See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/323107675

# Managing market innovation for competitive advantage: how external dynamics hold sway for financial services

#### Article in International Journal of Financial Services Management · January 2018

DOI: 10.1504/IJFSM.2018.10011051

Project

0 80 3 authors: Thomas Anning-Dorson University of Ghana 19 PUBLICATIONS 53 CITATIONS SEE PROFILE SEE PROFILE Robert Hinson University of Ghana 85 PUBLICATIONS 928 CITATIONS	CITATION	S	READS	
Thomas Anning-Dorson Mohammed Amidu   University of Ghana University of Ghana   19 PUBLICATIONS 53 CITATIONS   SEE PROFILE SEE PROFILE   Robert Hinson University of Ghana	0		80	
Viniversity of Ghana       Viniversity of Ghana         19 PUBLICATIONS       53 CITATIONS         SEE PROFILE       SEE PROFILE         SEE PROFILE       SEE PROFILE         Viniversity of Ghana       Viniversity of Ghana         Viniversity of Ghana       Viniversity of Ghana         Viniversity of Ghana       Viniversity of Ghana	3 autho	rs:		
19 PUBLICATIONS       53 CITATIONS       43 PUBLICATIONS       394 CITATIONS         SEE PROFILE       SEE PROFILE       SEE PROFILE         Robert Hinson       University of Ghana       University of Ghana		Thomas Anning-Dorson	Mohammed	d Amidu
SEE PROFILE SEE PROFILE           SEE PROFILE           Nobert Hinson           University of Ghana		University of Ghana	University of	of Ghana
Robert Hinson University of Ghana		<b>19</b> PUBLICATIONS <b>53</b> CITATIONS	43 PUBLICATI	IONS <b>394</b> CITATIONS
Robert Hinson University of Ghana		SEE PROFILE	SEE PROFI	IF
University of Ghana				
		Robert Hinson		
85 PUBLICATIONS 928 CITATIONS		University of Ghana		
		85 PUBLICATIONS 928 CITATIONS		
SEE PROFILE		SEE PROFILE		
	ne of	f the authors of this nublication are all	o working on these related pr	niects
Some of the authors of this publication are also working on these related projects:	Joine O		o working on these related pro	ojects.
Some of the authors of this publication are also working on these related projects:				
Some of the authors of this publication are also working on these related projects:	Project	Financial Services Marketing View p	oject	

Corporate Social Responsibility in Africa View project

All content following this page was uploaded by Mohammed Amidu on 17 March 2018.

## Managing market innovation for competitive advantage: how external dynamics hold sway for financial services

## Thomas Anning-Dorson\*

Department of Marketing and Entrepreneurship, University of Ghana Business School, University of Ghana, Legon, Ghana Email: thomasdorson@gmail.com \*Corresponding author

## Robert Ebo Hinson

University of the Free State Business School, Bloemfontein, South Africa and Department of Marketing and Entrepreneurship, University of Ghana Business School, University of Ghana, Legon, Ghana Email: rhinson@ug.edu.gh

### Mohammed Amidu

Department of Accounting, University of Ghana Business School, University of Ghana, Legon, Ghana Email: amidu@ug.edu.gh

Abstract: From the complexity theory, it is argued that external factors largely determine the effectiveness of firm-level strategies. Hence, firms must seek to align their strategies such as market innovation with the prevailing business environment to achieve competitive advantage. We investigate the moderating effect of three environmental factors, regulatory regime, competitive intensity and customer demand on the relationship between innovation and competitive advantage creation in financial services firms. Data were collected from the Ghana's financial services sector with a focus on banking and insurance institutions. Constructs were validated through confirmatory factor analysis while robust regressions estimates were run to test their hypothesised relationships. We found that both competitive intensity and regulatory regime positively increase the effect of market innovation on competitive intensity and regulatory regime has a positive effect while the interaction between customer demand and regulatory regime dampens the positive relationship

Copyright © 200X Inderscience Enterprises Ltd.

between market innovation and competitive advantage creation. The concurrent occurrences of the three factors were found to have a negative moderating effect.

**Keywords:** market innovation; competitive advantage; financial services; regulatory regime; competitive intensity; customer demand.

**Reference** to this paper should be made as follows: Anning-Dorson, T., Hinson, R.E. and Amidu, M. (XXXX) 'Managing market innovation for competitive advantage: how external dynamics hold sway for financial services', *Int. J. Financial Services Management*, Vol. X, No. Y, pp.xxx–xxx.

**Biographical notes:** Thomas Anning-Dorson (PhD) works with the Department of Marketing and Entrepreneurship, University of Ghana Business School. His research area covers, innovation, competitive strategy, services management and emerging markets. He has published in journals such as *Journal of Business Research, International Marketing Review, International Journal of Innovation Management, Marketing Intelligent and Planning*, and *European Journal of Innovation Management*.

Robert Ebo Hinson is Professor of Marketing at the University of Ghana Business School and a research associate at the University of the Free State Business School in Bloemfontien, South Africa. He holds doctorate degrees in Marketing and International Business.

Mohammed Amidu is an Associate Professor at the University of Ghana Business School. He earned his PhD in Banking from Southampton Business School, University of Southampton, UK. He is a researcher with African Economic Research Consortium (AERC). He has also held Visiting Scholar positions at the International Monetary Fund (IMF), Washington DC. Currently, he is part of a collaborative research project on "Delivering inclusive financial development and growth" funded by Department for International Development (DFID), and Economic and Social Research Council (ESRC). He has published in the European Journal of Finance, Review of Quantitative Finance and Accounting, International Review of Financial Analysis, and Accounting Research Journal.

#### 1 Introduction

Financial service markets are inundated with the introduction of number of innovations in the light of keen competition in these markets (see Nejad and Estelami, 2012; Bobillo et al., 2006; Odonkor et al., 2011; Abuzayed et al., 2012; Anning-Dorson et al., 2017). Some of these innovations include product, process, pricing, promotional and market innovations, all in an attempt to enhance performance. One of the key innovation activities that appear to be mostly adopted by financial service firms comprises responding to market needs through branch expansion and market development, which epitomises market innovation. Market innovations come in the form of the creation and identification of new markets and needs; provision for such markets and needs; and reaction to changes in the market based on the intelligence. A lot of studies have found that physical presence and market development of financial service firms in a particular market attract customers (see Hinson et al., 2009; Narteh, 2013; Narteh and Kuada,

2014). This, therefore, suggests that a financial service firm's capacity to release their external dynamic capabilities through the implementation of market innovations would yield positive returns (Anning-Dorson, 2016a). However, what has not been adequately explored in the financial services literature especially in contexts where accessibility and proximity are considered crucial (see Hinson et al., 2009; Narteh, 2013) is the extent to which these factors influence the bottom-line and improve competitiveness.

