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Is strategic agility the new Holy Grail? Exploring the strategic agility construct

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Abstract: This paper reviews the concept of strategic agility and relates it to the context of building competitive advantage. The view of agility as an essential element of a firm's long-term success and survival has been discussed extensively in the literature. Strategic agility is an emerging area of research in the agility domain. It is a multidimensional concept, which includes both the ability to detect, anticipate, and sense market opportunities, evolving conditions, and other environmental changes and the ability to seize the opportunity with speed and implement new solutions. The paper discusses the concept of strategic agility and its impact on competitive advantage. The discussions are illustrated based on research carried out on Indian retail banks clarifying both the constituents of strategic agility as well as its contribution towards building a sustainable competitive advantage.

Keywords: strategic agility; retail banking; sustainable competitive advantage; SCA; performance.

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1 Introduction

Chaotic environments require new approaches to survival and success. Only companies with the ability to remain flexible in the face of rapidly emerging waves of change, to continuously adjust the company's strategic direction and to develop innovative ways to create value are likely to build and maintain competitive advantages. Megatrends such as demographics, digitisation, connectivity, trade liberalisation, global competition and

business model innovation are leading to the emergence of new competitors and driving new ways of doing business (Holbeche, 2015). This has plunged many traditional organisations into a VUCA world. VUCA is an acronym coined by the military and used to describe environments characterised by volatility, uncertainty, complexity and ambiguity (Johansen and Euchner, 2013). In a VUCA world no company consistently beats the market and hence traditional strategic planning and execution models are found inadequate (Bennett and Lemoine, 2014). This has led to organisations' quest for new techniques to improve and sustain their competitive capabilities and then survive and thrive in this turbulent business environment (Yang and Liu, 2012).

To cope with the strategic discontinuities and disruptions arising in a highly volatile and uncertain world, scholars have suggested the creation of strategic agility (SA) capabilities (Weber and Tarba, 2014). SA is the ability of an organisation to continuously adjust and adapt strategic direction in core business, as a function of strategic ambitions and changing circumstances, and create, not just new product and services, but also new business models and innovative ways to create value (Doz and Kosonen, 2007b; Long, 2000b). While the concept of SA has received increasing amount of interest in research, it is still an elusive concept with many definitions across various situations. This article aims to provide a better understanding of SA and the relationship of SA with sustainable competitive advantage (SCA) and illustrates this with research carried out in the retail-banking sector in India.

The article provides a brief overview of retail banking in India in Section 2 and discusses the concept of SA and its impact and the research gap in Section 3. Section 4 describes the research methodology; Section 5 discusses the key inferences of the research, and Section 6 of the article deals with conclusion by providing insights on acquiring SA.

2 Overview of banking in India

India has a bank dominated financial sector: commercial banks account for over 60% of the total assets of the financial system comprising banks, insurance companies, non-banking financial companies, cooperatives, mutual funds and other smaller financial entities (RBI, 2014). The sector is dominated by state-owned banks (they account for over 80% of deposits and assets), though the years since liberalisation (1991) have seen the emergence of many new private sector banks as well as the entry of several new foreign banks (Allen et al., 2007). Increasingly, however, private banks are displacing nationalised banks from their superior position and some of the new private banks like ICICI Bank, Axis Bank and HDFC Bank have emerged as important players in the retail-banking sector and are viewed as profit-driven professional enterprises.

Retail banking is concerned with marketing of financial products to retail customers (Bapat, 2015). In the retail banking sector, the rapid pace of consumers' adoption of mobile technologies and social media is transforming the face of traditional banking. In the past, retail customers were served primarily from the banks' branches but presently the customer has a number of options such as ATMs, internet banking, cards, electronic clearing, mobile banking, and home banking is evolving. They are creating specialised

processes for account acquisition, retail account processing, disbursement, and special services including advisory services. Banking itself has moved from 'banking-in-person' to 'net-banking' to 'mobile banking' and over to 'virtual banking' (Sarma et al., 2013).

Almost all the banks in the country (new and old) are increasingly pursuing a technology-centric strategy in banking operations and services delivery and have adopted core banking solutions and provide various technology-enabled banking solutions (Sambrani and Suryanarayana, 2007). This coupled with the high level of regulation and supervision prevalent in the banking industry tends to lead to homogenisation of banks' practices and behaviour and prevalence of similar business models [P.J. Nayak in Kidwai et al. (2012, p.203)]. New business models are required to address these challenges and the opportunity provided by the huge unbanked population in a viable manner. Hence, SA is a desired and needed capability in the banking sector.

3 Literature review

3.1 Strategic agility

Agility has emerged as a key area of interest due to assumptions that the best-performing organisations are the ones that are nimble and quick to respond to changes in the external environment (Harraf et al., 2015) and then reengineer, reconfigure and refine their operations to fulfil their strategic goals and objectives (Singh, 2013). It is a holistic concept encompassing both flexibility and adaptability (Nijssen and Paauwe, 2012).

The term 'SA' was popularised by Doz and Kosonen (2008) in their book Fast Strategy which was based on their research into companies demonstrating this capability. It means that an organisation can take quick, decisive, and effective actions and that it can trigger, anticipate, and take advantage of change (Doz and Kosonen, 2007b; Jamrog et al., 2006). SA implies an ability to mobilise and leverage upon organisation wide resources as quickly and efficiently as possible to respond to customer needs (Roth, 1996). Sull (2009) suggests that SA consists of spotting and seizing game-changing opportunities.

SA builds upon various concepts in management theory, which relate to organisation success in turbulent times. We use the dynamic capabilities (DC) theoretical lens to further our understanding of SA. Dynamic capability is the ability and capacity of a firm to integrate, build, and reconfigure internal and external competences and resources to address rapidly changing environments (Teece et al., 1997; Helfat et al., 2007; Helfat and Peteraf, 2015). SA has also been noted as a dynamic capability (Sambamurthy et al., 2003; Goldman et al., 1995) and we use the dynamic capability research as a base to build our understanding of SA.

We present few definitions of SA provided by various researchers in Table 1 and then discuss them in ensuing paragraphs.

Table 1 Definitions of SA

Author(s), year	Definition
D'Aveni (1994)	Strategic agility is described as flexibility and speed that gives organisations the ability to change the business in order to respond to changes in their markets and face substantial risks.
Roth (1996)	Strategic agility is the capability to produce the right products at the right place at the right time at the right price
Weill et al. (2002)	Strategic agility is defined as the set of business initiatives an enterprise can readily implement and described as the combination of brand, customer base, core competencies, infrastructure and employee's ability to change
McCann (2004)	Strategic agility is the ability to quickly recognise and seize opportunities, change direction, and avoid collisions
Jamrog et al. 2006)	Strategic agility is moving quickly, decisively, and effectively in anticipating, initiating and taking advantage of change.
Sull and Bryant (2006)	Strategic agility is the ability to exploit opportunities that slow down the competitor's exploitation of the same opportunity.
Doz and Kosonen (2007a)	Strategic agility is the ability to make strategic shifts on a time basis, by adopting re-orientation and re-innovation.
Morgan and Page (2008)	Strategic agility is defined as the ability to support and at times drive sudden changes in order to capitalise on changing market opportunities

3.1.1 Key aspects of SA

Considering the varied definitions, we observe some commonalities, some differences, and some oversights. No single definition appears to subsume all others. By synthesising facets of prior definitions, and filling in some gaps, we submit the following definition of SA: SA is the capability of response (proactive/reactive) to both foreseen and sudden changes using resources and knowledge to come up with innovative solutions that not only ensure near term competitive edge but also long-term survival through constant business model renewal.

