Paper 19 Learning Behaviour, Market Orientation and Firm Performance

Peter A. Murray* Faculty of Business, University of Southern Queensland, Queensland. 4350 Australia Ph: 61 7 4631 5538 Fax: 61 7 4631 5597 Email: <u>peter.murray@usq.edu.au</u>

Karen W Miller School of Management and Marketing Faculty of Business University of Southern Queensland Toowoomba, Qld 4350 Australia Email: <u>karen.miller@usq.edu.au</u>

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Abstract

The purpose of this paper is to rethink market orientation (MO) through learning practices. Organisational learning scholars prefer to categorise learning into modes, levels, and behaviours (Crossan and Berdrow, 2003; Fiol and Lyles, 1985; Miller, 1996), which focuses research towards the type of management practices required for organisational success. Learning behaviour however is not the basis of market orientation. This research provides greater clarity about the role of learning in market orientation.

Introduction

In examining the existing market orientation (MO) literature, there are many competing ideas. These are based on the cultural (Narver and Slater, 1990); behavioural (Kohli and Jaworski, 1990); relationship (Helfert *et al.*, 2002) and systems based approaches (Becker and Homburg, 1999). Of these, the culture and the behavioural MO approaches have comprised the most interest. While understanding MO relationships and how these lead to superior customer value and firm performance form the basis of existing MO descriptions, the marketing literature is unclear, vague, and ambiguous in relation to learning for market driven behaviour and learning for market driving behaviour. While scholars have found a link between learning orientation and MO (Morgan *et al.*, 2010; Grinstein, 2008; Mavondo *et al.*,2005),

little knowledge exists in relation to what types of learning behaviour underpin market-driven behaviour on the one hand and market driving behaviour on the other.

Literature Review

Learning orientation

Learning orientation (LO) used here is defined as the flow of beliefs and behaviours that become standardised in organisational systems and action-taking. For a firm to have a learning orientation there must be a commitment to learning, a shared vision for learning and open-mindedness towards learning (Baker and Sinkula, 1999a). This type of behaviour can be compared to analytical and structured learning found in Miller's (1996) method-based learning type construct (discussed next). However, scholars see market-driven behaviour not only as maintaining existing behaviours but also as knowledge-producing (Baker and Sinkula, 1999a); new *market-driving* behaviours are required when firms are challenging current competitors with new offerings adopting a more 'proactive' stance in which the latent needs of customers are addressed (Narver et al., 2004). Hypothesis 1: Learning orientation (LO) will positively influence learning type market orientation (LTMO).

Learning type market orientation

Method-based learning types

Learning type market orientation can be explained through method-based and emergent-based learning. Three types of learning underpin method-based learning behaviour: analysis, experimental, and structural (Miller, 1996: p. 488). Analytical learning consists of methodically evaluating alternatives which is common practice in matching internal resources to external opportunities in strategic implementation (Ansoff, 1979). Experimental learning is about making small incremental decisions similar to Braybrooke and Lindbloms (1963) 'satisficing' concept of 'good enough' decisions, but these will be rarely accompanied by significant reflection. Experimental learning is often associated with fewer restraints in action which often accounts for why marketers see this as exploration (Gatignon and Xuereb, 1997). The other method-based learning type is structured learning. Here, actions are standardised routinely, almost prescribed, setting out how actors will behave within a given context, guided by reports, systems, and manuals.

Emergent learning types

Three types of learning underpin emergent learning behaviours: synthetic, interactive, and institutional (Miller, 1996). Synthetic learning closely resembles double-loop or higher order learning (Espedal, 2008) where actors can test the assumptions common in decisions that underpin a firms actions and challenge previous method-based learning with new emergent ideas. The ability of actors to solve complex puzzles relies for instance on higher-order learning by changing the logic of decisions by forming novel new relationships. Concepts can be redefined to achieve greater fit and consistency. Interactive learning by comparison is essential in forging social arrangements, for working in teams with a high level of engagement and communication, and in bargaining and trading in relation to organisational resources. In previous research, high interactive ability has been linked to interpretive schemes where organisations successfully monitor and keep pace with the environment (Crossan et al., 1993).

