

# The Relationship Between Ambidextrous Marketing, Market Performance and Financial Performance\*

Emrah Tokgöz

*Çanakkale Onsekiz Mart University*

*Çan, Çanakkale, Turkey*

*Phone: +90 505 724 23 10, fax: +90 286 416 0653, e-mail: emrahtokgoz@yahoo.com*

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## Abstract

The purpose of this research is to investigate the relationship between ambidextrous marketing, market performance and financial performance. To achieve market performance and financial performance, firms may need ambidextrous marketing function, which involves capable of exploitation and exploration. In this research, based on prior findings, the impact of ambidextrous marketing on market performance and financial performance is revealed using Structural Equation Modelling (SEM). As research universe, Small and Medium-Sized Enterprises (SMEs) operating in information technology have been selected in Turkey. A survey was created online and implemented using electronic mail to managers and owners resulting in 392 usable completed questionnaires. According to the results of the model, marketing exploitation has significant and positive direct effects on market performance, while marketing exploration has significant and positive effects on market and financial performance. When dependent variables are examined, it is revealed that market performance has significant and positive direct effects on financial performance. As a result, it is demonstrated that ambidextrous marketing has an impact on market performance and financial performance.

Jel Classification: **M31**

Key Words: ambidextrous marketing, marketing exploitation, marketing exploration, market performance, financial performance

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## 1. Introduction

Over the past 30 years, as a result of changes, firms have begun to struggle under the pressure of global competition, especially in difficult to predict structures (Lessard, Lucea and Vives, 2013). It is vital for organizations to develop marketing capability in response to challenges from global competitive pressures that are difficult to foresee (Cantarello, Martini and Nosella, 2012). The development of marketing capabilities has been identified as one of the important ways that firms can achieve performance (Vorhies and Harker, 2000). According to Menguc and Auh (2008, p.455), “capabilities refer to the ability, competency, or efficacy to deploy, implement or execute resources for a firm’s advantage. Capabilities capture the process domain of deployment”. Therefore, one of the issues that marketing literature most often works in is marketing capabilities (Qureshi and Kratzer, 2012).

Market deployment is found in the actions that a firm takes to generate a market response, which includes parts of the marketing mix, such as product, price, distribution and promotion activities (Grant, 1991; Day, 1994; Dutta et al., 2002; Slotegraaf, Moorman and Inman, 2003). Some researchers prefer to classify the marketing mix as a capability (Morgan, Slotegraaf and Vorhies, 2009; Vorhies, Morgan and Autry, 2009; Murray, Gao and Kotabe, 2011; Merrilees, Thiele and Lye, 2011; Kaleka, 2011; Evers, Andersson and Hannibal, 2012; Ngo and O’Cass, 2012). Marketing capabilities have been defined as “the integrative processes designed to apply collective knowledge, skills and resources of the firm to market-related needs of the business, enabling the business to add value to its goods and services, adapt to market conditions, take advantage of market opportunities and meet competitive threats” (Vorhies, 1998). While managing marketing capabilities, marketing managers face an important strategic dilemma on how to exploit existing marketing capabilities while also exploring entirely new ones (Atuahene-Gima, 2005). In the literature, ambidexterity is shown as a possible solution to this dilemma (Tushman and O’Reilly, 1996). When the ambidextrous concept is applied to marketing, two dimensions are conducted simultaneously; marketing exploitation and marketing exploration (Benner and Tushman, 2003; Vorhies, Orr and Bush, 2011).

In this study, the author seeks to understand and empirically examine the role of marketing exploration and marketing exploitation in improving market and financial performance. The purpose of this research is to investigate the relationship between ambidextrous marketing, market performance and financial performance. In addition, this study investigates whether ambidexterity in marketing exploration and exploitation exists and whether they effect market performance and financial performance. To this end, a comprehensive exploration of research into ambidextrous marketing in the literature is initially conducted. The dimensions of ambidextrous marketing are subsequently revealed. These dimensions are applied to marketing and defined. Dealing with the research model and hypotheses adopted from the literature, empirical research was conducted in Small and Medium-Sized Enterprises (SMEs) operating in information technology.

The structure of the following article is organized as follows. The next three sections discuss the theoretical issues related to studies of ambidextrous marketing, market performance and financial performance. The subsequent section deals with the research model and hypotheses adopted from the literature. The sixth and seventh sections present the method, analysis and results of the study. The last section provides the conclusions and discussion, the limitations of the research and proposals for future studies.

## 2. Ambidextrous Marketing

In dynamic contexts, sustained performance is rooted in working with existing products and innovation simultaneously. Long-term performance depends on the organization's ability to adapt and change through innovation (Smith and Tushman, 2005). This adaptation and change capability is measured through organizational functions separately and together. The most important way to achieve this capability is through ambidextrous behaviours. Organization theorists have adopted this trait as a metaphor to describe organizations (Bodwell and Chermack, 2010). Schumpeter (1934) was the first to refer to these two terms: the exploration of new possibilities and the exploitation of old certainties. Both terms were used by March (1991) in a paper discussing the trade-off between these two organizational learning possibilities (Popadiuk, 2012).

Ambidexterity is usually defined as the ability of individuals to use both of their hands with equal skill; individuals who are neither "right-handed" nor "left handed" (Bodwell and Chermack, 2010). Ambidexterity refers to how an organization does the job today while at the same time works towards the job tomorrow (Bodwell and Chermack, 2010). There is increasing interest in academic research in investigating how organizations can achieve this balance between exploration and exploitation. Creating ambidextrous functions has been suggested as one possible solution, which involves the synchronous pursuit of both exploration and exploitation (Benner and Tushman, 2003). For organizations, according to Raisch and Birkinshaw (2008), ambidexterity is a new research paradigm in organizational theory, because the research on organizational ambidexterity is strong in some areas while weak or virtually non-existent in others.

When we examine the researches of ambidexterity in the literature, it can be seen that Tushman and O'Reilly (1996), Adler, Goldoftas and Levine (1999), Birkinshaw and Gibson (2004) and, Gibson and Birkinshaw (2004) approached the topic with an organizational design viewpoint. He and Wong (2004), Jansen et al. (2008), Andriopoulos and Lewis (2009), Li and Lin (2008), De Visser et al. (2010) and, Andriopoulos and Lewis (2010) approached the topic with an innovation management viewpoint. Lubatkin et al. (2006), Bodwell and Chermack (2010), Cao, Gedajlovic and Zhang (2009), Han and Celly (2008), Menguc and Auh (2008), O'Reilly and Tushman (2008), Carmeli and Halevi (2009) and, Smith and Tushman (2005) approached the topic with a strategic management viewpoint. Finally, Im and Rai (2008), Nemanich and Vera (2009), Rothaermel and Alexandre (2009) and, Gupta, Smith and Shalley (2006) approached the topic with an organizational learning viewpoint.

Some researchers applied the notion of ambidexterity to marketing functions. In the context of marketing, "firms that effectively balance the tension between efficiently managing today's markets while simultaneously exploring future markets are thought to be ambidextrous" (Tushman and O'Reilly, 1996). This is why, in the literature, ambidexterity has two dimensions which are exploitation and exploration (March, 1991; Gupta, Smith and Shalley, 2006; Raisch and Birkinshaw, 2008; Vorhies, Orr and Bush, 2011; O'Reilly and Tushman, 2013; Birkinshaw and Gupta, 2013). Firms that engage in exploitation to the exclusion of exploration are likely to find themselves trapped in suboptimal stable equilibria. As a result, maintaining an appropriate balance between exploration and exploitation is a primary factor in a firm's survival and prosperity (March, 1991; Simsek, 2009).

The concept of being ambidextrous has been associated with various marketing functions. In the literature on marketing functions and ambidexterity, the first conceptual

and empirical research was posed by Aulakh and Sarkar (2005). They advanced the notion of “strategic ambidexterity”, which they define as “a firm’s ability to combine exploration and exploitation strategies across product, market, and resource domains” (Judge and Blocker, 2008). Chronologically, when we examine other studies related to ambidextrous and marketing functions in Appendix 1, it can be seen that Atuahene-Gima (2005), Yalcinkaya, Calantone and Griffith (2007), Menguc and Auh (2008), Li and Lin (2008), Li and Huang (2012) and, Voss and Voss (2012) examined the issue of product ambidexterity. Kyriakopoulos and Moormann (2004), Slater, Hult and Olson (2010), Sarkees, Hulland and Prescott (2010), Vorhies, Orr and Bush (2011), and Tollin and Schmidt (2012) examined the issue of marketing strategy ambidexterity. Jasmand, Blazevic and Ruyter (2012) and, Lubatkin, Simsek, ling and Veiga (2006) examined the issue of employee behaviour ambidexterity. He and Wong (2004), Jansen, Bosch and Volberda (2005), Jansen, Bosch and Volberda (2006), Hughes, Martin, Morgan and Robson (2010) and, Chang and Hughes (2012) examined the issue of technological ambidexterity. Kristal, Huang and Roth (2010) examined the issue of supply chain ambidexterity.