The extent to which moves that are geared towards achieving competitive position and improved financial performance is linked to the fitness of the institution's innovation strategy to the changing environment needs further interrogation to understand their implications (Anning-Dorson et al., 2015; Caldart and Ricart, 2004). Corporate success and failure are products of interactions between an organisation's strategies and the changing business environment (Mason, 2007). The application of the complexity theory calls for an adaptation of the firm to its environment to ensure strategic success (McArthur and Nystrom, 1991). The complexity theory suggests that the relationship between variables is not always linear and that circumstances and events may alter such relationships (Urry, 2005). Understanding how the business environment influences the effect of the strategic pursuit of financial service firms (i.e. market innovations) on competitive advantage creation and enhanced performance should be of critical concern to both practitioners and academics.

Studies on single environmental factors such as the regulatory environment, competition or customer demand does not offer adequate strategic insight for the development and implementation of strategies (see Park et al., 2014; Lin et al., 2013; Horbach et al., 2012). In this regard, managers are challenged with the issue of how best to fathom the best form of strategy to adopt (develop and implement), when to adopt and the extent of adoption in a challenging business environment. The complicated business environment suggests that firms would have to deal with different environmental uncertainties concurrently. This has different implications on performance and competitiveness of a firm; and therefore suggests that a firm's choice of a strategy must be mapped against different types of environmental uncertainties singularly and in combination to assess the viability. The extant literature on strategic management has largely dealt with single environment conditional effect on strategy implementation (see Palmer et al., 2001; Park et al., 2014; Aghion et al., 2014). The insights provided by these singular effects limit our understanding of the interaction effect that multiple environmental conditions might have on a particular strategic choice. Sundbo (1997) for instance in the strategic innovation paradigm asserts that innovation as a strategy is largely driven by the market; and that the success of such a strategy is conditioned on the market situation. This market situation can be reflected in the form of customer demand, competitive intensity and regulatory regimes that the service firm faces (Sundbo, 1997; de Brentani, 2001; Thakur and Hale, 2013). Effectively, a singular or combinatory effect of the three conditions for example can be varied in terms of the success levels of a strategy in creating the needed competitive advantage. This study considers it important to understand how a strategy such as market innovation that is intended to attract customers and enhance competitive advantage would fare under different environmental circumstances. The next section presents the theoretical background and the hypotheses; then a discussion of the methods, results, discussions and implications; and closes out with conclusions.

#### 2 Theoretical background and hypotheses

The complexity theory explains that the direct effect of one variable on another may change depending on the prevailing circumstances (Urry, 2005). The analogy of liquid turning into gas best explains how the direct relationship between variables may be altered under different circumstances. Gladwell (2002) states that if a system passes a particular threshold with minor changes in the controlling variables, switches occur such that a liquid turns into a gas. This emphasises the point that the direct relationship between innovation and performance that has largely been found to be positive can change depending on certain conditions (see Anning-Dorson, 2016a; Fischer and Fröhlich, 2013). In a highly regulated and competitive business such as financial services, three key variables may redirect the relationship effect, i.e. customer demand, competitive intensity and the regulatory regime. The strategic management literature shows that strategic success is dependent on the environmental conditions (Roberts and Amit, 2003) and that it is important to understand the effect of these conditions. Danneels (2004) asserts that gaining knowledge on the environment is crucial to the successful development and implementation of innovation strategies. The current paper posits that competitive intensity, regulatory regime and customer demand moderate the relationship between strategy and competitive advantage creation in financial services sector.

#### 2.1 Market innovation and competitive advantage

Innovation generally is positively related to competitive advantage creation (Dess and Picken, 2000; Bobillo et al., 2006; Otero-Neira et al., 2009; Lew and Sinkovics, 2013). In services, empirical findings have suggested that innovation is linked with competitiveness and also seen as an important strategic option for competitive advantage creation (Darroch and McNaughton, 2002; Grawe et al., 2009). Helfat et al. (2009) opine that an organisation with capacity to innovate is a type of dynamic capability that contributes significantly to competitive advantage development. Chen and Tsou (2012) argue that competitive advantage comes about as a result of exploiting internal strengths and external opportunities - a dynamic capability. Innovation is an inherent-organisational action that seeks to discover superior resource combination - a fundamental principle of dynamic capability theory - that aligns with environmental dynamics to create competitive advantage. The effective alignment of the internal strength and external opportunities helps financial service firms to gain unique insight into the future thereby reducing the uncertainty of the future at the expense of competitors - competitive advantage. Innovation generates valuable new resource combination, capability exploitation to generate new value and explore new markets and customer needs in a way that is specific to the financial service firm. One of such potent innovations that generate new value and explore new markets is market innovation.

In Anning-Dorson's (2016b) conceptualisation of innovation in service, he captured market innovation as reacting to market changes, being a game changer, identifying and marketing to special needs and identifying unmet needs, which result from service intelligence gathering. Market innovation is therefore meant to address the rapidly changing industry environment through the integration, building and reconfiguration of the internal and external competencies (Teece et al., 1997). Anning-Dorson (2016b) emphasises that market innovation is one type of innovation that helps a firm to release

its external capabilities to create competitive advantage. Therefore, financial service firms seek to create competitive advantage as they seek to expand their operations and extend their service touch points.

Market innovations are therefore expressed through sensing and reacting to market opportunities and threats better than the competition. Financial service firms create competitive advantage by their actions on the marketplace. Such competitive actions include identification and satisfaction of unmet needs in markets, reacting quickly to new opportunities on markets, creation and identification of new markets and serving special needs profitably. Financial service firms can create competitive advantage by carefully timing their service extension into a new market and grasping market trends to inform their marketing actions (Grawe et al., 2009; Ko and Lu, 2010). Hence, we hypothesise that:

*Hypothesis 1: Market innovation will be positively and significantly related to competitive advantage.* 

## 2.2 Moderation effect of competitive intensity, regulatory regime and customer demand

It can be argued that one way that businesses may generate and preserve a competitive advantage is through some type of innovation. Top managers have cited innovation as a single most critical competitive advantage source (Van de Ven, 1986; Palmer et al., 2001). Empirical research has shown a positive relationship between innovation and performance, with innovation being seen as an important ingredient for firms to survive increasing competitiveness (Palmer et al., 2001). Innovation may contribute directly to the long-term viability of operations by enabling a firm to gain and maintain a competitive advantage in the marketplace. However, innovation can also be a risky proposition (Calantone et al., 1994). The uncertainty in a changing business environment may complicate the performance benefit that may naturally accrue to the innovating firm. D'Este et al. (2012) posit that attempting to be an innovator can be very costly, with no assurance of adequate return. Additionally, innovation may not generate the needed revenues to offset the cost of it. Innovations may confer a temporary competitive advantage may not be sustainable (Palmer et al., 2001).

