

African Journal of Emerging Issues (AJOEI)

Online ISSN: 2663 - 9335 Available at: https://ajoeijournals.org

JOURNAL OF STRATEGIC MANAGEMENT

STRATEGIC FLEXIBILITY, TMT COGNITIVE CAPABILITY AND FIRM PERFORMANCE: A REVIEW OF LITERATURE

Kahingo, Caroline. M. K,¹ and Dr. Muchemi, Anne. W²

1*Ph.D Candidate, School of Business, Kenyatta University, Nairobi, Kenya

*Corresponding Author's E-mail: carolinekahingo@gmail.com

²Lecturer, School of Business, Kenyatta University, Nairobi, Kenya

ABSTRACT

Purpose: The dynamism experienced in the business environment has led to unprecedented levels of unpredictability, volatility and intense competition among firms. The strategies that were employed previously in stable environments have become unviable in this dynamism. This has placed a strain on firms to implement strategies that enable them to survive and achieve superior performance. Strategic flexibility has been proposed as a strategic option for firms operating in this ever turbulent circumstances. It enables firms to adapt and adjust as a response such changes. However, a number of challenges confront both scholars and practicing managers regarding this concept. One of the most outstanding is that there is no clear identification of the dimensions and indicators for its measurement.

Methodology: Consequently, this study undertook a systematic review of extant theoretical and empirical literature on strategic flexibility, top management team (TMT) cognitive capability, environmental dynamism and firm performance. The relevant theories and constructs to the study were examined, operational indicators identified and both theoretical and conceptual gaps highlighted.

Conclusion: This paper makes theoretical contributions in strategic management because the inclusion of the moderating variable, environmental dynamism and the mediating variable, TMT cognitive capability, has led to the development of a proposed theoretical model that is expected to guide future studies examining the effect of strategic flexibility on firm performance.

Recommendation: This paper recommends that an empirical study should be conducted using the proposed theoretical model in order to establish the relationship between the variables in order to contribute to the consolidation of knowledge on the construct of strategic flexibility.

Key words: Environmental Dynamism, Firm Performance, Strategic Flexibility, TMT Cognitive Capability, Resource Flexibility, Strategic Action Flexibility

1.0 INTRODUCTION

Turbulence in the business environment is characterized by unpredictability and intense competitiveness (Nowotny, Scott & Gibbons, 2001). This environmental dynamism, attributed to fast-paced technological change, globalization and volatility, causes a major challenge on a firm's abilities to maintain competitiveness (Hitt, Keats, & DeMarie, 1988). Additionally, the average response speed to competition has significantly increased further impacting negatively on firm performance (Grimm, Lee & Smith, 2005). Consequently, intended planned strategies that were developed in relatively stable environments may not apply in dynamic environments (Sanchez, 1995; Eisenhardt, 2002; D'Aveni, Dagnino & Smith, 2010). When organisations face intense competition, organisational performance becomes essential for survival and success of the business (Richard, Devinney, Yip, & Johnson, 2009).

The focal point in strategic management has been to understand why some organisations persistently outperform others. Anwar, Shah and Hasnu (2016) argue that the relationship between strategy and performance linkages is central in strategic management research. The key objective of any organisation is to maintain continuous performance because this enables it to grow and progress (Gavrea, Ilies & Stegerean, 2011). Modern organisations facing intense competition must be keen on organisational performance because it is the key for their survival and success (Richard *et al.*, 2009).

Increased dynamism poses a challenge to a firm because it triggers off changes in suppliers, buyers, character of competition and overall competitive environment (Petrus, 2019). At the same time, for firms that have developed a best fit between a strategic orientation and the environment, changes in demand and emerging opportunities may offer advantages since they are better placed to tap into them (Azadegan, Patel, Zangoueinezhad, & Linderman, 2013). Since environmental dynamism has a significant impact on the structure, strategy and performance of a firm (Miles, Covin & Heeley, 2000), the strategic effectiveness is supported where there is a fit between its internal structures and processes and the operating environment (Anand & Wand, 2004). Different firms react differently to idiosyncratic environmental dynamism with different strategies; including avoidance of the uncertainty, buildup of slack and flexibility (Womack, Jones & Roos, 1990).

