments	Exemplary comments
Contemporary	10	21	<i>half Westernized, half Asian; result oriented; I don't feel the gap; organization is changing; can be empowered; largely due to the generation of differences; staff can easily talk with us; manager to actually create the culture of that organization; Individualism, they have an impact on, on the organization performance; They open to the world; Critical thinking; respect the idea; long term development of the company; psychological safety environment; People have different characteristic; bringing the more American culture; everyone works here very open minded; boss still can be a friend</i>
Traditional	7	14	<i>happily, is somehow more important; agreement of the whole team; distance with my high management people; we don't freely share; team achievement is more important; it's just going to be easier for us...teamwork; have more collaboration; it's very collective; we facilitate the coordination; be recognized as a whole team; we respect the senior; the big hierarchy; somehow still have the fear; may feel fear to talk to; afraid of feedback...to the higher managers</i>

The analysis showed that all respondents provided a total of twenty-one comments that were categorised as indicating a shift in organisational culture that are contemporary in nature. Seven respondents provided a total of fourteen comments that reflected traditional Vietnamese cultural influences impacting on organisational culture.

The comments that reflected a shift in organisational culture in Vietnamese organisations towards more contemporary values indicated several drivers and key shifts. The comments indicated influences from other cultures in the younger generation as a key driver, for example:

“It is half Westernized, half Asian.” (R1)

“Not in silos, but actually they have to collaborate together, working together and the younger generation or younger employee I can have, they can be empowered to raise up their voice, their opinions, whenever they have any new ideas.” (R3)

“I don't really share the same point of view of that assessment within the culture and I think that's largely due to the generation of differences.” (R4)

“Increasingly, I can see that the younger generation, they learn more they are open to the world, tends to technology innovation and they welcome other differences.” (R5)

“And also, in high school now they teach a lot about the role of teamwork and critical thinking and that sort of thing.” (R5)

“For those who live and work overseas or study.” (R5)

“In my company and it doesn't work a lot in Vietnam culture because I'm bringing the more American culture back in Vietnam.” (R9)

“So, we're not based on a lot of about Vietnamese personalities or culture or a lot though we just mix it.” (R9)

In addition, these comments especially noted a shift in some aspects of culture related to traditional values of the hierarchy, achievement focus, and long-term orientations of Vietnamese culture, for example:

“It's more about business oriented, result oriented. I think this is more masculinity here.” (R2)

“Some senior positions such as a CEO or president, actually, they are very friendly and down to Earth so I don't feel the gap, the difference between the normal staff and the senior management. So, I don't think that in my company has those gaps.” (R2)

“I think they no longer believe in the way of working that hierarchy and people giving out the hard direction and you have to follow it.” (R3)

“I think is in keeping with that, that change very well in terms of how we're not going to let that hierarchy from slowing us down in terms of how we're going to grow and operate but of course any change is going to take time for the behaviours and the way of working that the Vietnamese people are used to do.” (R3)

“Normally the staff in a high power-distance culture would not directly confront the manager, whereas we can. The staff can easily talk with us.” (R4)

“Even though we are definitely a culture with high power distance, I think it's the job of the manager to actually create the culture of that organization rather than to let the culture of the whole nation dictate how we manage our organization.” (R4)

“So even though the model in the past is more about collectivism, right collectiveness, ...individualism has an impact on the organization performance.” (R5)

“Long term development of the company and actually it's more common in Vietnam.” (R6)

“So that's why the company had to promote a psychological safety environment for everyone to talk about their opinion, their ideas, and about their job.” (R7)

“The background, the characteristic may I say is different. People have different characteristics, and they can make out from their experience also.” (R8)

“Everyone that works here is very open minded.” (R10)

“For a Vietnamese company, when you see bosses, you guys are scared or the boss your king. But my company the boss still can be a friend. We don't need to say hi if we don't want to and it's pretty friendly.” (R10)

Comments that were categorised as reflecting traditional elements of Vietnamese culture as influences on organisational culture in Vietnamese organisations reflected strong elements of collectivism and community while also indicating influences related to hierarchy remain, for example:

“Every goal and objective and decision-making process; they need the whole the agreement of the whole team.” (R1)

“To work with your colleague happily is somehow more important than your own achievement.” (R1)

“The hierarchy culture also I think is quite applicable to my company as well, we also have distance with high management people.” (R1)

“We don't freely share, really share our opinions with the high, the senior management people.” (R1)

“The team achievement is more important than the individual.” (R2)

“But I think for Vietnam in Vietnam, when you're working in Vietnam, that collectivist they call it, people working together is still a good trait, it's still a very good trait for any organization to have, so it's just going to be easier for us whenever we say that we have to be more teamwork.” (R3)

“I didn't want to use KPIs as the pressure for individual to push the revenue of the organisation and doing that, it can be very individualistic. If one staff achieves to KPI and the other cannot achieve them, that can be some conflict where we use the performance of the whole organization. So, in a way it's very collectiveness.” (R4)

“So that is definitely embedded for the organization like us, we facilitate the coordination.” (R5)

“Sometimes it is the achievement of one individual, but the boss would want it to be recognized as a whole team, and sometimes it may demotivate the individual that did that job and other members.” (R7)

“One thing about the culture is we respect the senior up to their age, their knowledge, their experience, something like that and respect the status also if between the manager and the subordinate and maybe the senior leader.” (R8)

“We adopt the Western working side meaning we are more open compared to the other organization, but somehow still have the fear.” (R8)

“That's linked to one way communication, especially the higher the level than the staff may feel fear to talk to and then they just listen and do one way.” (R8)

In summary, the comments show that the strongest underlying traditional culture elements of collectivism, community, and family values are very important contributors to the shape of organisational culture in Vietnamese organisations. At the same time, other traditional cultural features are also changing to meet the needs of the organisations in achieving their outcomes especially in relation to empowerment of workers and lessening hierarchies along with a greater focus on the contributions and ideas of all employees to drive organisational learning and change that can help the organisations to achieve their goals.

4.7.5 Interview question five – National culture and Organisational Culture

Interview question five was developed to gain a greater insight into the perceptions of how national culture impacts on organisational culture in answering research question three. This qualitative insight can be mixed with the discussions in the literature review related to Vietnamese culture and the outcomes of the quantitative findings related to the Dimensions and Indexes of organisational culture to better understand how national culture impacts organisational culture. This question is also useful in adding context to all of the research questions:

Q5. In your opinion, what are the similarities and differences in terms of the contribution of national culture to organizational culture between Vietnam and other countries?

Nine of the respondents provided a total of eighteen comments and examples of their experience and insights related to the contribution of national culture to organisational culture. Overwhelmingly, fifteen of the comments indicated that the respondents believed or had experience in organisations where they could recognise influences of national culture on the culture of the organisation. Three comments, however, also provided insights and accounts of experiences where the influence of other cultures also impacted on organisational culture.

Examples that provided support for the contribution of national culture to organisational culture in different national cultural environments included:

“The national culture really affects the organisational culture as well. I had a chance to work in Singapore for a few years and what I observed the national culture, more or less, stills impact on organisational culture in Singapore. They really work hard. The culture, the people there. And so really disciplined compared to the Vietnamese, the Vietnamese are actually more flexible, and we are less rigid, less disciplined than the Singaporean culture. In Singapore, you must be on time. If you attend the meeting late, you get complaints, or you contribute less in the project, everybody complains and then let you out of the project. But in Vietnam, if you contribute, if your contribution is not much in the project, somehow, people tolerate.” (R1)

“But when the Singaporean came to Vietnam, of course they need to localize and then adapt the Vietnamese culture here. So that's why the team here can work harmoniously. They cannot bring the exact Singapore culture to Vietnam and then ask all of us here to follow exactly that culture. It's like blending, nicely.” (R2)

“Wherever you are in the world, in the country is to operate thinking that's going to be always that different in terms of cultures and how the people are behaving and how people have a different set of traits that that is going to be distinct.” (R3)

“So, for any multinational organisation when they come into a local community and operate, I think there's a level of adaptability that the organization should have done to understand the culture you're operating in, the community you're operating in, and the people you are working with.” (R3)

“At least for Vietnam, I do believe so. The national culture has an impact in organization, at least for the organization in Vietnam. If you look at the Vietnamese, especially state-owned enterprise and you see this is very apparent. But in other types of enterprises, like a totally private enterprise, it depends on how much you see people working if you have the strong leadership or you have the leadership that believes in other cultures.” (R5)

“Vietnam culture has something to do with the organizational culture and like the US. A culture will impact on their organizational culture. I think so, yes.” (R7)

“More senior people, so when they were all higher level sometimes when we speak, we also give some respect to them. Sometimes, if they are wrong, maybe we will tell them in the person. We will not tell openly that, hey, you are wrong. But I think for US and all Australia or other Western countries, they will immediately say that, hey, this is not right. They will speak up. Maybe they will also speak to that person, but maybe in private.” (R7)

“When you do a survey and it is a Singaporean who does the survey, that's the way they stand up. If the standard is good or bad, then it is different from Vietnamese perspective. But to Vietnamese, maybe they give some preference that way or they tend to do it better.” (R7)

“I mean, what is the environment working environment of [Respondents organisation] in Singapore? And they said that it's a bit different from Vietnam, totally different from Vietnam for example.” (R8)

“Vietnam, we promote the collectivism rather than Singaporeans and then we will look at the team when we say we but in Singapore sometimes they will say I did it.” (R8)

“The bit of culture and also the characters, more generous, more let's say, more collaborative and more tolerant compared to their colleagues in Singapore. Let's say in conflict management, right? In Singapore if one person conflicts with the other person for sure, they don't take it personally. They said that even though they don't take it personally, it just a business matter. But at the end they don't make friends with that people. I mean, they just see that people in the company only will discuss with you. But

after work, be a stranger. I don't eat with you. I don't want to see you outside the organization. Something like that, but in Vietnam, even though we have a disagreement, we don't like that people in the team, something like that. But at the end for the party or the gathering activity, we still invite everybody, and everybody can still sit in and cheers.” (R8)

In addition to providing support for the influence of national cultures on organisational cultures, these comments also added to the insights into the influence of Vietnamese culture on organisational culture. Clear links can be seen to Vietnamese cultural traits related to collectivism and community (R1; R8), power distance and hierarchies (R5; R7), femininity (R1; R7; R8), and low levels of uncertainty avoidance (R1).

Some comments also supported findings from previous questions that also acknowledged that other cultural influences also impacted on the organisational culture of Vietnamese organisations. For example:

“There is an imbalance of power between culture, national culture like Western culture, or especially in American culture or, not one or the hegemony one so they are likely to influence other national culture where, for example, we can say that one dimension individualism, American individualism has spread very powerful way throughout different Asiatic countries.” (R4)

“For example, like Confucianism in Asia, they are very collective with, but the younger generation are heavily influenced by Western or American media they are in a way, they identify more themselves with individualism. The ‘I’s’ go for the ‘we’ rather than the ‘we’ for the ‘I’. I think that because of the power imbalance between culture, Vietnamese culture still influences a portrait which we grew up in Vietnam, but at the same time all the more powerful cultures like American culture or South Korean pop culture, which is by extension, American culture influence a lot.” (R4)

“You don't expect everyone to have the same rights in other culture, but you may have some people or a segment of people who have who are similar to the other countries. So, they can apply the same thing in the local, which is power distance or whatever.” (R5)

“I think it depends on the company because each company has a company culture, some companies are like Australia or something, but they have more Vietnamese” (R10)

These comments also provide support for the themes from question four that indicate influences from other cultures on organisational culture in contemporary Vietnamese culture and organisations.

4.7.6 Interview question six – Additional information

Interview question six was developed to give participants the opportunity to add any information that they may have believed was relevant in the context of the questions that had been asked in the interviews. Interview question six was:

Q6. Is there something we have not asked you that we should?

None of the respondents felt that they could provide any additional information in response to the final interview question.

4.8 Summary

The quantitative findings showed that organisational culture in Vietnamese organisations is aligned with a strong Team Orientation while also being aligned with Empowerment and Capability Development to exhibit a high level of Involvement. Consistency and Mission are also prominent features of organisational culture aligned with Goals and Objectives, Strategic Direction and Intent, and Core Values. The relationship between organisational culture and performance showed a significant positive relationship to the Dimension of Mission which was led by a significant positive relationship with Goals and Objectives. The Indexes of Customer Focus and Capability Development also showed significant positive relationships with performance. The structural model showed moderate predictive value while exhibiting predictive relevance. The qualitative findings showed good support for the quantitative findings and provided additional insights into the relationships between the different Dimensions and Indexes of the model. In addition, the qualitative findings showed links between both traditional and contemporary influences on Vietnamese culture and organisational culture while showing support that national culture plays a significant role in shaping organisational culture.

CHAPTER 5: DISCUSSION AND CONCLUSION

5.1 Introduction

The final chapter of this dissertation is presented in Chapter five and brings together the discussions from the literature review, methodology, and findings for final discussion and conclusion. Chapter one was an introduction to the thesis which provided a background for this research. The literature review was then presented in chapter two based on the three parent theories that had been identified: organisational culture; organisational outcomes (performance), and Vietnamese culture. The literature review was able to highlight the gaps in the literature in relation to the research questions and to allow for hypotheses development that could be aimed at answering the research questions and sub-questions. Utilization of the DOCS and the DM is proposed for the testing of these hypotheses by assessing the organisational culture of Vietnamese organisations and quantifying the relationship between the characteristics of organisational culture and performance in these organisations. The research methodology and justification were discussed in chapter three. The realism paradigm was presented as the driver for the methodology in line with the researcher's world view and the justification and strategy for using an Explanatory Sequential Mixed Methods design were presented. Chapter four presented the findings of the research based on the application of the methodology which comprised the collection and analysis of data from surveys that was then used to develop interview questions for the collection and analysis of additional data.

5.1.1 Objective of the chapter

The objective of chapter five is to provide discussions of the findings that were presented in chapter four in the context of the literature review that was presented in chapter two and in relation to the research objectives and specific research questions which were presented in chapter one. In-depth discussions that mix the quantitative and qualitative findings are presented in relation to each of the main questions and their associated sub-questions in sections 5.2 to 5.6. Section 5.7 then presents the conclusions to the research questions. Section 5.8 provides an overview of the contribution of knowledge from this research before sections 5.9 and 5.10 provide a more in-depth discussion of the specific theoretical and practical implications of the research respectively. Section 5.11 discusses the limitations of this research

before section 5.12 provides a discussion of the future directions of research that could be explored with regard to this research. Finally, the concluding remarks of chapter five and the thesis are provided in section 5.13.

The following sections discussing the research questions and sub-questions triangulate and mix the results from the quantitative and qualitative findings in line with the explanatory mixed methods approach of this research (Creswell 2014). The aim of these discussions is to compare, contrast, and verify the results of both stages of the research before the conclusions to the research questions are presented as a result of these discussions.

5.2 Research question 1 discussion

The aim of research question one is to develop an understanding of the nature of organisational culture in Vietnamese organisations.

1. What is the nature of organisational culture in Vietnamese organisations?

In understanding the nature of organisational culture in Vietnamese organisations it will be possible to further understand whether the drivers of organisational culture are coming from traditional or contemporary cultural influences and what the relationship is between the nature of organisational culture and performance of Vietnamese organisations. The DOCS and the DM can be utilised to build a picture of organisational culture in Vietnamese organisations using the scores associated with the Dimensions and their respective Indexes. In line with the Explanatory Sequential Mixed Methods nature of this research, these findings can be verified and explored to better understand the nature of organisational culture in Vietnamese organisations with a second qualitative phase. Building on this picture of organisational culture in Vietnamese organisations, research question two then explores the relationships to organisational performance before research question three explores the relationship with Vietnamese cultural influences.

5.2.1 Dimensions and Indexes in Vietnamese organisations

The results of the DOCS allowed for a map of organisational culture in Vietnamese organisations to be created according to the Indexes of the DM which was presented in the

findings (Figure 4.1). These scores have been plotted on a bar chart to allow for a visual comparison to the distribution of the categorisation of the qualitative comments.

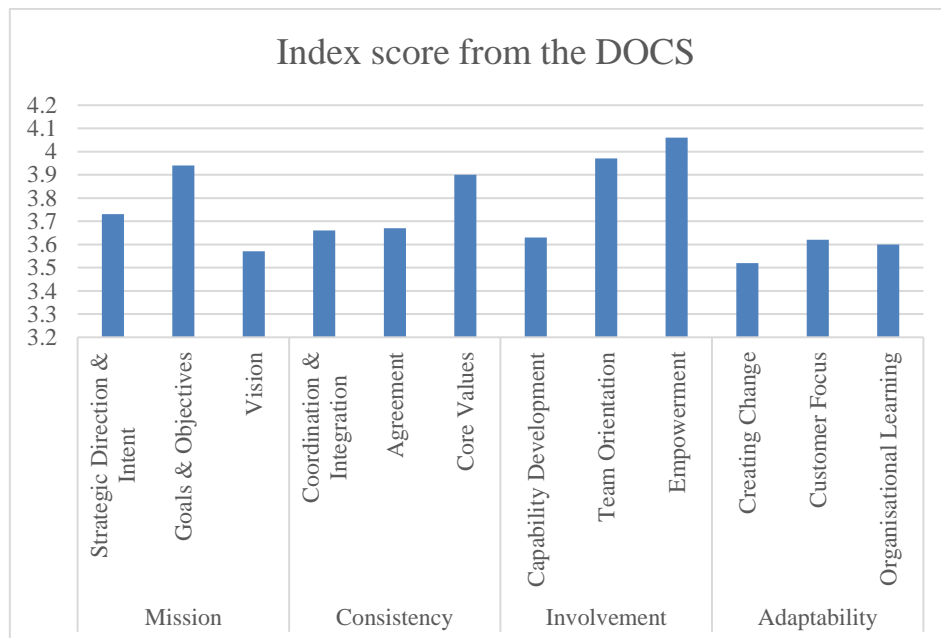


Figure 5.1 - DOCS Index scores in Vietnamese organisations

The DOCS showed that the Indexes of Empowerment, Goals and Objectives, Team Orientation, Empowerment, and Strategic Direction and Intent were the most prominent in Vietnamese organisations. The remaining Indexes were ranked similarly behind the more prominent Indexes with the Indexes of Vision and Creating Change ranking the lowest.

The qualitative comments related to organisational culture in Vietnam were categorised according to the Indexes of the DM and have been plotted on a bar chart to allow for a visual comparison to the distribution of the quantitative comments.

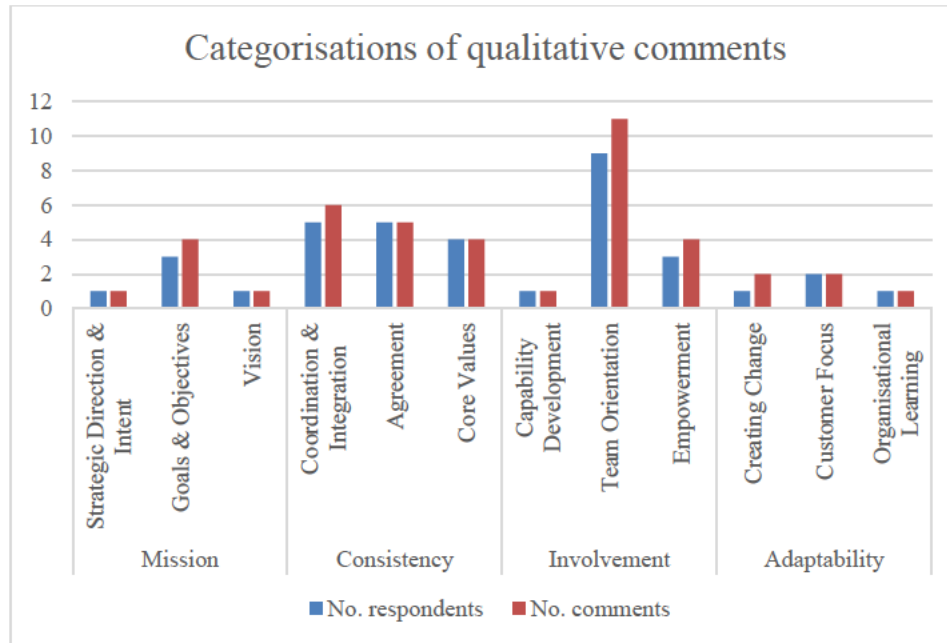


Figure 5.2 - Categorisation of comments reflecting organisational culture in Vietnamese organisations according to Indexes of the Denison Model

The categorisation of the comments showed that Team Orientation was discussed as the most prominent Index of organisational culture while the Indexes of Coordination and Integration, Agreement, Core Values, and Goals and Objectives were also shown to be prominent in the discussions. There was little support from the comments for the remaining Indexes as prominent features of organisational culture in Vietnamese organisations. The results of both stages as presented can also be ranked to aid in the discussion of the similarities and differences as shown in Table 5.1 below.

Table 5.1 - Comparative rankings of the quantitative and qualitative findings according to the Indexes of the Denison Model

Quantitative Results		Qualitative Results	
Rank	Index	Sub Theme (Index)	Rank
1	Empowerment	Team Orientation	1
2	Team Orientation	Coordination & Integration	2
3	Goals & Objectives	Agreement	3
4	Core Values	Core Values	4
5	Strategic Direction & Intent	Goals & Objectives	= 5
6	Agreement	Empowerment	= 5
7	Coordination & Integration	Customer Focus	7
8	Capability Development	Creating Change	8
9	Customer Focus	Organisational Learning	= 9
10	Organisational Learning	Vision	= 9
11	Vision	Capability Development	= 9
12	Creating Change	Strategic Direction & Intent	12

While there is some variation in the results from the two stages of the research, overall, the qualitative results show support for the scores for each of the Indexes and Dimensions of the DM while providing insight into organisational culture in Vietnamese organisations. Broadly, the Indexes are grouped together either in the top half or the bottom half of the results for both stages of research. This shows a clear alignment in both stages of the research that these attributes of organisational culture can be considered more prominent and less prominent in Vietnamese organisations.

The results provide verification that Team Orientation is a key feature of Vietnamese organisational culture and could be argued to be the most dominant aspect based on both stages of the research. This is especially apparent when considering the comments and the way that it is linked to Coordination and Integration in achieving Goals and Objectives. Empowerment also has a prominent place in Vietnamese organisational culture, ranking top in the quantitative analysis and supported by numerous comments in the qualitative stage. Agreement and Core Values also rank well in both stages of the study and indicate that common alignment of issues and following the values set by the organisation are important.

On the other hand, the other Indexes show little prominence in the nature of organisational culture in Vietnamese organisations and were well aligned across the studies, apart from Strategic Direction and Intent. Strategic Direction and Intent had mixed results across both phases of the study with only one comment categorising it as a feature of organisational culture in the qualitative study yet being the fifth highest scoring Index in the quantitative study. Similar results were seen when the Index scores were used to calculate scores for each of their respective Dimensions and they were ranked. The results and rankings of the Dimensions in both phases of the study are shown in Table 5.2.

Table 5.2 – Comparative rankings of the quantitative and qualitative findings according to the Dimensions of the Denison Model

Quantitative Results		Qualitative Results	
Rank	Dimension	Theme (Dimension)	Rank
1	Involvement	Involvement	=1
= 2	Consistency	Consistency	= 1
= 2	Mission	Adaptability	3
4	Adaptability	Mission	4

Involvement was ranked as the most prominent Dimension in each phase of the research while Consistency was ranked equal second and equal first in the quantitative and qualitative studies respectively. Adaptability was ranked lowly in both studies while the Dimension of Mission was more mixed owing to the mixed findings for the Index of Strategic Direction and Intent. Overall, the qualitative results show good validation for the findings in the quantitative stage.

Overwhelmingly, the Indexes that scored higher in both studies are aligned with an internal focus on the DM while those that scored lower are more aligned with an external focus. The Index of Goals and Objectives was the only Index with an external focus that was ranked in the top half of Indexes in both studies. Furthermore, the only other Index that was ranked in the top half of the Indexes in either study was Strategic Direction and Intent which was ranked fifth in the quantitative study. Similarly, the only Index that aligned with an internal focus that was ranked in the lower half of the Indexes in both studies was the Index of Capability Development while the Coordination and Integration was ranked in the lower half in the quantitative study. The rankings of all Indexes overall were very evenly distributed on the DM when considering the attributes of flexibility and stability. These results are also mirrored when looking at the Dimensions with an internal focus both ranked first or second most prominent in both phases of the study and the externally focussed dimensions ranking lower. These findings are shown in Figure 5.3.

Rankings of Indexes and Dimensions when plotted on the Denison Model

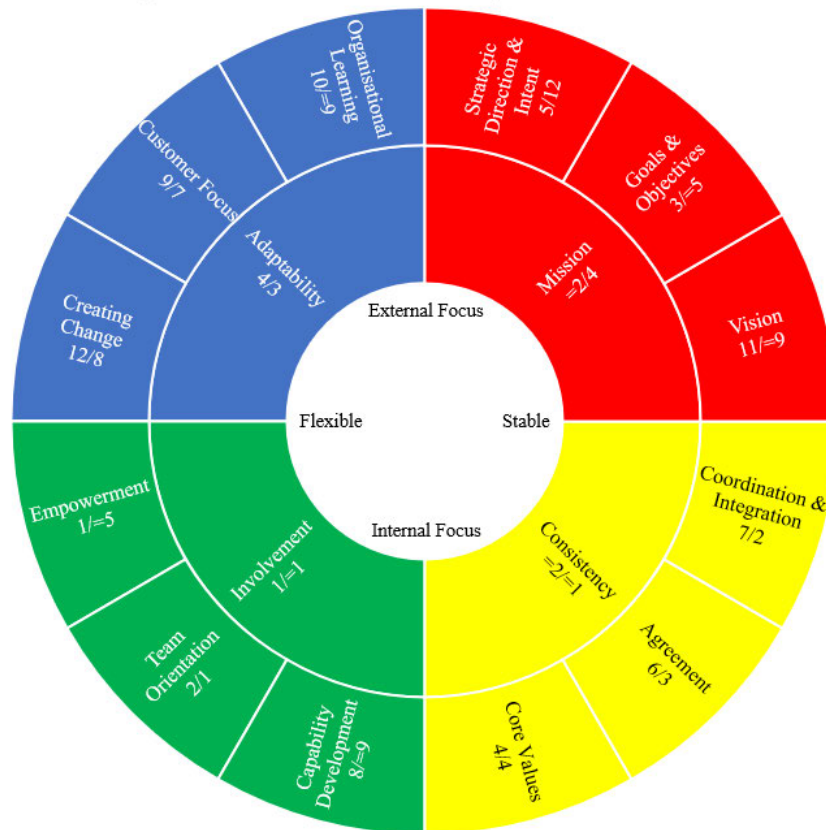


Figure 5.3 - Rankings for quantitative and qualitative results respectively for each Index and Dimension plotted on the Denison Model

(Source: Created by Author)

To summarise, the triangulation of results can verify the results of the quantitative analysis while offering some additional insights. The Index of Team Orientation is strong in Vietnamese organisations, and this also facilitates Coordination and Integration with a Goals and Objectives orientation. Empowerment is strong while Strategic Direction and Intent and Core Values are also important features. Indexes of Organisational Learning, Customer Focus, Creating Change, and Vision are not prominent features of organisational culture in Vietnamese organisations. These results are also reflected in the Dimensions of organisational culture with Involvement and Consistency showing prominence in Vietnamese organisational culture over Mission, and especially, Adaptability. Overall, these results align Vietnamese organisational

culture with an internal focus while stability and flexibility are evenly represented in the organisational culture's makeup. According to the DM, organisations with an internal focus indicate higher degrees of employee satisfaction, higher quality, and good resource utilisation while the balance between flexibility and stability indicate a balance between growth and profitability (Denison & Neale 1999; Denison Consulting 2021).

In addition, these results support previous studies that have assessed organisational culture in Vietnamese organisations that were discussed in the literature review. A number of these studies commonly noted the features reflecting the collective values of Vietnamese culture in Vietnamese organisation such as family culture (Moslehpour et al. 2016), teamwork (Ha, Bui & Tung 2020), clan orientation of non-managers (Nguyen et al. 2018), and recruitment favouring those higher in sociability (Mai & Nguyen 2015). These findings also align with other discussions in the literature that noted the changing nature of organisational culture that noted increasing individualism in some cases (Moslehpour et al. 2016), and transformational leadership promoting adhocracy (Tuan 2010). While Ha et al. (2020) found that empowerment was the least impactful aspect of organisational culture, this study suggests that it is becoming an increasing focus and component of organisational culture in Vietnamese organisations owing largely to contemporary Western cultural influences.

5.3 Research sub-question 1a discussion

Research sub-question 1a is designed to add to the existing body of literature that has studied organisational culture Dimensions according to the DM in different cultural contexts.

1a. How do the organisational cultural dimensions of Vietnamese organisations compare to those in other cultures?

Adding this study to the existing literature allows for a comparison and discussion of the results in different cultural contexts. The following section presents these studies and allows for some discussion of the results in the different cultural contexts.