The possible negative effect of innovation on competitiveness and performance can be explained by the environmental uncertainties that may come up during innovation implementation. The strategic management literature asserts that the effectiveness of a firm's strategic orientation is a function of the environment within which it operates (Jansen et al., 2006). Zahra et al. (1999) confirm that the environmental conditions under which firms operate significantly impact on strategy implementation and the expected outcomes. This paper therefore posits that environmental/market conditions such as competitive intensity, customer demand and regulatory regime will influence the relationship between innovation and firm performance.

Nations and industries alike set up institutions to regulate and oversee the activities of competing firms to protect both customers and industry players. The term regulation generally refers to the implementation of rules by public authorities and governmental bodies to influence market activity and the behaviour of private actors in the economy (Blind, 2012). Such interventions in the market are justified to the extent that they maximise collective welfare, including reaching some distributive goals. The financial

services sector is considered as one of the most regulated (Zineldin, 2005). Regulators attempt to introduce fairness and sanity in the financial service industry. The financial crises that hit the world have further heightened the extent of regulations in the sector. Activities of players are being streamlined to cut down on the excesses that may threaten financial stability of economies. The regulations in the sector may manifest in economic or institutional ways (OECD, 1997; Blind, 2012; Bourlès et al., 2013).

Economic regulations are targeted at avoiding market failures generated by the behaviour of single players within the markets. In financial services, they are focused on competition policies, price regulation, legal framework and market entry regulations. Empirical studies such as Viscusi and Moore (1993) confirm that high level of regulations have negative effect on innovation. Regulations in financial services are put in place to monitor and regulate competition to safeguard both investors and clients. The regulatory environment tends to limit firms ability to innovative as cost of innovating becomes higher than the returns (Parente and Prescott, 1994). The empirical literature on innovation and regulations has shown negative relation over time. In the study of Bassanini and Ernst (2002), a negative correlation was found between the intensity of market regulations and the intensity of innovation and development, while Swann (2005) shows that the content of regulations is not only an important source for innovation but also a severe obstacle for innovation activities. In the service sector, Prieger (2002) confirms a negative influence of stricter regulation on service innovations. We therefore postulate that the regulatory regime will moderate the positive relationship between market innovation and service firm competitive advantage creation.

This study adapts the definition of competitive intensity by Auh and Mengue (2005) that expresses it as situation where competition is fierce due to the presence of numerous competitors and the lack of opportunities for further growth. Competitive pressures reside in different strategic settings requiring organisations to understand their competitive environment and choose processes that are most effective within that context (Sanders Jones and Linderman, 2014; Uddin and Suzuki, 2014). It is essential that the environment is duly considered in the strategic management processes. This is because organisations as open systems would have the environmental factors impacting on their strategic effectiveness (Katz and Kahn, 1978). Lawrence and Lorsch (1967) extended systems theory and proposed that organisational effectiveness and by extension strategic activities are influenced by the degree of fit between an organisation's activities and its environment. The principle behind this contingency theory is that the processes such as market innovation of an organisation must match its environmental context (i.e. competitive intensity) in order to be effective (Drazin and Van de Ven, 1985; Sanders Jones and Linderman, 2014). In a very competitive environment, the existing processes and regular activities of market innovation may no longer be effective and organisational competitiveness may suffer (Donaldson, 2001). In highly competitive periods, an attempt by a financial service firm to take risks in market innovation can be expensive and difficult to post positive return on investment thereby reducing competitiveness. We, therefore, posit that competitive intensity will dampen the positive relationship between market innovation and firm competitiveness.

Chen and Tsou (2012) assert that consumer research regarding innovation shows a consistent result of customers increasingly demanding for innovation and that customer demand influences the beneficial effects of an innovation drive (Pantano and Viassone, 2014). Consumers favourably respond to innovative activities of firms especially if such innovations offer convenience and more value. Service firms that understand their

customers and are able adjust themselves to the evolving demand of their customers are more competitive. Studies by Gungor and Gozlu, (2012) and Saemundsson and Candi (2014) indicate that customer expectation is considered one of the most important external factors in innovation. We argue in this study that considering the fact that market innovations are targeted at creating and identifying new markets and needs, providing for such markets and needs, and reacting to changes in the market based on the intelligence, increasing customer demand will positively moderate the effect of market innovation. Financial service firms that are able to invest and implement market innovation in high demand periods will be meeting the needs of consumers, which will in effect enhance the competitiveness of such firms. We therefore surmise that customer demand periods will have a positive effect on the relationship between market innovation and competitive advantage creation.

Considering the fact that environmental factors may occur concurrently, we expect the combinations of the three factors to have a moderating effect on the relationship between market innovation and firm competitiveness. We argue that environmental factors do not occur singularly and that the concurrent existence of environmental factors will influence strategic success. Based on the above arguments, we put forward the following moderation hypotheses:

Hypothesis 2: The concurrent existence of environmental factors ((a) customer demand and competitive intensity; (b) customer demand and regulatory regime; (c) competitive intensity and regulatory regime; and (d) all the three) will moderate the relationship between market innovation and firm competitive.

#### 3 Methods

#### 3.1 Sample and data description

Sample for the empirical analysis of the study was collected from the Ghana financial services sector. Coffie and Owusu-Frimpong (2014) have underscored the importance of the service sector especially the financial service sub-sector to the Ghanaian economy in terms of employment and contribution to GDP. Among other things, Adams et al. (2015) assert that financial service firms play an important role in providing the needed finance to support private-sector development initiatives in emerging economies such as Ghana. The critical role played by the financial service sector gives adequate justification for the focus of this study (for details, see Owusu-Frimpong et al., 2011). The sample for this study was created out of a large service firm survey on innovation, competition and performance in Ghana. Financial services firms within the larger survey constituted of 27 universal banks and 390 micro-finance institutions that were listed under the registry of banking firms under the Bank of Ghana. A total of 106 Insurance Firms were included with a breakdown of 18 Life, 26 General and 61 Brokerage firms also from the list provided by The Insurance Commission (see Anning-Dorson et al., 2015). The survey instruments measured the constructs of interest on a seven-point Likert scale (1 = strongly disagree; 7 = strongly agree). Firms that participated were those who had been initially visited and/or emailed and had agree to be part. The survey instrument specifically requested a management member to fill the questionnaire. Two reminders and follow-ups were made within a six-week period. After excluding those who

significantly could not complete the questionnaire, a total of 232 were considered eligible for the analysis. As done in Anning-Dorson et al. (2013), the study checked for non-response bias by comparing the responses collected within the first three weeks to that of last three weeks.

