# 'A strategic analysis of the performance

# of the telephone banking channel'

by

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To the best of my knowledge and except where otherwise indicated, this paper is entirely original. None of the material contained herein has previously been submitted in part or in whole for any degree at any university.

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30 September 2003

# ABSTRACT

The telephone-banking channel, delivered through call centres, has become an integral part of the distribution mix of retail financial institutions. To get the greatest competitive advantage from this channel, the strategic orientation, structural and behavioural aspects of the call centre must be aligned with its operational-service and sales-performance objectives.

Unfortunately, while considerable managerial effort is expended developing call centres, often their performance results remain uncertain or uncommunicated. There are indications also that financial institutions should not underestimate active market orientation benefits; innovative, strategic-thinking and progressive structures; flexible, empathic leadership, and, valuing supportive human resource strategies.

Our survey of Australian deposit-taking institutions investigates the extent to which strategic and behavioural aspects are aligned with its operational-service and sales-performance objectives. Specifically, managerial approaches to IT development, competitive positioning, leadership delegation, market research attitudes and product orientation were considered. Approaches to trust, conflict, morale and reward, and, key performance indicator (KPI) choices were sought also.

Results show sales performance is positively related to more externally focussed strategic orientations. Reinforcing the importance of innovative human resource practices, performance is also related positively to psychosocial climate in general and employee reward and morale, in particular. This extension of management theory urges financial service leaders to actively contemplate one of its most important resources, people. Further, the survey itself indicated that while the majority of institutions continue to use operationally based key performance indicators, such as minimum call duration, the ability of the call centre to generate sales revenue is also being recognised.

In summary, given the size and potential of the telephone-banking channel, this research encourages further, urgent exploration of strategic relationships among the channel, its market, performance measures and comprehensive people-centred HR strategies aimed at developing high employee trust, and satisfaction.

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# CHAPTER ONE: INTRODUCTION

## 1.1 Introduction

Since the late 1970s the Australian retail financial services industry has undergone substantial change largely as a result of the deregulation process undertaken by successive Federal governments. Deregulation has centred on the easing of prudential control over banks, the removal of direct controls such as interest rate restrictions and a lowering of barriers to entry. The consequence of such change was a dramatic shift in the competitive environment. Lower barriers to entry have brought about the licensing of 16 foreign banks, entry of non-traditional financial service providers and the granting of banking licences to a number of larger building societies. This has led to far greater service flexibility and innovation in product pricing and development.

Australian banking, therefore, now operates in a competitive and highly dynamic environment characterised by deregulation, differentiated products, complex client needs and a continual search for service innovation. These changes have led to major re-orientations in strategic thinking matched by considerable investment in new technologies.[1]

Structurally, the consequence of dramatic industry changes and severe competition has seen the creation of new process methodologies, the development of new delivery methods and the formation of strategic alliances. In particular, organisational structures have needed to change to locate and drive increased efficiency. For example, traditional branch processing functions have been centralised as a significant cost-saving exercise.

Moreover, in addition to changes to existing activities there have been widespread changes in client service delivery methods. Factors such as the high cost of face-to-face service and the development of increasingly sophisticated technology have ensured that telephone-banking has become an important banking channel (Dunleavy, 1995). As a

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[1] It is useful to offer a definition for 'strategy' – '…a comprehensive and consistent pattern of decisions and actions actually made to gain sustainable competitive advantage…' Perry, et. al. (1992).

consequence there have also been major changes in management practices and in particular to human resource (HR) practices.

The financial institutions (FI) telephone-banking delivery channel commenced in Australia approximately twelve years ago. Then, it was a relatively low key, service-oriented delivery channel, primarily answering inbound calls to reduce costs and maximise internal efficiencies.[2] Currently, FI call centres most often comprise two major client contact modes. The first mode is automatic call service delivery where client calls are actioned by a non-human telephone 'interactive voice response unit' (IVRU). The second is human service interactions delivered by a person commonly known as a client service representative (CSR).

The phenomenal growth of call centres indicates that they have gained industry acceptance and are now arguably thought of as strategic assets requiring significant financial, technological, and human resource allocations. Unfortunately, call centres do not always appear to have attracted the degree of senior management attention that is commensurate with their revenue-earning potential.

Only a few studies have been carried out on call centre performance and their emphasis has been on operational and service delivery aspects with revenue expectations mostly absent from key performance management considerations (Waterhouse, 1998). Moreover, a Price Waterhouse study (1997) found that less than 50% of all call centres reported key results to senior management.

Further, only approximately half of all call centres achieved their key performance indicators (KPIs).[3] Yet, paradoxically, a startling 90% of the survey respondents thought that they met senior management expectations.

The paper's overarching hypothesis is that the Australian FI telephone-banking channel

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[2] In this paper the terms 'telephone banking' and 'call centres' as a client delivery channel are used inter-changeably.

[3] In the case of FI telemarketing endeavours, it was shown that some firms have an underdeveloped or unsophisticated approach to telephone banking performance measures (Dunleavy, 1995).

places more emphasis on operational, cost management rather than sales-driven, innovative, diversified or market-orientated initiatives. Put another way, for a variety of behavioural and circumstantial reasons and in terms of the measurement comments above, it is suspected that service performance aspects have tended to overshadow the channels' sales potential (Waterhouse, 1998).

As strategy involves management discernment, orientation to the market and structural reactions to competitive pressures, consequent delivery choices can differ markedly. It is suspected that, as opposed to channel specific product development, outbound calling and pro-active sales processes including telemarketing, FIs have continued to manage the channel as an inbound, service-focussed operation. Conversely, the research will seek to confirm that those FIs that have appreciated their potential as a more integrated, revenue channel have attained improved consequential performance.

It is suspected from the literature and anecdotal feedback that older, inward-looking and micro-involved ways of managing have impeded performance. Primarily then, the paper is interested in the performance implications of strategic, structural and behavioural aspects of the telephone-banking channel. From this we derive an overarching research question:

> *What is the relationship between telephone-banking organisational characteristics (strategic orientation, leader style, climate and structure) and performance*

This study then considers strategic, structural and behavioural aspects of the channel as related to performance. It proposes the inherent risk that ill-suited or structurally embedded management may result in less than effective performance-attaining behaviours. The paper also seeks to develop an understanding of the use of performance indicators within delivery channels.

This chapter introduces the research topic – an investigation of the strategic, structural and management behavioural orientations that influence FI telephone-banking channel performance. In Section 1.1 an overview of the Australian telephone-banking channel is presented. The limitations of prior studies are presented in Section 1.2. Section 1.3 discusses the justifications for research and comments on the lack of general management

theory and specific theory on financial service delivery channels. In Section 1.4 the contributions of the research are discussed. Section 1.5 presents the intended research methodology. Section 1.6 outlines the research's limitations. Section 1.7 concludes this Chapter.

## 1.2    Limitations of prior research

From general management theory, Prahalad and Hamel (1994) proposed that management be forced to abandon traditional strategic action. This is due to the challenges of 'fundamental structural transitions' in industries brought about by the onset of deregulation, global competition and emergent client expectations. Furthermore, academics are 're-examining (the) concepts of tools and strategy…' and contemplating the need to include other contextual factors into research.

Similarly, management is faced with ongoing challenges to link research and industry practice if, as Porter and McKibbin (1988, p. 170) suggested, the 'impact of research by management academics upon management practices is virtually' nil. Such issues and re-orientations have clear implications for banking innovation.

Not unreasonably, FIs have sought to graft the telephone delivery channel onto existing retail operations, which are undergoing significant change. Consequently, in some respects it may be that telephone banking has inherited the limitations of existing service and product choices. This is evidenced by the decision of some FIs to retain a cost-based operational approach to channel management at the expense of revenue initiatives and could be a case of 'process reinforced by (existing) structure' (Kanter, 1983, p. 41).

Unfortunately, few Australian studies to date have examined electronic channel service delivery and banking call centres in particular; viz. Waterhouse (1998) and Dunleavy (1995). Similarly in the United States, Evenson, Harker and Frei (1998) identified a lack of telephone banking channel research. Hence, as yet, no one has considered fully the channel's strategic orientation to the marketplace nor proposed a line of inquiry that integrates the perceptual, financial, and behavioural implications of strategic and structural choices. A further concern is that what little work that has been done at the

retail channel level has been limited largely to service delivery efficiency and consequently has paid almost no attention to revenue generation. This is notwithstanding the profitability demands of senior managers and shareholders (Evenson, Harker and Frei, 1998; Wallis Committee, 1997[4]).

## 1.3    Justification for research

It has been asserted already that telephone-banking is an emergent yet relatively unexplored area of study. This is notwithstanding that it is faced with considerable challenges re-orientating it away from being purely a service delivery channel towards sales processes.

In particular, little appears to be known about the consequences of re-allocation of human, built environments and technological resources needed to build successful sales functionality in the telephone-banking environment. It may be that such endeavours have varying impact on performance levels, and in some instances could be counter-productive to client satisfaction and profitability expectations (Harker, Hitt, and Frei, 1999).

Harker, Hitt and Frei (1999) argued that the alignment of FI technology, HR and investments with an appropriate amount of product technology is a key strategy for effectiveness. They also argued that leaders are needed who can successfully integrate such key strategic factors into their operations.

In sum, therefore, this research has identified a need to examine the potential relatedness of strategic, behavioural and IT variables in the successful telephone-banking channel. This study aims to develop an integrated framework to understand both the service and sales dimensions of channel performance. It is motivated by a number of inter-related needs that are yet to be understood fully in a financial services context.

The research addresses lack of theory, at the retail FI delivery channel level, in relation to the strategic and structural determinants of performance. Further, the study aims to

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[4] Financial System Inquiry (Wallis Committee) (1997). *Final Report*. Canberra*:* AGPS.

integrate behavioural considerations by focusing on internal, channel-climatic conditions and management choice as they relate to decision-making. As a consequence of introducing behavioural (leadership) and climatic issues, this study aims to extend theory on organisational structure into the delivery channel unit of analysis. Then reflecting the dual service and sales nature of telephone banking, the research considers the channel's technological orientation. Thus, it examines those aspects that support automatic call-answering and self-service endeavours, as opposed to those that support the channel's revenue potential through human call intervention and the generation of sales leads and referrals. Finally, the research examines the nature and extent of the channel's performance goals, termed 'key performance indicators' and their co-relatedness to performance.

## 1.4    Contributions of this research

There is a dearth of knowledge about the nature and alignment of channel goals and operationalising FI strategy. The dissertation fills this gap by assessing theoretical and practical issues related to performance. In this way it urges re-consideration of market and psychosocial perceptions that may or may not be related to performance success (Worthington, 1999). Moreover, it adds depth to the largely unexplored area of performance measurement in the telephone-banking channel. In summary, the dissertation makes two important contributions to the literature. The first is more theoretical in nature and the other seeks to assist industry practices.

The first offers a better understanding of organisational theory especially strategy, structure, climate and leadership in this retail FI channel. The second determines relationships among executives' perceptions of strategic and psychosocial behaviours and IT and key measurement choices to performance.

The paper finds no evidence of a significant relationship between market scanning, as a proxy for structural choice, and leadership decision-making and performance. Therefore, it sounds a warning to management to consider carefully the full cost/benefit implications before embarkation on such activities.

## 1.5 Methodology

The research consists of an empirical study of Australian retail banks, building societies and credit unions, which operate a telephone-banking delivery channel. The questionnaire distributed to these FIs comprised various existing instruments. Designed primarily on nominal scales, they measure strategic orientation, structure, climate, leadership decision-making preference and control, and, information technology (IT). Additionally, to add depth to our understanding of the innovative orientation of the channel, the survey obtained details of the extent of current and future channel product offerings. Then, the type and nature of key performance indicators were obtained.

The collection of primary survey data enables multiple channel performance indicators for the financial year ended 30 June 1999 to be linked to the hypothesised covariates of performance. Spearman's Correlation Coefficient was the primary data analysis test used to examine relationships. Finally, as the data was cross-sectional in nature, no conclusions in relation to causal links among various performance drivers were made.

## 1.6 Limitations

The research is limited to all banks, building societies and largest credit unions[5] as a representative sample of the entire retail bank industry. Consequently, it did not seek to include smaller credit unions nor the prospective plans of these or other emergent financial service providers contemplating such delivery methods.

Methodology aspects, such as the limited sample size, the deliberate selection of only two performance measures from a range of realistic, industry-based choices or the cross-sectional nature of the data, may have affected the work. While Burton and Obel's (1998) work represented a well researched synthesis of notable, general management theorists[6], in the telephone banking channel not all these aggregate measures appear to produce

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[5] The largest 50 credit unions as determined by Net Assets ($M) from Financial Institutions Survey (1999). KPMG.

[6] Including Miller and Droge (1986), Child (1972), Kotter, (1988, 1990) Mann, Indik and Vroom (1973), and Mintzberg (1980).

sufficient differentiation of managerial preferences nor behaviours and hence may not be as useful for analysis at the channel level.

Aside from quantitative channel performance measures, channel executive management self-perceptions were used widely, due to the behavioural nature of the research. While such processes inevitably raise concerns in relation to a potential response bias, this has been mitigated by selecting constructs that have been empirically tested and are well recorded in the management literature, and by ensuring the anonymity and confidentiality of respondents' data.

## 1.7 Overview of the paper

The foregoing sections introduced the significant challenges and the lack of supporting theory at the channel level. In sum, there is a lack of theory at the retail FI delivery channel level in relation to the strategic, structural and behavioural determinants of performance. Beyond this chapter, the paper comprises five other chapters.

Chapter 2 briefly reviews the key competitive and industry factors facing contemporary banking. The chapter introduces and describes the devolution of retail FI delivery with particular emphasis on the call centre environment in Australia.

Chapter 3 consists of a literature review. Firstly, it considers selected general strategic theory. Secondly, various channel performance drivers are examined, including strategic orientation, structural focus, leadership control preferences, climatic conditions, belief and behaviours and IT expenditure. Finally, the measurement of performance in the telephone banking delivery channel is discussed.

Chapter 4 develops the paper's hypotheses and proposes a simple research model. Further, the chapter explains the research design and methodology, various constructs and the choices made to operationalise each variable.

Chapter 5 presents the survey results and discusses the findings derived from the survey. Moreover, the chapter draws a number of conclusions, notes various research limitations

and makes some suggestions for further research.

Finally, Chapter 6 summarises and discusses the research findings as they relate to strategic orientation, organisational climate and KPI choices. It also canvasses implications for banking leaders, discusses research limitations and presents areas for future research.

# CHAPTER TWO: RECENT DEVELOPMENTS IN THE AUSTRALIAN FINANCIAL SYSTEM

## 2.1 Introduction

Banking plays a critical role in the progress of commerce, and in global and national economic development, as a means of facilitating and augmenting the exchange of wealth, and the satisfaction of communal and personal goals. This chapter reviews the rapid changes and recent, consequential initiatives within the Australian banking sector over the past three decades.

Furthermore, it considers the implications of the rise of new retail FI delivery channels and, in particular, telephone banking. It also considers that banking must now pay far closer attention to the mix among strategic orientation, structural fit, leadership factors, appropriate competitive alliances and innovative approaches as a result of such changes (Barlow, 1996).

## 2.2 Recent changes in the Australian financial services industry

Since the end of the 1970s the Australian financial industry has experienced rapid change driven by a number of interrelated factors. Primary amongst these has been the progressive removal of significant government regulation (Ralston, 1998). Other major drivers of change include globalisation, dramatic technological innovation, a greatly deregulated industrial relations climate, increasingly discriminating clients and complex, ongoing stakeholder pressures, for example, the Consumer Credit Code.[7]

Deregulation has occurred in a cumulative way. While deregulation of the financial system commenced in the early 1970s, it wasn't until the late 1970s and early 1980s that such initiatives gained momentum. Around this time, successive Federal governments, driven by political concerns over monetary policy and competition, initiated two

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[7] The Consumer Credit Code is the national retail lending code, enacted by State. In Queensland the relevant legislation is: *Consumer Credit (Qld) Amendment Act 1998*.

successive, major reviews into the Australian financial sector, specifically, the Campbell Committee banking inquiry (1981) and the Martin Review (1983).[8]

The Fraser Liberal Government established the Campbell Committee (1981) in January 1979 to inquire into the Australian financial system. Primarily, it recognised that government controls did not encourage efficiencies and recommended the deregulation of the financial system. Such was the need for rapid regulatory change that some Campbell recommendations were inaugurated before the final report was released (Ralston, 1998). Reflecting some concerns over its conclusions, the Hawke Labor Government initiated a second and consequential Martin Review (1983) into the Campbell Report's recommendations. This Review recommended a similar outcome to Campbell and in August 1984 the Labor Government removed all restrictions on deposit interest rates.

The pace of reform that gave rise to a deregulated market from the early 1980s has continued unabated, notwithstanding some community action to re-regulate to protect investors. Such concerns gave rise to the Commonwealth Treasurer's request, on 25 October 1990, that the House of Representatives Committee on Finance and Public Administration (the Martin Inquiry, 1991[9]) undertake a further review of the impact of financial deregulation. This was especially in relation to the banking system, bank profitability, competitive effectiveness and community benefits (Daugaard and Valentine, 1994).[10]

The immediate consequence of the Martin Inquiry report was the rapid demise of significant government regulation. Since that time, such unprecedented deregulation has resulted in the removal of barriers to entry, interest rate ceilings and other restrictions on bank activities. Consequently, the deregulated environment from the early 1990s resulted

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[8] Campbell Committee is officially known as the Australian Financial Systems Enquiry, (Campbell) (1981), *Report,* Canberra: AGPS. The Martin Review of Campbell's work is called: Australian Financial Systems Review (Martin), (1983), *Report*, Canberra: AGPS.

[9] The full report of the 1991 Martin Inquiry is: House of Representatives Standing Committee on Finance and Public Administration (Martin Committee) (1991). *A Pocket Full of Change: Banking and Deregulation*, (Mr S. Martin, Chairman), AGPS, Canberra.

[10] Interestingly, the report's publication in 1991, while making mention of technical innovation, did so primarily in the context of ATMs and the payment systems and made only scant reference to other innovation.

in increased market share for banks. Yet a number of competitive forces have moved to challenge this pre-eminent position.

In the early 1990s building societies gained access to the cheque clearance system, a removal of the bank monopoly in the payments system. Moreover, the removal of barriers to entry occasioned the entrance of a considerable number of overseas FIs, the conversion of many larger building societies to banks, the rise of niche orientated providers[11] and internal organisational re-structuring. Such re-orientation has also been supported and challenged by the continuation of the growth in technology, which will continue to present significant challenges for both bank and non-bank FIs alike.[12]

Reduced barriers to entry have resulted in a highly competitive environment. Under such conditions, all financial service providers have been left with the choice either to accept the new environment by responding assertively to create innovative niches or simply to resist change, an option which would appear to have no place in the current tumultuous marketplace.

The new FI competitive operating environment has given rise to internal structural change such as the re-organisation of banks into three divisions; retail, investment and institutional banking. Moreover, increasingly differentiated or segmented client groups such as, higher volume domestic clients, meant that call centre, financial advice and share broking channels have arisen. Yet, while the rise of additional competition gave rise to some innovation, the continued use of older bureaucratic structures appeared to be a clear impediment to effective change (Harker and Hunter, 1998).

The increasing segmentation of FIs into distinct business units or channels has led to a shift from the corporate level as the appropriate unit of analysis to the business unit itself (Mir, 1997). However, while it has been argued that the intensity with which banks participate in strategic planning is positively correlated to financial performance (Heffernan, 1996), emergent FI retail channels are relatively little understood especially

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[11] For example, RAMS Home Loans, a non-bank, niche financial service provider, targeted the residential home loan market.

[12] Specifically, IT based channels are now not monopolised by banks, for example, *BPay* innovations.

in relation to their performance contribution. This is despite their growing strategic importance to the organisation (Waterhouse, 1998).

Finally, the Wallis Committee Inquiry[13], announced on 30 May 1996 by the Howard Liberal Government, was charged with the responsibility of reviewing the results of financial deregulation. The Wallis Committee explicitly excluded itself as being a predictor of the future and focussed on industry change drivers, which included new technology, increasing client differentiation, pricing issues, global market considerations, regulation and new competitive pressures. In particular, the Wallis Committee indicated that Australian FIs are facing 'increasing competition' from traditional non-banks, those '(as yet) outside the industry' and offshore providers (Wallis Committee, 1997, p. 137). The Committee (p. 93) also identified technology as an innovation driver and noted its effects upon 'financial relationships and market structures'. Wallis commented that IT development has broken down physical and expense barriers and that FIs are placing more emphasis on client and product development.

In relation to new forms of delivery, Wallis noted changing client preferences and increasing client choices. It also indicated clients have accepted the rollout of new electronic channels. Furthermore, as denoted in Figure 2.1, psychosocial factors, beyond the control of the FIs, have meant that clients themselves are seeking new methods of conducting banking and new more competitive financial products.

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[13] Known as the Financial System Inquiry (Wallis Committee) (1997). *Final Report.* Canberra*:* AGPS.

Figure 2.1: Implications of Customer Choice (Wallis Committee, 1997)

**Customer Trends**

- Ageing population

- Reduced job security, increased job mobility, early retirement, longer working hours

- Increasing exposures to financial system

- Increasing value awareness

- Willingness to adopt new technology

**Changing Channel Choice**

- Many customers will move to cheaper transaction channels (electronic)

**Changing Product Choice**

- Demand for life cycle smoothing products

- Demand for conveniently bundled products

- Increased access to products and advice

**Changing Supplier Choice**

- Customers will face increased supplier choice

- Customers choose suppliers offering best value

The final issue of specific relevance to telephone banking performance management the Committee noted was:

‘the shift from measurement of performance of broad organisational unit goals towards the measurement of more specific business dimensions such as delivery channels…’ (p. 141).

The Wallis Committee's final recommendations were transmitted on the 18 March 1997. These included integrating corporations law, market integrity and consumer protection into one agency and incorporating one federal agency to carry out prudential regulation of ‘all financial institutions licensed to conduct deposit taking or offering of capital-backed life products…’ (p. 41). The Committee also found that the Reserve Bank of Australia should retain responsibility for the stability of the financial system.

In sum, the effects of financial deregulation have been considerable. Deregulation has resulted in removal of regulatory barriers to entry, heightened competition and given rise to a number of competitive actions. Specifically, these competitive (re)actions include mergers to create synergistic effect, organisational structural changes and price re-structuring. Furthermore, despite earnings growth, FIs across the globe are under continual pressure to manage themselves more profitably by not only reducing costs, but by also driving revenue initiatives.

### 2.2.1    Changing customer choice

FI branch closures are one example of the cost-minimising activities that have taken place. The Wallis Committee estimated the financial system cost of operating such structures to be around $41 billion per year, of which banks incur approximately half. Furthermore, while the Committee noted the decline in the number of retail bank branches in Australia, it stated that two remaining sources of cost inefficiency in the banking system were branch networks and the payments system (Wallis Committee, 1997).

At the same time as pressures have increased to minimise costs, deregulation and increased competition have caused a wider range of products and services to become available to the public. The cost of providing these financial services are to some extent passed to customers on a 'user pays basis', although some participants would still argue this has not gone far enough as the service cost still outweighs the benefits derived by the organisation. The Wallis Committee noted the interrelated effects of changing expectations of service distribution channels, and product and supply choice. These include increasing client sophistication and greater time constraints.

Moreover, change is also a function of broader technology innovation; witness the intense market hype associated with the continual evolution and expansion of the Internet. In sum, such changes and new preferences have considerable product and market innovation implications. Yet, despite the need for comprehensive strategies very little specific research has occurred in Australia especially along strategic co-alignment, key performance management, organisational structure and behavioural lines and even less so

at the emergent retail delivery channel level.

## 2.2.2   The rise of major new technology

FIs are utilising rapidly changing information technology (IT) to manage lower cost delivery. In particular, as a cost reduction strategy, FIs seek to transfer[14] clients to new, lower cost, technology-based delivery channels (for example, self-service 24 hours a day ATMs and telephone banking centres). To effect client transfers, FI use strategies such as convenience (e.g. *1800-free call* and *13XXXX* local call cost, irrespective of call origination) and revised pricing to facilitate client wholesale agreement. All in all, in terms of such change, technology is recognised as a major driver of FI change (Wallis Committee, 1997).

Technological change in banking service and product delivery has been virtually exponential. In Australia over the period 1989 to 1999, the number of ATMs grew from 4,073 to 9,387, and EFTPOS outlets increased from 11,452 to 265,391 (Australian Payments Clearing Association Limited (APCA), 2000, p. 2). Banks in the United States spent 20% of their entire non-interest expenses on IT in 1997 (Frei, Harker and Hunter, 1997, p. 2).

While precise expenditure figures in Australia are not available, it is suspected that the picture is no different here, as most newer delivery channels are electronically based. Consequently, IT management, and especially its cost benefit relationship, remains a critical strategic issue for FIs. Strategic initiatives to manage the considerable outlays involved include creation of external IT partnerships, IT systems integration[15] and client management platforms (CMPs) where the banker can see the client's entire bank portfolio relationship at one glance. The extent of such investment also raises questions in relation to return on investment and its revenue generating capacity. This is a critical issue for newer channels, such as telephone banking, where technology expenditure was incurred to support cost minimising delivery. Now the shift is towards enhancing the revenue creating function of the channel.

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[14] This is often termed 'client migration'.

[15] For example, supersession of many, disparate (stand alone) PC systems into one integrated IT system.

Such strategic market and technological investment choices are well illustrated by Frank Cicutto, CEO of the National Australia Bank. He stated that bank *e*-commerce providers 'must be clear on whether they wanted a strategy of defending – investing just enough to be at parity with competitors – or attacking: investing ahead of the curve' (Boreham, 1999). Further, from a strategic theory viewpoint, Frei, Harker and Hunter (1997) argued that no one set of management or strategic actions meets current situational demands. Therefore considerable thought, continual strategic review and integration is needed to achieve alignment among technology, strategy and human resources.

## 2.3    The rise of new delivery channels

The banks' market share growth from 1993[16] is as a consequence of the lifting of restrictions on activities, which had previously limited their competitiveness. Other contributors to growth were the extent of bank branch networks, loyalty of clients and the market's perceptions of prudential guarantee (Daugaard and Valentine, 1994). Yet such advantages are now under continual threat by the implementation of new technology, deregulation itself, the entrance of non-bank financial-service providers and product differentiation. All of which in a highly competitive financial product market have produced sustained pressure on Australian banks to change and diversify.

This pressure has also contributed to the creation of new forms of product and service delivery and moves by banks into traditionally non-bank product areas, for example, share trading (Valentine and Ford, 1997).

Competitive pressures and consequent client demands, cost reduction imperatives and technological enhancements have led to the growth of electronic delivery channels and of telephone banking in particular. Such enhancements are characterised by the use of complex technology primarily purchased from sources external to banking, for example, automatic call answering and call distribution technologies. Moreover from a client perspective, such endeavours are supported by increased demand for cheaper products, convenience and client access methods (Wallis, 1997).

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[16] This growth was at the expense of other non-bank FIs.

Figure 2.2 illustrates the growth, extent and a potentially integrated approach to electronic service-delivery channels, which are a technological driven retail strategy (Wallis, 1997; KPMG, 1998). The grey shaded areas collectively represent the 'telephone banking channel', a term used to denote the dissertation's 'unit of enquiry'. This channel comprises both the automated service (IVRs) and the manual service staffed by client service representatives/officers (CSR/CSOs) also known as SSRs (Sales and Service Representatives).

While the dramatic financial services industry changes have compelled some significant interior structural changes and technological innovations, not all FIs have responded at the same rate nor have all innovations been successful.[17] In fact, it is suspected that competitive factors and ill-considered strategies have seen the emergence of reactive and arguably fragmented channel endeavours that are not nearly as coordinated as indicated in Figure 2.2.

Up until 1992, it was suggested in the United States that 'very few banks (had) as yet harnessed technology and redesigned work flows to achieve a leap in productivity and customer service' (ABA, 1992). However, as recently as 1993 in Australia, despite the emergence of home and telephone banking – via telephone, ATMs and EFTPOB (electronic funds transactions at point of bank) and EFTPOS (electronic funds transactions at point of sale), telephone-banking call centres did not feature in Australian financial services texts.[18] In particular, in 1994, one of the largest four Australian banks, and a significant number of second tier banks did not have a telephone banking or home banking services (KPMG, 1995).

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[17] In the United States, a number of early PC banking initiatives were not regarded as successful from a sales or acceptance volume point of view (Frei, Harker and Hunter, 1997).

[18] For example, late 1980's CBA 'phone banking' was a comparatively simple (bank issued) touchpad/keynote driven 'dial in' system which enabled access to simple computer activated banking services. Interestingly, De Lucia and Peters (1998) mentioned phone banking but did not contemplate call or human interactive strategies.

Figure 2.2: Proliferation of Electronic Channels (Seitz and Stickel, 1998)
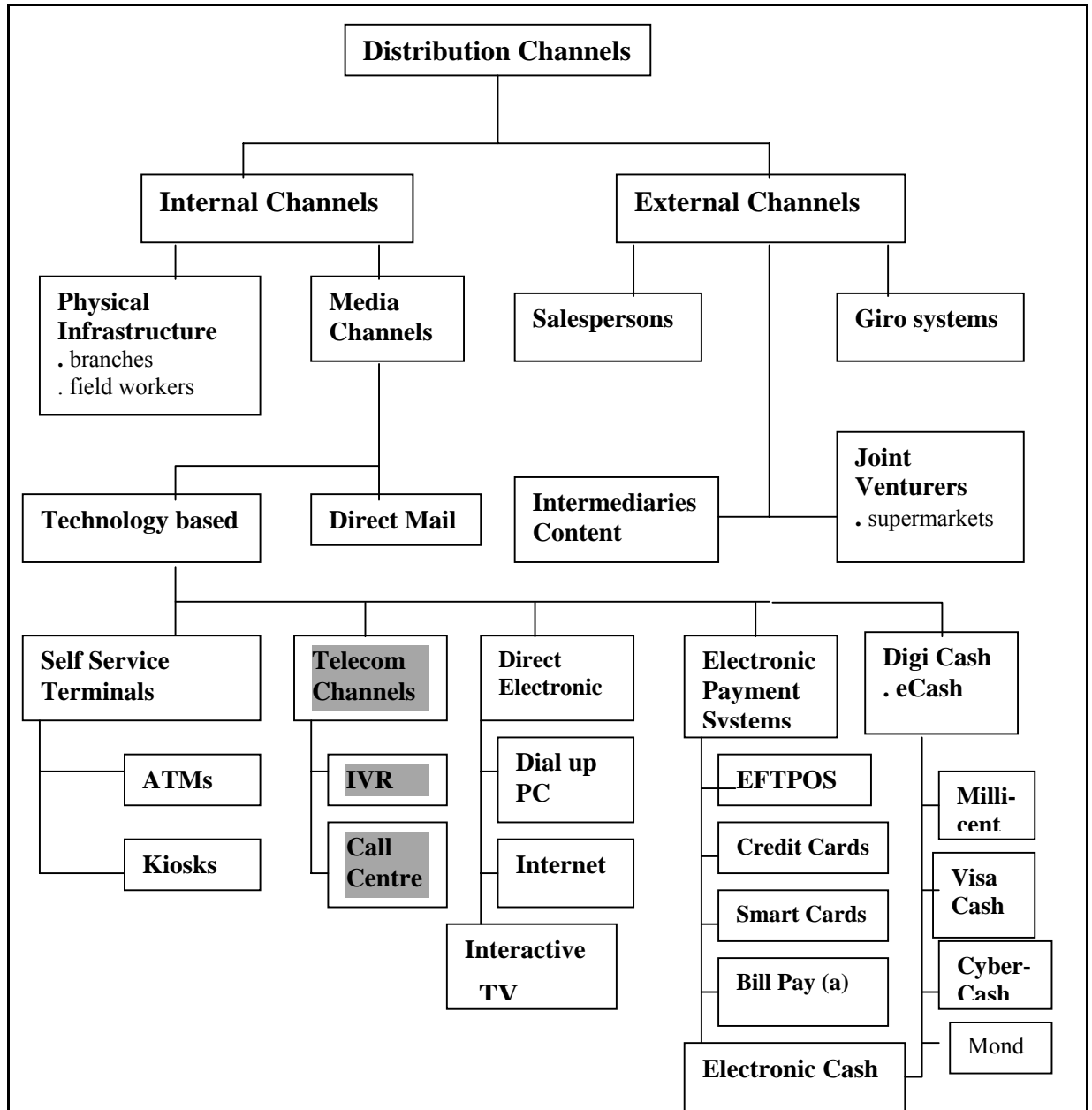


Delivery channel strategy requires significant cost/benefit and performance analysis. While the Wallis Report (1997, p. 21) drew the logical conclusion that 'banks will not maintain uneconomic business units' such sentiments reflect the 'innovative' imperative rather than actuality.