On the other hand, in the summary of selected research on ambidexterity in marketing in Appendix 1 (2004 - 2012), there is no widely accepted measure of ambidexterity. Although some have developed their own, He and Wong’s (2004) scale of exploration and exploitation has mostly been used. Studies began in 2004 and have continued regularly every year since then. The other point that demands attention is that these studies have mostly been conducted in different high technology industries. The notion of ambidexterity and the dimensions of exploration and exploitation have been used as keywords in almost all research. The respondents were from different countries and were marketing managers or managers in a decision-making roles. Half of the studies do not have antecedents, and there is not similarity between antecedents. Almost all were associated with performance consequences.

As above, according to the literature, ambidexterity has two dimensions which are exploitation and exploration. When these dimensions are applied to marketing, it can be said that both are “ambidextrous marketing” together. In the following sections, marketing exploitation and marketing exploration are defined. Finally, therefore, this study will attempt to explore how marketing exploration and marketing exploitation can be simultaneously achieved through a multilevel analysis that integrates the operational as well as the managerial level (Cantarello, Martini and Nosella, 2012).

## 2.1. Marketing Exploitation

The concept of exploitation is defined in different ways in the literature in respect to refinement, choice, production, efficiency, selection, implementation and execution (Lavie, Stettner and Tushman, 2010). According to Kyriakopoulos and Moorman (2004), exploitation is defined primarily as improving and refining current procedures associated with existing marketing strategies, including product, price, distribution, promotion and other marketing mix strategies. Exploitation can improve a firm’s current expertise, and involves the use of explicit knowledge bases by internalizing and combining them. In effect, the intent of exploitation is to respond to current environmental conditions by adapting existing technologies and further meeting the needs of existing customers (Lubatkin, Simsek, Ling and Veiga, 2006).

Marketing exploitation refers to the development of new capabilities in respect to the firm's existing markets, products and capabilities (Vorhies, Orr and Bush, 2011). Marketing exploitation can be conceptualized as serving the customer through their needs and creating value for them, and processes involving the generation, dissemination, and responsiveness to market capability and forging relationships with customers, channel members and suppliers (Judge and Blocker, 2008). Marketing exploitation builds on existing knowledge and reinforces existing skills, processes and structures (Jansen, Bosch and Volberda, 2006).

## 2.2. Marketing Exploration

According to existing literature, exploration is about search, variation, risk-taking, experimentation, play, flexibility, discovery, and innovation (Lavie, Stettner and Tushman, 2010). Exploration is defined primarily as challenging prior approaches to interfacing with the market such as introducing a new product, price, distribution, promotion or other marketing mix strategies. Exploration requires the development of new capabilities (Kyriakopoulos and Moorman, 2004), and involves the development of new marketing trajectories. Essentially, exploration is intended to respond to latent environmental trends by creating innovative new markets (Lubatkin, Simsek, Ling and Veiga, 2006).

Marketing exploration refers to the development of new capabilities that go beyond what is currently known about markets, products, technologies and capabilities (Vorhies, Orr and Bush, 2011). Across different research contexts, exploration has been variously associated with pioneering, improvisation, capability-building, autonomy and chaos, and emerging markets and technologies (Kathuria, 2012).

## 3. Market Performance

Market performance refers to the company's ability to satisfy, develop, and retain customers by offering products, services, and other elements that suit their needs (Moorman and Rust, 1999; Zhou, Brown and Dev, 2009; Leonidou, Leonidou, Fotiadis and Zeriti, 2013). Market performance is the effectiveness of an organization's marketing activities with regard to market-related goals, such as revenues, growth and market share (Homburg, Grozdanovic and Klarmann, 2007). In other words, market performance is conceptualized as the extent to which a firm achieves success with its existing businesses, products or markets, and in future positioning in its markets (Kandemir, Yaprak and Cavusgil, 2006).

Market performance concerns marketplace awareness and reactions to realized positional advantages. These may be viewed from a customer perspective (Day and Nedungadi, 1994). From a customer perspective, market performance concerns cognitive and affective responses such as brand awareness and perceived quality, and the subsequent behavioural consequences such as purchase decision-making and actions of prospects and customers in the target market to the positional advantages achieved by the firm (Morgan, Clark and Gooner, 2002).

## 4. Financial Performance

The diversity of performance measures used in the literature constitutes an additional source of methodological heterogeneity (Gonzalez-Benito and Gonzalez-Benito, 2005). According to dictionaries, performance means the result obtained in a competition by somebody, or extremely good achievement in a field of activity (Danescu and Beleneși, 2012). Performance can be defined as the state of the competitiveness of the organization, reached through a level of efficiency and productivity which ensures a sustainable market presence (Grigore, Badea and Radu, 2010).

Financial measures are related to accounting measures and economic performance (Gonzalez-Benito and Gonzalez-Benito, 2005). Financial performance centres on outcome-based financial indicators (e.g. return on assets, return on investment, profit growth), reflecting the fulfilment of the economic goals of the organization (Luo, Huang and Wang, 2011). Financial performance is defined as operating profits, profit to sales ratio, profit return on investment and return on assets for SMEs (Leonidou, Leonidou, Fotiadis and Zeriti, 2013).

## 5. Research Model and Hypotheses

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### 5.1. Ambidextrous Marketing and Financial Performance

Higher levels of ambidextrous marketing, or high compatibility of exploratory and exploitative activities, contributes to firm performance by controlling performance risk. Conversely, an imbalance between exploration and exploitation poses threats to firm performance through an increase in such risks (Levinthal and March, 1993; March, 1991; Cao, Gedajlovic and Zhang, 2009). Ambidexterity is thought to be the ability of businesses to exploit existing capabilities while at the same time discovering capabilities that can meet future market needs (Tushman and O'Reilly, 1996; Gibson and Birkinshaw, 2004). O'Reilly and Tushman (2004) observed that ambidextrous organizations are successful at both exploiting the present and exploring the future. However, they also note that few companies have the capability to integrate these two processes well. It is not surprising then that the integration of these two processes provides financial performance. The few studies that have examined links between the ambidextrous approach and firm performance have focused on financial measures and associated ratios (Sarkees, Hulland and Prescott, 2010; Jansen et al., 2012). Previous research in marketing has shown that marketing capabilities are important drivers of firm performance (Krasnikov and Jayachandran, 2008; Vorhies and Morgan, 2005; Vorhies Orr and Bush, 2011).

Therefore, I hypothesized the following:

**H1:** Marketing exploitation has a significant and positive effect on financial performance

**H2:** Marketing exploration has a significant and positive effect on financial performance

### 5.2. Ambidextrous Marketing and Market Performance

Exploitative and exploratory marketing capabilities enable firms to utilize and refine current experience and knowledge to improve efficiencies (He and Wong, 2004; Ray, Barney and Muhanna, 2004). Exploitative marketing capabilities stress the search for and use of solutions to customer problems and experience. Exploratory marketing capabilities emphasize the



development of technologies, products and service delivery processes entirely new to the industry, implicitly reflecting the first-mover status. Thereby, both exploitative and exploratory marketing capabilities improve market performance (Chen, Li and Evans, 2012).

In competitive markets, it is difficult for firms to build a competitive advantage (Garcia, Calantone, and Levine, 2003). Through a firm's development of exploration capabilities, firms can increase their degree of product, price, distribution and promotion. Introducing new products and services to the market, overcoming prior firm limitations, and enhancing both value delivery to current customers and the extension of products and services to new customers. Exploitation capabilities gives firms a chance to leverage their existing resources. This leverages a firm's existing products and services, and therefore makes it possible to deepen value delivery within an existing clientele, thereby ensuring market performance (Yalcinkaya, Calantone and Griffith, 2007).

Therefore, I hypothesized the following:

**H3:** Marketing exploitation has a significant and positive effect on market performance

**H4:** Marketing exploration has a significant and positive effect on market performance

### 5.3. Market Performance and Financial Performance

Market performance will lead to superior financial performance because satisfying customers increases repeat purchases, reduces complaints, encourages them to buy other company products, and generates positive word-of-mouth recommendations (Leonidou, Leonidou, Fotiadis and Zeriti, 2013). Furthermore, market performance is expected to have a positive impact on financial performance, which is also a well established link in the marketing literature (Moorman and Rust, 1999; Rust et al., 2004; Homburg, Grozdanovic and Klarmann, 2007; Ramaswami, Srivastava and Bhargava, 2009; Zhou, Brown and Dev, 2009; Murray, Gao and Kotabe, 2011).

Firms can seek profitable growth of maximum sales, rate of retaining existing customers, rate of customer loyalty and their reputation among customers. Similar results have been achieved in many other studies as well (Hooley et al., 2005; Srivastava et al., 1998). Further, Hooley et al. (2001) and Jaakkola et al. (2010) argue that superior market performance results in superior financial performance. Ultimately, the sales performance of the firm in combination with the cost of sales in its market will determine financial performance outcomes (Day and Fahey, 1988; Kaplan and Norton, 1993).

Therefore, I hypothesized the following:

**H5:** Market performance has a significant and positive effect on financial performance.

According to the theoretical background, the research model is revealed in Figure 1.