The above definitions help us to compare and contrast the concept of SA with organisational agility. Firstly, it goes beyond the sense and respond aspect of organisational agility by enabling firms to initiate and apply dynamic competitive moves to not only respond positively to changes imposed by others but also to initiate shifts in strategy to create new marketplace realities (McCann, 2004; Mavengere, 2013). SA is the ability to continuously adjust and adapt strategic direction in core business and create not just new product and services, but also new business models.

Secondly, SA does not mean not having a strategy, but rather it emphasises strategic thinking, a clear vision, and a joint concept of strategy development and implementation (Long, 2000b). Strategic leadership is defined as a person's ability to anticipate, envision, maintain flexibility, think strategically, and work with others to initiate changes that will create a viable future for the organisation (Ireland and Hitt, 1999). Strategic leaders ensure firm-wide innovative strategic thinking and rapid acceptance of organisational changes that, even when difficult, are required to enhance firm performance.

Thirdly, SA lays emphasis on a firm transforming itself into a knowledge factory – a more refined and evolved version of a learning organisation (Roth, 1996). It builds upon an organisation capabilities for developing and learning complex problem-defining and problem-solving heuristics (Lei et al., 1996). It also draws upon organisational learning theory which is concerned with the development of insights, knowledge and associations between past actions, the effectiveness of those actions, and future actions (Huber, 1991).

Lastly, SA refers to the ability to change or reconfigure existing substantive capabilities (Collis, 1994), it must be developed by the firm; it cannot be purchased from factor markets (Dove, 2002). Building resource reconfiguration capabilities requires both deep commitments from top management towards identifying and overcoming organisational rigidities in existing structures, processes and beliefs (Doz and Kosonen, 2010).

3.1.2 Dimensions of SA

As SA is an emerging area of research, various researchers have opined on what really constitutes SA. According to Doz and Kosonen (2008), there are three dimensions to SA: strategic sensitivity, collective commitment and resource fluidity.

Strategic sensitivity has been defined as the ability to predict market occurrences and developments before competitors (Beer and Eisenstat, 2004; Doz and Kosonen, 2008). It implies being open to as much information, intelligence and innovations as possible by creating and maintaining relationships with a variety of different people and organisations (Doz and Kosonen, 2008). Hence, firms need to be oriented towards the market to become aware of the need for change. It is an important aspect of organisation culture and a pre-condition to learning orientation (Slater and Narver 1995). Market orientation is the creation of necessary behaviours for the creation of a superior value for buyers by acquiring knowledge about the market and responding to it, and continuously delivering superior performance for the business (Baker and Sinkula, 1999; Jaworski and Kohli, 1993; Narver and Slater, 1990).

Collective commitment is the shared dedication to the organisation's goals by the leadership and employees across the organisation (Beer and Eisenstat, 2000; Doz and Kosonen, 2008). SA presumes the capability to build a shared commitment to achieving these goals and to collaborate with all stakeholders in a fast manner to effectively execute strategies. Collective commitment means making decisions together with the whole management team so that in the end all the team members commit to collective success instead of promoting their own personal agenda. Executives of strategically agile organisations need to make quick decisions often without the luxury of time to evaluate in detail or consultation with seniors, peers or advisers. Hence, one of the key ingredients to successful decision-making is teamwork, leadership unity and commitment to common goals. Leaders who engage in the practice of dialogue and debate based on genuine and open disagreements from other senior managers enable collective commitment (Doz and Kosonen, 2010).

Doz and Kosonen (2008) define resource fluidity as the smooth allocation of significant resources for future development. A quick response to emerging opportunities presumes that available resources and capabilities can be effectively adapted to capitalise on environmental changes, whether they be threats or opportunities (Teece, 2007). Englehart and Simmons (2002) emphasised organisation structure and policies as important concepts for enabling flexibility and agility in organisations. Doz and Kosonen

further describe several organisational conditions and mechanisms that are related to the ability to mobilise resources. First, business and management processes need to be flexible and aligned tightly. Second, it is important for the organisation to be as free as possible from the binds of rigid commitments to partners and customers because these strong commitments constrain the ability to shift in response to new market challenges or opportunities. Finally, they describe the freedom from structure as the freedom to make strategic decisions about the direction without the limitations of the current structure. Based on their research, they posit that organisations with more flexible management structures including matrix related structures tended to be more effective in building resource fluidity.

Long (2000a) also provides a six dimensional measure of SA building on the strategic orientation required to ensure superior firm performance (Barney, 1986; Gatignon and Xuereb, 1997; Pleshko and Nickerson, 2008). The measures include – clarity of vision – a clear, compelling vision of goals of the company embodying its strategic intent. Knowledge of clients – means knowing what customers want, why they want it, when they want it, and how they want it. Understanding core capabilities – this helps to create value by aiding in allocating requisite and available resources to those activities responsible for growing, enhancing, or reshaping the capabilities such as organisational knowledge, skills, processes, and know-how. Selecting strategic targets – is being able to identify opportunities based on understanding of core capabilities in order to obtain maximum success. Shared responsibility – is a measure of the firm's relationship with its value chain partners. Knowledge of competitors-knowing what the competition is doing covering strategic intent, value creating strategies and product/service/process/market orientation. Taking action – in line with the vision, optimising the core capabilities and engaging people with an overall sense of purpose leads to high level of SA.

We submit that addition of entrepreneurial orientation to the existing dimensions of SA would contribute to a more comprehensive framework. Entrepreneurship orientation (EO) is an organisational approach which focuses on innovation and which embraces risk in quest for innovation (Miller, 1983). The morphing of traditional organisation toward entrepreneurial organisation takes place within a complex and dynamic environment, under conditions of rapid technological changes and hyper-competition (Nielsen, 2015). In a firm, creation of entrepreneurial orientation involves creating a strategy that provides the basis for entrepreneurial decisions and actions (Robinson and Stubberud, 2014).

Entrepreneurship culture supports the creation of new dealings from the existing ones which are a result of development of new product, transformation of the existing products, creation of new producing methods or new distribution channels, and finding new management attitudes or new competitive strategies (Stevenson and Jarillo, 1990). Risk-taking is an important dimension of EO as entrepreneurial firms tend to experience a higher level of external and internal uncertainty. Doz and Kosonen (2008) posited that the willingness and encouragement of risk taking was an important aspect of SA.