#### 3.2 Measures

The current study was interested in five major constructs: market innovation, competitive advantage, customer demand, competitive intensity and regulatory regime.

*Market innovation:* It reflects creation and identification of new markets and needs, providing for such markets and needs and reaction to changes in the market based on the intelligence. This was measured based on the works of Alam (2011), Ko and Lu (2010), and Alegre et al. (2006). Market innovation was measured in terms of the firm's ability to identify potential markets faster, secure first-mover advantage in product and market development, enter new markets with new products and grasp market trends. A total of six items were used to measure market innovation. All items were measured on a seven-point Likert scale.

*Competitive advantage:* Competitive advantage allows the service firm to produce and deliver services that meet customer needs and wants (Akimova, 2000). Following the approach developed by Hooley et al. (1993), the study measured competitive advantages across the marketing mix areas. For the purpose of this study, competitive advantage was measured by competitive pricing, service quality, speed of reaction to customer needs, company/brand image, personal selling and product range offered. Others include distribution coverage, market research, product performance, cost advantage, after sales service and marketing communication. Studies such as Akimova (2000) used same factors to measure competitive advantage of firms.

*Customer demand:* Measures for customer demand were adapted from Calantone et al. (2002) and Alegre et al. (2006) to assess the current level of demand from customers, their penchant for new product, price sensitivity and customers' product preference due to time change.

*Regulatory regime:* Regulatory regime reflects the level of supervision and monitoring expressed over the activities of financial service firms. Since there was no universal measure for regulatory regime of the Ghanaian financial service sector, the current study measured the perception of managers regarding the level of regulatory restrictions across the different sub-sectors within the financial sector. This allowed us to deal with differences in regulatory differences that may come from different regulatory bodies. The study measured the regulatory regime based on the level of price regulations, licensing requirements for process and market entry, level of scrutiny for new service introduction. It further assessed the restrictions on innovation, approval for product and process improvement and market expansion.

*Competitive intensity:* Our conceptualisation of competitive intensity is based on the works of Jaworski and Kohli (1993) and Deng and Dart (1994) to assess the level of competition within the industry, promotional wars, competitive moves and matching of competitive offers.

Beyond the five major constructs, some firm-level characteristics were used as control variables. Following Wang (2008), the study controlled for firm size firm age, type of service, firm age, number of owners and form of ownership as having potential influence on the performance of service firm.

Informant evaluation: In line with established tradition (e.g. Morgan et al., 2012), we also assessed the competence of the respondents on three key areas: (1) knowledge about the questions asked; (2) accuracy of the answers provided; and (3) confidence in the answers provided. The informant competence measures were assessed on a seven-point Likert scale (1 = strongly disagree; 7 = strongly agree), and the average minimum score obtained was 6, which is very high and above Kumar's (1996) thresholds that advocate for retention of cases with individual responses above the mid-scale point of 4 in this study as a measure of high informant competency. We are therefore confident that the key informants in our research are competent.

#### 3.3 Validation of measures

To the extent that all the measures in our model used standard scales, without any new items added to them, no pretesting was required with an exploratory factor analysis (Hulland et al., 2017; Anning-Dorson, 2017a). For analysis of data for this work, Partial Least Squares-based Structural Equation Modelling (PLS-SEM) (Hair et al., 2016) was employed. Before examining the structural relationships, the measurement model was tested for reliability and validity of items and constructs. This process is in accordance with Anderson and Gerbing (1988) who recommended this two-step approach.

Table 1 shows the factor loadings, Average Variance Extracted (AVE) and constructs reliability. In order to test the internal consistency of the items used to measure each construct for each country, composite reliability (CR) of the construct has been examined. The value of composite reliability was calculated from the formula given by Hair et al. (2016). It is evident that for all the constructs, CR is more than the recommended value of 0.70 (Nunnally, 1978; Anning-Dorson, 2017a). Convergent validity was established by examining average variance extracted for each construct. It was found that for all constructs, AVE values were above the recommended cut-off of 0.5 (Fornell and Larcker, 1981).

#### 3.4 Common method bias

The study conducted two tests to show that common method bias was not a problem for the current study. A Lindell and Whitney's (2001) test was first conducted through the market variable approach before a Harman one-factor test. Both approaches showed that common method bias was not a problem for the current study.

 Table 1
 Measurement mode

Construct/items	Loadings
Market innovation: $AVE = 0.86$ ; $CR = 0.60$	
Our company constantly builds up its capacity to identify potential markets faster than competitors	0.761
Our company is quick in grasping and utilising market trends	0.697
Our new products/service offerings allow us to enter new markets	0.814
The firm often creates the opportunity to spread its innovative products/services easily across markets	0.838

 Table 1
 Measurement mode (continued)

Construct/items	Loadings
Customer demand: $AVE = 0.80$ ; $CR = 0.51$	
Our customers tend to look for new products all the time	0.614
Sometimes our customers are very price sensitive	0.793
New customers tend to have product-related needs that are different from those of our existing customers	0.653
In our kind of business, customers' product preferences change quite a bit over time	0.782
Competitive intensity: $AVE = 0.85$ ; $CR = 0.58$	
Competition in our industry is cutthroat	0.657
There are many promotion wars in our industry	0.744
Anything that one competitor can offer others can match readily	0.846
One hears of a new competitive move almost every day	0.810
Regulatory regime: $AVE = 0.83$ ; $CR = 0.62$	
Prices are highly regulated in our industry	0.692
There are strict licensing requirements before you enter the market	0.720
For every new service introduction, the firm must go through scrutiny before you launch	0.937
Competitive advantage: $AVE = 0.94$ ; $CR = 0.60$	
Competitive pricing	0.719
Cost advantage	0.819
After sales service	0.757
Marketing communication	0.744
Service quality	0.732
Speed of reaction to customer needs	0.714
Company/brand image	0.790
Personal selling	0.763
Product range offered	0.851
Distribution coverage	0.838
Marketing research	0.752
Product performance	0.817

#### 4 **Results**

After the items and measures were tested rigorously for their reliability and validity, we employed the partial least squares (PLS) approach for structural equation modelling (SEM), using the statistical package SmartPLS 3 (Ringle et al., 2014; Hair et al., 2017). We opted for the use of PLS-SEM over the statistical covariance-based methodologies for the two reasons (Barroso et al., 2010; Chin and Newsted, 1999; Hair et al., 2016; Kawalla et al., 2018): (a) because the number of observations is relatively small

(the sample has 232 cases) and PLS does not require a large data set; and (2) as PLS is a non-parametric technique, the data do not necessarily need to have a normal distribution. Our methodological procedure, therefore, follows recommendations of Anning-Dorson (2017a), Hair et al. (2016), and Marcoulides and Saunders (2006) as we a priori examine the measurement model results and then proceeded with the analysis of the structural model.