From Market Orientation to Practice Customer Practices

In the Narver and Slater (1990) framework, customer practices of firms are mostly method-based learning based on

commitment, customer value and needs, satisfaction objectives, and after-sales service. Most of the listed variables in the framework are based on structured learning where learning is a product of previous intelligence, where roles become specified and learning concerns "how to carry out tasks and roles efficiently" (Miller, 1990, p. 495). While customer retention is not mentioned in the previous culture framework, it is implied in customer commitment. Javalgi *et al.*, (2007) contend that once attained, customers however are often neglected suggesting that serviced solutions are difficult to master.

Hypothesis 2a: Business customer practices (BAC) are a dimension of LTMO.

Inter-functional Practices

According to Narver and Slater (1990, p. 22), inter-functional coordination (IFC) requires "an alignment of the functional areas' incentives and the creation of inter-functional dependency so that each area perceives its own advantage in cooperating closely with the others". From this, different types of inter-functional learning practices will be required. Moreover, three additional coordinating actions will be necessary to accommodate these different types of learning. First, leaders will need to be proactive by facilitating the implementation of MO and recognising power structures that inhibit IFC (Zhou et al., 2008). Second, a focus on employees should be aimed at fostering a sense of pride and satisfaction in their work, greater investment in employee development, and in the delegation of responsibility (Grinstein, 2008; Mavondo et al., 2005). Third, profit is not guaranteed. A direct link between improving inter-functional practice and brand performance will be fostered by closely aligning functions (O'Cass and Ngo, 2007).

Hypothesis 2b: Business internal inter-functional practices (BIIAP) are a dimension of learning type market orientation (LTMO)

Competitor Practices

The original competitive orientation by Narver and Slater (1990) is at the vanguard of the MO construct: "to achieve consistently above normal market performance....to create sustainable competitive advantage" (Narver and Slater 1990, p. 21). The competitor orientation however also requires a combination of method and emergent-based actions. For instance, in a recent article in Harvard Business Review, Davenport (2006) illustrates how analytics' competitors are leaders in their fields. Analytics' competitors use sophisticated business processes and quantitative frameworks as a last remaining point of differentiation from others. Competing on quantitative measures requires significant investment in new technology and the "accumulation of massive stores of data, and the formulation of company-wide strategies for managing the data" (2006, p. 100).

Hypothesis 2c: Competitor practices (BCAP) are a dimension of LTMO.

Innovation practices

In a study of 227 CEOs' in high-tech firms, Mavondo *et al.*, (2005) found that MO is a stronger predictor of three types of innovation (process, product, and administrative) than learning orientation *per se*. Innovation concerns gathering and generating new information in the development of competitive responses and in new products and services (Hurley and Hult, 1998; Hult *et al.*, 2004), and a positive relationship has been found between innovative ability and superior performance (O'Cass and Ngo, 2007). However, innovation also concerns exploration activities and synthetic learning since actions need

to be emergent and intuitive, combining knowledge in new and novel ways so that new patterns can be revealed (Murray and Blackman, 2006; Narver *et al.*, 2004).

Hypothesis 2d: Innovation practices (BIAP) are a dimension of LTMO.

Linking LTMO to new product success and brand performance

Market orientation is an important predictor of performance (Modi and Mishra 2010). The link between MO and organisational performance such as return on assets in market segments (Narver and Slater, 1990) and market share (Ambler and Putoni, 2003; Taghian 2010), is well established. Other scholars have found empirically valid links between brand performance and innovation (O'Cass and Ngo, 2007; Grinstein, 2008) reflecting market driving behaviour. According to many scholars, it is the learning that forms the basis of market driving behaviours that will reshape market structures leading to more value for the customer and improved business performance (Jaworski et al., 2000; Engelen et al., 2010). Innovation tends to have a significant impact on market value and profitability because it makes brands radically stronger (Blundell et al., 1999). In a crosssectional industry study of 180 organisations, O'Cass and Ngo found that "market orientation and innovative culture enable organisations to achieve higher brand performance...[and]...that market orientation is a response partially derived from the organisation's innovative culture" (2007, p. 881).

Hypothesis 3: There is a positive relationship between LTMO and new product success (NPS) Hypothesis 4: There is a positive relationship between NPS and brand performance (BP) Hypothesis 5: There is a positive relationship between LTMO and brand performance (BP)

The proposed conceptual model distinguishes learning orientation (LO) from learning types' market orientation (LTMO) as discussed earlier. The four dimensions of LTMO are customer, inter-functional, competitor and innovation practices.