Strategic flexibility is crucial for survival of firms operating in an ever turbulent environment (Asker & Mascarenhas, 1984; Hitt, Keats, & DeMarie, 1988; Sharma, Sushil & Jain, 2010). As an organisational capability, strategic flexibility is employed by a firm to adapt either proactively or reactively due to external pressure (Aaker & Mascarenhas, 1984; Abbott & Banerji, 2003; Sanchez, 1995; Johnson, *et al.*, 2000; Kim, 2014; Nadkarni & Narayanan, 2007; Dreyer & Grønhaug, 2004; Volberda, 1996; Verdú-Jover *et al.*, 2005). The firm recognizes changes in the environment, reallocates its resources to undertake different strategic actions, and promptly retracts on its actions and resource commitment due to dynamism (Shimizu & Hitt 2004).

Research shows that strategically flexible firms achieve higher financial performance (Combe *et al.*, 2012; Nadkarni & Narayanan 2007; Saini & Johnson 2005; Verdú-Jover *et al.*, 2005). They are able to respond quickly to opportunities and challenges in their environments (Ahmad, et al., 2016; Verdú-Jover *et al.*, 2005). These firms also adopt alternative courses of action or strategic options to compete in product markets (Sanchez, 1995) and to resolve challenges (Shimizu & Hitt, 2004). By deploying their existing resources to create new sets of resources, strategically flexible firms respond appropriately to changes (Wei, Yi & Guo, 2014).

However, other studies have shown contradictory outcomes, arguing strongly that strategic flexibility may be suitable only in particular situations in the market during rapid changes and in specific industries such as those that are fast-paced (Ahmad *et al.*, 2016; Nadkarni & Narayanan, 2007). Yet other scholars argue that firms that are too flexible may lack the level of stability required to achieve a balance that will enable them to exploit the current opportunities (Verdú-Jover *et al.*, 2005). Such firms are always trying to achieve flexibility which costs them on the present opportunities.

1.1 Statement of the Problem

Dynamism in the business environment has led to unpredictability and intense competitiveness (Nowotny, Scott & Gibbons, 2001). Such an environment is characterized by unprecedented levels of volatility, uncertainty, intense competition and ambiguity. Consequently, this has had a significant impact on the structure, strategy and performance of firms (Miles, Covin & Heeley, 2000). The organisation continually faces shortening of the product cycle, changes in the nature of competition and the overall competitive environment (Petrus, 2019). To maintain its strategic effectiveness, a firm needs to strive to build a fit between its structures and processes and

operating environment (Anand & Wand, 2004). This implies that the traditional methods of strategy developed in relatively stable environments can no longer tenable in the face of unpredictability (Sanchez, 1995; Johnson *et al.*, 2000).

Flexibility is a viable strategic option for firms faced with such circumstances (Womack, Jones & Roos, 1990). A review of extant literature demonstrates that strategic flexibility is crucial for survival of firms operating in ever turbulent environment (Asker & Mascarenhas, 1984; Hitt, Keats, & DeMarie, 1988; Sharma, Sushil & Jain, 2010). Flexible firms may be proactive or reactive in their actions as they develop strategies to weather the pressures by adapting to external change. This enables them to achieve higher financial performance (Combe *et al.* 2012; Nadkarni & Narayanan 2007; Saini & Johnson 2005; Verdú-Jover *et al.* 2005).

However, the advancement of this construct by scholars and its application by firms faces a number of challenges. One, in most of the previous studies the term 'flexibility' was mainly applied to the manufacturing industry (Johnson *et al.*, 2003; Brozovic, 2018; Sunayana & Perveen, 2019) and this has contributed to the paucity of literature focusing on strategic flexibility itself (Brozovic, 2018). Two, a lack of consensus on its definition among the various scholars persists (Johnson *et al.*, 2000; Kim, 2014; Brozovic, 2018) thus hindering understanding of its scope and dimensions. Three, the multi dimensionality of the concept makes it a difficult concept to properly elucidate (Dreyer & Granhaug, 2004; Sethi & Sethi 1990). Four, it is also a challenge to establish unanimously agreed on measures for its measurement (Singh, Oberoi & Ahuja, 2013). This has led to unconsolidated and mixed findings regarding this construct, of which Brozovic (2018) highlights the necessity of additional theoretical studies on the construct to bring fusion into the field.