This dimension is important especially in financial services and can be defined as the willingness to take risks in the pursuit of strategic objectives (Brown and Chew, 1999). Risk appetite includes both risk seeking as well as risk averseness (Belghitar and Clark, 2012). An organisation would therefore, need to recognise that multiple risk appetites may exist for different levels of risk, such as operational, strategic, and tactical(Hillson and Murray-Webster, 2012). The risk culture will affect an organisation's ability to function within its risk appetite (Dinu, 2014; Redhead, 2002).

3.2 Sustainable competitive advantage

In today's hypercompetitive environment, firms that are agile tend to be more successful (Roberts and Grover, 2012). Further, the ability to identify profitable customers, build their long-term loyalty and steadily expand existing relationships is one of the key factors in gaining a competitive edge (Saen, 2013). SCA represents a firm's success in continually seizing competitive opportunities for enhancing performance, defending itself again rivals' competitive moves, as well as erecting barriers to the erosion of its prevailing competitive advantage (Reed and DeFillippi, 1990; Piccoli and Ives, 2005). It can be viewed as a condition where a firm's competitive advantage cannot be eroded due to competition [Porter, (1985), p.20]. Prahalad and Hamel (1990) opine that (SCA) is dependent upon building and exploiting strong capabilities or core competences, which can be deployed across the organisations product markets.

While earlier competitive advantage was based on structural characteristics, such as market power, economies of scale, or a broad product line, today however, the emphasis is on capabilities that enable a business to deliver superior value consistently to its customers (Slater and Narver, 2000). The key characteristics of capabilities that lead to SCA are that they are firm specific and developed over time (Amit and Schoemaker, 1993; Grant, 1991; Prahalad and Hamel, 1990) and cannot be traded or acquired by firms, unlike resources.

Firm viability (meeting minimum requirements, e.g., productivity, on time delivery, process change-over time) and market leadership (ability to shape the operating environment, e.g., relative technological competitiveness, competitive advantage through ability to develop new product, etc.) are two prime outcomes of SA (Dove, 2001). However, an advantage is durable only if competitors cannot readily imitate a firm's superior product delivery attributes. In other words, a gap in the capability underlying the differentiation must separate the firm from his competitors; otherwise, no meaningful competitive advantage exists (Coyne, 1986).

3.3 Performance

Performance is a continuous and flexible process that engages members of an organisation within a prescribed framework that sets out how they can best work together to achieve the required results (Armstrong, 2006). Organisational performance encompasses three specific areas of firm outcomes:

- 1 financial performance (profits, return on assets, return on investment, etc.)
- 2 market performance (sales, market share, etc.)
- shareholder return (total shareholder return, economic value added, etc.) (Richard et al., 2009; Thang and Buyens, 2008; Morgan and Strong, 2003).

It also reflects an organisation's understanding and knowledge regarding customer needs and expectations (Slater and Narver, 1994) as firms that are able to learn about customers, competitors, and regulators stand a better chance of sensing and acting upon events and trends in the marketplace (Day, 1994).

3.4 Research gap

In our research, we observed that even though SA has frequently been promoted as a means of improving business competitiveness, little empirical evidence exists in the literature validating its positive link with competitive advantage and business performance. Hence, we propose the following hypothesis to test if building SA capabilities can lead to a SCA and if being strategically agile has an impact on performance in one type of service sector, namely the banking sector.

- H1 SA has a significant impact on building a SCA.
- H2 SA has a significant impact on the performance (PERF) of an organisation.

4 Research methodology

There are few empirically tested frameworks to study the impact of SA in the context of the service sector. This research was part of a larger study on exploring SA in the banking sector carried out between May–December 2013. It was preceded by a qualitative research phase, which guided the hypothesis formulation and operational definitions of the constructs. The study covered retail banks (public, private, foreign and cooperative) with at least ten years of operations in India.

4.1 Operational definition

The constructs were operationalised based on literature review and the qualitative research. SA and SCA were conceptualised as reflective measures whereas PERF was conceptualised as a formative measure. The operational definition and scale sources used in this research are given in Table 2.

 Table 2
 Operational definitions

Construct	Operational definition	Scale source	No. of items
Strategic agility	For the purposes of this research, the following dimensions of SA have been included resource reconfigurability, strategic orientation, market orientation, entrepreneurial orientation, learning orientation and transformational leadership	Doz and Kosonen (2008), Pavlou and El Sawy (2006), Lee et al. (2008) and Long (2000)	26
Performance	Financial performance is said to be enhanced by an organisation's ability to learn (Day, 1994; Slater and Narver, 1995). Further, a firm that actively learns about its customers is in a position to offer more appropriate and finely targeted products resulting in a higher level of sales growth (Slater and Narver, 1995). Also, a firm's ability to learn and target customer wants and needs more precisely is thought to result in higher levels of customer satisfaction, which leads to superior levels of customer retention (Slater and Narver, 1995). Hence, a mix of financial and marketing parameters is considered in this construct.	Homburg and Pflesser (2000) and Hopkins and Hopkins (1997)	9

 Table 2
 Operational definitions (continued)

Construct	Operational definition	Scale source	No. of items
Sustainable competitive advantage	Sustainable competitive advantage (SCA) represents a firm's success in continually seizing competitive opportunities for enhancing performance, defending itself again rivals' competitive moves, as well as erecting barriers to the erosion of its prevailing competitive advantage (Piccoli and Ives, 2005; Reed and DeFillippi, 1990)	Weerawardena (2003) and Lee and et al. (2008)	10

4.2 Data collection

Data for this study was carried out using a survey during August–December 2013. The survey questionnaire was prepared based on literature review and a qualitative study carried out in another phase of this study. Existing scales, where applicable, were used with modifications. All items were rated on seven-point ordinal Likert-type scales (e.g., 1 = agree completely and 7 = disagree completely as anchors). The study focused on the retail business vertical within banks and the respondents for the survey were mid-senior level managers. In all the survey generated 180 usable responses.

4.3 Data analysis and results

Exploratory factor analysis (EFA) and partial least squares structural equation modelling (PLS-SEM) technique using Smart PLS Version 2.0 (Ringle et al., 2005) was used to analyse the data. PLS-SEM (also called PLS path modelling) is primarily used to develop theories in exploratory research by focusing on explaining the variance in the dependent variables when examining the model (Hair et al., 2013). PLS-SEM uses an ordinary least squares (OLS) regression-based method. It works efficiently with small sample sizes and complex models and makes no assumptions about the underlying data such as data distribution (Cassel et al., 1999).

A PLS model is usually analysed and interpreted in two stages sequentially. First is the assessment and refinement of adequacy of the measurement model (outer model) followed by the assessment and evaluation of the structural model (inner model) (Gefen et al., 2000; Tenenhaus et al., 2005). The assessment of measurement model is an important and essential step as tests the reliability and validity of the scales employed to measure the latent constructs and their manifest variables used in the structural model (Loehlin, 1998). The structural model specifies the relations between latent constructs (Loehlin 1998). This enables direct testing of the theory of interest (Cheng, 2001). PLS assesses the structural component by generating estimates of standardised regression coefficients for the structural paths in the model (Sosik et al., 2009) and the statistical significance of these path coefficients is evaluated using bootstrapping (Hesterberg and Moore, 2005).