Method

Design of the Measures

There are four key constructs in the conceptual framework: (1) learning orientation (LO), (2) learning type market orientation (LTMO), (3) new product success (NPS) and (4) brand performance (BP). The design of the measures for Learning orientation (LO) utilised the well established 18 item Baker and Sinkula (1999) scale using a seven point semantic differential scale with bipolar labels 'Strongly Disagree' and 'Strongly Agree'.

The new product success (NPS) scale utilised the well established six item Baker and Sinkula (1999b) NPS scale using a seven point semantic differential scale with bipolar labels that compares brand innovation performance against competitors where 1= Lowest/Worst and 7=Highest/Best. The brand performance measures were developed using the definition proposed by O'Cass and Ngo (2007) which refers to the relative measurement of a brand's success in the marketplace compared to its competitors including sales growth (O'Cass and Ngo, 2007), profitability and market share (Keller and Lehmann 2003) and new product success (Baker and Sinkula, 1999b).

To collect the data, a self-completed, web based survey was developed and implemented. The sample frame was drawn

from Pure-Profile which is a large well established Australian commercially available consumer panel with over 300,000 members. Pure-Profile identified 2200 members in the marketing management category. A total of 202 valid responses were received for the survey representing a net response rate of 10%, an acceptable response compared to other studies (Schillewaert *et al.*, 1998).

Results

Assessing the LTMO measures

The surveys were received from a cross section of industries including manufacturing, services, and retail. Factor analysis was conducted on 69 variables using SPSS 17.0 maximum likelihood analysis with an oblique rotation. The results of the factor analysis produced four prominent factors: customer practices (BAC), internal inter-functional practices (BIAP), competitor practices (BCAP) and innovation practices (BIAP) explaining 56 per cent of the variance. The researchers refined the items retaining those that achieved a factor loading of 0.4 or more, removing 33 items with a factor loading of 0.3 or less. Of the LTMO variables, 36 were retained including 14 items for customer practices (BIAP), four items for Interfunctional practices (BIAP) and nine items for competitor practices (BIAP).

PLS

For data analysis, PLS modelling software package XLSTATpro (Addinsoft, 2008) was used because of PLS' robustness and ability to deal with complex latent variable relationships (Engelen *et al.*, 2010). The PLS software can also be used for structural equation modelling (SEM) that generalises and combines features from principal component analysis and multiple regression. These analytical tools are

useful in predicting a set of dependent variables from a large set of independent variables (Abdi, 2003).

Assessing the measurement model

To assess convergent validity, the average variance explained (AVE) should be 0.5 or greater (Fornell and Larcker 1981) and the Cronbach alpha for each construct should be 0.7 or greater. Chin and Newsted (1999) suggest that the standardized factor loadings should be greater than 0.7, however, a loading of 0.5 or 0.6 may still be acceptable in exploratory research (Chin, 1998a). The learning orientation construct (LO) produced a single factor explaining 52 percent of the variance and a Cronbach alpha of 0.92. Brand performance (BP) produced a single factor explaining 51 per cent of the variance and Cronbach alpha reliability of 0.84.

Assessing the hypotheses

The results for the hypotheses support all five hypotheses. The results indicate that customer practices (H2a: r=.36; t=15.20), followed by inter-functional practices (H2b: r=.34; t=19.74), innovation practices (H2c: r=.31; t=19.86) and then competitor practices (H2d: r=.18; t=7.15) make the greatest significant contribution to the LTMO construct.

The structural results exceed established benchmarks; the R^2 were equal to or greater than the recommended 0.10 (Falk and Miller, 1992) and the critical ratios (t-values) were all above 1.96 indicating that each of the structural paths (hypotheses) were significant. The results indicate that learning orientation positively influences LTMO (H1: r=.60; t= 7.91) accounting for 36% of the variance in LTMO indicating that if an organisation is committed to learning, has a shared vision and is open minded they are more likely to gain advantages from MO practices in a market oriented environment. Similarly, positive results were found for the impact of LTMO on new

product success (H3: r= .44; t=7.20) and brand performance (H5: r=.45; t= 3.48) with LTMO accounting for 19% of the variance on new product success and 10% of the variance on brand performance. A strong positive relationship was also found between new product success and brand performance, indicating the more successful the product is the more likely the brand will perform (H4: r=.69; t=12.92) as new product success accounted for 41% of the variance in brand performance.