Having successfully tested our measurement model, we proceeded to evaluate the structural model. Table 2 presents the path coefficients along with the *t*-values. In assessing the moderation effects as hypothesised in H2a–H2g, a single indicant approach was adopted (Anning-Dorson, 2017b; Little et al., 2006). We initially, mean-centred all the variables involved in the moderation to reduce the possibility of multi-collinearity. We then created single indicants through the multiplicative approach to create the interaction terms. The single indicant interaction terms were then included in the final model whose results are displayed in Table 2.

It was our argument in H1 that financial service firms' pursuit of market innovations will result in positive and significant increase in competitive advantage. This was supported. The first set of H2 hypothesised that environmental factors such as competitive intensity, customer demand and regulatory environment will moderate the relationship between market innovation and competitive advantage. The results show that only regulatory regime at 95% significance level positively moderate the relationship between market innovation and competitive advantage. However, a 90% significance level was found for the positive moderation of competitive intensity while customer demand was not found to be a significant moderator.

On the three-way interaction moderation effects, the concurrent presence of customer demand and regulatory regime was found to negatively moderate the relationship between market innovation and competitive advantage. This implies that in periods where customer demand and regulatory regimes are high, the positive relationship between market innovation and competitive advantage is dampened. Conversely, the relationship between market innovation and competitive advantage is strengthened in periods where competitive intensity and regulatory regimes are high. The interaction effect of competitive intensity and customer demand, however, did not show any moderation effect between market innovation and competitive advantage. Lastly, in periods of high market demand, competitive intensity and regulatory regime, the relationship between market innovation and competitive advantage is dampened.

Table 2Structural model results

Paths specified	Standardised coefficient	t-values bootstrap <sup>a</sup>
Control relationships		
Size $\rightarrow$ Competitive Advantage	0.251	3.78***
Age $\rightarrow$ Competitive Advantage	-0.147	1.76*
Type of service $\rightarrow$ Competitive Advantage	0.244	2.69***
Foreignness $\rightarrow$ Competitive Advantage	-0.264	2.46**
No. of owners $\rightarrow$ Competitive Advantage	0.0202	0.28 <sup>ns</sup>
$Private/Public \rightarrow Competitive Advantage$	-0.0140	0.07 <sup>ns</sup>

Table 2Structur	al model re	esults (	continued)	
-----------------	-------------	----------	------------	--

Paths specified	Standardised coefficient	t-values bootstrap
Non-hypothesised direct relationships		
Competitive Intensity (CI) $\rightarrow$ Competitive Advantage	-0.179	3.69***
Customer Demand (CD) $\rightarrow$ Competitive Advantage	0.334	5.11***
Regulatory Restrictions (RR) $\rightarrow$ Competitive Advantage	0.0202	0.29 <sup>ns</sup>
Model relationships		
H1: Market Innovation (MI) $\rightarrow$ Competitive Advantage	0.463	7.84***
Two-way interaction		
H2a: MI $\times$ CI $\rightarrow$ Competitive Advantage	0.0750	1.78*
H2b: MI $\times$ CD $\rightarrow$ Competitive Advantage	0.0474	1.54 <sup>ns</sup>
H2c: MI × RR $\rightarrow$ Competitive Advantage	0.106	2.35**
Three-way interaction		
H2d: MI $\times$ CI $\times$ CD $\rightarrow$ Competitive Advantage	-0.0177	0.93 <sup>ns</sup>
H2e: MI × CI × RR $\rightarrow$ Competitive Advantage	0.0584	2.15**
H2f: MI × CD × RR $\rightarrow$ Competitive Advantage	-0.0572	2.27***
Four-way interaction		
H2g: MI × CI × CD × RR $\rightarrow$ Competitive Advantage	-0.0366	1.79**

Note: <sup>a</sup> The *t*-value bootstrap is computed using 1000 subsamples (Henseler et al., 2009)

 $R^2 = 0.58$ , \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1, <sup>ns</sup> = not significant.

#### 5 Discussion and implications

Financial service firms pursue market innovations with the aim of increasing the competitive advantage. Banks and insurance firms alike in Ghana are engaging in market innovations such as increasing their branch networks, pursuing market developments, quickly reacting to changing market needs, identifying and creating new markets in order to increase their competitiveness. The literature on market innovation supports the positive influence on competitive advantage creation and therefore might have informed the rush for market innovation. However, what has not been deeply thought about is the effect that environmental factors such as demand levels, competitive intensity and regulatory regimes may have on the positive relationship between market innovation and competitiveness. The results from the current study support previous findings that market innovation indeed helps create competitive advantage for firms (Darroch and McNaughton, 2002; Grawe et al., 2009; Otero-Neira et al., 2009; Lew and Sinkovics, 2013). The linear effect assessment within the financial service sector of Ghana as depicted by H1 shows that firms can create competitive advantage via their market innovations.

In the current study's assessment of how the effect of market innovation on competitive advantage is held sway by the dynamics of the environment, the results show

a complex picture. The findings of the study counter the linear relationship between market innovation and competitive advantage creation. In that the incidence of competitive intensity and regulatory regime will determine how effective market innovations will be in creation competitive advantage. The results show that in periods of high competitive intensity and regulatory regimes (singularly), there is a higher propensity for financial service firms to create competitive advantage out of their market innovations. This may be explained by the fact that when competition is high, customers look out for differences, which financial service firms can provide through market innovations. The implication is that financial service firms may increase their competitiveness through increasing branch network, pursuing market developments, quick reaction to market needs and creation of new markets. On the other hand, strict regulatory framework would mean cutback of freedom, which stifles other innovations such as product and process innovations. High regulatory regime provided restrictions on the number and kind of product introductions as well as process improvement. The implication of the finding is that firms that are able to pursue market innovations such as identifying and creating new markets are able to circumvent the restrictions impose by the regulatory regime and that create competitive advantage over the competition. The above confirms the findings of studies such as Park et al. (2014), Lin et al. (2013), Horbach et al. (2012) and Aghion et al. (2014) that environmental factors moderate the effect of innovation on competitiveness.

Our hypothesis that the dynamic nature of the business environment is such that there can be concurrent occurrence of environmental factors and that this can influence the effect of market innovation on competitiveness found support. The concurrent happening of high competitive intensity and regulatory regime positively moderated the effect of market innovation on competitive advantage. This implies that financial service firms should seek to create competitive advantage from the market innovation is high periods of competitive and regulatory system. Increasing market innovation in such periods would mean that firms are able to do better than the competition even when restrictions are impose on product and process innovation. Such restrictions may create similar products and services, as firms are limited on new product introduction. Market innovations allow financial service firms to create advantages if they are able to identify and create new markets for their existing products and services. Pursuing market development and quickly reacting to changing market needs create advantage, which increases overall performance.