It is suspected that a primary focus on cost minimisation indicates some failure to contemplate broader strategic aims, specifically inter-channel cooperation, sales

performance growth goals, relationship development and client profitability (Pihl and Wambay, 1992). Furash and Johanssen (1992, p. 87) suggested that wholesale change in delivery channel is not without considerable risk of 'driving clients away from face-to-face on-site delivery thereby lessening personal interaction and (consequent) cross selling (potential)', without appropriate client migration to new channels.

Not surprising then, in the absence of one 'correct' approach to retail FI innovation, it is critically important to align technology-driven delivery channels to overall strategic objectives. However, the flexibility and coordination required to effectively manage emergent and newer channels has challenged the applicability of older, functional forms of organising banks and in particular long-held hierarchical management practices (Furash and Johanssen, 1992). In the next section, the development of one such major, emergent, retail banking channel, telephone banking, will be considered.

### 2.3.1   Call centres

While generic telephone service delivery has generally been regarded as a relatively modest way of dealing with transaction-based client telephone calls it is undergoing a period of significant and sustained growth. The current Australian call centre industry is thought to be twice as large as its originally estimated size and now employs some 160,000 telephone agents nationwide (Tebutt, 1999).

For retail banks, telephone-banking originally provided generally straightforward services and included balance and transaction inquiries, bill payments and stopped cheque processing. However, notwithstanding the early minimalist approach, the contemporary telephone-banking channel is undergoing a period of significant growth and delivery re-orientation.

This is driven by increasing client demand, new call-answering technology, cost management imperatives and in some instances, progressively more innovative or complex channel-specific products with revenue-earning potential. There are those who predict that transaction-based telephone-banking will soon manage in excess of one third of all financial service volume. Therefore, telephone banking service delivery issues have

considerable implications for top management, which would expect reasonable returns on related human resource and technological investments (Frei, Harker, and Hunter, 1997, p. 9; Orr, 1997).

To manage such significant growth, the telephone-banking channel targeted 'self service banking' driven by increasingly sophisticated, automatic computer voice answered call technologies, especially IVR Units (IVRU). The intention is to manage incoming transactions without the need to speak to a CSR unless escalation is required. Such endeavours are usually supported by operational-focussed performance expectations such as 'low or minimal call duration' and high 'speed of incoming call answer'. Such automatic IT services now answer and fully deal with the vast majority of all calls (i.e. these calls are not subsequently transferred/escalated to a human operator).[19]

CSR/CSOs in answering enquiries not fully dealt with by the IVRU, tend to meet more complex client needs. While this type of activity is a more labour-intensive exercise, it can be more sales-focussed, with the expectation that most CSR-answered calls will involve product discussions and cross or up-selling. To this end, CSR-staffed sales platforms have now been established within some channels. Consequently, the decision to answer the majority of calls by automated services with characteristically shorter call duration is risky from a sales revenue viewpoint (Orr, 1997).

Orr (1997) highlighted the dichotomous nature of the internal channel environment. While cost-based call centres minimise client call times, profit centres aim to maximise call times (Orr, 1997). Furthermore, the wholesale importation of a significant number of client enquiries, previously handled face-to-face at branches, combined with a focus on maximising call throughput via automatic call service technology would appear to have serious revenue and hence profit implications. The risk is that automated telephone banking activities may work against actualising relationship-driven sales innovations. As a consequence, telephone-banking initiatives will be inadequate if they focus only on cost minimisation and do not successfully address more comprehensive client needs.

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[19] In the case of Bendigo Bank for year ended 30/6/99, of all telephone banking calls received 80% were handled by self-service technology.

One means of achieving this is to implement human service in dedicated cells, with expectations of longer call time averages. This approach will restore the channel to something approaching a traditional relationship-banking model.

It is suspected that the United States experience of cost-based call centres has also occurred in Australia where anecdotal evidence conceptualises the channel as an IT-reliant, high volume, cost-minimising business unit. This raises the risk that the 'cost based' Australian retail channel 'service' approach is not strategically aligned to the organisation. Indeed, Waterhouse (1998) identified this cost-minimisation, profit-driven dichotomy and warned against applying too stringent a test /reaction against IVRU-driven service when ultimately the channel must be driven by client need (Waterhouse, 1999).

Accordingly, the senior management of telephone-banking channels is faced with a dichotomous strategic choice between automatic IT-driven self-service call answering and relationship-based client call management. This can be expressed best as a continuum, ranging from a straightforward cost reducing channel to a fully integrated 'Direct Bank' where the client may use electronic means to transact all business up to and including comprehensive product choices (Radecki, Wenninger and Orlow, 1997). As a consequence, call management initiatives can be made more service-orientated with significant investment in automatic call answering technology and CSRs. To minimise access such channels seek to keep human-answered calls short.

FIs have been faced with a number of alternatives that are arguably located on a service/sales continuum. Firstly, they may continue to treat the telephone-banking channel as a high volume, automated self-service delivery mechanism; secondly, they may offer a hybrid approach – a telephone-banking channel could provide clients who opt out of the automated call with the opportunity of CSR interaction. Thirdly, they may maximise the relational approach by staffing CSR cells.

Each of these options has attendant cost and strategic implications. For example, FIs focussed on automated call services are faced with the attendant risks of lost sales opportunities due to minimal or no human interaction. By comparison, those channels with significant and arguably more costly CSR interaction provide the FI with direct revenue opportunities (via cross sales).

There is only a minimal growing body of work, primarily in the United States, on structural and management behavioural factors affecting the telephone-banking delivery channel. Recent work at the Wharton School has identified the enormous revenue earning potential available in the 'creation of high performing call centers'. This paper argues that 'FIs that attempted to sell more, lose sight of customer service…' (Evenson, Harker and Frei, 1998, p. 2). The re-orientation of US call centre environment from service to sales is not without its difficulties, and has seen the rise of significant HR, performance measurement and organisational challenges. For example, channel management's determination to continue to use automated service, despite its inability to address potential revenue problems, suggests other influencing factors are at play (Harker and Hunter, 1998; Frei and Harker, 1999a).

Clients faced with a considerable range of electronic preferences (refer Figure 2.2), continue to migrate to technological-driven channels such as call centres. This requires FIs to review continually their marketplace, their strategic responses and re-orientate themselves as appropriate. Thus, strategic and product innovation needs to be an ongoing characteristic of the channel. In the absence of detailed knowledge of channel context and managerial behaviours it is unclear what factors, such as structural fit or climatic, are characterised in call centre strategy.

Notwithstanding the many challenges, the outlook remains bright as many banks see their call centre initiatives optimistically (Radecki, Wenninger, and Orlow, 1997). Furthermore, it is not certain to what extent Australian FIs have followed the UK and US experience of using client data to interactively manage the banking relationship and 'up sell' so as to maximise returns, although the author understands that some participants are currently considering or developing such innovative strategies.

Figure 2.3 contrasts banks with other financial and non-financial groupings, for example, mutual funds, which tend to offer a more extensive service experience that includes sales relationship management. The choice between a cost minimising, 'service only' approach and increasingly integrated sales approach is well represented here. Specifically, the service approach is found at the lower end of the service and relationship management sophistication scale. Beyond a simple service approach, some, ranging between Levels 1 and 2, engage in modest cross selling. Finally, comprehensive cross-selling relationship

management is an increasingly more sophisticated activity. Consequently, it is suggested telephone banking has not exploited the fullest range of product, sale and revenue opportunities available.

Figure 2.3: Call Centre Sophistication (Booz-Allen Hamilton, 1998)

**Levels of Call Center Sophistication**

**Level 4**
Integrated
Channel
management

**Level 3**
Relationship
Management
Focus

**Level 2**
Opportunistic
Cross selling

**Level 1**
Phone
'cross selling'
Service only

**Service
Only**

Software Companies    Banks    Retailers    Mutual Funds    Card Issuers    Telecomm
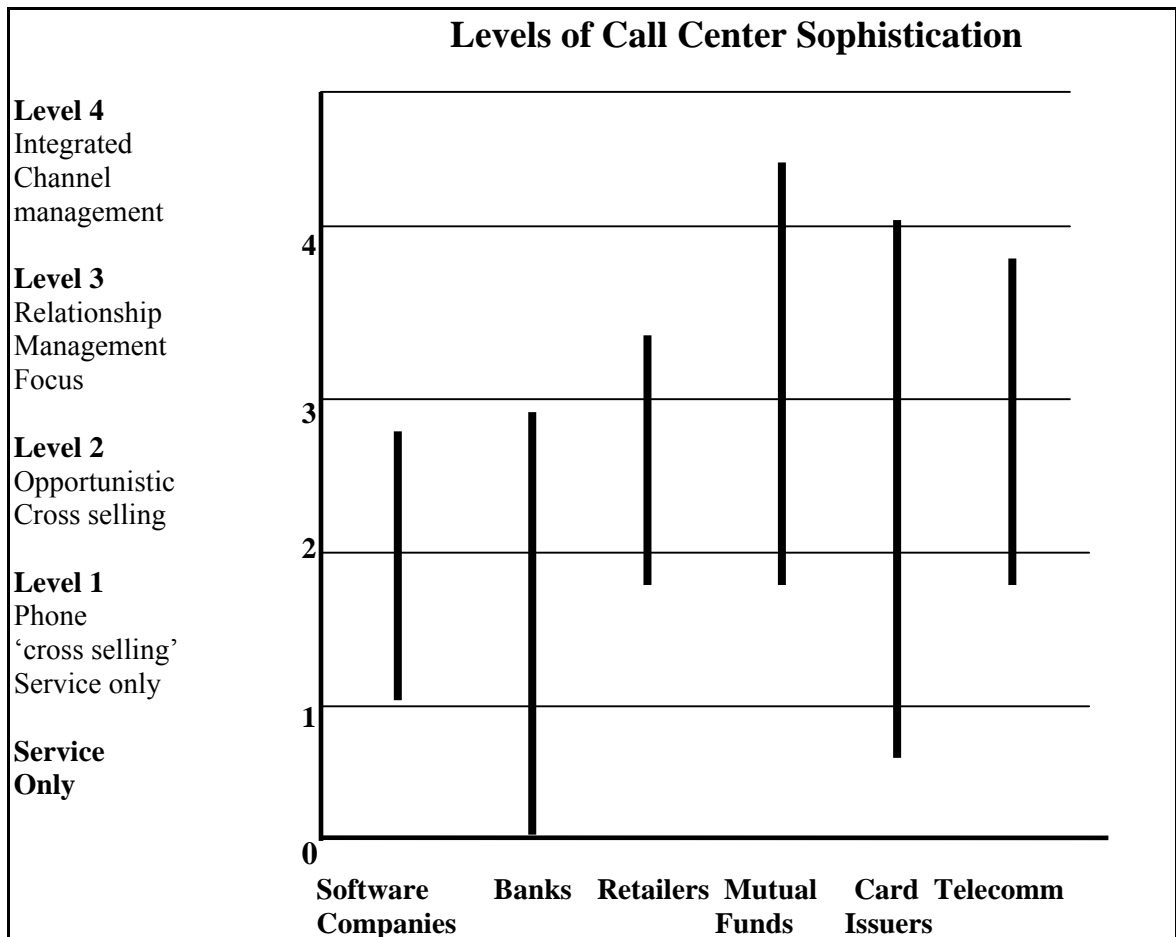
In sum, it is proposed that the telephone-banking environment with its cost-profit based continuum is a fruitful area of study, especially because it is suspected that operational-based and arguably non-revenue maximising strategies are still being implemented. The channel also represents the somewhat dichotomous focus between improving existing strategic responses and investigating alternative futures (Frei, Harker and Hunter, 1997).

Consequently, bank management is faced with considerable choice of strategic response to factors within their control and also to environmental circumstances beyond their control. Further, this discussion on telephone-banking also brings into sharper focus the complex issue of situational fit with the external environment, product innovation and delivery methodology, and, performance management.

Clearly new and parallel delivery channels provide opportunities for choice by management and clients. Yet lack of information and the continued use of the cost centre method and unclear or unmatched KPIs means that senior management may be less informed than they would prefer. This may have serious implications for the roll out of newer delivery channels such as the Internet and its integration with existing channels. The implication is that misalignment or otherwise is by and large a senior management issue and a topic well worth investigating in the absence of comprehensive telephone-banking specific literature.

## 2.4    Summary

In Chapter 2, recent developments in the Australian financial services industry and in particular the emergence of retail distribution channels, such as the 'call centre' concept, were reviewed. In sum, the risk for Australian institutions is that given foreign successes and our almost total reliance on overseas sources for technology and selling skills, foreign entrants are, in a deregulated market, well placed to move into segmentalised aspects of financial intermediation. It was suggested that the relatively recent emergence of such delivery channels has meant a new and potentially successful strategic direction for Australian FIs.

# CHAPTER THREE: LITERATURE REVIEW

## 3.1    Introduction

Chapter 2 reviewed recent developments in the Australian financial services industry, in particular, the emergence of retail distribution channels, such as the 'call centre'. The emergence of such delivery channels has meant a new strategic direction for Australian financial institutions.

Despite the importance of understanding these new channels there is a dearth of published literature that aligns generic, strategic and organisational design theories with financial services strategic management. The little that is known within the Australian setting makes it difficult to conclude whether such channels are actually strategic in intent or action (Waterhouse, 1998). From a practitioner viewpoint, the creation of the channel as cost-minimisation activity suggests that telephone 'bankers' are focussed on day-to-day operational management and not on broader 'value or revenue adding' strategic goals (Waterhouse, 1998). Yet it is suspected that some *ad hoc* management approaches were adopted in the development of the telephone-banking channel. These were more a function of past knowledge, structure or measurement methods. Consequently, from a sales perspective, this may have led to under-utilisation of the financial-service channel.

For a long time academics have emphasised the need for strategic management as a deliberate process of identifying and exploiting possibilities, allocating resources and connecting decisions to business goals (Perry, Gibson and Dudurovic, 1992). In particular, Burton and Obel (1998) and Johnson and Scholes (1988) have argued that effective strategic management is critical to organisational sustainability.

In relation to strategic management, Drennan (1996) found behavioural complications and potential misalignment(s) of and/or among strategic, structure and internal climatic conditions. In uncertain environments, this can have adverse performance management implications. For example, cost-minimisation may be an inappropriate strategic approach in a highly competitive and complex market.

Simultaneously, other externally oriented activities, such as product differentiation, new or enhanced delivery mechanisms and network development would appear to be more suited. Such choices, however, place increased demands upon resources. External orientation is associated with more comprehensive information gathering and management requirements coupled with advanced marketing capabilities (Govindarajan, 1989). Accordingly, strategic choices imply associated management challenges.

This chapter is in four parts. The first section provides a brief introduction to the theory of strategic management and models of strategy implementation. As the FI telephone-banking segment is the primary unit of analysis, the second section deals with business unit level strategic management. It is proposed that six key factors are related to performance. The factors are strategic orientation, structure, leadership style, psychosocial climate, technology, and key performance indicators (KPIs). It is arguable also that such key factors may drive performance. Figure 3.1 illustrates the proposed relationships. The third section develops a simple performance model to incorporate these interrelated variables and proposes six hypotheses concerning telephone-banking performance, while the final section summarises the chapter.

Figure 3.1: Proposed Research Relationship
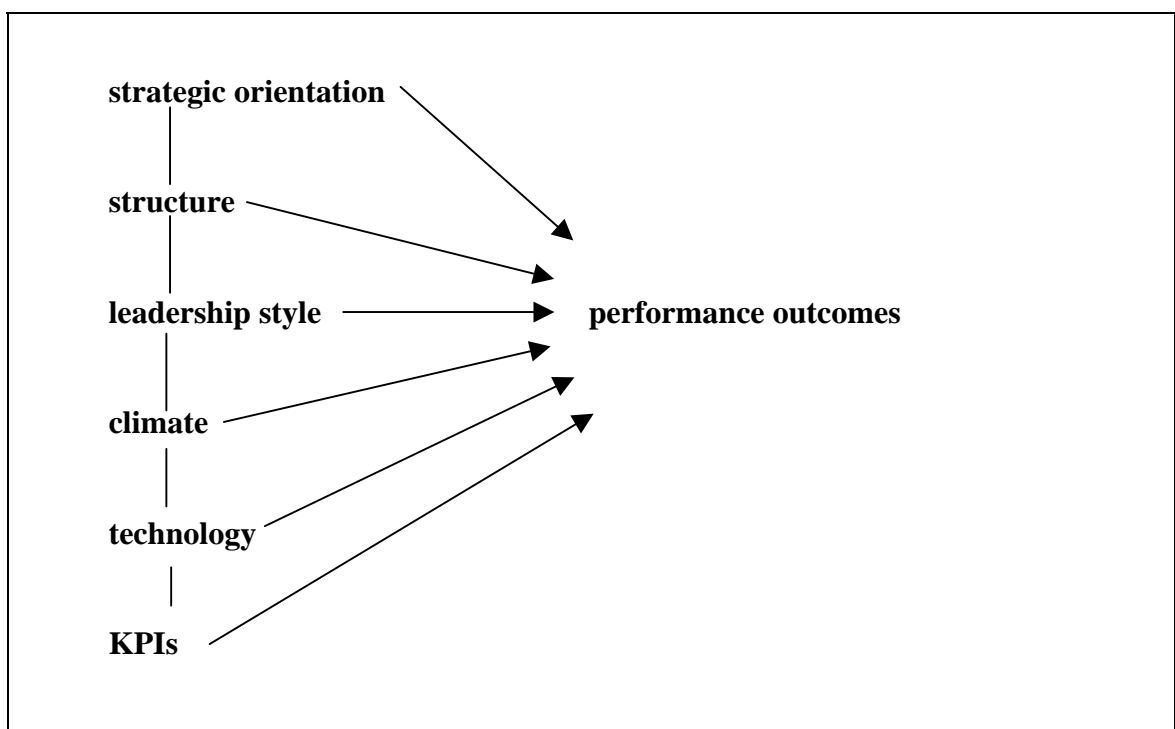
## 3.2    Strategic management

This section reviews recent strategic literature as it applies to the Australian FI call centre environment. Theorists have long posited the importance of the relationship of strategic, contextual and leadership elements. More recently, the devolution of strategic action to the business unit level initiated some work at the sub-organisational level (Porter, 1980; Govindarajan, 1989).

Organisational goals form the basis for determining strategy. These originate from top-level management, such as the board of directors and executives (Burton and Obel, 1998). From a behavioural viewpoint, there are possibly three levels of strategic management that establish business goals. Firstly, top management's intent is communicated to divisional leadership or business unit (BU) management. Secondly, BU management operationalises the intent via its leadership, technology and structural resources. Finally, the process may be devolved further to sub-units, such as regional groups or project groups and client or functional teams (Perry, Gibson and Dudurovic, 1992). That is:

- corporate strategy – the macro level or the primary type of business undertaken
- competitive strategy – business level strategy – how the firm functions in its segments
- operational strategy – how the institution implements strategy at the BU level.

In sum, goals establish a 'coherent and integrated pattern of decisions' and hence they are the precursors of strategic management and action (McCammon, 1971 p. 118). Further, strategic management as the means of successfully organising effort to meet organisational and environmental demands is well documented (Ansoff, 1984; Gleuck and Jauch, 1984).

In complex or changing environments, 'innovative behaviour strongly influences overall profitability'. In a banking context specifically, James and Hatten (1994) demonstrated that strategic planning is positively correlated to banking performance. Consequently,

environmental change requires banking strategy and innovation to be recursive activities (Govindarajan, 1989).

Successful and responsive strategy therefore is a cyclical process requiring extensive market review and a thorough understanding of the competitive, political, cultural and social processes of the firm (Johnson and Scholes, 1988). Similarly, Viljoen (1994) indicated that 'strategic competitive advantage' is a function of appropriate market selection, level of investment used, functional areas employed, pricing and the firm's ability to position itself competitively. The implication is that management must determine appropriate performance indicators to drive effective and/or corrective action and re-implementation as necessary (Mintzberg, 1983; Barney, 1991).

Strategic success therefore is a function of management's ability to consider the market and take appropriate action (James and Hatten, 1994; Brazeal, 1996). Yet, despite agreement about the nature of strategy and innovation, competitive effort does not always take place in an externally orientated context (McGrath, MacMillan and Venkatararaman, 1995). For example, an unwillingness to broach new ways of acting or to consider new product options may have dire consequences on strategic marketing direction and hence upon organisational performance. Similarly, Mintzberg (1979) highlighted the potentially adverse implications of inappropriate management and organisational structures which demonstrate a resistance to change.

### 3.2.1 Strategic fit/strategic misfit

Strategic design making introduces the concept of 'strategic fit' and 'strategic misfit' (Burton and Obel, 1998). Lawrence and Lorch (1967) proposed that 'fit' is a function of structural integration and differentiation. 'Strategic misfit' occurs from a mismatch between external environmental and/or internal characteristics. For example, the external market, standard technology or leadership may change, yet organisational structure is slow to react to these demands. If this is not changed to accommodate the new situation then a strategic factor, such as structure or leadership, may be out of balance.

Therefore, achieving optimum performance becomes difficult if not impossible. Even the

size of the misalignment may have disproportionate consequences. For example, in a highly complex firm with an *ad hoc* structure that encourages decentralised decision-makers, an inappropriately small staff reward system may severely impair human performance (Burton and Obel, 1998).

Due to the serious risk of misalignment, the relationship between strategy and performance is a compelling reason to ensure that BU management behaviours are orientated correctly (Govindarajan, 1989). In the next section, strategic management will be reviewed within the context of contemporary banking literature before considering structures and leadership and the retail FI business unit.

### 3.2.2 Applicability of strategic theory to banking

Up until at least the late 1980s, the Australian financial services industry was characterised by strong delineation between banks and non-bank firms, long-term profitability and employment stability. The organisation of banks was along highly structured and functional lines, which suited the relatively stable competitive environment prior to deregulation. Additionally, the industry was largely undifferentiated in leadership terms due to a shared culture amongst managers. This in turn affected belief about competition, clients, information management and products (Short, Palmer, and Stimpert, 1998; DiMaggio and Powell, 1983).

Since deregulation and subsequent re-organisation of financial institutions in the 1990s[20] the banking industry is now characterised by constant change. As a consequence, post-deregulation banking has needed to be attentive constantly to global developments, market initiatives and the 'special role of technology' (Vrakking, 1992; Geschka and Hubner, 1992, p. 213). Such competitive challenges suggest that appropriate strategic choice is highly critical to contemporary FI management. Finally, it is reasonable to propose in light of such changes that 'a strictly functional, operational or activity based

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[20] Especially since the late 1980s, banking has experienced greatly enhanced competition, a deregulated industrial relations climate, rapidly changing technology and the resultant emergence of (electronic) delivery channels, the continual entrance of non-bank competitors (e.g. AMP), and more complex stakeholder pressures (e.g. Uniform Credit Code, ACCC).

approach to management is no longer (an) acceptable' way of operating (Viljoen, 1994, p. 5).

### 3.2.3 Applicability of strategic theory to banking channel management

Industry reconstructions, rapid technological change and severe market share competition has seen business re-organise itself around process or product, specifically new BUs and delivery channels, rather than the traditional control hierarchies.[21] This devolution has created a critical need to formulate appropriately responsive strategy at the BU and channel level (Govindarajan, 1989). Similarly, Golden (1992) suggested that performance is enhanced when an externally orientated BU has control over its environmental monitoring and strategic decision-making. Yet, the devolution of organisations into BUs and divisions raises unanswered questions regarding the interrelationship among decentralisation, product differentiation and BU level effectiveness (Govindarajan, 1986 and 1989).

Beyond the traditional branch network approach, the market segmentation approach which in banking occurred in the late 1980s and early 1990s led to the formation of (at least) three new strategic BUs within financial institutions: retail banking, business banking and corporate business banking. Whilst such dramatic structural changes are by no means finalised, re-organisations along these lines have completely overhauled the traditional functional branch, head office approach (Keler, 1998).

Segmentation has been accompanied by new and distinctive ways of delivering financial service products and services. These have occurred through varied 'channels'. The term 'channel' denotes distinctive delivery methodology. For example the call centre and PC distribution channels were introduced to meet the needs of various client groups. However, Frei and Harker (1999a, p. 9) argued that clients are 'rarely channel specific, rather they use a wide variety of distribution methods'. This can be illustrated by business banking clients who may prefer face-to-face channel in the form of a banking relationship manager yet process their day-to-day funds management and payroll requirements via

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[21] The concept 'business unit' denotes the structural means of organising strategic effort at a sub-organisational level (Govindarajan, 1989).

electronic channels.

**3.2.3.1 The telephone-banking initiative – Call Centres**

The rise of the telephone-banking channel represented a development in the retail segment of financial institutions. Yet, as discussed in Chapter 2, it originated as a relatively modest decision to manage routine retail financial service transactions in a cost-effective way rather than as a broad strategic revenue approach (Frei and Harker, 1999b).

Retail financial service delivery channels such as telephone banking are in a constant state of flux. This is not only due to external factors but also senior management now realises that such forms of delivery offer far more than simple transaction-based services, which can reduce costs and remove client telephone call volumes from branch networks (Waterhouse, 1998). Yet, despite the telephone channel's potential to deliver more than considerable service initiatives, that is, act as a major revenue source, financial institutions have been slow to realise this latter potential. This could be due to limited research and published literature relating to the channel and as such, it remains relatively unknown territory (Evenson, Harker and Frei, 1998).

In the United States, industry executives identified a lack of retail delivery strategy and in particular some absence of telephone business objectives (Kline, 1997). Yet in some quarters, US telephone banking has recently taken on a stronger sales dimension and emerged as a channel associated with profit potential. This partial shift from a cost- based service to a profit-driven approach has seen call operations form an essential dimension of integrated channels management alongside ATMs, the Internet, and client relationship management (coined 'CRM').[22] Frei and Harker (1999b) indicated that the re-orientation of the telephone-banking channel from a service to revenue potential, however, is accompanied by significant challenges.

Despite some recognition of the revenue imperative, technical innovation has encouraged the wholesale and continued use of methods and targets better suited to high volume

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[22] Chase's approach is that whilst the broad bank 'owns the client' each business unit has a role to deliver the product - interview with Edmund Valenski, Senior VP Chase Manhattan Bank (Kline, 1997, p. 88).

transaction processing rather than revenue generation. For example, automatic call answering and IVRUs predominate at the expense of client representative answered calls. Similarly, the continued importance of service measurement targets, such as speed of answer (SOA) and (minimal) length of each call, have tended to delay or even thwart sales-driven initiatives (Evenson, Harker and Frei, 1998).

All in all, the channel's strategic contribution is by no means certain. To complicate the emergent profitability experiences in the United States, recent literature contains the completely unexpected contention that a shift away from service to sales goals may actually result in reduced sales performance due to associated diminution of service levels (Frei and Harker, 1999b).

Waterhouse (1998) said preference for service-oriented goals when contrasted against the channel's revenue-generating potential suggested a failure to capitalise on strategic opportunities especially market and sales opportunities. He further argued that the telephone financial-service delivery is driven by 'cost reduction, acquiring new clients and service quality'(Waterhouse,1998, p. 128). Waterhouse also proposed that performance in terms of sales and revenue growth will occur only in the telephone FI channel through closer identification with organisational goal, re-structuring and the use of innovative strategy.

Finally, understanding the strategic issues that have assisted or impeded the progress of a FI delivery channel offers insight into the establishment of other technologically based delivery channels. Early Internet banking experience in Australia suggests that some larger banks are externally orientated market leaders. Others, whilst acknowledging the channel's potential, are clearly more defensive in their strategic orientation. A third group adopt a 'wait and see' approach especially in relation to anticipated cost reductions (KPMG, 1998). From this it appears that what occurred in telephone financial services may be repeated. Understanding this process will pay dividends in the future.

## 3.3     Strategic performance drivers

A channel's structural and behavioural characteristics affect its strategic and goal

orientation, and hence its performance. This section outlines the channel's key performance drivers, which support or impede success, and provides evidence to support the selection of these drivers.

Rapid and previously uncharacteristic changes experienced in FIs indicate the need for innovative management (Govindarajan, 1989). FIs face the risk of 'missing the correct strategy for the future versus living with misaligned strategy they know to be inefficient' (Frei, Harker and Hunter, 1997, p. 36). Successful innovation in a complex, dynamic banking market requires a shift from traditional bureaucratic structure to more strategic and flexible organisational structure (Burns and Stalker, 1961; Harker and Zenios, 1998). Further, Quinn (1985) argued that the best method of managing innovation was an 'incrementalist approach, (based on) goal orientated and interactive learning…that minimizes overly detailed planning and control…' (p. 82). This relates to the recursive nature of strategic management reviewed in Section 3.2.2.

### 3.3.1   Strategic orientation

Strategic management literature illustrates that strategic typologies have strong currency in explaining organisational performance and understanding the orientation of the firm towards the market. Specifically, in their seminal work on strategy, Miles and Snow (1978) suggested that firms can adopt one of four strategic orientations each of which is accompanied by structural characteristics. As shown in Figure 3.2, the four orientations are located along a strategic continuum.

Figure 3.2: Miles and Snow's (1978) Strategic Continuum
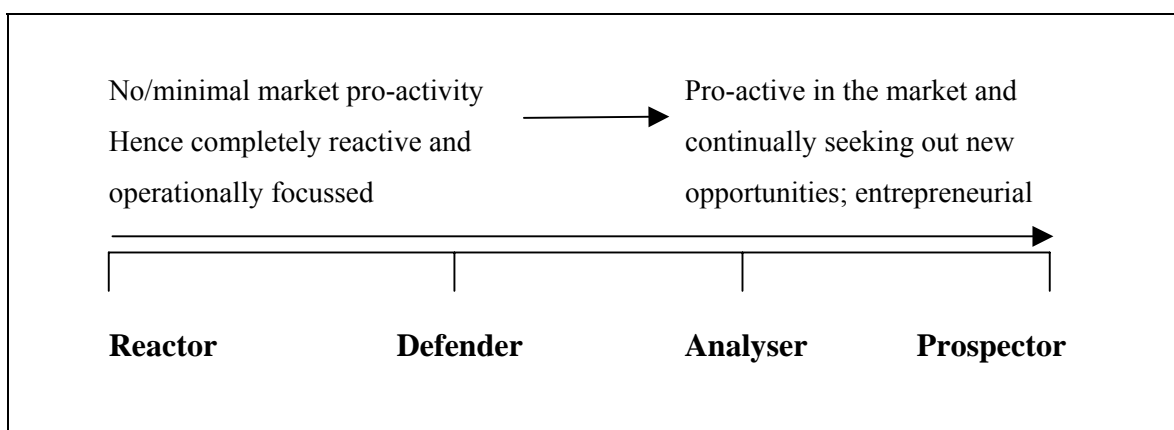
According to this typology, *prospector*s take an entrepreneurial approach in the market, continually searching for opportunity. In this approach, success depends on surveying a wide range of environmental conditions, trends and events to initiate new product responses. *Prospector*s are also aggressive firms which 'define the basis for future value' in their industries (Hamel and Prahalad, 1994). Structurally, these firms are flexible and can be characterised by low formalisation and decentralised management control. In this case, a bureaucratic structure would represent a total mismatch between strategy and structure.