Managerial Implications

Given the importance of learning which Taghain (2010) argues is the key to MO, the researchers developed a matrix to best illustrate LTMO and its four MO practices. The importance of the results are that various kinds of MO practices require different learning type actions.

Conclusion

The dual construct of MO in this paper has been expanded in four ways. First, learning orientation was defined within the context of market driven and market driving behaviour and different learning types of behaviour were outlined. Second, the discussion explored how customer, competitor, and interfunctional coordination variables could be expanded through more recent scholarly contributions to MO. Third, innovation was outlined as an additional MO orientation and linked to different learning type actions. Fourth, the discussion explored how new product success and brand performance is perhaps a more reliable measure of MO.

A key contribution is that learning orientation is mediated by market orientation. LTMO mediates the relationship between learning orientation and brand performance. Interestingly, the role of new product success in determining brand performance is significant. Whilst LTMO contributes to new product success, the results identify the contribution of new product success to brand performance at four times that of LTMO. Thus, successful new products breed successful brands.

References XAbdi, H. (2003). "Partial least squares (PLS) regression" in M. Lewis-Beck, A. Bryman and T. Futing. (Eds). *Encyclopaedia of Social Sciences Research Methods*. Thousand Oaks, CA: Sage.

XAddinsoft. XLSTAT (Version 2008). 2008.

XAmbler, T., Putoni, S. (2003). "Measuring marketing performance", in Hart, S. (Ed), *Marketing Changes*. London: Thomson Learning.

XAnsoff, H.I. (1979). *Implementing strategic management*. Englewood Cliffs, NJ: Prentice Hall.

XBaker, W.E. and Sinkula, J.M. (1999a)."The synergistic effect of market orientation and learning orientation on organizational performance", *Journal of the Academy of Marketing Science*, 27, 411-427.

XBaker, W.E. and Sinkula, J.M. (1999b). "Learning orientation, market orientation, and innovation: Integrating and extending models of organisational performance", *Journal of Market - Focused Management*, 4, 295-308.

XBlundell, R.W. Griffith, R. and Van Reene, J. (1999). "Market share, market value, and innovation in a panel of British manufacturing firms", *Review of Economic Studies*, 66, 529-54 XBraybrooke, D. and Lindblom, C. (1963). *A strategy of decision*. New York: Free Press.

XChin W.W. (1998a). Issues and opinion on structural equation modelling. *MIS Quarterly*, 22, vii-xvi.

XChin, W. and Newsted, P.R. (1999). "Structural equation modelling with small samples using partial least squares" inn RH Hoyle (Ed). *Statistic strategies for small sample research CA*. Sage Publication

XCrossan, M., Lane, H.W., and Hildebrand, T. (1993). "Organizational learning: theory to practice" in J. Hendry, G. Johnson, and Newton (Eds), *Leadership and the management of change*, Wiley and Sons.

XDavenport, T.H. (2006). "Competing on analytics", *Harvard Business Review*, January. Day, G. (1994). "The capabilities of market-driven organization", *Journal of Marketing*, 58, 37-52

XDeshpandé, R. Farley, J.U. and Webster, F.E. (1993). "Corporate culture, customer orientation, and innovativeness in Japanese firms: A quadrad analysis", *Journal of Marketing*. 57, 23-7.

XDrucker P. (1985). *Innovation and entrepreneurship*. London: Pan Books.

XEngelen, A., Bettel, M and Heinemann, F. (2010). "The antecedents and consequences of a market orientation: the moderating role of organisational lifecycles", *The Journal of Marketing Management*. 26, 515-547.

XEspedal, B. (2008). "In the pursuit of understanding how to balance lower and higher order learning in organizations", *The Journal of Applied Behavioural Science*, 44, 365-390.

XFalk, R.F. and Miller, N.B., (1992). *A primer for soft modelling*. OH: University of Akron Press XFiol, C.M. and Lyles, M.A. (1985). "Organizational learning", *Academy of Management Review*, 10, 803-814.

XFornell, C. and Larcker, D.F. (1981). "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*. 18, 39-50.

XGatignon, H. and Xuereb, J. (1997). "Strategic orientation of the firm and new product performance", *Journal of Marketing Research*, 34, 77-90.

XGrinstein, A. (2008). "The relationships between market orientation and alternative strategic orientations", *European Journal of Marketing*, 42, 115-134.