Conversely, firms are not able to create advantages from market innovation when customer demand and regulatory regimes are high. This may be explained by the fact that investing in market development may not yield good returns for the firm, as it may be more profitable to expend all energy to service the current market even in high regulatory regimes. The negative moderation effect implies that service firms will find their competitive advantage eroding in concurrent occurrences of high customer demand and regulatory regime. The same explanation can be given in situations where all the three environmental factors are witnessing high incidence rate. Financial service firms should rather limit their market innovation investments in such periods if they are to maintain their competitiveness.

#### 6 Conclusion

Although service firms such as those operating in financial sector may benefit from market innovations, there is the need to find a strategic fit for such strategy and the prevailing environmental condition. This study concludes that the extent to which firms' activities that are geared towards achieving competitive position is linked to the fitness of such activities to the changing environment needs determines the extent of success. This conclusion reinforces Mason's (2007) assertion that corporate success and failure are products of interactions between an organisation's strategies and the changing business environment. The current study has provided the needed understanding on how the business environment influences the effect of the strategic pursuit of financial service firms (i.e. market innovations) on competitive advantage creation.

The current study has expanded the complexity theory by moving beyond single environmental factor effect to multiple and complex interplay of factors and their effect on strategic outcome. It further emphasises Urry's (2005) theory that relationship between variables is not always linear and that circumstances and events may alter such relationships.

Every empirical research has limitations and this study is no different. The findings in this study may be endogenous to contextual factors and therefore must guide its usage. Future research may compare different contexts to ascertain if the effects found in this study are generalisable. Others may also look at multiple countries to confirm the stability of our model. Future studies may also look at other forms of innovations and how they are impacted by environmental factors singularly and in combination.

#### References

- Abuzayed, B., Al-Fayoumi, N. and Gharaibeh, H. (2012) 'Competition in MENA countries banking markets', *International Journal of Financial Services Management*, Vol. 5, No. 3, pp.272–301.
- Adams, K., Debrah, Y.A., Williams, K. and Mmieh, F. (2015) 'Why on earth should foreign banks invest in Africa's financial services sector? Evidence from financial multinationals in Ghana', *Thunderbird International Business Review*, Vol. 57, No. 6, pp.445–462.
- Aghion, P., Bechtold, S., Cassar, L. and Herz, H. (2014) *The Causal Effects of Competition on Innovation: Experimental Evidence*, No. w19987, National Bureau of Economic Research.
- Akimova, I. (2000) 'Development of market orientation and competitiveness of Ukrainian firms', European Journal of Marketing, Vol. 34, Nos. 9/10, pp.1128–1148.
- Alam, I. (2011) 'Exploring cross-national differences in service innovation process and strategy in developing and developed nations', *Journal of Service Management*, Vol. 22, No. 5, pp.586–606.
- Alegre, J., Lapiedra, R. and Chiva, R. (2006) 'A measurement scale for product innovation performance', *European Journal of Innovation Management*, Vol. 9, No. 4, pp.333–346.
- Anderson, J.C. and Gerbing, D.W. (1988) 'Structural equation modeling in practice: a review and recommended two-step approach', *Psychological Bulletin*, Vol. 103, No. 3, pp.411–423.
- Anning-Dorson, T. (2016a) 'Interactivity innovations, competitive intensity, customer demand and performance', *International Journal of Quality and Service Sciences*, Vol. 8, No. 4. pp.534–554.
- Anning-Dorson, T. (2016b) 'Innovation development in service firms: a three-model perspective', International Journal of Services and Operations Management, Vol. 28, No. 1, pp.64–80.

- Anning-Dorson, T. (2017a) 'Customer involvement capability and service firm performance: the mediating role of innovation', *Journal of Business Research*, pp.1–12. Available online at: https://doi.org/10.1016/j.jbusres.2017.07.015
- Anning-Dorson, T. (2017b) 'How much and when to innovate: the nexus of environmental pressures, innovation and service firm performance', *European Journal of Innovation Management*, Vol. 20, No. 4, pp.599–619.
- Anning-Dorson, T., Hinson, R.E. and Amidu, M. (2015) 'Environmental moderators and performance effect of interactivity innovation: study of the services sector of an emerging economy', *Proceedings of 2015 Annual Conference of the Emerging Markets Conference Board*, pp.31–32.
- Anning-Dorson, T., Kastner, A. and Mahmoud, M. (2013) 'Investigation into mall visitation motivation and demographic idiosyncrasies in Ghana', *Management Science Letters*, Vol. 3, No. 2, pp.367–384.
- Anning-Dorson, T., Nyamekye, M.B., Nyamekye, M.B. and Odoom, R. (2017) 'Effects of regulations and competition on the innovativeness-performance relationship: evidence from the financial services industry', *International Journal of Bank Marketing*, Vol. 35, No. 6, pp.925–943.
- Auh, S. and Mengue, B. (2005) 'Balancing exploration and exploitation: the moderating role of competitive intensity', *Journal of Business Research*, Vol. 58, No. 12, pp.1652–1661.
- Barroso, C., Carrión, G.C. and Roldán, J.L. (2010) 'Applying maximum likelihood and PLS on different sample sizes: studies on SERVQUAL model and employee behavior model', *Handbook of Partial Least Squares*, Springer Berlin Heidelberg, pp.427–447.
- Bassanini, A. and Ernst, E. (2002) Labour Market Institutions, Product Market Regulation, and Innovation: Cross Country Evidence, ECO/WKP(2002)2, OECD, Paris.
- Blind, K. (2012) 'The influence of regulations on innovation: a quantitative assessment for OECD countries', *Research Policy*, Vol. 41, No. 2, pp.391–400.
- Bobillo, A.M., Sanz, J.A. and Gaite, F.T. (2006) 'Innovation investment, competitiveness, and performance in industrial firms', *Thunderbird International Business Review*, Vol. 48, No. 6, pp.867–890.
- Bourlès, R., Cette, G., Lopez, J., Mairesse, J. and Nicoletti, G. (2013) 'Do product market regulations in upstream sectors curb productivity growth? Panel data evidence for OECD countries', *Review of Economics and Statistics*, Vol. 95, No. 5, pp.1750–1768.
- Calantone, R.J., Cavusgil, S.T. and Zhao, Y. (2002) 'Learning orientation, firm innovation capability, and firm performance', *Industrial Marketing Management*, Vol. 31, No. 6, pp.515–524.
- Calantone, R.J., Di Benedetto, C.A. and Bhoovaraghavan, S. (1994) 'Examining the relationship between degree of innovation and new product success', *Journal of Business Research*, Vol. 30, No. 2, pp.143–148.
- Caldart, A.A. and Ricart, J.E. (2004) 'Corporate strategy revisited: a view from complexity theory', *European Management Review*, Vol. 1, No. 1, pp.96–104.
- Chen, J-S. and Tsou, H-T. (2012) 'Performance effects of IT capability, service process innovation, and the mediating role of customer service', *Journal of Engineering and Technology Management*, Vol. 29, pp.71–94.
- Chin, W.W. and Newsted, P.R. (1999) 'Structural equation modeling analysis with small samples using partial least squares', *Statistical Strategies for Small Sample Research*, Vol. 1, No. 1, pp.307–341.
- Coffie, S. and Owusu-Frimpong, N. (2014) 'Alternative positioning strategies for services in Ghana', *Thunderbird International Business Review*, Vol. 56, No. 6, pp.531–546.
- D'Este, P., Iammarino, S., Savona, M. and von Tunzelmann, N. (2012) 'What hampers innovation? Revealed barriers versus deterring barriers', *Research Policy*, Vol. 41, No. 2, pp.482–488.
- Danneels, E. (2004) 'Disruptive technology reconsidered: a critique and research agenda', *Journal of Product Innovation Management*, Vol. 21, No. 4, pp.246–258.