Secondly, *analysers* are close followers of *prospectors*. *Analysers* are possibly more efficient than the *prospector*s which require higher profit margins to justify their innovative risk-taking. *Analysers* can operate using either a routine approach in a stable market or they imitate competitors in changing environments. Structurally, *analysers* may operate in a dual mode. They may have routine mechanisation in some segments yet require flexibility in others. In marketing/product development, for example, they can adapt via technological developments to accommodate dynamic circumstances.

The third type*, defenders* do not search outside their niches and therefore perform only minimal market scanning. Hence, they have a narrower product range. Typically, *defenders* operate in stable environments and can establish successful market niches. As a consequence, this type represents a serious misfit in a changing or uncertain market (Burton and Obel, 1998). Structurally, *defenders* are characterised normally by highly centralised control and hierarchical forms of leadership.

Finally, *reactors* are a residual strategic type characterised by under-performance and embedded operational methodologies. *Reactors* are frequent identifiers of change but have an inability to respond appropriately. This can be attributed to the continuing use of strategies and organisational structures that have become obsolete in the light of environmental change.

Snow and Hrebiniak (1980) found that *prospector*s, *analysers* and *defenders* each outperformed *reactors* in competitive and less highly regulated industries. Contrarily, Hambrick (1983) found that on a profitability basis, *defenders* outperformed *prospector*s, although from a market share viewpoint, the reverse was true. These market

responsiveness characteristics are more likely to be attributed to the *prospector* whereas the defender's success relies upon internal and operational focus (Golden, 1992).

Clearly then, this typology has been used frequently and is deemed to be reasonably robust across a variety of industry settings, including financial institutions performance (Golden, 1992; James and Hatten, 1994; Burton and Obel, 1998; Rogers and Miller, 1999). More particularly, it also has been used to analyse highly competitive industry settings. Shortell and Zajac (1990) found that *prospector*s and *analysers* outperformed the *defender* in the 'rapidly changing hospital environment' (p. 818). This suggests that it is not unreasonable to consider the typology for strategic analysis of the dynamic FI channel.

The typology also offers other advantages. Firstly, it categorises management behaviour, which establishes its usefulness in understanding leadership (Burton and Obel, 1998). Secondly, the typology has been used successfully to investigate strategy and performance at the sub-organisational (that is, channel) level (Golden, 1992; Shortell and Zajac, 1990). Thirdly, the approach adopts a quantifiable scale, which assists empirical analysis.

In a community-banking context, Wood and Rimler (1998) used a similar typology to assess the relationship between strategy and return on assets. They identified three distinctive strategic intents: *pioneers, moderates* and *conservatives*. Similar to *prospector*s, *pioneers* are less averse to risk. They actively set out to discover opportunities and strive to lead the market. Like *defenders, moderates* are more risk averse and tend to focus on operational issues (i.e. cost). This type seeks to follow similarly sized *pioneers* and can quickly adapt to changing circumstances.

Finally, *conservatives* are similar to both *defenders* and *reactors* in that they are more risk averse. *Conservatives* tend to be characterised by the smaller FIs, which make no attempt to lead, have a protective orientation and focus on maintaining their niche by their level of service differentiation. In sum, all channels possess characteristics that locate the strength and nature of strategic intent in relation to the market, yet still very little is known about the strategic orientations of emergent retail FI delivery channels (Golden, 1992).

Studies have suggested that *prospector*s and *analysers* tend to outperform other types. Within the context of the telephone-banking channel, it might be expected that operational-focussed call centre units will be characterised by a *defender* typology and therefore may not be as successful in attaining financial (sales) goals. On the other hand, a *prospector*, as a more market-orientated type, would tend to survey the environment, initiate market responsive strategies and consequently be more successful. Unfortunately, analysis is complicated by the fact that FI call centres may exhibit both operational and sales characteristics and yet still focus on satisfying non-sales benchmarks (James and Hatten, 1994).[23]

It is a key consideration for strategic delivery channels that in environments of considerable uncertainty, clients seek product variety (Burton and Obel, 1998). This is especially true in deregulated environments.

In the FI channel it is doubtful that market and client development are core priorities despite organisational rhetoric to the contrary (Waterhouse, 1998). It is suspected that a telephone-banking channel with a service delivery intent places less emphasis on product development. Shortell and Zajac (1990) indicated that the Miles and Snow approach was able to 'predict differences in (product development) behaviour in relation to business lines' (p. 820). They found that *prospectors* emphasised new services and market development, followed by *analysers,* then *defenders*. Work similar to Shortell and Zajac (1990) has not been undertaken in a bank channel environment, yet it is posited that benefit would be derived if their approach were extended beyond service to incorporate product intent.

### 3.3.2   Structure

This paper is interested in how leadership, strategic orientation and firm structure influences channel activity. Hence, understanding leadership archetypes and their strategic implications is critical to managing FI performance. Specifically, leadership

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[23] Generic telephone channel benchmarks include: (a) '80% of calls answered within 20 seconds'; (b) no more than 2.30 minutes per call; (c) >80% of all incoming calls will be responded to by the automated (non-human) voice response units (VRUs) or interactive voice response units (IVRUs).

preference for involvement as a critical contingent factor is situated alongside factors such as innovation, IT and HRM. (Harker and Zenios, 1998). The automated voice (IVRU) service approach suggests in some ways that leadership style may have been derived from a long period of industry stability. For example, an 'operational' manager selected to lead a cost-based financial call centres fits with Miles and Snow's (1978) third, *defender* category or fourth *reactor* category.

Organisational structure is an enabler of performance, thereby making it one of the most important aspects of management theory. Furthermore, successful organisational performance is based upon 'sense making' from multiple sources of external information. Moreover, in a state of uncertainty, 'strategy, structure[24] and performance constitute environmental enactment' (Jaunch and Kraft, 1986, p. 777). Similarly, Miller and Toulouse (1998) argued that environmental scanning combats narrowed vision and broadens awareness. This theory can be used to assist managers when designing appropriate and more complex strategies required by uncertain environments.

From a banking perspective, Roth and van der Velde (1991) identified a number of key performance drivers related to structure, propensity to gather information and determination of market factors. The drivers included flexibility and ability to change quickly, to introduce new products and to understand competitive issues. The devolution of banking organisational structure from a geographically based, single hierarchical model to a market segments approach was partially a response to the need for greater specialisation. Yet, it may not have been accompanied by requisite structural change to ensure the best performance (Kimball, 1997).

It has been proposed that 'structurally advantaged actors' that is, those that demonstrate flexibility and openness tend to perform better than the disadvantaged, in atmospheres where 'the legitimacy of rules' is uncertain (Lounsbury, Hirsch and Klinkerman, 1998). Similarly, Kaplan and Mackey (1992) proposed that a better fit among organisational context, structure and contingency variables augments performance. So too, Ginsberg (1986, p. 6) located strategy within an environmental and structural framework, viz.:

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[24] Structure then is the 'social creation of rules, roles and relationships' related to the firm's ability to acquire and process strategic information (Dawson, 1992 p. 107). In this way, structure is critically related to strategy and strategic orientation.

'understanding how strategic decision-making processes lead from individual behaviour to firm-level strategy requires not only a greater inclusion of situational variables but a more careful examination of the social structure in which the strategic decision-making processes are embedded…'

Therefore, to be successful, firms must consider external factors, be open to adaptation, demonstrate flexibility and have a propensity for innovative forms of organising. Consequently, the ability to recognise and assimilate external information is essential to the innovative process. It is not unreasonable to conclude that firms that demonstrate lesser propensity towards the market or stronger preference towards internal rules may not use externally orientated performance goals (Cohen and Levinthal, 1990; Grinyer and McKiernan, 1990; Miles and Snow, 1978).

To determine a management structure that fits best with the external environment, it is useful to consider structure on a continuum ranging from high management control through to significant management flexibility. A changing and uncertain environment requires flexible, rapid management decisions and suggests low centralisation and minimal formality. In this case, an "adhocracy" with its less formal management approach to product innovation and environmental change would be suited better. This orientation would be similar to Miles and Snow's (1978) *prospector* type.

Success is determined by how well the firm adapts and co-ordinates both internal and external activities (Mintzberg 1979). Donaldson (1995) argued that change in corporate strategy 'dislodges structural fit' and can result in performance loss. Some management structures can constrain effective strategic implementation as they have been shown to relate to under-performance.

Further, Crozier (1973) suggested that an inability to adapt was, in part, due to "historically determined structuration and power distribution, augmented by the possibility of an industry 'operating code'" (p. 132). Similarly, Grinyer and McKiernan (1990) argued that structuration and power distribution could establish itself as a set of core beliefs about operational issues.

There is a risk that existing knowledge and methodologies, especially in hierarchically structured firms, can impede strategic development. Specifically, internally focussed BUs which are structurally orientated towards operational goals and efficiencies would be more suitable to a well defined, stable external climate. They can be characterised by a limited external search capability, uncertainty avoidance, and considerable operating controls, especially rules.

The implication is that organisations[25] subject to such inertia cannot readily contemplate change or innovation (Grinyer and McKiernan, 1990; Cooper, Willard, and Woo, 1986; Ginsberg, Larsen and Lomi, 1996). Consequently, procedurally based operating structures support success in stable markets. Such an orientation can lead to 'recursive patterns' not suitable for the dynamic, changing market in which retail financial institutions operate (Miller and Friesan, 1984).

In sum, the inter-related implications of environment, organisational structure and strategic decision-making are of primary interest in this paper. To address this, a number of academics have successfully proposed management's various preferences for centralisation, formalisation and market scanning. Such variables are well suited to an analysis of the telephone-banking channel as they relate directly to decision-making style and information management acquisition and capacities (Govindarajan, 1989; Miller, Kets de Vries and Toulouse, 1982; Chandler, 1962; Burton and Obel, 1998).

Not only are telephone FI channel's structural characteristics uncertain, its operational focus also suggests that external information management and market scanning may not have played a critical role to date. Consequently it is unclear what the performance effects of structural activities such as gathering new information or forecasting client preferences and understanding competitive issues drivers would have on the channel.

Although structure is a multi-faceted contingency factor, single empirical measures can be incorporated into research to 'reveal important information about different aspects' (Ford and Slocum, 1977, p. 568). Miller, Kets de Vries, and Toulouse (1982) proposed 'market

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[25] See the *defender* and *reactor* strategic orientations (Miles and Snow, 1984).

scanning' as a key structural variable. Market scanning is related to goals and to performance itself, as failure to accumulate knowledge and information resources is 'a failure to take advantage of opportunity' and may assist in the 'structural deficiency of goal incompatibility' (Jaunch and Kraft, 1986, p. 783). Given the paper's interest in FI channel strategic behaviour and performance, propensity to scan the environment for relevant information is well suited (Miller, 1987).

### 3.3.3 Leadership

Leadership also can influence channel performance. Pawar and Eastman (1997) proposed that an organisational structural context and leadership 'can influence each other' and individually affect successful change. Financial services managers who have 'grown up' in organisations may have difficulties in distinguishing between the firm's structural and their own management characteristics (Davis, 1985).

Telephone banking is a relatively recent form of channel that requires innovation. Accordingly, there is a dearth of academic work on the inter-relationship among leadership, structure, strategy and performance in the financial service channel environment. However, it is still unclear as to what style of leadership is operant in the FI channel, although it is suspected that at least at the outset of the channel, internally focussed operational goals were management's preference (Waterhouse, 1998).

Thus it is possible that different leadership approaches are related to various strategic intents and that performance either can be supported or adversely affected by managers. For example, there are those whose goal setting is focussed on shorter-term issues. General management theorists provide a sound base to consider leadership at the FI channel level (Levinthal and March, 1993).

Finkelstein and Hambrick (1990) indicated that strategic decisions and performance are related to top-level managerial characteristics. They also suggested that managers 'structure decision situations to fit their view' (p. 484), therefore, management's control preferences affect structural choices. Alternatively, it has been argued that organisational context influences leadership behaviours and either support or adversely affect managerial

discretion. For example, on the negative side, organisational inertia impairs managerial flexibility (Finkelstein and Hambrick, 1990; Burton and Obel, 1998).

In sum, the flexibility ascribed to channel managers as a performance determinant necessitates a match between an open management and proactive strategy. Leadership is an inter-related organisational contingency factor, alongside size, technology and structure. Hence leadership 'impacts on firm strategy, structure and conduct' and is therefore also a co-determinant of performance (Ansoff, 1965 and 1984).

It is uncertain from the literature whether leadership acts as a driver of firm structure or whether structure determines management style. What is clear, however, is that leadership style is directly related to firm structure, strategy and performance. Consequently, misunderstanding channel management's style could lead to a situational misfit and adverse performance. The challenge then is to understand and manage innovation by linking overall vision to strategic planning in a context of leadership and organisational processes (Burton and Obel, 1998).

Expected strategic misfit raises questions about channel innovation from the viewpoint of management effectiveness. Kanter (1983) indicated the limiting effects on innovation can be due to reliance on the past, reactive behaviour, isolation, and system dominated structure. Similarly, Lant and Mezioas (1990) posited that established organisations have difficulty choosing and implementing innovation. From these perspectives we can derive a list of management difficulties especially in relation to implementing new product that may be relevant to the FI telephone-banking channel (Ennew, Watkins and Wright, 1990):

- difficulties in combining management styles
- difficulties in combining IT perspectives
- difficulties in recruiting special staff
- difficulties in dealing with organisational change

Evenson, Harker and Frei's (1998) brief telephone-banking analysis suggested that channel leadership might not be aligned with innovative imperatives, for example,

maintenance/growth of market share and revenue. Such management strategic mis-orientation may represent a failure to capture external opportunities. This, in turn, raises questions in relation to the Australian environment and the performance implications of the selected management style.

In considering leadership style as an important contingency factor, a number of authors have proposed measurement variables such as flexibility, delegation and formalisation (McGregor, 1969). Management decision-making, as a subset of overall managerial involvement has also been posited as a key manager effectiveness indicator (Gibson, Ivancevich and Donnelly, 1994). Similarly, consistent with the 'fit' approach above, it has been held that decision-making style represents management's response to situational variables (Gibson, Ivancevich and Donnelly, 1994). It has also been suggested that autonomy in decision-making at the BU level has a positive effect upon its performance. This is especially relevant to considerations of new and emergent delivery channels.

Management's preference for either high or low micro-involvement in decision-making is an explanatory organisational variable considered 'a summary measure of management style' (Burton and Obel, 1998). This typological approach enables direct comparison with other channel performance determinants; for example, a high degree of micro-involvement indicates considerable structural formalisation. Moreover, the choice of such a measurement scale continues the information gathering/processing and market orientation themes proposed elsewhere in the paper (Burton and Obel, 1998).

Burton and Obel's (1998) comprehensive approach algorithmically determined either a high or low preference for micro (leader) involvement. The seven sub-elements were: preference to delegate, the specificity of directions given, propensity to be proactive, focus on short or longer-term decisions, risk preference, and choice to motivate either by control or inspiration. These factors relate to the structural "embeddedness" issue previously discussed. Misfits can occur, for example, in a large BU operating within a complex environment. A high preference for leader micro-involvement would result in information saturation. Such a leadership style could adversely affect performance.

More particularly, a manager with a high degree of risk aversion and preference not to delegate would appear not to suit a highly competitive environment. This is consistent

with Miller and Toulouse (1986, p. 101) who found considerable 'negative correlation between flexible personalities and structural formalisation'. A leader with a low preference for delegation would be a misfit within a flexible, decentralised structure.

Similarities to Burton and Obel's (1998) methodology can be found elsewhere. Both theirs and McGregor's (1969) 'Theory X and Y' managerial characteristics seek to identify management characteristics in terms of either autocracy or flexibility. In particular, Theory X managers are not inclined to delegate nor motivate, and may have shorter-term horizons. Conversely, Theory Y leaders prefer to delegate, are pro-active and have a higher risk propensity. Both approaches can be broken down into remarkably similar dimensions: decision-making style, motivation, risk propensity, preference for delegation and pro-activity.

### 3.3.4   Channel climate

Organisational climate is regarded as 'a summary measure of people and behaviour' climate and acts as a moderating effect between inputs and outputs. While considerable climatic literature is targeted at the organisational level of analysis, this section applies the literature to review BU channel level implications. Extrapolated to the delivery channel level, organisational climate is the 'relatively enduring quality of the internal environment' and as such it is an organisational contingency factor (Burton and Obel, 1998, p. 113).

Climatic aspects are considered by some to derive from the individual psychological level. In particular, Burton and Obel (1998) suggested that ascertaining individual viewpoints about the work environment is essential for understanding their performance influences.

A number of theorists have considered organisational climate either as change related or as a performance driver. Pawar and Eastman (1997, p. 104) proposed 'organisational receptivity to change is generated by contextual factors and is expressed by members behaviours'. On this wider, organisational scale, Denison (1995) indicated climate as a situational predictor of performance (Joyce and Slocum, 1982). Similarly, Hinings and

Greenwood (1988) proposed that an inability to manage members' value commitments and levels of interest with the status quo could detrimentally effect successful change management. As well, Denison (1995, p. 622) indicated climate as a 'perceptual measure of organisational attributes'.

Finally, in terms of a general review of climate, Zammuto and Krackover (1991) proposed the term 'psychological climate' to understand organisational behaviour. This is categorised into a typology that corresponds with the 'structural fit' discussion in Section 3.3.2, specifically:

- *'group'* climate – high trust levels, people sharing values; open, friendly workplace
- '*developmental'* climate – demonstrates an openness to the external environment pro-active and outward looking work place
- *'internal process'* climate – highly formal and structured work place, and,
- *'rational goal'* climate – result orientated environment – leaders are 'hard drivers'.

In sum, climate's importance as a key contingency factor that influences efficiency and hence success, situates such a typological approach well for examination of factors that assist or impair organisational success. Similarly, climatic type can be co-situated with an associated structural characteristic, which establishes its usefulness for determining climatic/structural fit as an intervening variable between inputs and performance.

For financial services, Jaja's (1989) work on banking performance and IT indicated understanding the behavioural composition of the organisation and its innovation implications as a critical management factor. Yet, recent banking studies have tended to focus more on tangible, financially measurable, drivers of performance. For example, Frei, Harker and Hunter (1997) focussed on IT and capital at the expense of psychosocial factors such as culture and climate which are posited by others as vitally important (Burton and Obel, 1998).

In the United States, the re-orientation of the US telephone-banking environments from

service to sales activity is not without considerable management complexity (Frei and Harker, 1999b). In the absence of comprehensive knowledge of channel climate and management behaviours it is unclear what fit, climatic or otherwise, is characterised in the telephone-banking channel. In relation to Australia, this section then seeks to develop the use of climatic aspects for use at the FI channel level.

The work then seeks to understand psychosocial workplace issues and, in particular, perceptions of openness, conflict, trust, respect and reward in the workplace. To measure this construct seven perceptual dimensions have been used successfully (Burton and Obel, 1998). These are: trust, conflict, morale, rewards, resistance, leader credibility and scapegoating. For the purposes of channel analysis, these perceptual dimensions should be directed to a specific organisation unit (Glick, 1985).

### 3.3.5   Technology

Technology has changed the way FIs view service, sales delivery and cost management. FIs now proactively encourage clients to conduct banking transactions via self-service delivery methods such as telephone-banking, using IVRUs. This has resulted in a notable reduction in branch staffing levels.

The strategic contribution of information technology (IT) to business success is well documented (Jaja, 1989; Frei and Harker, 1999a). Sambamurthy, Zmud and Boynton (1994, p. 74) found that technology has resulted in organisations' re-orientation to 'seize competitive advantage'. In Australia, the considerable FI expenditure on technology shows no signs of abating, as Wallis Committee (1997) noted:

> 'technology is already allowing innovation to occur in the financial services
> industry at an accelerated pace, leading to significant changes in financial
> relationships and market structures' (p. 93).

Relatively recent thinking has indicated that competitive advantage is sustained through comprehensive IT management and not through 'stand alone strategic applications' (Sambamurthy, Zmud and Boynton, 1994, p 74). As a situation variable, technology is the

process of transforming information, machinery and techniques into outputs. Accordingly, IT is a co-determinant of performance (Zahra and Covin, 1993; Mintzberg, 1983). In a bank context, Davis (1997) indicated that the effectiveness of IT management seriously affects client retention, revenue and success. Similarly, Harker and Zenios (1998) proposed bank IT expenditure as a key performance driver.

Technology itself requires innovative and multi-directional methods of process co-ordination and as such is highly sensitive to the channel's climate.[26] Consequently, as financial service innovation is a function of human resource capacity and research and development investment, the paper is vitally interested in IT management choices and in IT expenditure outcomes.

IT should not be overlooked as a key performance driver (Jaja, 1989; Harker and Zenios, 1998). Ansoff (1984) proposed in his 'Environment Strategic Success' hypotheses that, from a technically aggressive viewpoint, firms ought to position themselves at the 'exploratory' IT intensity level on a stable/creative continuum (see Figure 3.3).

Figure 3.3: Bank Technical Intensity Scale. Contrasting Jaja's (1989) findings against Ansoff's (1984) Prescriptive Model
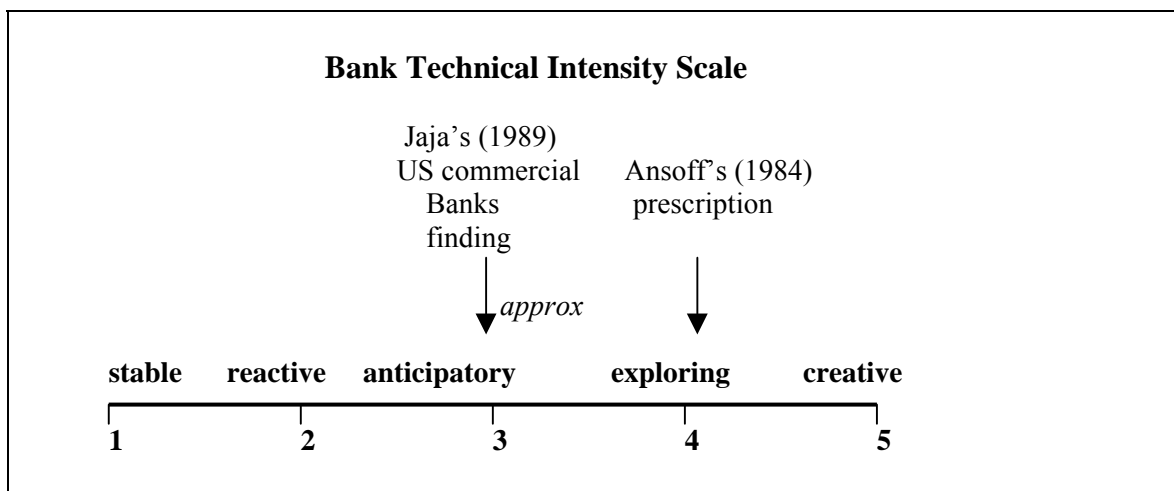


In terms of measurement, investment expenditure in systems is often used to measure the information technology construct (Pennings and Harianto, 1992). To provide a framework for analysis, Ansoff proposed four major technological categories. These were (i)

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[26] This is not a uni-directional process rather a potentially recursive pattern - i.e. changes in 'strategy-structure-conducts' are made possible by technology which can result in beneficial 'strategic-structure-conduct' (Malone and Crowston, 1994 ).

environmental issues, (ii) technological innovation, (iii) marketing factors and, (iv) the capability of management-enabled comparison of technological orientation to strategic and structural considerations (Jaja, 1989). As items (iii) and (iv) are incorporated elsewhere in the paper this section will focus on (i) and (ii).

In banking, Jaja (1989) posited that the necessity to align strategy to the IT environment, the relationship between technological change and competition is widely misunderstood (Porter, 1985). Further, Harker and Zenios (1998) cautioned that there was some doubt as to whether IT investment contributes positively to FI profit.

Jaja (1989) posited that better managerial perception of 'technological turbulence' lead to improved bank performance, yet found that commercial banks were located around the less optimum, 'anticipatory' stage. Jaja concluded that technical aggressiveness is the most 'critical' predictor of success, over and above manager's perceptions of general and IT environmental turbulence. While Jaja's work focussed on bank wide imperatives, he also foreshadowed the extent of technological change at the sub-business level.

To determine aggressiveness Jaja (1989) used a dollar measure for investment in technology. His survey questions extended analysis to include, the bank's competitive position in relation to IT research leadership and a focus on IT research. An extract of Jaja's questions were adopted from Ansoff (1984). They are set out below in Table 3.1 and place each question on a scale from *stable* to *creative*.

Table 3.1: Technological Aggressiveness of Bank IT Strategy[27]

| Factors | Stable | Reactive | Anticipatory | Exploratory | Creative |
|---------|--------|----------|--------------|-------------|----------|
| IT Investment % of expenses | Very low | Low | Moderate | High | Very high |
| IT Competitive Position | Imitator | Close follower | Follower | Aggressive follower | Innovator |
| IT Research | No R and D | Imitate emergent IT | Improve and develop existing IT | Adapt novel IT | Pioneer new IT |

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[27] Jaja adapted the question set from Ansoff (1984).

In the telephone-banking channel, the appropriate use of technology is critical. Frei and Harker (1999a) indicated that technical innovation has encouraged the wholesale and continued use of IVRUs to answer client calls. Hence, strategic IT decisions remain an important means of satisfying, and in fact driving increasing client demand for service.

Wallis Committee (1997) differentiated between operator assisted and interactive voice response unit call types. Profit orientated call centre environments focus on 'client relationship management' (CRM) driven IT solutions. Such methodologies aim to deliver comprehensive client information to the client service representative (CSR) in the client's 'channel of choice' (Ellens, 1999, p. 24). Consequently, technology aims to integrate often disparate bank IT platforms into 'one view' of the clients' information to enable a value added relationship to be managed.

In the transaction orientated FI call centre, IVRU technology has lead to significant automatic call answering efficiencies especially in the service level, speed and volume of calls answered performance categories. However it has also been found that IT expenditure that leads to IVRU complexity does not correlate well with improved performance (Jaja, 1989; Evenson, Harker and Frei, 1998).

While there is no doubt IVRUs answer considerably more calls per hour than a banker representative, there is now concern that IT may be counterproductive from a revenue viewpoint (Waterhouse, 1998). Similarly, Evenson, Harker and Frei, (1998) found that a complex IVRU system results in clients opting to disconnect from the IVRU to speak to a human operator. In this way it may not be advantageous to clients if they experience delays reconnecting to a human operator. Nor is it productive for FIs if they have already adjusted staffing levels (downwards) to reflect IT innovation.

Therefore, management thinking is required to integrate IT, strategy and structure. In terms of Miles and Snow's (1978) such strategic typologies, Hambrick (1983) found that *prospector*s will incur a higher research and development (R and D) expense to sales ratio although the profitability of the outcome was not explored. IT aggressiveness too may impel innovative service delivery channels. Specifically, technological enhancements have contributed to the growth of electronic delivery channels and telephone banking in particular.

In the absence of literature, it is unclear that the wholesale exportation of significant call volumes to automated voice response service systems, despite the moves in some quarters to augment human relationship based telephone sales process, is viewed by clients as either differentiated or innovative. In particular, FI's cost focus may indicate a failure to contemplate inter-channel relationships, sales performance and client profitability (Pihl and Wambay, 1992).

From this it appears that strategic considerations are also highly relevant to IT investment considerations yet, very little, if any Australian research has as yet related IT initiatives to strategic orientations. Aside from some very recent work at the Wharton School, little has been done, at the retail bank channel level, to explore strategic issues thoroughly (Evenson, Harker and Frei, 1998). This paper considers IT as a driver of telephone-banking performance (Harker and Zenios, 1998) and the proposition that selected IT development in the call centre drives improved performance.

## 3.4    Measurement of performance: challenges

Performance management is a critical process for financial services, as it is for all industries. An American Bankers Association (ABA) survey concluded that 'leading edge' financial service institutions that set higher goals tended to obtain higher results there for (ABA, 1992). Hence, the rationale for measuring business effort arises out of need to provide information on the attainment (or otherwise) of business goals (Orr, 1997).

The devolution of financial services processes to the channel level requires the alignment of BU level performance to overall, organisational goals (Mintzberg, 1994). Davis (1997) argued that the critical challenge for banking is the delivery of key results at the BU level. Such a finding has been support by the Wallis Committee (1997).

Attendant upon performance is managements' corrective action. Orr (1997) found, at the organisational level that while there is a reasonably 'sophisticated' bank performance measurement environment, some financial service firms are experiencing strategic and tactical performance difficulties. A number of changes are associated with performance

management at the channel level. Nilsson (1987) argued that operationalising channel plans requires an evaluative approach; reviewing fit with overall strategy, clearly stating achievable, measurable goals aligned with the activities of other BUs, operationalising new sub-units goals and incorporating revised competitive realities. Kimball (1997) indicated that the creation of new channels offered possibilities for greater client service specialisation and revenue. He also said that it occasioned new resource and performance management challenges, for example, client overlap, allocating, and sharing profits among divisions. Consequently, for emergent channels, it is suggested that existing performance indicators of planning, control and learning embedded in other environments or structural forms may not be appropriate, however useful they were for other forms of delivery (Maidique and Zirger, 1995).

Goal setting establishes the relevance of action to internal and external parameters, yet it is held that a firm's own experiences will eventually inhibit such processes 'as past experiences create organisational rigidities' (Ginsberg, Larsen and Lomi, 1996, p. 121). The implication is that this inertia, discussed in Section 3.3.2, may have dysfunctional consequences indicating the need for goal frameworks that express strategic intent with due recognition of environmental factors and organisational context (Zajac, 1996; Dawson, 1992).

Cyert and March (1963) asserted that operational decisions with short-term applications operating in a 'rules based environment' are functions of past goals and organisational goal experience. The problem is that the propensity to remain with older forms of structure and existing goal measures can have adverse implications for strategic goal setting (Fiegenbaum, Hart and Schendel, 1996; Levinthal and March, 1993).

### 3.4.1 Telephone-banking goals

From a performance measurement viewpoint this paper is exploratory in nature, and sought to establish call centre channel specific KPI use (Bamberger and Fiegenbaum, 1996). At the outset, the telephone-banking channel began as a relatively modest way to devolve calls away from branch networks. Yet, industry surveys (Waterhouse, 1998) and recent empirical work at Wharton reinforce the considerable revenue earning potential of

the telephone-banking channel. In the light of exponentially rising call volumes, managing delivery on a service-only basis may ensure that bank management has missed the true sale potential nature of the channel.

In telephone banking, referring to Waterhouse (1998) and Harker and Zenios (1998) it is conceivable also that structural rigidity has adversely affected channel goal setting (McCammon, 1971). While a 'cost approach' provides information on call volumes and enables expenses allocation, it does not provide information on the revenue and expense relationship.