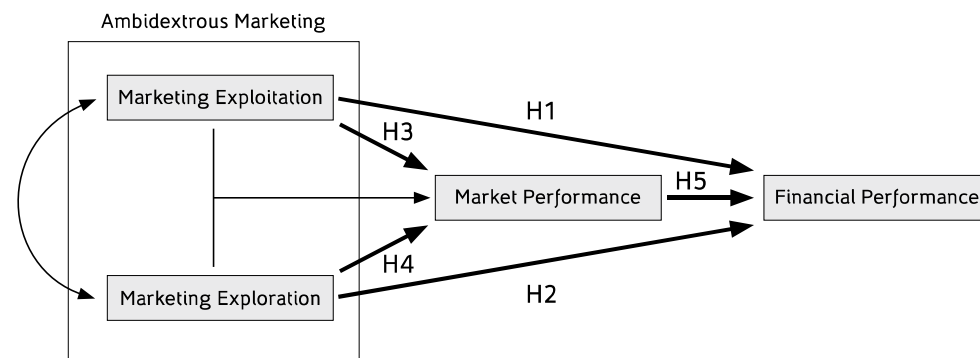
## 6. Method

### 6.1. Data collection and sample

The aim of this study is to explore how marketing exploitation and marketing exploration can simultaneously effect market performance and financial performance. In this study, a convenience sampling procedure, which is one of the non-random sampling methods, is used. A sample of firms was created from all SMEs operating in information technology in

Turkey. A questionnaire was created using the Google-Drive survey tool. The author then determined contact information for the managers and owners of SMEs via telephone. The participants were asked to evaluate their marketing exploitation, marketing exploration, market performance and financial performance over the last 3 years. To implement the data collection, a survey link was mailed to each firm, and a pre-test was performed. After correcting errors, the survey was implemented in full with the sample.

Figure 1. Theoretical Research Model



Using the above process, a total of 392 surveys were completed between May and October 2015. After collecting 392 surveys, a construct reliability was calculated. Subsequently, the validity and reliability of the four constructs was assessed employing 23 items and using Confirmatory Factor Analysis (CFA). CFA models are commonly used to examine patterns of interrelationships among various constructs. Each construct in a model is measured using a set of observed variables. A key feature of CFA models is that no specific directional relationships are assumed between the constructs as they are only correlated with each other (Khine, Ping and Cunningham, 2013). Finally, SEM was conducted and compared with the traditionally reported fit indexes to see whether they were within an acceptable range (Dimitrov, 2014).

## 6.2. Measures

Marketing exploitation was measured using 7 items on a scale adapted from Sarkees, Hulland and Prescott (2010) and Vorhies, Orr and Bush (2011). The items showed good reliability ( $\alpha=0.909$ ). Marketing exploration was measured using 7 items on a scale adapted from March (1991), Sarkees, Hulland and Prescott (2010) and Vorhies, Orr and Bush (2011). The items showed good reliability ( $\alpha=0.931$ ). Market performance was measured using 5 items on a scale adapted from Vorhies and Morgan (2005), Zhou, Brown and Dev (2009), Leonidou, Leonidou, Fotiadis and Zeriti (2013). The items show good reliability ( $\alpha=0.863$ ). Financial performance was measured using 4 items on a scale adapted from Leonidou, Leonidou, Fotiadis and Zeriti (2013). The items showed good reliability ( $\alpha=0.926$ ). (see Table 1 and Appendix 2).



Construct reliabilities are 0.909 for marketing exploitation, 0.931 for marketing exploration, 0.863 for market performance and 0.926 for financial performance. All measures proved reliable (see Table 1). Using the Confirmatory Factor Analysis (CFA) a good fit to the data was found, while the factors loaded highly on their assigned constructs: Chi-square was 640.39, degree of freedom (df) 224, Normed Fit Index (NFI) 0.97, Non-Normed Fit Index (NNFI) 0.98, Comparative Fit Index (CFI) 0.98, Goodness-of-Fit Index (GFI) 0.88, Adjusted Goodness-of-Fit Index (AGFI) 0.85, Standardized Root Mean Square Residual (SRMR) 0.045 and Root Mean Square Error of Approximation (RMSEA) 0.069. The traditionally reported fit indexes are within the acceptable range (Dimitrov, 2014).

Table 1 presents the correlations matrix between latent variables. Marketing exploitation has a positive and significant correlation with marketing exploration (0.74), with market performance (0.66) and with financial performance (0.40). Marketing exploration has a positive and significant correlation with market performance (0.62) and with financial performance (0.50). Market performance has a positive and significant correlation with financial performance (0.53). Table 2 presents the confirmatory factor analysis and descriptive statistics. The t-value for each item was always significant. All standard errors of the estimated coefficients were low, and the standardized factor loadings extracted for each question were greater than the threshold of 0.50 (Anderson and Gerbing, 1988).

**Table 1.** Correlation Matrix of Latent Variables

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	1	2	3	4	Average Variance Extracted (AVE)	Composite Reliability (CR)
1- Marketing Exploitation	0.909 <sup>a</sup>				0.60	0.91
2- Marketing Exploration	0.74 (9.79)	0.931 <sup>a</sup>			0.67	0.93
3- Market Performance	0.66 (8.55)	0.62 (8.29)	0.863 <sup>a</sup>		0.56	0.86
4- Financial Performance	0.40 (6.56)	0.50 (7.81)	0.53 (7.66)	0.926 <sup>a</sup>	0.76	0.92

$\chi^2 = 640.39$   $p < 0.0000$ ;  $df = 224$   $\chi^2/df = 2.85$

Normed Fit Index (NFI) = 0.97

Non-Normed Fit Index (NNFI) = 0.98

Comparative Fit Index (CFI) = 0.98

Goodness-of-Fit Index (GFI) = 0.88

Adjusted Goodness-of-Fit Index (AGFI) = 0.85

Standardized Root Mean Square Residual (SRMR) = 0.045

Root Mean Square Error of Approximation (RMSEA) = 0.069

a = Cronbach's Alphas of the composite scales, (t-values in parentheses)

**Table 2.** Confirmatory Factor Analysis and Descriptive Statistics of Measures

Survey Measures	Mean	Standard Deviation	t- values	Standardized Factor Loading	Error Variance
<b>Marketing Exploitation</b>					
Exploitation 1	4.181	0.858	fp	0.82	0.33
Exploitation 2	4.132	0.900	15.75	0.72	0.48
Exploitation 3	4.181	0.821	16.82	0.76	0.43
Exploitation 4	4.170	0.866	18.45	0.81	0.35
Exploitation 5	4.165	0.899	14.32	0.67	0.55
Exploitation 6	4.091	0.825	18.39	0.81	0.35
Exploitation 7	4.074	0.853	18.47	0.81	0.35
Total Mean of Exploitation	4.142				
<b>Marketing Exploration</b>					
Exploration 1	4.048	0.938	fp	0.81	0.34
Exploration 2	3.928	0.988	17.76	0.78	0.39
Exploration 3	3.655	1.051	17.14	0.76	0.42
Exploration 4	3.892	0.990	19.04	0.82	0.33
Exploration 5	3.747	1.079	18.25	0.80	0.37
Exploration 6	3.811	0.907	21.91	0.90	0.19
Exploration 7	3.783	0.916	20.06	0.85	0.28
Total Mean of Exploration	3.837				
<b>Market Performance</b>					
MP 1	4.265	0.812	fp	0.70	0.50
MP 2	4.145	0.847	13.53	0.75	0.44
MP 3	4.313	0.760	14.44	0.80	0.35
MP 4	4.423	0.799	13.15	0.72	0.47
MP 5	4.507	0.711	13.96	0.77	0.40
Total Mean of Market Perf.	4.330				
<b>Financial Performance</b>					
FP 1	3.479	1.112	fp	0.88	0.23
FP 2	3.528	1.121	23.83	0.88	0.23
FP 3	3.515	1.084	24.77	0.89	0.20
FP 4	3.505	1.028	21.89	0.84	0.30
Total Mean of Financial Perf.	3.506				

fp: Fix Parameter

The scale format for each of these measures was 1 = "strongly disagree" and 5 = "strongly agree."

Correlation is significant at the 0.01 level.

In addition to assessing the confirmatory factor analysis, a Composite Reliability (CR) was calculated and Average Variance Extracted (AVE) values for each latent variables. To do this, loadings and error variances were used from Table 2 and the following formulas applied.  $AVE = (\sum \lambda^2) / [\sum \lambda^2 + \sum \epsilon]$ ,  $CR = (\sum \lambda) / [(\sum \lambda) + \sum \epsilon]$  ( $\lambda$ = loading and  $\epsilon$  = error variance). AVE and CR values were used to assess the convergent validity. For convergent validity, the AVE value must be bigger than 0.50 and the CR value must be bigger than 0.70. Finally, the CR value must be bigger than the AVE ( $CR > 0.70$ ;  $AVE > 0.50$ ;  $CR > AVE$ ) (Diamantopoulos and Siguaw, 2000). This provides evidence that there is convergent validity between the four latent variables (see Table 1). To assess the discriminant validity between the latent variables – marketing exploitation, marketing exploration, market performance and financial performance -- it was determined that the AVEs and CRs are both higher than the squared

correlation between the constructs (e.g. between marketing exploitation and marketing exploration =  $0.74 * 0.74 = 0.54$  and  $0.67 > 0.54$ ) (Fornell and Larcker, 1981). This provides evidence that there is discriminant validity between the four latent variables.