In seeking to evaluate whether the Dimensions of organisational culture varied across the regions, it is possible to compare the results of the Denison, Haaland, and Goelzer (2004) study with those obtained in this study in Vietnam. The results of the mean scores for the Dimensions

in Table 5.3 (Adapted from Denison, Haaland & Goelzer 2004, p. 10) show that while overall the averages in the Vietnamese study were higher than seen in the other regions, the rankings of the Dimensions show similarity across the regions. In all regions, the Dimension of Involvement scored the highest followed by the Dimension of Mission. While the Dimensions of Adaptability and Consistency scored lower than the Dimensions of Involvement and Mission in all regions, Adaptability was ranked the lowest in North America and Vietnam while Consistency was ranked the lowest in Asia. In EMEA, Adaptability and Consistency were ranked equally lowest. The findings from this study align with the findings of the Denison, Haaland, and Goelzer (2004, p. 106) study that found ‘...despite everything we know about the importance of cross-cultural differences, these results show a very similar pattern across these major regions of the world’. Denison, Haaland, and Goelzer (2004) suggest that this alignment is seen despite the underlying cultural differences owing to the importance of these Dimensions while acknowledging differences in the underlying behaviours that express these findings.

Table 5.3 - Vietnamese Organisational Cultural Dimensions compared to other regions

Dimension	North America	Asia	EMEA	Vietnam
Mission	3.32	3.39	3.35	3.75
Adaptability	3.25	3.28	3.26	3.58
Involvement	3.43	3.42	3.45	3.89
Consistency	3.28	3.21	3.26	3.75

5.3.1 Secondary Studies Comparisons

This section will discuss and compare studies that are less robust than the primary studies already discussed as well as studies that vary somewhat in methodology from this study in

Vietnam. The most closely aligned in terms of methodology will be discussed first and the less well aligned studies will follow in the discussion.

Nazir & Lone (2008) sought to validate the Denison, Haaland, and Goelzer (2004) study in the Indian context in a similar way that this research sought to in the Vietnamese context. Nazir and Lone (2008) used the DOCS questions and seven performance related questions that were developed from the five questions used in the Denison, Haaland, and Goelzer (2004) study. A total of 212 responses were used in the data analysis of the Indian study from various levels of the organisation while the respondents were heavily skewed to males (95%) and limited to two firms each from cement, steel, and textile organisations. The similarities in the data collection and analysis allow for comparisons of the Dimensions and Indexes of the DM as well as their relationships between organisational performance in India and Vietnam to be made. Table 5.4 below (Adapted from Nazir & Lone 2008, p. 52) shows a comparison between the mean scores of each of the Dimensions of the DM between the Nazir and Lone (2008) Indian study and this study conducted in Vietnam.

Table 5.4 - Vietnamese Organisational Cultural Dimensions compared to India

Dimension	India	Vietnam
Mission	3.44	3.75
Adaptability	3.45	3.58
Involvement	3.66	3.89
Consistency	3.46	3.75

The mean scores for the Dimensions of the DM reflect closely the findings of the comparison between Vietnam and other regions from the Denison, Haaland, and Goelzer (2004) study. Again, while the mean scores were higher in Vietnam across all Dimensions, the Dimension of Involvement was ranked the highest. While the Dimension of Mission was not ranked the second highest in the Indian study, the Dimensions of Mission, Adaptability, and Consistency

were all very closely ranked distinctly below Adaptability at 3.44, 3.45, and 3.46 respectively (Nazir & Lone 2008). It is interesting to note that Mission and Consistency, however, were ranked equal second in this Vietnamese study and both well above the Dimension of Adaptability.



Figure 5.4 - Comparison of Hofstede's cultural dimensions between India and Vietnam

(Source: Hofstede Insights 2023)

When considering Hofstede's cultural dimensions (Figure 5.4), it is interesting to note the strong similarities between India and Vietnam with the exception of individualism, which is substantially greater in India although still leans slightly more collectivist (Hofstede's Insights 2023). The close alignment in the Dimension scores from the Nazir and Lone (2008) study to the findings of this study are reflected in this close alignment of Hofstede's cultural dimensions (Hofstede Insights 2023). The relatively lower score in the Dimension of Consistency in the Nazir and Lone (2008) study compared to this study suggest that the greater level of collectivism seem in Vietnam may contribute to a greater level of Consistency which could be explained by the findings of the Team Orientation related to Coordination and Integration found in Vietnamese organisations in this study.

Tulcanaza-Prieto, Aguilar-Rodriguez, and Artieda (2021) used the DM to assess the relationship to performance in Ecuador. While sharing similarities with the other studies discussed, this study used a different set of factors to assess performance which included thirteen items (Tulcanaza-Prieto, Aguilar-Rodriguez & Artieda 2021). In addition, this study did not use the sixty statements from the original DOCS and instead used an adapted version of the survey that contained six statements to assess each of the Dimensions of the DM. Despite the different statements used to assess the Dimensions, the mean scores can still be compared to those of other studies and this study in Vietnam and are shown below (Adapted from Tulcanaza-Prieto, Aguilar-Rodriguez & Artieda 2021, p. 9).

Table 5.5 - Vietnamese Organisational Cultural Dimensions compared to Ecuador

Dimension	Ecuador	Vietnam
Mission	3.76	3.75
Adaptability	3.89	3.58
Involvement	3.72	3.89
Consistency	3.68	3.75

The Dimensions in Ecuador showed a higher overall mean than the other studies discussed, more in line with the findings in Vietnam. However, when considering the rankings of the Dimensions, Involvement was not ranked the highest, coming in third behind Adaptability and Mission respectively while Consistency was ranked the lowest.

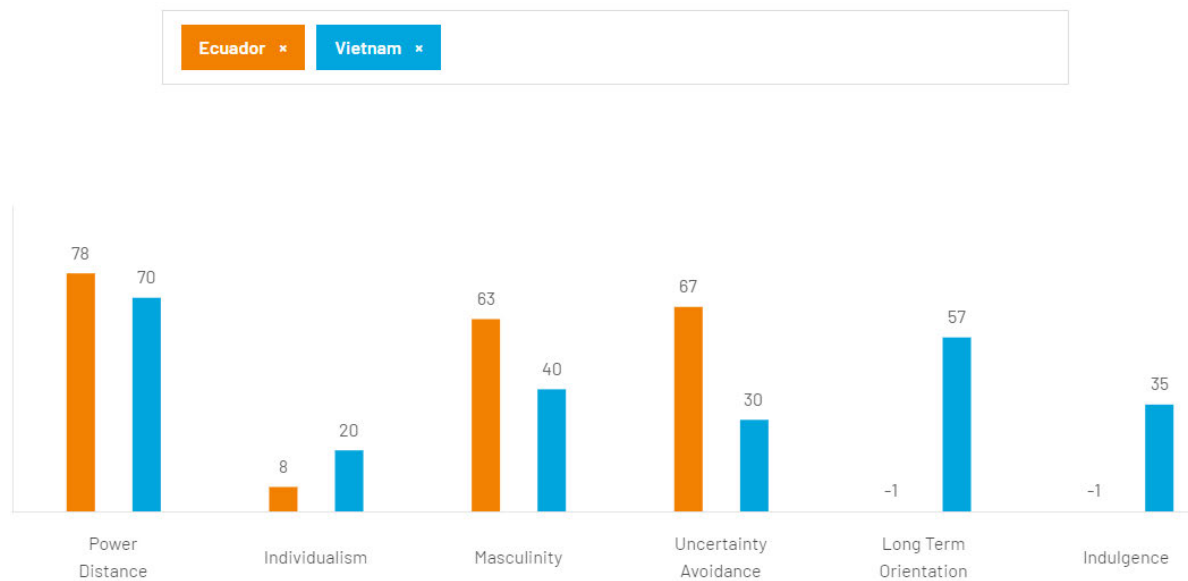


Figure 5.5 - Comparison of Hofstede's cultural dimensions between Ecuador and Vietnam

(Source: Hofstede Insights 2023)

When considering Hofstede's cultural dimensions (Figure 5.5), it is interesting to note the strong similarities between Ecuador and Vietnam on the dimensions of power distance and individualism (Hofstede's Insights 2023) which were key indicators in forming hypotheses for this study. Despite an even greater level of collectivism in Ecuadorian culture (Hofstede Insights 2023), Involvement was ranked third compared to Vietnam where was ranked first, largely owing to the strong Index of Team Orientation. However, the Dimension of Mission was scored and ranked similarly in both studies suggesting that similarities in power distance and collectivism in both cultures contribute to the Dimension as was shown in the previous analysis.

5.3.2 Other study comparisons

Dimension scores from other studies can also be compared to this study and are shown in Table 5.6 below (From Abane, Adamtey & Ayim 2022 p. 6 (Ghana); Hosseini 2014, p. 6 (Shiraz, Iran); Mohammadi 2020, p. 272 (Tehran, Iran); Salajeque & Naderifar 2014, p. 2430 (Iran); Wahyuningsih et al. 2019, p. 147 (Indonesia).)

Table 5.6 - Organisational Dimension scores according to the Denison Model in other studies

Country / Region	Mission	Adaptability	Involvement	Consistency
Ghana	2.36	2.37	2.30	1.64
Shiraz (Iran)	3.55	3.53	3.55	3.74
Tehran (Iran)	3.15	3.12	3.02	3.08
Iran	3.11	3.16	3.31	3.14
Indonesia	3.99	3.89	4.10	3.92

This analysis of all similar studies found in the literature allows for a conclusion that can show a comparison of the relationship between the Indexes and Dimensions of organisational culture in Vietnamese organisations that was found in this study to all other studies that have been reviewed in this study and is presented below in Table 5.7 (From Abane, Adamtey & Ayim 2022 p. 6 (Ghana); Abdullah et al. 2014 p. 144 (Malaysia); Denison, Haaland & Goelzer 2004, p. 10 (North America, Asia & EMEA); Hosseini 2014, p. 6 (Shiraz, Iran); Mohammadi 2020, p. 272 (Tehran, Iran); Nazir & Lone 2008, p. 52 (India); Salajeque & Naderifar 2014, p. 2430 (Iran); Tulcanaza-Prieto, Aguilar-Rodriquez & Artieda 2021, p. 9 (Ecuador); Wahyuningsih et al. 2019, p. 147 (Indonesia).)

Table 5.7 - Composite comparison of results across all similar studies

Country / Region	Mission	Adaptability	Involvement	Consistency
Vietnam	3.75	3.58	3.89	3.75
Ghana	2.36	2.37	2.30	1.64
Malaysia	3.84	3.79	3.79	3.69
North America	3.32	3.25	3.43	3.28
Asia	3.39	3.28	3.42	3.21
EMEA	3.35	3.58	3.89	3.75
Shiraz (Iran)	3.55	3.53	3.55	3.74
Tehran (Iran)	3.15	3.12	3.02	3.08
India	3.44	3.45	3.66	3.46
Iran	3.11	3.16	3.31	3.14
Ecuador	3.76	3.89	3.72	3.68
Indonesia	3.99	3.89	4.10	3.92

Building on the previous analyses presented, the results when comparing the Dimensions of organisational culture based on the DOCS scores across countries and regions shows that the Dimension of Involvement continues to score the highest in most of the studies and in only the Tehran (Iran) study was it ranked the lowest. This adds additional support to the findings by Denison, Haaland, and Goelzer (2004) that suggest differences can be attributed to underlying behaviours despite the importance of the underlying cultures. However, it is also interesting to note similarities and differences between cultures such as Vietnam, Indonesia, and Malaysia or between the three Iranian studies which further indicate that differences can be attributed to underlying behaviours rather than culture alone. It is of particular interest to note the exact similarities in the rankings of the Dimensions between this study in Vietnam and the USA study when considering the contemporary influences seen in Vietnamese behaviours in

organisations that are shown to exist despite the strength of the underlying traditional cultural influences. These results provide interesting scope for deeper analysis and subsequent research.

5.4 Research Question 2 discussion

The discussion related to research question two will mix the quantitative and qualitative findings in line with the explanatory mixed methods methodology to verify and develop a greater understanding of the relationship between organisational culture and performance in Vietnamese organisations.

2. To what extent do organisational culture and its subdimensions influence organisational performance in the Vietnamese context?

As discussed in the literature review, the DM was chosen as the tool to assess organisational culture in Vietnamese organisations owing to its well established and widespread use and validation in numerous other studies (Denison Consulting 2021; Denison, Nieminen & Kotrba 2014). As this was the first time that Denison Organisational Culture Survey has been used in Vietnam and that it required translation into Vietnamese for administration and a second qualitative stage was added the quantitative survey stage to validate the results and provide important insights into these relationships in Vietnamese organisations. The discussion will involve mixing and discussing the findings from the quantitative and qualitative stage. Firstly, the Indexes of the DM will be discussed followed by a discussion related to each of the Dimensions.

5.4.1 Indexes of the Denison Model and performance

Hypotheses were formulated as to whether the Indexes of the DM would have positive or negative relationship with performance in Vietnamese organisations based on the literature review and the definitions of the Indexes. The relationship between the Indexes of the DM and performance in Vietnamese organisations were assessed using the Denison Organizational Culture Survey (DOCS) and performance questions to gather data and PLS-SEM analysis of the data using SmartPLS 4. Following the assessment of the quantitative data, qualitative questions were developed to provide support and verification of these results and to better understand the effects of these Indexes on performance in Vietnamese organisations.

Firstly, it is possible to make a broad comparison between the quantitative findings and the qualitative findings regarding the Indexes of organisational culture and performance in Vietnamese organisations. Significant positive relationships were found between the Indexes of Goals and Objectives, Capability Development, and Customer Focus while no significant relationships were found between any of the other Indexes and performance in the quantitative analysis. Figure 5.6 below, shows the number of respondents and comments linking all the Indexes to performance in the qualitative stage.

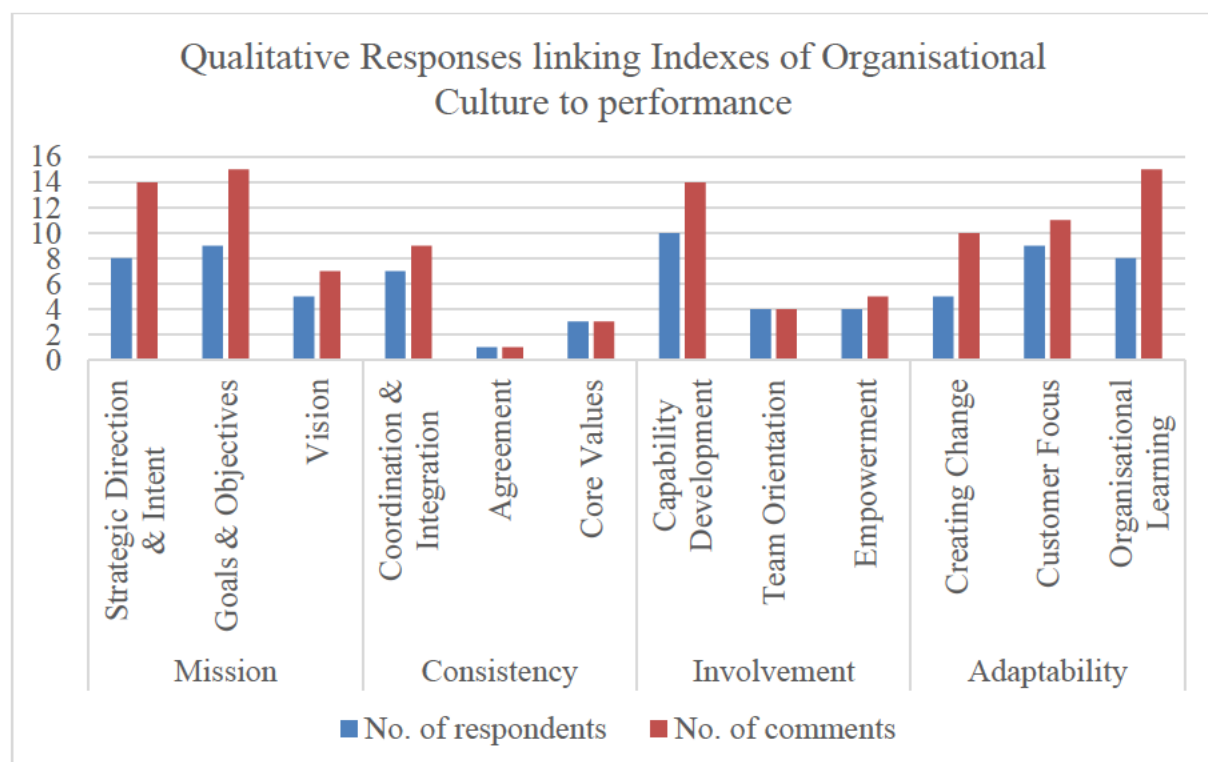


Figure 5.6 - Numbers of qualitative comments linking Indexes to performance categorised by Index

The broad comparison shows that the number of respondents and comments for Goals and Objectives and Capability development in the qualitative stage provide strong support for a positive impact on performance in line with the quantitative findings. There is also support for the Index of Customer Focus, however the support for Customer Focus is not as strong as for

other Indexes such as Strategic Direction and Intent and Organisational Learning which were not found to have a significant relationship with performance in the quantitative stage. Overall, the qualitative stage shows some support for the Indexes of Vision, Coordination and Integration, and Creating Change impacting performance while little support is shown for the Indexes of Agreement, Core Values, Team Orientation, and Empowerment.

The following sections explore the relationships between each of these Indexes and performance in Vietnamese organisations by mixing the data from the quantitative findings and the qualitative findings in line with the explanatory sequential mixed methods design of this research (Creswell 2014). The findings from each stage of research are discussed for each Index with underpinnings from the literature review and definitions for each respective Index.

5.4.1.1 Strategic Direction and Intent and performance

The literature review indicated that both traditional and contemporary Vietnamese values are aligned with the Index of Strategic Direction and Intent. The literature showed that historically Vietnam has continuously overcome adversity by coming together to commit to common interests by working together (Dutton, Werner & Whitmore 2012; Murray 2008). In addition, this aligns with the cultural dimensions of Vietnam which emphasise collectivism and hierarchy while also being supported by contemporary literature (Hofstede Insights 2022; Nguyen 2023). Therefore, it was hypothesised that the Index of Strategic Direction and Intent would have a positive impact on performance in Vietnamese organisations.

The Index of Strategic Direction and Intent was found not to have a significant positive impact on performance in Vietnamese organisations in the quantitative phase of this study and the hypothesis was not supported. The β of the relationship between Strategic Direction and Intent and performance was 0.027 with a p -value of 0.414 which does not indicate a significant positive relationship.

Despite the hypothesis not being supported, the qualitative stage indicated numerous links to the importance of the Index of Strategic Direction and Intent having an impact on performance in Vietnamese organisations. This was especially evident in cases where links were found between Indexes that were found to have a significant positive impact on performance in Vietnamese organisations. To illustrate, as shown in Table 4.33, of the assessment of comments

related to organisational culture Indexes associated with performance, the Index had the fourth highest number of comments from the fourth highest number of respondents ranked after the three Indexes that were found to have a significant positive relationship. Fourteen comments from eight respondents indicated an association in their organisations. This is compared to the Indexes which had a significant positive relationship with performance of Capability Development with fourteen comments from ten respondents; Customer Focus with eleven comments from nine respondents; and Goals and Objectives with fifteen comments from nine respondents.

Further evidence of a positive contribution of Strategic Direction and Intent in Vietnamese organisations was also found when categorising comments specifically related to the sub-questions exploring the relationships with the Indexes with significant findings. For example, one comment indicated how Strategic Direction and Intent supported Capability Development while four comments from three respondents indicated how it supported Goals and Objectives. Evidence from the comments also shows how Strategic Direction and Intent is important in supporting the positive relationship that was found with the Dimension of Mission. Five comments from five respondents indicated how Strategic Direction and Intent has an impact on achieving the Mission in their organisations.

Therefore, while a significant positive impact between Strategic Direction and Intent was not found in the quantitative stage, the qualitative findings show that the Index plays an important role in facilitating performance in Vietnamese organisations. This is especially clear in the role that it plays in supporting Indexes that were found to have a significant positive relationship with performance while clear links were also shown as to how Strategic Direction and Intent is also supported by other Indexes. Strategic Direction and Intent plays an important role in the performance of Vietnamese organisations.

5.4.1.2 Goals and Objectives and performance

The literature review indicated that there was a close alignment between the Index of Goals and Objectives in both traditional and contemporary culture that was evidence by the historical achievements of Vietnamese people in the face of adversity driven by a strong sense of pride (Murray 2008) that is coupled with cultural dimension collectivism and family, long term focus, and power distance relationships and community hierarchies (Hofstede Insights 2022;

Murray 2008). This was further supported by the alignment with external focus and stability of Goals and Objectives as part of the Dimension of Mission and definition of the Index which indicates clear goals that provide everyone with a clear direction in their work (Denison & Neale 1999). Therefore, it was hypothesised that the Index of Goals and Objectives would have a positive impact on performance in Vietnamese organisations.

The Index of Goals and Objectives was found to have a significant positive impact on performance in Vietnamese organisations in the quantitative stage of this study and the hypothesis was supported. The β of the relationship between Goals and Objectives and performance was 0.338 with a p -value of 0.003 which indicates a significant positive relationship. This was supported by the findings in the qualitative stage which used a general question related to organisational culture and performance as well as a specific question related to the Index of Goals and Objectives to further explore and confirm this relationship. The main and sub-questions resulted in nine respondents providing a total of fifteen comments while the sub question resulted in seven respondents providing a total of twelve comments that could be categorised as belonging to the relationship between Goals and Objectives and performance. These comments supported a positive relationship between Goals and Objectives and performance in Vietnamese organisations. The comments had a common theme that related the importance of all employees understanding the Goals and Objectives that they need to achieve to positively impact the performance of the organisation.

Strong links to the other Indexes of Mission were found in the qualitative stage. Three comments were categorised linking Vision while four comments were categorised linking Strategic Direction and Intent to Goals and Objectives and performance. In addition, links to the Index of Coordination and Integration with four comments and to Team Orientation with two comments with Goals and Objectives and performance gave insight into how these Indexes play an important role in supporting the relationship between Goals and Objectives and performance.

The positive impact of the Index of Goals and Objectives in Vietnamese organisations is well supported by the literature review, quantitative analysis, and qualitative analysis in this study. These findings also show important connections to the Mission of the organisation and strong

evidence of support from the other Indexes in the Dimension of Mission while being enabled with support from other Indexes.

5.4.1.3 Vision and performance

The literature review indicated that there was close alignment between the Index of Vision in both traditional and contemporary Vietnamese culture owing to its alignment with external focus and stability. This was further supported when considering the definition of the Index of Vision which closely aligns with the collectivist nature of traditional Vietnamese culture which embodies shared future values led by guidance and direction of leaders (Denison & Neale 1999; Hofstede Insights 2022; Murray 2008). Therefore, it was hypothesised that the Index of Vision would have a positive impact on performance in Vietnamese organisations.

The hypothesis was not supported, and the Index of Vision was not found to have any significant relationship with performance in Vietnamese organisations in quantitative portion of this study. The qualitative results also supported this with only five respondents providing a total of seven comments that were categorised as contributing to the performance of their respective organisations.

The Index of Vision belongs to the Dimension of Mission which was found to have a positive impact on performance in both the quantitative and qualitative studies. In addition, the Index of Goals and Objectives, which also belongs to the Dimension of Mission, was also found to have a positive impact on performance in both studies. This suggests that Vision is important but that other drivers of that Vision are more important to contributing positively to performance in Vietnamese organisations. This was reflected in comments that were categorised as being related to Mission in the qualitative stage that indicated stronger connections to Strategic Direction and Intent and Goals and Objectives. In addition, it was shown in the qualitative stage that other Indexes also contributed to the Dimension of Mission such as Coordination and Integration and Empowerment.

Therefore, it can be concluded that while Vision has an importance in contributing to performance in Vietnamese organisations, it is not as important as ensuring that the Goals and Objectives are clearly communicated to employees so that they share a clear direction and understanding of how they can work together to achieve the Mission of the organisation.

5.4.1.4 Coordination and Integration and performance

The literature review demonstrated links between Coordination and Integration related to both traditional and contemporary Vietnamese cultural values. It was noted that the collective nature of Vietnamese culture and the ability to come together to overcome adversity would positively impact performance while power distance relationships could impede the flow of information in organisations and have a negative effect (Hofstede Insights 2022; Murray 2008). However, it was hypothesized that the Index of Coordination and Integration would overall have a positive impact on performance in Vietnamese organisations as it was thought that even if power distance relationships dictated a more top-down flow of communication, this would still have a positive impact on performance.

The hypothesis was not supported, and the Index of Coordination and Integration was not found to have a significant positive relationship with performance in Vietnamese organisations in the quantitative phase of this study. The β of the relationship between Coordination and Integration and performance was 0.049 with a p -value of 0.318 which does not indicate a significant positive relationship.

However, more in line with the findings from the literature review and the hypothesis, the qualitative stage found numerous links between Coordination and Integration impacting performance in Vietnamese organisations. Similarly, to the qualitative findings for the Index of Strategic Direction and Intent, these links were especially between Indexes that were found to have a significant positive impact on performance in Vietnamese organisations. As shown in Table 4.33, the assessment of the comments related to organisational culture Indexes associated with performance, the Index had the fifth highest number of comments from the fifth highest number of respondents ranking only behind the three significant Indexes and Strategic Direction and Intent. A total of nine comments were categorised as belonging to the Index of Coordination and Integration from a total of seven respondents.

The sub questions that explored the Indexes that were found to have a significant positive relationship with performance in the qualitative stage provided evidence of how the Index of Coordination and Integration provide support for these Indexes and impact performance in Vietnamese organisations. For example, four comments from four respondents indicated the importance of Coordination and Integration in achieving Goals and Objectives while two

comments from one respondent indicated the importance of Coordination and Integration in supporting Customer Focus. Comments also showed how the Index of Coordination and Integration also contributes to the Dimension of Mission which was also found to have a significant positive relationship with performance. Three comments from three respondents demonstrated how Coordination and Integration was important in supporting the achievement of Mission in Vietnamese organisations.

While not found to have a significant positive impact on performance in the quantitative analysis, the qualitative analysis indicates that the Index of Coordination and Integration plays an important role in supporting and enabling the functions of Indexes and Dimensions of organisational culture that do have a significant positive impact on performance in Vietnamese organisations.

5.4.1.5 Agreement and performance

The literature review found that the Index of Agreement could be impacted in different ways than in Western organisations owing to Vietnamese cultural characteristics related to saving 'face', power distance relationships, and collectivism (Hofstede Insights 2022; Nguyen 2015). This was supported by Tafvelin, von Thiele Schwarz and Hasson (2017) who found that performance could be negatively impacted when perceptions of organisational issues between leaders and teams is present. However, overall, it was hypothesised that the Index of Agreement would have a positive impact on performance in Vietnamese organisations owing to the traditional power distance relationships in Vietnamese culture (Hofstede Insights 2022) while more contemporary cultural influences could also be expected to contribute to a positive impact.

The hypothesis was not supported, and the Index of Agreement was not found to have any significant impact on performance in the quantitative stage of this research. The β of the relationship between Agreement and performance was -0.014 with a p -value of 0.451 which does not indicate a significant positive relationship.

This finding from the quantitative stage was supported by the findings in the qualitative stage. As shown in Table 4.33, the categorisation of comments related to the organisational culture Indexes associated with performance, the Index of Agreement was ranked the lowest of all

Indexes and only one comment from one respondent was categorised as supporting performance in Vietnamese organisations. Comments that were related directly to the Indexes and the Dimension that were found to have a significant impact on performance in Vietnamese organisations did not result in the categorisation of any comments that Agreement supported any of these in impacting performance in Vietnamese organisations.

5.4.1.6 Core Values and performance

The literature review found that the Index of Core Values had been found to be compromised by individual values in some contexts and that this may lead to an ‘Asian Paradox’ where traditional collectivist core values are compromised by the influence of more contemporary individualistic values (Ralston, Nguyen & Napier 1999). This was supported by finding from Mai and Nguyen (2015) that found that contrasting ethical values that often result in higher levels of nepotism and corruption could also create a misalignment in Core Values. Therefore, it was hypothesised that conflicting values in organisations would contribute to Core Values having a negative impact on performance in Vietnamese organisations.

The hypothesis was not supported, and the Index of Core Values was not found to have any significant impact on performance in the quantitative stage of this research. The β of the relationship between Core Values and performance was 0.094 with a p -value of 0.222 which does not indicate a significant negative relationship.

While this finding did not support the hypothesis, the findings from the qualitative stage provided little support for a positive impact of Core Values on performance in Vietnamese organisations. As shown in Table 4.33, the comments related to organisational culture and performance in Vietnamese organisations ranked the number of comments second last in total with only three respondents providing a total of three comments that were categorised as impacting organisational performance. However, two comments from two respondents indicated a relationship between Core Values and the Index of Customer Focus which was found to have significant positive relationship with performance.