Embeddedness and inertia may explain why service-based performance indicators as opposed to revenue based KPIs are the most significant telephone service delivery measurement approach.[28] This is notwithstanding the relevance of revenue approaches to channel management and success. A Price Waterhouse (1997) call centre industry survey revealed that the 44% of call centres are managed on a cost centre basis; 36% as a profit centre and 20% regard themselves as independent BUs. Revenue based KPIs were used by only 17% of inbound call centre operations.

Research also indicated that many call centre channel managers do not report KPIs to senior management (Price Waterhouse, 1997). Hitt and Frei (1999, p. 2) also indicated there 'has been little systemic study on how these (financial service) channels affect profitability' although it is suspected that the channel's service orientation and a paucity in reliable and useful information have not helped (Channon, 1980).

As indicated by Evenson, Harker and Frei (1998), the imperative to improve IVRU results occurs despite wide recognition of the channel's revenue earning potential This suggests strategic goal misalignment and/or management inability to update performance management processes and indicators to meet changing circumstances. In the Australian setting, it is suspected that there is a general and continuing preference on the part of FI managers to drive as many inbound client calls as possible through automated call service

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[28] Generic service quality indicators used in other non-banking contact centres are regularly used by financial service firms telephone-banking channel, for example, the number of inbound calls answered and client satisfaction. These indicators lend themselves well to quantitative and qualitative analysis.

technology, IVRU etc, although some smaller, CSR-staffed, sales-specific cells have been created now. This possibility is reinforced by the continual use of KPI choices such as high IVRU targets and associated minimal CSR answered call times (Evenson, Harker and Frei, 1998).[29]

Consequently, it is unclear if telephone banking continues, on average, to place greater emphasis on operational, cost goals rather than sales-driven, innovative, diversified or market orientated initiatives. Increased client self service by definition reduces the number of calls available to CSRs.

Notwithstanding a supposed inability to know just what sales revenue opportunities are missed, by directing almost all calls to automatic call units, to date few studies have considered performance measurement of the telephone-banking environment. What little work that has been done is represented best by Evenson, Harker and Frei (1998) who considered the 'creation of high performing call centres', and the inter-relationships of influences on FI call centre service delivery. However, the study's intended aim does not appear to have been achieved as the study reinforced the automatic call answering argument by suggesting that 'FIs that attempted to sell more, lose sight of customer service…' (p. 2). Perhaps, part of the answer lies in their definition of 'high performance' as more to do with their selection of call-orientated indicators such as *client hold time* and *speed of (call) answer*, than on sales revenue outcomes (Evenson, Harker and Frei, 1998).[30]

The conceptualisation of the Australian call centre as IT-reliant, high-volume, cost-minimising BU with a focus on maintaining and upgrading technical proficiency fits well with the concept that a technically focused unit may not be orientated strategically to the external market and hence inefficient (Waterhouse, 1998). That less allowance may have been made for specific, market related financial measures[31] means that the increasingly

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[29] At one large Australian bank IVRU call target is 85% of all inbound calls.

[30] This paper was nominated as one of the first academic papers to study the inter-relationships or influences on FI call centre service delivery.

[31] For example, loans/sales written or retained or sales referrals and sales leads generated. These indicators are then expressed in terms of core drivers like 'the number of calls taken'.

multi-dimensional nature of the call centre channel performance is at risk of being overlooked. The alternative is to adopt a multivariate performance measurement approach that better reflects the multiple goals of this retail FI channel.

Given that performance measures reflect the effectiveness of strategy (Kaydos, 1998), the paper's overarching hypothesis is that Australian FI telephone-banking channels tend, on average to place more emphasis on operational, cost management rather than sales-driven, innovative, diversified or market-orientated initiatives. Consequently, for a variety of behavioural and circumstantial reasons it is suspected that service aspects have tended to overshadow the sales potential of the channel (Waterhouse, 1998).

### 3.4.2  Service - non-financial goals

Evenson, Harker and Frei (1998) illustrated that the propensity of the delivery channel to be primarily service based, is due to call based standard measures of service 'promptness' such as; customer (call) hold time and system time, the time spent on each call. Other service based indicators include, 'grade of service', which is defined as the percent of all incoming calls answered within a certain number of seconds. Such indicators are, and particularly for telephone-banking channels are deemed as, service quality that could be compared across firms (Evenson, Harker and Frei, 1998; Kaydos, 1998).

As such, the ability of the channel to answer calls within certain parameters is deemed a proxy for the effectiveness of managerial decisions to resource the channel adequately. Further, the variable, as a standard measure of client satisfaction, links retail channel strategy to the broader client service intent of the organisation. For the purposes of this paper, 'grade of service' is preferred over other, related, call measures such as 'customer hold time' and 'calls abandoned'. This is because these would need to be incorporated into more detailed and longer-term study, which provides for a more complete capture of performance outcomes.

External service efficiency measures based on client perceptions were considered also and disregarded as they were deemed subjective measures of the clients' broader telephone service experiences. Further, they would have necessitated a considerable sample and imposed considerable timing issues.

### 3.4.3 Sales - financial goals

The channel operates in a dynamic business environment. Waterhouse's (1998) finding of almost exclusively 'service' orientation indicates a potential mismatch occurring between overall goals and channel level performance indicators. Yet, general telephone-banking research shows the minimal use of revenue oriented KPIs (Price Waterhouse, 1997).

While service performance measures recognise the channel's volume capacity they do not recognise the revenue orientation now in evidence in some US financial institutions. Nor do they reflect the proposition that the Australian channel is already or may become an important source of product referrals to FI networks.

While delivery channel literature recognises that inbound calls do present sales inquiry opportunities and uses the term 'inbound sales', such measures have not featured in empirical analysis of channel performance (Evenson, Harker and Frei, 1998). Similar to branch 'dollar sales targets' measures such as 'converted sales per call', for example a funded home loan, reflect the relative nature of the action as a closer proximate of profitability notwithstanding that the channel may not derive direct revenue from the sale. Such measures are sensitive to product development and selection.

While Waterhouse (1998) foreshadowed that the sales generating potential of the channel required further investigation, unfortunately, KPMG (1998) found that the 'number of FI Internet site hits' is the preferred KPI measurement approach. This suggests that goal measurement has not necessarily increased in sophistication in newer FI channels. While such FI services may not in themselves produce direct revenue or fee income, an anomaly well represented in 'cost based' telephone banking, such channels do make at least an indirect contribution to product profitability. Consequently, in the light of increasing channel sophistication, its posited revenue producing capability and irrespective of whether service or sales measures are currently used, all performance information must be determined to enable managers to act on such goals measured.

## 3.5    Summary

The chapter reviewed selected theories of strategy, strategic orientation, organisational

design and structure, leadership, organisational climate, technology and performance measurement as they apply generally and to financial institutions, and the orientation of the FI channel to its environment. The literature provided a series of typologies that enabled the identification of managements' approach to their markets. This is most important, as we know that an inappropriate orientation may impede in practice appropriate strategic decisions and behaviours (Johnson and Scholes, 1988).

Notwithstanding the importance of the telephone-banking channel as a low cost service alternative, there is a dearth of related performance analysis work and, further, performance measurement approaches are by no means clear. The general hypothesis that emerges is that the cost-based and operational-based approach has been widely used in Australia's FI industry and due to its focus on operational issues and relatively short-run measurement approach, it may not have proven to be as advantageous as was its strategic intent. It is conceivable that these forms of KPIs indicated a *defender* structure which Miles and Snow said was liable to be weak in terms of its environmental monitoring.

Such weakness could have potentially adverse strategic implications (Golden, 1992). Hence, it is posed that from the outset of the call centre delivery channel there appeared to be insufficient strategic thinking at BU level resulting in a strategic misalignment and ineffective goals setting.

After considering the general strategy implications, Section 3.2.1 proposed that structural influences either support or impeded strategic activity within the retail FI channel in particular. Specifically, Ginsberg (1986) related structure to strategic context not as a causal factor but as a relational factor. Moreover, it was suggested that the structural adaptation of the marketing channel to its environment is positively correlated to performance. This has implications for the devolution of the firm into new work divisions (Lukas, Hult and Ferrell, 1996).

Limited academic literature has focussed primarily on non-financial 'service based' data, refer: Evenson, Harker and Frei's (1998) 'low (call) wait time' and 'obtaining a client response'. These indicators were in turn driven by such variables as; 'type of calls –

inbound and/or outbound, amount of CSR freedom to deal with call without having to transfer, turnover – average number of CRS leaving compared to previous year…'.[32]

It is not known whether the telephone channel has aligned itself to the broadest FI level strategic expectations as their critical KPI setting factors. This is exacerbated by the importation of generic 'non bank', for example '(minimal) call duration may not serve as the most appropriate performance measurement drivers'.

A multi-faceted approach to performance measurement is indicated by the conflict between long-term and short-term measurement. Such an approach to performance should overcome the mismatch described due in part to cognitive rigidities occasioned by experiences and prevailing conventional wisdom (Schendel and Patton, 1978).

The next chapter, Chapter 4**,** presents the research model of telephone banking channel performance drivers, eight hypotheses proposing the components of performance and the misfit that may have occurred. The chapter will also identify the variables and review data collection techniques.

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[32] Especially in terms of Evenson *et al* (1998*)* commented (a) 'that outbound sales can shift the attention from effective service delivery'; and then (b) 'call centres that attempt to sell more tend to lose sight of customer service' (p. 12).

# CHAPTER FOUR: MODEL AND HYPOTHESIS DEVELOPMENT

## 4.1 Introduction

There are many inter-related factors, which will influence the success of strategic decisions. Chapter 3 reviewed the literature on such factors, such as strategic orientation, structure, organisational climate and leadership as they relate to performance. Additionally, it was ascertained that there is a limited amount of published information on bank delivery channels and especially call centre management.

In particular, Chapter 3 highlighted the risk of *ad hoc* approaches to strategic implementation, which are often adopted more as a function of past knowledge and/or structure, uncertainty-avoiding behaviour or inappropriate measurement choices. This paper considers the possibility that cost-minimising service-delivery issues tend to overshadow a client-focussed, externally-orientated sales-generation focus (Waterhouse, 1998).

This chapter is designed in a four-part framework. Firstly, Section 4.2 presents an overview of the research model and hypotheses development. Secondly, the survey method is discussed in Section 4.3 including pilot testing, main survey research procedure and questionnaire design. Section 4.4 discusses research assumptions. Finally, Section 4.5 summarises the chapter.

## 4.2 Proposition and hypotheses development

The channel's ability to monitor its external environment and determine consequential strategic direction as an enhancer of BU performance is of considerable interest to managers (Golden, 1992). The model here proposes strategic orientation to the market, climate, technology, leadership style and structure as non-hierarchical, measurable and inter-related independent variables, which support or otherwise financial service goals.

### 4.2.1   The Proposition

From the literature, a proposition is derived that extends organisational and channel-based theory by considering the influences of strategy and structure upon call centre channel performance. Further, as illustrated in Figure 4.1, the a proposition enables exploration of as yet unknown relationships between call centre channel performance and a number of factors such as strategic orientation, structure, organisational climate, leadership orientation and technology.

Primarily, the paper is interested in the performance implications of strategic, structural and behavioural aspects of the telephone-banking channel. Moreover it is suspected from the literature and anecdotal feedback that older, inward looking and micro-involved ways of managing have impeded performance. From this we derived an overarching research question:

*What is the relationship between telephone-banking organisational characteristics (strategic orientation, leader style, climate and structure) and performance effects*

A number of studies have empirically considered bank-wide strategy and performance in the context of Miles and Snow's strategic typology (for example, James and Hatten, 1994; McKee, Varadarajan and Pride, 1989).  Yet, this dissertation aims to extend such work to the FI channel level and as such, enable consideration of the following more detailed research interests:

- What are the performance effects of the channel's strategic orientation ?
- Does the structure of the channel support or impede performance ?
- What form of leadership was prevalent in the telephone-banking channel ?
- Were call centre channel key performance indicators (KPIs) goals related to or aligned to performance ?
- What was the relationship between various IT investment choices and telephone-banking performance

- Is the psychosocial climate of the channel related to improved or diminished channel performance ?

Figure 4.1: Proposition showing hypothesised channel performance determinants



**Strategic ◀▶ Structure ◀—▶ Leadership ◀—▶ Climate ◀▶ IT ◀▶ KPI** *Independent*
**Orientation** **Choice** *Variables*

as drivers of

**Call Centre Channel Performance** *Dependent Variable*
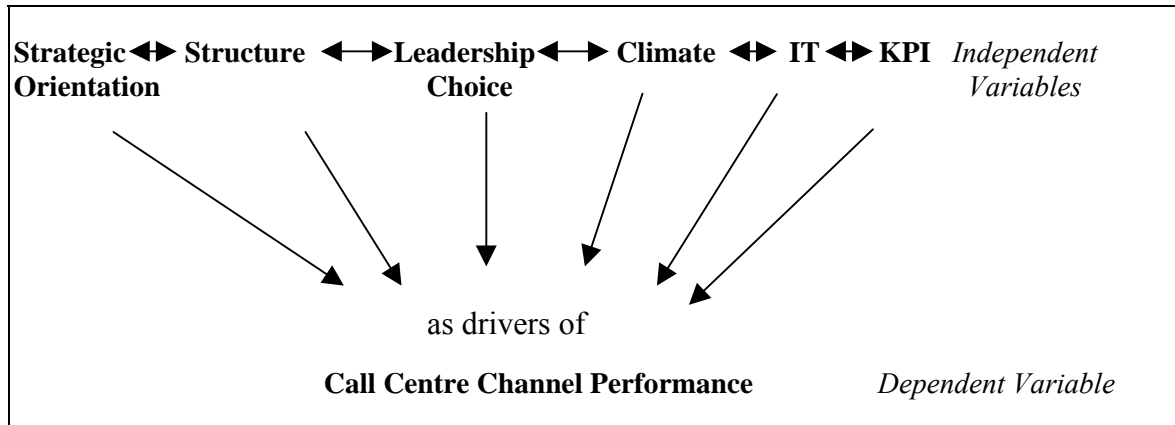
The proposition shown at Figure 4.1 refers to an assertion that matching strategy with organisational structure is already an established research area (Govindarajan, 1986). It attempts to explore the fit among strategy, structure and climate considerations. It also reflects the key influence of technology in relation to performance. Additionally, it incorporates the channel's orientation to the external market, its propensity to manage information, and management preferences for product innovation (Miles and Snow, 1978; Burton and Obel, 1998). To reflect the limited nature of academic work in FI telephone channel management each determinant is shown in an interrelated way so as not to preclude multi-directional relationships.

The inclusion of leadership, structure and climate as independent variables also overcomes, to some extent, Zahra and Pearce's (1990) concerns about omission of process variables. Furthermore, from a banking perspective the proposed relationship among channel structure, leadership, and strategy has support in Evenson, Harker and Frei's (1998) 'effective service delivery' work. Here it was held that internal processes, human resources and technology are efficiency determinants associated with (service delivery) performance as the primary dependent variable (Jaunch and Kraft, 1986).[33]

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[33] The Evenson, Harker and Frei (1998) paper expressly stated that it aimed to review strategies for 'creating high performing call centres'. It also nominated itself as 'high level' and as one of the first papers to study the inter-relationships of influences on FI call centre service delivery.

This proposition considers the direct effects of each independent variable. While management preference and characteristic sub-elements were analysed *post hoc*, the mediating effects of variables, if any, were not the intention of the study. Finally, the model seeks to activate Mir's (1997) suggestion of modeling structural variables with elements of performance.

Each factor will be considered now in turn. Strategic orientation affects banking performance (James and Hatten, 1994). This reflects that each of Miles and Snow's strategic typologies produce varying performances and their proposition that interactions between strategy and performance shape organisational capabilities (Zahra and Pearce, 1990; Shortell and Zajac, 1990; Henderson and Mitchell, 1995). The structure construct, designated as 'propensity to scan the external environment', recognises that assimilated, external information is essential to the innovative process and demanded by a constantly changing, highly competitive, external environment (Cohen and Levinthal, 1990). The direction of the structural/strategic effect in Figure 4.1 is irrelevant. This is because irrespective of whether structure informs strategy (Vrakking, 1992) or strategic change affects structure (Channon 1973), both have a well-established relationship to performance (for structure - see Donaldson, 1987; Cyert and March, 1963; and, Crozier, 1973; for strategy - Burton and Obel, 1998).

The leadership construct enters the model via its presumed relationship with channel level management decisions around strategy and structure. This is based on the widely held proposition that strategic choice is strongly related to management action. Similarly, it recognises that leadership is a co-determinant of performance (Henderson and Mitchell, 1995). Additionally, the incorporation of the decision-making variable deals with the shortcomings of previous studies that tended to look at the demographics, for example, leadership tenure and qualifications, rather than the behavioural process of leadership (Mir, 1997). In sum, each of the first three variables relies on the assertion by McGrath, MacMillan and Venkatararaman (1995) that leadership, product implementation, and market initiatives are necessary factors to achieve superior performance.

The climate construct is incorporated into the model also. It serves as a summary measure of employee behavioural orientation, for example, their norms and values, which arguably affect outputs and consequently drive performance (Burton and Obel, 1998).

Finally, technology is incorporated into the model as an important determinant of performance, especially in turbulent environments. This reflects arguments about the connection and positive performance implications of a 'fit' between product development and technical aggressiveness (Zahra and Covin, 1993; Jaja, 1989).

### 4.2.2   Hypotheses

The hypotheses reflect the fact that alignment of strategic, structural, technological and behavioural factors at the bank delivery channel level has received minimal attention in the literature. This is notwithstanding that such alignments are critical to effectiveness of financial institutions (Harker and Zenios, 1998).

Ansoff (1965 and 1984) proposed that maximum profitability requires a match between a rapidly changing environment and an aggressive strategy. It is contended that more externally strategic orientated types (*prospector* and *analyser*) which tend to survey the environment and initiate market and product development/differentiation strategies will indicate a better strategic fit in a changing and complex retail FI environment (Miles and Snow, 1978).  However it is suspected that a continued focus on service level goals may be dichotomous with revenue-based approaches. This refers to the contention that a more internally or operationally focussed channel indicates a propensity against incorporating external influences (Waterhouse, 1998).   If this were true, the exclusion of sales imperatives in the face of considerable revenue opportunities would represent a serious misalignment of strategic effort.

The expectation here then is that more internally, operationally focussed telephone-banking channels will be characterised by a *defender* typology which will not be as successful in attainment of financial goals, specifically, revenue KPIs. Consequently, the relationship between the call centre channel and overall strategic intent is of interest as we do not know whether the telephone channel has aligned itself strategically to the broadest FI level goals and the demands of various stakeholders, expressed as strategic reference points (SRPs).

It is also suspected that more externally oriented strategic orientations may lead to IT complexity due their continual innovations and investment in research. Such developments may, for example, lead to overly complex IVRUs and hence come at some cost to maintaining service-orientated goals. This may in turn actually result in reduced sales performance (Frei and Harker, 1999a). This paradoxical contention suggests a question worth further exploration (Frei and Harker, 1999a).

The following hypotheses enable consideration of the nature of the relationship between strategic and managerial choices and service and sales aspects of telephone performance. Each is written in the null hypothesis format ($H_1$) notwithstanding the directional nature of the exploration[34]:

**Hypothesis 1a:** *There is no relationship between more innovative strategic orientations and channel service performance.*

**Hypothesis 1b:** *There is no relationship between  more innovative strategic orientations and channel sales orientated performance.*

From an innovation perspective it would also be useful to review the Shortell and Zajac (1990) finding that *prospector*s place greater emphasis on new and planned introduction of new products and/or services; and, additionally on developing the way in which existing products are offered to clients. The second set of null hypotheses consider product innovation in the telephone-banking channel:

**Hypothesis 2a**: *There is no relationship between  more strategic, externally oriented call centre channels and enhancing/developing the extent of the way in which the channel offers its products to clients.*

**Hypothesis 2b:** *There is no relationship between  externally oriented call centre channels and increasing the number of products offered to clients.*

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[34] Some management researchers use the alternative hypothesis format although the *Null Hypothesis* ($H_o$) format introduced by Fisher (1949) is widely used.  The null is seen, "typically (as) a hypothesis of no difference" (Ruf, 2003), yet, it is the alternative hypothesis as indicated by Neyman and Pearson (1928) that researchers are most often interested in (Winstead, 2003).

It is apparent that the precise channel structural characteristics of the telephone FI channel are uncertain. Moreover, the internal, operational focus of the FI call centre channel in Australia suggests that external information accumulation in the form of market scanning has not played a critical role to date (Waterhouse, 1998). The propensity to review or ignore external influences (termed 'market scanning') has unknown performance implications is tested in the following set of hypotheses:

**Hypothesis 3a:** *There is no relationship between service performance and more strategic, externally orientated channel structures.*

**Hypothesis 3b:** *There is no relationship between sales performance and more strategic, externally orientated channel structures.*

The fourth pair of hypotheses consider that profitability necessitates a match between an open, decentralised and flexible management style and proactive strategies (Ansoff, 1965 and 1984). Earlier discussions indicate the possibility that telephone-banking leadership was imported from pre-deregulation organisational structures thereby transferring older forms of organising, specifically hierarchical and/or bureaucratic leadership styles with managerial micro-involvement in decision-making to the channel. Such mechanistic styles may be suited well to production type businesses but, in a constantly changing and competitive environment, it may be that the converse, flexible, open, innovative, decentralised and responsive leadership is more suited. This avenue of investigation seeks to ascertain if this leadership response is related to performance (Burns and Stalker, 1961; Burton and Obel, 1998).

**Hypothesis 4a:** *There is no relationship between channel service performance and delegated management authority.*

**Hypothesis 4b:** *There is no relationship between sales performance and delegated management authority.*

Using organisational climate as a summary measure of channel behaviour, it is posited that more internal-oriented, highly-structured climatic forms are supported by strong rules, characterised by reduced leadership credibility, lower employee trust and may fail to consider fully employees' behavioural and motivational issues (Zammuto and Krackover, 1991). Hence, they may be less flexible and resistant to change.

Such characteristics may lead to an over-emphasis upon operational issues and overlook the values of employees which in turn impairs management's ability to consider critical long term HR challenges and can impair performance (Pawar and Eastman, 1997). Consequently, internally orientated channels would be a mismatch in some environments for example, one requiring managerial flexibility to devise innovations to cope with serious competition. Hence, in the null:

**Hypothesis 5a:** *There is no relationship between service performance and more open, valuing and employee satisfying channel climates.*

**Hypothesis 5b:** *There is no relationship between sales performance and more open, valuing and employee satisfying channel climates.*

The appropriate use of information technology (IT) is critical to telephone channel performance yet potentially risky if a strategic fit is not achieved. What this means is that on the one hand, Jaja (1989, p. 287) found that a bank's technical aggressiveness 'co-determines superior financial performance' and hence is a critical success factor. Conversely, excessive spending on IT can result in system (over) complexity and although may drive some efficiencies, it may become counter-productive and eventually result in diminished performance (Evenson, Harker and Frei, 1998). Consequently, the paper considers the reasonable possibility that IT spending may be associated with IVRU complexity. Whereby, the more innovative strategic types (*prospectors)* have a propensity to incur higher developmental costs, but not necessarily produce improved performance.

The following three null hypotheses are aimed at comparing and contrasting the often-dichotomous IVRU related and customer service representative (CSR) related technological expenditure against the (self-typed) Miles and Snow's (1978) strategic orientations.

**Hypothesis 6a:** *There is no relationship between higher IVRU utilisation and less innovative strategic approaches.*

**Hypothesis 6b:** *There is no relationship between investment in IVRU technology and the more innovative strategic approaches.*

**Hypotheses 6c:** *There is no relationship between investments in human (CSR)*

*technology and the more innovative strategic approaches.*

Harker and Zenios (1998) indicated that technology was an important driver of bank performance. Therefore, it would be reasonable to propose that strategic innovators are more involved with technical developments.

**Hypothesis 7a:** *There is no relationship between technical aggressiveness and more innovative strategic orientations.*

However, Harker and Zenios (1998) also cautioned that recent studies found that IT investment improved profitability took place in other industries and not in banking. Therefore, in the financial service environment arguably characterised by market complexity and uncertainty and requiring innovative strategy, it is not clear that more technological investment produces proportionally higher call centre performance results. The penultimate hypotheses consider the proposed relationship between higher levels of technological investment and peformance:

**Hypotheses 7b:** *There is no relationship between service performance and technical aggressiveness.*

**Hypothesis 7c:** *There is no relationship between sales performance and technical aggressiveness.*

Literature reviewed in Chapter 3 suggests Australian telephone banking has focused on utilisation of cost or service based KPIs at the expense of financially based, sales indicators. The proposition is about choices of financial KPIs likely to focus the managerial mind more on sales and revenue performance. In this light, it is suspected that less strategically orientated channels are more likely to use service-oriented call volume or cost-based measurements, and conversely, that externally orientated channels were more likely to focus on sales and revenue performance measures. The final null hypotheses test the relationship between performance and KPI choice.

**Hypothesis 8a:** *There is no relationship between service performance and financial KPIs.*

**Hypothesis 8b:** *There is no relationship between sales performance and financial KPIs.*

In conclusion, while hypotheses propose certain relationships, it must be stated that causality is not the paper's intention. It is possible in a dynamic environment that a channel structure orientated towards market scanning could support performance enhancements. However, it also remains to be seen if the reverse is true for this FI channel.

### 4.2.3   The dependent variables - channel service and sales performance

Performance measures reflect the effectiveness of strategy (Kaydos, 1998). The paper's overarching hypothesis is that Australian telephone-banking channels place more emphasis on operational, cost management rather than on sales and revenue-orientated initiatives. For a variety of behavioural and circumstantial reasons it is suspected that service aspects[35] have tended to overshadow the channels' sales potential (Waterhouse, 1998). Consequently, it is suspected that less allowance has been made for bank specific financial measures for example, loans/sales written or retained and may not adequately reflect the increasingly multi-dimensional nature of channel performance.

Figure 4.2: Performance Characteristic (adapted from Stern and El-Ansary, 1982, p. 495)

| **Performance Measures** | | | |
|---|---|---|---|
| (Stern, 1982) | | | |
| **Effectiveness** | **Equity** | **Efficiency** | |
| *(quantitative)* | *(qualitative)* | *(predominantly quantitative)* | |
| **Delivery** | **Stimulation** | **Productivity** | **Profitability** |
| short-term | long-term | efficiency of | financial |
| focus | goal orientated | outputs | efficiency |

Of these, delivery and productivity were selected to reflect the arguably dichotomous service and sales aspects of telephone-banking performance. The two chosen aspects appear in Figure 4.2 shaded in grey. Consequently, analysis was undertaken to examine the proposed relationship among performance, strategic orientation, leadership style, and the channel's structural orientation to the market (Evenson, Harker and Frei, 1999). This approach also builds upon the need for pure service-based indicators (Evenson, Harker and Frei, 1998) being more in keeping with the sales-based variables.

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[35] For example, the 'number of inbound calls answered' and 'client satisfaction'.

As a proxy for the dependent variables, service and sales performance, two very widely used, industry-accepted performance measures were used. For service performance, 'Grade of Service' (GOS) – the percentage of calls answered within 20 seconds, was chosen as an indicator of promptness of answering inbound client calls. This related to the delivery aspect of Figure 4.2. In terms of sales-oriented productivity, 'percentage of inbound calls answered by CSRs resulting in a sales lead or referral' was chosen. These two measures, shown in Figure 4.3 lend themselves to statistical, and in particular, correlation analysis, and analysis against other factors within the model.

Figure 4.3: Selected Performance Proxies

| Parameter | Process Variable | Unit of Analysis | Example |
|-----------|------------------|------------------|---------|
| **Performance Effectiveness**<br>**- Service** | GOS -<br>Speed of Answer | seconds | 75% of incoming calls answered within 20 secs |
| **Efficiency**<br>**- Sales Orientation** | | | |
| | Sales referrals | % | 8% of calls |
| | / sales leads generated | per call | per incoming calls |

A multivariate approach to performance measurement was adopted to reflect better the multiple goals of the retail FI channel and to test the proposition that FI call centres may be driven more by operational, cost management rather than sales-oriented measures. This approach also sought to reduce the threat to validity occasioned by the use of a single source and single method bias.

### 4.2.3.1 Non-financial performance – service

The ability of the channel to answer incoming calls within certain parameters was also considered a proxy for the effectiveness of managerial decisions to resource the channel adequately. Moreover, the variable, as a standard measure of client satisfaction, links retail channel strategy to the broader client service intent of the organisation (Kaydos, 1998).

For the telephone-banking channel, GOS is a standard measure of telephone service promptness.[36] In general, it is an acceptable indicator of service quality that could be compared across firms (Evenson, Harker and Frei, 1998). The duration aspect typically ranges between 10 and 30 seconds. For this research, the percentage of inbound calls answered within 20 seconds is adopted. Therefore, the survey question (B2b) was:

> '…What was your **actual** average service level, (excluding IVR calls) in terms of the % answered within 20 seconds for the year ended 30/6/99?'.

GOS is preferred over other related incoming call measures such as 'customer hold time' and 'incoming calls abandoned' as these would need to be incorporated into more detailed and longer term study (Kaydos, 1998; Evenson, Harker and Frei, 1998). Externally derived, service-efficiency measures, such as client perceptions were considered also. These were discarded as they were deemed more subjective measures of the clients' broader telephone service experiences. Additionally, collection of such measures is usually very labour intensive, which would have imposed adverse research timing issues.

### 4.2.3.2       Financial performance – sales leads

Anecdotal evidence of Australian FI's experience shows the telephone channel to be a vital source of product referrals generated for action by the broader FI branch network.[37] Similarly, recent US empirical work has considered the emergent and growing nature of the channel to generate sales inquiries with potential for conversion into sold FI product (Evenson, Harker and Frei, 1998).

As dollar sales type performance indicators or similar are widely accepted performance measures (Dunleavy, 1995), one relatively straightforward survey question related to sales performance. Consequently, a sales measure was selected that represented an

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[36] GOS is a standard performance indicator which is also called 'average response time'. Another common indicator is 'average speed of answer' (ASA).

[37] Client product expressions of interest are also referred to as 'sales leads', 'referrals' (to the branch network) etc.

extension of the service based, call-answering measurement approach described in Section 4.2.3.1, that is, answering as many incoming calls as possible within minimum time frames. Therefore, the survey question (B3) was:

'…On the basis of experience, in the year ended 30/6/99, what proportion of inbound calls answered by CSRs resulted in a sales lead (referred/appointment) ?…'

The necessity for such performance measures to be readily understood by survey recipients was deemed critical in the light of the pilot study results. In terms of the proposed 'product inventory' test, the variable was viewed as sensitive to product development and selection.

Other indicators such as, 'converted sales per call', for example, funded home loans, reflect the relative nature of the action and are a closer proximate of profitability. However, the channel may not derive direct revenue from the sale; hence it is not clear that these adequately operationalise the dependent variable, 'channel performance'.

### 4.2.4   The independent variables

This section discusses the independent variables. In this study the independent variables are strategic orientation, extent/scope of product offerings, channel structure, leadership, climate, IT aggressiveness and KPI type.

### 4.2.4.1 Strategic orientation[38]

The *strategic orientation* variable is operationalised by the extensively used Miles and Snow (1978) strategic typology. In this light, the strategic orientation survey question (C1) was:

'…Considering the telephone channel <u>as a whole,</u> which of the following

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[38] UK financial institutions spent approximately US $100 billion on technology in 1996 (Hall and Cain, 1997, p. 38).

descriptions most closely fits your channel ?   Please note than no type is inherently 'good' or 'bad'…'.