## 7. Analysis and Results

After the confirmatory factor analysis, structural equation modelling (SEM) was employed using the Linear Structural Relations (LISREL) 8.54 software to analyse the data and test the research hypotheses. SEM was run and the model fit indexes were within an acceptable range, t-value was not significant for H3 ( $t = 1.02$  at  $p > 0.05$ ). Here, model re-specification was concerned with improving the model data fit by deleting any statistically non-significant path (Khine, 2013). Therefore, the H3 path way with its low significance was deleted. And the SEM was run again. This time, model fit indexes were within the acceptable range and all path ways were significant ( $p < 0.05$ ) (see Figure 2).

Figure 2 shows that the measurement model indicated a good fit to the data and the statistics for the model indicated the following: chi-square was 644.70, degree of freedom (df) 225, Normed Fit Index (NFI) 0.97, Non-Normed Fit Index (NNFI) 0.98, Comparative Fit Index (CFI) 0.98, Goodness-of-Fit Index (GFI) 0.87, Adjusted Goodness-of-Fit Index (AGFI) 0.85, Standardized Root Mean Square Residual (SRMR) 0.046 and Root Mean Square Error of Approximation (RMSEA) 0.069. The traditionally reported fit indexes are within the acceptable range.

As shown in Figure 3, the structural model is given. There is correlation (0.73) between marketing exploitation and marketing exploration. Financial performance and market performance have an error variance of 0.68 and 0.53 respectively. It is understood that this research model explains 0.32 per cent ( $1 - 0.68 = 0.32$ ) of financial performance and 0.47 per cent ( $1 - 0.53 = 0.47$ ) of market performance.

According to the results of the model, **H1** was not supported – marketing exploitation has no significant or positive direct effect on financial performance ( $t = 1.02$  at  $p > 0.05$ ). **H2** was supported – marketing exploration has a significant and positive direct effect on financial performance ( $\beta = 0.27$  and  $t = 4.26$ ). **H3** was supported – marketing exploitation has a significant and positive direct effect on market performance ( $\beta = 0.44$  and  $t = 5.84$ ). **H4** was supported – marketing exploration has a significant and positive direct effect on market performance ( $\beta = 0.30$  and  $t = 4.13$ ). **H5** was supported – market performance has a significant and positive direct effect on financial performance ( $\beta = 0.36$  and  $t = 5.31$ ).

Figure 2. Research Model Standard Solution

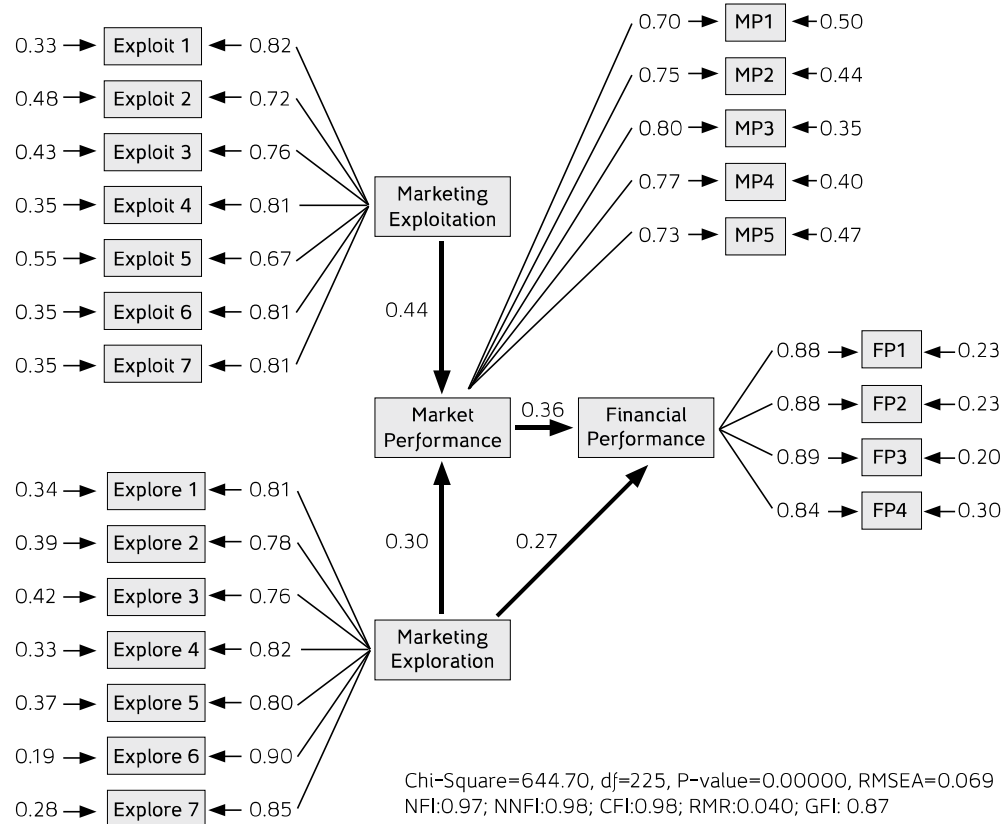
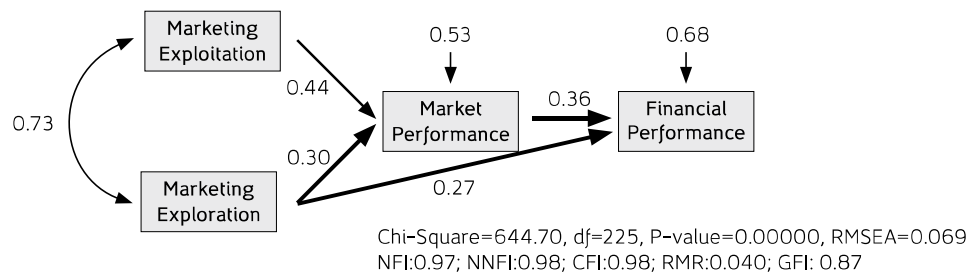


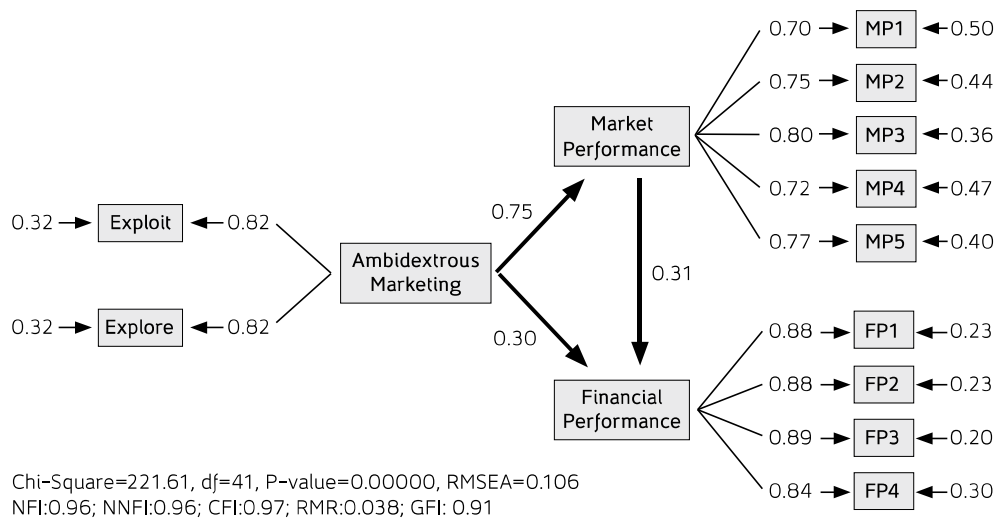
Figure 3. Structural Model



After testing the research hypotheses, to understand whether ambidextrous marketing has a significant impact on market performance and financial performance, as seen in Figure 4, the path ways were rebuilt. The impact of ambidextrous marketing, as a latent variable with both dimensions – marketing exploitation and marketing explorations – on market performance and financial performance, was tested. The model fit indexes were within the acceptable range. In Figure 4, the model indicated a good fit to the data. The fit statistics for the model indicated the following: chi-square was 221.61, degree of freedom (df) 41, Normed

Fit Index (NFI) 0.96, Non-Normed Fit Index (NNFI) 0.96, Comparative Fit Index (CFI) 0.97, Goodness-of-Fit Index (GFI) 0.91, Adjusted Goodness-of-Fit Index (AGFI) 0.85, Standardized Root Mean Square Residual (SRMR) 0.047 and Root Mean Square Error of Approximation (RMSEA) 0.10. The traditionally reported fit indexes are within the acceptable range.

**Figure 4.** Impact of Ambidextrous Marketing on Market Performance and Financial Performance



## 8. Discussion and Conclusions

This study has important implications for managers and practitioners. It should not be forgotten that ambidexterity has two dimensions. To make the ambidextrous marketing function possible, firms must use two dimensions at the same time. One of the important consequences of this study is that while firms continue using their existing marketing capabilities from one side, they also exhibit behaviours that will explore new marketing capabilities. The aim of this study was to explore how marketing exploration and marketing exploitation can be simultaneously achieved. Finally, it can be said that marketing exploration and marketing exploitation can be simultaneously achieved and have an impact on performance.