Consequently, this paper presents a systematic review of extant literature on the construct of strategic flexibility. In so doing, the paper proposes to contribute to further advancement of this construct by expanding the dimensions of strategic flexibility that have previously been left out. The paper also examines the relationship between strategic flexibility and firm performance by incorporating TMT cognitive capability as a mediating variable and environmental dynamism as a moderating variable; hence the proposal of a theoretical framework to address identified gaps emerging from a review of theoretical and empirical literature. It is anticipated that this

theoretical model can be used in future empirical studies and contribute to further consolidation of knowledge on strategic flexibility.

2.0 CONCEPTUALIZATION OF KEY CONSTRUCTS

2.1 Strategic Flexibility

Currently, there is no agreement on how to define the construct of strategic flexibility. Brozovic (2018) in a review of empirical studies on strategic flexibility identified a total of 83 unique definitions. Nadkarni and Narayanan (2007) describe strategic flexibility as the ability to precipitate intentional changes, and adapt to environmental changes through continuous changes in the current strategic actions, asset deployment and investment strategies. Sanchez (1995) describes strategic flexibility as the firm's abilities to respond to various demands from a dynamic environment. A synthesis of various definitions leads to the proposal of one that will guide this paper: strategic flexibility is the ability of a firm to be aware of changes in the environment, and have the foresight and ability to act or respond to them in the most appropriate and timely manner by realigning its structure and processes; and repositioning of flexible resources.

Extant literature portrays several perspectives on the construct of strategic flexibility. First, strategic flexibility is a reactive ability of firms in responding to environmental changes (Aaker & Mascarenhas, 1984; Ansoff, 1975; Sanchez, 1995; Harrigan, 1985a; Sunayana & Parveen, 2019). It is basically a corrective maneuver taken by an organisation due to change in the external environment; enabling firms adjust to fit in the changing environment. Second, strategic flexibility is a proactive ability (Abbott & Banerji, 2003; Evans, 1991; Zhang, 2006; Ogunmokun & Li, 2012). Although it appeared in earlier studies this perspective has only become prominent in recent studies (Brozovic, 2018). It emphasizes the ability of an organisation to undertake preemptive maneuvers to deal with foreseen changes in its environment. In this regard, the firm can intentionally trigger change and continuously adjust its strategic actions, resource use and investment strategies (Nadkarni and Narayanan, 2007).

Third, strategic flexibility is a dynamic capability owned by a firm (Eisenhardt & Martin, 2000, Zhou & Wu, 2010). As such it can be applied at two levels; either as a firm-level or managerial-level activity (Volberda, 1996; Combe & Greenley, 2004; Sharma, Sushil & Jain, 2010). At the

firm-level, through its emphasis on flexible use of resources and reconfiguration of processes, strategic flexibility enables firms to achieve a competitive advantage; redeploy resources and change their current operations and have a timely response in turbulent markets (Eisenhardt & Martin, 2000; Zhou & Wu, 2010). At the managerial level, flexibility is perceived as a managerial task that addresses the managerial capabilities that make a firm flexible (Sharma, Sushil & Jain, 2010). Strategic flexibility as a firm-level activity depends on the cognitive capability possessed by the top management team (TMT).

2.1.1 Dimensions of Flexibility

The multidimensional nature of strategic flexibility renders it as a difficult concept to define (Matthyssens, Pauwels & Vandenbempt, 2005; Dreyer & Grønhaug 2004; Sethi & Sethi, 1990). There are several dimensions of strategic flexibility identifiable from extant strategic management studies including resource flexibility, coordination flexibility, strategic action flexibility, market flexibility, production flexibility, competitive flexibility and HR flexibility. Resource flexibility refers to flexibility in resource allocations to pursue alternative courses of action (Zhou & Wu, 2010). It shows the extent to which a firm is able to use its resources to produce and distribute products effectively. Flexible resources can be put to alternative uses, have low costs and time needed to switch to those alternative uses (Sanchez, 1995; Matthyssens, Pauwels & Vandenbempt, 2005; Wei, Yi & Guo, 2014). The degree of resource flexibility can be increased by shortening the time necessary to switch to an alternative course of action (Sunayana & Parveen, 2019).