The bootstrapped-re-sampling method was used in the Smart-PLS 2.0 software, in order to evaluate the statistically significance of the defined relationships (Ringle et al., 2005). This procedure involves bootstrapping 5,000 sub-samples, selected randomly to replace original data (Hair et al., 2011; Karagöz and Akgün, 2015). Bootstrapping is a method for estimating the distribution of estimates of path coefficients by re-sampling with replacement from the original sample (Hesterberg and Moore, 2005). Path coefficients (β) were obtained for each randomly selected sub-sample, and the values of t-statistics were calculated.

4.3.1 Exploratory factor analysis

Factor analysis, using varimax rotation, was applied to all the variables to test their factor loadings. Only items with factor loadings above 0.5 and no cross loadings were retained. After EFA, 6 items pertaining to the construct of SCA, 10 items pertaining to SA and 4 items pertaining to PERF were retained. The Cronbach's alpha for all factors met the recommended threshold of greater than 0.70.

Table 3Results of EFA

Overview of constructs used for further analysis (after EFA)							
Factor name/construct	No. of items	Sub-dimensions	% of variance explained	Cronbach's aplha			
Sustainable competitive advantage	6	Barriers to imitation	9.03	0.93			
Market orientation	3	Customer satisfaction, knowing competitors	3.66	0.84			
Approach to risk taking	2	Risk philosophy	3.72	0.85			
Strategic leadership	5	Leadership, strategic orientation	6.43	0.89			
Performance	4	Financial performance	6.38	0.90			

4.3.2 Measurement model analysis

The measurement model met all the evaluation criteria such as composite reliability (CR) above the critical value of 0.70, average variance extracted (AVE) above the recommended criteria of 0.5 and the outer loadings greater than 0.5 (Hair et al., 1998) meeting the reliability and validity criteria. Analysis of square root of the AVE vis-à-vis inter-correlations amongst the constructs and evaluating the cross-loadings of the constructs helped to establish discriminant validity (Barclay et al., 1995; Chin, 1998; Fornell and Larcker, 1981; Hulland, 1999).

 Table 4
 Measurement model analysis

	Item	First order construct factor loading	Second order construct factor loading	Average variance explained (CR)	Composite reliability (CR)	Cronbach's alpha	Discriminant validity
Strategic agility (SA) (second order construct)				0.5400	0.9210	0.9044	Yes
First order constructs				0.7603	0.9047	0.8410	
Market orientation							
Our business objectives are driven by customer satisfaction	MRK TON 1	0.9121	0.7765				
Our business strategies are driven by our beliefs about how we can create greater value for our customers	MRKTON2	0.8902	0.6879				
The top management team regularly discusses competitors' strengths and strategies	MRKTON3	0.8103	0.6805				
Leadership				0.8937	0.9439	0.8811	Yes
The bank's management is always on the lookout for new opportunities for the unit and the organisation	LDRSHP1	0.9948	0.7664				
The bank's management always acts as the organisation's leading force	LDRSHP2	0.9459	0.7740				
Approach to risk taking				0.8670	0.9288	0.8466	Yes
We accept risks to find the opportunities for growth in the market	RSKTKNGAP1	0.9329	0.6551				
The top management believe bold, wide-ranging acts are necessary to achieve our organisation objectives	RSKTKNGAP2	0.9294	0.6394				
Strategic orientation				.7683	0.9087	0.8491	Yes
Our strategic direction is clear	STRATONI	0.8948					
The company's goals and objectives can be linked our mission, vision and strategy	STRATON2	0.8745					
We constantly adapt our strategic goals to address new or shifting market demand and conditions	STRATON4	0.8599					
Sustainable competitive advantage (SCA)				0.7244	0.9402	0.9264	Yes
Ease with which competitor can match competitive moves							
Your bank's product innovations	EASE1		0.8716				
Your bank's process innovations	EASE2		0.8936				
Your bank's managerial innovations	EASE3		0.8826				
Your bank's marketing innovations	EASE4		0.8715				
Your bank's capability to acquire knowledge and technology through external links and networks	EASE5		0.8087				
Your bank's marketing capability	EASE6		0.7743				

 Table 5
 Discriminant validity

	LDRSHP	MKTON	RSKTKNGAP	STRATON
LDRSHP	0.9454			
MKTON	0.4864	0.8720		
RSKTKNGAP	0.4345	0.5076	0.9311	
STRATON	0.7269	0.6176	0.4602	0.8165
Fornell-I	Larcker criterion for a	discriminant vali	dity – second order co	nstructs
	PERF		SA	SCA
PERF	Formative			
SA	0.3371	0.	7348	
SCA	0.2382	0.	1923	0.8511

Note: The square root of AVE values is shown on the diagonal and printed in italic (reflective constructs only); non-diagonal elements are the latent variable correlations.

4.3.3 Structural model analysis

The structural model is evaluated by considering the variance explained (R²), the predictive relevance (Q²) as well as the significance of the path coefficients (Chin, 2010). The R² value represents a measure of the predictive power and indicates the amount of variance in the construct in question, which is explained by its antecedent variables in the model (Roldán and Sánchez-Franco, 2012). Researchers have suggested that at the very minimum that R² should be at least greater than 0.10 (Falk and Miller, 1992) whereas (Chin, 1998) considers R² values of 0.67, 0.33, and 0.19 as substantial, moderate, and weak respectively. In the structural model, Q² values larger than zero for a certain reflective endogenous latent variable indicate the path model's predictive relevance or this particular construct (Hair et al., 2013). The Q² value is obtained by using the blindfolding procedure in Smart PLS.

In our model, the R^2 value for SCA (0.037) is insubstantial and the R^2 value for PERF at 0.11 can be considered as weak. However, the Q^2 values are slightly greater than 0 for SCA (0.02) and PERF (0.04) indicating that the model has predictive relevance.

We also evaluate the relationship of the various dimensions of SA with SA and find that all the constructs have moderate to strong R^2 values ranging from 0.48 to 0.80 and the path coefficients are also significant at p>0.05 indicating that these sub-constructs are indicate a critical aspect of SA, especially strategic orientation. The high Q^2 values of each of the sub-components (ranging from 0.36 to 0.60) also strengthen the predictive accuracy of the model with regards to SA.

Lastly, significance testing of the path coefficients supports both our hypothesis at p > 0.05 level. Hence we can conclude that SA does have a significant positive effect on both SCA and PERF. The path coefficients of each of the sub-dimensions to the focal SA are also significant (p > 0.05) indicating that the proposed sub-dimensions are an important part of the overall SA construct.