The strategic continuum ranges from a residual and introspective *reactor* to externally scanning, and opportunistic and highly innovative *prospector* type. Such a typology assists in testing the hypothesised strategic misalignment of the FI call centre channel as toward straightforward cost management as against externally focussed product sales orientation. In particular, a considerable number of researchers have successfully used the typology in financial service settings (James and Hatten, 1994; McKee, Varadarajan and Pride, 1989; Rogers and Miller, 1999). In particular, Burton and Obel (1998, p. 255) held that the typology is 'a rather robust and a good way to categorise strategic FI behaviour…'.

The strategic assessment typology is based on a single question approach and is strictly 'perceptual' in nature, both of which would normally challenge content validity. It has nevertheless been well tested empirically (for example, Powell, 1992; Hambrick, 1983; Shortell and Zajac, 1990) and was adopted 'as is' for the purposes of this study. Test administration via the respondent self-assessment approach has also been justified well (Shortell and Zajac, 1990; James and Hatten, 1994; Powell, 1992).

To reduce bias and minimise failure to respond Shortell and Zajac (1990) administered their CEO self-typing strategic test twice, once by mail and subsequently by telephone (separated by a two week interval). Here, however, this was considered counter-productive to the level of BU trust required to maximise executive responses. Since all survey respondents were channel executives (in charge) it was assumed that they would be informed well about overall strategic direction and related matters and truthfully report the same.

Further, to validate the strategic typology each of the four self-types was presented on an unlabelled basis, as opposed to a pejorative one as used by James and Hatten (1994). Thirdly, to confirm or otherwise the selected strategic orientation and reduce the risk to validity associated with a one scale perceptual measure, a service and product inventory was also obtained. Additionally it was supposed that this would provide much needed information about the market orientation of the channel.

**4.2.4.2 Extent/scope of product offerings**

The extent of product offer is useful in consideration of the channel's strategic orientation (Shortell and Zajac, 1990), and is especially relevant to the hypothesis that FI call centres are likely to exhibit low levels of product sales diversity or planned market initiatives. Further, more inwardly focussed telephone-banking types, for example, a *defender* would be more likely to target operational efficiencies (Waterhouse, 1998) as opposed to market responsiveness (Golden, 1992). Consequently, the channel's current and planned service and product range were selected as a proxy for the strategic product orientation. The product orientation aspect (G) of the survey sought:

> '…In your channel, what is the current and proposed, over the next 2 years extent of product service levels ? *(Please tick <u>one box for current and one box for proposed level.</u>* If applicable, indicate in the right hand column for both now and proposed extent, if the telephone channel typically works in an <u>inter</u> dependent way with a WWW/Internet capabilities to support this product's delivery…'.

In the search for an appropriate product measure, the Shortell and Zajac (1990) hospital 'service' industry relates well to the call centre[39] and therefore has been extended here to incorporate product orientation considerations. Similarly, Zahra and Pearce (1990) recommended the use of secondary data about product developments as a means of validating the strategic typology. Likewise, Golden (1992) found that market innovation analysis, via current and planned service offerings inventory, (for example, balance inquiries) enables empirical testing of the strategic typology and confirms convergent validity. In sum, the product inventory approach should:

- add depth to our understanding of the BUs' strategic product orientation;
- for the first time in a bank setting, test the reasonableness of the self assessment strategic typology; and,

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[39] This relates well to the generally accepted 'service' nature of the financial institution call centre channel (for example Evenson's et. al, 1998 financial institutional call centre study) although we are not limited by such definitions.

- confirm the study's validity by countering the argument that a 'one strategic item scale' creates construct concerns (Venkatararaman and Grant, 1986).

Specifically, respondents were asked to provide details of current and proposed products within the next two years. Further, they were asked to indicate the extent and the nature of offerings along a broad continuum of product delivery:

**Product/Service**

**Information only**  balance/statement information provided – no sales specifics mentioned; comprehensive client needs not a major consideration; simple product information provided to client predominantly at client's initiation.

**Referral elsewhere**  pursuit of sales referrals to another unit – at client or CSR initiation – more complex client needs now given some attention; product appointments made in branch network (or other selling point/outlet) – no/minimal outbound calling.

**Product/Loan**

**Application taken**  limited outbound calling to sell some products/develop extensive referrals product sold at 'point of call'– that is, product document taken/completed via channel and determination made (approved/account opened) and fulfilment kit initiated.

**Relationship**

**managed**  ranging from at least some channel relationship management to client almost exclusively utilises this channel; comprehensive relationship management – no other BU manages client.

### 4.2.4.3  Structure

Structure was operationalised as 'market scanning' to reflect the choice to access new information (Miller and Friesan, 1982; Quinn, 1985, p. 253). The structural hypothesis is based on the fact that some FI telephone-banking channels may have translated existing forms of organising and arguably less effective forms, across to the channel by precluding information about client preferences, competitor activities and product development

(Stern and Spence, 1990). Consequently, the structural scale also enabled the operationalisation of the hypothesis that less outward looking, 'defender' call centre channels would score lowest in structural scanning, confirming their comparatively less innovative approach.

As a result, such operations may have been more focussed on cost minimisation and not necessarily on sales innovation (Waterhouse, 1998). Additionally, the paper was seeking to clarify the environmental context in which strategic decisions are made (see Ginsberg, Larsen and Lomi, 1996). Given that some 70% of innovation is market driven, the primary purpose then was to identify channel structural orientation as it relates to propensity to focus inwardly or towards the market.

In the light of a significant debate about the cause and effect relationship between structure and performance, and the complexity of establishing suitable performance indicators, a behavioural approach was indicated also (Dawson, 1992; Quinn, 1985, p. 253). Additionally, scanning reflects unit orientation to manage change especially as related to potentially insular and resistance aspects of structure (Miller, 1987).

In terms of the model, market scanning was also representative of leaderships' choice to address or avoid external markets. Thus, logically it could be expected to locate such orientation along the *reactor/prospector* strategic continuum (Miller, Kets de Vries and Toulouse, 1982). Consequently, the chosen proxy also addressed one of the paper's key concerns: the extent of structural embeddedness, past goals and the potentially innovative reducing effects of avoiding uncertain futures as related to performance. The form of the construct also enabled us to test the proposition that organisational effectiveness is dependent upon the congruence between internal factors and the market (Grinyer, Al-Bazzaz and Yasai-Ardekani, 1986; McKee, Varadarajan and Pride, 1989).

To operationalise the construct, four sub-elements represented by four questions, based on Miller (1982), were used. These examined the involvement of the channel in acquiring, tracking and forecasting market and sales information. The questions were arranged on an ordered linearly equidistant scale. This enabled correlation and the more discerning Pearson's coefficient to be used (Havlecik and Peterson, 1977). Other empirically testable, structural measures, including centralisation (Miller and Friesan, 1982) and

formalisation where considered (Miller and Friesan, 1982; Govindarajan, 1986). However such proxies would not have considered fully the behavioural market orientations proposed by the strategic typological research approach (McKee, Varadarajan and Pride, 1989).

The survey questions (F1 to F4) sought executive responses on a five-point scale, viz.:

*'...Please indicate the extent to which the following scanning devices are used…*

F1. Routine gathering of opinions from clients ?

F2. Explicit tracking of competitor policies and tactics ?

F3. Forecasting sales, customer preferences, technology ?

F4. Special and/or 'one off' market studies ?

### 4.2.4.4 Climate

The hypothesis is that, where a call centre channel's climate is characterised as an innovative, open climatic types, it will produce better performance. Specifically, the construct, 'climate', is characterised as the patterns of interactions, shared group values and behavioural issues. It is generally regarded as a summary measure of people and behaviour within business (Burton and Obel, 1998).

To operationalise the construct, Quinn and Rohrbaugh's (1983) comprehensively tested climatic typology approach was adopted. Such a typological scale approach enabled quantitative analysis. This proposes four distinct categories: group climate – where there is true sharing; developmental climate – an innovative and entrepreneurial approach; 'internal process' climate – a formalised and structured approach; and, finally, 'rational goal' climate – a results-orientated hard-driven approach (Burton and Obel, 1998, p. 114). This climatic typology was selected as it readily related to the Miles and Snow's (1978) strategic orientations, and, to innovation, in particular.

To ascertain the prevailing retail channel's climatic atmosphere, Burton and Obel (1998) proposed seven comprehensively tested questions on trust, conflict management, morale,

rewards, resistance to change, leader credibility and scapegoating (Zammuto and Krackover, 1991).[40] Scapegoating was removed from the question set for two reasons. Firstly, the term appeared to be a negative one that may have been counter-productive to the level of respondent trust required to complete the questionnaire. Secondly, as trust, resistance, morale and conflict appropriately measured personal behavioural orientation it added no further value to what was already measured.

The climatic question set below sought answers on a three-point scale from 'low' to 'high':

*What is the current climatic situation within the telephone-banking channel ?*

G1. The level of trust – sharing, openness, confidence - is

G2. The level of conflict – disagreement, friction - is

G3. The employee morale – confidence, enthusiasm – is

G4. The channels resistance to change – is

G5. The leadership credibility – respect, inspiration &

acceptance – is

G6. Rewards are given in an equitable fashion

Specifically, trust relates to an open BU built on truthfulness, as opposed to a closed, less truthful setting that proposes an anxious atmosphere. Conflict is a proxy for the degree of opposition and disagreement. Morale is offered as an indicator of enthusiasm and confidence in the unit's endeavours. Reward is a measure of employee equity with inappropriate offerings indicating bias or favouritism.

Resistance to change tends to indicate inertia and as such reinforces embeddedness. Leader credibility indicates a sense of respect and commitment and hence is partially an indicator or readiness to operationalise leader decisions (Burton and Obel, 1998).

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[40] Although an individual (in this case the telephone banking CEO) acts as respondent source, these are considered group level indicators of analysis (Glick, 1985).

To produce a single variable, the six remaining questions were averaged[41] into a single instrument. This produced one of the four climatic types with a Cronbach Alpha of 0.69 for the instrument (Quinn and Rohrbaugh, 1983).

### 4.2.4.5 Leadership

The research model proposes leadership as a co-driver of performance along with strategic orientation, structure, IT aggressiveness and climate. In particular, this revisits appropriate decision-making behaviour as critical to performance and the argument that a less micro-involved leader decision-making process is more suited to situations requiring flexible, innovative and responsive behaviours (Miles and Snow, 1978; Mir, 1997). Moreover, in the constantly changing, competitive call centre environment an information-detailed, future-avoidant and risk-adverse leader orientation may well represent a situational misfit (Burns and Stalker, 1961; Burton and Obel, 1998).

As a proxy for managerial style and to operationalise the leadership variable, Burton and Obel's (1998) leadership variable; 'preference for micro-involved leadership' was used. This variable measures various components of managements' preference for high micro-involvement. The Leadership questions (E) sought answers appropriately on a scale of options that ranged from closed to openness, short term to long term and detailed to very aggregate.

> E1. Executive management may prefer to make most of the decisions themselves or they may prefer to delegate numerous decisions to other managers i.e. greater preference for decentralisation. What kind of decisions does management prefer to make ?

> E2. Executive management may prefer long-term decisions or short-term decisions. What kind of decisions does executive management prefer ?

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[41] Cluster analysis via 'Organisational Consultant' software (Burton and Obel, 1998).

E3. Executive management may prefer to use very detailed or very aggregate information in decision making. What level of detail of information does management prefer to use when making decisions ?

E4. Executive management may be risk averse in its decision-making, or it may have a preference to assume risk. What is management's attitude towards risk ?

E5. Executive management may prefer to be proactive, anticipate future events and take pre-emptive actions. It may be reactive, wait and see and then act. What is management's preference on taking action ?

E6. Executive management may prefer to manage through *ex ante* motivation, or post control techniques. What motivation and control does management prefer ?

By introducing the channel's decision-making behaviour, the construct supports the study's model beyond closely associated structural aspects of organisational design (Burton and Obel, 1998). Decision-making considers how managers establish and process their decision framework. Manager types range from those who are pro-active, take risk and prefer to delegate, to those managers who prefer higher control, possibly autocracy and risk adversity. This leadership aspect is similar to the structure variable as delegation is closely related to decentralisation (Burton and Obel, 1998).

In particular, to measure micro-involvement preference, the research design comprised a single instrument of seven questions:

- Preference for delegation
- Level of decision-making
- Reactive or pro-active decision-making
- Decision-making horizon
- Risk preference
- Motivation or control

These sub-elements are combined via a logarithmic calculation and produce high, medium or low preference for micro-involvement. Burton and Obel (1998) reported an acceptable Cronbach Alpha of 0.60 for the instrument.

### 4.2.4.6 Technology

This paper considers the performance effects of the telephone-banking channel's investment in call management technology. The first IT hypothesis is based on Harker and Zenios (1998) indication that technology is an important driver of bank performance; therefore it was hypothesised that there was a positive relationship between investment in call technology and the more innovative strategic approaches. Further, Frei and Harker (1999b) warned of the potentially adverse effects of the overuse of technology; it was hypothesised that there is a negative relationship between a higher level of investment in call technology and telephone-banking channel performance.

Measurement of IT capital investment often takes the form of a sole indicator, 'percentage of IT expenditure in terms of assets' (for example, Pennings and Harianto, 1992). However, it is unclear that the ownership of the asset rests with the telephone- banking channel, whereas most if not all subject firms would be expected to track at least some channel specific expenditure. Consequently, the channel's involvement in IT is measured by its investment in systems and equipment, as a percentage of total expenditure. This also enables some consideration of the channel's specific orientation, termed technical aggressiveness, and the extent and success of its expenditure priorities and innovative stance, that is, performance (Jaja, 1989).

For hypotheses 6, the survey question set was:

> For H6a.
> D1. What proportion of total inbound calls, for FYE 30/6/99, recorded at
> B1, were completely handled by automatic call answering unit/s ?
> For H6b.
> D6. What was the extent of IT development to support IVRU (or other
> electronic device) served inbound calls ?
> For H6c.

D5. What was the extent of IT development to support CSR served inbound calls ?

Table 4.1 shows that Jaja's (1989) survey questions extend analysis to include non-financial constructs such as the bank's competitive position in relation to IT research leadership and focus on IT research.

Table 4.1: Technological aggressiveness of bank IT strategy (Jaja, 1989)[42]

| Factors | Stable | Reactive | Anticipatory | Exploratory | Creative |
|---|---|---|---|---|---|
| IT Investment % of expenses | Very low | Low | Moderate | High | Very high |
| IT Competitive Position | Imitator | Close follower | Follower | Aggressive follower | Innovator |
| IT Research | No R and D | Imitate emergent IT | Improve and develop existing IT | Adapt novel IT | Pioneer new IT |

Using Jaja's three factors above, the survey questions for H7 were:

D2. What was the extent of the channel's overall investment in technology as a % of expenses ?

D3. As a channel what was your competitive position in relation to information technology research and development ?

D4. What was the channel's focus on IT research ?

This set of questions is preferred over a one expenditure indicator or productivity index for a number of reasons. Firstly, it expands, the paper's information gathering activity to include the propensity of the channel itself to contemplate IT innovation. This is arguably where resident channel knowledge is best or well placed to make direct sense of operational requirements. Secondly, strategic knowledge of the channel's IT intention will enable direct comparison to Miles and Snow's (1978) strategic continuum. Thirdly, by avoiding the specificity of actual dollar expenditure, it allows for the distinct

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[42] Jaja adapted this question set from Ansoff (1984)

possibility that some smaller telephone-banking units may reside within broader retail channels and hence not measure their specific IT capital investment.

To prevent respondent bias, the wording of the 'stable, reactive, creative' scale was not included in the questionnaire. While executive informants would be assumed to be across strategic issues, the risk is a larger-channel executive may respond with abstract assessments in relation to some variables, especially technology (Miller, Glick, Wang and Huber, 1991). This was overcome by adoption of the Shortell and Zajac (1990) proposition that they would involve relevant associates in completion of the survey.

Given the deliberate shift towards sales-based call activity, Jaja's (1989) competitive approach was expanded to differentiate between IT development and support activities of an automated IVRU nature and those of a client relationship orientated nature. Consequently, two additional questions were incorporated into the survey:

1. the extent of the channels' IT activity that supports human answered inbound calls
2. the extent of the channel's IT activity that supports automated, non-CSR, inbound calls.

### 4.2.4.7 Key performance indicators

What makes the measurement task challenging is that there is an undetermined relationship between shorter-term volume-based goals and more strategic aspects of goal attainment. Additionally, in the telephone-banking delivery channel, the literature is relatively silent on the types of key performance indicators used. Therefore, the paper sought to identify the channel's KPI priorities so as to enable a richer understanding of goal orientation. Consequently, an additional question set was incorporated into the research design for the reasons set out below. Respondents were asked to nominate, in order of importance, the five key measurable indicators of channel performance, viz.:

I. Using the numerals 1 to 5, please nominate the channel's <u>five most important performance measurement indicators</u> by rank ordering your five

selections, from '1' for the most important to '5' for the least important, under the 'Rank Order' column. Additionally, for each of the five selected measures, please indicate the extent of the performance achieved in the FYE 30/6/99.

Firstly, to determine the relationship between service and sales performance respectively, and choice of their relevant KPI, the five most important performance measurements were sought as a proxy for respondents' preference for various types of measurement indicators. Secondly, to reduce the threat to validity through the use of a single source and single method bias, the question addressed the possibility that respondents may not be inclined to admit to poor performance effectiveness. The purpose then was twofold, (a) inflated performance effectiveness would be revealed when contrasted against dichotomous numeric performance measures (recorded elsewhere in the survey), and (b) in the event of some additional information about the climate of the channel (specifically, truthfulness and openness) would become apparent (Drennan, 1996).

Thirdly, Stern and El-Ansary (1982) indicated that performance measures range from short to long term and from service or operationally based 'delivery measures' to productivity/productivity measures. The questions were intended to develop a more extensive list of KPIs to add depth to our knowledge of the nature, type and extent of key performance indicators within the channel.

Fourthly, it was uncertain, (a) how a call centre channel aligned with the overall financial institution's goals and objectives, and (b) how the channel acted (if at all) to view its external environment, take strategic decisions and set appropriate measurement indicators. Consequently, this segment was intended to indicate the extent of alignment of nominated channel indicators to overall business strategy. Finally, in cases of a channel with multiple call centre sites, the questions were devised to ascertain whether or not there is a degree of alignment between overall channel goals and the goals of each subordinate call centre.

### 4.2.5 Size

It was expected that channel size would be correlated with performance (Golden, 1992). Additionally, that large size is a potential impairment on the ability to change. This is of relevance as we seek to study the allegedly differing effects of different sized BUs (Finkelstein and Hambrick, 1990). Moreover, Miller, Glick, Wang and Huber (1991) found that the contingency variable, size and bureaucracy are positively correlated and further that the 'size-bureaucratisation' argument holds across a number of industries. As a consequence, channel size is included as a control variable.

Possibilities for operationalising size included revenue, number of employees and output level (Miller, Glick, Wang, and Huber, 1991). The channel output measure, total inbound calls answered, was chosen to operationalise the variable. Total revenue and staff numbers [full time equivalent (FTE) or otherwise] were excluded because many FI channels typically reflect a cost centre approach and staff numbers may not be a proportionate figure given the significant involvement of IT.

### 4.3    Overview of survey method

This study is exploratory in nature and seeks to establish and interpret key channel performance relationships. Particularly, it considers bank channel strategic orientation in a relatively new segment of Australian financial services – the telephone-banking channel. It also deals with the knowledge shortfall by considering the 'how' of strategic decisions in the FI call centre channel as a key performance driver.

The study also proposes that management orientation and behaviours appear to be more a function of past, pre-conceived or uncertainty avoiding processes and/or beliefs rather than as a result. It was also posited that there was an under-utilisation of innovative, client service and revenue generating aspects within the channel.

A mail survey of the majority of Australian financial institutions was selected to provide a wide coverage of the channel's strategic and behavioural orientations and performance outcomes. Time constraints precluded a more in-depth behavioural case study approach

although it is possible that this could have revealed a rich source of triangulated information for further analysis.

The question of bias in relation to performance reporting was minimised by the use of multiple data sources. In particular, to overcome subjectivity, a modest product inventory was incorporated into the design to allow for more in-depth analysis, cross checking against management self-selected strategic typology and for organisation specific issues to emerge. This also provided understanding of the nature and extent of product planning processes undertaken by the financial institutions. In conclusion, a two-phase research plan resulted. Firstly, a brief pilot-testing phase established the relevance and applicability of the survey from both the research construction and respondent viewpoint. Secondly, a main population survey was implemented as the primary research procedure.

### 4.3.1 Pilot testing

The independent variable measurement instruments are well established and sound in their own right. However, the draft survey was submitted to three senior bank managers to ensure that the two performance indicators were considered key indicators of channel performance and hence suitable for inclusion. The participants represented different segments of the industry, specifically, one large bank, a major second tier bank and a regional building society. Each pilot participant was later included in the main survey.

Following Drennan (1996), general question readability, questionnaire style and duplication risk issues were considered by the submission of the questionnaire to three academics.[43] One invitee was a professor (in strategic management), one a PhD-qualified senior lecturer in commerce and finally a PhD-qualified lecturer in banking.

Brief survey layout improvements and slight wording adjustments took place as a result of both aspects of pilot testing. Of particular note was the slight adjustment to the wording of the sales performance question resulting from recipient feedback.

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[43] This was due to the multiple nature of questions for each 'construct variable', with the exception of strategy and KPI usage.

### 4.3.2   Main survey

Research design required matching research questions to the unit of analysis (Yin, 1994). Newer forms of bank organisational relationships, needed to meet technological and global challenges, require a re-orientation in the units of analysis to the core activity level and away from the firm level (Leavy, 1996). This justifies the telephone-banking channel itself as the primary unit to study channel strategic measurement and alignment to overall objectives.

A questionnaire was distributed to the senior executive in charge of the telephone-banking channel in 59 Australian financial institutions, specifically, all banks, all building societies and the 25 largest (by total assets) credit unions. In the light of the hypothesised misalignment of call centre strategic goals, the decision to survey the most senior executive from the telephone-banking channel was justified to ensure accessibility to channel level thought. This obtained the channel's strategic position and orientation from the officer assumed to possess required knowledge and to play a key multi-directional role between the SBU and the wider organisation (Shortell and Zajac, 1990). Further, the availability of widely accepted measurement indicators suggested that a quantitative approach could be adopted notwithstanding that management behaviour may ordinarily have justified a qualitative approach. In relation to strategic typing, the current and proposed product inventory, as a second data source sought to create as synergistic a result as possible and hence, enhance research quality (Zahra and Pearce, 1990; Eisenhardt, 1989; Mintzberg, 1979).

Construct validity of each research instrument was not considered in light of each question set's well established nature. However, as some research instruments were used for what appeared to be the first time within a banking channel context, the inter-item reliability test Cronbach's alpha, was used to ascertain internal question consistency. All Cronbach's alphas were in an acceptable range from 0.60 to 0.76 (Nunally, 1967). In particular, the Cronbach's alphas were: structure ($\alpha$=0.76), leadership ($\alpha$=0.60), climate ($\alpha$=0.69), IT ($\alpha$= 0.74).

### 4.3.3 Design

The questionnaire was designed to obtain information on the dependent and independent variables and to provide data to support (or otherwise) the hypothesised misalignment of call channel goals to overall strategic intent. Wherever possible quantitative data were sought to provide a sound basis for later data analysis.

Related items were grouped together into eight sections for better reader attention and comprehension (Bordens and Abbott, 1991). Further, Dillman and Frey (1994) suggested placing more challenging or confronting questions after the initial questionnaire sections, that is, once the reader is committed.

Finally demographic questions were positioned at the end of the questionnaire (Dillman and Frey, 1974). With the exception of the dependent variable (performance) proxies, interval scales were used for all other constructs.

### 4.3.4 Sample

To test the various proposed strategic relationships and channel performance propositions a sample based methodology sought data from the telephone-banking channel context. The archival nature of KPI data is intended to offset the limited findings occasioned by one perceptual source of data, that is, Miles and Snow (1978) typology.

#### 4.3.4.1 Sample size

Of the 59 surveys sent, 24 useable responses were received. As shown in Table 4.5, after adjustment for those intended respondents that do not have a telephone-banking capability (n=5), this represents an overall final response rate of 44.4%.[44] This response rate, while moderate in nature, is nevertheless acceptable on the basis of comparable postal surveys (for example, Hede and Ralston, 1993). Moreover, the primary limitation imposed by a

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[44] Sample population representativeness is considered strong. While overall sample size was small (n=24), useable samples in each FI sub-group were in the range 40-50 % and therefore, considered representative. Moreover, not all FIs in each grouping had a call centre channel. In this way, content validity enables inferences from samples to the population.

smaller sample size was that only preliminary research findings were made.

This sample size for FI call centre analysis is justified to some extent by the only comparable Australian FI research by Waterhouse (1998), which also used a small number of FIs. [45] Moreover, other management research produced statistically robust results with relatively small sample sizes (Brown and Latham, 2000[46]; Wall, Clegg and Jackson, 1978[47]).

Previously, the small number of Australian research papers targeted all industry call centres. This makes direct comparisons to banking difficult. Moreover, representative sampling is critically important for inferential statistics. Due to the smaller number of the retail FI population, randomisation was not deemed possible, therefore partial stratification of the target FI population was used to ensure satisfactory representation from the four mutually independent FI groups and hence, strengthen external validity.

In this way, as set out below, the 24 respondents represented a significant number of the larger sized Australian FIs with call centres across each group. This was deemed satisfactorily representative so as to draw any statistically valid inferences about the target population, viz.:

| No of Respondents | Which represents X% of the Total Number in the FI sub group (KPMG, 1998) |
|---|---|
| 2 | represent 50% of large Banks (4) |
| 5 | represent 45% of regional banks (11) |
| 8 | represent 42% of building societies (19) |
| 9 | represent 36% the 25 largest (by net assets) credit unions - recognising that most often credit unions had no telephone-banking capacity anyway |
| 24 | |

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[45] This research used 37 FIs of which only 18 were in the bank and building society category.

[46] An employee goal and performance study (n=32).

[47] A sales management study (n=47).

### 4.3.4.2 Statistical Power

Statistical power analysis was used *post hoc* to review the effectiveness of sample size and possible effect detection. Statistical power is a quantitative measure of sensitivity that permits researchers to determine the likelihood that their analysis will detect significant effects of a given size in a particular situation (Keppel, 1991). [48] Power is also a relevant consideration in terms of the available data sample as sample size is a co-determinant of power. Ideally, the sample size that provides adequate power (e.g. > 0.80) should be determined in the design phase of the experiment. However, in this paper it was undertaken on a *post hoc* analysis basis.

Statistical significance level ($\alpha$), the extent of the dependant variable effects and sample size each co-determine the extent of power. However, in effect only sample size is the one most often used to control power (Keppel, 1991). Power results for statistically significant hypotheses outcomes are discussed at the end of Chapter Five.

### 4.3.5   Survey procedure

As the primary means of conducting the investigation a self-administered questionnaire was sent to each respondent. Prior to survey dispatch, each FI was telephoned to establish the identity, title, direct facsimile (wherever possible) and mail address of the recipient. Consequently, each survey was personally addressed to the most senior telephone-banking channel executive or, in the case of smaller FIs, direct to the Senior Executive.

Each questionnaire, with a covering explanatory letter to convey its purpose, importance and required response due date, was subsequently facsimiled to each firm. Additionally,

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[48] Power ranges from 0 to 1. Ideally, the experiment should have power closest to one. Power is essential in experimentation because power is related to the extent to which we can detect the effect of the independent variable(s). Power is most effectively used during the design phase of the experiment to determine the extent of the sample size required to permit effective statistical analysis. If sample size is too small there is a risk of loss of precision, that is, it may not assist in deciding the true effects, if any, of the independent variable(s). If sample size is too large then there is a risk of resource wastage in accumulating unnecessary data.

some preliminary findings from the literature were outlined in the letter to attract further interest in the research.  On the working day immediately following the dispatch of the facsimiled request, a copy of the survey with a postage pre-paid self-addressed envelope was mailed.

Additionally, each potential respondent was offered a copy of the summary conclusions of the study as an enticement to complete and return the same. Where responses were not received by the due date, reminder follow up telephone calls and facsimiles continued until all likely responses were received. Where a respondent overlooked completing a part of the survey, in the small number of cases (n=4) where it was necessary, these management respondents were contacted directly, by telephone, for necessary clarification. In all cases, this resulted in further useable response details being obtained.

The motivation of the participants to answer accurately, in itself a factor distinguishing a successful survey, was deemed sufficient on the basis of a guarantee of complete anonymity for themselves and their FI. Motivation to complete was strengthened by strongly expressed industry interest in the study's findings.

While survey participants were made aware that strategic issues were the primary focus of the research, it was decided not to reveal the primary hypothesis – that there was an insufficient or limited approach to the channel's strategic alignment. Two benefits derived from this. Firstly, it was anticipated that this would enable greater access to subjects (Douglas, 1976). Secondly, it did not influence respondents' reactions, thus enhancing the usability of the survey information (Johnson, 1998).

### 4.3.6   Data collection

Twenty-four FI responses were received. This 44.4% response rate was deemed acceptable on the basis of comparable postal surveys dealing with managerial perceptions and workplace issues (Ralston and Hede, 1994). All data were screened prior to analysis. Each response was coded and reviewed at least twice to ensure accuracy of data capture.

Where management respondents were contacted directly by telephone for necessary survey clarifications, the opportunity was taken to obtain some further information about the nature, extent and plans for their channel. All missing data were eliminated from the

analysis. Data analysis commenced after the foregoing corrections and clarifications were made. For information purposes and so as to understand the varying components of the industry, each part of the survey is shown in Table 4.2 by financial institution sector, viz. major and regional banks, building societies and credit unions, using commonly accepted identifiers (KPMG, 1996).

Table 4.2: Frequency distribution of the survey's sample population and respondents

| Data Summary | Major Banks | Regional Banks | Building Societies | Credit Unions[49] | Total |
|---|---|---|---|---|---|
| Population | 4 | 11 | 19 | 50 | 84 |
| Sample | 4 | 11 | 19 | 25 | 59 |
| % of Population | 100% | 100% | 100% | 50% | 70% |
| less those without telephone banking | | 2 | 3 | | |
| **Adjusted Sample Size** | **4** | **9** | **16** | **25** | **54** |
| No of Responses | 2 | 5 | 8 | 9 | 24 |
| % Responses to Adjusted Sample Size | **50.0%** | **55.6%** | **50.0%** | **36.0%** | **44.4%** |

### 4.3.6.1 Respondent characteristics

The research was designed to ascertain channel level strategic, structural and managerial orientations and service and sales performance. It sought the views and opinions of the executive in overall charge of the channel (or equivalent) and was addressed accordingly. As shown in Table 4.3 below, all respondents were of at least managerial rank, and a significant number (12) occupied roles that appeared to supervise call centre managers.

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[49] The 50 largest credit unions as determined by total net assets.

Table 4.3: Frequency Distribution of Respondents by FI Sector

| Managerial Rank | Major Banks | | Regional Banks | | Building Societies | | Credit Unions | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *No* | *%* | *No* | *%* | *No* | *%* | *No* | *%* | *No* | *%* |
| Organisational Level Executive | | | | | | | 1 | 11 | **1** | **4** |
| Senior Channel Executive | 2 | 100 | 2 | 40 | 1 | 12 | 1 | 11 | **6** | **25** |
| Channel Executive | | | 1 | 20 | 4 | 50 | | | **5** | **21** |
| Call Centre Manager or Equivalent | | | 2 | 40 | 3 | 38 | 7 | 78 | **12** | **50** |
| Supervisor | | | | | | | | | | |
| **Total** | **2** | **100%** | **5** | **100%** | **8** | **100%** | **9** | **100** | **24** | **100** |

For banks, respondents were generally at the targeted executive level. Notwithstanding the express aim of targeting executive level replies, 50% of respondents were at the call centre management level. These respondents were mostly (7 of 12) in smaller organisations and this was accepted on the basis that such firms would generally have a lower number of managerial levels. Such senior managerial role holders would be in a position to understand the entire channel's structure, management orientation, IT and product aspects.