Coordination flexibility is the ability of a firm to pool and consolidate its current resources in diverse ways to build new sets of resources in response to environment changes (Sanchez, 1995; Sunayana & Parveen, 2019; Wei, Yi, & Guo, 2014; Zhou & Wu, 2010). It involves the processes that identify and reshape groups of resources within the organization (Sanchez, 1995; Zhou & Wu, 2009; Sunayana & Parveen, 2019). Coordination flexibility increases with reduced costs, difficulty and time required for these three aspects. Conversely, it increases with the range of alternative novel resource uses, resource chain configurations, and systems and processes identified to pursue a defined course of action (Sanchez, 1997).

Strategic action flexibility is the capability of a firm to respond to environmental changes by using various strategic options (Nadkarni & Narayanan, 2007; Nadkarni & Herrmann, 2010;

Sopelana, Kunc, & Herna'ez, 2014). According to Ahmadi and Ozman (2017) it is the capability of the firm to be responsive to the environment by showing different strategic actions at a high speed. The dynamic environment demands that organisations must develop different strategic options that enable them to take novel actions effectively and quickly (Anand & Ward, 2004). Strategic action flexibility enables firms to have the capacity to address new situations through actions taken.

Market flexibility refers to the ability of an organisation to reorganize its marketing efforts to respond rapidly to changes in its environment (Grewal & Tansuhaj, 2001; Abbott & Banerji, 2003; Beraha, Bingol, Ozkan-Canbolat & Szczygiel, 2018). According to Abbott and Banerji (2003) market flexibility includes the ability to develop and roll out a uniform product in markets with similar demand characteristics. Changes in customers' demands, shortening of the product cycle and increased competitive intensity lead to drastic changes in the market position of a firm or an entire industry. This implies that firms need to be flexible in their marketing to be responsive to such changes (Combe & Greenley, 2004) and develop the capability to use multiple distribution channels.

Production flexibility can be described as the ability of an organisation to manufacture or produce goods or services quickly, and offer them at competitive prices in most global markets (Abbott & Banerji, 2003; Beraha *et al.*, 2018). It involves aspects such as modification of the current products, offering new products, and changing the capacity level (Abuzaid, 2014). In pursuing production flexibility, the firm's intention is to use its capabilities to configure and reconfigure its products or services; to generate unique options of significantly superior value for potential customers (Johnson *et al.*, 2003). Entrenched in production flexibility is process flexibility which enables the firm to match its capacity with variation in demand. Process flexibility is the ability of a firm to produce multiple products on multiple production facilities or lines (Atwa, 2013).

Competitive flexibility can be described as the firm's ability to compete in dynamic markets characterized by high competitive intensity and demand or technological uncertainty (Abbott & Banerji, 2003; Abuzaid, 2014; Atwa, 2013). Firms may face competitive pressure from their competitors' maneuvers, such as introduction of new products that threaten their market position, or the entry of new competition (Sharma, Sushil, & Jain, 2010). Highly flexible firms have the

ability to scan the environment, evaluate markets and competitors, and to quickly accomplish reconfiguration and transformation ahead of competition (Teece, Pisano & Shuen, 1997).

HR flexibility is an important dimension in strategic flexibility (Wright & Snell, 1998; Xiu, Liang, Chen, & Xu, 2017). Strategically flexible develop flexible and innovative HR practices that are suitable for the demands of a dynamic environment. The three important aspects of HR flexibility in dynamic environments are skill malleability, functional flexibility and behavioral flexibility (Wright & Snell, 1998; Xiu, *et al.*, 2017). This means that HR should be able to: learn new tasks quickly; carry out diverse tasks in different functions while assuming responsibility for them, and adjust their behaviour as per the situation.