- Darroch, J. and McNaughton, R. (2002) 'Examining the link between knowledge management practices and types of innovation', *Journal of Intellectual Capital*, Vol. 3, No. 3, pp.210–222.
- de Brentani, U. (2001) 'Innovative versus incremental new business services: different keys for achieving success', *Journal of Product Innovation Management*, Vol. 18, No. 2, pp.169–187.
- Deng, S. and Dart, J. (1994) 'Measuring market orientation: a multi-factor, multi-item approach', *Journal of Marketing Management*, Vol. 10, No. 8, pp.725–742.
- Dess, G.G. and Picken, J.C. (2000) 'Changing roles: leadership in the 21st century', Organizational Dynamics, Vol. 28, No. 1, pp.18–34.
- Donaldson, L. (2001) The Contingency Theory of Organizations, Sage, Thousand Oaks, CA.
- Drazin, R. and Van de Ven, A.H. (1985) 'Alternative forms of fit in contingency theory', *Administrative Science Quarterly*, Vol. 30, No. 4, pp.514–539.
- Fischer, M.M. and Fröhlich, J. (Eds) (2013) *Knowledge, Complexity and Innovation Systems*, Springer Science and Business Media, Berlin.
- Fornell, C. and Larcker, D.F. (1981) 'Evaluating structural equation models with unobservable variables and measurement error', *Journal of Marketing Research*, Vol. 18, No. 1, pp.39–50.
- Gladwell, M. (2002) *The Tipping Point: How Little Things can make a Big Difference*, Little, Brown, Boston, MA.
- Grawe, S.J., Chen, H. and Daugherty, J.P. (2009) 'The relationship between strategic orientation, service innovation, and performance', *International Journal of Physical Distribution and Logistics Management*, Vol. 39, No. 4, pp.282–300.
- Gungor, O.D. and Gozlu, S. (2012) 'Influencing factors of innovation for Turkish companies', International Journal of Quality and Service Sciences, Vol. 4, No. 4, pp.374–386.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M. and Thiele, K.O. (2017) 'Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods', *Journal of the Academy of Marketing Science*, Vol. 45, No. 5, pp.616–632.
- Hair Jr., J.F., Hult, G.T.M., Ringle, C. and Sarstedt, M. (2016) 'A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), Sage Publications, Thousand Oaks, CA.
- Helfat, C.E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D. and Winter, S.G. (2009) *Dynamic Capabilities: Understanding Strategic Change in Organizations*, John Wiley and Sons, New York.
- Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009) 'The use of partial least squares path modeling in international marketing', *Advances in International Marketing*, Vol. 20, No. 1, pp.277–319.
- Hinson, R., Owusu-Frimpong, N. and Dasah, J. (2009) 'Key motivations for bank patronage in Ghana', *International Journal of Bank Marketing*, Vol. 27, No. 5, pp.381–399.
- Hooley, G.J., Beracs, J. and Kolos, K. (1993) 'Marketing strategy typologies in Hungary', *European Journal of Marketing*, Vol. 27, Nos. 11/12, pp.80–101.
- Horbach, J., Rammer, C. and Rennings, K. (2012) 'Determinants of eco-innovations by type of environmental impact – the role of regulatory push/pull, technology push and market pull', *Ecological Economics*, Vol. 78, pp.112–122.
- Hulland, J., Baumgartner, H. and Smith, K.M. (2017) 'Marketing survey research best practices: evidence and recommendations from a review of JAMS articles', *Journal of the Academy of Marketing Science*, pp.1–17. Available online at: https://doi.org/10.1007/s11747-017-0532-y
- Jansen, J.J., Van Den Bosch, F.A. 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.
- Jaworski, B.J. and Kohli, A.K. (1993) 'Market orientation: antecedents and consequences', *The Journal of Marketing*, Vol. 57, No. 3, pp.53–70.
- Katz, D. and Kahn, R.L. (1978) The Social Psychology of Organizations, Vol. 2, Wiley, New York.