It is of interest that these comments were related to the Index of Core Values which demonstrated a transition from more traditional Vietnamese cultural values to more contemporary values that have been driven by influences from other cultures. This aligns with

the discussion in the literature review that indicated that this value is somewhat conflicted in Vietnamese organisations as a result of traditional and contemporary cultural influences.

5.4.1.7 Capability Development and performance

The literature review found that the Index of Capability Development may be influenced by low uncertainty avoidance in Vietnamese culture (Hofstede Insights 2022) which in turn may contribute to a more superficial level of learning that does not necessarily directly contribute to performance (Liu & Littlewood 1997; Vo 2014). Furthermore, the discussion noted that the high level of power distance in Vietnamese culture (Hofstede Insights 2022) may compound the opportunity for Capability Development to positively impact performance in Vietnamese organisations. However, it was also noted that the long-term orientation of Vietnamese culture (Hofstede Insights 2022) would align with Goal and Objectives. Therefore, it was hypothesized that Capability Development would have a positive impact on performance in Vietnamese organisations.

The hypothesis was supported, and the Index of Capability Development was found to have a significant positive impact on performance in the quantitative stage of this research. The β of the relationship between Capability Development and performance was 0.202 with a p -value of 0.028 which indicates a significant positive relationship.

This finding was supported in the qualitative analysis and as shown in Table 4.33, the Index of Capability Development had the greatest number of respondents with the second the greatest number of comments categorised as providing a link between to organisational performance in Vietnamese organisations. All ten respondents provided a total of fourteen comments that were categorised as providing evidence of a positive relationship.

Being an Index that was found to have a significant positive relationship in the quantitative stage, a specific sub question was included to further explore and confirm this relationship. The specific question related to Capability Development elicited responses from all ten respondents with a total of nineteen comments categorised as providing insight into this relationship. These comments provided confirmation of this relationship with respect to the definition of the Index with a total of nine comments from seven of the respondents categorised as supporting the definition. In addition, the analysis showed how this relationship was supported and driven by

other Indexes of organisational culture. The Indexes of Team Orientation, Organisational Learning, and Strategic Direction and Intent each had one comment that was categorised as contributing to Capability Development. The Index of Goals and Objectives and Creating Change each had two comments that were categorised as contributing to Capability Development while in addition, the Dimension of Mission was also linked with two comments.

Overall, the discussions in the literature review and the hypothesis that was developed as a result was well supported by both the quantitative and qualitative findings. Furthermore, evidence of external drivers related to the Mission, Goals and Objectives, Strategic Direction and Intent, and Creating Change were found while Team Orientation was identified as an internal focus that contributed to the achievement of performance of this Index.

5.4.1.8 Team Orientation and performance

The literature review found that the Index of Team Orientation would be expected to align closely with the Vietnamese value of collectivism while also aligning with the power distance values (Hofstede Insights 2022). This was further supported by literature that supported clan culture in Vietnamese organisations (Nguyen et al. 2018) and linked organisational commitment to teamwork (Moslehpour et al. 2016). In addition, the literature supported the family and community values were linked to goals and overcoming adversity (Murray 2008). Therefore, it was hypothesized that Team Orientation would have a positive impact on performance in Vietnamese organisations.

The hypothesis was not supported, and the Index of Team Orientation was not found to have a significant positive relationship with performance in Vietnamese organisations in this study. The β of the relationship between Team Orientation and performance was -0.032 with a p -value of 0.394 which does not indicate significant positive relationship.

While this finding is supported by the qualitative analysis, some evidence was provided of Team Orientation having a positive impact on performance in Vietnamese organisations. The Index of Team Orientation had the third least number of comments categorised as being linked to performance and had the third lowest number of respondents who provided comments. A total of four comments from four respondents had comments categorised as indicating how Team Orientation impacted on performance in their organisations. In addition, the analysis of

the Index of Goals and Objectives which was found to have a significant positive impact on performance categorised two comments from one respondent that was linked Team Orientation.

With an internal focus and characteristic of flexibility, the findings offer some insight into how Team Orientation is related to enabling support for achieving the Goals and Objective which have an external focus. The mixed results of this Index combined with comments related to the changing traditional and contemporary values in Vietnam indicate that the impact of Team Orientation on performance has a relationship with the alignment more towards traditional than contemporary culture in the organisations.

5.4.1.9 Empowerment and performance

The literature review found that the Index of Empowerment is at odds with the power distance relationships in traditional Vietnamese culture (Hofstede Insights 2022). In addition, the literature showed that these traditional power distance dynamics are still apparent in contemporary Vietnamese culture (Dang 2017; Murray 2008; Phan 2008). Furthermore, it was anticipated that more senior leaders would be more aligned with the traditional cultural values and hierarchical management. Fey and Denison (2003) and Denison, Haaland, and Goelzer (2004) also noted that top-down management hierarchies would have a negative impact on Empowerment in organisations. Therefore, it was hypothesised that the Index of Empowerment would have negative impact on performance in Vietnamese organisations.

The hypothesis was not supported, and the Index of Empowerment was not found to have a significant negative impact on performance in the quantitative stage of this research. The β of the relationship between Empowerment and performance was 0.052 with a p -value of 0.333 which indicates no significant negative relationship.

The qualitative results showed some support for the Index of Empowerment impacting performance in Vietnamese organisations with four respondents providing a total of five comments being categorised as linking with performance. This was the fourth fewest number of comments that were categorised for an Index based on the comments linking organisational culture to performance in Vietnamese organisations. This evidence of some empowerment linking organisational performance had some additional support with one comment directly

linking Empowerment to the Dimension of Mission that was found to have a significant positive relationship with performance.

While the hypothesis was not supported, the findings from the literature that indicated the adherence to more traditional power distance relationships with some changes evident in more contemporary organisational environments. These findings suggest that there is a more focus in contemporary culture in lowering the power distance relationships and empowering employees across the organisation although this is not having an impact on performance in Vietnamese organisations.

5.4.1.10 Creating Change and performance

The literature review found that the Index of Creating Change aligned well with the Vietnamese cultural value of low uncertainty avoidance combined with an external focus and ability to be flexible that is linked to the long-term orientation and the achievement of goals in Vietnamese culture would allow Vietnamese organisations to create change in reaction to requirements of the business (Hofstede Insights 2022; Murray 2008). However, it was noted that the collectivist and power distance relationships (Hofstede Insights 2022) could create barriers to creating change from the bottom up in organisations more aligned with traditional values and that creating change would be more effective in more contemporary organisations. Therefore, it was hypothesised that the Index of Creating Change would have a positive impact on performance in Vietnamese organisations.

The hypothesis was not supported, and the Index of Creating Change was not found to have a significant negative impact on performance in the quantitative stage of this research. The β of the relationship between Creating Change and performance was -0.073 with a p -value of 0.245 which indicates no significant negative relationship.

The qualitative findings support the quantitative findings and reflect the discussions of the literature review. A total of ten comments from five respondents were categorised as relating the Index of Creating Change to performance in the main question and sub questions related to the link between organisational culture and performance. The discussions in the literature review noted that the relationship between Creating Change and performance could vary between more contemporary and traditional organisations which is reflected in the comments

in the interviews. Comments that were categorised as linking Creating Change to performance came from either respondents who work for multinational organisations in Vietnam and whose management practices are driven by international leadership, or from small Vietnamese organisations with young leaderships whose values are more influenced by contemporary and Western values.

This was further supported when looking at the sub questions that were specifically related to the Indexes that were found to have a significant positive relationship with performance. Two respondents provided comments that linked Capability Development to Creating Change and three respondents provided comments that linked Customer Focus to Creating Change. Again, all of these comments were from organisations with either young or international leadership. The analysis of the Index of Creating Change shows how the changing culture of Vietnam and contemporary cultural drivers are changing organisational culture and how this Index is providing important links to performance in more contemporary Vietnamese organisations.

5.4.1.11 Customer Focus and performance

The literature review found that while an external focus on customer needs could be at odds with the hierarchical nature of Vietnamese society, the strong Vietnamese traditional values of external focus could be complimentary. It was shown that while the developmental stage of the Vietnamese economy is heavily focus on manufacturing (Salt 2017) that success has largely been driven by an emphasis on customer satisfaction (Nguyen 2019) and that this is now also seen to be carrying over into other industries as they develop (Nguyen et al. 2020b; Nguyen et al. 2023b; Pham & Hoang 2021). Fey and Denison (2003) note that while a more contemporary management style may exhibit more focus on the customers than more traditional organisations, this aligns with the current state of Vietnamese organisations overall and that the Index of Customer Focus would have a positive impact on performance in Vietnamese organisations.

The hypothesis was supported, and the Index of Customer Focus was found to have a significant positive impact on performance in Vietnamese organisations in the quantitative phase of this study. The β of the relationship between Customer Focus and performance was 0.191 with a p -value of 0.019 which indicates a significant positive relationship.

The qualitative results showed strong support for this finding with nine respondents providing a total of eleven comments that were categorised as providing support linking Customer Focus to performance in Vietnamese organisations. These comments placed Customer Focus equally second in the number of respondents who provided comments while placing it fourth in the number of comments behind Goals and Objectives, Capability Development, and Strategic Direction and Intent. It is interesting to note that while Goals and Objectives and Capability Development were found to have a significant positive relationship with performance, Strategic Direction and Intent was not. The impact of Customer Focus on performance is further supported by comments that were directly related to the specific sub question that further explored this relationship. All respondents provided a total of fifteen responses that provided support for the link between Customer Focus and performance in Vietnamese organisations. Five comments linked the Index of Customer Focus to the Index of Goals and Objectives while two comments were linked to the Dimension of Mission, demonstrating support for impacting performance. In addition, comments were categorised as linking to the Index of Coordination and Integration which was found to support other Indexes that were found to have a significant positive impact on performance.

The hypothesis was supported, and the results align with discussions in the literature review and hypothesis development that more contemporary value shifts in Vietnamese organisations would see a greater alignment with Customer Focus and that the Vietnamese cultural trait of adaptability would help to enable this. This is supported by the qualitative findings that also found that the Index of Customer Focus had four comments linked to the Index of Creating Change and four comments linked to the Index of Organisational Learning.

These findings suggest that Vietnamese organisations are adapting to external market drivers and organisations are changing to more contemporary values that are supported by traditional cultural enablers that enable a collectivist approach that is made effective through clear leadership and direction that associates Customer Focus with the Goals and Objectives and Mission of the organisation.

5.4.1.12 Organisational Learning and performance

The literature review found that traditional values related to long term orientation and uncertainty avoidance (Hofstede Insights 2022) would align with the external orientation of

Organisational Learning. However, it was expected that this Index would also be conflicted by traditional values related to power distance and collectivism that would emphasise a focus on family and harmonious work environments (Hofstede Insights 2022; Murray 2008). It was expected that this Index could be mixed owing to the clash of traditional and contemporary values and that difference may be seen between more contemporary organisations with broader cultural influences and more traditional organisations with more traditional management styles. Overall, it was hypothesised that the Index of Organisational Learning would have a positive impact on performance in Vietnamese organisations.

The hypothesis was not supported, and the Index of Organisational Learning was not found to have a significant positive impact on performance in the quantitative stage of this research. The β of the relationship between Organisational Learning and performance was -0.045 with a p -value of 0.343 which indicates no significant positive relationship.

The qualitative results showed support for the importance of Organisational Learning to performance in Vietnamese organisations in line with the hypothesis prediction. The Index of Organisational Learning had the equal greatest number of comments categorised along with Goals and Objectives with a total of fifteen comments from eight of the respondents. This was further supported when looking at the responses related to the sub questions linking the significant Indexes to performance. One comment was categorised for Organisational Learning supporting Capability Development while four comments from four respondents were categorised as supporting Customer Focus.

These results give insights into how Organisational Learning is impacting performance in Vietnamese organisations and aligns with the discussions in the literature review. Organisational Learning is being supported by traditional values related to long term orientation and low uncertainty avoidance which align well with the external focus of this Index. The links with Customer Focus indicate that this is a key driver for Organisational Learning and that the internal focus on Capability Development is helping to link and facilitate Organisational Learning and Customer Focus. This Index aligns well with traditional values and shows that it is enhanced in organisations that embrace contemporary values.

5.4.2 Dimensions of the Denison Model and performance

Hypotheses were developed that predicted whether each Dimension of the DM would have either a positive or negative impact on performance in Vietnamese organisations based on the literature review and the definitions of the Indexes. For the quantitative analysis, the relationship between the Dimensions of the DM and performance in Vietnamese organisations was assessed using a higher order construct type II reflective formative model. The results showed a significant positive relationship between the Indexes of Mission while no statistically significant relationship was shown between the other Dimensions and performance.

Table 5.8 - Quantitative relationships between Dimensions and performance

Relationship	β	<i>p</i> -value
Mission > Performance	0.336*	0.010
Consistency > Performance	0.132	0.138
Involvement > Performance	0.142	0.127
Adaptability > Performance	0.084	0.216

Note: * $p < 0.05$

The qualitative analysis grouped the comments that were categorised according to each of the Indexes into each of their respective Dimensions for interview question three and the sub questions that sought to explore the relationships between organisational culture and performance. These results showed the greatest support for the Dimensions of Mission and Adaptability impacting performance while the Dimension of Involvement showed less support and the Consistency showed the least support.

Table 5.9 - Qualitative comments categorised according to Dimensions of the Denison Model

	No. of respondents	No. of comments
Mission	9	36
Consistency	8	13
Involvement	10	23
Adaptability	10	36

The results for the tests of each Dimension are discussed below with reference to the literature review and hypotheses that were developed and insights that added to these findings from the qualitative interviews.

5.4.2.1 Mission and performance

The literature review showed that the Dimension of Mission shared commonalities between traditional Vietnamese culture in being externally focused on achievements that overcome the odds (Murray 2008) and contemporary culture which puts an emphasis on achievement. This was further supported by research by Nguyen et al. (2018) who found that while workers are more clan oriented, managers are more market oriented. This dynamic would allow for the traditional cultural traits related to power distance and collectivism (Hofstede Insights 2022) to support the achievement of objectives with a clear sense of achievement as defined by the Dimension of Mission (Denison & Neale 1999, p. 1-14). Therefore, it was hypothesised that the Dimension of Mission would have a positive impact on performance in Vietnamese organisations and that it would be the Dimension with the strongest impact on performance.

The hypothesis was supported, and the Dimension of Mission was found to have a significant positive impact on performance in Vietnamese organisations in the quantitative analysis. The β of the relationship between Mission and performance was 0.336 with a p -value of 0.010 which indicates a significant positive relationship.

This relationship was further supported with data collected in the qualitative interviews. Nine respondents provided a total of fifteen comments that provided support for the quantitative finding. Respondents gave examples of the importance of Mission in impacting performance in their organisation that illustrated the emphasis that management make in ensuring that it is clearly communicated and understood by employees. The examples provided showed evidence of the relationships of all three Indexes that form the Dimension of Mission as contributing to this relationship. These comments explicitly mentioned the importance of employees having a clear view of the Goals and Objectives as well as understanding how to achieve those goals via understanding the Strategic Direction and Intent via a Vision that is clearly communicated from the top down within the organisation. The Dimension of Mission was the only Dimension where a significant positive impact on performance was found, and it also contained the Index of Goals and Objectives which was also found to have a significant positive impact on performance.

5.4.2.2 Consistency and performance

The literature review found that the Dimension of Consistency was aligned with stability and Vietnamese cultural characteristics related to hierarchy, collectivism, long term orientation, and the traditional bureaucracy seen in Vietnamese organisations (Murray 2008; Hofstede Insights 2022). This was further supported by findings from Nguyen et al. (2018) who found that characteristics of organisational culture that aligned with stability and an internal focus in Vietnamese organisations. This research also further supported the relationship between workers as clan oriented and managers as being market oriented (Nguyen et al. 2018). Therefore, it was hypothesised that the Dimension of Consistency would have a positive impact on performance in Vietnamese organisations.

The hypothesis was not supported, and the Dimension of Consistency was not found to have a significant positive impact on performance in Vietnamese organisations. The β of the relationship between Consistency and performance was 0.132 with a p -value of 0.138 which indicates no significant positive relationship.

The qualitative stage of this study in seeking to confirm and better understand this relationship was able to offer additional insights. Eight respondents provided a total of ten comments that were classified as belonging to Indexes that comprise the Dimension of Consistency. This was

the fewest number of respondents and comments that was associated with any of the Dimensions. Overwhelmingly, these comments were associated with the Index of Coordination and Integration with nine comments while only three comments were associated with Core Values and only one with Agreement. These findings align well with the significant positive relationship with the Dimension of Mission and the Index of Goals and Objectives while also closely aligned with the repeated theme of Team Orientation that was prominent throughout the qualitative interviews.

The qualitative findings support the quantitative findings and offers insights into how the relationship within Vietnamese organisations between the Dimension of Consistency and performance could be improved. While employees are working together in a coordinated way towards achieving the goals and mission of the organisation, improved levels of agreement and a greater alignment in working with the core values of the organisation may lead to improvements in the relationship with performance.

5.4.2.3 Involvement and performance

The literature review showed that Involvement aligned well with traditional cultural drivers related to interpersonal relationships and collectivism with its internal focus and alignment with stability (Edwards & Pham 2013; Hofstede Insights 2022). Clan culture has been shown to have a strong impact on organisational culture in previous studies in Vietnam (Nguyen et al. 2018) which would be expected to align closely with the Team Orientation Index belonging to this Dimension. However, it was also noted in the hypothesis development that this may be impacted by the 'Asian Paradox' (Ralston, Nguyen & Napier 1999), although (Nguyen et al. 2018) found that clan-oriented employees are still likely to follow market-oriented managers which would align with the Vietnamese cultural values related to team, family, and hierarchies (Hofstede Insights 2022; Murray 2008). Therefore, it was hypothesised that the Dimension of Involvement would have a positive impact on performance in Vietnamese organisations.

The hypothesis was not supported, and the Dimension of Involvement was not found to have a significant positive impact on performance in Vietnamese organisations. The β of the relationship between Involvement and performance was 0.142 with a p -value of 0.127 which indicates no significant positive relationship.

The qualitative stage of this study provided some support for the quantitative findings with a lower number of comments categorised as reflecting the impact of Involvement on performance compared to the Dimensions of Mission and Adaptability. The mixing of these results aligns with the discussions in the literature review and the hypothesis development that, despite hypothesising a positive impact, noted the different Indexes within this Dimension would have different impacts on performance and hypotheses of the Indexes predicted that Team Orientation and Capability would have a positive impact on performance while Empowerment was hypothesised to have a negative impact on performance. In addition, these discussions also noted that these results could be mixed depending on whether individual organisations were more traditional or contemporary in nature.

5.4.2.4 Adaptability and performance

The literature review found that the Dimension of Adaptability was aligned with flexibility which was opposing traditional Vietnamese cultural values related to collectivism and the conservative nature of the culture while the external focus complemented the historical achievements of Vietnamese people overcoming adversity and the long-term pragmatic orientation of Vietnamese culture (Hofstede Insights 2022; Murray 2008). It was also noted that the Fey and Denison (2003) study in Russia finding a significant relationship between Adaptability and performance could indicate a similar finding in this study owing to similar stages and history of social and economic development at the times of the respective studies. This was further supported owing to the low level of uncertainty avoidance in Vietnamese culture although it was also noted that a clash of more contemporary values could cause a conflict of these values however, it was expected that the very nature of this characteristic it could be expected that these issues could be overcome effectively.

The hypothesis was not supported, and the Dimension of Adaptability was not found to have a significant positive impact on performance in Vietnamese organisations. The β of the relationship between Adaptability and performance was 0.084 with a p -value of 0.216 which indicates no significant positive relationship.

The qualitative stage of research did not support the findings from the quantitative stage and indicated that the Dimension of Adaptability has an important impact on performance in Vietnamese organisations. When mixing these findings, these results align with the discussions

from the literature review and the hypothesis predictions which although ultimately predicting a positive impact, noted the mixed expectations of this Dimension.

The hypotheses development from the literature suggested that the Adaptability would have a positive impact on performance owing to the low level of uncertainty avoidance and high degree of long-term orientation of Vietnamese culture (Hofstede Insights 2022). It was also noted that Vietnam may share similar findings to the Russia study owing to the similar uncertain environment in moving from a closed to an open economy (Fey & Denison 2003). However, at the same time it was noted that Adaptability also has characteristics that oppose traditional collectivist and conservative Vietnamese cultural values which could impede Adaptability (Hofstede Insights 2022; Murray 2008). It was also noted that the individual Indexes that make up the Adaptability Dimension would have mixed effects on the collective of the Dimension owing to each of their characteristics. These differences were also expected to impact organisations in Vietnam differently depending on whether they were more aligned with traditional or conservative values (Phan 2008).

5.5 Research sub-question 2a discussion

Research sub-question 2a is designed to add to the existing body of literature that has studied the relationship between organisational culture and performance in organisations using the DM in distinct cultural contexts.

2a. How do the effects of organisational culture on organisational performance in Vietnam compare to those effects in other cultures?

Adding this study to the existing literature allows for a comparison and discussion of the results in distinct cultural contexts. This question is primarily answered with the findings from the quantitative portion of this research while interview questions number one, two, and three from the qualitative section were designed to build on the understanding of the quantitative results and contribute to answering this question with even more insight.

The quantitative research shows that certain subdimensions of organisational culture in Vietnamese organisations have a positive and significant impact on organisational performance while other subdimension were not found to have a positive or negative impact. The

Dimensions of organisational culture, whether assessed according to the DM Dimensions, Indexes, or interpreted through other organisational culture models, can be seen to be associated with organisational outcomes in Vietnamese organisations.

The results of the hypotheses testing and the relevant qualitative interview questions with relation to the literature review will be systematically discussed beginning with a broader discussion of the Dimensions of the DM and followed with a more detailed discussion of each Index of the DM with findings from the interview integrated into the discussion to add additional insight to these findings. There is overlap between other studies while at the same time a unique picture of organisational culture has been presented for Vietnamese organisations with unique relationships with organisational performance.

Studies that can be compared to this study include two major studies that explore this relationship in the USA and Russia (Fey & Denison 2003), and Asia and the rest of the world (Denison, Haaland & Goelzer 2004). In addition to these major studies, two minor studies that were discussed in the literature review that assess the relationship between Denison cultural Dimensions and performance that include studies in India (Nazir & Lone 2008) and Columbia (Avella & Ernesto 2010). Other studies that have used the DM that were discussed in the literature review differ in that they were seeking to assess the impact on variables other than performance such as knowledge-based management (Ahmady, Nikooravesh & Mehpour 2016), or worker productivity (Abane, Adamtey & Ayim 2022; Mohammadi 2020) and are not suitable to be added to the comparisons of this study.

While the DM has become the most widely used model for organisational cultural assessment in literature, the numerous studies vary in methodology and quality. In answering this research sub-question, it is important to consider the methodology and quality of other studies in making comparisons and drawing conclusions. This was also considered when designing this study and why the studies by Denison, Haaland, and Goelzer (2004) and by Fey and Denison (2003) were used as the primary guide for the collection of data and questions used in this study in Vietnam closely aligned. The study ‘Organizational Culture and Effectiveness: Can American Theory Be Applied in Russia?’ by Fey and Denison (2003) was published in *Organization Science* and the study ‘Corporate Culture and Effectiveness: Is Asia Different from the Rest of the World?’ by Denison, Haaland, and Goelzer (2004) was published in *Organizational Dynamics*; both Q1

ranked journals in their year of publication (Scimago Journal & Country Rank 2023). As such the primary comparisons and discussions will be related to these two major studies. However, comparisons and discussions of other secondary studies will also be made to try to provide additional insights that can be valuable in answering this research sub-question. This will be done by firstly using the two major studies for a primary studies comparison, followed by another section where secondary studies will be compared. Finally, other studies that link organisational culture with aspects other than performance or just seek to generally build a picture of organisational culture in a particular context will be discussed in relation to this study in Vietnam.

5.5.1 Primary studies comparisons

When considering the relationship between this study and those conducted in other cultures, it is interesting to look at whether factors such as broader economic and political influences provide greater alignment or whether alignment is seen in cultural aspects which align between the different settings.

One of the first major studies endeavouring to understand whether the application of the theory behind the DM could be applied in other cultures was conducted in Russia and compared to results from the USA (Fey & Denison 2003). This study had substantial similarities with this study conducted in Vietnam owing to the stage of economic development as well as the political changes that have impacted this economic development in moving from a centrally planned economy to a freer market economy (Fey & Denison 2003; Murray 2008). At the time the Russian study was conducted, demographic similarities also existed such as both having a well-educated work force and a low cost of labour (Fey & Denison 2003). The results of the relationships between Dimensions of organisational culture and performance in Russia, the USA, and Vietnam (from this study) are shown in Table 5.10 (Adapted from Fey & Denison 2003, p. 694)

Table 5.10 - Beta Coefficients (β) between Dimensions of the Denison Model and Performance in Russia, USA, and Vietnam

Dimension	Russia	USA	Vietnam
Mission	0.09	0.38**	0.336*
Adaptability	0.30****	-0.06	0.084
Involvement	0.27***	0.21	0.142
Consistency	0.13	0.10	0.132

Note: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.005$ **** $p < 0.001$

In the Russian context, Adaptability was most useful in understanding organisational effectiveness followed by Involvement while in the Vietnamese study, Mission was the only Dimension to show a significant positive impact. It was hypothesised that Vietnam would show positive impacts in the relationships between Adaptability and Involvement owing to the similarities to Russia in the political and economic environment as well as the similarity in power distance relationship and individualism however no significant relationship was found. Considering the close alignment of economic and political environments as well as the similarities between certain cultural indicators (Figure 5.7) at the respective times that these studies were conducted, no significant similarities can be seen in the relationship between Dimensions of organisational culture and organisational performance.

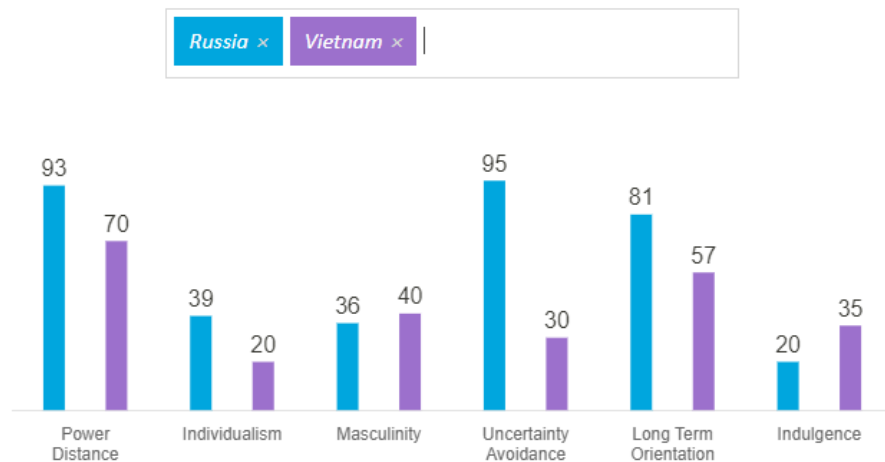


Figure 5.7 - Cultural comparison between Russia & Vietnam.

(Source: Hofstede Insights 2023)

It is interesting to note that the results of this study when compared to the Fey and Denison (2003) study exhibits greater similarity to the USA than to Russia with the Dimension of Mission found to have a significant positive relationship in both the USA and Vietnam while no other Dimensions were found to have a significant relationship. When comparing the cultural dimensions of their respective cultures (Figure 5.8), similarities can be seen in levels of uncertainty avoidance and long-term orientation between Vietnam and the USA. This supports discussions in the literature review and hypothesis development that suggested that the Dimension of Mission would be affected by the long-term orientation of Vietnamese culture.



Figure 5.8 - Cultural comparison between USA & Vietnam.

(Source: Hofstede Insights 2023)

In addition to the Russian study, at the same time Denison, Haaland, and Goelzer (2004) were also conducting a major study using the DM to assess whether the relationship between corporate culture and organisational effectiveness in Asia was different to the rest of the world. Similarly, to the Russia study, one of the main questions that this research was trying to answer was whether the DM could be applied in other parts of the world (Denison, Haaland & Goelzer 2004). In addition, similarly to this research study in Vietnam, the main research question was aimed at understanding whether there were cross cultural differences in the relationship between organisational culture and effectiveness (Denison, Haaland & Goelzer 2004). While the study focussed on the link between organisational culture and effectiveness across cultures, it also sought to evaluate whether the organisational culture itself also varied across cultures (Denison, Haaland & Goelzer 2004).

Overall, this study compared the correlations of both Dimensions and Indexes of the DM with performance between both regions (North America, Asia, Europe / Middle East / Africa (EMEA)) and individual countries (South Africa, Canada, Jamaica, Australia, USA, Brazil & Japan) (Denison, Haaland & Goelzer 2004). The data drew from across a varied range of industries in these different regions while the data for the individual countries mentioned drew samples from populations of employees in grocery stores that were independently owned

(Denison, Haaland & Goelzer 2004). While most of the surveys for this data collection were conducted in English, similarly to this Vietnamese study, the organisations in Japan and Brazil were conducted in the local languages of Japanese and Portuguese respectively (Denison, Haaland & Goelzer 2004).