There is a high correlation coefficient (0.73) between the dimensions of ambidextrous marketing (see Figure 3). Compared with other studies in the literature on the correlation coefficient between the dimensions of ambidextrous marketing, Kyriakopoulos and Moorman (2004) found a correlation of 0.26; Jansen, Bosch and Volberda (2006) found 0.07; Li and Lin (2008) found 0.33; Menguc and Auh (2008) found 0.55; Vorhies, Orr and Bush (2011) found 0.52; Hughes, Martin, Morgan and Robson (2010) found 0.50; Chandrasekaran, Linderman and Schroeder (2012) found 0.24; Li and Huang (2012) found 0.50; Voss and Voss (2012) found 0.11; Atuahene-Gima (2005) found 0.41. Therefore, the research findings here are consistent with previous empirical studies in the literature.

Another contribution of this study relates to the measurement of dimensions of marketing ambidextrous. It was seen in Table 2, that firms do not set out the same level of marketing exploitation (4.142) than they set out for marketing exploration (3.837). Compared to other studies in the literature, Kyriakopoulos and Moorman (2004) found that marketing exploitation and marketing exploration levels are 3.60 and 2.49 respectively. Jansen, Bosch and Volberda (2006) found 5.27 and 3.77; Menguc and Auh (2008) found 3.85 and 3.80; Li and Lin (2008) found 4.56 and 4.31; Vorhies, Orr and Bush (2011) found 5.12 and 4.79; Hughes, Martin, Morgan and Robson (2010) found 5.96 and 5.39; Chandrasekaran, Linderman and Schroeder (2012) found 5.01 and 4.53; Li and Huang (2012) found 5.35 and 5.01; Voss and Voss (2012) found 5.60 and 4.74 respectively. The research findings here are consistent with previous empirical studies in the literature.

Where there is less competition, organizations can reach their pre-determined objectives with existing capabilities. However, when competition is more intense, it may be difficult to adapt to such an environment. In this case, organizations will need activities involving exploratory behaviour. In such difficult situations, the ability of organizations to survive will be determined in proportion to their ambidextrous marketing behaviour. In Appendix 1, it can be seen that researchers have mostly conducted their researches in different high technology industries. The findings related to the characteristics of the high-tech industries are “explorative” associated with pioneering, improvisation, capability-building and technologies. It may be said that ambidextrous marketing behaviours are more needed in high-tech industry than others. What is important here is the adoption of an understanding of exhibiting preventive behaviours described as exploring new capabilities, without having to exhibit reactive behaviours in situations where environmental competition is increased.

Reviewing the results of the research model, it was found that for the firms in the study, marketing exploitation appears to be providing a stronger direct effect for improving market performance than marketing exploration. When an improvement of marketing capabilities is needed, marketers can rely on marketing exploitation capabilities to make minor changes in the configuration of resources that deploy market-based assets. Firms use marketing exploitation more regularly in adaptive, evolutionary ways and use marketing explorations, when managers/owners make the choice to perform more radical reconfigurations of market resources. Firms that are ambidextrous regarding marketing exploration and exploitation may have a significant advantage over less ambidextrous firms.

According to the results of the model, H1 was not supported. Marketing exploitation does not have a significant and positive direct effect on financial performance ( $t = 1.02$  at  $p > 0.05$ ). In other words, market performance is a mediator between marketing exploitation and financial performance. In Table 1, it can be seen that marketing exploitation has a stronger direct effect on market performance than financial performance. This means, marketing exploitation causes an enhanced rate of customer retentions, sales from existing customers, customer loyalty, reputation among customers and quality of services offered to their customers.

Another result of the research model was that for the firms in the study, marketing exploration has a stronger direct effect on financial performance than marketing exploitation, while it has almost the same direct effect on financial performance and market performance. This result may imply that marketing exploration capability encompasses search, variation, risk-taking, experimentation and innovation. If organizations focus rather on financial performance, they should use marketing exploration, which differs in terms of existing



marketing capabilities. To have new marketing exploration capabilities, the manager/owner can increase product introductions, introducing new products and services onto the market, overcoming competitors, and enhancing both value delivery to current customers and the extension of products and services to new customers.

The purpose of this study was to develop and test a conceptual framework that broadens our understanding of ambidextrous marketing. The research model revealed that ambidextrous marketing exists and effects market performance and financial performance. This evidence supports my conceptualization. This study demonstrates the importance of building marketing exploration and exploitation capabilities to improve the firm's market and financial performance. In addition, the research model has hidden moderator/mediator relationships. Market performance is a mediator between marketing exploitation and financial performance, while it is a moderator between marketing exploration and financial performance.

The study could not test the validity of the results across different industry groups because of time and financial limitations. Future studies need to examine the generalizability of the results in different industries. Future studies could also extend the study by including additional antecedent and consequent variables in the conceptual model.

## References

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- Adler, P.S., Goldoftas, B. and Levine, D. 1999. Flexibility Versus Efficiency? A Case Study of Model Changeovers in the Toyota Production System. *Organization Science*, Vol. 10, No. 1, pp. 43–68.
- Anderson, J.C. and Gerbing, D.W. 1988. Structural Equation Modelling in Practice: A Review and Recommended Two-Step Approach. *Psychol Bull*, Vol. 103, No. 3, pp. 411–23.
- Andriopoulos, C. and Lewis, M.W. 2009. Exploitation-Exploration Tensions and Organizational Ambidexterity: Managing Paradoxes of Innovation, *Organization Science*, Vol. 20, No. 4, pp. 696–717.
- Andriopoulos, C. and Lewis, M.W. 2010. Managing Innovation Paradoxes: Ambidexterity Lessons from Leading Product Design Companies. *Long Range Planning*, Vol. 43, pp. 104–122.
- Atuahene-Gima, K. 2005. An Exploratory Analysis of the Impact of Market Orientation on New Product Performance: A Contingency Approach. *Journal of Product Innovation Management*, Vol. 12, pp. 275–293.
- Benner, M.J. and Tushman, M.L. 2003. Exploitation, Exploration, and Process Management: The Productivity Dilemma Revisited. *Academy Management Review*, Vol. 28, No. 2, pp. 238–256.
- Birkinshaw, J. and Gibson, C. 2004. Building Ambidexterity into an Organization. *MIT Sloan Management Review*, Vol. 45, pp. 47–55.
- Birkinshaw, J. and Gupta, K. 2013. Clarifying the Distinctive Contribution of Ambidexterity to the Field of Organization Studies. *The Academy of Management Perspectives*, Vol. 27, No. 4, pp. 287–298.
- Bodwell, W. and Chermack, T.J. 2010. Organizational Ambidexterity: Integrating Deliberate and Emergent Strategy with Scenario Planning. *Technological Forecasting and Social Change*, Vol. 77, pp. 193– 202.

- Cantarello, S., Martini, A. and Nosella, A. 2012. A Multi-Level Model for Organizational Ambidexterity in the Search Phase of the Innovation Process. *Creativity and Innovation Management*, Vol. 21, No 1, pp. 28-48.
- Cao, Q., Gedajlovic, E. and Hongping, Z. 2009. Unpacking Organizational Ambidexterity: Dimensions, Contingencies, and Synergistic Effects. *Organization Science*, Vol. 20, pp. 781-96.
- Carmeli, A. and Halevi, M.Y. 2009. How Top Management Team Behavioural Integration and Behavioural Complexity Enable Organizational Ambidexterity: The Moderating Role of Contextual Ambidexterity. *The Leadership Quarterly*, Vol. 20, pp. 207-218.
- Chandrasekaran, A., Linderman, K. and Schroeder, R. 2012. Antecedents to Ambidexterity Competency in High Technology Organizations. *Journal of Operations Management*, Vol. 30, pp. 134-151.
- Chang, Y.-Y. and Hughes, M. 2012. Drivers of Innovation Ambidexterity in Small- to Medium-Sized Firms. *European Management Journal*, Vol. 50, No. 1, pp. 1-17.
- Chen, Y.-C., Li, P.C. and Evans, K.R. 2012. Effects of Interaction and Entrepreneurial Orientation on Organizational Performance: Insights into Market Driven and Market Driving. *Industrial Marketing Management*, Vol. 41, pp. 1019-1034.
- Danescu, T. and Belene I.M. 2012. Financial Performance Versus Non Financial Performance. Case Study at Antibiotice Trading Company IASI. *Economic Sciences*, Vol. 1, No. July, pp. 904-909.
- Day, G. and Fahey, L. 1988. Valuing Market Strategies. *Journal of Marketing*, Vol. 52, No. July, pp. 45 - 57.
- Day, G.S. 1994. The Capabilities of Market-Driven Organizations. *Journal of Marketing*, Vol. 58, pp. 37-52.
- Day, G.S. and Nedungadi, P. 1994. Managerial Representations of Competitive Advantage. *Journal of Marketing*, Vol. 58, No. 2, pp. 31- 44.
- De Visser, M., Weerd-Nederhof, P., Faems, D., Song, M., Looy, B.V. and Visscher, K. 2010. Structural Ambidexterity in NPD Processes: A Firm-Level Assessment of the Impact of Differentiated Structures on Innovation Performance. *Technovation*, Vol. 30, pp. 291-299.
- Diamantopoulos, A. and Siguaw, J.A. 2000. *Introducing LISREL. A Guide for the Uninitiated*. Sage Publication, London.
- Dimitrov, D.M. 2014. *Statistical Methods for Validation of Assessment Scale Data in Counseling and Related Fields*. Alexandria, VA, USA, Wiley.
- Dutta, S., Bergen, M., Levy, D., Ritson, M. and Zbaracki, M. 2002. Pricing as a Strategic Capability. *MIT Sloan Management Review*, Spring, pp. 61-66.
- Evers, N., Andersson, S. and Hannibal, M. 2012. Stakeholders and Marketing Capabilities in International New Ventures: Evidence from Ireland, Sweden, and Denmark. *Journal of International Marketing*, Vol. 20, No. 4, pp. 46-71.
- Fornell, C. and Larcker, D.F. 1981. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, Vol. 18, pp. 39-50.
- Garcia, R., Calantone, R. and Levine, R. 2003. The Role of Knowledge in Resource Allocation to Exploration Versus Exploitation in Technologically Oriented Organizations. *Decision Sciences*, Vol. 34, No. 2, pp. 323-349.
- Gibson, C.B. and Birkinshaw, J. 2004. The Antecedents, Consequences, and Mediating Role of Organizational Ambidexterity. *Academy of Management Journal*, Vol. 47, pp. 209-226.
- Gonzalez-Benito, O. and Gonzalez-Benito, J. 2005. Cultural vs. Operational Market Orientation and Objective vs. Subjective Performance: Perspective of Production and Operations. *Industrial Marketing Management*, Vol. 34, pp. 797- 829.