Figure 1 Structural model analysis (see online version for colours)

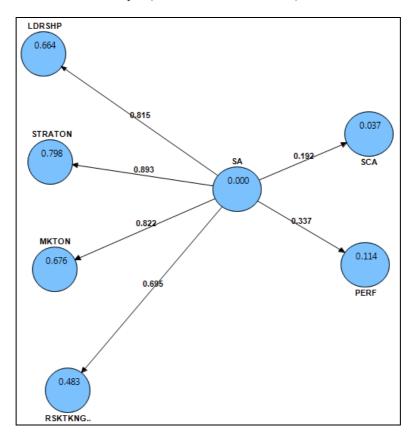


Table 6 Hypothesis testing

Path coefficient significance testing results						
	Hypothesis	Path coefficients	t-values	Significance level	p-value	Support
H2:	SA -> LDRSHP	0.81	24.67	***	0.000	Yes
	SA -> MKTON	0.82	26.52	***	0.000	Yes
	SA -> PERF	0.34	4.88	***	0.000	Yes
	SA -> RSKTKNGAP	0.70	13.45	***	0.000	Yes
H1:	$SA \rightarrow SCA$	0.19	2.62	**	0.000	Yes
	SA -> STRATON	0.89	56.74	***	0.000	Yes

Notes: NS – not significant.

@ Bootstrap confidence intervals for 10% probability of error (a = 0.10).

*p < .10; **p < .05; ***p < .01.

 Table 7
 Summary of PLS analysis

Endogonous latout usuiablo	Effects on endogenous variables				
Endogenous latent variable -	R^2	Q^2	Path coefficient		
SCA	0.04	0.02			
H1: SA -> SCA			0.19 (2.62)		
PERF	0.11	0.05			
H2: SA -> PERF			0.34 (4.88)		
LDRSHP	0.66	0.57			
SA -> LDRSHP			0.81 (24.67)		
MKTON	0.68	0.53			
SA -> MKTON			0.82 (26.52)		
RSKTKNGAP	0.48	0.36			
SA -> RSKTKNGAP			0.70 (13.45)		
STRATON	0.80	0.60			
SA -> STRATON			0.89 (56.74)		

5 Key inferences from research

There are many factors that are critical to an organisation's future such as organisation goals, policies, scope and diversity of businesses, organisation structure, etc. (Agarwal and Helfat, 2009; Rumelt et al., 1994). However, recent scholarship suggests that critical resources (tangible and intangible assets), capabilities, routines and other processes, and people (individuals and teams) that affect an organisation's ability to succeed in the future are also to be added to this list (Winter, 2007; Helfat and Winter, 2011). We hypothesised that SA can contribute towards building a SCA (H₁) and positively influence performance (H₂). Both the hypotheses are supported in the model and we discuss them briefly in the ensuing paragraphs.

The dynamic capability theory suggests that the success of a firm relies on its ability to integrate, build, and reconfigure internal and external competencies to achieve new forms of competitive advantage (Teece et al., 1997). Further, the capability embeddedness perspective of this theory suggests that this, i.e., capability embeddedness, helps to create barriers to imitation due to the isolating mechanism (Grewal and Slotegraaf, 2007; Rumelt, 1984). This could explain why differences in performance or competitive advantage exist within firms with apparently similar capabilities. We find a positive impact of SA on SCA (H₁) further substantiating this proposition.

In a research investigating performance by comparing economic and organisational factors, it was found that organisational factors influenced the profitability more than that of the economic factors (McGivern and Tvorik, 1997). Performance is a continuous and flexible process that engages members of an organisation within a prescribed framework that sets out how they can best work together to achieve the required results (Armstrong, 2006). Organisational performance also reflects an organisation's understanding and knowledge regarding customer needs and expectations (Slater and Narver, 1994) as firms that are able to learn about customers, competitors, and regulators stand a better chance

of sensing and acting upon events and trends in the marketplace (Day, 1994). Further, a firm that actively learns about its customers is in a position to offer more appropriate and finely targeted products resulting in a higher level of sales growth and enhanced financial performance (Slater and Narver, 1994). Our research substantiates this proposition by finding a positive impact of SA on performance (H₂).

6 Conclusions

The dimensions of SA covered in the study provide a better understanding of the concept and also provide pointers on how organisations can plan to implement it. While, implementing agility is context dependent, nonetheless, firms can implement a variety of practices to achieve SA [Goldman et al., (1995), p.73]. These practices are based on – enriching the customer (based on market orientation), organising to master change and uncertainty (approach to risk and strategic orientation) and leveraging the power of human capital and information (leadership). Successful organisations share a common feature: the ability to pivot and implement quickly in order to achieve competitive advantage (PMI Report, 2015).

This research makes multiple contributions relevant to academics as well as practicing managers. It aimed at providing a better understanding of SA and theorises the benefits likely to accrue to organisations pursuing agility capabilities. This contributes to the current body of knowledge on the implementation benefits of SA, which is still under-researched.

While discussing the practical and academic implications of this study, we would also like to highlight areas for further research and also submit few limitations of the study. Firstly, this study was designed as a perception study and hence performance measures were self-reported. It was not possible to obtain objective marketing and financial data, as banks do not uniformly report statistics desired for the research separately for the retail banking SBU. This is a limitation as self-reported measures can be biased. Secondly, this research reflects the agility situation of a firm at a specific period of time. However, SA capabilities take time to build and it also takes time for their results to be seen. Longitudinal research is needed to further explore this theme, and identify the nature and behaviour of causal relationships and their combined effects in the long-term. Such a research design would help to better understand the nuances and dynamics of SA.

Organisational culture has a significant impact on the structure, which in turn influences the behaviours and actions of people (Nerur et al., 2005). Culture exerts considerable influence on decision-making processes, problem-solving strategies, innovative practices, information filtering, social negotiations, relationships, and planning and control mechanisms (Nerur et al., 2005). Neither culture nor mind-sets of people can be easily changed, which makes the move to become strategically agile a formidable challenge. Therefore, the role of organisation structure and culture in enabling a structure conducive to innovation and consequently the SA of the firm are an interesting direction of future research.

SA is increasingly being acknowledged as a powerful managerial tool for managing business turbulence and staying relevant. Therefore, the results of this study have several important implications for practitioners. Most companies that have made it past the start-up stage are optimised for efficiency rather than for SA – the ability to capitalise on opportunities and dodge threats with speed and assurance (Kotter, 2012). Hence, business

leaders across all industries are reshaping their business priorities and embracing the need to build SA capabilities. There are many elements that contribute to building a strategically agile organisation (Weill et al., 2002). Few of the key elements are discussed in the in the ensuing paragraphs.

Provide clear and unifying organisational direction: Strategically Agile organisations possess the capability to set an effective collective direction in a fast changing and ambiguous environment. This direction includes the long-term shared vision (foresight) and the shorter term strategic goals (insight), decisions, and other actions that are aligned with and support the long-term business goals (Doz and Kosonen, 2008).

Building learning organisations: Managerial knowledge is very important in DC evolvement (Adner and Helfat, 2003). Developing a culture of learning emphasising the development and improvement of activities and abilities such as systems thinking, improving mental models, and fostering dialogue (Senge, 1996).

Capitalising on human capital: identifying the organisation's needed capabilities requires honest assessment of the organisational competitiveness, its core competencies and strategic assets. Toward this purpose, the strategically agile organisation is engaged in conscious and deliberate learning including ongoing reflection; adaptations based on such reflection and are continuously managing their talent through targeted recruiting and development strategies.