### 4.3.7   Data analysis

Responses to the survey questionnaire were coded and placed in an Excel spreadsheet. Non-parametric testing was selected for bivariate analysis. This was due to the absence of normality from most variables and primarily from the two dependent variables.[50] Data transformation was considered but discarded as an option as it would most likely have affected interpretation. This selection also suited the ordinal nature of the data.

Spearman's (rho) correlation was used to determine relationships between data sets.

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[50] Again, non-parametric tests while not considered as sensitive as parametric tests where necessary due to the skewed nature of the data.

Spearman's correlation was chosen over Pearson's correlation coefficient because it more suited to data that is not normally distributed whereas for normally distributed variables Pearson's correlation coefficient is usually chosen (SPSS, 2002). Additionally, Spearman's is not as susceptible to influence by extreme values.

Chi-Square Test statistic was considered also. However, the small sample size would not have supported the requirement, since at least five frequencies should appear in each cell of the contingency table (Laplin, 1978).

The data were then analysed using SPSS (Version 8) statistical analysis software. This software was primarily used due to its accessibility and because it contains the requisite non-parametric tests.

As a cross check and to add depth to findings, both correlation types were produced for each hypothesis testing scenario. Wherever necessary, the four strategic orientations were collapsed into two – *reactors*/*defenders* to represent the more inward looking, less market innovative group and *analysers*/*prospector*s to reflect the more external orientated, innovative respondents.

### 4.3.7.1 Cross-tabulation

For hypotheses where statistically significant relationships were not supported, an alternative method was introduced to add depth to the paper's findings. Cross-tabulation is a suitable analysis technique when seeking to compare results for mutually exclusive types, bivariate cross-tabulations are presented ancillary to the main correlation reports (Zikmund, 1991). In some cases this reveals previously unknown information not revealed due to the failure of tests of statistical significance for the main test. Statistics for each table were based on all the cases with valid data with user-defined missing values treated as 'missing'.

### 4.4     Research assumptions

This research focussed on the telephone-banking channel level of retail banking

operations. Because of this, a number of assumptions were required:

(a)     that the survey respondent - the (overall) channel executive in charge - was well placed to respond to all perceptual questions, strategic characteristics, behavioural and nominal measures in relation to performance and expenditure

(b)     that the nominated performance drivers, specifically, strategic orientation, structural orientation, climatic, leadership, and IT expenditure had a strong combined effect upon channel performance and were therefore sufficiently dominant to explain channel performance

(c)     that, if necessary, the said executive would consult with subordinate officers with specific knowledge necessary to complete the survey

(d)     that respondents understood questions and responded in an honest/frank way

(e)     that the brief pilot testing exercise established the industry relevance and, hence reliability of the survey instrument.

## 4.5     Reliability and validity issues

A number of controls were implemented to avoid common research pitfalls. These included, a homogeneous sample, pilot testing, targeted survey addressees, reliable questions, scales and acceptable intra-item reliability results using Cronbach Alpha.

### 4.5.1   Internal validity

The primary theoretical sources used to operationalise independent variables had been well tested and documented in bank and non-bank setting over many years. The paper's strategic orientation variable has been used at the sub-business level of analysis elsewhere (Miles and Snow, 1978).  Further, Burton and Obel's (1998) work consisted of a meta-analysis of existing management theories. From this work, Burton and Obel derived statistically robust measures for leadership, structure and climate used in this paper. In terms of the two dependant variables, two very widely used, quoted and industry accepted measures of call centre performance were selected.

A word of caution is needed, however. While strategic planning, structure and leadership theories are well developed and tested, they are notably absent from the modest amount of bank specific, telephone-banking channel research. However, the often-demonstrated robust nature of the self-typing strategic orientation and other structural questions was considered sufficient to form a reasonable degree of confidence in the statistical outcomes (Shortell and Zajac, 1990; Burton and Obel, 1998).

Other strategies were employed to increase research instrument reliability. Firstly, some survey questions were reverse-coded. Secondly, well established multiple question sets were used wherever possible.

Maturation and the highly competitive and confidential nature of some practices threatened to internal validity. However, strict confidentiality assurances and performance data matched to contemporaneous management action, structure and climate assisted.

## 4.5.2   External Validity

External validity was augmented in a number of ways. Respondents were stratified partially to ensure that each of the four types of retail FIs (that is, large banks, regional banks, building societies and credit unions) was well represented. Such partial stratification of data sources assists population validity.  This was done to obtain modest increases in (analysis) precision.

Validity was also supported by the fact that the retail FI telephone-banking channel is deemed a relatively homogeneous unit of analysis. While the sample size is small in terms of the absolute entire FI population, indications are that those not surveyed did not possess full telephone banking capabilities.

In particular, while only 24 useable surveys participated, if this is re-organised it represents at least 50% of the three larger FI categories. This is shown in Table 4.4. Only smaller credit unions were un-represented significantly, thus drawing the overall response rate lower. It is therefore reasonable to assume that the findings would apply across the entire FI population.

Table 4.4:   Percentage of selected FI strata represented in the sample

| Large Banks | Regional Banks | Building Societies |
|---|---|---|
| 50.0% | 55.6% | 50.0% |

The limitation of such an approach is that an homogeneous group and cross-sectional data pose threats to external validity if attempts are made to generalise findings to non-FI settings. However, this was not viewed with concern, as the primary applicability of the research was to retail FI channels and less so to inform general management theory. In terms of temporal validity, performance date range and the adequacy of the managerial conditions and perceptions within this paper occurred as were expected reasonably to prevail close to the time of survey.


## 4.6     Summary

Chapter 4 has presented a model that shows channel performance as the outcome of the interrelationships between various internal structural and behavioural channel characteristics that interact with a changing, and hence dynamic market. Further, six hypotheses were developed to enable investigation of the posited mixes and potential misfit/s among strategic, structure, climatic and behavioural factors as drivers of both performance of a non-financial and financial nature.

The chapter also discussed the source and nature of data collected. The survey instrument took the form of mail questionnaire with interval scales. Performance measures capture the service aspect of telephone banking and the sales outcome (Waterhouse, 1998). Further, these measures were considered sufficient to reflect financial accountability, establish reliable information about performance outcomes and strategic decision accountability into the model.

Additionally, two aspects of the survey not included in the model were devised. These were a product inventory to add depth to our understanding of the current and planned product orientation of the channel; and information sought in relation to the nature, extent and use of key performance indicators. Finally, the methods of data analysis were foreshadowed and research assumptions stated.

# CHAPTER FIVE – RESULTS

## 5.1 Introduction

Chapter 5 presents the results of the telephone-banking survey and tests the research hypotheses outlined in Chapter 4. These hypotheses are designed to examine relationships between call centre performance and strategic factors such as strategy, structure, leadership, climate, information technology and KPIs. Section 5.2 presents the descriptive results of the survey, while the results of hypotheses tests are shown in Section 5.3. Section 5.4 concludes the chapter.

## 5.2 Descriptive results

This section presents a selection of responses from the survey to facilitate a better understanding of the nature of the FI survey respondents. Table 5.1 presents a summary of data treatments, inter-item reliabilities and the theoretical source of measurement.

Table 5.1:   Data characteristics, question set aggregations and inter-item reliabilities

| Variable | No. Survey Questions | Nature of Data | Method of Aggregating Questions | Cronbach Alpha (*a*) | Cronbach - Standard Item Alpha (*a*) | Theoretical Basis for the Scale |
|---|---|---|---|---|---|---|
| **Dependent** | | | | | | |
| Sales Performance | 1 | interval | | | | |
| Service Performance | 1 | interval | | | | |
| **Independent** | | | | | | |
| Strategic Orientation | 1 | ordinal | | | | Miles and Snow, 1978 |
| Structural | 4 | ordinal | simple mean | 0.76 | 0.75 | |
| Leadership | 6 | ordinal | algorithm | 0.60 | 0.60 | Burton and Obel, 1998 |
| Climate | 6 | ordinal | algorithm | 0.68 | 0.69 | Burton and Obel, 1998 |
| IT | 3 | ordinal | simple mean | 0.73 | 0.74 | Jaja, 1989 |

The data include the number of call centres operated, the number of employees in each call centre, the numbers of inbound calls per centre each week, and the strategic orientation of each FI. As all research hypotheses were of a collective nature, all multiple question sets representing leadership, structure, climate and technology variables, were

aggregated using simple means or by an algorithmic process.[51] These aggregated variables are used in the hypothesis testing in the next section.

### 5.2.1   Number of call centres

Respondents were asked to nominate the number of telephone call centres operated by their telephone-banking capability in single units from 1 to six centres. The results are shown in Table 5.2.

Table 5.2:   Number of call centres per financial institution

| No. call centres | Code | Major Banks | Regional Banks | Building Societies | Credit Unions | Total |
|---|---|---|---|---|---|---|
| 1 centre | *1* | | 3 | 6 | 8 | **17** |
| 2 centres | *2* | | 1 | 2 | | **3** |
| 4 centres | *4* | | 1 | | 1 | **2** |
| 6 centres | *6* | 2 | | | | **2** |
| **Total** | | **2** | **5** | **8** | **9** | **24** |

Almost all respondents (83%) indicated that they operate one or two call centres. The two major bank respondents each operated six call centres.  Three regional banks operated one centre each, whereas one Regional FI operated two and four call centres each. Building societies operated one, two or four call centres.  Finally, eight credit unions operated one centre each and one credit union operated four call centres.

### 5.2.2   Number of telephone-banking channel employees

Respondents firstly were asked to nominate the number of employees in the channel. Responses to the question are shown in Table 5.3.

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[51] This was performed using Burton and Obel's (1998) well-established computer based, 'knowledge based expert system' with survey results processed via the CD-ROM accompanying their book.

Table 5.3:   Channel employees per call centre by industry type

| No. employees | Code | Major Banks | Regional Banks | Building Societies | Credit Unions | Total |
|---|---|---|---|---|---|---|
| < 20 staff | 1 | | | 5 | 2 | 7 |
| 21 – 50 staff | 2 | | 1 | 3 | 6 | 10 |
| 51-100 staff | 3 | | 1 | | 1 | 2 |
| 101-500 staff | 4 | | 2 | | | 2 |
| 501-1,000 staff | 5 | 1 | 1 | | | 2 |
| 1,001-1,500 staff | 6 | 1 | | | | 1 |
| Total | | 2 | 5 | 8 | 9 | 24 |

Most respondents (71%) employ no more than 50 staff in their telephone-banking operations. Three FIs, the two major banks and one regional bank, had more than 500 staff each in their call/contact centres.

### 5.2.3   Number of inbound calls

Telephone-banking channel respondents were asked to nominate the number of inbound calls received per week. Selections ranged from 0-10,000 calls per week to greater than 1 million calls per week, as shown below in Table 5.4.

Table 5.4:   Number of inbound calls per week per call centre

| No. inbound calls | Code | Major Banks | Regional Banks | Building Societies | Credit Unions | Total |
|---|---|---|---|---|---|---|
| 0 – 10,000 | 1 | | | 5 | 1 | 6 |
| 10,000 – 50,000 | 2 | | 2 | 3 | 7 | 12 |
| 50,001 – 200,000 | 3 | | 1 | | 1 | 2 |
| 200,001- 500,000 | 4 | | 1 | | | 1 |
| 500,001 - 1 million | 5 | | 1 | | | 1 |
| >1 million | 6 | 2 | | | | 2 |
| Total | | 2 | 5 | 8 | 9 | 24 |

As might be expected, the major banks having the largest number of call centres reported the greatest number of inbound calls, more than one million calls per week. The majority (18) of FIs received 50,000 calls per week or less.

### 5.2.4   Strategic orientation

Table 5.5 shows the strategic orientation by financial service group. As a proxy for strategic preference, respondents' views on market orientation were sought.

Table 5.5:   Strategic orientation by financial service group

| Strategic orientation | Major Banks | Regional Banks | Building Societies | Credit Unions | Total |
|---|---|---|---|---|---|
| *Reactor* | | 1 | 1 | 1 | **3** |
| *Defender* | | 1 | 2 | 2 | **5** |
| *Analyser* | 2 | 2 | 5 | 6 | **15** |
| *Prospector* | | 1 | | | **1** |
| **Total** | **2** | **5** | **8** | **9** | **24** |

Responses were sought on an unlabelled scale ranging from maintaining a secure product and market niche to an exploratory/developmental approach. As can be seen above, the *analyser* orientation predominated in each financial service group with 63% of respondents reporting this, the second most innovative category. The second most selected orientation overall was that of *defender* (21%), followed by the *reactor* (12.5%). One respondent, a regional bank, selected the most externally orientated and innovative *prospector* category. Aside from this, regional banks selected one each of the other three strategic types. Building societies indicated that they were predominantly *analysers* (62.5%), with 2 *defenders* orientations and one *reactor* type. Most credit unions (67%) reported in the *analyser* category although two reported as *defender* and one as a *reactor*.

### 5.3   Testing hypotheses

This section presents the results of statistical tests of hypotheses listed at the end of Chapter 4. The development of the hypotheses reflects the fact that alignment of strategic, structural, technological and behavioural factors at the bank delivery channel level has received minimal attention in the literature. This is notwithstanding that such alignments are deemed critical to the financial institution (Harker and Zenios, 1998).

Where necessary, the four strategic orientations are collapsed into two – '*reactors/defender*s' to represent the more inward looking, less market innovative group and '*analysers/prospector*s' to reflect the more externally orientated, innovative

respondents. Prior to testing, four results were deleted due to missing values.

Spearman's correlation was used to test the hypotheses. Due to the absence of normality from most variables and, in particular, the two dependent variables, non-parametric testing suited to ordinal level data was required.

Alternative statistical methodologies, for example, the Wilcoxon ranked-sum test and the Chi-Square Test statistic, were considered as some hypotheses lent themselves well to bivariate testing in the form of a higher or lower measure of the dependent variables, service and sales orientated performance. The Chi-Square statistic was not used as it required five or more frequencies should appear in each cell of the Chi-Square contingency table (Laplin, 1978). The Wilcoxon rank-sum test uses equal variance and, in particular, the one-tailed alternative provides a useful method for testing directional hypotheses from a moderately small sample size. However, it was thought that collapsing all variables might result in loss of data differentiation.[52]

For each hypothesis, bivariate scatter plots were examined in the first instance to check for outlying data (outliers), which could have affected the Spearman's correlation values. SPSS (V. 8) output for each hypothesis test are reproduced in the Appendices.

Analysis recognized that correlation coefficients only reflect the direction and degree of the relationship between the variables. Significant correlation coefficients at the $p<0.10$ level are marked with an [@]; while those at the $p<0.05$ level are identified with a single asterisk.

### 5.3.1 Hypothesis one: strategic orientation and performance

Hypothesis one (H1), has two sub-hypotheses (H1a and H1b). These test the relationship between service and sales performance (PERFMSER, PERFMSAL) and strategic orientation (STRATGO).

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[52] Due to the ordinal nature of the performance data it was not unexpected that data ties would be encountered within the same rank or in either set. Data ties within the same rank were arbitrarily assigned successive ranks whereas it was acceptable to assign the same output achieved by each strategic set the same rank.

The telephone-banking channel may focus on service or sales performance, or both aspects. A focus on service level reflects a strategic choice to maintain the channel using a cost reduction strategy. A focus on sales level may suggest that this FI channel is more interested in pursuing revenue opportunities.  Also, it might be expected that a more aggressive strategic orientation will be related to sales performance.

### 5.3.1.1 Service performance and strategic orientation

Table 5.6 shows possible responses for Grade of Service (GOS) - the percentage of calls answered within 20 seconds. These were ranged on a seven point scale from 51-60% GOS to >75% GOS.

Table 5.6:   Service performance (% of calls answered within 20 secs) and Strategy

| GOS% of calls answered within 20 secs | Reactor | Defender | Analyser | Prospector | Total |
|---|---|---|---|---|---|
| 51-60% | 1 50.0% | 1 20.0% | 2 16.7% | | 4 20.0% |
| 61-70% | 1 50.0% | 1 20.0% | 3 25.0% | | 5 25.0% |
| 71-80% | | 1 20.0% | 3 25.0% | | 4 20.0% |
| 81-85% | | | 2 16.7% | 1 100.0% | 3 15.0% |
| 86-90% | | 2 40.0% | 1 8.3% | | 3 15.0% |
| 91-95% | | | 1 8.3% | | 1 5.0% |
| Total | 2 100.0% | 5 100.0% | 12 100.0% | 1 100.0% | 20 100.0% |

GOS responses are divided evenly across all service levels, mostly. For illustration purposes, those respondents achieving at greater than the generally accepted 80% grade of service (GOS)[53] benchmark are shaded grey in Table 5.6.

Aside from an *analyser* which achieved the highest service levels, a*nalysers* were spread across all of the aggregate service categories, although the majority (67%) achieved at 80% GOS or below. While one *defender* reported in the second highest service category, the remainder achieved below the 80% service level. The two *reactors*, a regional bank and a building society, achieved service at or below 70% GOS.

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[53] See discussion on industry practice in Chapter 3.

### 5.3.1.2 Sales performance and strategic orientation

As a proxy for sales performance, at Question B3, respondents were asked to provide the percentage of inbound calls to the channel that resulted in a sales lead, sales referral or sales appointment. As shown in Table 5.7, sales referrals derived from calls were spread across all performance categories.

There were 5 missing values of 'don't know' or 'not applicable'. This indicates that 21% of respondents are either not orientated towards tracking sales outcomes or are possibly not initiating a sales referral in the first place on a by-call basis.

Table 5.7:   Sales leads generated per inbound call

| Sales leads per Inbound call | *Reactor* | *Defender* | *Analyser* | *Prospector* | Total N=19 |
|---|---|---|---|---|---|
| 0 – 2 % | 2 66.6% | | | | 2 10.5% |
| 2 – 4% | | 1 50% | 2 15.4% | | 3 15.8% |
| 5 – 6% | | | 1 7.7% | 1 100.0% | 2 10.5% |
| 7 – 8% | | 1 50% | 1 7.7% | | 2 10.5% |
| 9 – 10% | | | 2 15.4% | | 2 10.5% |
| >10% | 1 33.3% | | 7 53.8% | | 8 42.2% |
| **Total** | **3 100.0%** | **2 100.0%** | **13 100.0%** | **1 100.0%** | **19 100.0%** |

Two of three *reactors* were in lowest 0-2% category and one reported in the highest >10% group. *Defenders* were either 2-4% or 7-8%. *Analysers* outperformed other strategic types reporting in the highest (>10%) category, but were spread across five of the seven categories. The one *prospector* nominated the 5-6% sales lead category.

### 5.3.1.3 Results of testing hypothesis one

Hypotheses test results are shown in Table 5.8. For H1a, testing fail to reject the null hypothesis (r=0.225, p=0.340, n=20) and therefore it could not be concluded that *prospectors/analysers* are more effective from a service performance viewpoint, nor that *defenders/reactors* are more effective.

For H1b, the null hypothesis could be rejected indicating a statistically significant relationship between more innovative strategic orientation and sales performance at the 10% significance level (r = 0.327, p = 0.086).

Table 5.8:   Results of hypothesis testing: performance and strategic orientation

| Hypothesis | Nature of Hypothesised Relationship | Spearman's Correlation |
|---|---|---|
| H1a | *There is no relationship between more innovative strategic orientations and channel service performance.* | $r$=0.225 $p$=0.340 (N.S.) $n$=20 |
| H1b | *There is no relationship between between more innovative strategic orientations and channel sales orientated performance.* | $r$=0.327 $p$=0.086 [@] $n$=19 |

[@] p<0.10 level

### 5.3.2   Hypothesis two: product innovation and strategic orientation

Hypothesis two (H2) investigated the proposition that more innovative channels, i.e. those characterised as *prospectors* and *analysers*, will place more emphasis on new services and products (PRD_INCR). Further, they will emphasise extending the way in which products are offered (PRD_EXPN).

### 5.3.2.1 Product range and strategic orientation

The survey sought information on the product orientation of the channel. Specifically, details of current and future offerings of 15 commonly sold financial service products were sought on a scale anchored at one end by 'not applicable' to denote that the product is not offered; through to 'relationship managed' at the other end to denote the most comprehensive extent. From this information, the number of products offered was established. Results are shown in Table 5.9.

Although all respondents offered more than five products, results ranged up to 13 products. There were some immediately discernable differences among strategic orientations, with *defenders* and *reactors* predominantly offering the lowest number of products. *Analysers* were distributed across all categories although the majority (60%) nominated lower numbers of product categories (5 – 8 products). Predictably, the *prospector* nominated the highest number of products i.e. 13.

Table 5.9: Number of products currently offered

| Number of Products | Reactor | Defender | Analyser | Prospector | Total |
|---|---|---|---|---|---|
| 5 | | 1 | 2 | | 3 |
| 6 | 1 | 1 | 4 | | 6 |
| 7 | 2 | | 2 | | 4 |
| 8 | | 2 | 1 | | 3 |
| 9 | | | 1 | | 1 |
| 12 | | | 1 | | 1 |
| 13 | | 1 | 4 | 1 | 6 |
| Total | 3 | 5 | 15 | 1 | 24 |

The intended increase in the number of products offered, comparing the current time to two years hence (PRD_INCR), is shown in Table 5.10. Not surprisingly, less innovative respondents did not tend to increase their offerings. The cross-tabulation for more innovative strategic types is counter to expectations, in that 14 of the 15 *analysers* similarly intended to increase their number of products offered by zero or 1.

Table 5.10: Increase in number of products offered two years hence

| Increase in number of products | Reactor | Defender | Analyser | Prospector | Total |
|---|---|---|---|---|---|
| 0 | 2 | 3 | 8 | 1 | 14 |
| 1 | | 1 | 2 | | 3 |
| 2 | | 1 | 1 | | 2 |
| 3 | | | 3 | | 3 |
| 4 | 1 | | | | 1 |
| 5 | | | 1 | | 1 |
| Total | 3 | 5 | 15 | 1 | 24 |

## 5.3.2.2 Expansion in delivery options and strategic orientation

The second aspect sought details of the expansion in the way in which the fifteen nominated products are offered by channel (PRD_EXPN). The result is shown in Table 5.11.

The extent of product offerings changed little for *reactors*, although one *reactor* nominated the highest number (nine) of expanded products, arguably because they have the least developed product range. Similarly, *defenders* indicated that they would only be implementing moderate change to the way the products were offered. *Analysers* selected responses across the broadest range, however the majority were in the lower to moderate categories. The one *prospector* advised that they plan to increase their extent of delivery beyond two products.

Table 5.11: Expansion in way in which selected products are offered

| Number of products | *Reactor* | *Defender* | *Analyser* | *Prospector* | **Total** |
|---|---|---|---|---|---|
| 0 | | | 2 | | 2 |
| 1 | 1 | | 4 | | 5 |
| 2 | | 3 | 1 | 1 | 5 |
| 3 | 1 | | 1 | | 2 |
| 4 | | 1 | 1 | | 2 |
| 5 | | 1 | 3 | | 4 |
| 6 | | | 1 | | 1 |
| 7 | | | | | 0 |
| 8 | | | 1 | | 1 |
| 9 | 1 | | 1 | | 2 |
| **Total** | **3** | **5** | **15** | **1** | **24** |

### 5.3.2.3 Results of testing hypothesis two

For Hypotheses 2, neither the relationship between the more externally oriented, strategic channels and increased number of product offerings nor greater emphasis on the extent of the channel products were statistically significant (H2a; $r=0.009$, $p=0.967$: H2b; $r=0.11$, $p=0.958$). Hypotheses testing results are shown in Table 5.12.

Table 5.12: Results of hypothesis testing: product innovation and strategic orientation

| Hypothesis | Nature of hypothesised relationship | Spearman's Correlation |
|---|---|---|
| H2a | *There is no relationship between more strategic, externally oriented call centre channels and enhancing/developing the extent of the way in which the channel offers its products to clients.* | $r=0.009$ $p=0.967$ (N.S) $n=24$ |
| H2b | *There is no relationship between externally oriented call centre channels and increasing the number of products offered to clients.* | $r=0.11$ $p=0.958$ (N.S) $n=24$ |

### 5.3.3   Hypothesis three: performance and structure

It was posited that in the Australian call centre channel, external information management and market scanning have not played a critical role to date. This would appear contrary to theory which indicates that ascertaining external market influences has positive performance implications (Waterhouse, 1998).   The third hypothesis considers the aggregate, independent variable, '*structure*' (STRUC_AG) as represented by external market scanning, and proposes no relationship between service and sales performance (PERMSER, PERMSAL respectively) and channel structure.

The combined term, 'structure', comprised a mean calculation of the four sub-elements. On the structural scale, '3' which equated to 'Don't Know', was treated as a user-defined missing value to preclude it from all calculations.

### 5.3.3.1 Service performance and structure

Table 5.13 shows the cross-tabulation for the mean aggregate market scanning structural measure (as a proxy for structure) and service performance. Service performance results were spread across almost the full range of mean structural scores although comparatively fewer FIs nominated the highest responded-to service level, viz. 91-95% Grade of Service. Therefore, no comprehensive trend can be determined readily from the cross-tabulation.

Table 5.13: Service performance and structure

| Mean Structure (STRUC_AG) | Service Performance | | | | | | Total |
|---|---|---|---|---|---|---|---|
| GOS % | 51-60 | 61-70 | 71-80 | 81-85 | 86-90 | 91-95 | |
| Survey Code | 2 | 3 | 4 | 5 | 6 | 7 | |
| 1.33 | | | 1 | | | | 1 |
| 1.50 | | 1 | | | | | 1 |
| 1.67 | 1 | | | | | | 1 |
| 2.00 | 1 | | | | | 1 | 2 |
| 2.50 | | 1 | | 1 | | | 2 |
| 2.75 | | | | | 1 | | 1 |
| 3.25 | 2 | | | 1 | | | 3 |
| 350 | | 1 | | 1 | 1 | | 3 |
| 3.67 | | | | | 1 | | 1 |
| 4.25 | | 1 | 1 | | | | 2 |
| 4.50 | | 1 | 1 | | | | 2 |
| Total | 4 | 5 | 3 | 3 | 3 | 1 | 19 |

### 5.3.3.2 Sales performance and structure

Table 5.14 shows sale performance results as reasonably evenly cross-tabulated across a wide range of structural orientations, from 1.33 to 4.50. While all sales performance levels, from *0 – 2%'* to *>10%* were represented, notably fewer FIs indicated lower sales outcomes with higher sales conversion results. Consequently, no conclusions can be drawn as to the relationship between sales performance and structure.

Table 5.14: Sales performance and Structure

| % of Calls generating Sales leads | Sales Performance | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0 - 2 | 2.1 - 4 | 4.1 - 6 | 6.1 - 8 | 8.1 - 10 | >10 | |
| Survey Code | 2 | 3 | 4 | 5 | 6 | 7 | |
| **Structure (STRUC_AG)** | | | | | | | *Total* |
| 1.33 | | | | | 1 | | 1 |
| 2.00 | 1 | 1 | | | | 2 | 4 |
| 2.50 | | 1 | | | | 1 | 2 |
| 3.00 | | | | | 1 | | 1 |
| 3.25 | | 1 | | | | 2 | 3 |
| 3.50 | | | | | | 1 | 1 |
| 3.67 | | | | 1 | | | 1 |
| 4.00 | 1 | | 1 | | | | 2 |
| 4.25 | | | | 1 | | 1 | 2 |
| 4.50 | | | 1 | | | 1 | 1 |
| Total | 2 | 3 | 2 | 2 | 2 | 8 | 19 |

## 5.3.3.3 Results of testing hypothesis three

Hypotheses test results are shown in Table 5.15. For H3a, the null hypothesis could not be rejected ($r = -0.059$, $p = 0.811$). Therefore, the hypothesised relationship between more externally orientated structure and service performance was not found to be significant. Testing also failed to reject the null hypothesis; no relationship between external structure and sales performance (H3b) ($r = 0.034$, $p = 0.89$).

Table 5.15: Results of hypothesis testing: channel structure and performance

| Hypothesis | Nature of Hypothesised Relationship | Spearman Correlation |
|---|---|---|
| H3a | *There is no relationship between service performance and more strategic, externally orientated channel structures.* | $r = -0.059$ $p = 0.811$(N.S.) $n = 19$ |
| H3b | *There is no relationship between sales performance and more strategic, externally orientated channel structures.* | $r = 0.034$ $p = 0.89$ (N.S.) $n = 19$ |

## 5.3.4 Hypothesis four: performance and leadership orientation

Discussion in Chapter 3 indicated the possibility that channel executive leadership may be characterised by long-term, bureaucratic styles imported to the call centre environment from other retail bank structures. It was suggested this might have adverse performance implications. Alternatively, the proposition is that empowering management where

decisions are delegated ought to have positive performance effect (Burns and Stalker, 1961; Burton and Obel, 1998). Therefore, the fourth hypothesis proposes a positive relationship between call centre performance and the independent variable, 'leadership', (LDR_COM) represented by various channel decision-making aspects.

Part E of the survey sought details about the channel's leadership orientation in the form of management preference for micro-involved decision-making and related information requirements. The variable comprised six aspects of delegation/decision-making orientation. Each question (E1 - E6) was asked, on a four-item scale from high management involvement in operations through to aggregate and minimal involvement in decision-making, with 'no answer' regarded as an abstention.

For hypotheses testing, the combined variable, 'leadership', comprised the six leadership delegation, decision-making sub-elements algorithmically aggregated into 'low', 'medium' and 'high' preference for micro (leader) involvement. To achieve this aggregation, one sub-variable, the fourth leadership question, 'detail of information used', required recoding to match the directional scale of other sub elements. Response '1' from the original survey scale, which equated to 'no answer', was treated as a user-defined missing value to preclude it from all calculations involving mean aggregated variable.

### 5.3.4.1 Service performance and leadership orientation

The service performance and leadership cross-tabulation is shown in Table 5.16. While performance was fairly evenly distributed across all possible performance levels, aggregate leadership predominated around the mid-range score '2'.

Table 5.16: Service performance and leadership

| Service Performance Grade of Service (PERFMSERV) | Code | **Aggregate Leadership Score** (LDR_COM) Preference for Micro-Involvement | | | |
|---|---|---|---|---|---|
| | | *Low* *1* | *Medium* *2* | *High* *3* | **Total** |
| 51-60% | *2* | | 4 | | **4** |
| 61-70% | *3* | 1 | 4 | | **5** |
| 71-80% | *4* | 1 | 3 | | **4** |
| 81-85% | *5* | 1 | 2 | | **3** |
| 86-90% | *6* | | 1 | 2 | **3** |
| 91-95% | 7 | | 1 | | **1** |
| | **Total** | **3** | **15** | **2** | **20** |

These results indicated that most respondents (73.7%) were in the mid-range 'medium preference for micro involvement' category, with three respondents in the 'low preference for micro involvement' group and the remaining two combined into the 'high preference for micro involvement' category. Less than 35% of respondents, primarily those that prefer medium to high micro-decision making involvement, nominated at or above the predominant industry benchmark GOS of 80%.

### 5.3.4.2 Sales performance and leadership orientation

Almost half the respondents, all medium to high preference for micro involvement, reported in the highest sales '>10%' sales leads/referrals category. All other respondents were divided fairly evenly across remaining sales performance categories. Significantly, seven medium preference for micro involvement reported group in the highest sales performance category.