The beta coefficient (β) between the Indexes of the DM and performance across these seven countries from the Denison, Haaland, and Goelzer (2004) study and the results from this study in Vietnam are shown in Table 5.11 (Adapted from Denison, Haaland & Goelzer 2004, p. 105)

Table 5.11 - Beta Coefficients (β) between Indexes of the Denison Model and Performance comparison of Countries

Index	Vietnam	South Africa	Canada	Jamaica	Australia	USA	Brazil	Japan
Agreement	-0.014	0.63*	0.37	0.20	0.34*	0.54*	0.78*	0.28
Capability Development	0.202*	0.70*	-0.06	0.26	0.23*	0.56*	0.81*	0.14
Coordination & Integration	0.049	0.54*	0.45	0.18	0.37*	0.56*	0.88*	0.23
Core Values	0.094	0.54*	0.45	0.18	0.37*	0.56*	0.88*	0.23
Creating Change	-0.073	0.82*	0.34	0.00	0.35*	0.63*	0.75*	0.23
Customer Focus	0.191*	0.45*	0.06	0.25	0.24*	0.45*	0.62*	0.24
Empowerment	0.052	0.60*	0.38	0.08	0.27*	0.68*	0.84*	0.08
Goals & Objectives	0.338*	0.76*	0.58*	0.22	0.42*	0.68*	0.81*	0.25
Org. Learning	-0.045	0.12	0.13	0.11	0.33*	0.67*	0.76*	-.010
Strategic Direction & Intent	0.027	0.69*	0.77*	0.44	0.38*	0.57*	0.79*	0.55*
Team Orientation	-0.032	0.61*	0.43	-0.06	0.32*	0.60*	0.86*	0.11
Vision	-0.016	0.45*	0.43	0.26	0.36*	0.61*	0.79*	0.29

Note: $p < 0.05$.

In addition to evaluating the relationship between the Dimensions of the DM and performance, Nazir and Lone (2008) also examined the relationship between each of the Dimensions and each of the performance indicators as separate dependent variables. In assessing overall organisational performance, Nazir and Lone (2008) found that Mission had the most significant positive impact on performance while Involvement also had a significant positive impact on performance and no significant relationship was found between Consistency or Adaptability and performance. These results can also be directly compared to the results of this study in Vietnam as shown below in Table 5.12 (Adapted from Nazir & Lone 2008, p. 54).

Table 5.12 - Beta Coefficients (β) between Dimensions of the Denison Model and Performance comparison of Vietnam and India

Dimension	India	Vietnam
Mission	0.691*	0.336*
Adaptability	0.313	0.084
Involvement	0.480*	0.142
Consistency	0.008	0.132

Note: * $p < 0.05$.

Nazir and Lone (2008) also looked at the relationships between each of the Indexes of the DM and each measure of organisational performance as well as the overall measure of organisational performance. As with the Denison, Haaland, and Goelzer (2004) study, this allows for comparison with the data from this study in Vietnam. The relationships between the Indexes of the DM and overall organisational performance comparing Vietnam and India are shown in Figure 5.13 below (Adapted from Nazir & Lone 2008, p. 53).

Table 5.13 - Beta Coefficients (β) between Indexes of the Denison Model and Performance comparison of Vietnam and India

Index	Vietnam	India
Agreement	-0.014	0.336**
Capability Development	0.202*	0.464**
Coordination & Integration	0.049	0.414**
Core Values	0.094	0.430**
Creating Change	-0.073	0.407**
Customer Focus	0.191*	0.223**
Empowerment	0.052	0.379**
Goals & Objectives	0.338*	0.399**
Organisational Learning	-0.045	0.426**
Strategic Direction & Intent	0.027	0.465**
Team Orientation	-0.032	0.331**
Vision	-0.016	0.380**

Note: $p < *0.05$, $p < **0.01$

This comparison between Vietnam and India can be considered with relation to the economic developmental stage of each country as well as the culture traits.

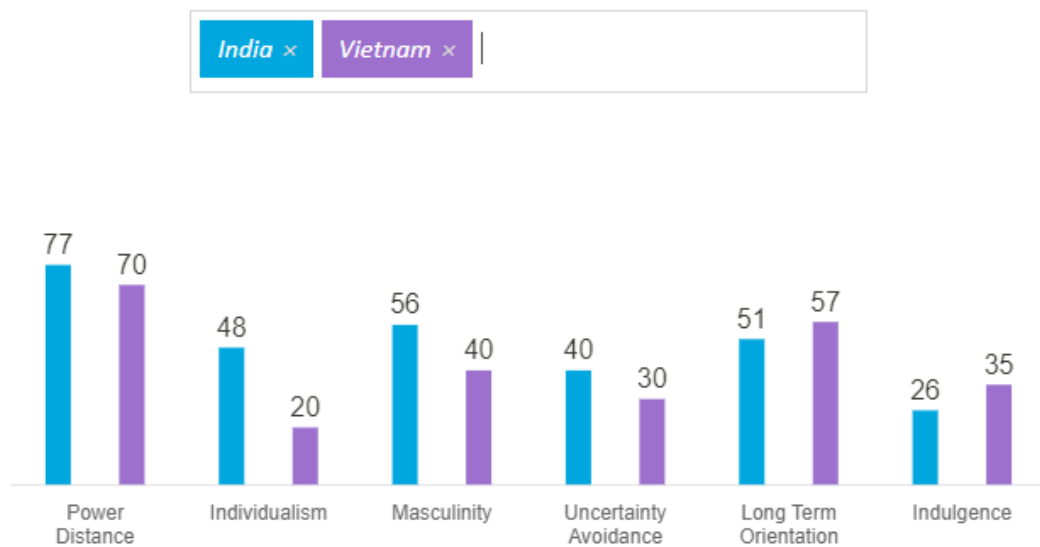


Figure 5.9 - Cultural comparison between India & Vietnam

(Source: Hofstede Insights 2023)

The comparison of cultural traits shows a high degree of similarity across all the cultural dimensions (Hofstede Insights 2023). Similarity is especially seen in the dimensions of power distance and long-term orientation which were key predictors in the hypothesis development related to finding a positive impact of Mission on organisational performance in Vietnam. It was also hypothesised that the Dimension of Involvement would have a positive impact on performance in Vietnamese organisations, however no significant relationship was found. This is interesting when comparing to the Indian context where individualism is greater than in Vietnam and this was predicted to be a key driver of a positive impact of Involvement on performance in Vietnamese organisations. Aside from the cultural dimensions impacting on the relationship between organisational culture and performance, consideration can also be given to the similar state of economic development seen in India and Vietnam.

Avella and Ernesto (2010) sought to examine organisational culture in Columbia using the DM and seeking to understand the relationship to performance. Using similar methods of data collection as Denison, Haaland, and Goelzer (2004) and this study, Avella and Ernesto (2010) also compared the Indexes of the DM to performance in Columbia with the seven nations that were discussed and compared earlier in this discussion. Unlike the Denison, Haaland, and

Goelzer (2004) study, this study was more similar to the Nazir and Lone (2008) study that used some additional performance questions and sought to understand more about the relationship between the Indexes of the DM and the different aspects of performance as separate independent variables rather than an aggregation of performance. However, results of the performance measures were also aggregated and correlations between each Index and performance were presented with allows for the comparison of the results in Columbia with those in this study in Vietnam as well as with the seven countries and India that were compared previously. Below is a comparison between the results in Columbia (Adapted from Avella & Ernesto 2010, p. 182) and the findings of this study in Vietnam.

Table 5.14 - Beta Coefficients (β) between Indexes of the Denison Model and Performance comparison of Vietnam and Columbia

Index	Vietnam	Columbia
Agreement	-0.014	0.59**
Capability Development	0.202*	0.61**
Coordination & Integration	0.049	0.49**
Core Values	0.094	0.47**
Creating Change	-0.073	0.40**
Customer Focus	0.191*	0.42**
Empowerment	0.052	0.52**
Goals & Objectives	0.338*	0.58**
Organisational Learning	-0.045	0.46**
Strategic Direction & Intent	0.027	0.56**
Team Orientation	-0.032	0.37**
Vision	-0.016	0.60**

Note: * $p < 0.05$, ** $p < 0.01$

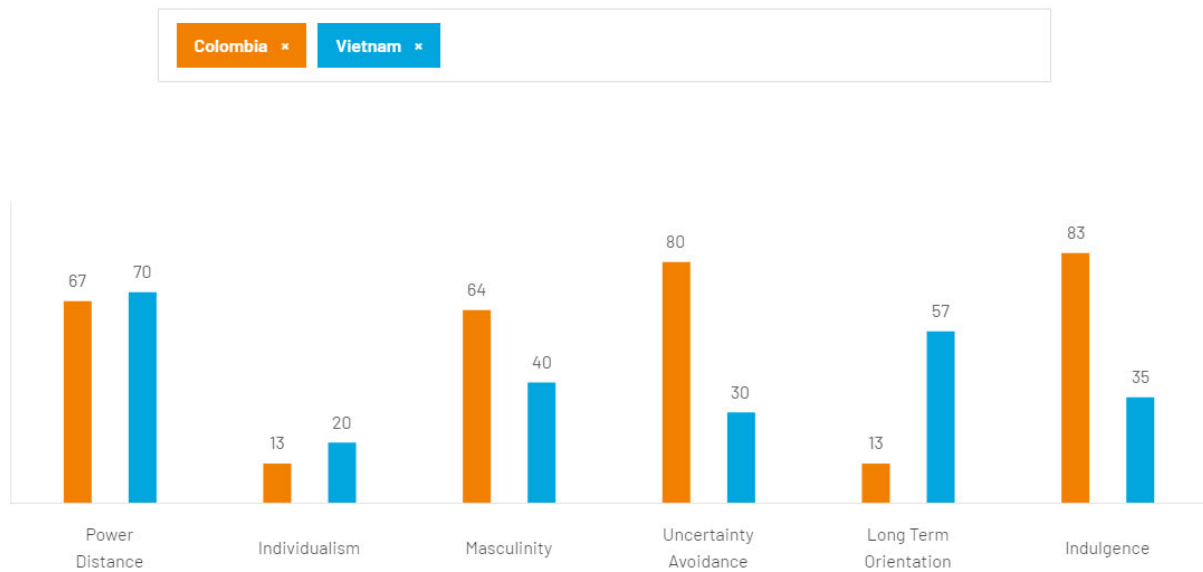


Figure 5.10 - Cultural comparison between Columbia & Vietnam

(Source: Hofstede Insights 2023)

While an aggregate of performance was not assessed and therefore a comparison to the aggregated performance measures of this and other studies cannot be made, when looking at the relationships between the Dimensions of the DM and the eight performance measures used, Avella and Ernesto (2010) found significant positive impact on the Dimension of Mission on five of the variables. No other significant relationships were found with any of the other Dimensions and any of the eight performance measures (Avella & Ernesto 2010). Therefore, again, as found in the Denison, Haaland, and Goelzer (2004), the Nazir and Lone (2008), and this study in Vietnam, Mission was ranked as the top and most significant Dimension to impact on performance. A composite comparison across these studies between the Dimensions of the DM and performance is shown in Table 5.15 below.

Table 5.15 - Composite comparison of Beta Coefficients (β) between Dimensions of the Denison Model and Performance across all similar studies

Dimension	Russia	USA	India	Vietnam
Mission	0.09	0.38**	0.691*	0.336*
Adaptability	0.30****	-0.06	0.313	0.084
Involvement	0.27***	0.21	0.480*	0.142
Consistency	0.13	0.10	0.008	0.132

Note: * $p < 0.05$ ** $p < 0.01$ *** $p < 0.005$ **** $p < 0.001$

As with research question 1a, the comparisons that have been made between organisational culture and performance in other cultures can be added to the findings of this study to compile a comparison of studies across cultures as presented below in Table 5.16 (Adapted from Avella & Ernesto 2010, p. 182; Denison, Haaland & Goelzer 2004, p. 105; Nazir & Lone 2008, p. 53)

Table 5.16 - Composite comparison of Beta Coefficients (β) between Indexes of the Denison Model and Performance across all similar studies

Index	Vietnam	Columbia	South Africa	Canada	Jamaica	Australia	USA	Brazil	Japan	India
Agreement	-0.014	0.59**	0.63*	0.37	0.20	0.34*	0.54*	0.78*	0.28	0.336**
Capability Development	0.202*	0.61**	0.70*	-0.06	0.26	0.23*	0.56*	0.81*	0.14	0.464**
Coordination & Integration	0.049	0.49**	0.54*	0.45	0.18	0.37*	0.56*	0.88*	0.23	0.414**

Index	Vietnam	Columbia	South Africa	Canada	Jamaica	Australia	USA	Brazil	Japan	India
Core Values	0.094	0.47**	0.54*	0.45	0.18	0.37*	0.56*	0.88*	0.23	0.430**
Creating Change	-0.073	0.40**	0.82*	0.34	0.00	0.35*	0.63*	0.75*	0.23	0.407**
Customer Focus	0.191*	0.42**	0.45*	0.06	0.25	0.24*	0.45*	0.62*	0.24	0.223**
Empowerment	0.052	0.52**	0.60*	0.38	0.08	0.27*	0.68*	0.84*	0.08	0.379**
Goals & Objectives	0.338*	0.58**	0.76*	0.58*	0.22	0.42*	0.68*	0.81*	0.25	0.399**
Organisational Learning	-0.045	0.46**	0.12	0.13	0.11	0.33*	0.67*	0.76*	-.010	0.426**
Strategic Direction & Intent	0.027	0.56**	0.69*	0.77*	0.44	0.38*	0.57*	0.79*	0.55*	0.465**
Team Orientation	-0.032	0.37**	0.61*	0.43	-0.06	0.32*	0.60*	0.86*	0.11	0.331**
Vision	-0.016	0.60**	0.45*	0.43	0.26	0.36*	0.61*	0.79*	0.29	0.380**

Note: *p<0.05 **p<0.01

5.6 Research question 3 discussion

The objective of research question three is to build greater understanding of how Vietnamese culture impacts organisational culture in Vietnamese organisations with a goal of adding to the

understanding of how organisational culture can be managed in relation to the impact on performance in Vietnamese organisations.

3. What roles do Vietnamese national culture play in influencing organisational culture in Vietnamese organisations?

Following the Explanatory Sequential Mixed Methods approach, findings from the quantitative stage can be confirmed and explored using the findings from the qualitative stage (Creswell 2014). These findings allow for a picture of the Indexes and Dimension of Vietnamese culture to be formed which can be considered with the relationships to traditional and contemporary cultural influences in Vietnamese culture which have been explored. The discussions of the findings for research question one showed that organisational culture in Vietnamese organisation has a prominent Team Orientation and that internal characteristics according to the DM play a greater role in shaping the organisational culture in Vietnamese organisations. This included a close relationship between Team Orientation and Coordination and Integration supporting a Goals and Objectives focus. Goals and Objectives was the most prominent externally focussed Index associated with organisational culture while Agreement and Empowerment were also shown to be important features.

These findings suggest that traditional Vietnamese cultural values play a significant role in impacting the makeup of organisational culture in Vietnamese organisations. Collectivism and a sense of community and family values (Hofstede Insights 2022; Murray 2008) were shown to be very prominent features of Vietnamese culture in the literature review and the results show that this plays a major role in shaping the culture within Vietnamese organisations. At the same time, the cultural features related to power distance and the hierarchies observed in Vietnamese culture (Hofstede Insights 2022) were also reflected in the culture of Vietnamese organisations. The Indexes of Agreement and Coordination and Integration show that the team functions effectively by adhering to these hierarchical characteristics.

At the same time, there was evidence that more contemporary values influenced by Western values are also playing a role in shaping organisational culture. Empowerment was seen as important and comments indicated that while there is still a large degree of respect for hierarchies, at the same time there was an understanding that regardless of these relationships,

it was important to empower employees to be able to speak freely across the hierarchical levels to improve organisational outcomes. The responses to interview question two provided additional support that respondents felt that this is of particular importance to establishing a strong organisational culture in Vietnamese organisations. The responses to interview question two supported this blend of cultural values being important with most comments seen for the Indexes of Strategic Direction and Intent, Coordination and Integration, and Empowerment. This shows that a strong culture is perceived as providing empowerment to employees as important so that they can work effectively across the hierarchical levels of the organisation with a shared sense of direction, and how to achieve the objectives of the organisation.

Interview question four sought to verify and explore the linkages between Vietnamese culture and organisational culture in Vietnamese organisations more specifically. Interview question four sought to elicit directly from respondents what they viewed as the impacts of Vietnamese culture on their organisations respective culture. The responses were categorised as either supporting traditional cultural influences or supporting contemporary cultural influences. The results further supported that both traditional and contemporary cultural influences play a role in shaping the organisational culture in Vietnamese organisations. However, more respondents and more comments indicated contemporary influences on organisational culture. As with the findings from research question one, the comments that were categorised as supporting traditional influences on organisational culture were dominated by comments that were related to collectivist, community, and family values as well as comments that related to hierarchies and power distance relationships that aligned with Vietnamese cultural characteristics (Hofstede Insights 2022; Murray 2008; Nguyen 2016; Nguyen 2023). Also, in line with the findings from research question one, the findings supported contemporary cultural influences that related to empowerment and individualism. This was directly supported by specific answers from respondents that mentioned influence from other cultures such as South Korea, The USA, and Singapore. In addition, this was further supported by comments from respondents that noted the generational shift and the more relaxed approach to community and organisational hierarchies than seen in older generations. Furthermore, this was also seen reflected more so in foreign operated organisations in Vietnam where it was indicated that organisational structures were more formal in older organisations. The opposite was reflected in Vietnamese organisations with younger management.

These comments provide strong support for the contemporary and traditional cultural drivers that are impacting Vietnamese organisations while at the same time offering additional insights into how and why this is occurring. The comments showed that the influences driving the contemporary changes are related to objectives that are driven from multinational organisational perspectives; generational change where younger managers and organisations are adopting more contemporary business values from the West; and that the generational gap is reducing which owes to the younger workforce in general. Therefore, the shape of organisational culture is being driven by traditional cultural influences, changing contemporary cultural influences, and by organisational influences.

Interview question five sought to further explore these topics in relation to the effect of national culture on organisational culture in other cultural contexts. Once again, the responses supported the previous findings and offered additional insights. Numerous respondents had experience working in organisations operating in foreign cultures or working in Vietnam with those who come from foreign cultures. The comments supported the influence of the national culture on the organisational culture in both contexts while also supporting that the foreign culture mixed with the traditional culture in these organisational environments. The comments supported the idea that the underlying national culture would play a prominent role and that for multinational organisations operating across cultures that it was important to understand the local national cultural influences. In addition, the comments reflected the needs for managers to understand the cultural dynamics and accommodate those while leading the integration of contemporary cultural drivers.

While this study does not directly link national culture to organisational performance, it shows the impacts between national culture and organisational culture and the relationships between organisational culture and performance. These relationships show that cultural considerations are an important for managers in the shaping of organisational culture and that consideration should be given to the relationship that these have with the desired culture and performance of organisations.

For example, Empowerment and Team Orientation were found to be key features of organisational culture in Vietnamese organisations yet neither of these Indexes had a

significant positive impact on performance. While some evidence of Team Orientation supporting Indexes that were found to have a significant positive impact on performance were found, these were not strong links. This is also apparent when looking at the Index of Empowerment which also showed only some limited support for helping to facilitate performance in relation to Indexes with a significant positive relationship.

However, it was also possible to see how an alignment between traditional and contemporary values were able to come together in Vietnamese organisations to distinctly shape the organisational culture as well as provide strong links to performance. This is especially interesting when looking at the shape of organisational culture and looking at the positive relationships between Indexes and Dimensions and performance.

This is especially evident if considering the Indexes of Coordination and Integration and Team Orientation. These Indexes both align strongly with the collectivism of Vietnamese culture and although they were not found to have a significant positive impact on performance, they were clearly identified as key drivers in facilitating the positive impacts seen between Indexes such as Goals and Objectives and Customer Focus as well as the broader Dimension of Mission.

5.7 Conclusions

Vietnam has a complex range of drivers of national culture from historical traditional influences that include Confucianism, Taoism, Buddhism, and Socialism mixing with more contemporary influences from Western values that shape Vietnamese culture today. Strong links can be seen between the collectivist nature of many of these drivers that place emphasis on community, family, and national pride and the shape of organisational culture in Vietnamese organisations. As a result, contemporary Vietnamese organisations display a strong Team Orientation coupled with Coordination and Integration and Agreement that sees organisations well aligned with the Core Values of the organisation. At the same time, it can also be seen that more contemporary Western values are driving changes in contemporary Vietnamese culture in organisations that is especially impactful owing to the generational change and younger workforce in Vietnam. The shape of organisational culture is overwhelmingly internally focussed with an emphasis on Involvement and Consistency that suggests a good balance between flexibility and stability. This positions Vietnamese organisations with a good balance

between growth and profitability while exhibiting characteristics of high levels employee satisfaction, quality, and resources allocation (Denison Consulting 2021; Denison & Neale 1999).

While these values shape the organisational culture of organisations, the significant links between organisational culture and performance in Vietnamese organisations can be seen between more externally driven Dimensions and Indexes of organisational culture that relate especially to the goals of the organisation. This includes achieving the Mission of the organisation and especially focussed on the Goals and Objectives. Significant impacts found between Customer Focus and Capability Development further support that the goals of the organisation are key performance drivers as discussions with respondents revealed that these Indexes comprised part of the organisational mission and goals.

Therefore, it can be seen that the internally focussed Indexes and Dimensions play a critical role in Vietnamese organisations in supporting and enabling performance that is driven by Goals and Objectives. These findings align well with the discussions in the literature review that noted the ability of Vietnamese people to come together to overcome adversity with a steely determination driven by common objectives. In addition, these findings align closely with previous studies that found Mission to be most significantly aligned with performance in organisations regardless of the culture and supports that while behaviours related to culture may vary, the underlying importance of the Dimension of Mission to performance is seen across cultures (Denison, Haaland & Goelzer 2004).

The research shows that Vietnamese organisational culture is very strongly influenced by traditional Vietnamese culture and that the Goals and Objectives of the individual organisations play a role in shaping certain aspects of the organisational culture while providing the strongest link to organisational performance. The research showed that this is inherent in organisational culture in different cultural settings as demonstrated by other research and the findings from the qualitative interviews in this research. At the same time, it was shown that Vietnamese organisations today are also strongly influence by contemporary Western cultural influences especially in organisations with younger leaders and international management. The findings showed that while traditional features related to collectivism and power distance were

prominent that at the same time empowerment and individuals were valued and that organisations seek to integrate these competing values in positive ways.

5.8 Summary of the contribution to knowledge

The following Table summarises the output and the contribution to knowledge of this study.

Table 5.17 - Summary of the contribution of knowledge of this research project

Output	Contribution to knowledge
Understanding of organisational culture in Vietnam	Advance
Understanding of perceptions of organisational performance in Vietnam	Advance
Understanding relationship between dimensions of organisational culture and organisational performance in Vietnam	Advance
Understanding of the development of organisational culture	Addition
Understanding of the development of organisational outcome measures	Addition
Understanding the development of organisational culture in Vietnam	Advance
Understanding demographic differences in organisational culture in Vietnam	Advance
Validating the DOCS and the Denison Model as a tool for assessment of organisational culture in Vietnam	Advance

Output	Contribution to knowledge
Understanding the relationship between Vietnamese culture and organisational culture in Vietnamese organisations	Addition
Understand Dimensions and Indexes of Vietnamese organisational culture in comparison to other cultures	Addition
Understand the impact of Dimensions and Indexes of organisational culture on performance in Vietnamese organisations in comparison to other cultures	Addition
Validating the use of PLS-SEM as a predictive model for the relationships between organisational culture and performance using the DOCS and Denison Model	Addition

The following sections provide additional details related specifically to the implications for theory, implications for practice, the limitations of this research, and the future directions for research related to the outcomes of this study.

5.9 Theoretical Implications

This study has numerous implications for theory related to the broader study of organisational culture, the relationship between organisational culture and performance, and the application of the DM in studying organisational culture. It also has more specific implications directly related to the understanding organisational culture in Vietnam as well as understanding of the relationships between Vietnamese culture and organisational culture in Vietnamese organisations and the link between Vietnamese organisational culture and performance. In addition, the methodology of this research adds to the body of literature using an Explanatory Sequential Mixed Methods research design generally, in the field of business, and in assessing

organisational culture and performance while also adding to the use of PLS-SEM as a valid predictive model to assess these relationships.

Firstly, this research provides findings that add to the general body of literature that provides understanding of the nature of organisational culture in different cultural settings. This research shows the general nature of organisational culture in Vietnamese organisations which allows for comparison and discussion in relation to the nature of organisational culture across different countries and regions around the world.

Secondly, this research also builds on the general body of literature that looks at relationships between organisational culture and various measurements of outcomes in various organisational, industry, and cultural settings. In particular, it adds to the body of literature that seeks to understand the general nature of the relationship between aspects of organisational culture and organisational outcomes at a broad national cultural level.

Thirdly, as well as adding to the overall literature, this study also adds to the limited but rapidly growing body of research that is specific to organisational culture and the relationship between a variety of outcomes specific to Vietnam and Vietnamese organisations. This contribution is multifaceted in that it contributes to understanding the general shape of organisational culture in Vietnamese organisations as well as the relationship between Vietnamese culture and organisational culture in Vietnamese organisations and between Vietnamese organisational culture and performance. It is also the first time that the DM has been used in this way in research in Vietnam.

This research also adds to the large and continually growing body of research that has looked specifically to the DOCS and the DM to measure the general nature of organisational culture according to the Dimensions and Indexes of the model in a variety of cultural, industry, and organisational settings. In addition, this research also adds to the research that has sought to find relationships between the Dimensions and Indexes of the DM and various types of organisational outcomes across cultures, industries, and organisations. As shown in the discussion section, this research allows for a comparison of the body of research that has looked at the nature of organisational culture and its relationship with performance in numerous regions and countries to these findings in Vietnam.

Additionally, it adds to the body of research that has used the DM in academic research to assess the Dimensions and Indexes of in a variety of organisational, industry, and cultural settings. Especially, it adds to the literature that is related to the relationship between the Dimensions and Indexes of organisational culture according to the DOCS and performance. This study shows the general relationship between organisational cultural Dimensions and Indexes and performance across a broad cross section of Vietnamese organisations which also allows for comparison to these relationships in similar studies that have been conducted in other cultural settings.

The methodology used in this study also contributes to the use of Explanatory Sequential Mixed Methods research in general as well as in the specific fields of organisational culture and performance. The use of this methodology also adds to the validation of the use of the DM as a measure of organisational culture and the relationship with performance while providing unique insights and understanding of these findings in Vietnam and Vietnamese organisations.

It also contributes to the application of the DM to assess the impact between the Indexes and Dimensions of the model and performance in using and verifying PLS-SEM as a suitable method to predict these relationships.

Finally, the findings of this research add to the understanding of the importance of certain Dimensions and Indexes of organisational culture across cultures and the relationship that these exhibit to particular behaviours while understanding how this is facilitated against a backdrop of different yet important cultural settings that show a clear relationship between national and organisational cultures much in line with the findings of Denison, Haaland, and Goelzer (2004).

Support was shown for the findings of Denison, Haaland, and Goelzer (2004) that underlying behaviours are important factors in shaping organisational culture owing to the importance of the organisational cultural Dimensions despite the importance of cross-cultural differences which were shown to be important to organisational culture in this study. The compilation and comparison of the various studies that have used the DM to score Dimensions also provides a basis for further analysis and research to confirm these findings and to look more specifically at how the behaviours and cultures support each other to facilitate the relative strength of each Dimension in different contexts.

5.10 Practical Implications

The practical implications are significant given the insights provided by the results of the research and the unique stage of Vietnam's economic and cultural development. These include helping management to better understand the drivers of organisational culture in Vietnamese organisations and the importance of different relationships between Vietnamese culture and organisational culture, and organisational culture and organisational performance. The research has demonstrated that there is significant scope for the development of organisational culture in Vietnamese organisations that could be expected to drive improvements in organisational outcomes and to effectively align organisational culture for specific desired outcomes with respect for the relationship with Vietnamese culture and the relationship of organisational culture with performance. In understanding the importance of the relationships between the Vietnamese cultural values that are reflected in the make-up of organisational culture, these can be considered to develop working environments that are able to better facilitate the behaviours that can be connected to desired areas of the culture to drive specific outcomes.