Creating strong organisation culture: Individuals in an organisation share a culture, or common values, attitudes, and behaviours and managers in organisations where participation is prevalent are more likely to encourage their own subordinates to participate in decisions (Parnell et al., 2012). When faced with opportunities and threats, organisational culture affects decisions, feelings and behaviours of individuals (Ozigbo, 2012). Strategically agile organisations realise the importance of a shared participative process that includes managers and employees in strategic decision-making. Further, a widely shared commitment and amenability to the change process in the organisation is a fundamental precondition for effective achievement of strategic objectives (Maijanen et al., 2014).

Building effective top management teams: The role of top management teams, in generating and maintaining organisational collaboration for achieving strategy renewal and agility is central (Doz and Kosonen, 2008). It requires a high degree of persistency, effectiveness, and teamwork at the company top (Doz and Kosonen, 2008).

In the pursuit of a lasting competitive advantage, building and deployment of appropriate capabilities and resources is critical. In the face of growing competition and market turbulence, achieving SA could well be the Holy Grail for companies looking for the elusive competitive advantage.

References

Adner, R. and Helfat, C. (2003) 'Corporate effects and dynamic managerial capabilities', *Strategic Management Journal*, Vol. 24, No. 10, pp.1011–1025.

Agarwal, R. and Helfat, C. (2009) 'Strategic renewal of organizations', *Organization Science*, Vol. 20, No. 2, pp.281–293.

Allen, F., Chakrabarti, R. and De, S. (2007) 'India's financial system', Nomura Occasional Series on Contemporary Capital Markets, p.109 [online] http://fic.wharton.upenn.edu/fic/papers/ 07/0736.pdf (accessed 16 January 2015).

- Amit, R. and Schoemaker, P. (1993) 'Strategic assets and organizational rent', *Strategic Management Journal*, Vol. 14, No. 1, pp.33–46.
- Armstrong, M. (2006) Performance Management: Key Strategies and Practical Guidelines, Kogan Page, New York, NY.
- Baker, W.E. and Sinkula, J.M. (1999) 'The synergistic effect of market orientation and learning orientation on organizational performance', *Journal of the Academy of Marketing Science*, Vol. 27, No. 4, pp.411–427.
- Bapat, D. (2015) 'Union experience: towards excellence in retail banking', *Decision*, Vol. 42, No. 3, pp.335–345.
- Barclay, D., Higgins, C. and Thompson, R. (1995) 'The partial least squares (PLS) approach to causal modeling: personal computer adoption and use as an illustration', *Technology Studies*, Vol. 2, No. 2, pp.285–309.
- Barney, J. (1986) 'Organizational culture: can it be a source of sustained competitive advantage?', *Academy of Management Review*, Vol. 11, No. 3, pp.656–665.
- Beer, M. and Eisenstat, R.A. (2000) 'The silent killers of strategy implementation and learning', *Sloan Management Review*, Vol. 41, No. 4, p.29.
- Belghitar, Y. and Clark, E. (2012) 'The effect of CEO risk appetite on firm volatility: an empirical analysis of financial firms', *International Journal of the Economics of Business*, Vol. 19, No. 2, pp.195–211.
- Bennett, N. and Lemoine, G. (2014) 'What a difference a word makes: understanding threats to performance in a VUCA world', *Business Horizons*, Vol. 57, No. 3, pp.311–317.
- Brown, G. and Chew, D. (1999) Corporate Risk: Strategies and Management, Risk Books, London, UK.
- Cassel, C.M., Hackl, P. and Westlund, A.H. (1999) 'Robustness of partial least-squares method for estimating latent variable quality structures', *Journal of Applied Statistics*, Vol. 26, No. 4, pp.435–446.
- Cheng, E. (2001) 'SEM being more effective than multiple regression in parsimonious model testing for management development research', *Journal of Management Development*, Vol. 20, No. 7, pp.650–667.
- Chin, W.W. (1998) 'The partial least squares approach to structural equation modeling', *Modern Methods for Business Research*, pp.295–336, Lawrence Erlbaum, Mahwah, NJ.
- Chin, W.W. (2010) 'How to write up and report PLS analyses', *Handbook of Partial Least Squares*, pp.655–690, Springer, Berlin Heidelberg.
- Collis, D. (1994) 'Research note: how valuable are organizational capabilities?', Strategic Management Journal, Special Issue: Competitive Organizational Behavior, Vol. 15, No. S1, pp.143–152.
- Coyne, K. (1986) 'Sustainable competitive advantage what it is, what it isn't', *Business Horizons*, January–February, Vol. 29, No. 1, pp.54–61.
- D'Aveni, R.A. (1994) Hypercompetition, The Free Press, NY.
- Day, G. (1994) 'The capabilities of market-driven organizations', *Journal of Marketing*, Vol. 58, No. 4, pp.37–52.
- Dinu, A-M. (2014) 'General concepts regarding risk appetite', *Knowledge Horizons Economics*, Vol. 6, No. 2, pp.157–159.
- Dove, R. (2002) Response Ability: The Language, Structure, and Culture of the Agile Enterprise, John Wiley & Sons, New York, NY.
- Doz, Y. and Kosonen, M. (2007a) 'Strategic renewal: building strategic agility', *International Strategic Management Society Conference*, San Diego, CA.
- Doz, Y. and Kosonen, M. (2007b) 'The new deal at the top', *Harvard Business Review*, Vol. 85, No. 6, p.98.
- Doz, Y. and Kosonen, M. (2008) Fast Strategy: How Strategic Agility Will Help You Stay Ahead of the Game, Wharton School Publishing, Harlow.