2.2 Firm Performance

Firm performance is a relevant construct in strategic management research that is often used as a dependent variable (Selvam *et al.*, 2016). This is because management teams and researchers are interested in assessing the performance of organizations (Taouab & Issor, 2019). However, research is still hampered by a lack of consensus on its definition, selection of indicators which is dependent of individual convenience and scarce consideration of its dimensionality (Combs, Crook & Shook, 2005; Richard *et al.*, 2009). Harrison and Wicks (2013) define firm performance as the total value created by a firm through its activities which is the sum of utility created for each of a firm's legitimate stakeholders. Richard et al. (2009) maintain that organizational performance comprises of three specific areas of firm outcomes; financial performance, product-market performance and shareholder return.

Extant research demonstrates various perspectives on the construct of performance. First, the resource-based perspective of firm performance dominates in strategic management. This view holds that superior firm performance is attributed to organisational resources and capabilities (Bharadway, 2000). Barney (1991) posits that competition between firms is based on the possession of valuable, rare, difficult to imitate and non-substitutable resources which enables firms to generate above normal profits (Barney, 2001). Immobility of these resources within a firm enables it to achieve a sustained competitive advantage (Peteraf, 1993) and helps to explain why some firms outperform others persistently.

Second, the shareholder theory advanced by Friedman (1970) emphasizes that the only responsibility a firm has is to increase shareholder wealth. According to the author business

should use available resources to engage in activities which will increase the profits within the set legal confines. Harrison and Wicks (2013) posit that the shareholder perspective advances that firm performance is concerned with providing financial returns; which are also variously known as profits, return on investment (ROI), economic rents or shareholder returns.

Third, the stakeholder theory advanced by Freeman (1984) advocates for the identification and prioritization of all stakeholders in a firm, not just the shareholders. According to Harrison and Wicks (2013) stakeholders include all groups affected by a firm, among them being customers, employees, suppliers, and local communities. A consideration of the interests these stakeholders create improves a firm's value hence positively impacting on performance. Fourth, the balanced scorecard (BSC) perspective of firm performance. Kaplan and Norton (1992) argue that there is no single measure to adequately address the critical areas of the business. Subsequently, they developed the BSC to include both financial measures and operational measures. Financial measures are a reflection of the outcomes of actions that have already been executed; while operational measures are the drivers for future financial performance (Kaplan & Norton, 1992).

The major dimensions of performance identifiable in extant literature are financial performance and non-financial performance. Financial performance is a traditional measure of firm performance based on the shareholder theory. The major concern for investors is superior financial performance (Chakravarthy, 1986). According to Venkatraman and Ramanujam (1986) financial performance is a narrow segment of firm performance because it shows the achievement of economic goals only. The authors identify overall profitability, profit margin, earnings per share, stock price and sales growth as measures of financial performance. The most common measures of financial performance include profitability, growth and market value, ROA, ROI, ROE, EBITM and new wealth creation (Abbott & Banerji, 2003; Cho & Pucik, 2005; Atwa, 2013). Muchemi (2013) posits that financial information assists the firm in decision-making in such aspects as business profitability, pricing, budgeting, cost, strategic planning and incentive compensation.

Non-financial performance are mainly subjective measures and qualitative in nature. Most of the studies currently emphasize non-financial or multi-dimensional measures of firm performance in evaluating the achievement of organisational goals. The information is collected by asking managers and other informants in key positions to rate their company's overall performance on

measures such as market share, profitability, innovation efforts and performance of human resource practices (Singh, Darwish, and Potočnik, 2016). Other measures of qualitative performance are market share, market growth, current strategy, cost market effectiveness, technological effectiveness, diversification and product development (Muchemi, 2013).

Many recent studies combine both quantitative and qualitative measures of performance. Santos and Brito (2012) identified six dimensions of firm performance: profitability, growth, market value, customers' satisfaction, employees' satisfaction, environmental performance and social performance. Ganesh-Kumar and Nambirajar (2013) adopt market share, sales growth, profit margin, overall product quality, overall competitive position, average selling price, ROI and ROS as their measures of organisational performance. Combs, Crook and Shook (2005) in their analysis of publications in the period from 1980 to 2004 identified three dimensions of performance as: accounting returns, stock market, and growth. Other measures (market share, survival, and subjective measure) identified in the publications did not fall clearly into these major dimensions.