Table 5.17: Sales performance and leadership orientation

| Sales Performance % of inbound calls resulting in sales leads, referrals appointments (PERFMSAL) | Code | Aggregate Leadership Score (LDR_COM) Preference for Micro-Involvement | | | |
| --- | --- | --- | --- | --- | --- |
| | | Low 1 | Medium 2 | High 3 | Total |
| 0-2% | 2 | | 2 | | **2** |
| 2-4% | 3 | | 3 | | **3** |
| 4-6% | 4 | 1 | 1 | | **2** |
| 6-8% | 5 | | 2 | | **2** |
| 8-10% | 6 | 1 | 1 | | **2** |
| >10% | 7 | | 7 | 1 | **8** |
| **Total** | | **2** | **16** | **1** | **19** |

### 5.3.4.3 Results of testing hypothesis four

Similar to Hypotheses 3, Burton and Obel's (1998) algorithmic process was used to create an aggregate leadership measure (LDR_COM).[54] For Hypothesis 4a, the null hypothesis could not be rejected ($r_s = 0.221$, $p = 0.349$). Therefore, the hypothesised relationship

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[54] This was performed using Burton and Obel's (1998) well-established computer based, 'knowledge based expert system'. This is in the form of algorithmic analysis software performed on the CD-ROM accompanying their book.

between service performance and leader orientation was not found to be significant. Use of the alternative (straight) mean leadership score produced the same outcome (LDR_AGG)($r_s$=0.209, $p$=0.405. Hypotheses testing results are shown in Table 5.18.

Table 5.18: Results of hypothesis testing: leadership preference and performance

| Hypothesis | Nature of hypothesised relationship | Spearman's Correlation |
|---|---|---|
| H4a | *There is no relationship between channel service performance and delegated management authority.* | $r_s$ = 0.221 $p$ = 0.349 (N.S) $n$ = 20 |
| H4b | *There is no relationship between sales performance and delegated management authority.* | $r_s$ = 0.213 $p$ = 0.382 (N.S) $n$ = 19 |

However, re-inspection of cross-tabulation suggested the removal of two outliers, one higher performer reporting the lowest leader preference for micro-involvement and one low performer reporting the highest preference for micro-involvement. This produced a statistically significant result ($r_s$ = 0.601, $p$ =0.01).

For Hypothesis 4b, the null hypothesis could not be rejected. Therefore, the relationship between sales performance and lower leader micro-involvement was not found to be significant ($r_s$ = 0.213, $p$ = 0.382). The alternative (straight) mean leadership score (LDR_AGG) method confirmed this result ($r_s$ = 0.057, $p$ = 0.42).

## 5.3.5   Hypothesis five: performance and climate

To understand climate and, in particular, psychological aspects[55] so important to call centre environments, Hypotheses 5a and 5b considered the aggregate channel climate variable in relation to performance. These sought to test the proposition that more open, empowering and rewarding forms of organisational climate are related to performance (Pawar and Eastman, 1997).

Burton and Obel's (1998) question set was used to group respondents into one of four, orthogonal climatic categories. However, that most respondents fell into one summary

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[55] These climatic aspects include staff morale, trust and rewards.

form, 'developmental climatic nature', warned of a potential loss of data differentiation.[56] Hence, the alternate aggregate means compiled from the six sub-elemental questions (trust, conflict, morale, resistance to change, leader credibility and reward) were used.

### 5.3.5.1 Service performance and climate

Table 5.19 shows almost all respondents were in the moderate to higher end of the 'climate' scale yet were spread relatively evenly across service performance levels from 51-60% to 91-95%. Only one climatic score, a moderately high level one, was in the highest service performance 91-95% GOS category.

Table 5.19: Service performance and climate

| Service Performance Grade of Service (GOS) (PERFMSERV) | Code | Aggregate Climatic Score (CLM_AGG) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | *1.83* | *2.33* | *2.50* | *2.67* | *2.83* | *3.00* | *Total* |
| 51-60% | *2* | 1 | | | | 1 | | 2 |
| 61-70% | *3* | | 2 | | | | 1 | 3 |
| 71-90% | *4* | | | 1 | 1 | 1 | | 3 |
| 81-85% | *5* | 1 | 1 | | 1 | | | 3 |
| 86-90% | *6* | | | | 2 | | 1 | 3 |
| 91-95% | *7* | | | 1 | | | | 1 |
| | **Total** | **2** | **3** | **2** | **4** | **2** | **2** | **15** |

### 5.3.5.2 Sales performance and climate

Analysis took the form of straight mean average (CLM_AGG) of the six climatic questions. Results of service and sales performance and climatic variable cross-tabulation are shown in Table 5.20 and 5.21 respectively.

Aggregate climate scores showed that respondents were represented in all performance levels. Interestingly, while six FIs nominated the highest sales performance level, there was no noticeable climatic relationship. Three FIs here reported higher climatic scores and, paradoxically, three respondents in the highest sales lead performance, '>5% of calls' category, reported the lower climatic scores.

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[56] If we were to use Burton and Obel's typology (CLM_COM), the result would be $r_s$=-0.100, p=0.666.

Table 5.20: Sales performance and climatic orientation

| Sales Performance (Sales Leads) (PERFMSAL) as a % of Inbound Calls | Code | Aggregate Climatic Score (CLM_AGG) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | *1.83* | *2.33* | *2.50* | *2.67* | *2.83* | *3.00* | *Total* |
| <1% | *2* | 1 | | | | | | 1 |
| 1 – 2 % | *3* | 1 | 1 | | | | | 2 |
| 2 – 3 % | *4* | | | | 2 | | | 2 |
| 3 – 4 % | *5* | | | | 1 | | 1 | 2 |
| 4 – 5 % | *6* | | | | 1 | | | 1 |
| > 5% | 7 | | 1 | 2 | | 2 | 1 | **6** |
| | **Total** | **2** | **2** | **2** | **4** | **2** | **2** | **14** |

## 5.3.5.3 Results of testing hypothesis five

Results for H5a indicated that null hypothesis could not be rejected ($r_s$=0.124, $p$=0.661, $n$ = 15. Therefore, the proposed relationship between service performance (PERMSER) and more internally orientated climate (CLIM_AGG) was not found to be significant. For H5b, the null hypothesis could be rejected at the 0.10 significance level ($r_s$=0.469, $p$=0.091, $n$ = 14). Therefore, the relationship between sales performance (PERFMSER) and more internally orientated climate (CLIM_AGG) was found to be statistically significant.

Table 5.21: Results of hypothesis testing: Climate and Performance

| Hypothesis | Nature of hypothesised relationship | Spearman's Correlation |
|---|---|---|
| H5a | *There is no relationship between service performance and more open, valuing and employee satisfying channel climates.* | $r_s$= 0.124 $p$ = 0.661 (N.S) $n$ = 15 |
| H5b | *There is no relationship between sales performance and more open, valuing and employee satisfying channel climates.* | $r_s$= 0.469 $p$ = 0.091[@] $n$ = 14 |

[@] $p<0.10$

Additionally, in that internal reliability was barely acceptable (Cronbach Alpha=0.69), sub-elements were correlated separately against both aspects of performance. For service performance, this produced two statistically significant results:

- Morale ($r_s$=0.339, p=0.07)
- Reward ($r_s$=0.328, p=0.08)

For the sales performance and climatic sub-element relationships, three correlations were found to be statistically significant:

- Trust ($r_s$=0.395, p=0.05)
- Morale ($r_s$=0.328, p=0.07)
- Reward ($r_s$=0.324, p=0.09)

### 5.3.6 Hypothesis six: IVRU utilisation and strategy and performance and IT

The thesis considers three IT propositions relating to telephone banking. Firstly, that higher IVRU utilisation is positively related to less externally oriented and strategic channels. Secondly, that more innovative channels, being focussed on product development and hence on sales growth, do not target IVRU investment as their main priority and therefore have a lower IVRU investment. Thirdly, that more innovative channels would prefer to focus their resources on enhancing human-based call technology. Hypotheses testing results are summarised in Table 5.25.

#### 5.3.6.1 IVRU utilisation and strategic orientation

The IVRU utilisation question (IT_IVR) sought the proportion of inbound calls completely handled by automatic response units (IVRU, etc). *Reactors* generally nominated the lowest IVRU utilisation whereas *defenders* range across a number of responses from the mid range (46-50%) point up to and including the highest level of IVRU usage. Most analysers selected higher utilisation percentages. In particular, eight of 14 analysers and the one *prospector* reported in the second highest IVRU category (61-75%). Surprisingly overall, 9 from 15 of the more innovative types were nominated in the medium to very high IVRU utilisation. Results appear in Table 5.22.

Table 5.22: Percentage of inbound calls answered by IVRU

| Q. Response | % IVRU calls | *Reactor* | *Defender* | *Analyser* | *Prospector* | Total |
|:---:|:---:|:---:|:---:|:---:|:---:|:---:|
| 1 | 36-40 | 2 | | 3 | | **5** |
| 2 | 41-45 | | | | | **-** |
| 3 | 46-50 | 1 | 1 | 1 | | **3** |
| 4 | 51-55 | | 1 | 2 | | **3** |
| 5 | 56-60 | | | | | **-** |
| 6 | 61-75 | | 1 | 8 | 1 | **10** |
| 7 | >75 | 1 | 1 | | | **2** |
| **Total** | | **3** | **4** | **14** | **1** | **23** |

### 5.3.6.2 Investment in IVRU and strategic orientation

Information on the extent of IT development to support IVRU (or other electronic devices) (ITIVRU) was sought in Question D6. IT results cross-tabulated against strategic orientation are shown in Table 5.23.

Table 5.23: IVRU development on IVRU-type devices and strategic orientation

| IT development on IVRU –type devices (ITVRU) | | *Reactor* | *Defender* | *Analyser* | *Prospector* | **Total** |
|---|---|---|---|---|---|---|
| 1 | Very low | | 1 | 3 | | **4** |
| 2 | Low | 1 | 1 | 1 | | **3** |
| 3 | Moderate | | 1 | 7 | | **8** |
| 4 | High | 1 | 2 | 3 | 1 | **7** |
| 5 | Very High | | | 1 | | **1** |
| **Total** | | **2** | **5** | **14** | **1** | **23** |

*Reactors* nominated either low or high IT development. *Defenders* were divided fairly evenly across the low to moderate answers. Surprisingly 11 of 14 analysers reported low to moderate investment categories and, not surprisingly, the one *prospector* selected 'high' expenditure.

### 5.3.6.3 IT development to support CSR served calls and strategic orientation

Question D5 related to IT development initiatives intended to support client/customer service representative (CSR) served calls (ITCSR). Results are shown in Table 5.24.

Table 5.24: CSR expenditure and strategic orientation

| Expenditure on CSRs (ITCSR) | | *Reactor* | *Defender* | *Analyser* | *Prospector* | **Total** |
|---|---|---|---|---|---|---|
| 1 | Very low | 1 | 1 | 4 | | **6** |
| 2 | Low | | 1 | 1 | 1 | **2** |
| 3 | Moderate | 1 | 2 | 7 | | **11** |
| 4 | High | 1 | 1 | | | **2** |
| 5 | Very High | | | 2 | | **2** |
| **Total** | | **3** | **5** | **14** | **1** | **23** |

Results indicate that each strategic type with the exception of the *prospector* are spread across a broad range of the human-oriented IT expense scale. With the exception of one 'don't know', *reactors* were divided evenly among very low, moderate and high expenditure. The mid range, 'moderate' expenditure, primarily represents *defenders*. Similarly, most *analysers* (n=9) are in the mid to high range although by contrast the

remaining four of this strategic type nominated 'very low' human/CSR-related expenditure. Surprisingly, the one *prospector* selected 'low' expenditure.

### 5.3.6.4 Results of testing hypothesis six

Testing fail to reject the null hypothesis (H6a) therefore, the hypothesised relationship between higher IVRU utilisation (IT_VRU) and less innovative strategic approaches (STRATGO) was not found to be significant ($r_{s=}0.082$, p=0.716, n=22). Similarly, the null Hypothesis 6b; no relationship between IVRU investment and less innovative strategic approaches could not be rejected ($r_s$=0.196, p=0.359, n=24). Finally, the hypothesised relationship between investment in human (CSR) technology (ITCSR) and innovative strategic approaches, Hypothesis 6c was not found to be significant ($r_s$= -0.009, p=0.968, n=23). Results are shown in Table 5.25.

Table 5.25: Results of hypothesis testing: IT investment and strategic orientation

| Hypothesis | Nature of Hypothesised Relationship | Spearman's Correlation |
|---|---|---|
| 6a | *There is no relationship between higher IVRU utilisation and less innovative strategic approaches.* | $r_s$=0.082 p=0.716 (N.S.) n=22 |
| 6b | *There is no relationship between investment in IVRU technology and the more innovative strategic approaches.* | $r_s$=0.196 p=0.359 (N.S.) n=24 |
| 6c | *There is no relationship between investments in human (CSR) technology and the more innovative strategic approaches.* | $r_s$=-0.009 p=0.968 (N.S.) n=23 |

### 5.3.7 Hypothesis seven: performance and IT aggressiveness

This section stemmed from Jaja's (1989) proposition that technical aggressiveness drives bank performance although this has not been tested specifically in the telephone-banking channel. Conversely, while IT expenditure quite reasonably would appear to be related to a technologically based delivery channel, and consequently a co-determinant of performance (Jaja, 1989), excessive IT spending may be more associated with IVRU complexity, become counterproductive and result in diminished performance (Evenson, Harker and Frei, 1998).

Hypothesis 7 proposed no associations between service and sales performance and strategic orientation and technical aggressiveness. This hypothesis differs from

Hypothesis 6, which considered channel management's internal IT IVRU and CSR technological development viewpoints.

Using Jaja's (1989) question set, details of the channel's approach to IT investment, IT research and competitive IT positioning were sought, as a proxy for channel IT aggressiveness. Questions (D2 to D4) were asked on a scale ranging in general terms from 'very low' to 'very high'. The results are shown in Table 5.26.

Answers to Question D2 about (Overall) investment in technology were arrayed on a scale from 'don't know' to 'very high'. For the strategic types, with the exception of the *prospector*, results were distributed fairly evenly across the lower, moderate and higher IT categories. However, seven *analyser*s nominated moderate investment. Surprisingly, one FI, a *defender*, selected the 'very high' IT investment category.

Table 5.26: IT aggressiveness results (questions adapted from Jaja, 1989)

| Jaja's IT Questions and Response Scales | | | *Reactor* | *Defender* | *Analyser* | *Prospector* | *Total* |
|---|---|---|---|---|---|---|---|
| **Overall** | 0 | Don't Know | | 1 | 1 | | 2 |
| **Channel IT** | 1 | Very Low | 1 | 2 | 1 | | 4 |
| **Investment** | 2 | Low | 1 | | 4 | | 5 |
| (ITINVEST) | 3 | Moderate | | 1 | 7 | | 8 |
| (Question D2) | 4 | High | 1 | | 2 | 1 | 4 |
| | 5 | Very high | | 1 | | | 1 |
| | **Total** | | **3** | **5** | **15** | **1** | **24** |
| **IT** | 0 | Don't Know | | 1 | | | 1 |
| **Competitive** | 1 | Imitator | | | 3 | | 3 |
| **Position** | 2 | Close follower | | 1 | 3 | | 4 |
| (ITCOMPTV) | 3 | Follower | 3 | 2 | 5 | | 10 |
| (Question D3) | 4 | Aggressive Fr | | | 2 | | 2 |
| | 5 | Innovator | | 1 | 2 | 1 | 4 |
| | **Total** | | **3** | **5** | **15** | **1** | **24** |

| IT | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Research** | 0 | Don't Know | | | 1 | | 1 |
| **Focus** | 1 | No IT RandD | 1 | 1 | 2 | | 4 |
| (ITRESEAR) | 2 | Emerging IT | 1 | | 3 | | 4 |
| (Question D4) | 3 | Develop IT | 1 | 2 | 6 | | 9 |
| | 4 | Novel IT | | | | | 0 |
| | 5 | Pioneer IT | | | 3 | 1 | 4 |
| | **Total** | | **3** | **3** | **15** | **1** | **22** |

The channel's competitive IT position was considered at Question D3 on a scale ranging from *imitator* to *innovator*. With the exception of the majority response, *follower* (n=10) results were distributed fairly evenly across all IT categories. All r*eactors* nominated the *follower* category whereas, for *defenders*, responses show a spread across the broadest range of answers. *Analysers* were spread evenly with the largest number (5) nominating the mid-range *follower* category. The one *prospector* was in the highest *innovator* category.

Question D4 sought the channel's overall IT research focus. Responses ranged from '*don't know*' to '*pioneering new IT'*. Almost all respondents (82%) either imitated or improved existing call technology. All *reactors* and *defenders* selected the lower level IT research response. Again, most (80%) *analyser*s with the exception of three *pioneering* (new) IT selectors nominated low to mid-range responses. Similarly, the *prospector* selected the highest *pioneer* IT category.

### 5.3.7.1 Combined IT Investment Measure

As all three questions tested related IT investment and research aspects, each question result was aggregated into a composite IT measure Jaja's (1989) three IT questions were combined by simple arithmetic mean into the aggregate climatic measure – IT_AGG2R. The aggregation into a composite score produced an acceptable reliability score (Cronbach Alpha=0.74). Results are shown in Table 5.27.

Table 5.27: Strategic orientation and aggregate IT aggressiveness

| Strategic Orientation (STRATGO) | Aggregate IT Investment (ITAGGR) | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Very Low | | Moderately low | | | | Moderate | | | High to Very High | | | |
| Score | 1.00 | 1.67 | 2.00 | 2.33 | 2.50 | 2.67 | 3.00 | 3.33 | 3.67 | 4.00 | 4.33 | 4.67 | Total |
| Reactor | | 1 | | 1 | | | | 1 | | | | | 3 |
| Defender | 1 | | 1 | | | | 2 | | | | | | 4 |
| Analyser | 1 | | 3 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | | 15 |
| Prospector | | | | | | | | | | | | 1 | 1 |
| Total | 2 | 1 | 4 | 2 | 1 | 2 | 4 | 2 | 1 | 1 | 1 | 1 | 23 |

Generally, most FI fell into the mid-range categories. *Reactors* and *defenders* responses ranged from the *low* to *moderate* IT categories. *Analysers* results ranged from *very low* to *very high,* with most in the middle range categories. Consistent with expectations around the externally oriented, pro-active strategic typology, the *prospector* fell into the highest IT investment category.

## 5.3.7.2 Service performance and IT Aggressiveness

Table 5.28: Service performance and aggregate IT aggressiveness

| Service Performance (PERFMSERV) | Aggregate IT Investment (ITAGG2R) | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Very Low | | Moderately low | | | Moderate | | | High to Very High | | | | |
| Score | 1.00 | 1.67 | 2.00 | 2.33 | 2.67 | 3.00 | 3.33 | 3.67 | 4.00 | 4.33 | 4.67 | 5.00 | Total |
| 51-60%  2 | | 1 | 2 | | | 1 | | | | | | | 4 |
| 61-70%  3 | | | 2 | 1 | 1 | 1 | | | | | | | 5 |
| 71-80%  4 | | | | | | | 2 | 1 | | | | 1 | 4 |
| 81-85%  5 | | | | | 1 | | | | 1 | | 1 | | 3 |
| 86-90%  6 | 1 | | | | | 1 | | | | 1 | | | 3 |
| 91-95%  7 | 1 | | | | | | | | | | | | 1 |
| Total | 2 | 1 | 4 | 1 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 20 |

Results for the service performance and IT aggressiveness cross-tabulation were divided generally across all aggregate IT investments and service-performance levels, with the exception of the highest performance category. Notably, two FI that nominated the very lowest orientation to IT research and development reported the highest service performance level.  These are shaded in grey in Table 5.28.

### 5.3.7.3 Sales performance and IT Aggressiveness

Table 5.29 below illustrates that sales performance outcomes are spread across the broadest range of aggregate IT investment possible. Eight respondents nominated the highest sales success level *'>10%'*. Cross-tabulation also indicates than well in excess of half (63%) of FIs reported more than moderate success (6*% and above sales outcome/referral as a percentage of inbound calls) in delivering revenue outcomes. However, very few, shaded grey below, which nominated in the upper ranges of IT investment were in this performance category. It is perhaps more notable that far more FIs (n=8), that fell into the *very low* to *moderate* IT investment section, reported similarly high sales performance levels.

Table 5.29: Sales performance and aggregate IT aggressiveness

| Sales Performance (PERFMSAL) | Aggregate IT Investment Score (ITAGG2R) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Very Low* | | *Moderately low* | | | | *Moderate* | | | *High to Very High* | | | |
| *Score* | 1.00 | 1.67 | 2.00 | 2.33 | 2.50 | 2.67 | 3.00 | 3.33 | 3.67 | 4.00 | 4.33 | 4.67 | **Total** |
| 0-2% | | 1 | | | | | | 1 | | | | | **2** |
| 2-4% | | | | | | 1 | 1 | | | 1 | | | **3** |
| 4-6% | | | | | | | | | 1 | | | 1 | **2** |
| 6-8% | 1 | | 1 | | | | | | | | | | **2** |
| 8-10% | | | | 1 | | | | 1 | | | | | **2** |
| >10% | 1 | | 2 | 1 | 1 | | 1 | 1 | | | 1 | | **8** |
| **Total** | **2** | **1** | **3** | **2** | **1** | **1** | **2** | **3** | **1** | **1** | **1** | **1** | **19** |

### 5.3.7.4 Results of testing hypothesis seven

Results for Hypothesis 7 are summarised below in Table 5.30. The result ($r_s$=0.224 p=0.293, n=24), indicates that the null hypothesis H7a could not be rejected. Therefore, the hypothesised relationship between more aggressive IT orientation (IT_AGG2R) and more innovative strategic orientations was not found to be significant.

Table 5.30: Results of hypothesis testing: IT and performance

| Hypothesis | Nature of Hypothesised Relationship | Spearman's Correlation |
|---|---|---|
| 7a | *There is no relationship between technical aggressiveness and more innovative strategic orientations.* | $r_s$=0.224 p=0.293 (N.S) n=24 |
| 7b | *There is no relationship between service performance and technical aggressiveness.* | $r_s$=0.263 p=0.263 (N.S) n=20 |

| Hypothesis | Nature of Hypothesised Relationship | Spearman's Correlation |
|---|---|---|
| 7c | *There is no relationship between sales performance and technological aggressiveness.* | $r_s$=-0.191 p=0.434 (N.S) n=19 |

The null hypothesis 7b, that there is no relationship between technical aggressiveness and channel service performance (PERFMSER), could not be rejected ($r_s$=0.263 p=0.263, n=20). So too, Hypothesis 7c, a proposed null relationship between technological aggressiveness and sales performance was not found to be significant.($r_s$=-0.191, p=0.434, n=19).

Finally, as illustrated in Table 5.31 post hoc testing of the three IT investment sub-elements indicated a statistically significant result; that between service performance (PERMSER) and *IT Research* (ITRESEAR) ($r_s$=0.374, p= 0.095, n=21).

Table 5.31: Results of significant sub-hypothesis testing: IT and performance

| Nature of *Post Hoc* Hypothesised Relationship | Spearman's Correlation |
|---|---|
| Positive relationship between IT research (ITRESEAR) and more innovative strategic orientations (PERMSER) | $r_s$= 0.374 p= 0.095 [@] n=21 |

[@] significant at the p>0.10 level

## 5.3.8 Hypothesis eight: Channel KPIs and performance

The survey sought information about the nature and relative importance of channel KPIs. The first issue was to ascertain the types and nature of KPIs most used by channels. FI respondents were asked to nominate the five most important KPIs, in rank order, from a list of 21 commonly used industry KPIs. Results are presented in Table 5.32 with revenue-oriented KPIs designated in grey.

Table 5.32: Channel key performance indicator by rank order

| Rank Order | KPI | Staff n=3 | Service n=6 | Client n=4 | Sales n=8 | 1st | 2nd | 3rd | 4th | 5th | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **KPI Type** | | | | **Preference Frequencies for KPI nominated in Rank Order:** | | | | |
| 1 | Grade of Service | | # | | | 3 | 5 | 4 | 3 | 3 | **18** |
| 2 | Staff turnover percentage (%) | # | | | | | | 4 | 4 | 4 | **12** |

| Rank Order | KPI | KPI Type | | | | Preference Frequencies for KPI nominated in Rank Order: | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Staff n=3 | Service n=6 | Client n=4 | Sales n=8 | 1st | 2nd | 3rd | 4th | 5th | Total |
| 3 | Qualitative Client Satisfaction | | | # | | 2 | 4 | 5 | | | **11** |
| 4 | No of Inbound Calls Answered | | # | | | 5 | | | 5 | | **10** |
| 5 | Sales/Referral to Inbound Calls | | | | # | 3 | 3 | 3 | 1 | | **10** |
| 6 | Converted Sale Leads to Inbound Call | | | | # | 1 | 3 | 2 | 1 | 3 | **10** |
| 7 | No of Client Complaints | | | # | | 1 | 4 | | | 1 | **6** |
| 8 | Return on Investment (ROI) | | | | # | 1 | | 2 | 2 | 1 | **6** |
| 9 | Other (unspecified) Staff | # | | | | | 3 | 2 | | | **5** |
| 10 | Expenses as a % of Sales/Rev | | | | # | | | | 2 | 1 | **3** |
| 11 | Net Profit or similar | | | | # | 3 | | | | | **3** |
| 12 | No of Outbound Calls | | # | | | | | | 1 | 2 | **3** |
| 13 | Market Share % | | | | # | | | 1 | 1 | | **2** |
| 14 | Return on Equity (ROE) | | | | # | | | 1 | 1 | | **2** |
| 15 | (Client) Retention | | | # | | | 1 | 1 | | | **2** |
| 16 | Total Expense | | # | | | | | 1 | | | **1** |
| 17 | Abandoned Rate | | # | | | | | | | 1 | **1** |
| 18 | IVR vs CSR volumes | | # | | | | | 1 | | | **1** |
| 19 | Sales Vs Budget | | | | # | 1 | | | | | **1** |
| 20 | Products per customer | | | # | | 1 | | | | | **1** |
| 21 | Staff satisfaction | # | | | | | | 1 | | | **1** |
| | | | | | | | | | | **Total** | **109** |

In terms of performance indicator preference, the top five most frequently nominated KPIs, were in order, *GOS*, nominated by 18 FIs; *Staff Turnover %*, nominated by 12 FIs; *Qualitative Staff Surveys*, selected by 11 FIs. Finally, ten respondents each nominated, *Number of Inbound Calls* and *Sales/Referral to Inbound Call* rate. Overall, this tends to confirm the hypothesis that the channel would tend to use non-financial indicators as opposed to revenue oriented financial KPIs. The most nominated first-preference KPIs were '*Number of Inbound Calls'*; secondly, co-equally, '*Sales/Referral to Inbound Call'* rate*, 'Grade of Service'* (GOS), and '*Net Profit or similar'* and '*qualitative client satisfaction'*.

### 5.3.8.1 Performance and KPI choice

This study also explores the possibility that less allowance has been made for financial measures and therefore may not adequately reflect the increasingly multi-dimensional nature of the call centre channel performance. Consequently, to examine the proposition that FI which are more likely to use call-volume-based measurements may not be as successful. Or conversely, that revenue-orientated FIs are more likely to achieve sales and revenue performance. KPIs were classified also into either financially based, revenue-oriented indicators (shaded in grey in Table 5.32) or non-revenue/non-financial service-oriented KPIs used as proxy for the dependant variable, service performance.

Thirteen of the 21 (62%) most commonly used channel KPIs were of a non-financial nature whereas eight of the KPIs were of the alternative, revenue/financially oriented kind. The fact that four of five, and six of the top 10 most often nominated KPIs were non-revenue in nature, indicates their primary importance.

### 5.3.8.2 Testing hypothesis eight

The null hypothesis in relation to Hypotheses 8a could not be rejected. Hence the relationship between financial KPIs and service performance was not found to be significant (r= 0.087, p= 0.740, n=17). For Hypotheses 8b, as the null hypothesis could be rejected, testing indicated a statistically significant relationship between financial KPIs and sales performance ($r_s$=0.520, p=0.027, n=18). These results are shown in Table 5.33

Finally, to add depth, sales performance was collapsed into high or low performance. This ad-hoc testing confirmed the Hypotheses 8b result with a strong positive correlation ($r_s$= 0.632, p= 0.00). Table 5.33 shows these in summary.

Table 5.33: Results of hypothesis testing: Performance and KPIs

| Hypothesis | Nature of Hypothesised Relationship | Spearman's Correlation |
|:----------:|:------------------------------------|:----------------------:|
| H8a | *There is no relationship between service performance and financial KPIs.* | $r_s$=0.087 p=0.740 (N.S) n=17 |

| H8b | *There is no relationship between sales performance and financial KPIs.* | $r_s$=0.520 p=0.027* n=18 |
|---|---|---|

\* significant at the p<0.05 level

### 5.3.9   Summary of hypotheses testing outcomes

Table 5.34 summarises acceptance or rejection of all hypotheses. Significance levels are shown at which any are accepted.

Table 5.34: Summary of hypotheses tests

| H | Hypothesised Relationships | Reject | Accept P<0.05 | Accept P<0.10 |
|---|---|---|---|---|
| 1 a | *There is no relationship between more innovative strategic orientations and channel service performance.* | Reject | | |
| 1 b | *There is no relationship between between more innovative strategic orientations and channel sales orientated performance.* | | | Accept |
| 2 a | *There is no relationship between more strategic, externally oriented call centre channels and enhancing/developing the extent of the way in which the channel offers its products to clients.* | Reject | | |
| 2 b | *There is no relationship between externally oriented call centre channels and increasing the number of products offered to clients.* | Reject | | |
| 3 a | *There is no relationship between service performance and more strategic, externally orientated channel structures.* | Reject | | |
| 3 b | *There is no relationship between sales performance and more strategic, externally orientated channel structures.* | Reject | | |
| 4 a | *There is no relationship between channel service performance and delegated management authority.* | Reject | | |
| 4 b | *There is no relationship between sales performance and delegated management authority.* | Reject | | |
| 5 a | *There is no relationship between service performance and more open, valuing and employee satisfying channel climates.* | Reject | | |
| 5 b | *There is no relationship between sales performance and more open, valuing and employee satisfying channel climates.* | | | Accept |
| 6 a | *There is no relationship between higher IVRU utilisation and less innovative strategic approaches.* | Reject | | |
| 6 b | *There is no relationship between investment in IVRU technology and the more innovative strategic approaches.* | Reject | | |
| 6 c | *There is no relationship between investments in human (CSR) technology and the more innovative strategic approaches.* | Reject | | |

| H | Hypothesised Relationships | Reject | Accept | |
|---|---|---|---|---|
| | | | P<0.05 | P<0.10 |
| 7 a | *There is no relationship between technical aggressiveness and more innovative strategic orientations.* | Reject | | |
| 7 b | *There is no relationship between service performance and technical aggressiveness.* | Reject | | |
| 7 c | *There is no relationship between sales performance and technological aggressiveness.* | Reject | | |
| 8 a | *There is no relationship between service performance and financial KPIs.* | Reject | | |
| 8 b | *There is no relationship between sales performance and financial KPIs.* | | Accept | |

## 5.4    Statistical Power of Quantitative Measures

As discussed in Chapter Four, statistical power is a quantitative measure of sensitivity that permitted detection of the likelihood that analysis will detect significant effects of a given size in a particular situation (Keppel, 1991). While power ranges from zero to one, early meta-analysis studies indicated that social science research papers on average, possessed power of approximately 0.48 (Cohen, 1962).  However it is now generally considered that power indices greater than 0.80 are deemed to have appropriate explanatory effect (Kirk,1982; Keppel, 1991).   Power results for statistically significant hypotheses outcomes are shown in Table 5.35.