- Doz, Y. and Kosonen, M. (2010) 'Embedding strategic agility: a leadership agenda for accelerating business model renewal', *Long Range Planning*, Vol. 43, Nos. 2–3, pp.370–382.
- Englehart, C. and Simmons, P. (2002) 'Organizational flexibility for a changing world', *Leadership and Organization Development Journal*, Vol. 23, No. 3, pp.113–121.
- Falk, R. and Miller, N. (1992) A Primer for Soft Modeling, University of Akron Press, Ohio.
- Fornell, C. and Larcker, D. (1981) 'Evaluating structural equation models with unobservable variables and measurement error', *Journal of Marketing Research*, Vol. 18, No. 1, pp.39–50.
- Gatignon, H. and Xuereb, J-M. (1997) 'Strategic orientation of the firm and new product performance', *Journal of Marketing Research*, Vol. 34, No. 1, pp.77–90.
- Gefen, D., Straub, D. and Boudreau, M. (2000) 'Structural equation modeling and regression: guidelines for research practice', *The Communications of the Association for Information Systems*, Vol. 4, No. 7, pp.2–77.
- Goldman, S., Nagel, R. and Preiss, K. (1995) *Agile Competitors and Virtual Organizations:* Strategies for Enriching the Customer, Von Nostrand Reinhold, New York, NY.
- Grant, R.M. (1991) 'The resource-based theory of competitive advantage: implications for strategy formulation', in Zack, M. (Ed.): *California Management Review*, Vol. 33, No. 3, pp.114–135.
- Grewal, R. and Slotegraaf, R. (2007) 'Embeddedness of organizational capabilities', *Decision Sciences*, Vol. 38, No. 3, pp.451–488.
- Hair Jr., J.F. et al. (2013) A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), Sage Publications, Thousand Oaks, CA.
- Hair, J.F. et al. (1998) Multivariate Data Analysis, Prentice-Hall, Upper Saddle River.
- Hair, J.F. et al. (2011) 'An assessment of the use of partial least squares structural equation modeling in marketing research', *Journal of the Academy of Marketing Science*, Vol. 40, No. 3, pp.414–433.
- Harraf, A. et al. (2015) 'Organizational agility', Journal of Applied Business Research, Vol. 31, No. 2, p.675.
- Helfat, C. and Peteraf, M.A. (2015) 'Managerial cognitive capabilities and the microfoundations of dynamic capabilities', *Strategic Management Journal*, Vol. 36, No. 6, pp.831–850.
- Helfat, C. and Winter, S. (2011) 'Untangling dynamic and operational capabilities: strategy for the (N) ever changing world', *Strategic Management Journal*, Vol. 32, No. 11, pp.1243–1250.
- Helfat, C. et al. (2007) Dynamic Capabilities: Understanding Strategic Change in Organizations, Blackwell, London.
- Hesterberg, T. and Moore, D. (2005) 'Bootstrap methods and permutation tests', *Introduction to the Practice of Statistics*, Vol. 5, pp.1–70, WH Freeman Company, New York.
- Hillson, D. and Murray-Webster, M. (2012) A Short Guide to Risk Appetite, Gower Publishing, Ltd., Surrey, UK.
- Holbeche, L. (2015) 'The agile organization' [online] http://www.koganpage.com/media/project kp/document/agile-organization-sample.pdf (accessed 14 March 2016).
- Homburg, C. and Pflesser, C. (2000) 'A multiple-layer model of market-oriented organizational culture: measurement issues and performance outcomes', *Journal of Marketing Research*, Vol. 37, No. 4, pp.449–462.
- Hopkins, W.E. and Hopkins, S.A. (1997) 'Strategic planning-financial performance relationships in banks: a causal examination', *Strategic Management Journal*, Vol. 18, No. 8, pp.635–652.
- Huber, G. (1991) 'Organizational learning: the contributing processes and the literatures', Organization Science, Vol. 2, No. 1, pp.88–115.
- Hulland, J. (1999) 'Use of partial least squares (PLS) in strategic management research: a review of four recent studies', *Strategic Management Journal*, Vol. 20, No. 2, pp.195–204.
- Ireland, R.D. and Hitt, M.A. (1999) 'Achieving and maintaining strategic competitiveness in the 21st century: the role of strategic leadership', *The Academy of Management Executive*, Vol. 13, No. 1, pp.43–57.

- Jamrog, J. et al. (2006) Agility and Resilience in the Face of Continuous Change, American Management Association, New York.
- Jaworski, B. and Kohli, A. (1993) 'Market orientation: antecedents and consequences', *The Journal of Marketing*, Vol. 57, No. 3, pp.53–70.
- Johansen, B. and Euchner, J. (2013) 'Navigating the VUCA world', Research-Technology Management, Vol. 56, No. 1, pp.10–15.
- Karagöz, I.B. and Akgün, A.E. (2015) 'The roles of IT capability and organizational culture on logistics capability and firm performance', *Journal of Business Studies Quarterly*, Vol. 7, No. 2, p.23.
- Kidwai, N., Duggal, B. and Rangarajan, C. (2012) Contemporary Banking in India, Business World, India.
- Kotter, J.P. (2012) 'How the most innovative companies capitalise on today's rapid-fire strategic challenges and still make their numbers', *Harvard Business Review*, Vol. 90, No. 11, pp.43–58.
- Lee, O., Sambamurthy, V., Lim, K. and Wei, K.K. (2008) *IT-Enabled Organizational Agility and Sustainable Competitive Advantage*, Working paper, Social Science Research Network [online] http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1249301.
- Lei, D., Hitt, M. and Bettis, R. (1996) 'Dynamic core competences through meta-learning and strategic context', *Journal of Management*, Vol. 22, No. 4, pp.549–569.
- Loehlin, J. (1998) Latent Variable Models: An Introduction to Factor, Path, and Structural Analysis, Lawrence Erlbaum, Mahwah, NJ.
- Long, C. (2000a) 'Measuring your strategic agility: a checklist', Consulting to Management, Vol. 11, No. 3, pp.25–28.
- Long, C. (2000b) 'You don't have a strategic plan? Good! (But be able to think strategically)', *Consulting to Management*, Vol. 11, No. 1, pp.35–42.
- Maijanen, P., Jantunen, A. and Hujala, M. (2014) 'Dominant logic and dynamic capabilities in strategic renewal case of public broadcasting', *International Journal of Business Excellence*, Vol. 8, No. 1, pp.1–19.
- Mavengere, N. (2013) 'Information technology role in supply chain's strategic agility', *International Journal of Agile Systems and Management*, Vol. 6, No. 1, pp.7–24.
- McCann, J. (2004) 'Organizational effectiveness: changing concepts for changing environments', *Human Resource Planning*, Vol. 27, No. 1, p.42.
- McGivern, M. and Tvorik, S. (1997) 'Determinants of organizational performance', *Management Decision*, Vol. 35, No. 6, pp.417–435.
- Miller, D. (1983) 'The correlates of entrepreneurship in three types of firms', *Management Science*, Vol. 29, No. 7, pp.770–791.
- Morgan, R. and Page, K. (2008) 'Managing business transformation to deliver strategic agility', *Strategic Change*, Vol. 17, Nos. 5–6, pp.155–168.
- Morgan, R. and Strong, C. (2003) 'Business performance and dimensions of strategic orientation', *Journal of Business Research*, Vol. 56, No. 3, pp.163–176.
- Narver, J. and Slater, S. (1990) 'The effect of a market orientation on business profitability', *The Journal of Marketing*, October, Vol. 54, pp.20–36.
- Nerur, S., Mahapatra, R. and Mangalaraj, G. (2005) 'Challenges of migrating to agile methodologies', *Communications of the ACM*, Vol. 48, No. 5, pp.72–78.
- Nielsen, J.E. (2015) 'Corporate entrepreneurship, organizational learning and knowledge implementation', *Ekonomski Horizonti*, Vol. 17, No. 3, p.199.
- Nijssen, M. and Paauwe, J. (2012) 'HRM in turbulent times: how to achieve organizational agility?', The International Journal of Human Resource Management, Vol. 23, No. 16, pp.3315–3335.