XHult, S.D. Hurley, R.F. and Knight, G.A. (2004). "Innovativeness: Its antecedents and impact on business performance", *Industrial Marketing Management*, 33, 429-38.

XHurley, R. and Hult, T. (1998), "Innovation, market orientation, and organizational learning: An integration and empirical examination", *Journal of Marketing*, 68, 42-54.

XJavalgi, R. Martin, C.L. and Young, R.B. (2006). "Marketing research, market orientation and customer relationship management: A framework and implications for service providers", *Journal of Services Marketing*, 20/1, 12-23. XJaworski, B.J. and Kohli, A.K (1993). "Market orientation: Antecedents and consequence", *Journal of Marketing*, 57, 53-70.

XJaworski, B.J., Kohli, A.K., and Sahay, A. (2000). "Market driven versus driving markets", *Journal of the Academy of Marketing Science*, 28, 45-54.

XKeller, K.L. and Lehmann, D.R. (2003). "How do brands create value"? *Marketing Management*, 12, 26-31.

XKohli, A. K. and Jaworski, B.J. (1990). "Market orientation: The construct, research propositions, and managerial implication", *Journal of Marketing*, 54, -18.

XLeisen, B., Lilly, B. and Winsor, R.D. (2002). "<u>The effects</u> of organisational culture and market orientation on the <u>effectiveness of strategic marketing alliances</u>", *Journal of Services Marketing*, 16, 201-222.

XMavondo, F.T. Chimhanzi, J. and Stewart, J. (2005). "Learning orientation and market orientation. Relationship with innovation, human resource practices and performance", *European Journal of Marketing*. 39, 1235-1263.

XMiller, D. (1996). "A preliminary typology of organizational learning: synthesizing the literature", *Journal of Management*, 22, 485-505.

XModi, P. and Mishra, D (2010). "Conceptualising market orientation in non-profit organisations: Definition, performance, and preliminary construction of a scale", *Journal of Marketing Management*. 26, 548-569. XMurray, P. Blackman, D. (2006), "Managing innovation through social architecture, learning, and competencies: A new conceptual approach", *Knowledge and Process Management*, Vol. 13, No. pp.132-143.

XNarver, J.C. and Slater, S. F. (1990). "The effect of a market orientation on business profitability", *Journal of Marketing*. October. 20-35.

XNarver, J.C. Slater, S.F. and MacLachlan, D.L. (2004). "Responsive and proactive market orientation and newproduct success", *Journal of Product Innovation Management*, 21, 334-347.

XO'Cass, A. and Ngo, L.V. (2007). "Market orientation versus innovative culture: Two routes to superior brand performance", *European Journal of Marketing*, 41, 868-887.

XPodsakoff, P.M. Mackenzie, S.B. Lee, J.Y. and Podsakoff, N.P. (2003). "Common method biases in behavioural research; a critical review of the literature and recommended remedies", *The Journal of Applied Psychology*, 88, 879-903.

XRindfleisch, A. Malter, A.J. Ganesan and S. Moorman, C. (2008), "Cross-sectional versus longitudinal survey research; concepts, findings, and guidelines", *Journal of Marketing* Research, XLV, 261-279.

XSambamurthy, V., Chin, W. (1994). "The Effects of Group Attitudes towards Alternative GDSS designs on the Decision-Making Performance of Computer Supported Groups", *Decision Sciences*, 25, 215-241..

XSchillewaert, N., Langerak, F., and Duhamel, T. (1998). "Non-probability sampling for WWW surveys: a comparison of methods", *Journal of the Market Research Society*, 40, 307–322.

XTaghian, M (2010). "Market planning: operationalising the market orientation strategy", *Journal of Marketing Management*, 26, 825-841.

XTuli, K.R. Kohli, A.K. and Bharadwaj. S.G. (2007). "Rethinking customer solutions: From product bundles to relational processes", *Journal of Marketing*, 71, 1-17.

XWang, C.L., and Ahmed, P.K. (2004). "The development and validation of the organisational innovativeness construct using confirmatory factor analysis", *European Journal of Innovation Management*, 7, 303-313.

XZhou, K.Z, Li, J.J. Zhou, N. and Su, C. (2008). "Market orientation, job satisfaction, product quality, and firm performance: Evidence from China", *Strategic Management Journal*, 29, 985-1000.