Table 5.35 : Power of Statistically Significant Results

| Hypothesis | Spearman's *r* | Actual *n* | Actual Power | Critical *n* assuming Power = 0.80[57] |
|---|---|---|---|---|
| 1b | 0.327 | 20 | 0.54 | 42 |
| 5b | 0.469 | 15 | 0.67 | 21 |
| 8b | 0.520 | 18 | 0.82 | 17 |

As shown in the table, only Hypothesis 8b meets the requirement that power should be at least 0.80, although Hypothesis 5b is approaching 0.80.  However, the power of all statistically significant results was still within the range used by earlier studies. Therefore they only offered slight to moderate probability that the independent variable would

[57] This is based upon delta ($\delta$) calculations: $\delta = d \sqrt{(N-1)}$ where N=total number of participants and d equates to Spearmans *r*.  Resultant $\delta$s produced various power results at $\alpha$=0.05.

detect a significant effect. Accordingly, with the exception of H8, significant results are discussed in a preliminary and cautious manner on the understanding that a larger study (hence a larger sample size) would be required to discover and consider any detectable variable effects.

## 5.5    Conclusions

Chapter 5 presented the descriptive outcomes of the FI telephone-banking survey and presented results of the hypotheses testing. In particular, the eight hypotheses enabled consideration of the nature and the effect of various strategic choices over both service and sales aspects of telephone-banking performance. This approach permits exploration of the possibility that more innovative orientation may come at some cost to maintaining service-orientated goals.

Primarily, analysis took the form of non-parametric univariate correlation analysis (Govindarajan, 1989). From a methodology viewpoint, Spearman's correlation statistical analysis was used to determine bivariate relationships, although statistical significance does not indicate a causal relationship. Chapter 6 discusses the results and draws conclusions from the hypotheses testing presented in Chapter 5.

# CHAPTER SIX – CONCLUSIONS

To conclude, Chapter 6 restates the research objectives. Section 6.1 summarises the research project. The dependent variables are re-introduced in Section 6.2. Section 6.3 discusses results of the service performance related hypotheses testing. In Section 6.4, various relationships to sales performance are discussed. Implications for research and practice are outlined in Sections 6.5 and 6.6 respectively. Section 6.7 indicates some areas of possible future research. Penultimately, research limitations are detailed in Section 6.8 Then, Section 6.9 concludes by summarising the study.

## 6.1    Summary of research

This research was driven by limited knowledge about performance-related issues in the telephone-banking channel. The study sought to utilise management theories about business strategy, leadership, climate and IT so as to better understand call centre performance implications. From this starting point an overarching research question was derived:

> *What is the relationship between telephone-banking organisational characteristics (strategic orientation, leader style, climate and structure) and performance effects*

In particular, the paper aimed to test the proposition that some senior managers tend to avoid uncertainty and especially difficult market circumstances. By using strategic orientation, structure, leadership, climatic influences and IT, the research sought to study the performance effects of management choices, on two aspects of performance, service and sales outputs.

Using bivariate Spearman's correlation analysis, some relationships were found to be statistically significant. The significant relationships were:

- a positive association between more innovative strategic orientations and sales performance

- a positive association   between psychological climate and sales performance

- a positive association between financial KPIs and sales performance.

In that, the research was interested in the performance implications of strategic, structural and behavioural aspects of the telephone-banking channel, there is some support for the assertion that organisational characteristics and in particular, strategic orientation, climate and choice of financial KPIs are positively related to higher performance. Consequently further research would appear warranted especially to examine inward-looking and less employee-supportive ways of managing that could impede performance.

Against expectations and contrary to the management literature outlined in Chapter 3, a number of the bivariate relationships were not found to be significant and hence were counter to expectations

- between less market-orientated structural forms, and, lesser performance and product expansion, respectively

- between more innovative strategic orientations (*prospector*s/*analyser*s) and product expansion

- the proposition that more innovative strategic types would drive heightened product and IT development activities

- between investment in human (CSR) technology and the more innovative strategic approaches.

The limited nature of results draws attention to three limitations of the study: that it was cross-sectional in nature, that there was a small sample size and that the research was based on management self-typing perceptions. Nevertheless, some significant relationships and the wide variety of reported outcomes from respondents indicate that other, as yet unexplored and possibly intervening, factors may be at play.

## 6.2    Strategy – Hypothesis 1a

This section considers the variable 'strategy' (STRATGO) against a number of variables.

Consistent with James and Hatton's (1994) bank level study, the research found that 60% of channel respondents classify themselves as relatively innovative and actively oriented towards their market, although this relationship was found to be significant. That a majority of *analyser/prospector*s performed in the lowest three service levels brings into question, the effects that a focus on such external matters and product innovation have on service performance.

## 6.2.1 Product issues

In light of the dearth of Australian information, the research sought information about any increase or proposed increase in the number of channel products offered and their relationship to performance. Hypothesis 2, explored the possibility that more externally oriented strategic FIs would be more inclined to expand into new products or develop their existing product offerings via the telephone-banking channel. Therefore, the work also sought to confirm the usefulness of the strategic typology as a reasonable proxy for measuring product innovation.

### 6.2.1.1 Channel product expansion and the extent of product offerings – Hypothesis 2a

Testing failed to reject the null hypothesis that there is no relationship between more innovative strategic types and increased number of products nor expansion of the type of channel product delivery (r= 0.009, p=0.967; r= 0.11, p=0.958, respectively). This leaves unanswered the question: does believing one's channel to be innovative necessarily translate into product improvement/development action?

In that cross-tabulation can add richness to research findings, a significant number of more innovative strategic type respondents indicated that they were planning 'no' to 'modest' extensions to the way products are offered. This paradoxical finding may be explained by the fact that, on average, such FIs already had a proportionately higher number of offered products via the channel. Alternatively, some less innovative strategic types planned moderate to significant increases in the extent the nominated products are sold over the telephone. This may suggest an imperative to reposition via a 'catch up' strategy.

Testing failed to reject the null hypothesis of no relationship with *prospector*s/*analyser*s, and, there was greater emphasis on increasing the number of products. This raises questions; are FIs developing other ways of attaining performance goals? or it may relate to differentiated sales and service activities rather than product offerings themselves?

### 6.2.1.2 Product offerings analysis - Hypothesis 2b

Established literature considered in this study has made much of Miles and Snow's (1978) strategic typology and in particular, its positive correlation to product expansion (Shortell and Zajac, 1990). From a theoretical viewpoint, failure to find a significant result suggests that channel market peculiarity is an issue worthy of further investigation. This potential research area is consistent with James and Hatten's (1984) assertion that structural and environmental factors needed to be incorporated into research.[58]

Cross-tabulation analysis indicates that most respondents classified themselves as being product innovative (*analyser*s or *prospector*s). It could be that marketing/product development knowledge is not resident at the telephone-banking channel level. That the result was not found to be significant leaves the following question unanswered: how do contact centre product developers successfully ascertain, develop and communicate product innovation and development imperatives?

### 6.2.2  Strategy and technology

The following sub-sections consider various relationships between strategy orientation (STRATGO) and various aspects of IVRU utilisation, development and general technical aggressiveness of the telephone-banking channel.

### 6.2.2.1 Strategy and IVRU utilisation – Hypothesis 6a

The majority of respondents reported in the medium to higher IT investment and IT

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[58] They found that *prospectors* emphasised new services and market development, followed by the *analysers* and *defenders*, in that order (p. 820).

research scanning categories. However, research failed to reject Hypothesis 6a, the proposition that there was no relationship between higher IVRU utilisation and less strategically innovative channels ($r_s$=0.082, p=0.716).

## 6.2.2.2 Strategy and investment in IVRU development – Hypothesis 6b

Frei and Harker (1999a) indicated that technical innovation has encouraged the wholesale and continued use of IVRUs to answer client calls. This is clearly a strategic goal, yet, testing again failed to reject Hypothesis 6b; no relationship between IVRU investment and more strategically innovative channels, ($r_s$=0.196, p=0.359).

## 6.2.2.3 Strategy and investment in IT that support CSR Calls – Hypothesis 6c

Evenson, Harker and Frei (1998) found that a complex IVRU system results in clients opting to disconnect from the IVRU to speak to a human operator. Such a contention ought to have strategic and IT investment implications. However, testing found that Hypothesis 6c, that there is no relationship between human (CSR) related IT investment and more innovative strategic approaches ($r_s$=-0.009, p=0.968), could not be rejected.

Notwithstanding that the relationship was not found to be significant, cross-tabulation indicated that the majority of telephone banker respondents chose automated service mechanisms. This is worth further review as elsewhere in the world this choice drives profit-oriented call centre performance via 'client relationship management' (CRM) based IT solutions (Jaja, 1989; Miles and Snow, 1978; Hambrick, 1983).[59]

## 6.2.2.4 Strategy and technical aggressiveness – Hypothesis 7a

In the transaction-orientated FI call centre, IVRU technology has lead to significant automatic call answering efficiencies especially in terms of service level, speed and volume of calls answered. However, testing of Hypothesis 7a failed to support such

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[59] See Miles and Snow's (1978) typologies; Hambrick (1983) found that *prospector*s would incur a higher research and development (R and D) expense to sales ratio. However, profitability from such action was not explored there nor has it been examined in this research.

expectations. Neither do results enable us to reject the expectations of no relationship between higher IT expenditure, termed (aggregate) 'technical aggressiveness' and more externally oriented strategic types. Further research then, appears warranted to examine technology's relationship to bank channel performance and particularly in terms of IRVU complexity (Jaja, 1989; Harker, 1998).

## 6.3    Service performance

In this sub-section, the service performance (PERFMSERV) dependant variable is considered against relevant independent variables

### 6.3.1    Service performance and strategy - Hypothesis 1a

Results failed to reject the hypothesised null relationship between more innovative strategic orientations and higher service performance (r=0.225, p=0.340). However, with the removal of two outliers, moderate support was found for a relationship between more strategic types (*prospector*s/*analyser*s) types and higher service performance (r=0.472, p=0.048). The relationship between (self-typed) strategic orientation and channel success is a worthwhile area of further research.

### 6.3.2    Service performance and structure - Hypothesis 3a

Although a number (n=8) of respondents indicated that are lower service performers scan the market more often than others, testing failed to enable rejection of no relationship between service performance and aggregate structural variable (STRUC_AG), represented by the proxy 'market scanning' ($r_s$=-0.059, p=0.811).

This was surprising in the face of Roth and Van der Velde's (1991, 1992) assertion that scanning and market awareness, amongst other factors are related to performance. This result may have more to do with the small sample and cross-sectional nature of this study. The result was surprising given that Burton and Obel (1998) found environmental enactment as meaningful to performance, especially in complex situations.

Finally, from a cross-tabulation perspective most respondents actively engage in market scanning. Yet, while not uncertainty avoiding, such FI had mixed service performance outcomes. Further research would enable the potential performance consequences of structural decisions and marketing in particular to be examined (Grinyer and McKiernan, 1990).

### 6.3.3 Service performance and leadership - Hypothesis 4a

Results failed to reject the hypothesised relationship between leadership preference for higher micro-involvement (LDR_COM) and service performance ($r_s$= 0.221, p= 0.349). However, removal of two outliers indicated a positive relationship ($r_s$= 0.601, p= 0.001).

Subject to limitations around the small sample size (n=18) urges further analysis. In particular, it encourages closer examination of Burton and Obel's (1998) finding that leadership elements such as risk adversity and stronger leader participation in decision-making are related to service success.

### 6.3.4 Service performance and climate - Hypothesis 5a

In terms of Hypothesis 5a, testing failed to reject the hypothesised null relationship between service performance and psychosocial climate (CLM_AGG) ($r_s$= 0.124, $p$ = 0.661. This could be explained by the ineffectiveness of the question set at the channel level or the choice of 'developmental' climate typology to adequately differentiate channel performance. It may also be related to the fact that the sample audience comprised senior channel leadership, which is perhaps not the most appropriate level of analysis from which to obtain employee-relations issues.

In terms of cross-tabulation, the majority of respondents were of the *developmental* climate type nature. In Chapter 3, it was stated that the *developmental* climate type demonstrates openness to the external environment and is therefore characterised by lower resistance to change.

Two significant sub-elemental results reinforce the inter-relatedness of 'employee

valuing' oriented practices to channel service performance:-

- Between Morale and service performance ($r_s$=0.339, p=0.07)
- Between Reward and service performance ($r_s$=0.328, p=0.08)

These results are not surprising considering that emotion and reward are receiving increased attention elsewhere, especially work-life balance issues, widespread measurement of employee satisfaction (like *Gallup Surveys*) and their potential behavioural relationship/s to client satisfaction measures.[60]  On this basis, further work is warranted to examine the position that executives need to consider the emotional and reward aspects of banking.

### 6.3.5   Service performance and technical aggressiveness – Hypothesis 7b

Testing did not enable rejection of Hypothesis 7b; a null relationship between higher IT expenditure and more externally oriented strategic orientations.  This is in spite of the fact that most FIs seek higher levels of call centre service efficiencies via IT strategies (Zahra and Covin, 1993; Mintzberg, 1994; Harker and Zenios, 1998).  Failure to reject the null hypothesis indicates further investigation of the role of IT aggressiveness management is warranted, especially:-

- Possibility that IT aggressiveness was tested in aggregate (it could be that the form of survey needs to be broken down into expenditure/cost sub-units, in relation to software, external IT relationships etc.)
- Possibility that pre-existing technology produces acceptable service levels.

### 6.3.6   Key performance indicators - Hypothesis 8a

Testing failed to reject the posited null relationship between KPIs and service performance ($r_s$=0.087, p=0.740). This means that we continue to struggle to understand

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[60] For example; Bouwman, H,. (2001) about work/life balance.

just how service-based indicators  assist in attaining broader profitability goals.[61]

From a cross-tabulation perspective, management's KPI choices remain largely focussed on service based, non-financial goals.   The extent of non-financial KPIs was not surprising in the light of recent works that propose service-related indicators such as 'shorter call duration's as a 'best in class' call centre practice (Tarp, 1997).

The predominant use of non-financial KPIs may indicate that profitability performance measures are being overlooked despite the positive correlation found (at H8b) between these KPIs and sales performance (Kimball, 1997).   The extent of non-financial KPIs usage also provides some support for Waterhouse's (1998) assertions that the Australian industry is lead more by cost reduction and service considerations as opposed to financial imperatives

## 6.4     Sales performance results

In this sub-section, the sales performance variable is considered against relevant independent variables.

### 6.4.1   Strategy - Hypothesis 1b

Analysis allowed the null Hypothesis 1b to be rejected.   This indicates that strategic orientation is not simply self-typing/belief but that telephone-banking channel strategic typology is actually related to stronger sales performance ($r = 0.327$, $p=0.086$). Thus this research extends Miles and Snow's (1978) approach from a bank wide and strategic level to the banking unit level Golden, 1992; James and Hatten, 1994).   Conversely then, indications are that neglecting strategic endeavours could be related to adverse sales-related consequences.

However, this tentative outcome needs to be considered cautiously in light of the short-term nature of the data collected and the lower likelihood that analysis detected

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[61] Often termed 'call based' or 'transactionally focused' indicators.

significant effects of a given size in a particular situation (*power*=0.54). Given the nature of strategic typology, future research would appear warranted to consider any sales performance related issues arising from gauging market trends and emergent client needs.

From a theoretical viewpoint, that more (market) innovative orientations is related to better sales performance is consistent with Govindarajan's (1989) positive relationship between strategy and performance. Here again, the result affirms the importance of paying attention to market initiatives and product development (Vrakking, 1992). However, such strategies must be balanced against the warning that being 'first in' strategically is often associated with higher development costs (Burton and Obel, 1998). This sounds a warning to take a cost benefit approach to strategic market and product development.

In that the data collected were cross-sectional in nature and only represented one financial year, any conclusions may be premature. They nevertheless indicate a potentially fruitful area of future study, especially a longitudinal channel-performance study.

### 6.4.2   Structure – Hypothesis 3b

Testing failed to reject the null hypothesis between structure and sales performance ($r_s$=0.034, p=0.89).   Therefore, this neither affirms of disavows the proposition that attainment of higher performance occurs when FI's rate themselves as actively scanning their markets, gathering market factors and ascertaining competitive issues (Roth and Van der Velde, 1991, 1992).

Cross-tabulation indicates two aspects which were particularly interesting; 42% of respondents with lesser structural market orientation ('never' to 'sometimes') reported the highest sales results and conversely, some of the highest scanners achieved minimal sales success.   This indicates a fruitful area for further study as the benefits arising from (costly) market scanning appear somewhat contradictory.

### 6.4.3   Leadership - Hypothesis 4b

Results failed to enable rejection of the hypothesised, null relationship between leadership preference for higher micro-involvement (LDR_COM) and sales performance ($r_s$= 0.213, p= 0.382). Yet, from a cross-tabulation, the study may extend understanding of call centres' leadership style in that the majority of respondents (71%) were in the 'medium preference' for the micro-decision-making involvement category. This mid-range response is difficult to analyse because it indicates both management preponderance to make most of the decisions themselves and some preference to delegate decisions to others.

Further, despite their theorised importance and day-to-day usage, no relationship between leadership decision-making sub-element, such as preference not to be bogged down in decision-making detail, propensity towards risk, decision-making autonomy and sales performance were found to be was found to be statistically significant. Hence, from a revenue perspective, we are left to speculate on the long-term effects of micro-involved channel management.  The results may be affected by methodological issues such as the limited sample size, the arbitrary selection of only two performance measures and the cross-sectional nature of the data.

### 6.4.4   Channel climate - Hypothesis 5b

Testing enabled us to reject the null hypothesis, H5b, no relationship between sales performance (PERFMSER) and more internally orientated climate (CLIM_AGG), albeit at a 10 % significance level ($r_s = 0.469$, $p = 0.091$, $n = 14$).  However some caution must be exercised there was only moderate likelihood that analysis detected significant effects of a given size in a particular situation (*power*=0.67).

However, three sub-elements were related to sales performance.  This confirms that building an environment based on openness and truth, where human interactions are respected, is positively related to sales.  (Burton and Obel, 1998), vis:-

- Trust ($r_s$=0.395, p=0.05)
- Morale ($r_s$=0.328, p=0.07)

- Reward ($r_s$=0.324, p=0.09)

From a practitioner viewpoint, it also provides some reassurance that ascertaining individual perceptions about values in the work environment is a performance-related activity. It also reinforces the need to further research the entire work environment and in particular, the 'softer' management and organisational cultural aspects.

### 6.4.5   Technological aggressiveness - Hypothesis 7c

Testing failed to reject the null Hypotheses 7c, that there is no relationship between technological aggressiveness and sales performance ($r_s$=-0.191, p=0.434).   Interestingly, post hoc testing using a collapsed sales-orientated performance variable (REC PERF)[62] produced a negative correlation between IT aggressiveness and performance (r= -0.410, p= 0.081).   From a cost/benefit viewpoint, this suggests further research to ascertain the performance related outcomes of channel executives' decisions around IT expenditure and especially CRM-type technology.

### 6.4.6   Key Performance Indicator - Hypothesis 8b

Testing enabled rejection of the null hypothesis between financial KPIs and sales performance ($r_s$=0.520, p=0.027). [63] This furthers understanding of the inter-relatedness of call centre goals and results in a small way, to what Hitt and Frei (1999) indicated was absent from previous studies i.e. that there was little systemic study about call centre action and profitability.

Notwithstanding the small sample size, the results encourages further research into how goals focus is related to performance, that is, is what we focus on driving outcomes.

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[62] Collapsing Sales Performance into two (2) equally divided outcomes; using; '1' for lesser and '2' for higher sales performance

[63] Hypothesis 8b met the required power.

**6.5      Implications of research for theory**

The research makes a theoretical contribution by successfully identifying some relationships between management-driven factors and performance.  Specifically it found:

- strategic orientation theory could be extended to the financial institutional channel level by identifying a positive relationship between strategic orientation and sales performance; providing some indication that Miles and Snow's (1978) strategic typology can be used at the channel level
- a positive relationship between channel climate and sales performance
- financially oriented KPI choice is positively related to sales performance

**6.6      Implications for practice**

This study has attempted to review a number of anticipated management choices, their drivers and relatedness (or otherwise) to  service and sales performance outcomes.   In sum, the study:

- Identified an inventory of the channel's preferred strategic approaches in terms of Miles and Snow's typology
- in that a positive relationship was found between strategic orientation and sales performance, the research has implications for channel managers and senior FI executives when making strategic choices
- affirmed that strategic self-typing is useful for executives as it is positively related to sales performance
- reinforced the relevance of managing workplace psychosocial climate by identifying a positive relationship between some psychosocial factors and sales performance. In particular, it reinforced the relatedness of supporting employee 'values based' HR strategies in terms of morale, reward and trust
- found that while most channel respondents saw themselves as product developers this did not relate to performance. (This leaves the question unanswered: how to successfully identify, develop and communicate product innovation to and from the telephone-banking channel ?)

- identified a relationship between financial KPI choices and sales performance; with further work it may recommend executives more actively utilise financially based indicators

## 6.7    Future research directions

A number of future directions emerged from the study.  Research methodology was based on one strategic question,so it remains unclear from a behavioural viewpoint precisely what the channel does to determine and implement its strategic focus and interact with its market. Consequently, research about the specific methodologies employed by channel strategic planners and managers on a case study basis would be essential in further understanding the success factors involved in retail banking.  Corroboration from other retail bank channels could also extend findings.

Further, closer examination of any sales and service consequences arising from the following issues may prove beneficial:-

- research the entire work environment and in particular, the 'softer' issues of trust and morale and organisational cultural aspects
- research to ascertain the outcomes of  channel executives' decisions around IT expenditure and especially CRM-type technology as drivers of success
- research would appear warranted to consider any sales performance related issues arising from gauging market trends and emergent client needs
- benefits from market scanning appear contradictory; why did respondents with lesser structural market orientation ('never' to 'sometimes') report the highest sales results? conversely, some of the highest scanners achieved minimal sales-oriented success
- investigation of IT aggressiveness management, especially:-
  - ❑ possibility that IT aggressiveness could become counterproductive at a certain expenditure point.  Further work could examine expenditure/cost sub-units, in relation to software, external IT relationships
  - ❑ possibility that pre-existing technology produces acceptable service levels

Theoretically, in stable operational type environments, management elements such as risk

adversity, shorter-term decision making and stronger leadership participation appear more related to service success. What we still don't know is what affects such a relationship would have in a turbulent service environment such as a call centre.

Finally, due to the limitations outlined in Section 6.9, some data analysis aspects should be borne in mind in future research:

- that the sample is representative of the population of interest
- sufficient power be considered to ensure likelihood that the analysis will detect significant effects
- that the best available measurement tools are used at channel level
- this was a necessarily short-term study, longer-term studies may produce more meaningful results and also permit replication by other researchers
- in the absence of normally distributed data, considerable work may be needed over a far longer study period to examine causal relationships via detailed regression-type analysis

Finally, other forms of analysis may offer rich sources of meaningful data. These include the case study method and triangulation - where a number of methodologies are used together. Specifically, a combination of correlation analysis and case research may enable researchers to detect more complex relational patterns and behaviours arising from data analysis. Moreover, this could permit more sensitivity to individual variability and change over time while still ensuring that research is systematic and valid.

## 6.8    Limitations

This study is exploratory in nature and was designed to provide an initial analysis of the Australian telephone-banking channel. A larger sample could have produced different results, particularly with respect to relationship among technology, strategy and performance.

Methodological aspects such as the limited sample size, the selection of only two performance measures from a range of realistic, industry-based choices and/or the cross-

sectional nature of the data may have affected the research. Therefore, some cautionary comments about data collection, especially in relation to the small sample size, have been made.

The study is open to some criticisms and therefore care is recommended when generalising the research findings. Firstly, in view of the small number of respondents and the cross-sectional nature of the data, it is possible though not probable that the significant results were produced by chance. Secondly, respondents were telephone-banking managers or higher who have the broadest responsibilities to make key strategic decisions (Drew, 1995). However, except in the case of the smaller respondent institutions these managers would not necessarily operationalise day-to-day management decisions.

There are concerns over the use of cross-sectional data for performance-based studies. However, it could be argued that cross-sectional data is acceptable in exploratory studies because only statistically significant correlations and not causality are asserted in the findings (Powell, 1992).

In the telephone-banking channel, not all aggregate HR measures appeared to produce sufficient differentiation of managerial preferences or behaviours. Hence, their current format they may not be useful for channel level analysis. This is despite the fact that Burton and Obel's (1998) work represented a well-researched synthesis of notable, general management theorists.[64]

As the results relate specifically to the call centre channel it may not be reasonable to extrapolate some issues to other emergent FI delivery channels. Further, in view of heavy reliance on managerial self-typing, with the exception of performance and call-based variables, some bias may be present especially if respondents do not have full knowledge i.e. executives do not necessarily have total control over all aspects of strategy, marketing or product development.

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[64] Including Miller and Droge (1986), Child (1972), Kotter, (1988, 1990) Mann, Indik and Vroom (1973), and Mintzberg, (1980).

It is also recognized that it may not be realistic to generalize surveyed senior executive perceptions as being characteristic of the channel as a whole. However, all in all, as top-level leaders of the channel, survey respondents were deemed to have sufficient knowledge of overall call centre operations especially its climate, decision-making arrangements (viz. delegations) and structure.

Additionally, especially in relation to psychosocial climate responses and perceptions around leadership decision-making some biases may have resulted from exclusively surveying strategic level executives. To explore motivation, reward and employee values in the future it is worthwhile considering an employee-level survey mechanism to establish any significant relationships to outcomes. Overall, a longitudinal study, say over three years would help normalise any adverse effects and possibly illustrate potential for more comprehensive statistical analysis including regression.

A number of controls were implemented to avoid common research pitfalls. These have been discussed earlier and included a homogeneous sample, pilot testing and proven and reliable questions scales.

Finally, caution must be exercised in terms of *power* as only one of three statistically significant relationships (Hypothesis 8b) indicated sufficient likelihood that the analysis detected a significant effect (*power*=0.82).

## 6.9    Summary

This study pre-supposed that Australian FI telephone banking tended, on average to place more emphasis on operational, cost management issues. Moreover, the paper was interested in the research question:-

> *What is the relationship between telephone-banking organisational characteristics (strategic orientation, leader style, climate and structure) and performance*

In summary, there is some support for the assertion that organisational characteristics and in particular, strategic orientation, climate and choice of financial KPIs are positively

related to higher performance. This result warns against inward looking and less employee supportive ways of managing which may impede performance.

Results confirm that from a KPI measurement viewpoint, the FI call centre industry was characterised by a service measurement focus. In particular, this aspect challenged current theory (for example, Evenson, Harker and Frei, 1998) that service orientation is the pre-eminent way to ensure FI telephone channel success.

The results also provide some support for Drennan's (1996) finding that behavioural complications and potential misalignment among strategy, structure and internal climatic conditions are related to adverse performance management implications. Summarising each in turn:

Strategy/Service Performance

From a channel service performance viewpoint, the performance and strategic orientation relationship was not found to be significant. However, sales performance was correlated positively to channel management's strategic interactions (James and Hatten, 1994).

Structure

Considerable market scanning takes place at the channel level. This confirms Harker and Zenios's (1998) view that FI are responding to client's demands for increased delivery choices. Or at least, FIs are aware of the complex needs of increasingly complex client choices. However, while the cross-tabulation result tends to confirm Jaunch and Kraft's (1986) assertion that in a state of uncertainty, structural aspects constitute 'environmental enactment', such activities relationship to performance was not found to be significant.

Leadership

Leadership decision-making's relationship to performance was not found to be significant, despite its theorised importance and day-to-day usage. Sub elements included, management preference not to be bogged down in the detail of each decision, propensity towards risk and decision-making autonomy. However, post-hoc analysis indicated some support for a position relationship between service performance and delegated management authority.

<u>Climate</u>

Research failed to reject the null hypothesis of no relationship between service performance and channel climate. It was suggested that this might be because, automated services confound the effects of human-answered calls and/or the inappropriateness of that two-dimensional scale. This may indicate either the inappropriateness of the question set or issues over senior managers' ability to effectively answer climatic questions.

The relationship psychosocial climate and sales performance was found to be statistically significant. Finding support for the relative importance of considering 'softer' management issues such as trust, reward, employee resistance and conflict management extends theory to the channel level (Burton and Obel, 1998).

Further, some positive relationships at the sub-elemental level in relation to emotional and reward aspects were found to be statistically significant. This reinforces the critical relevance of managing the workplace's psychosocial climate. Finally, future research may useful to examine importance of such perceptual variables to staff turnover outcomes.

<u>Information technology</u>

Surprisingly, technical aggressiveness relationship to service performance was not found to be statistically significant. Prior theory indicated that a technically oriented delivery channel operating in a highly competitive market and which is operationalising considerable IT innovation will achieve notable performance success. Future research could examine if higher IT expenditure is a result of the strategic imperative or to maintain service efficiencies.

<u>KPIs</u>

Telephone-banking executives view generic service quality performance indicators, for example, the number of inbound calls answered and client satisfaction, as important. Moreover, the extensive use of non-financial KPIs indicates that profitability performance measures are overlooked despite their positive correlation to sales performance (Kimball, 1997). Paradoxically, the strength of the positive correlation between financial KPIs and sales performance urges telephone-banking management to take broader, revenue-related views of performance indicators rather than simply use service-based indicators as has often been the case in the Australian setting.

From a theory perspective, the research confirms the importance of being selective in KPI practice. It supports theory which warns against unproductive embeddedness in older forms of KPI selection (Ginsberg, Larsen and Lomi, 1996).

Conclusion

Financial services call centres have been increasingly positioned to offer both substantial service and sales outcomes, especially those based on client relationship management and Web development.  In terms of the relationship between telephone-banking organisational characteristics (strategic orientation, leader style, climate and structure) and performance, the study offered some evidence that the channel's (self-typing) strategic orientation, psychosocial climate and selection of financial KPIs are moderately related to sales performance.  As call centre development and its alignment to other delivery channels are unlikely to abate, allocating scarce HR and IT resources will remain important considerations in the drive for client based efficiencies.

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# APPENDIX A – LETTER TO SURVEY PARTICIPANTS

14 October 1999

Dear

I am writing to seek your assistance in obtaining data to research the telephone-banking (Call Centre) channel in Australia. Although financial institutions have been implementing new and innovative information technology (IT) based delivery channels for some time now, little is known from an academic viewpoint, of the appropriate mix of channel strategic orientation, organisational structure, leadership that leads to enhanced performance. I hope to develop our understanding of such important channels.

My research has now reached a stage where I need up to date industry data to derive conclusions that I can share with the industry and university community.
The questionnaire asks a range of questions about the channel's orientation, the workplace environment and the current performance measurement approaches. It is aimed at obtaining the perceptions and performance of the channel at large I would ask that you as the executive complete it. Completing the questionnaire should take approximately 30 to 45 minutes.

To assist industry, summary conclusions and information will be released. It is hoped that findings will assist the industry as it considers further IT based innovation. No answers that relate to specific organisations will be released data. Hence, all answers will be kept strictly confidential. It you would like summary feedback on the research outcomes please complete the details on the back of the questionnaire.

It would be appreciated if you could return the completed questionnaire in the enclosed reply-paid envelope or by facsimile by 21 October 1999.

Finally, I would like to thank you in anticipation for assisting in this important research.

Yours sincerely

**Peter Devenish-Meares**

**Centre for Australian Financial Institutions, University of Southern Queensland**
Telephone: 07 4631 2613   Facsimile: 07 4631 1527

# APPENDIX B – SURVEY

# APPENDIX C – HYPOTHESES TESTING – SPSS OUTPUT