This research shows important connections to the general nature of organisational culture with traditional Vietnamese culture and how more contemporary cultural influences are interacting with these in Vietnamese organisations. By understanding this internal alignment that was found, managers can better manage the inputs to align with and compliment these findings. For example, in understanding the importance of Team Orientation in the culture of Vietnamese organisations based on the community and family values seen in broader Vietnamese traditional and contemporary culture, managers can ensure that they foster environments and work tasks that compliment these characteristics to ensure that Indexes such as Coordination and Integration can complement these traits to maximise the effectiveness of the behaviours of employees. Similarly, by understanding the importance of more contemporary Western practices such as the Empowerment of employees, especially to an increasingly younger workforce, managers can integrate these values for increased effectiveness against the backdrop of strong hierarchies that are still exhibited from drivers of traditional culture. For example, while understanding that respect for hierarchies from traditional cultural values are still important in contemporary culture; processes, mechanisms, and training can be developed and implemented in ways that respects the traditional values while allowing for empowerment that can complement, rather than conflict with and stifle performance.

In addition, understanding the significant relationships between Indexes and Dimensions of organisational culture and performance, it will be able to assist managers in developing specific organisational culture drivers that will maximise the performance in Vietnamese organisations with respect to specific desired outcomes. This is of particular importance for organisations as the economy continues to develop and finding a sustainable competitive advantage plays an increasingly important role in business sustainability and broader economic development towards a developed nation status.

For example, Customer Focus and Capability Development were found to have a significant impact on the performance of Vietnamese organisations and the qualitative interviews revealed that these are very much tied to Goals & Objectives and Mission of the organisations which also showed significant positive relationships. This creates a great opportunity for managers in Vietnamese organisations to drive desired organisational outcomes by embedding Indexes such as Creating Change, Organisational Learning, or Coordination & Integration into the Goals & Objectives and Mission of the organisation as it would be expected that these Indexes could then have a greater impact on the performance of the organisations in similar ways that Customer Focus and Capability Development were shown to.

The specific desired outcomes can be considered by managers when driving cultural change regarding the ideas discussed. For example, if market share and sales growth are seen as more important outcomes, managers can focus more on embedding Organisational Learning into the Goals & Objectives and Mission. Alternately, if product and/or service innovation is seen by managers as a more desired outcome, a greater focus could be put on embedding Creating Change into the Goals & Objectives and Mission of the organisation. Or, if ROI, ROA, and ROS were more desired outcomes, a greater focus could be put on embedding Coordination & Integration into the Goals & Objectives and Mission of the organisation.

This research gives clear direction to managers to help shape the culture of organisations in a way that considers the traditional and contemporary influences coming from Vietnamese culture. At the same time, it also allows managers to develop specific plans to target the development of organisational culture within organisations with an aim to have significant impacts on performance with respect to specific desired organisational outcomes.

5.11 Limitations of the research

The limitations of this research are primarily related to the sample in both stages and the survey, and the measurement model for the quantitative stage of this study. The sample for the population was obtained via non-probability convenience sampling which created limitations related to demographic representation, size, and bias. Ideally a probability sample that was representative of the demographics of the population would have been employed, however, this method was beyond the resources available in terms of time and access to participants for this study. This was mitigated via the use of demographics questions which allow for the responses that were collected to be considered with respect to the general population of the study. These comparisons were discussed in section 4.2.1. Although a more purposeful method could be employed for the collection of data in the qualitative stage, it was also restricted by the limited known respondents from the first stage. As expected, the results of the quantitative stage showed bias towards the primary researchers' network in terms of location (HCMC), age, and industry demographics. While there was an attempt to mitigate these biases in the qualitative stage, there was in particular a bias of locations (All HCMC) and industries. In attempting to mitigate these biases in the confirmatory findings of the qualitative stage, some participants were selected from outside the original quantitative group.

Other limitations of this study were primarily related to the survey and the measurement model in the quantitative stage. The survey that was used was taken directly from the Denison Facilitator guide to allow for the best alignment with previous Denison studies. The modern survey used by Denison Consulting is somewhat refined from this initially developed version and contains fewer questions (Denison Consulting 2021). At the same time, other research that has been based on the DM and questionnaire, researchers have used variations of the survey. The modern Denison survey used by Denison Consulting sees some questions reworded and one question from each Index removed for a total removal of twelve questions and a total of forty-eight questions on the survey compared to the original sixty questions (Denison Consulting 2021; Denison & Neale 1999). The questions in the survey that performed the worst in terms of normality, reliability, and validity in this study were questions that have been removed from the modern Denison Survey. Therefore, this research validates the removal of these indicators which allows for results that are as meaningful and a survey that could be administered more easily owing to the reduced burden of questions. All eight questions that

were reverse coded were removed from the measurement model and it would be suggested that rewording or removal of these questions could improve the performance of these questions and have the potential to improve the validity and reliability of the model that was created. In addition, these questions were shown to give lower means and higher standard deviations when assessing the shape of organisational culture which suggests that rewording these questions would allow for a more accurate description of the organisational culture Dimensions and Indexes to be quantified. In addition to the removal of the reverse coded questions, an additional nine questions were removed to maximise the reliability and validity of the measurement model. This suggests that there may have been issues with the translation or understanding of these questions. However, while it appears problematic that more than 20% of indicators of the model had to be removed as part of this research, when considering the model from the perspective of removing the twelve unnecessary questions, only five of the remaining forty-eight questions had to be removed which is only 9.6% of the questions and within a more acceptable range for validation of the model. In addition, the removal of indicators is not considered problematic in reflective models using PLS-SEM where as few as two indicators can still provide a good reflection of the variable being measured (Hair et al. 2017).

However, it must also be acknowledged that in the final measurement model, while desired CR was achieved, if applying the stricter measurement of rho a, some of the results became less desirable. This was also true when considering the convergent validity of the model where the AVE was less than desirable for three of the exogenous variables, including two that were found to have significant relationships with performance. However, while these Indexes of Customer Focus and Capability Development exhibited some issues related to CR and AVE, given the findings which were supported in the qualitative stage, it could also indicate that rather than problems with questions in the survey, mixed responses owing to the juxtaposition of traditional and contemporary cultural influences in Vietnamese organisations may have influenced these outcomes.

Finally, as this study was cross-sectional, it does not address the changes in culture over time. This provides scope for a longitudinal study that could address this and show the changing nature of Vietnamese culture and Vietnamese organisational culture over time which would be

of particular interest given the diverse cultural influences shown in Vietnam and the rapid state of development in the Vietnamese economy.

Overall, these limitations may have impacted the generalisability of the results that are skewed towards the demographics that were overrepresented compared to the population which included the services and real-estate industry. The interviews conducted in the qualitative stage were only conducted with workers in HCMC which may also skew the results towards urban areas which may be arguably more influenced by contemporary culture. In addition, the skew to HCMC represents a skew to the Southern Vietnamese culture which has been shown to demonstrate differences with relation to contemporary and traditional influences on management compared to the North (Ralston, Nguyen & Napier 1999).

5.12 Directions for future research

This Explanatory Sequential Mixed Methods study provides a diverse range of directions for future research that could provide important theoretical and practical implications. Future research directions could include:

- Replicating this study on a larger scale with a random sampling methodology that would allow for confirmation of these results and greater insight into industry sectors.
- Refining the survey to provide a higher level of predictive validity and relevance of the structural model.
- Quantitative studies focussed on specific industries, segments of industries, or individual organisations replicating the data analysis of this study.
- The use of PLS-SEM in other studies in other cultural contexts to predict the relationships between Indexes and Dimensions of the Denison Model and organisational performance.
- Deeper exploration and analysis of the comparisons of the Dimensions and Indexes of organisational culture from the various studies that have been conducted across other countries and regions.
- Deeper exploration and analysis of the comparisons of the Dimensions and Indexes of organisational culture and their relationship with performance that have been conducted across other countries and regions.

- Further investigation into the importance of cross-cultural differences in the make-up of organisational culture against a backdrop of similar importance of particular Dimensions and Indexes and the relationship dynamic between culture and behaviours that facilitate these outcomes.

5.13 Concluding Remarks

The final chapter of this thesis presented discussions that mixed the quantitative and qualitative results of the research in line with the Explanatory Sequential Mixed Methods design of this study which then allowed for the conclusions, contribution, and future directions of research to be presented. The discussions for research question one showed good support for the quantitative findings in the qualitative findings while offering additional insights. The discussion showed that Vietnamese organisations have a strong internal focus led by the Dimensions of Involvement and Consistency and the Index of Team Orientation. The discussions also showed how this is supported by Coordination and Integration and an emerging focus on Empowerment that facilitates a strong Goals and Objectives outcome in line with the Mission of the organisations. In addition, it showed that Vietnamese organisations are well balanced between stability and flexibility which indicated a good balance between growth and flexibility.

In discussions of research sub question 1a, it was able to be shown that this study aligned with Denison, Haaland, and Goelzer (2004) findings that differences in underlying behaviours still result in alignment of cultural traits in organisations across cultures. Support for this was also shown in comparison to other subsequent studies and a comparison of relevant studies that were explored in the literature review were also presented. The discussions related to research question two again showed good support for the quantitative findings from the qualitative findings while also offering additional insights. The discussions showed that the connections to organisational culture and performance in Vietnamese organisations were externally focussed in alignment with the Dimensions of Missions and Adaptability and the Indexes of Goals and Objective and Customer Focus. These discussions supported the facilitation of these external objectives through the support of strong internal characteristics of organisational behaviour. These findings also supported those contemporary Western cultural influences were

combining with traditional cultural drivers in affecting the outcomes of Vietnamese organisations.

The discussion of sub question 2a also showed alignment with other studies where the Index of Goals and Objectives and the Dimension of Mission were shown to consistently provide a significant impact on performance in organisations across cultures. It was interesting to note that the expected alignment with performance in Russian organisations as shown in the Denison, Haaland, and Goelzer (2004) study was not seen which was most likely owing to an increased influence of contemporary Western culture in Vietnam. A comparison of relevant studies that were explored in the literature review were also presented. Discussion related to answering research question three from the qualitative findings showed that national cultural values had a strong impact on organisational culture in organisations. This was seen by respondents working with foreigners in Vietnam and from Vietnamese workers who had experience working in foreign cultures abroad. This was supported with the picture of organisational culture that was presented in answering research question one and it was shown how this is then connected to facilitating performance in answering research question two. At the same time these discussions showed that contemporary Western values merging and integrating with traditional Vietnamese values especially related to power distance and individualism to create a contemporary workplace culture that still values hierarchies and groups while findings ways to empower individuals and facilitate communication across levels of the organisation.

The conclusions in this chapter summarised the findings from these discussions. The contribution to knowledge of this research project showed significant impacts on both theory and practice. Contributions to theory included advancement of the study of organisational culture and performance generally as well as in the Vietnamese contexts as well as in areas applying the DM, Explanatory Sequential Mixed Methods, and the use of PLS-SEM for predicting these relationships. Contributions to practice included improving the understanding of the relationship between traditional and contemporary cultural influences in Vietnamese organisations and how these shape organisational culture and connect organisational culture to performance in a way that can guide managers to build the organisational culture of organisations in Vietnam in a way that can maximise employee commitment while maximising performance. The limitations of the research were discussed with respect to the broad nature

of the study, the relatively small sample size, and the distribution of the survey. Finally, the future directions for research were presented which included replicating the study on a larger scale, focussing studies on particular industries, regions, and organisations, and applying the use of PLS-SEM for similar studies in other cultural contexts.

LIST OF REFERENCES

- Abane, JA, Adamtey, R & Ayim, VO 2022, 'Does Organizational Culture Influence Employee Productivity at The Local Level? A Test of Denison's Culture Model in Ghana's Local Government Sector', *Future Business Journal*, vol. 8, no. 1, pp. 1-13.
- Abdullah, NH, Shamsuddin, A, Wahab, E & Hamid, NAA 2014, 'The Relationship between Organizational Culture and Product Innovativeness', *Procedia, Social and Behavioral Sciences*, vol. 129, pp. 140-147.
- Abuzarqa, R 2019, 'The Relationship Between Organizational Culture, Risk Management and Organizational Performance', *Cross Cultural Management Journal*, vol. 21, no. 1, pp. 13-30.
- Agee, J 2009, 'Developing Qualitative Research Questions: A Reflective Process', *International Journal of Qualitative Studies in Education*, vol. 22, no. 4, pp. 431-447.
- Agyapong, A, Zamore, S, & Mensah, HK 2020, 'Strategy and Performance: Does Environmental Dynamism Matter?', *Journal of African Business*, vol. 21, no. 3, pp. 315-337.
- Ahmady, G, Nikooravesh, A & Mehrpour M 2016, 'Effect of Organizational Culture on Knowledge Management Based on Denison Model', *Procedia - Social and Behavioral Sciences*, vol. 230, pp. 387-395.
- Alamsjah, F & Yunus, EN 2022, 'Achieving Supply Chain 4.0 and the Importance of Agility, Ambidexterity, and Organizational Culture: A Case of Indonesia', *Journal of Open Innovation*, vol. 8, no. 2, pp. 83-106.
- Allport, FH 1924, 'The Group Fallacy in Relation to Social Science', *The Journal of Abnormal Psychology and Social Psychology*, vol. 19, no. 1, Apr., pp. 60-73.
- Anwar, S 2011, 'Foreign Direct Investment and Export Spillovers: Evidence from Vietnam', *International Business Review*, vol. 20, no. 2, April, pp. 177-193.

Ashkanasy, NM, Broadfoot, LE & Falkus, S 2000, 'Questionnaire Measures of Organizational Culture', in NM. Ashkanasy, CM. Wilderom & MF. Peterson (eds), *Handbook of Organizational Culture & Climate*, SAGE Publications, Thousand Oaks, CA, pp. 131–145.

Avella, M & Ernesto, M 2010, 'Relaciones Entre Cultura y Desempeno Organizacional en una Muestra de Empresas Colombianas: Reflexiones Sobre la Utilizacion del Modelo de Denison', *Cuadernos de Administración*, vol. 23, no. 40, pp. 163-190.

Baba, Y 2015, 'Does Learning Orientation Matter for Nonprofit Organization Performance? Empirical Evidence from Ghana', *Leadership & Organization Development Journal*, vol. 36, no. 3, pp. 234-252.

Baragan, LG, Ionescu, A, & Matei, RN 2013, 'The Importance of Organizational Culture within Managerial Reengineering', *Romanian Economic and Business Review*, vol. 8, no. 3.1, pp. 79–83.

Barati, MA, Ghaderi, A, Gouhari, MR & Sadeghi, A 2009, 'A Study on Organizational Culture at Hashemi Nezhad Hospital, Based on Denison Model', *Journal of Health Administration*, vol. 13, no. 40, pp. 63–72.

Bembenek, B 2014, 'The Importance of Organizational Culture in Cluster Management', *Modern Management Review*, vol. 19, no. 21, pp. 9–24.

Bhattacharya, K 2017, *Fundamentals of Qualitative Research: A Practical Guide*, Taylor & Francis, New York.

Blaikie, N & Priest, J 2019, *Designing Social Research: the Logic of Anticipation*, Polity Press, Cambridge, UK.

Bodewig, C & Badiani-Magnusson, R 2014, *Skilling up Vietnam: Preparing Workforce for a Modern Market Economy*, World Bank Publications, Herndon.

Bolman, LG & Deal, TE 2017, *Reframing Organizations: Artistry, Choice, and Leadership*, John Wiley & Sons, Incorporated, New York.

Bryman, A 2016, *Social Research Methods*, 5th edn, Oxford University Press, Oxford, UK.

Bryman, A & Bell, E 2015, *Business Research Methods*, Int. 4th edn, Oxford University Press, Oxford, UK.

Cameron, KS & Quinn, RE 2011, *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, 3rd edn, Jossey-Bass, San Francisco.

Cameron, KS, Quinn, RE, DeGraff, J & Thakor, AV 2006, *Competing values leadership: creating value in organizations*. E. Elgar Pub, Northampton, MA.

Cao, Y 2019, *Culture Matters: Exploring the Importance of Competing Organisational Cultures in a Collective Response to Corporate Social Responsibility*, UNSW, Sydney.

Caraballo, FE 2016, 'Organizational Culture Comparisons of China and The United States Using the Denison Organizational Culture Model', PhD Thesis, Alliant International University San Francisco, California.

Caracelli, VJ & Green, JC 1993, 'Data Analysis Strategies for Mixed Method Evaluation Designs', *Educational Evaluation and Policy Analysis*, vol. 15, no. 2, pp. 195-207.

Carro-Suárez, J, Sarmiento-Paredes, S & Rosano-Ortega, G 2017, 'Organizational Culture and its Influence in Business Sustainability. The Importance of Culture in Corporate Sustainability', *Estudios Gerenciales*, vol. 33, no. 145, pp. 352–365.

Cercel, M & Marina LE 2011, 'A Comparative Study Of Organizational Culture Evaluation Through Two International Instruments: Denison Model And Human Synergistics Oci', *Annals of University of Craiova - Economic Sciences Series*, University of Craiova, Faculty of Economics and Business Administration, vol. 2, no. 39, pp. 67-76.

Cercel, MO 2012, 'Analiza Comparativă a Modelelor Human Synergistics și Denison de Evaluare a Culturii Organizaționale', *Management intercultural*, vol. 14, no. 2, pp.19-25.

Chatterjee, S, Chaudhuri, R & Vrontis, D 2022, 'Does Remote Work Flexibility Enhance Organization Performance? Moderating Role of Organization Policy and Top Management Support', *Journal of Business Research*, vol.139, pp.1501-1512

Chin, WW 1998, 'The Partial Least Squares Approach to Structural Equation Modeling', in G. Marcoulides (ed.), *Modern Methods for Business Research*, Lawrence Erlbaum Associates, Mahwah, NJ.

Churchill, GA & Peter, JP 1984, 'Research Design Effects on the Reliability of Rating Scales: A Meta-Analysis', *Journal of Marketing Research*, vol. 21, no. 4, pp. 360-375.

Cleemput, I, Dauvrin, M, Kohn, L, Mistiaen, P, Christiaens, W, & Léonard, C 2020, 'Developing an Agency's Position with Respect to Patient Involvement in Health Technology Assessment: The Importance of the Organizational Culture', *International Journal of Technology Assessment in Health Care*, vol. 36, no. 6, pp. 569–578.

Coffey, V 2010, *Understanding Organisational Culture in the Construction Industry*, Routledge, London.

Cohen, J 1988, *Statistical Power Analysis for the Behavioral Sciences*, 2nd edn, Erlbaum, Hillsdale, NJ.

Cohen, J 1992, 'A Power Primer', *Psychological Bulletin*, vol. 112, no. 1, pp. 155–159.

Collins, NT 2009 *Economic Reform and Employment Relations in Vietnam*, Routledge.

Cone, C & Unni E 2020, 'Achieving Consensus Using a Modified Delphi Technique Embedded in Lewin's Change Management Model Designed to Improve Faculty Satisfaction in a Pharmacy School', *Research in Social and Administrative Pharmacy*, vol. 16, no. 12, pp. 1711-1717.

Corfield, JJ 2008, *The History of Vietnam*, Greenwood Press, Westport, CT.

Court, D & Abbas, R 2018, *Qualitative Research and Intercultural Understanding: Conducting Qualitative Research in Multicultural Settings*, Routledge, Abingdon, Oxon.

Cozby, PC & Bates, SC 2012 *Methods in Behavioral Research*, 11th Ed., McGraw-Hill, New York.

Creswell, JW 2014, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 4th edn, SAGE Publications, Thousand Oaks, CA.

Creswell, JW & Plano-Clark, VL 2007, *Designing and Conducting Mixed Methods Research*, SAGE Publications, Thousand Oaks, CA.

Creswell, JW & Plano-Clark, VL 2017, *Designing and Conducting Mixed Methods Research*, 3rd edn, SAGE Publications, Thousand Oaks, CA.

Criveanu, MM & Ivanescu, CR 2019, 'The Importance of Organisational Culture in IT Companies', *Analele Universității Constantin Brâncuși Din Târgu Jiu: Seria Economie*, no. 6, pp. 331–336.

Crosby, G 2020, *Planned Change; Why Kurt Lewin's Social Science is Still Best Practice for Business Results, Change Management, and Human Progress*, Productivity Press, Milton, UK.

Cummings, S, Bridgman, T & Brown KG 2016, 'Unfreezing Change as Three Steps: Rethinking Kurt Lewin's Legacy for Change Management', *Human Relations*, vol. 69, no. 1, pp. 33–60.

Dang, LTN 2017, 'Insights into Vietnamese Culture of Gender and Factors Hindering Academic Women's Advancement to Leadership Positions', *Discourses on Gender and Sexual Inequality*, vol. 23, pp. 19–47.

Daraei, M & Parsaamal, E 2012, 'An Investigation on Organizational Culture Effectiveness on Corporate Social Responsibility in Saypa Company', *Mudīrīyat-i dawlatī (Dānishgāh-i Tīhrān. Dānishkadeh-i Mudīrīyat)*, vol. 5, no.4, pp.101-120.

David, FR 2020, 'Analysis of Vision and Mission Statements Characteristics and their Association with Organizational Performance: A Guide to Writing Effective Vision and Mission Statements', *Applied Studies in Agribusiness and Commerce*, vol. 14, no. 1-2, pp. 87-95.

de Chernatony, L 2010, The Importance of Organisational Culture on Brands, In *From Brand Vision to Brand Evaluation*, Routledge, Milton Park, New York, pp. 168–202.

Deal, TE & Kennedy, AA 1982, *Corporate Cultures: The Rites and Rituals of Corporate Life*, Addison-Wesley Pub. Co., Reading, Mass.

Denison Consulting 2019, *The Denison Model: Diagnosing and Building Cultural Alignment*, Denison Consulting, Ann Arbor, MI, Viewed January 19 2020 <<https://www.denisonconsulting.com/contact-us/>>

Denison Consulting 2019, *Introduction to the Denison Model*, Denison Consulting, Ann Arbor, MI, Viewed January 19 2020 <<http://denisonconsulting.com/wp-content/uploads/2019/08/introduction-to-the-denison-model.pdf>>

Denison Consulting 2021, *Organizational Culture Surveys*, Denison Consulting, Ann Arbor, MI, Viewed 12 May 2023 <<https://denisonconsulting.com/culture-surveys/>>

Denison, DR 1984, 'Bringing Corporate Culture to the Bottom Line', *Organizational Dynamics*, vol. 13, no. 2, pp. 5–22.

Denison, DR 1990, *Corporate Culture and Organizational Effectiveness*, Wiley, New York.

Denison, DR, Haaland, S, & Goelzer, P 2004, 'Corporate culture and organizational effectiveness: Is Asia different from the rest of the world?', *Organizational Dynamics*, vol. 33, no. 1, pp. 98–109.

Denison, DR & Mishra, AK 1995, 'Toward a Theory of Organizational Culture and Effectiveness', *Organization Science*, vol. 6, no. 2, pp. 204–223.

Denison, DR & Neale, WS 1999, *Denison Organizational Culture Survey Facilitator Guide*, Denison Consulting, Ann Arbor, MI.

Denison, D, Nieminen, L & Kotrba, L 2014, 'Diagnosing Organizational Cultures: A Conceptual and Empirical Review of Culture Effectiveness Surveys', *European Journal of Work and Organizational Psychology*, vol. 23, no. 1, pp. 145–161.

Denscombe, M 2010, *The Good Research Guide for Small-scale Social Research Projects*, Open University Press, Berkshire, UK.

Diacanu, L & Maxim A 2015, 'The Importance of Organizational Culture for the Success of USA Low-cost Airlines', *SEA - Practical Application of Science*, vol. 3, no. 7, pp. 375–382.

Diamantopoulos, A & Siguaw, JA 2006, 'Formative Versus Reflective Indicators in Organizational Measure Development: A Comparison and Empirical Illustration', *British Journal of Management*, vol. 17, no. 4, pp. 263–282.

Dolan, C & Barrero Zalles, D 2021, *Transparency in ESG and the Circular Economy: Capturing Opportunities through Data*, 1st edn, New York, NY.

Duque-Grisales, E & Aguilera-Caracuel, J 2021, 'Environmental, Social and Governance (ESG) Scores and Financial Performance of Multilatinas: Moderating Effects of Geographic International Diversification and Financial Slack', *Journal of Business Ethics*, vol. 168, no. 2 pp. 315–334.

Durkheim, E 1893, 'The Division of Labor in Society', in S Lukes (ed.), *The Division of Labor in Society*, Free Press, New York.

Dutton, GE, Werner JS & Whitmore, JK 2012, 'Sources of Vietnamese Tradition', in G Dutton, J Werner & J Whitmore (eds), *Sources of Vietnamese Tradition*, Columbia University Press, New York.

Edwards, V & Phan, A 2013, *Managers and Management in Vietnam: 25 years of Economic Renovation (Doi Moi)*, Routledge, New York.

El Emary, IMM, Brzozowska, A & Bubel, D 2020, *Management of Organizational Culture As a Stabilizer of Changes: Organizational Culture Management Dilemmas*, Taylor & Francis Group, Milton park, Oxon.

Falk, FR & Miller, NB 1992, *A Primer for Soft Modelling*, The University of Akron Press, Akron, OH.

Fey, CF & Denison, DR 2003, 'Organizational Culture and Effectiveness: Can American Theory be Applied in Russia?', *Organization Science*, vol. 14, no. 6, pp. 686–706.

Firestone, S 2020, 'Importance of Organizational Culture to Crisis Leadership', in *Biblical Principles of Crisis Leadership*, Springer International Publishing, Switzerland, pp. 23–34.

Fornell, C & Larcker, DF 1981, 'Evaluating Structural Equation Models with Unobservable Variables and Measurement Error', *Journal of Marketing Research*, vo. 18, no. 1, pp. 39-50.

Freeman, M 2016, *Modes of Thinking for Qualitative Data Analysis*, Taylor & Francis Group, Walnut Creek, CA.

Frink, DD, Robinson, RK, Reithel, B, Arthur, MM, Ammeter, AP, Ferris, GR, Kaplan, DM & Morrisette, HS 2003, 'Gender Demography and Organization Performance: A Two-Study Investigation with Convergence', *Group & Organization Management*, vol. 28, no. 1, pp.127-147.

Geertz, C 1973, *The Interpretation of Cultures*, vol. 5019, Basic books.

General Statistics Office of Viet Nam 2021, '*Statistical Yearbook of Viet Nam*', Ministry of Planning and Investment, Hanoi, Vietnam.

George, AJT 2016. 'Research Ethics', *Medicine*, vol. 44, no. 10, pp. 615–618.

Giddings, LS & Grant, BM 2006, 'Mixed Methods Research for the Novice Researcher', *Contemporary Nurse: A Journal for the Australian Nursing Profession*, vol. 23, no. 1, pp. 3-11.

Gillespie, MA, Denison, DR, Haaland, S, Smerek, R, Neale, WS 2008, 'Linking Organizational Culture and Customer Satisfaction: Results from two Companies in Different Industries', *European Journal of Work and Organizational Psychology*, vol. 17, no. 1, pp. 112–132.

Gillespie, R 1993, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, 1st edn, Cambridge University Press, New York & Melbourne.

Grahovac, M & Pandrc, N 2018, 'The Importance of Organizational Culture and its Impact on the Integratedness of Public Administration', *Ekonomija: Teorija i Praksa*, vol. 11, no. 2, pp. 64–74.

Ha, NKG, Bui, NV & Tung, DD 2020, 'A Model of Organizational Culture for Enhancing Organizational Commitment in Telecom Industry: Evidence from Vietnam', *WSEAS Transactions on Business and Economics*, vol. 17, pp. 215–224.

Hair, JF, Hult, GTM, Ringle, CM & Sarstedt, M 2017, *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd edn, Sage, Thousand Oaks, CA.

Hair, JF, Page, MJ & Brunsveld, N 2020, *Essentials of Business Research Methods*, 4th edn, Routledge, New York.

Hair, JF, Sarstedt, M, Ringle, CM & Gudergan, SP 2018, *Advanced Issues in Partial Least Squares Structural Equation Modelling*, Sage, Thousand Oaks, CA.

Hair, JF, Ringle, CM & Sarstedt, M 2011, 'PLS-SEM: Indeed a Silver Bullet', *Journal of Marketing Theory and Practice*, vol. 19, no. 2, pp. 139-151.

Halachmi, A 2005, *Performance Measurement and Performance Management*, Emerald Publishing, Bradford, England.

Hall, CM & Pedace, R 2016, 'Do Managers Matter? Managers Effects on Organization Performance', *Managerial and Decision Economics*, vol. 37, no. 8, pp. 541-551.

Hamidi, Y, Mohammadibakhsh, R, Soltanian, A & Behzadifar, M 2017, 'Relationship Between Organizational Culture and Commitment of Employees in Health Care Centers in West of Iran', *Electronic Physician*, vol. 9, no. 1, pp. 3645-3652.

Han, JW, Nguyen, TTM, Hua, SM & Pham, TH 2023, 'Organizational Learning through Training Effectiveness: Evidence from the Hospitality Industry in Vietnam', *The Learning Organization*, vol. 30, no. 5, pp. 532-553.

Hartnell, CA, Ou, AY & Kinicki, A 2011, 'Organizational Culture and Organizational Effectiveness: A Meta-Analytic Investigation of the Competing Values Framework's Theoretical Suppositions', *Journal of Applied Psychology*, vol. 96, no. 4, pp. 677–694.