- Kawalla, C., Höck, M., Ullmann, M., and Ringle, C.M. (2018) 'An empirical examination of the thickness profile formation of twin-roll-cast magnesium strips', *Archives of Civil and Mechanical Engineering*, Vol. 18, No. 1, pp.227–234.
- Ko, H-T. and Lu, H-P. (2010) 'Measuring innovation competencies for integrated services in the communications industry', *Journal of Service Management*, Vol. 21, No. 2, pp.162–190.
- Kumar, R. (1996) *Research Methodology A Step by Step Guide for Beginners*, Addison Wesley, Sydney.
- Lawrence, P.R. and Lorsch, J.W. (1967) 'Differentiation and integration in complex organizations', Administrative Science Quarterly, Vol. 12, No. 1, pp.1–47.
- Lew, Y.K. and Sinkovics, R.R. (2013) 'Crossing borders and industry sectors: behavioral governance in strategic alliances and product innovation for competitive advantage', *Long Range Planning*, Vol. 46, No. 1, pp.13–38.
- Lin, R.J., Tan, K.H. and Geng, Y. (2013) 'Market demand, green product innovation, and firm performance: evidence from Vietnam motorcycle industry', *Journal of Cleaner Production*, Vol. 40, No. 10, pp.101–107.
- Lindell, M.K. and Whitney, D.J. (2001) 'Accounting for common method variance in crosssectional research designs', *Journal of Applied Psychology*, Vol. 86, No. 1, pp.114–121.
- Little, T.D., Bovaird, J.A. and Widaman, K.F. (2006) 'On the merits of orthogonalizing powered and product terms: implications for modeling interactions among latent variables', *Structural Equation Modeling*, Vol. 13, No. 4, pp.497–519.
- Marcoulides, G.A. and Saunders, C. (2006) 'Editor's comments: PLS: a silver bullet?', MIS Quarterly, Vol. 36, pp.3–5.
- Mason, R.B. (2007) 'The external environment's effect on management and strategy: a complexity theory approach', *Management Decision*, Vol. 45, No. 1, pp.10–28.
- McArthur, A.W. and Nystrom, P.C. (1991) 'Environmental dynamism, complexity, and munificence as moderators of strategy-performance relationships', *Journal of Business Research*, Vol. 23, No. 4, pp.349–361.
- Morgan, N.A., Katsikeas, C.S. and Vorhies, D.W. (2012) 'Export marketing strategy implementation, export marketing capabilities, and export venture performance', *Journal of the Academy of Marketing Science*, Vol. 40, No. 2, pp.271–289.
- Narteh, B. (2013) 'SME bank selection and patronage behaviour in the Ghanaian banking industry', *Management Research Review*, Vol. 36, No. 11, pp.1061–1080.
- Narteh, B. and Kuada, J. (2014) 'Customer satisfaction with retail banking services in Ghana', *Thunderbird International Business Review*, Vol. 56, No. 4, pp.353–371.
- Nejad, M.G. and Estelami, H. (2012) 'Pricing financial services innovations', Journal of Financial Services Marketing, Vol. 17, No. 2, pp.120–134.
- Nunnally, J.C. (1978) *Psychometric Theory*, 2nd ed., McGraw-Hill Book Company, New York, NY.
- Odonkor, T.A., Osei, K.A., Abor, J. and Adjasi, C.K. (2011) 'Bank risk and performance in Ghana', *International Journal of Financial Services Management*, Vol. 5, No. 2, pp.107–120.
- OECD (1997) 'The OECD Report on Regulatory Reform': Volume I: Sectoral Studies, OECD, Paris.
- Otero-Neira, C., Lindman, M.T. and Fernández, M.J. (2009) 'Innovation and performance in SME furniture industries: an international comparative case study', *Marketing Intelligence and Planning*, Vol. 27, No. 2, pp.216–232.
- Owusu-Frimpong, N., Ejye Omar, O. and Mmieh, F. (2011) 'An understanding of baby boomers' attitudes toward financial services products in Ghana', *Thunderbird International Business Review*, Vol. 53, No. 1, pp.69–78.
- Palmer, J.C., Wright, R.E. and Powers, J.B. (2001) 'Innovation and competitive advantage in small businesses: effects of environments and business strategy', *Journal of Small Business Strategy*, Vol. 12, No. 1, pp.30–41.

- Pantano, E. and Viassone, M. (2014) 'Demand pull and technology push perspective in technologybased innovations for the points of sale: the retailers evaluation', *Journal of Retailing and Consumer Services*, Vol. 21, No. 1, pp.43–47.
- Parente, S. and Prescott, E. (1994) 'Barriers to technology adoption and development', *Journal of Political Economy*, Vol. 102, No. 2, pp.298–321.
- Park, B.J.R., Srivastava, M.K. and Gnyawali, D.R. (2014) 'Walking the tight rope of coopetition: impact of competition and cooperation intensities and balance on firm innovation performance', *Industrial Marketing Management*, Vol. 43, No. 2, pp.210–221.
- Prieger, J.E. (2002) 'Regulation, innovation, and the introduction of new telecommunications services', *Review of Economics and Statistics*, Vol. 84, No. 4, pp.704–715.
- Ringle, C.M., Wende, S. and Becker, J.M. (2014) 'SmartPLS 3. Hamburg: SmartPLS', Academy of Management Review, Vol. 9, pp.419–445.
- Roberts, P.W. and Amit, R. (2003) 'The dynamics of innovative activity and competitive advantage: the case of Australian retail banking, 1981 to 1995', *Organization Science*, Vol. 14, No. 2, pp.107–122.
- Saemundsson, R.J. and Candi, M. (2014) 'Antecedents of innovation strategies in new technologybased firms: interactions between the environment and founder team composition', *Journal of Product Innovation Management*, Vol. 31, No. 5, pp.939–955.
- Sanders Jones, J. and Linderman, K. (2014) 'Process management, innovation and efficiency performance: the moderating effect of competitive intensity', *Business Process Management Journal*, Vol. 20, No. 2, pp.335–358.
- Sundbo, J. (1997) 'Management of innovation in services', *The Service Industries Journal*, Vol. 17, No. 3, pp.432–455.
- Swann, P. (2005) 'Do standards enable or constrain innovation?', *The Empirical Economics of Standards*, Department of Trade and Industry, London, pp.76–120.
- Teece, D.J., Pisano, G. and Shuen, A. (1997) 'Dynamic capabilities and strategic management', *Strategic Management Journal*, Vol. 18, No. 7, pp.509–533.
- Thakur, R. and Hale, D. (2013) 'Service innovation: a comparative study of U.S. and Indian service firms', *Journal of Business Research*, Vol. 66, pp.1108–1123.
- Uddin, S.S. and Suzuki, Y. (2014) 'The impact of competition on bank performance in Bangladesh: an empirical study', *International Journal of Financial Services Management*, Vol. 7, No. 1, pp.73–94.
- Urry, J. (2005) 'The complexity turn', Theory Culture and Society, Vol. 22, No. 5, pp.1-14.
- Van de Ven, A.H. (1986) 'Central problems in the management of innovation', Management Science, Vol. 32, No. 5, pp.590–607.
- Viscusi, K.W. and Moore, M.J. (1993) 'Product liability, research and development, and innovation', *Journal of Political Economy*, Vol. 101, pp.161–184.
- Wang, C.L. (2008) 'Entrepreneurial orientation, learning orientation, and firm performance', *Entrepreneurship Theory and Practice*, Vol. 32, No. 4, pp.635–657.
- Zahra, S.A., Nielsen, A.P. and Bogner, W.C. (1999) 'Corporate entrepreneurship, knowledge, and competence development', *Entrepreneurship: Theory and Practice*, Vol. 23, No. 3, pp.169–169.
- Zineldin, M. (2005) 'Quality and customer relationship management (CRM) as competitive strategy in the Swedish banking industry', *The TQM Magazine*, Vol. 17, No. 4, pp.329–344.