- Grant, R. 1991. The Resource-Based Theory of Competitive Advantage: Implications For Strategy Formulation. *California Management Review*, Spring, pp. 114-135.
- Grigore, A.M., Badea, F. and Radu, C. 2010. Modern Instruments for Measuring Organizational Performance. *Annals of Faculty of Economics*, Vol. 1, No. 2, pp. 951-956.
- Gupta, A.K., Smith, K.G. and Shalley, C.E. 2006. The Interplay Between Exploration and Exploitation. *Academy of Management Journal*, Vol. 49, pp. 693-706.
- Han, M. and Celly, N. 2008. Strategic Ambidexterity and Performance in International New Ventures. *Canadian Journal of Administrative Sciences*, Vol. 25, pp. 335-49.
- He, Z.L. and Wong, P.K. 2004. Exploration vs. Exploitation: An Empirical Test of the Ambidexterity Hypothesis. *Organization Science*, Vol. 15, pp. 481-494.
- Homburg, C., Grozdanovic, M. and Klarmann, M. 2007. Responsiveness to Customers and Competitors: The Role of Affective and Cognitive Organizational Systems. *Journal of Marketing*, Vol. 71, No. 2, pp. 18-38.
- Hooley, G.J., Greenley, G.E., Fahy, J. and Cadogan, J. 2001. Market-Focused Resources, Competitive Positioning and Firm Performance. *Journal of Marketing Management*, Vol. 17, No. 5-6, pp. 503-520.
- Hooley, G.J., Greenley, G., Cadogan, J.W. and Fahy, J. 2005. The Performance Impact of Marketing Resources. *Journal of Business Research*, Vol. 58, No. 1, pp. 18-27.
- Hughes, M., Martin, S.L., Morgan, R.E. and Robson, M.J. 2010. Realizing Product-Market Advantage in High-Technology International New Ventures: The Mediating Role of Ambidextrous Innovation. *Journal of International Marketing*, Vol. 18, No. 4, pp. 1-21.
- Im, G. and Rai, A. 2008. Knowledge Sharing Ambidexterity in Long-Term Interorganizational Relationships. *Management Science*, Vol. 54, pp. 1281-1296.
- Jaakkola, M., Möller, K., Parvinen, P., Evanschitzky, H. and Mühlbacher, H. 2010. Strategic Marketing and Business Performance: A Study in Three European "Engineering Countries". *Industrial Marketing Management*, Vol. 39, pp. 1300-1310.
- Jansen, J.J.P., Van den Bosch, F.A.J. and Volberda, H.W. 2005. Exploratory Innovation, Exploitative Innovation, and Ambidexterity: The Impact of Environmental and Organizational Antecedents. *Schmalenbach Business Review*, Vol. 57, pp. 351-363.
- Jansen, J.J.P., Van den Bosch, F.A.J. and Volberda, H.W. 2006. Exploratory Innovation, Exploitative Innovation, and Performance: Effects of Organizational Antecedents and Environmental Moderators. *Management Science*, Vol. 52, No. 11, pp. 1661-1674.
- Jansen, J.J.P., George, G., Van den Bosch, F.A.J. and Volberda, H.W. 2008. Senior Team Attributes and Organizational Ambidexterity: The Moderating Role of Transformational Leadership. *Journal of Management Studies*, Vol. 45, pp. 982-1007.
- Jansen, J.J.P., Simsek, Z. and Cao, Q. 2012. Ambidexterity and Performance in Multiunit Contexts: Cross-Level Moderating Effects of Structural and Resource Attributes. *Strategic Management Journal*, Vol. 33, pp. 1286-1303.
- Jasmand, C., Blazevic, V. and Ruyter, K. 2012. Generating Sales While Providing Service: A Study of Customer Service Representatives' Ambidextrous Behavior. *Journal of Marketing*, Vol. 76, No. 1, pp. 20-37.
- Judge, W.Q. and Blocker, C.P. 2008. Organizational Capacity for Change and Strategic Ambidexterity. *European Journal of Marketing*, Vol. 42, No. 9/10, pp. 915-926.
- Kaleka, A. 2011. When Exporting Manufacturers Compete on the Basis of Service: Resources and Marketing Capabilities Driving Service Advantage and Performance. *Journal of International Marketing*, Vol. 19, No. 1, pp. 40-58.

- Kandemir, D., Yaprak, A. and Cavusgil, S.T. 2006. Alliance Orientation: Conceptualization, Measurement, and Impact on Market Performance. *Journal of the Academy of Marketing Science*, Vol. 34, No. 3, pp. 324-340.
- Kaplan R.S. and Norton, D.P. 1993. The Balanced Scorecard — Measures That Drive Performance. *Harv. Bus. Rev.*, No. January/February, pp. 71-79.
- Kathuria, A. 2012. *Information Technology Role in Facilitation of Organizational Ambidexterity and Identity*. Published Doctorate Thesis, University of Delhi.
- Khine, M.S., Ping, L.C. and Cunningham, D. (Eds.) 2013. *Application of Structural Equation Modeling in Educational Research and Practice*. Rotterdam, NLD: SensePublishers.
- Krasnikov, A. and Jayachandran, S. 2008. The Relative Impact of Marketing, Research-and-Development, and Operations Capabilities on Firm Performance. *Journal of Marketing*, Vol. 72, No. 4, pp. 1-11.
- Kristal, M.M., Huang, X. and Roth, A.V. 2010. The Effect of an Ambidextrous Supply Chain Strategy on Combinative Competitive Capabilities and Business Performance. *Journal of Operations Management*, Vol. 69, pp. 415-429.
- Kyriakopoulos, K. and Moorman, C. 2004. Tradeoffs in Marketing Exploitation and Exploration Strategies: The Overlooked Role of Market Orientation. *International Journal of Research in Marketing*, Vol. 21, pp. 219-240.
- Lavie, D., Stettner, U. and Tushman, M.L. 2010. Exploration and Exploitation Within and Across Organizations. *The Academy of Management Annals*, Vol. 4, No. 1, pp. 109-155.
- Lessard, D., Lucea, R. and Vives, L. 2013. Building Your Company's Capabilities Through Global Expansion. *Sloan Management Review*, Vol. 54, No. 2, pp. 60-68.
- Leonidou, L.C., Leonidou, C.N., Fotiadis, T.A. and Zeriti, A. 2013. Resources and Capabilities as Drivers of Hotel Environmental Marketing Strategy: Implications for Competitive Advantage and Performance. *Tourism Management*, Vol. 35, pp. 94-110.
- Levinthal, D.A. and March, J.G. 1993. The Myopia of Learning. *Strategic Management Journal*, Vol. 14, pp. 95-112.
- Li, C.R. and Lin, C.J. 2008. The Nature of Market Orientation and the Ambidexterity of Innovations. *Management Decision*, Vol. 46, No. 7, pp. 1002-1026.
- Li, Y.H. and Huang, J.W. 2012. Ambidexterity's Mediating Impact on Product Development Proficiency and New Product Performance. *Industrial Marketing Management*, Vol. 41, pp. 1125-1132.
- Lubatkin, M.H., Simsek, Z., Ling, Y. and Veiga, J.F. 2006. Ambidexterity and Performance in Small to Medium-Sized Firms: The Pivotal Role of Top Management Team Behavioral Integration. *Journal of Management*, Vol. 32, No. 5, pp. 646-672.
- Luo, Y., Huang, Y. and Wang, S.L. 2011. Guanxi and Organizational Performance: A Meta-Analysis. *Management and Organization Review*, Vol. 8, No. 1, pp. 139-172.
- March, J.G. 1991. Exploration and Exploitation in Organizational Learning. *Organization Science*, Vol. 2, pp. 71-87.
- Menguc, B. and Auh, S. 2008. The Asymmetric Moderating Role of Market Orientation on the Ambidexterity-Firm Performance Relationship for Prospectors and Defenders. *Industrial Marketing Management*, Vol. 37, No. 4, pp. 455-70.
- Merrilees, B., Thiele, S.R. and Lye, A. 2011. Marketing Capabilities: Antecedents and Implications For B2B SME Performance. *Industrial Marketing Management*, Vol. 40, pp. 368-375.
- Moorman, C. and Rust, R.T. 1999. The Role of Marketing. *Journal of Marketing*, Vol. 63, pp. 180-197, (Special Issue).