Hesse-Biber, SN 2014, *Mixed Methods Research: Merging Theory with Practice*, Guilford Publications, New York.

Highfield, C & Bisman, JE 2012, 'The Road Less Travelled: An Overview and Example of Constructivist Research in Accounting', *Australasian Accounting, Business & Finance Journal*, vol. 6, no. 5, pp. 3-22.

Hodges, J 2018, *Employee Engagement for Organizational Change: The Theory and Practice of Stakeholder Engagement*, Taylor & Francis Group, Milton Park, UK.

Hofstede, G 1980, *Culture's Consequences: International Differences in Work-Related Values*, Sage Publications, Beverley Hills, CA.

Hofstede Insights 2022, *Compare Countries*, Hofstede Insights, Helsinki, Finland, viewed 25 August 2022, < <https://www.hofstede-insights.com/fi/product/compare-countries/>>

Hofstede Insights 2023, *Compare Countries*, Hofstede Insights, Helsinki, Finland, viewed 12 May 2023, < <https://www.hofstede-insights.com/fi/product/compare-countries/>>

Hosseini, SAR 2014, 'Components of Organizational Culture based on Denison Model, *Kuwait Chapter of Arabian Journal of Business & Management Review*, vol. 3, no. 12a, pp. 31-42.

Hussain, SE, Lei, S, Akram, T, Haider, MJ, Hussain, SH & Ali, M 2018, 'Kurt Lewin's Change Model: A Critical Review of the Role of Leadership and Employee Involvement in Organizational Change', *Journal of Innovation & Knowledge*, no. 3, pp. 123–127.

Huynh, QL, Thi, TTN, Huynh, TK, Thi, TAD & Thi, TLL 2020, 'The Effects of Organizational Culture on Human Resource Management: A Study on Vietnamese Publicly Listed Enterprises', *Asian Economic and Financial Review*, vol. 10, no. 7, pp. 885-894.

Ivankova NV & Kawamura Y 2010, 'Emerging Trends in the Utilization of Integrated Designs in the Social, Behavioural, and Health Sciences', in A Tashakkori & C Teddlie (eds), *SAGE Handbook of Mixed Methods in Social & Behavioral Research*, 2nd edn, SAGE Publications, Thousand Oaks, CA, pp. 581–612.

James, K & Lahti, K 2011, 'Organizational Vision and System Influences on Employee Inspiration and Organizational Performance: Organizational Vision and System and Employee Inspiration', *Creativity and Innovation Management*, vol. 20, no. 2, pp. 108-120.

Jaques, E 1951, *The Changing Culture of a Factory*, Tavistock, London.

Jenkins, D 2012, *Measuring Performance: A Toolkit of Traditional and Alternative Methods*, Routledge, London, UK.

Jiménez, DS, Celis, PBM, Morales, DA & Tello, FC 2020, 'The Importance of the Climate and Organizational Culture for the Attention in Health Institutions', *Universidad y Sociedad (Cienfuegos)*, vol. 12, no. 1, pp. 53–60.

Jurcevic, M 2022, Importance of Organizational Culture and Quality Culture in Building an Integrated Management System, *Economic and Social Development: Book of Proceedings*, pp. 198–209.

Kalra, S 2015, 'The Global Economy and Macroeconomic Outlook', *Journal of Southeast Asian Economies*, vol. 32, no. 1, April, pp. 11–25.

Karakas, F 2010, 'Spirituality and Performance in Organizations: A Literature Review', *Journal of Business Ethics*, vol. 94, no. 1, pp. 89-106.

Karatepe, OM & Aga, M 2016, 'The Effects of Organization Mission Fulfillment and Perceived Organizational Support on Job Performance: The Mediating Role of Work Engagement', *International Journal of Bank Marketing*, vol. 34, no. 3, pp. 368–387.

Kia, S, Danaei, A & Oroei, M 2013, 'A Study on Relationship Between Knowledge Management and Organizational Culture Based on Denison Model: A Case Study of PVC Industry', *Management Science Letters*, vol. 3, no. 6, pp. 1571–1574.

Kieth, C 2012, *Catholic Vietnam a Church from Empire to Nation*, California University Press, Berkeley, CA.

Kirin, S, Gavric, G & Kirin, S 2019, 'Organizational Culture in Serbian Companies According to the Denison Model', *Scientific Review*, vol. 52, no. 1, pp. 97–108.

Kock, N 2019, *WarPLS User Manual: Version 6*, ScriptWarp Systems, Laredo, TX.

Kock, N & Hadaya, P 2018, 'Minimum Sample Size Estimation in PLS-SEM: The Inverse Square Root and Gamma-Exponential Methods', *Information Systems Journal*, vol. 28, no. 1, pp. 227–261.

Kokina, I & Ostrovska, I 2013, 'The Analysis of Organizational Culture with the Denison Model (The Case Study of Latvian Municipality)', *Eurasian Multidisciplinary Forum*, Oct., pp. 362–368.

Kotter, JP & Heskett, JL 1992, *Corporate Culture and Performance*, New York: Free Press.

Kourakos, M & Kafkia, T 2019, 'Organizational Culture: Its Importance for Healthcare Service Providers and Recipients', *Archeia Hellēnikēs Iatrikēs*, vol. 36, no. 3, pp. 312–319.

Kravitz, DA & Martin, B 1986, 'Ringelmann Rediscovered: The Original Article', *Journal of Personality and Social Psychology*, vol. 50, no. 5, pp. 936–941.

Kummerow, E & Kirby, N 2014, *Organisational Culture: Concept, Context, and Measurement*, World Scientific Publishing Co., Singapore.

Levasseur, RE 2001, 'People Skills: Change Management Tools – Lewin's Change model', *Inform Journal on Applied Analytics*, vol. 31, no. 4, pp. 71–73.

Lewin, K 1947, 'Frontiers in Group Dynamics: II. Channels of Group Life; Social Planning and Action Research', *Human Relations*, vol. 1, no. 2, pp. 143–153.

Linnenluecke, MK & Griffiths, A 2010, 'Corporate Sustainability and Organizational Culture', *Journal of World Business*, vol. 45, no. 4, pp. 357–366.

Liu, N & Littlewood, W 1997, 'Why Do Many Students Appear Reluctant to Participate in Classroom Learning Discourse?', *System (Linköping)*, vol. 25, no. 3, pp. 371–384.

Luoma-aho, V & Canel, MJ 2018, *Public Sector Communication: Closing Gaps Between Citizens and Public Organizations*, John Wiley & Sons, Newark. NJ.

Macedo, IM, Pinho, JC & Silva, AM 2016, 'Revisiting the Link Between Mission Statements and Organizational Performance in the Non-Profit Sector: The Mediating Effect of Organizational Commitment', *European management journal*, vol. 34, no. 1, pp. 36–46.

Mai, NK, Do, TT & Le TD 2023, 'Fostering Organisational High Performance through Leadership and Organisational Learning: Evidence from Tourism firms in Vietnam', *Journal of International Business and Entrepreneurship Development*, vol. 15, no. 1, pp. 137-159.

Mai, NK & Nguyen VQN 2015 'The Effects of Ethical Leadership and Organizational Culture towards Employees' Sociability and Commitment—A Study of Tourism Sector in Ho Chi Minh City, Vietnam', *Journal of Advanced Management Science*, vol. 3, no. 4, pp. 329–336.

McClave, JT & Sincich, T 2017, *Statistics*, 13th edn, Pearson, New York.

Miles, MB & Huberman, AM 1994, *Qualitative Data Analysis: A Sourcebook of New Methods*, Sage, Thousand Oaks, CA.

Moede, W 1927, 'Guide-lines of the Psychology of Performance', *Industrielle Psychotechnik*, vol. 4, pp. 193–209.

Mohammadi, S 2020, 'Organizational Culture and Its Impact of Organizational Productivity', *International Journal of Human Capital in Urban Management*, vol. 5, no. 3, pp. 267-276.

Molina, JF & Cameron, RA 2016, 'History and Emergent Practices of Multimethod and Mixed Methods Business Research' in S Hesse-Biber & R Johnson (eds), *The Oxford Handbook of Multimethod and Mixed Methods Research Inquiry*, Oxford University Press, New York, NY, pp. 466–485.

Moran, MB 2019, *Organizational Heartbeats: Engaging Employees in Sustainability by Leveraging Purpose and Curating Culture*, Taylor & Francis Group, Milton Park, UK.

Moslehpour, M, Pham, VK, Bilgiicli, I & Nguyen, HV 2016, 'Corporate Culture Differences between Taiwan and Vietnam', *Journal of Management and Strategy*, vol. 7, no. 1, pp. 81–89.

Mozaffari, N, Soltani, I & Bozorgzad, A 2012, 'Study of Organizational Culture of Departments of Education in Isfahan Province in Academic Year 2010-11 based on Denison Model', *International Journal of Business and Social Science*, vol. 3, no. 4, pp. 52–59.

Muldoon, J 2018a, 'Henry Ford and His Legacy: An American Prometheus', in B Bowden & A McMurray (eds), *The Palgrave Handbook of Management History*, Springer International Publishing, Palgrave Macmillan, Cham, Switzerland.

Muldoon, J 2018b, 'Taylor Made Management', in B Bowden & A McMurray (eds), *The Palgrave Handbook of Management History*, Springer International Publishing, Palgrave Macmillan, Cham, Switzerland.

Murray, G 2008, *Vietnam - Culture Smart!: The Essential Guide to Customs & Culture*, Rev. edn, Culture Smart, Kuperard, London

Nakagawa, S & Foster, TM 2004, 'The Case Against Retrospective Statistical Power Analyses with an Introduction to Power Analysis', *Acta Ethologica*, vol. 7, no. 2, pp. 103–108.

Nardi, PM 2018, *Doing Survey Research: A Guide to Quantitative Methods*, 4th edn, Taylor and Francis, London, UK.

Nazarian, A, Atkinson, P & Foroudi, P 2017, 'Influence of National Culture and Balanced Organizational Culture on the Hotel Industry's Performance', *International Journal of Hospitality Management*, vol. 63, pp. 22–32.

Nazir, NA & Lone, MA 2008, 'Validation of Denison's Model of Organisational Culture and Effectiveness in the Indian Context', *Vision – The Journal of Business Perspective*, vol. 12, no. 1, pp. 49–58.

Neely, AD 2002, *Business Performance Measurement Theory and Practice*, Cambridge University Press. Cambridge, UK.

Negi, PS, & Dangwal, RC 2019, 'Organisational Sustainability through Culture and Managerial Effectiveness: An Indian Perspective', *Journal of Entrepreneurship and Innovation in Emerging Economies*, vol. 5, no. 1, pp. 22–36.

Nguyen, DTN, Phan, M, Chovancová, M & Duc, HS 2023b, 'How Service Operations, Perceived Benefit, and Psychological Ownership Enhance Customer Retention in Retail – Evidence in Vietnam Supermarkets', *Cogent Business & Management*, vol. 10, no. 2, pp. 1-25.

Nguyen, DTN & Teo, STT 2018, 'HR Orientations and HR Department Effectiveness in Vietnam', *Personnel Review*, vol. 47, no. 5, pp. 1043-1061.

Nguyen, HD, Liu, Y, Hsu, P & Yu, S 2014, 'An Empirical Study of the Organizational Culture, Leadership and Firm Performance in a Vietnam Family Business', *International Journal of Organizational Innovation*, vol. 6, no. 4, pp. 109–121.

Nguyen, HM 2023 'The Family in Contemporary Vietnam' in J London (ed), *Routledge Handbook of Contemporary Vietnam*, Routledge, Milton Park, Oxon.

Nguyen, MH & Ngo, VM 2021, 'Employees' Psychological Capital, Burnout, and Quality of Work-Life in Vietnamese Enterprises: Moderating Effects of Individual and Organisational Characteristics', *Asian Academy of Management Journal*, vol. 26, no. 1, pp. 89-112.

Nguyen, NP, Wu, H, Evangelista, F & Nguyen, TNQ 2020a, 'The Effects of Organizational Mindfulness on Ethical Behaviour and Firm Performance: Empirical Evidence from Vietnam', *Asia Pacific Business Review*, vol. 26, no. 3, pp. 313-355.

Nguyen, OTK, Liu, LYJ, Haslam, J & McLaren, J 2023a, 'The Moderating Effect of Perceived Environmental Uncertainty and Task Uncertainty on The Relationship Between Performance Management System Practices and Organizational Performance: Evidence from Vietnam', *Production Planning & Control*, vol. 34, no. 5, pp. 423-441.

Nguyen, PDQ, Su, DN, Tran, PTK, Le, DTT & Johnson, LW 2020b, 'Factors Influencing Customer's Loyalty Towards Ride-hailing Taxi Services – A Case Study of Vietnam', *Transportation Research Part A*, vol. 134, pp. 96-112.

Nguyen, QTN 2016. 'The Vietnamese Values System: A Blend of Oriental, Western and Socialist Values', *International Education Studies*, vol. 9, no. 12, pp. 32–40.

Nguyen, TDN 2019, 'Experiences in Supply Chain Quality Management Practices in Vietnam: Studying on Steel Manufacturing Company A and Packaging Manufacturing Company B', *International Journal of Business and Management*, vol. 14, no. 7, pp. 171-184.

Nguyen, TQT 2015, 'The Influence of Traditional Beliefs on Vietnamese College Lecturer' Perception of Face', *Journal of Education Teaching*, vol. 41, no. 2, pp. 203-214.

Nguyen VH, Nguyen, ATH, Nguyen, TTH, Nguyen, HTT, Bui, HTT, Tran, PT, Nguyen, ALT, Bener, A 2018, 'Individual and Occupational Differences in Perceived Organisational Culture of a Central Hospital in Vietnam', *BioMed Research International*, vol. 2018, pp. 1–10.

Nguyen, VT, Siengthai, S, Swierczek, F & Bamel, UK 2019, 'The Effects of Organizational Culture and Commitment on Employee Innovation: Evidence from Vietnam's IT Industry', *Journal of Asia Business Studies*, vol. 13, no. 4, pp. 719-742.

Nukic, IS & Matotek, J 2014, 'Importance and Trends of Organizational Culture in Construction in Eastern Croatia', *Ekonomski Vjesnik*, vol. 27, no. 1, pp. 25–40.

Nunnally, JC 1978, *Psychometric Theory*, 2nd edn, McGraw Hill, New York.

Omazic, MA, Mihanovic, D & Sopta, A 2020, 'The Importance of Organizational Culture for Management of Changes in a Public Enterprise', *Advances in Business-Related Scientific Research Journal*, vol. 11, no. 1, pp. 1–22.

Owen, C 2017, *Ghosts in the Machine: Rethinking Learning Work and Culture in Air Traffic Control*, 1st edn, Taylor & Francis Group, Boca Raton, FL.

Panda, DK 2022, 'Impact of Organizational Culture on Strategic Planning', *Management Decision*, vol. 60, no. 5, pp. 1349–1368.

Pantelescu, AM & Maniu, LC 2015, 'The Importance of the Organizational Culture. Case Study: Assessing the Organizational Climate Factors inside a Four Stars Hotel from Romania',

International Journal of Academic Research in Business and Social Sciences, vol. 5, no. 9, pp. 303–309.

Parry, C & Healy, M 2000, 'Comprehensive Criteria to Judge the Validity and Reliability of Qualitative Research within a Realism Paradigm', *Qualitative Market Research: An International Journal*, vol. 3, no. 3, pp. 118–126.

Peters, TJ & Waterman, RH 1984, *In Search of Excellence: Lessons from America's Best-Run Companies*, Harper & Row, Sydney.

Peterson, MF 2009, 'Cross-Cultural Comparative Studies and Issues in International Research Collaboration', in D Buchanan & A Bryman (eds), *The Sage Handbook of Organizational Research Methods*, Sage Publications, London, UK, pp. 328–345.

Pettigrew, A 1979, 'On Studying Organizational Cultures', *Administrative Science Quarterly*, vol. 24, no. 4, pp. 570-581.

Pham, LT & Hoang, HV 2019, 'The Relationship Between Organisational Learning Capability and Business Performance: The Case of Vietnam Firms', *Journal of Economics and Development*, vol. 21, no. 2, pp. 259-269.

Phan, AT 2008, *Evaluation of Business and Management Training for Private Businesses in Ho Chi Minh City, Vietnam*, Buckinghamshire New University, UK

Porter, G & Beyerlein, MM 2000, 'Historic Roots of Team Theory and Practice' in M Beyerlein (ed), *Work Teams: Past, Present and Future*, 1st edn, Springer Science+Business Media Dordrecht, N.P.

Prowle, M, Kalar, M & Barrow, L 2016, 'New Development: Value for Money (VFM) in Public Services-The Importance of Organizational Culture', *Public Money & Management*, vol. 36, no. 7, pp. 547–552.

Quinn, R & Rohrbaugh, J 1981, 'A Competing Values Approach to Organizational Effectiveness', *Public Productivity Review*, vol. 5, no. 2, pp. 122–140.

Ralston, DA, Nguyen, VT & Napier, NK 1999, 'A Comparative Study of the Work Values of North and South Vietnamese Managers', *Journal of International Business Studies*, vol. 30, no. 4, pp. 655–672.

Ramage, M & Shipp, K 2009, 'Kurt Lewin' in, *Systems Thinkers*, Springer, London, UK.

Ravitch, SM & Riggan, M 2016, *Reason & Rigor: How Conceptual Frameworks Guide Research*, 2nd edn, Sage Publications, Los Angeles, CA.

Real, JC, Roldán, JL & Leal, A 2014, 'Entrepreneurial and Learning Orientation and Performance', *British Journal of Management*, vol. 25, no. 2, pp. 186-208.

Richard, PJ, Devinney, TM, Yip, GS & Johnson, G 2009, 'Measuring Organizational Performance: Towards Methodological Best Practice', *Journal of Management*, vol. 35, no. 3, pp. 718–804.

Robbins, SP & Coulter, MK 2018, *Management*, 14th edn, Pearson, New York, NY.

Robbins, SP, Judge, T, Edwards, M, Sandiford, P, Fitzgerald, M & Hunt, J 2020, *Organisational behaviour*, 9th edn, Pearson, Sydney, Australia.

Rogge, N, Agasisti, T & De Witte, K 2017, 'Big Data and The Measurement of Public Organizations' Performance and Efficiency: The State-of-the-Art', *Public Policy and Administration*, vol.32, no. 4, pp. 263-281

Ross, J 2011, 'Patient Safety Outcomes: The Importance of Understanding the Organizational Culture and Safety Climate', *Journal of Perianesthesia Nursing*, vol. 26, no. 5, pp. 347–348.

Rothwell, WJ, Imroz, SM & Bakhshandeh, B 2021, *Organization Development Interventions: Executing Effective Organizational Change*, Productivity Press, Milton, UK.

Rowley, C & Truong, Q 2009, 'Setting the Scene for The Changing Face of Management in Vietnam', in C Rowley & T Quang (eds), *The changing face of Vietnamese management*, Routledge, London.

Sackmann, SA 2021, *Culture in Organizations: Development, Impact and Culture-Mindful Leadership*, 1st edn, Springer International Publishing, Switzerland.

Salajeqe, S & Naderifar, A 2014, 'Investigating Characteristics of Organizational Culture', *International Journal of Industrial Engineering Computations*, vol. 4, no. 11, pp. 2427–2432.

Salt, B 2017, 'Vietnam Rising: Demographic and Economic Forces Building a Stronger Nation', Public lecture *KPMG RMIT Centre of Governance*, 07 October, RMIT University, Ho Chi Minh City, Vietnam.

Sarstedt, M, Hair, JF, Cheah, J, Becker, J & Ringle, CM 2019, 'How to Specify, Estimate, and Validate Higher-order Constructs in PLS-SEM', *Australasian Marketing Journal*, vol. 27, no. 3, pp. 197-211.

Saunders, MN, Lewis, P & Thornhill, A 2015, *Research Methods for Business Students*, 7th edn, Pearson Education, UK.

Sayma, M, Treharne, TL & Williams, HR 2016, 'Importance of Organizational Culture: A Model for Increased Engagement', *Journal of Multidisciplinary Healthcare*, vol. 9, no. 1, pp. 489–491.

Schein, EH 1981, 'Does Japanese Management Style Have a Message for American Managers?', *Sloan Management Review*, vol.23, no. 1, pp. 55-68.

Schein, EH 1990, 'Organizational Culture', *American Psychologist*, vol. 45, no. 2, pp. 109–119.

Schein, EH 1995, 'The Role of the Founder in Creating Organizational Culture', *Family Business Review*, vol. 8, no. 3, pp. 221–238.

Schein, EH 1996, 'Kurt Lewin's Change Theory in the Field and in the classroom: Notes toward a Model of Managed Learning', *Systems Practice*, vol. 9, no. 1, pp. 27–47.

Schein, EH & Schein, P 2017 '*Organizational Culture and Leadership*', 5th edn, Wiley, Hoboken, NJ.

Schindler, P 2021, *ISE EBook Online Access for Business Research Methods*, McGraw-Hill US Higher Ed ISE, New York.

Scimago Journal & Country Rank 2023, *Scimago Institutions Rankings*, Schimago Lab, viewed 31 March 2023, < <https://www.scimagojr.com/>>

Seale, C 1999, 'Quality in Qualitative Research', *Qualitative Inquiry*, vol. 5, no. 4, pp. 465-478.

Sindakis, S, Kitsios, F, Aggarwal, S, & Kamariotou, M 2022, 'Entrepreneurial Strategies and Family Firm Culture in The Arab World: A Systematic Literature Review', *Journal of Small Business and Enterprise Development*, vol. 29, no. 7, pp. 994–1016.

Singh, S, Darwish, TK & Potočnik, K 2016, 'Measuring Organizational Performance: A Case for Subjective Measures', *British Journal of Management*, vol. 27, no. 1, pp. 214–224.

Slåtten, T, Mutonyi, BR & Lien, G 2021, 'Does Organizational Vision Really Matter? An Empirical Examination of Factors Related to Organizational Vision Integration among Hospital Workers', *BMC Health Services Research*, vol. 21, no. 1, pp. 1-17, article 483.

Smith, PE, Yellowley, W & McLachlan, CJ 2020, *Organizational Behaviour: Managing People in Dynamic Organizations*, Routledge, London, UK.

Snyder, SD 2002, 'Vertically Integrated Projects and The Importance of Organisational Culture Amongst the Student Body', *The International Journal of Engineering Education*, vol. 18, no. 3, pp. 307–314.

Steer, L & Sen, K. 2010, 'Formal and Informal Institutions in a Transition Economy: The Case of Vietnam', *World Development*, vol. 38, no. 11, pp. 1603–1615.

Tafvelin, S, von Thiele Schwarz, U & Hasson, H 2017, 'In Agreement? Leader-team Perceptual Distance in Organizational Learning affects Work Performance', *Journal of Business Research*, vol. 75, pp. 1-7.

Taghi Alavi, M & Karami, A 2009, 'Managers of Small and Medium Enterprises: Mission Statement and Enhanced Organisational Performance', *The Journal of Management Development*, vol. 28, no. 6, pp. 555–562.

Taheri, M, Monshizadeh, M & Kordiani, HE 2015, 'The Relationship Between Organizational Culture and Organizational Success: A Case Study', *Management Science Letters*, Vol. 5, pp. 507-516.

Tangsgaard, ER 2021, 'How Do Public Service Professionals Behave in Risky Situations? The Importance of Organizational Culture', *American Review of Public Administration*, vol. 51, no. 7, pp. 492–508.

Tashakkori, A & Teddlie, C (eds) 2003, *Handbook of Mixed Methods in Social & Behavioral Research*, Sage, Thousand Oaks, CA.

Tashakkori, A & Teddlie, C (eds) 2016, *SAGE Handbook of Mixed Methods in Social & Behavioral Research*, 2nd edn., Sage, Thousand Oaks, CA.

Taylor, FW 1911, *The Principles of Scientific Management*, Harper & Brothers, New York, NY.

Teddlie, C & Tashakkori, A 2009, *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences*, SAGE, Los Angeles, CA.

The World Bank 2020, *The World Bank, The World Bank in Vietnam*, The World Bank, viewed 29 May 2020, <<https://www.worldbank.org/en/country/vietnam/overview>>

Triplett, N 1898, 'The Dynamogenic Factors in Pacemaking and Competition', *The American Journal of Psychology*, vol. 9, no. 4, pp. 507 - 533.

Trochim, WMK & Donnelly, JP 2008, *The Research Methods Knowledge Base*, 3rd edn, Cengage Learning, Mason, OH.

Trompenaars, F 1993, *Riding the waves of culture: Understanding Cultural Diversity in Business*, Brealey, London.

Trompenaars, F & Turner, CH 2012, *Managing Change Across Corporate Cultures*, 3rd. edn, Josse-Bass, USA.

Tuan, LT 2010, 'Organisational Culture, Leadership and Performance Management Integratedness', *International Journal of Management and Enterprise Development*, vol. 9, no. 3, pp. 251–275.

Tulcanaza-Prieto, AB, Aguilar- Rodríguez, IE & Artieda, C 2021, 'Organizational Culture and Corporate Performance in the Ecuadorian Environment', *Administrative Sciences*, vol. 11, no. 4, pp. 1-17, article 132.

Uhunoma, O, Lim, DH & Kim, W 2021, 'The Mediating Role of Informal Learning on Work Engagement: Older Workers in the US Public Sector', *European Journal of Training and Development*, vol. 45, no. 2/3, pp 200–217.

University of Southern Queensland 2022, *Human Research Ethics Procedure*, University of Southern Queensland, viewed 24 June 2022 <<https://policy.usq.edu.au/documents/181191PL>>

Vo, THY 2014, 'Cultural Differences: A Barrier to Native English Teachers in English as a Foreign Language Contexts', *VNU Journal of Foreign Studies*, vol. 30, no. 1, pp. 63-72.

Waggoner, DB, Neely, AD & Kennerley, MP 1999, 'The Forces that Shape Organisational Performance Measurement Systems: An Interdisciplinary Review', *International Journal of Production Economics*, vol. 60-61, pp. 53–60.

Wahyuningsih, SH, Sudiro, A, Troena, EA & Irawanto, SW 2019, 'Analysis of Organizational Culture with Denison's Model Approach for International Business Competitiveness', *Problems and Perspectives in Management*, vol. 17, no. 1, pp. 142-151.

Wickert, C & Risi, D 2019, *Corporate Social Responsibility*, Cambridge University Press, Cambridge, UK.

Wiles, R 2013, *What are Qualitative Research Ethics?*, Bloomsbury Publishing, London, UK.

Williams, P 2022, 'Organisational Culture: Definitions, Distinctions, and Functions', in C Newton & R Knight (eds), *Handbook of Research Methods for Organisational Culture*, Edward Elgar Publishing, Cheltenham, UK, pp. 5-22.

World Trade Press 2010, *Vietnam Society & Culture Complete Report: An All-Inclusive Profile Combining All of Our Society and Culture Reports*, World Trade Press, Petaluma, CA.

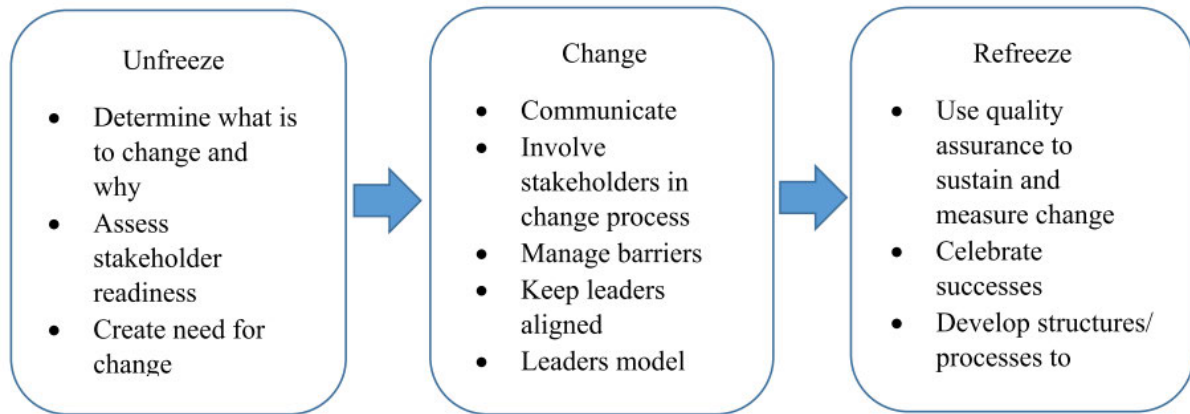
Zeng, Y, Jin, M, Guo, C & Zhang, Z 2015, 'Research on Evaluation of Enterprise Project Culture Based on Denison Model', *Journal of Industrial Engineering and Management*, vol. 8, no. 3, pp. 909 –927.

Zubko, SV & Karkovska, VY 2022, 'Organizational Culture and Its Importance in the Public Administration Sector', *Biznes Inform (Multilingual Edn)*, vol. 3, no. 530, pp. 113–119.