- Ozigbo, N. (2012) 'The implications of human resources management and organizational culture adoption on knowledge management practices in Nigerian oil and gas industry', *Communications of the IIMA*, Vol. 12, No. 3, pp.91–105.
- Parnell, J.A., Koseoglu, M.A. and Dent, E. (2012) 'Propensity for participative decision making (PPDM) in Turkey and the USA', *International Journal of Business Excellence*, Vol. 5, No. 3, pp.278–304.
- Pavlou, P.A. and El Sawy, O.A. (2004) 'Understanding the 'black box' of dynamic capabilities: a missing link to the strategic role of IT in turbulent environments?', *Management Science*.
- Piccoli, G. and Ives, B. (2005) 'Review: IT-dependent strategic initiatives and sustained competitive advantage: a review and synthesis of the literature', MIS Quarterly, Vol. 29, No. 4, pp.747–776.
- Pleshko, L. and Nickerson, I. (2008) 'Strategic orientation, organizational structure, and the associated effects on performance in industrial firms', *Academy of Strategic Management Journal*, Vol. 7, p.95.
- PMI Report (2015) Pulse of the Profession[®]: Capturing the Value of Project Management Through Organisational Agility,
- Porter, M. (1985) Competitive Strategy: Creating and Sustaining Superior Performance, Free Pass, New York
- Prahalad, C. and Hamel, G. (1990) 'The core competence of the corporation', *Harvard Business Review*, Vol. 68, No. 3, pp.75–91.
- RBI (2014) Report of the Committee on Capacity Building in Banks and Non-Banks.
- Redhead, K. (2002) 'Management attitudes to risk a finance perspective', *Company Accountant*, September, pp.26–27.
- Reed, R. and DeFillippi, R. (1990) 'Causal ambiguity, barriers to imitation, and sustainable competitive advantage', *Academy of Management Review*, Vol. 15, No. 1, pp.88–102.
- Richard, P.J. et al. (2009) 'Measuring organizational performance: towards methodological best practice', *Journal of Management*, Vol. 35, No. 3, pp.718–804.
- Ringle, C.M., Wende, S. and Will, A. (2005) *SmartPLS-Version 2.0*, Universität Hamburg, Hamburg.
- Roberts, N. and Grover, V. (2012) 'Investigating firm's customer agility and firm performance: the importance of aligning sense and respond capabilities', *Journal of Business Research*, Vol. 65, No. 5, pp.579–585.
- Robinson, S. and Stubberud, H.A. (2014) 'Elements of entrepreneurial orientation and their relationship to entrepreneurial intent', *Journal of Entrepreneurship Education*, Vol. 17, No. 2, pp.1–11.
- Roldán, J. and Sánchez-Franco, M. (2012) 'Variance-based structural equation modeling: guidelines for using partial least squares in information systems research', in Mora, M. (Ed.): Research Methodologies, Innovations and Philosophies in Software Systems Engineering and Information Systems, pp.193–221, IGI Global.
- Roth, A.V. (1996) 'Achieving strategic agility through economies of knowledge', *Planning Review*, Vol. 24, No. 2, pp.30–36.
- Rumelt, R. (1984) 'Towards a strategic theory of the firm', in Lamb, R.B. (Ed.): *Competitive Strategic Management*, pp.556–570, Prentice-Hall, Englewood Cliffs, New Jersey.
- Rumelt, R., Schendel, D. and Teece, D. (1994) Fundamental Issues in Strategy: A Research Agenda, Harvard Business Press, Boston, MA.
- Saen, R. (2013) 'Using cluster analysis and DEA-discriminant analysis to predict group membership of new customers', *International Journal of Business Excellence*, Vol. 6, No. 3, pp.348–360.
- Sambamurthy, V., Bharadwaj, A. and Grover, V. (2003) 'Shaping agility through digital options: reconceptualizing the role of information technology in contemporary firms', *MIS Quarterly*, Vol. 27, No. 2, pp.237–263.

- Sambrani, S. and Suryanarayana, A. (2007) 'Technology reforms in banking: an analytical study of the Indian banking industry in the post-liberalisation era', *National Conference on Banking Sector Retrospects and Prospects*, Manipal Institute of Management, Manipal, 25–27 May.
- Sarma, P.R., Subramanyam, M. and Pramod, V.R. (2013) 'ICT and banking is it a rejuvenating combination? A diagnostic analysis', *International Journal of Business Excellence*, Vol. 6, No. 2, pp.231–249.
- Senge, P. (1996) 'Leading learning organizations: the bold, the powerful and the invisible', in F. Hesselbein, M. Goldsmith and R. Beckhard (Eds.): *The Leader of the Future: New Visions, Strategies and Practices for the Next Era*, Jossey-Bass, San Francisco, CA.
- Singh, A. (2013) 'Social media and corporate agility', Global Journal of Flexible Systems Management, Vol. 14, No. 4, pp.255–260.
- Slater, S. and Narver, J. (1994) 'Market orientation, customer value, and superior performance', Business Horizons, Vol. 37, No. 2, pp.22–28.
- Slater, S. and Narver, J. (1995) 'Market orientation and the learning organization', *The Journal of Marketing*, Vol. 59, No. 3, pp.63–74.
- Slater, S. and Narver, J. (2000) 'The positive effect of a market orientation on business profitability: a balanced replication', *Journal of Business Research*, Vol. 48, No. 1, pp.69–73.
- Sosik, J., Kahai, S. and Piovoso, M. (2009) 'Silver bullet or voodoo statistics? A primer for using the partial least squares data analytic technique in group and organization research', *Group and Organization Management*, Vol. 34, No. 1, pp.5–36.
- Stevenson, H.H. and Jarillo, J.C. (1990) 'A paradigm of entrepreneurship: entrepreneurial management', *Strategic Management Journal, Special Issue: Corporate Entrepreneurship* Vol. 11, pp.17–27.
- Sull, D. (2009) 'Competing through organizational agility', McKinsey Quarterly, December, Vol. 1, pp.1–9.
- Sull, D. and Bryant, B. (2006) Discussion for Strategic Agility, Working paper.
- Teece, D. (2007) 'Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance', *Strategic Management Journal*, Vol. 28, No. 13, pp.1319–1350.
- Teece, D., Pisano, G. and Shuen, A. (1997) 'Dynamic capabilities and strategic management', *Strategic Management Journal*, Vol. 18, No. 7, pp.509–533.
- Tenenhaus, M. et al. (2005) 'PLS path modeling', Computational Statistics and Data Analysis, Vol. 48, No. 1, pp.159–205.
- Thang, N. and Buyens, D. (2008) 'Training, organizational strategy, and firm performance', *The Business Review*, Vol. 11, No. 2, pp.176–183, Cambridge.
- Weber, Y. and Tarba, S. (2014) 'Strategic agility: a state of the art', *California Management Review*, Vol. 56, No. 3, pp.5–12.
- Weill, P., Subramani, M. and Broadbent, M. (2002) *IT Infrastructure for Strategic Agility*, Center for Information Systems Research MIT Sloan School of Management, Cambridge, MA.
- Weerawardena, J. (2003) 'The role of marketing capability in innovation-based competitive strategy', *Journal of Strategic Marketing*, Vol. 11, No. 1, pp.15–35.
- Winter, S. (2007) Dynamic Capabilities: Understanding Strategic Change in Organizations, John Wiley & Sons, Malden, MA.
- Yang, C. and Liu, H.M. (2012) 'Boosting firm performance via enterprise agility and network structure', *Management Decision*, Vol. 50, No. 6, pp.1022–1044.