- Morgan, N., Clark, B.H. and Gooner, R. 2002. Marketing Productivity, Marketing Audits, and Systems for Marketing Performance Assessment Integrating Multiple Perspectives. *Journal of Business Research*, Vol. 55, pp. 363–375.
- Morgan, N.A., Slotegraaf, R.J. and Vorhies, D.W. 2009. Linking Marketing Capabilities With Profit Growth. *International Journal of Research in Marketing*, Vol. 26, pp. 284–293.
- Murray, J.Y., Gao, G.Y. and Kotabe, M. 2011. Market Orientation and Performance of Export Ventures: The Process Through Marketing Capabilities and Competitive Advantages. *Journal of the Academy of Marketing Science*, Vol. 39, pp. 252–269.
- Nemanich, L.A. and Vera, D. 2009. Transformational Leadership and Ambidexterity in the Context of an Acquisition. *Leadership Quarterly*, Vol. 20, No. 1, pp. 19–33.
- Ngo, L.V. and O’Cass, A. 2012. Performance Implications of Market Orientation, Marketing Resources, and Marketing Capabilities. *Journal of Marketing Management*, Vol. 28, No. 1–2, pp. 173–187.
- O’Reilly, C.A. and Tushman, M.L. 2004. The Ambidextrous Organization. *Harvard Business Review*, April, pp. 1–10.
- O’Reilly, C.A. and Tushman, M.L. 2008. Ambidexterity as a Dynamic Capability: Resolving the Innovator’s Dilemma. *Research in Organizational Behavior*, Vol. 28, pp. 185–206.
- O’Reilly, C.A. and Tushman, M.L. 2013. Organizational Ambidexterity: Past, Present, and Future. *Academy of Management Perspectives*, Vol. 27, No. 4, pp. 324–338.
- Popadiuk, S. 2012. Scale for Classifying Organizations as Explorers, Exploiters or Ambidextrous. *International Journal of Information Management*, Vol. 32, pp. 75–87.
- Qureshi, S. and Kratzer, J. 2012. An Investigation of Antecedents and Outcomes of Marketing Capabilities in Entrepreneurial Firms: An Empirical Study of Small Technology-Based Firms in Germany. *Journal of Small Business and Entrepreneurship*, Vol. 24, No. 1, pp. 49–66.
- Raisch, S. and Birkinshaw, J. 2008. Organizational Ambidexterity: Antecedents, Outcomes, and Moderators. *Journal of Management*, Vol. 34, pp. 375–409.
- Ramaswami, S.N., Srivastava, R.K. and Bhargava, M. 2009. Market-Based Capabilities and Financial Performance of Firms: Insights into Marketing’s Contribution to Firm Value. *Journal of the Academy Marketing Science*, Vol. 37, pp. 97–116.
- Ray, G., Barney, J.B. and Muhanna, W.A. 2004. Capabilities, Business Process, and Competitive Advantage: Choosing the Dependent Variable in Empirical Tests of the Resource-Based View. *Strategic Management Journal*, Vol. 25, No. 1, pp. 23–37.
- Rothaermel, F.T. and Alexandre, M.T. 2009. Ambidexterity in Technology Sourcing: The Moderating Role of Absorptive Capacity. *Organization Science*, Vol. 20, pp. 759–80.
- Rust, R.T., Ambler, T., Carpenter, G.S., Kumar, V. and Srivastava, R.K. 2004. Measuring Marketing Productivity: Current Knowledge and Future Directions. *Journal of Marketing*, Vol. 68, pp. 76–89.
- Sarkees, M., Hulland, J. and Prescott, J. 2010. Ambidextrous Organizations and Firm Performance: The Role of Marketing Function Implementation. *Journal of Strategic Marketing*, Vol. 18, No. 2, pp. 165–184.
- Simsek, Z. 2009. Organizational Ambidexterity: Towards a Multilevel Understanding. *Journal of Management Studies*, Vol. 46, pp. 597–624.
- Slater, S.F., Hult, G.T.M. and Olson, E.M. 2010. Factors Influencing the Relative Importance of Marketing Strategy Creativity and Marketing Strategy Implementation Effectiveness. *Industrial Marketing Management*, Vol. 39, pp. 551–559.

- Slotegraaf, R.J., Moorman, C. and Inman, J. 2003. The Role of Firm Resources in Returns to Market Deployment. *Journal of Marketing Research*, Vol. 11, pp. 295-309.
- Smith, W.K. and Tushman, M.L. 2005. Managing Strategic Contradictions: A Top Management Model for Managing Innovation Streams. *Organization Science*, Vol. 16, pp. 522-36.
- Srivastava, R.K., Shervani, T.A. and Fahey, L. 1998. Market-Based Assets and Shareholder Value: A Framework for Analysis. *Journal of Marketing*, Vol. 62, No. 1, pp.2-18.
- Tollin, K. and Schmidt, M. 2012. Marketing Logics, Ambidexterity and Influence. *Journal of Strategic Marketing*, Vol. 20, No. 6, pp. 509-534.
- Tushman, M.L. and O'Reilly, C.A. 1996. Ambidextrous Organizations: Managing Evolutionary and Revolutionary Change. *California Management Review*, Vol. 38, pp. 8-30.
- Vorhies, D.W. 1998. An Investigation of the Factors Leading to the Development of Marketing Capabilities and Organizational Effectiveness. *Journal of Strategic Marketing*, Vol. 6, pp. 3-23.
- Vorhies, D.W. and Harker, M. 2000. The Capabilities and Performance Advantages of Market Driven Firms: An Empirical Investigation. *Australian Journal of Management*, Vol. 25, No. 2, pp. 145-171.
- Vorhies, D.W. and Morgan, N.A. 2005. Benchmarking Marketing Capabilities for Sustainable Competitive Advantage. *Journal of Marketing*, Vol. 69, pp. 80-94.
- Vorhies, D.W., Morgan, R.E. and Autry, C.W. 2009. Product-Market Strategy and the Marketing Capabilities of the Firm: Impact on Market Effectiveness and Cash Flow Performance. *Strategic Management Journal*, Vol. 30, No. 12, pp. 1310-1334.
- Vorhies, D.W., Orr, L.M. and Bush, V.D. 2011. Improving Customer-Focused Marketing Capabilities and Firm Financial Performance Via Marketing Exploration and Exploitation. *Journal of the Academy Marketing Science*, Vol. 39, pp. 736-756.
- Voss, G. and Voss, Z.G. 2012. Strategic Ambidexterity in Small and Medium-Sized Enterprises: Implementing Exploration and Exploitation in Product and Market Domains. *Organization Science*, Articles in Advance, pp. 1-19.
- Yalcinkaya, G., Calantone, R.J. and Griffith, D.A. 2007. An Examination of Exploration and Exploitation Capabilities: Implications for Product Innovation and Market Performance. *Journal of International Marketing*, Vol. 15, No. 4, pp. 63-93.
- Zhou, K.Z., Brown, J.R. and Dev, C.S. 2009. Market Orientation, Competitive Advantage, and Performance: A Demand-Based Perspective. *Journal of Business Research*, Vol. 62, pp. 1063-1070.



## Appendix 1. Summary of Selected Ambidexterity Research on Marketing (2004-2012)

Author / Year	Keywords	Industry	Respondents Sample (Measuring instrument)	Dimensions for Ambidextrous	Used Sources for Ambidextrous Measurement	Antecedents	Consequence
He and Wong, 2004	Technological innovation (Explorative and Exploitative), Innovation strategy, Ambidextrous organization	Chemicals and electronics sectors	CEOs of manufacturing Firms, Singapore and Malaysia, 206 respondents (mail)	Exploitative innovation strategy and Explorative innovation strategy	Developed their own	–	Product innovation intensity, Process innovation intensity, Sales growth rate
Kyriakopoulos and Moorman, 2004	Marketing strategy (marketing exploitation and exploration), Market orientation, Complementarities, New products	Packaged food industry: (firms that did not engage in product development activities were eliminated)	Vice president of marketing of each business, Dutch companies, 340 respondents (mail)	Marketing Exploitation Strategies and Marketing Exploration Strategies	Developed their own	–	Market orientation, Financial performance outcomes and R&D resources
Atuahene-Gima, 2005	–	Electronics firms	Marketing managers, CEOs, and R&D managers, China, 227 respondents (Distributed and collected)	Competence Exploitation and Competence Exploration	Zahra, Ireland, and Hitt, 2000	Customer orientation and Competitor orientation	Incremental innovation performance and Radical innovation performance
Jansen, Bosch and Volberda, 2005	Ambidexterity, Exploration/Exploitation, Organizational and environmental antecedents	Banking	Unit managers, European multiunit financial services, 363 respondents (collected)	Exploratory innovation and Exploitative innovation	Gibson and Birkinshaw, 2004 and He and Wong, 2004	Dynamism, Competitiveness, Decentralization, Formalization, Connectedness	–
Jansen, Bosch and Volberda, 2006	Organizational learning, Performance, Coordination mechanisms, Exploration / Exploitation	Banking	General manager, European financial services firms, 283 respondents (mail)	Exploratory innovation and Exploitative innovation	Developed their own	Dynamism, Competitiveness, Decentralization, Formalization, Connectedness	Financial performance