Zupan, N & Kaše, R 2010, Strategic Importance of Organizational Culture in the Context of Organizational Growth through Acquisitions: The Case of the Helios Group, In J Ulijn, G Duysters & E Meijer (eds), *Strategic Alliances, Mergers and Acquisitions*, Edward Elgar Publishing. Cheltenham, UK, pp. 150–183.

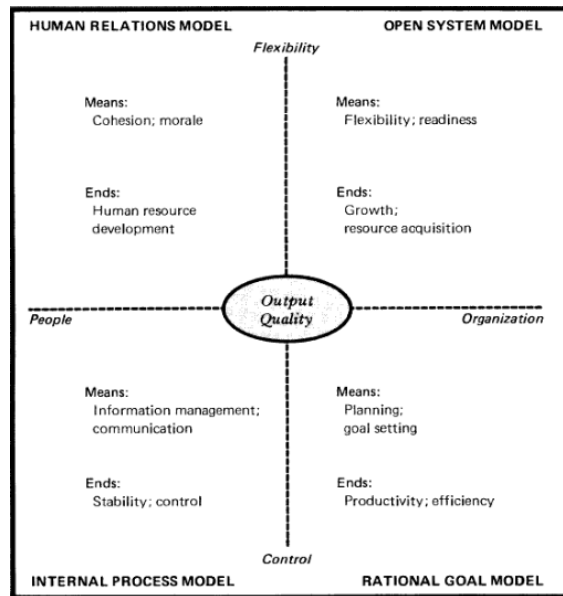
APPENDICES

Appendix A: Lewin's 3 step change model



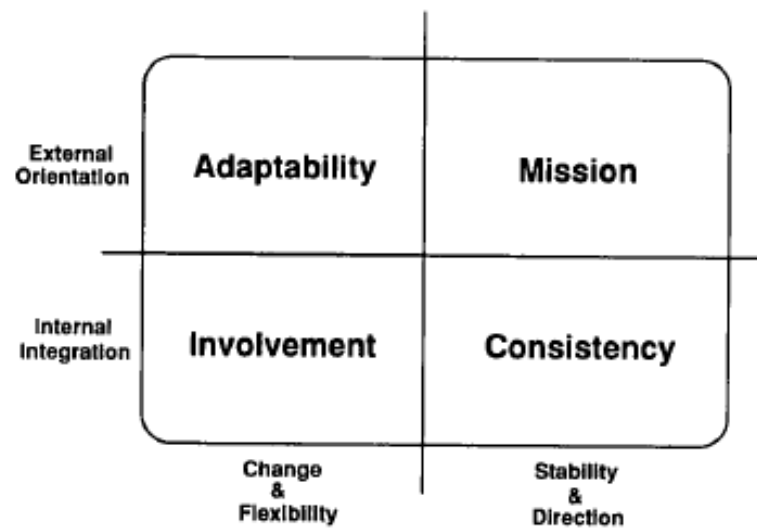
Source: Cone & Unni, p. 1713.

Appendix B: Competing Value Sets and Effectiveness Model



Source: Quinn & Rohrbaugh, 1981, p. 136.

Appendix C: Theoretical Model of Cultural Traits



Source: Denison & Mishra 1995, p. 216.

Appendix D: Research Worldviews

Paradigm (Worldview)			
Post positivism	Transformative	Constructivism	Pragmatism
<ul style="list-style-type: none"> - Determination - Reductionism - Empirical observation and measurement - Theory verification 	<ul style="list-style-type: none"> - Political - Power and Justice Orientated - Collaborative - Change oriented 	<ul style="list-style-type: none"> - Understanding - Multiple participant meanings - Social and historical construction - Theory generation 	<ul style="list-style-type: none"> - Consequences of actions - Problem centred - Pluralistic - Real world practice orientated

Source: Creswell 2014, p. 36.

Appendix E: Ethics approval

-----Original Message-----

From: human.ethics@usq.edu.au

Sent: Wednesday, 02 August 2023 05:04 AM

Subject: [RIMS] USQ HRE Amendment - H21REA013 (v2) - Expedited review outcome

- Approved

Dear Todd

The revisions outlined in your HRE Amendment have been deemed by the USQ Human Research Ethics Expedited Review process to meet the requirements of the National Statement on Ethical Conduct in Human Research (2007). Your project is now granted full ethical approval as follows.

USQ HREC ID: H21REA013 (v2)

Project title: Organisational Culture and Organisational Outcomes: An Inquiry into Vietnamese Organisations

Approval date: 02/08/2023

Expiry date: 25/06/2024

Project status: Approved with conditions.

The standard conditions of this approval are:

(a) conduct the project strictly in accordance with the proposal submitted and ethics approval, including any amendments made to the proposal required by the USQ HREC, or affiliated University ethical review processes;

(b) advise the USQ HREC (via human.ethics@usq.edu.au) immediately of any complaint or other issue in relation to the conduct of this project which may warrant review of the ethical approval of the project;

(c) make submission for ethical review and approval of any amendments or revision to the approved project prior to implementing any changes;

(d) complete and submit a milestone (progress) report as requested, and at least for every year of approval; and

(e) complete and submit a milestone (final) report when the project does not commence within the first 12 months of approval, is abandoned at any stage, or is completed (whichever is sooner).

Additional conditions of this approval are:

(a) Nil.

Failure to comply with the conditions of approval or the requirements of the National Statement on Ethical Conduct in Human Research (2007) may result in withdrawal of ethical approval for this project.

If you have any questions or concerns, please contact an Ethics Officer.

Kind regards

Human Research Ethics

University of Southern Queensland
Toowoomba – Queensland – 4350 – Australia
Email: human.ethics@usq.edu.au

This email (including any attached files) is confidential and is for the intended recipient(s) only. If you received this email by mistake, please, as a courtesy, tell the sender, then delete this email.

The views and opinions are the originator's and do not necessarily reflect those of the University of Southern Queensland. Although all reasonable precautions were taken to ensure that this email contained no viruses at the time it was sent we accept no liability for any losses arising from its receipt.

The University of Southern Queensland is a registered provider of education with the Australian Government.

(CRICOS Institution Code QLD 00244B / NSW 02225M, TEQSA PRV12081)

Appendix F: Questionnaire invitation letter



LETTER OF INVITATION TO PARTICIPATE IN A DBA RESEARCH PROJECT EXPLORING THE RELATIONSHIP BETWEEN ORGANISATIONAL CULTURE AND ORGANISATIONAL OUTCOMES IN VIETNAMESE ORGANISATIONS.

Project Title: Organisational Culture and Organisational Outcomes: An Inquiry into Vietnamese Organisations

My name is Todd William Rogers, and I am a Post Graduate Doctoral Candidate at the University of Southern Queensland, Australia.

I am conducting research on the relationship between organisational culture and organisational outcomes in Vietnamese organisations. This research will focus on how Vietnamese culture in particular compares with similar studies and the relationship to organisational outcomes. This research will form the basis of my thesis for fulfilment of a Doctor of Business Administration by Research (DBAR). I would like to extend an invitation to you to participate in this research.

If you decide to participate, you need to complete the survey provided. The survey will take about 15 minutes. The survey comprises 73 questions based on the Denison Model which focus on four main dimensions of organisational culture.

Agreeing to participate in this interview will imply consent. It is important to note that:

1. participation is voluntary, no pressure or expectations will be raised of participation
2. there are no consequences for non-participation or from withdrawing from the research
3. participation is anonymous
4. no personally identifying information will be gathered
5. data collected will be further reviewed to remove any items that might identify individuals
6. data will be secured stored and securely disposed of according to USQ guidelines and regulatory requirements

Participation in this research is completely voluntary and you may choose to withdraw from the research at any time or not answer questions that you do not feel comfortable answering.

The participant information sheet has also been attached to this email for additional information. Please feel free to contact me for further information at:

[REDACTED]

[REDACTED]

I look forward to your response.

Thanks, and best regards,

Todd Rogers

Appendix G: Participant information sheet – Questionnaire

	University of Southern Queensland Participant Information Sheet Questionnaire USQ HREC Approval number: H21REA013
---	--

Project Title

Organisational Culture and Organisational Outcomes: An Inquiry into Vietnamese Organisations

Research team contact details

Principal Investigator Details

Mr Todd Rogers



Supervisor details

Prof Tapan Sarker



Description

This project is being undertaken as part of the Doctor of Business Administration Research (DBAR) program through the University of Southern Queensland.

The purpose of this project is to provide insights into the connection between organisational culture and organisational outcomes in Vietnamese organisations. It is anticipated that the outcome of this research will allow for the extension and development of models to guide governance and management that will allow for effective development of organisational culture aimed specifically at improving organisational outcomes.

Participation

Your participation will involve completion of a survey that will take approximately 15 minutes of your time.

Questions will include (rated 1 to 5 on a Likert scale):

- Most employees in this organization are highly involved in their work.
- Working in this organization is like being part of a team.
- Our approach to doing business is very consistent and predictable.

Your participation in this project is entirely voluntary. If you do not wish to take part, you are not obliged to. If you do not wish to take part, you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage.

You will be unable to withdraw data collected about yourself after the data has been analysed.

If you do wish to withdraw from this project or withdraw data collected about yourself, please contact the Research Team (contact details at the top of this form).

Your decision whether you take part, do not take part, or take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland.

Expected benefits

It is expected that this project will not directly benefit you. However, it may benefit the understanding of how different dimensions of organizational behaviour contribute to organizational outcomes within the Vietnamese Commercial Banking Sector. This understanding will contribute to the development of a Vietnamese model that will provide recommendations that will directly contribute to the positive development of organizational culture that will drive improved outcomes in the Vietnamese Commercial Banking Sector.

Risks

In participating in the questionnaire, there are no anticipated risks beyond normal day-to-day living.

Privacy and confidentiality

All comments and responses are confidential unless required by law.

Research results will not include personally identifiable data collected in the survey. The research data can be reused in future projects and for different purposes and in such cases the participants' details will be non-identifiable.

Participants can access or request a summary of results of the survey by contacting the research team as per above contact details.

Any data collected as a part of this project will be stored securely, as per University of Southern Queensland's [Research Data and Primary Materials Management Procedure](#).

Consent to participate

Acceptance of the invitation to participate will act as an indication of you consent to participate in this research project.

Questions

Please refer to the Research team contact details at the top of the form to have any questions answered or to request further information about this project.

Concerns or complaints

If you have any concerns or complaints about the ethical conduct of the project, you may contact the University of Southern Queensland, Manager of Research Integrity and Ethics on +61 7 4631 1839 or email researchintegrity@usq.edu.au. The Manager of Research Integrity and Ethics is not connected with the research project and can address your concern in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this document for your information.

Appendix H: Interview invitation letter



LETTER OF INVITATION TO PARTICIPATE IN A DBA RESEARCH PROJECT EXPLORING THE RELATIONSHIP BETWEEN ORGANISATIONAL CULTURE AND ORGANISATIONAL OUTCOMES IN VIETNAMESE ORGANISATIONS.

Project Title: Organisational Culture and Organisational Outcomes: An Inquiry into Vietnamese Organisations

My name is Todd William Rogers, and I am a Post Graduate Doctoral Candidate at the University of Southern Queensland, Australia.

I am conducting research on the relationship between organizational culture and organizational outcomes in Vietnamese organisations. This research will focus on how Vietnamese culture in particular compares with similar studies and the relationship to organisational outcomes. This research will form the basis of my thesis for fulfilment of a Doctor of Business Administration by Research (DBAR). I would like to extend an invitation to you to participate in this research.

If you decide to participate, an interview would be arranged at a time of your convenience to be conducted online or face to face with myself. The interview would last about 20 minutes. During this interview, you will be asked approximately 6 open ended questions and follow up questions related to Vietnamese culture and organisational culture in Vietnam.

Agreeing to participate in this interview will imply consent. It is important to note that:

1. participation is voluntary, no pressure or expectations will be raised of participation
2. there are no consequences for non-participation or from withdrawing from the research
3. participation is anonymous
4. no personally identifying information will be gathered
5. data collected will be further reviewed to remove any items that might identify individuals
6. data will be secured stored and securely disposed of according to USQ guidelines and regulatory requirements

Participation in this research is completely voluntary and you may choose to withdraw from the research at any time or not answer questions that you do not feel comfortable answering.

The participant information sheet has also been attached to this email for additional information. Please feel free to contact me for further information at:

[REDACTED]

[REDACTED]

I look forward to your response.

Thanks, and best regards,

Todd Rogers

Appendix I: Interview Protocol Pack

Respondent number: ____ (To be filled in by the primary researcher)

INTERVIEW PROTOCOL PACK

PROJECT TITLE:

Organisational Culture and Organisational Performance: An inquiry into Vietnamese organisations

RESEARCH TEAM AND CONTACT DETAILS:

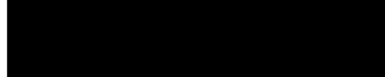
Principal Investigator Details

Mr Todd Rogers



Supervisor details

Prof Tapan Sarker



INSTRUCITONS:

The interview protocol pack is divided into three parts.

PART I: This is designed to give the reader context related to the dimensions of Vietnamese culture and the dimensions of organisational culture during the interview

PART II: These are demographic questions about the respondents. Please answer these questions before the interview and return to the primary researcher

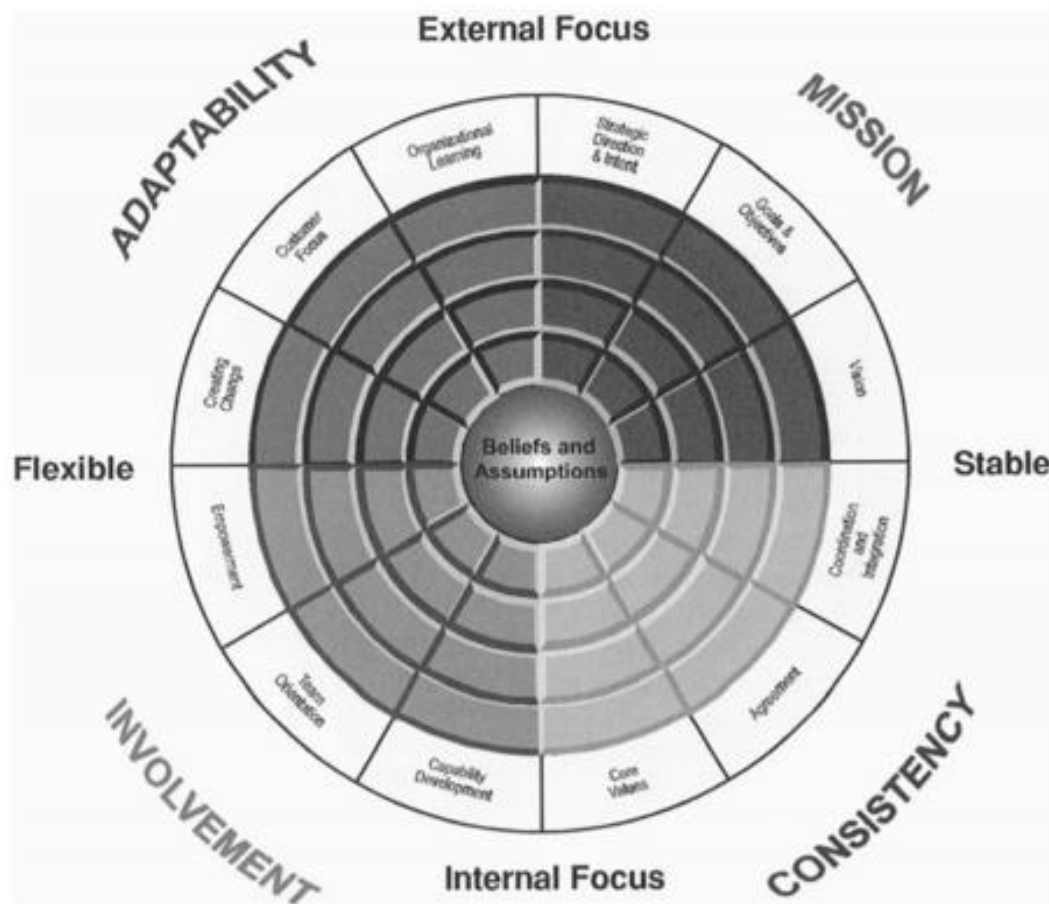
PART III: These are the questions that will be asked during the interview. Follow up questions will also be asked based on your responses to these questions. Please ask the primary researcher for any clarification that is required either prior to or during the interview

Respondent number: ____ (To be filled in by the primary researcher)

PART I:

Denison Model of Organisational Culture

INSTRUCTIONS: Please read about the Dimensions and Indexes of the Denison Model to ensure understanding of the questions and discussions with the primary researcher. Please ask the primary researcher for any clarification that is required either prior to or during the interview.



The Denison Model. (Source: Fey & Denison 2003, p. 689.)

Dimensions of the Denison Model

Involvement	(by employees in decisions and day to day tasks)
Consistency	(of organizational procedures)
Adaptability	(organizational change in response to customers and markets)
Mission	(a sense of direction and performance expectations)

Source: Denison & Neale 1999 p. 1-14.

Respondent number: ____ (To be filled in by the primary researcher)

Indexes of the Denison Model

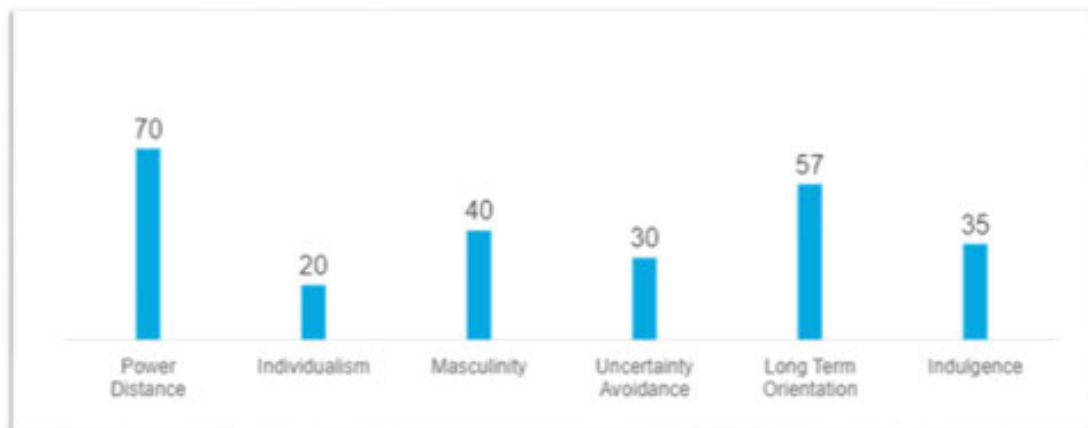
Empowerment	Individuals have the authority, initiative, and ability to manage their own work. This creates a sense of ownership and responsibility toward the organization.
Team Orientation	Value is placed on working cooperatively toward common goals for which all employees feel mutually accountable. The organization relies on team effort to get work done.
Capability Development	The organization continually invests in the development of employees' skills in order to stay competitive and meet ongoing business needs.
Coordination and Integration	Different functions and units of the organization are able to work together well to achieve common goals. Organizational boundaries do not interfere with getting work done.
Agreement	The organization is able to reach agreement on critical issues. This includes both the underlying level of agreement and the ability to reconcile differences when they occur.
Core Values	Members of the organization share a set of values which create a sense of identity and a clear set of expectations.
Creating Change	The organization is able to create adaptive ways to meet changing needs. It is able to read the business environment, quickly react to current trends, and anticipate future changes.
Customer Focus	The organization understands and reacts to their customer, and anticipates their future needs. It reflects the degree to which the organization is driven by a concern to satisfy their customer.
Organizational Learning	The organization receives, translates, and interprets signals from the environment into opportunities for encouraging innovation, gaining knowledge and developing capabilities.
Strategic Direction and Intent	Clear strategic intentions convey the organization's purpose and make it clear how everyone can contribute, and "make their mark" in the industry.
Goals and Objectives	A clear set of goals and objectives can be linked to the mission, vision, and strategy, and provide everyone with a clear direction in their work.
Vision	The organization has a shared view of a desired future state. It embodies core values and captures the hearts and minds of the organization's people, while providing guidance and direction.

Source: Denison & Neale 1999 pp. 2-10 – 2-15

Respondent number: ____ (To be filled in by the primary researcher)

Vietnamese Cultural Dimensions

INSTRUCTIONS: Please read about the Vietnamese Cultural Dimensions to ensure understanding of the questions and discussions with the primary researcher. Please ask the primary researcher for any clarification that is required either prior to or during the interview.



Vietnamese scores for Hofstede's cultural dimensions. (Source: Hofstede Insights, 2023)

POWER DISTANCE - 70

This dimension deals with the fact that all individuals in societies are not equal - it expresses the attitude of the culture towards these inequalities amongst us. Power Distance is defined as the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally.

Vietnam scores high on this dimension (score of 70) which means that people accept a hierarchical order in which everybody has a place and which needs no further justification. Hierarchy in an organisation is seen as reflecting inherent inequalities, centralization is popular, subordinates expect to be told what to do and the ideal boss is a benevolent autocrat. Challenges to the leadership are not well-received.

INDIVIDUALISM - 20

The fundamental issue addressed by this dimension is the degree of interdependence a society maintains among its members. It has to do with whether people's self-image is defined in terms of "I" or "We". In Individualist societies people are supposed to look after themselves and their direct family only. In Collectivist societies people belong to 'in groups' that take care of them in exchange for loyalty.

Vietnam, with a score of 20 is a collectivistic society. This is manifest in a close long-term commitment to the "member" group, be that a family, extended family or extended relationships. Loyalty in a collectivist culture is paramount and overrides most other societal rules and regulations. Such a society fosters strong relationships, where everyone takes responsibility for fellow members of their group. In collectivistic societies, offence leads to shame and loss of face. Employer/employee relationships are perceived in moral

Respondent number: ____ (To be filled in by the primary researcher)

terms (like a family link), hiring and promotion take account of the employee's in-group. Management is the management of groups.

MASCULINITY - 40

A high score (Masculine) on this dimension indicates that the society will be driven by competition, achievement and success, with success being defined by the winner / best in field - a value system that starts in school and continues throughout organisational life. A low score (Feminine) on the dimension means that the dominant values in society are caring for others and quality of life. A Feminine society is one where quality of life is the sign of success and standing out from the crowd is not admirable. The fundamental issue here is what motivates people, wanting to be the best (Masculine) or liking what you do (Feminine).

Vietnam scores 40 on this dimension and is thus considered a Feminine society. In Feminine countries the focus is on "working in order to live", managers strive for consensus, people value equality, solidarity and quality in their working lives. Conflicts are resolved by compromise and negotiation. Incentives such as free time and flexibility are favoured. Focus is on well-being, status is not shown. An effective manager is a supportive one, and decision making is achieved through involvement.

UNCERTAINTY AVOIDANCE - 30

The dimension Uncertainty Avoidance has to do with the way that a society deals with the fact that the future can never be known: should we try to control the future or just let it happen? This ambiguity brings with it anxiety and different cultures have learnt to deal with this anxiety in different ways. The extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these is reflected in the score on Uncertainty Avoidance.

Vietnam scores 30 on this dimension and thus has a low preference for avoiding uncertainty. Low UAI societies maintain a more relaxed attitude in which practice counts more than principles and deviance from the norm is more easily tolerated. In societies exhibiting low UAI, people believe there should be no more rules than are necessary and if they are ambiguous or do not work they should be abandoned or changed. Schedules are flexible, hard work is undertaken when necessary but not for its own sake, precision and punctuality do not come naturally, innovation is not seen as threatening.

LONG TERM ORIENTATION - 57

This dimension describes how every society has to maintain some links with its own past while dealing with the challenges of the present and future, and societies prioritise these two existential goals differently. Normative societies, which score low on this dimension, for example, prefer to maintain time-honoured traditions and norms while viewing societal change with suspicion. Those with a culture which scores high, on the other hand, take a more pragmatic approach: they encourage thrift and efforts in modern education as a way to prepare for the future.

Vietnam scores 57, making it a pragmatic culture. In societies with a pragmatic orientation, people believe that truth depends very much on situation, context and time. They show an ability to adapt traditions easily to changed conditions, a strong propensity to save and invest, thriftiness and perseverance in achieving results.

Respondent number: ____ (To be filled in by the primary researcher)

INDULGENCE - 35

One challenge that confronts humanity, now and in the past, is the degree to which small children are socialized. Without socialization we do not become "human". This dimension is defined as the extent to which people try to control their desires and impulses, based on the way they were raised. Relatively weak control is called "Indulgence" and relatively strong control is called "Restraint". Cultures can, therefore, be described as Indulgent or Restrained.

A low score of 35 on this dimension indicates that the culture of Vietnam is characterised as Restrained. Societies with a low score in this dimension have a tendency to cynicism and pessimism. Also, in contrast to Indulgent societies, Restrained societies do not put much emphasis on leisure time and control the gratification of their desires. People with this orientation have the perception that their actions are Restrained by social norms and feel that indulging themselves is somewhat wrong.

Source: Hofstede Insights 2023

Respondent number: ____ (To be filled in by the primary researcher)

PART II:

Demographic Questions:

INSTRUCTIONS: Please fill in the demographic questions prior to the interview and return to the primary researcher.

Please check (x) the response that applies to you in the box in the 'Answer' column.

Criterion	Response Choices	Answer
Age	18 - 24	<input type="checkbox"/>
	25 - 34	<input type="checkbox"/>
	35 - 44	<input type="checkbox"/>
	45 - 54	<input type="checkbox"/>
	55+	<input type="checkbox"/>
Gender	Male	<input type="checkbox"/>
	Female	<input type="checkbox"/>
	Prefer not to say	<input type="checkbox"/>
Level of employment	Senior Manager	<input type="checkbox"/>
	Manager	<input type="checkbox"/>
	Non manager	<input type="checkbox"/>
Years of work experience	0 - 5	<input type="checkbox"/>
	6 - 15	<input type="checkbox"/>
	16 - 25	<input type="checkbox"/>
	26 - 35	<input type="checkbox"/>
	More than 35	<input type="checkbox"/>
Work location	HCMC	<input type="checkbox"/>
	Hanoi	<input type="checkbox"/>

Respondent number: ____ (To be filled in by the primary researcher)

	Danang	<input type="checkbox"/>
	Other	<input type="checkbox"/>
Organisation Type	Foreign	<input type="checkbox"/>
	Vietnamese	<input type="checkbox"/>
Native Language	Vietnamese	<input type="checkbox"/>
	English	<input type="checkbox"/>
Industry type	Services	<input type="checkbox"/>
	Government	<input type="checkbox"/>
	Production	<input type="checkbox"/>
	Education	<input type="checkbox"/>
	Finance & Insurance	<input type="checkbox"/>
	Logistics	<input type="checkbox"/>
	Hospitality	<input type="checkbox"/>
	Healthcare	<input type="checkbox"/>
	Communications	<input type="checkbox"/>
	Administration	<input type="checkbox"/>
	Professional	<input type="checkbox"/>
	Entertainment	<input type="checkbox"/>
	Real estate	<input type="checkbox"/>

Respondent number: ____ (To be filled in by the primary researcher)

PART III: Interview Questions:

INSTRUCTIONS: Below are the questions that the primary researcher will ask during the interview. These questions will be accompanied by follow up questions that are related to the answers that you provide.

Please peruse the question prior to the interview and ask for any clarifications before commencement of the interview.

Q1. How would you describe the organizational culture in your current organization?

Q2. In your opinion, what are some benefits of having a strong organizational culture?

Q3. What are the effects of the organizational culture on organizational performance in your current organization? Specifically, could you please discuss the effects of the following aspects on organizational performance: (Q3.1) Mission; (Q3.2) Capability development; (Q3.3) Customer focus; and (Q3.4) Goals and objectives.

Q4. How would you describe the impact of the Vietnamese cultural characteristics, such as individualism, power distance, uncertainty avoidance, and masculinity, on the culture of your organisation?

Q5. In your opinion, what are the similarities and differences in terms of the contribution of national culture to organizational culture between Vietnam and other countries?

Q6. Is there something we have not asked you that we should?