Lubatkin, Simsek, Ling and Veiga, 2006	Behavioral integration, Top management teams, Ambidexterity, Exploratory and Exploitative orientation	Manufacturing, Scientific and Technical Services and Construction	CEOs and Top Management Team, USA, 139 respondents (letter)	Exploratory orientation and Exploitation orientation	He and Wong 2004 and Benner and Tushman 2003	Behavioral Integration	Firm performance
Yalcinkaya, Calantone and Griffith, 2007	–	Consumer nondurable, consumer durable, capital goods and producer industry.	Owner or CEO, USA, 111 respondents (e-mail)	Exploitation capability and Exploration capabilities	Exploitation capability (Douglas and Judge, 2001) and Exploration capabilities (Collis, 1994)	Technological Resources and Marketing Resources	Market performance and Product Innovation
Menguc and Auh, 2008	Ambidexterity, Capability, Exploration, Exploitation, Market orientation, Prospectors, Defenders	Machinery, Food, Building and construction materials, Automotive, Furniture, Chemicals, Electronics and electrical appliances, Metal products, and printing and Publishing.	CEOs or equal positions, Australia, 260 respondents (letter)	Exploitation and Exploration	Gibson and Birkinshaw (2004)	–	Market orientation, Market share growth, Return on investment, Return on sales, Profit growth, Return on assets, Sales growth, Cash flow
Li and Lin, 2008	Market orientation, Innovation, Business enterprise, Competitive strategy	High-technology	Top manager, Marketing manager, Manufacturing managers, and R&D managers, Taiwan, 227 respondents (mail)	Radical (exploratory) innovations and Incremental (exploitative) innovations	Jansen et al. (2006)	Proactive and responsive market orientation, Strategic mission rigidity, Strategic consensus, Market opportunity appraisal, Learning orientation	–
Kristal, Huang and Roth, 2010	Supply chain management, Ambidexterity, Exploitation, Exploration, Combinative competitive capabilities, Empirical research	Automotive, High Tech, Chemical, Aerospace and Defence, Pharmaceutical, Consumer Goods, Food Manufacturing, Health Care Devices Manufacturing	Vice president, Director, General manager, Supply chain manager, and purchasing manager, USA, 174 respondents (e-mail)	Supply chain Exploitation Practices and Supply chain Exploration Practices	March, (1991); Levinthal and March, (1993); Lewin et al. (1999); Lewin and Volberda, (1999)	–	Competitive capabilities, Market share, Profit level

Slater, Hult and Olson, 2010	Marketing strategy creativity, Marketing strategy, implementation, Strategy types, Performance	20 different manufacturing and service industries	Senior marketing managers, USA, 180 respondents (letter)	Marketing Strategy Creativity and Strategy Implementation Effectiveness	Marketing strategy creativity (exploration) (Andrews & Smith, 1996) and Marketing strategy implementation effectiveness (exploitation) (Noble & Mokwa, 1999)	–	Firm performance
Sarkees, Hult and Prescott, 2010	Ambidextrous, Exploitation, Exploration, Implementation, Marketing	Publicly traded US firms	Senior marketing managers, USA, 135 respondents (e-mail)	Firm Exploitation, Firm exploration, Marketing exploitation, Marketing exploration	Ambidextrous firm strategy (Gibson and Birkinshaw 2004) and Marketing implementation (Menon, Bharadwaj, Adidam, and Edison, 1999)	–	Organizational performance
Hughes, Martin, Morgan and Robson, 2010	Innovation, Market strategy, Ambidexterity, International new ventures, Export performance	Multi-industry sample: high-technology sectors	Executive managers, Managers; Executive directors, CEOs, or other senior positions, Mexican, 260 respondents (telephone)	Explorative Innovation Behaviors and Exploitative Innovation Behaviors	He and Wong (2004), Lubatkin et al. (2006)	Marketing Differentiation Strategy, Cost Leadership Strategy	Export venture performance
Vorhies, Orr and Bush, 2011	Exploration, Exploitation, Marketing capabilities, Complementarity, Firm performance	Consumer durable goods, Consumer nondurable goods, Consumer services, Business durable goods, Business non-durable goods, Business services	Chief Marketing Executive, USA, 406 respondents (CME) (e-mail)	Marketing Exploitation Capabilities and Marketing Exploration Capabilities	Developed their own using Atuahene-Gima 2005; Kyriakopoulos and Moorman 2004; Leonard 1995; Levinthal and March 1993; March 1991; Slater and Narver 1995; Zollo and Winter 2002.	Market Knowledge Development	Customer Focused Marketing Capabilities and Objective Financial Performance

Jasmand, Blazevic and Ruyter, 2012	Ambidexterity, Cross-/up-selling, Customer service provision, Employee level, Regulatory modes	Call center employee, customer service representatives (CSR): understanding of ambidexterity at the employee level	sales with service customer service representatives' (CSRs) employees, 119 respondents (e-mail)	Cross-/up-selling and Customer service provision	Developed their own	CSR's Responses and CSR's Motivational Orientations	Sales performance, Customer Satisfaction and Efficiency
Chang and Hughes, 2012	SME firms, Ambidexterity, Innovation, Business performance	Manufacturing and service	Managing directors (MDs) and Chief Product Design Managers in SMEs, Scotland, 243 respondents (e-mail)	Exploitative innovation and Explorative innovation	Exploitative innovation Jansen et al. (2006), Explorative innovation Jansen et al. (2006), He and Wong (2004), and Birkinshaw, Hood, and Jonsson (1998)	–	Subjective performance
Li and Huang, 2012	Product development Proficiency, Ambidexterity Exploitation Exploration	Manufacturing and high-tech industry	Middle and senior R&D managers or Product development managers, China, 253 respondents (e-mail)	Exploitation and Exploration	Ambidexterity (Cao et al., 2009; Gibson & Birkinshaw, 2004; He & Wong, 2004)	Marketing proficiency and Technical proficiency	New product performance
Voss and Voss, 2012	Ambidexterity, Product exploration, Product exploitation, Market exploration, Market exploitation	Theatre Communications Group	Managing directors, USA, 162 respondents (e-mail)	Market exploration, Market exploitation, Product exploration, Product exploitation	Developed their own	–	Financial performance
Tollin and Schmidt, 2012	Marketing executives, Marketing logics, Marketing's influence, Ambidexterity and capabilities	Financial services, Mobile communication, Health-care products, Petrochemicals, and Household appliances	General Manager in Charge of Marketing, Director of Marketing; Director of Communication, Director of Marketing and Business Development; and Chief of Marketing/Marketing Manager, European, 140 respondents (mail)	Exploitation focus, Exploration focus	Srivastava et al. (1999), Tollin (2008), Tollin and Jones (2009)	–	New product, brand and growth performance

Source: Compiled by Author.

## Appendix 2. Survey Measures Used in the Research

<b>Marketing Exploitation</b> (considering your marketing actions over the last 3 years, to what extent do you participate in the following expression)
1- We focus on developing our existing marketing capabilities
2- We consistently reexamin information from previous projects and/or studies to modify existing marketing processes
3- We routinely adapt existing ideas when developing new marketing processes
4- We incrementally and routinely improve our existing marketing procedures
5- We focus changes in marketing procedures on improving efficiency
6- We are very efficient in serving our current customers
7- We work well with other functional units in this organization
<b>Marketing Exploration</b> (considering your marketing actions over the last 3 years, to what extent do you participate in the following expression)
1- Different from existing marketing capabilities, we continually develop new marketing procedures that are very different from others developed in the past
2- Different from existing marketing capabilities, we routinely introduce new marketing procedures which are daring, risky, or bold
3- We consistently develop new marketing capabilities which deliver different outputs from existing processes
4- Different from existing marketing capabilities, we create new uncommon marketing processes not used before
5- Different from existing marketing capabilities, we focus on developing new marketing capabilities for customer satisfaction
6- Different from existing marketing capabilities, we develop new marketing capabilities which leading industry
7- Different from existing marketing capabilities, we develop new marketing capabilities which flexibility to provide us
<b>Market Performance</b> (considering your market performance over the last 3 years, to what extent do you participate in the following expression)
1- Rate of retaining existing customers is high
2- Rate of increasing sales from existing customers is high
3- Rate of customer loyalty is high
4- Our reputation among our customers is high
5- Quality of service that we offer our customers is high
<b>Financial Performance</b> (considering your financial performance over the last 3 years, to what extent do you participate in the following expression)
1- Our operating profits is high
2- Our profit to sales ratio is high
3- Our profit return on investment is high
4- Our return on assets is high