Appendix J: Interview consent form

	University of Southern Queensland Consent form Interview
USQ HREC Approval number: H21REA013	

Project Title

Organisational Culture and Organisational Outcomes: An Inquiry into Vietnamese Organisations

Research team contact details

Principal Investigator Details

Mr Todd Rogers



Supervisor details

Prof Tapan Sarker



Statement of consent

By signing below, you are indicating that you:

- Have read and understood the information document regarding this project. ☐ Yes / ☐ No
- Have had any questions answered to your satisfaction. ☐ Yes / ☐ No
- Understand that if you have any additional questions, you can contact the research team. ☐ Yes / ☐ No
- Are over 18 years of age. ☐ Yes / ☐ No
- Understand that any data collected may be used in future research activities. ☐ Yes / ☐ No
- Agree to participate in the project. ☐ Yes / ☐ No

Name (first & last)			
Signature		Date	

Please return this document to a research team member before undertaking the interview. |

Appendix K: Demographic questions (Quantitative and qualitative)

Criterion	Response Choices
Age	18 - 24
	25 - 34
	35 - 44
	45 - 54
	55+
	Nonresponse
Gender	Male
	Female
	Prefer not to say
	Nonresponse
Level of employment	Senior Manager
	Manager
	Non manager
	Nonresponse
Years of work experience	0 - 5
	6 - 15
	16 - 25
	26 - 35
	More than 35
	Nonresponse
	HCMC

Criterion	Response Choices
Work location	Hanoi
	Danang
	Other
	Nonresponse
Organisation Type	Foreign
	Vietnamese
	Nonresponse
Native Language	Vietnamese
	English
	Nonresponse
Industry type	Services
	Government
	Production
	Education
	Finance & Insurance
	Logistics
	Hospitality
	Healthcare
	Communications
	Administration
	Professional
	Entertainment

Criterion	Response Choices
	Real estate
	Nonresponse

Appendix L: Denison Organizational Culture Survey (DOCS) items

Involvement

The survey items that comprise the *Empowerment* index are:

- Most employees in this organization are highly involved in their work.
- Decisions in this organization are usually made at the level where the best information is available.
- Information is widely shared in this organization so that everyone can get the information s/he needs when it is needed.
- Everyone in this organization believes that s/he can have a positive impact.
- Business planning in our organization is ongoing and involves everyone in the process to some degree.

The survey items that comprise the *Team Orientation* index are:

- Cooperation and collaboration across functional roles are actively encouraged in this organization.
- Working in this organization is like being part of a team.
- Work is sensibly organized in this organization so that each person can see the relationship between his/her work and the goals of the organization.
- Teams are the primary building block of this organization.
- This organization relies on horizontal control and coordination to get work done, rather than hierarchy.

The survey items that comprise the *Capability Development* index are:

- This organization delegates authority so that people can act on their own.
- - The capability of the people in this organization is viewed as an important source of competitive advantage.
- This organization continuously invests in the skills of its employees.
- The "bench strength" of this organization is constantly improving.
- Problems often arise in my organization because we do not have the skills necessary to do the job.

Consistency

The survey items that comprise the *Coordination and Integration* index are:

- Our approach to doing business is very consistent and predictable.
- There is good alignment of goals across levels of this organization.
- People from different organizational units still share a common perspective.
- It is easy to coordinate projects across functional units in this organization.
- Working with someone from another part of this organization is like working with someone from a different company.

The survey items that comprise the *Agreement* index are:

- When disagreements occur, we work hard to achieve "win-win" solutions.
- This organization has a strong culture.
- There is clear agreement about the right way and the wrong way to do things in this organization.
- It is easy for us to reach consensus, even on difficult issues.
- We often have trouble reaching agreement on key issues.

The survey items that comprise the *Core Values* index are:

- There is a clear and consistent set of values in this company that governs the way we do business.
- This company has a characteristic management style and a distinct set of management practices.
- The managers in this company "practice what they preach."
- This organization has an ethical code that guides our behavior and tells us right from wrong.
- Ignoring the core values of this organization will get you in trouble.

Adaptability

The survey items that comprise the *Creating Change* index are:

- This organization is very responsive and changes easily.

- This organization responds well to competitors and other changes in the external business environment.
- This organization continually adopts new and improved ways to do work.
- Attempts to change this organization usually meet with resistance.
- Different units in this organization often cooperate to create change.

The survey items that comprise the *Customer Focus* index are:

- Customer comments and recommendations often lead to changes in this organization.
- Customer input directly influences our decisions.
- All members of this organization have a deep understanding of customer wants and needs.
- We encourage direct contact with customers by members of the organization.
- The interests of the final customer often are ignored in our decisions.

The survey items that comprise the *Organizational Learning* index are:

- This organization encourages innovation and rewards those who take risks.
- We view failure as an opportunity for learning and improvement.
- Lots of things "fall between the cracks" in this organization.
- Learning is an important objective in our day-to-day work.
- We make certain that the "right hand knows what the left is doing."

Mission

The survey items that comprise the *Strategic Direction* and Intent index are:

- This organization has a clear mission that gives meaning and direction to our work.
- This organization has a long-term purpose and direction.
- The strategic direction of this organization is unclear to me.
- This organization has a clear strategy for the future.
- Our organization's strategy is leading other firms to change the ways that they compete.

The survey items that comprise the *Goals and Objectives* index are:

- There is widespread agreement about the goals of this organization.

- The leaders of this organization set goals that are ambitious, but realistic.
- The leadership of this organization has "gone on record" about the objectives we are trying to meet.
- We continuously track our progress against our stated goals.
- The people in this organization understand what needs to be done for us to succeed in the long run.

The survey items that compromise the *Vision* index are:

- We have a shared vision of what this organization will be like in the future.
- The leaders in this organization have a long-term orientation.
- Short-term thinking often compromises long-term vision.
- Our vision creates excitement and motivation for our employees.
- We are able to meet short-term demand without compromising our long-term vision.

Source: Denison & Neale 1999, pp. 2-8 – 2-15.

Appendix M: Questionnaire performance questions

Comparing the performance of your organization with others in the industry, how would you assess your company performance in the following areas? Please mark one response per item.

	0	1	2	3	4	5
	Don't know	Low performer		Average		High performer
Sales Growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Profitability/ROI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of Products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employee Satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall Organizational Performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Source: Adapted from Denison & Mishra 1995.

1 Appendix N: Raw DOCS data (Cleaned and coded)

	DOCS Survey Items																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
(n = 123)	SD11	SD12	SD13	SD14	SD15	G01	G02	G03	G04	G05	V1	V2	V3	V4	V5	C11	C12	C13	C14	C15	A1	A2	A3	A4	A5	CV1	CV2	CV3	CV4	CV5	CD1	CD2	CD3	CD4	CD5	TD1	TD2	TD3	TD4	TD5	E1	E2	E3	E4	E5	CC1	CC2	CC3	CC4	CC5	CI1	CI2	CI3	CI4	CI5	O11	O12	O13	O14	O15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
1	5	5	5	5	5	5	5	4	5	5	5	5	3	4	4	5	5	4	4	4	4	5	5	5	5	4	4	4	5	4	4	5	5	3	5	3	5	4	5	4	4	5	4	4	3	5	5	4	4	4	4	5	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	

[illegible]

	DOCS Survey Items																																																																		
(n = 123)	SD11	SD12	SD13	SD14	SD15	G01	G02	G03	G04	G05	V1	V2	V3	V4	V5	C11	C12	C13	C14	C15	A1	A2	A3	A4	A5	CX1	CX2	CX3	CX4	CX5	CD1	CD2	CD3	CD4	CD5	TD1	TD2	TD3	TD4	TD5	E1	E2	E3	E4	E5	CC1	CC2	CC3	CC4	CC5	CE1	CE2	CE3	CE4	CE5	OL1	OL2	OL3	OL4	OL5							
56	3	3	5	1	1	4	4	4	4	4	4	1	1	5	1	1	1	1	4	5	4	3	1	1	4	1	4	1	1	1	5	5	1	1	3	1	5	5	5	5	1	1	1	1	3	4	4	4	2	4	4	4	5	5	1	1	3	4	4	5	4	5					
57	4	4	5	4	3	4	4	5	4	4	4	5	4	2	4	5	4	4	1	3	3	4	3	4	3	3	3	3	4	5	2	3	4	3	5	4	4	1	1	5	3	4	4	4	4	4	3	4	5	4	4	4	5	5	4	4	5	4	5								
58	5	5	5	5	1	5	4	4	3	4	4	3	4	2	3	2	2	5	4	5	1	5	4	5	4	4	2	3	5	5	3	5	4	5	3	1	5	5	5	5	4	5	5	4	5	4	2	5	5	4	5	5	3	5	3	4	4	4	4	4							
59	4	1	1	2	3	3	1	1	4	4	4	4	1	3	1	1	1	3	4	3	3	3	4	2	2	3	3	1	4	5	2	4	1	1	5	3	2	1	1	4	4	5	4	3	1	1	1	4	1	1	3	1	1	1	4	4	4	4	4								
60	4	5	2	5	5	4	4	2	2	4	3	5	4	1	3	5	4	3	4	4	2	5	5	3	2	4	2	4	2	3	3	3	4	2	2	4	4	5	3	4	4	2	3	4	4	2	5	4	4	4	4	3	4	3	4	2	3	4	4	4							
61	5	5	5	5	4	5	5	5	5	5	5	4	5	2	4	4	5	5	5	4	3	4	4	5	5	2	4	5	5	5	4	5	5	4	3	5	4	5	5	5	5	5	5	5	5	5	2	5	5	4	5	5	5	5	2	5	4	4	4	4							
62	4	4	2	4	4	4	4	4	4	4	4	4	4	2	4	4	4	4	4	2	4	4	4	4	4	2	4	4	4	4	4	4	4	2	4	4	5	4	4	3	3	4	4	4	4	4	4	4	4	4	4	4	2	4	4	2	4	4	4	4	4						
63	4	4	2	4	4	4	4	4	4	4	4	4	4	2	4	4	3	3	4	4	2	4	3	4	3	3	4	3	4	3	4	4	3	3	4	4	4	3	4	4	5	5	5	3	4	3	2	4	4	4	4	4	4	2	4	3	2	4	4	4	4	4					
64	5	5	1	5	5	5	4	5	5	5	5	5	5	1	5	5	5	5	5	4	5	5	5	5	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	3	4	5	5	4	2	4	5	5	1	5	5	5	5	5						
65	4	5	4	5	3	4	3	4	4	5	4	4	1	4	3	3	4	4	4	2	4	5	4	3	4	4	5	4	5	4	4	3	4	5	2	5	4	4	4	3	4	3	4	5	4	3	4	4	3	4	4	3	2	4	4	3	5	2	4	4	4	4	4				
66	2	5	2	4	3	5	3	5	4	3	4	3	1	5	4	4	4	2	3	1	3	2	3	4	1	5	5	5	5	4	5	3	3	2	3	5	5	2	3	1	3	4	5	5	5	2	3	4	2	3	4	4	3	1	5	3	4	4	1	3	4	4					
67	3	4	3	3	2	4	3	3	5	3	3	4	3	4	5	3	5	4	3	1	3	3	3	2	1	4	3	5	3	4	4	3	3	2	4	4	4	3	3	2	4	5	5	4	4	4	3	3	3	3	3	4	3	4	2	4	3	4	4	4	4						
68	5	5	4	5	3	5	5	5	4	5	5	5	3	5	4	4	4	5	5	5	5	4	5	5	4	3	3	3	3	2	5	5	3	3	5	5	5	5	4	5	5	5	5	5	4	4	3	5	3	3	5	3	3	5	5	3	5	5	5	5	5						
69	3	5	4	5	4	3	2	3	3	3	4	5	1	3	5	3	2	4	3	2	3	2	3	2	1	2	3	5	4	4	4	5	2	2	3	5	4	5	4	5	4	5	4	4	3	3	5	5	1	3	5	5	4	5	3	2	3	1	3	4	4	4					
70	1	2	5	1	4	1	1	1	1	5	1	1	5	1	3	2	5	5	5	1	1	4	2	5	2	1	3	2	4	3	3	3	3	3	3	3	3	4	3	3	3	3	3	4	2	3	4	4	4	1	3	4	2	2	1	5	2	4	4	4	4						
71	3	3	1	4	5	4	3	4	5	3	5	5	3	3	5	3	3	4	5	2	4	3	3	4	3	5	4	5	3	2	4	5	2	4	2	5	4	4	3	3	4	4	4	5	4	5	5	4	3	3	3	2	2	3	2	5	5	4	5	5	5	5	5				
72	4	4	4	5	4	5	4	5	4	5	5	5	2	3	3	4	5	4	5	3	3	5	4	4	4	5	5	5	5	3	4	5	5	1	5	3	4	5	2	5	5	5	5	4	3	4	5	4	5	2	2	4	3	3	5	5	2	4	5	4	4	4					
73	5	4	4	5	2	5	3	4	5	4	3	4	1	3	5	4	3	5	3	4	5	4	5	4	5	5	3	4	5	4	5	3	5	4	1	5	5	3	5	3	5	4	5	3	3	4	5	5	5	4	5	4	5	3	4	5	2	5	5	5	5	5					
74	4	5	4	5	4	5	4	5	5	5	4	5	4	4	4	3	4	3	3	1	4	5	3	5	4	5	4	5	4	2	3	4	5	3	1	5	5	4	5	3	5	4	4	5	3	5	4	3	5	4	5	4	5	2	4	4	2	4	5	4	4						
75	3	4	1	5	3	4	5	3	5	3	4	5	1	4	3	5	4	4	5	3	3	5	3	5	4	3	4	5	4	5	5	4	5	5	3	3	4	5	3	4	4	5	4	5	4	5	3	5	1	5	4	3	5	3	1	3	5	1	5	5	5	5	5				
76	4	3	2	5	4	5	3	5	4	5	3	4	1	4	3	4	5	5	5	1	5	4	5	4	4	3	5	5	4	5	3	5	4	5	2	5	5	4	4	5	5	5	4	4	3	5	4	3	3	5	4	3	5	4	3	5	4	1	3	4	4	4					
77	2	3	3	4	3	1	3	5	4	4	3	4	2	4	5	3	3	3	4	2	4	3	5	4	2	4	4	4	4	4	2	4	2	2	3	4	4	4	4	4	3	3	5	4	4	1	2	2	3	4	3	3	5	4	3	3	2	4	3	4	4	4					
78	5	4	1	3	5	4	4	4	4	5	3	4	1	5	4	3	4	3	5	1	4	5	3	5	3	3	5	4	4	3	3	3	3	5	3	4	5	4	3	4	5	4	3	5	2	2	3	1	4	5	3	5	3	2	3	4	1	5	4	4	4	4					
79	5	4	3	5	5	4	5	4	4	5	3	5	2	5	3	4	5	4	3	1	3	4	5	3	2	3	4	4	5	4	4	3	4	5	3	5	4	5	3	5	4	5	4	5	4	3	4	5	2	3	3	3	3	4	2	4	4	1	5	4	4	4	4				
80	3	5	1	3	3	4	4	5	4	5	4	4	2	3	4	4	4	3	4	3	3	4	5	5	2	3	5	4	3	4	3	4	5	4	1	3	4	3	4	5	5	4	3	4	3	4	5	4	1	4	4	5	3	1	4	4	2	4	5	4	4	4	4	4			
81	3	3	2	3	5	3	5	4	5	4	5	5	2	5	4	4	5	5	3	3	3	4	4	4	5	5	4	4	5	4	4	4	4	5	1	5	4	5	4	4	5	5	4	5	4	4	5	3	3	4	3	5	4	5	1	4	4	2	4	5	4	4	4	4	4		
82	4	4	3	5	3	4	5	5	4	5	3	3	2	5	5	5	4	5	3	2	5	4	3	4	1	4	4	4	5	5	5	4	5	3	2	3	3	4	2	5	5	4	3	2	3	3	4	2	4	5	5	4	5	3	5	5	2	5	5	5	5	5	5	5	5		
83	3	4	5	4	3	4	1	3	4	1	3	4	5	4	3	1	3	1	3	5	1	3	4	4	2	3	1	4	3	4	3	4	1	4	5	4	3	1	4	5	4	1	4	1	4	1	1	4	3	5	4	3	4	1	4	2	1	4	3	1	4	4	4	4	4		
84	3	1	2	3	3	4	1	3	1	4	3	1	2	3	4	4	3	4	1	3	4	3	1	3	5	4	1	3	4	3	3	1	4	3	2	3	4	1	3	4	1	3	4	1	1	4	3	5	4	3	1	4	3	2	4	3	2	1	4	4	4	4	4	4	4	4	4

	DOCS Survey Items																																																													
(n = 123)	SD11	SD12	SD13	SD14	SD15	GO1	GO2	GO3	GO4	GO5	V1	V2	V3	V4	V5	C11	C12	C13	C14	C15	A1	A2	A3	A4	A5	CX1	CX2	CX3	CX4	CX5	CD1	CD2	CD3	CD4	CD5	TO1	TO2	TO3	TO4	TO5	E1	E2	E3	E4	E5	CC1	CC2	CC3	CC4	CC5	CI1	CI2	CI3	CI4	CI5	OI1	OI2	OI3	OI4	OI5		
85	3	5	3	5	4	5	3	3	5	4	5	4	2	4	5	2	5	3	2	5	3	4	4	5	3	3	4	5	3	3	4	5	3	1	3	5	4	3	3	4	3	4	3	4	5	5	3	4	5	3	5	3	5	4	1	3	5	2	5	4	5	4
86	4	3	3	5	4	4	3	4	4	5	5	3	5	3	4	4	3	5	4	4	2	4	5	4	5	2	4	5	4	5	5	5	5	1	4	5	1	4	5	3	4	5	3	3	4	5	3	3	4	2	3	5	1	4	5	1	4	5	4	5		
87	5	4	1	4	5	4	5	4	5	5	3	3	5	2	5	3	4	5	5	4	2	5	5	4	2	5	3	3	3	3	5	4	5	4	3	3	5	5	4	3	3	4	3	3	4	5	3	4	5	5	4	3	4	5	2	5	4	5	4			
88	4	5	2	5	4	5	3	3	4	4	5	4	1	4	4	4	5	4	5	2	5	5	5	5	2	5	5	5	5	4	5	5	2	4	5	2	4	5	2	4	5	5	4	1	5	4	1	5	4	1	5	4	5	4	5	4						
89	4	3	2	3	3	5	4	5	4	5	4	5	1	5	4	4	5	4	5	3	3	4	5	4	2	5	4	5	4	4	5	5	2	5	2	4	5	4	5	5	5	5	5	4	5	5	2	5	5	1	4	5	1	4	5	4	5					
90	5	4	2	5	5	4	4	5	4	5	3	3	2	4	4	4	5	4	5	2	4	5	4	5	2	5	5	4	5	5	4	3	3	3	3	3	4	4	5	3	3	5	4	3	5	2	3	3	5	4	4	1	4	3	2	5	4					
91	2	4	1	4	5	5	5	4	5	4	4	4	1	5	4	3	4	5	4	4	4	3	4	4	3	2	4	2	4	3	4	5	5	5	3	5	3	3	4	4	4	5	3	3	4	5	3	5	5	3	5	3	5	3	4	3						
92	5	4	1	5	4	4	5	3	4	4	5	5	2	4	4	4	3	5	4	1	3	4	5	5	1	5	4	5	5	4	4	5	5	4	1	5	4	4	5	4	3	3	5	1	4	5	4	5	4	3	4	5	2	5	4							
93	3	3	1	5	2	2	3	4	3	3	4	3	2	3	4	5	4	5	4	1	5	5	5	3	5	2	3	4	4	4	4	5	5	5	1	4	2	3	5	5	3	5	5	4	4	4	5	4	1	5	4	1	4	4	3	5	4	4	5	3		
94	3	4	1	4	5	5	3	5	5	4	4	5	1	4	5	4	5	4	4	3	4	5	3	4	2	3	5	3	4	5	5	5	3	4	1	3	4	5	4	4	3	4	5	4	3	5	5	1	5	3	4	5	3	5	4	5	3	5	4			
95	5	4	1	3	3	4	5	4	3	4	5	4	2	5	4	3	4	4	5	1	4	5	4	5	3	4	5	5	4	5	5	5	4	4	1	3	3	4	4	3	3	4	2	3	4	5	4	3	4	4	5	5	1	5	5	2	5	4				
96	5	3	2	5	3	5	5	3	4	5	5	4	1	5	5	3	4	5	5	3	3	4	5	5	1	4	5	4	5	4	4	4	3	3	3	5	4	4	3	4	3	5	5	4	5	5	5	2	5	5	4	5	1	5	5	1	3	5				
97	5	5	2	5	4	5	4	5	5	4	4	5	1	4	4	5	5	4	5	3	4	5	3	2	3	2	3	3	4	5	5	3	4	5	3	3	4	5	4	3	3	5	5	5	5	3	5	1	4	5	4	5	5	2	5	5	2	4	5			
98	4	5	2	5	4	3	4	5	5	5	5	5	2	5	4	4	4	5	5	2	3	4	5	4	1	3	4	3	3	5	3	5	4	5	1	4	4	5	4	5	5	4	4	3	5	3	3	3	3	5	5	1	4	5	3	4	3					
99	5	4	1	4	3	4	3	4	5	4	3	4	1	5	5	3	4	4	4	5	5	4	3	5	1	5	4	5	4	5	5	5	4	2	5	4	5	4	5	5	5	5	5	4	4	4	2	4	5	5	4	5	2	3	3	1	4	3				
100	5	4	1	5	4	3	3	3	4	3	4	3	2	3	4	5	4	4	3	2	5	4	3	4	1	3	4	5	4	5	3	4	3	4	1	4	4	5	4	3	3	3	3	4	3	4	3	3	2	5	4	3	4	5	1	4	3	1	4	4		
101	3	4	2	4	5	3	3	4	5	5	3	5	2	5	5	5	5	4	4	2	3	4	4	5	1	3	4	5	5	4	4	5	3	4	1	5	5	3	3	4	5	5	3	4	4	3	4	5	1	4	4	4	3	4	3	4	5	2	3	5		
102	3	3	2	4	3	3	4	4	5	4	4	4	2	3	3	5	4	3	4	1	3	4	5	4	1	3	3	3	4	5	4	4	4	2	3	3	3	4	4	4	4	4	5	3	4	5	3	2	5	4	4	4	1	5	5	1	4	3				
103	4	5	1	4	3	4	3	5	4	3	3	4	1	4	4	2	3	2	4	4	4	4	5	4	4	5	5	5	3	5	4	4	5	4	1	5	4	5	4	4	5	4	4	3	4	4	5	4	1	4	3	3	4	1	4	4	2	5	4			
104	3	5	2	5	4	3	4	5	3	4	4	5	3	4	5	3	5	5	4	3	3	5	4	3	1	2	2	3	3	4	3	5	4	4	2	3	5	4	5	4	5	4	4	3	2	2	5	4	2	4	3	3	4	2	3	5	1	3	4			
105	5	3	4	3	2	4	3	3	4	4	3	4	1	4	4	5	4	3	4	1	3	3	2	3	2	5	5	4	5	5	3	3	5	4	3	3	3	4	5	5	3	3	5	5	4	4	3	3	3	4	5	4	3	2	4	5	2	4	4			
106	3	2	2	3	4	3	4	4	4	3	3	4	2	3	2	3	4	4	4	4	4	4	3	3	2	3	4	3	4	5	3	2	3	3	4	3	4	2	2	2	3	3	4	4	3	4	4	3	5	4	4	5	4	1	3	3	2	3	4			
107	3	3	2	5	5	5	5	4	5	4	4	5	1	5	5	3	3	4	4	3	4	4	4	1	3	4	3	4	5	4	4	4	4	1	5	4	5	4	5	5	5	4	5	5	4	3	4	4	2	4	3	3	4	5	2	3	3	2	4	5		
108	2	4	2	5	4	3	4	4	4	4	2	4	3	4	5	3	3	4	4	3	5	5	4	5	1	4	4	4	4	5	3	4	4	5	1	3	4	3	5	5	4	5	4	5	3	4	3	1	4	5	5	5	4	1	4	5	2	4	2			
109	3	4	1	4	4	4	5	3	5	4	4	5	1	4	4	3	4	5	4	2	3	3	4	4	1	3	5	4	5	4	3	4	5	4	1	5	4	3	4	5	5	5	4	4	3	4	5	2	4	3	3	4	5	1	4	4	1	4	5			
110	4	3	2	5	4	4	5	4	3	3	4	5	2	5	3	3	4	5	3	2	5	4	4	3	3	4	4	5	5	3	4	5	4	3	2	3	5	4	3	4	2	5	4	3	4	3	4	3	2	4	3	4	3	5	2	3	4	1	5	4		
111	5	4	3	5	5	3	4	4	4	3	4	4	1	5	5	4	4	5	5	2	4	5	5	4	2	5	5	4	5	4	3	4	5	3	4	5	3	3	2	2	5	3	5	5	4	3	4	5	2	5	4	4	3	4	3	5	3	2	5	3		
112	2	3	2	5	3	3	3	4	4	5	3	3	1	5	4	5	5	4	3	3	5	5	4	3	3	5	5	4	3	3	4	3	4	2	5	4	4	3	3	3	3	3	3	5	5	4	5	4	2	3	4	5	4	4	1	3	4	3	4	5		
113	5	4	2	3	3	4	5	5	5	4	5	5	2	1	3	4	5	5	2	3	3	3	3	4	2	4	5	5	3	3	1	3	3	2	3	5	4	5	3	4	5	4	5	3	4	3	5	1	4	2	4	5	5	2	3	5	2	4	3			

[illegible]

3 Appendix O: Raw performance survey questions data (Cleaned and coded)

	Performance Survey Items				
(n)	PER1	PER2	PER3	PER4	PER5
1	5	5	5	5	5
2	4	3	4	4	3
3	4	4	4	4	4
4	3	3	5	3	3
5	4	4	5	2	4
6	5	5	5	5	5
7	3	3	5	3	4
8	3	3	4	4	4
9	3	5	5	4	3
10	3	4	4	5	4
11	5	5	5	5	5
12	4	4	5	3	3
13	0	0	5	4	0
14	3	4	4	4	4
15	4	4	4	4	4
16	3	3	3	3	3
17	1	1	3	3	3
18	0	1	3	3	1
19	3	3	3	3	3
20	5	5	5	3	3
21	3	0	0	3	0
22	4	4	4	4	4
23	5	3	5	5	4
24	4	4	5	4	4

	Performance Survey Items				
(n)	PER1	PER2	PER3	PER4	PER5
25	3	0	3	0	0
26	3	3	4	3	4
27	5	5	5	5	5
28	4	4	4	3	3
29	3	5	5	3	3
30	3	3	3	3	3
31	4	4	5	5	4
32	3	3	3	3	3
33	5	5	5	4	5
34	3	3	3	3	3
35	5	5	3	3	5
36	4	4	2	1	3
37	0	0	0	0	0
38	3	3	3	3	3
39	0	3	3	3	5
40	5	5	5	5	5
41	3	3	2	3	3
42	3	3	3	3	3
43	3	3	3	3	3
44	3	4	4	3	4
45	5	5	5	3	3
46	3	4	5	3	2
47	3	4	3	0	5
48	0	0	0	5	4

	Performance Survey Items				
(n)	PER1	PER2	PER3	PER4	PER5
49	4	4	4	3	4
50	4	5	5	5	4
51	5	5	5	5	5
52	4	4	3	3	3
53	4	4	5	3	5
54	2	2	3	3	3
55	2	2	3	3	3
56	3	4	2	5	3
57	4	0	4	4	0
58	5	3	3	3	3
59	1	5	2	0	3
60	0	0	3	1	3
61	5	4	4	5	5
62	3	3	3	3	3
63	3	3	3	3	3
64	3	3	4	4	4
65	5	5	5	5	5
66	3	1	3	3	3
67	5	5	1	3	3
68	3	3	5	5	3
69	5	3	1	1	3
70	0	0	0	0	0
71	0	3	5	5	5
72	3	3	5	5	5
73	3	3	5	5	3
74	5	3	5	5	5

	Performance Survey Items				
(n)	PER1	PER2	PER3	PER4	PER5
75	5	3	3	5	3
76	5	3	4	5	5
77	3	3	3	4	4
78	5	3	3	3	3
79	3	5	5	5	5
80	5	3	3	3	3
81	5	5	5	3	5
82	5	3	5	5	3
83	3	1	3	3	3
84	3	1	3	3	3
85	3	3	3	3	3
86	3	5	5	5	5
87	5	5	3	5	5
88	5	5	5	3	5
89	5	5	5	5	5
90	3	3	5	5	3
91	3	3	3	3	3
92	3	3	5	3	3
93	3	3	5	5	3
94	5	5	5	5	5
95	5	5	3	5	5
96	3	5	5	5	5
97	5	5	5	5	5
98	5	3	5	5	5
99	5	5	5	5	5
100	3	3	5	3	3

	Performance Survey Items				
(n)	PER1	PER2	PER3	PER4	PER5
101	3	5	5	5	5
102	5	5	5	3	5
103	3	5	3	5	5
104	3	5	5	5	5
105	3	5	3	3	3
106	3	1	3	3	3
107	3	3	5	5	5
108	3	5	5	3	5
109	5	5	5	5	5
110	3	3	5	3	5
111	3	3	3	5	3
112	3	3	5	3	3

	Performance Survey Items				
(n)	PER1	PER2	PER3	PER4	PER5
113	3	3	5	5	3
114	5	3	5	5	5
115	5	3	5	5	5
116	3	5	3	3	3
117	5	5	3	3	3
118	5	5	5	5	5
119	4	4	4	4	4
120	5	5	5	4	5
121	0	0	4	4	4
122	4	4	3	3	3
123	4	1	4	1	3

4