2.3 TMT Cognitive Capability

Armstrong and Hird (2009) describe cognition as the mental activities relating to information search, storage, retrieval, and processing. Subsequently, TMT cognitive capability is the capacity of an individual manager to perform one or more of the mental activities that comprise cognition (Helfat & Peteraf, 2015). Although other people in the organisation may be involved in scanning and processing data, the responsibility of interpreting this information and making strategic decisions for the firm lies with the TMT (Nadkarni & Narayanan, 2007). Managers' interests, values and beliefs influence the choices they make; and this determines the strategic direction of the organisation (Child, 1972; Kor & Mesko, 2012).

The TMT cognitive capabilities vital for strategic change are perception, attention, problem-solving and reasoning, and communication (Helfat & Peteraf, 2015). Perception involves the capability of distinguishing stimuli in the environment guided by prior knowledge, expectation, and belief which aids in easier pattern formation and thus quick interpretation. Nadkarni and Barr (2008) argue that TMT's fast interpretation of environmental changes enables firms to undertake timely strategic responses thus performing better than those that do not do so.

Attention refers to the capability of identifying relevant information and focusing on it in order to further analyze and make meaning of it (Helfat & Peteraf, 2015). Strategic schemas assist in the identification of the relevant information to pay attention to in strategy formulation (Nadkarni &Narayanan, 2007). In uncertain, unpredictable and complex environments outstanding attention skills become crucial in identifying opportunities and threats (Souza and Forte, 2019); enabling the TMT to shift their attention focus with speed from one strategic option to another (Cho & Hambrick, 2006).

Problem-solving refers to removing obstacles in the path of a desired goal (Gazzaniga, Heatherton, & Halpern, 2010). According to Colman (2006) reasoning refers to mental activities focused on finding solutions to problems by using formal rules of logic or another rational procedure. It is through reasoning that the TMT interprets accurately the cause-effect relationship in environmental events, hence influencing the strategic action taken, the speed of response and outcomes (Nadkarni & Barr, 2008). Managerial communication plays a crucial role in the support of relationships and in influencing employees' attitudes and behaviour (Dasgupta, Suar & Singh, 2013). In dynamic environments CEOs who have superior communication and social cognitive capabilities enable their firms to reconfigure their strategic assets seamlessly (Helfat &Peteraf, 2015).

TMT cognitive capability plays a vital role in successful adoption of strategic flexibility and positive outcomes of firm performance. According to Combe and Greenley (2004) it seems that some decision makers are more capable of generating strategic flexibility than others. The authors maintain that cognitive models facilitating different ways of thinking about strategy will have a greater influence on strategic flexibility than those that do not because they form the central beliefs about environmental response. Executives with competitive cognitive structures are able to identify any threatening competitive action thus increasing the possibility and speed of retaliation (Marcel, Barr & Duhaime, 2010).

2.4 The Moderating Effect of Environmental Dynamism

Environmental dynamism has received a lot of attention in management literature (Anand & Wand, 2004; Miles, Covin & Heeley, 2000). It refers to the rate and level of instability and unpredictability in a firm's external environment (Wang & Li, 2008; Zhang, 2006; Danneels & Sethi, 2011). The unpredictability and intense competitiveness among firms (Nowotny, Scott &

Gibbons, 2001) is caused mainly by fast-paced technological change, globalization and volatility, posing a major challenge on a firm's abilities to maintain competitiveness (Hitt, Keats, & DeMarie, 1988).

Previous studies have established that environmental dynamism moderates firm performance (Okeyo, 2014; Miles, Covin & Heeley, 2000; Haleem, Jehangir, & UlHaq, 2018). Okeyo (2014) found that the effect of the business environment is greater in financial performance than on non-financial performance; indicating that total business environment accounts for 6.4 percent of the changes in organizational financial performance. Haleem, Jehangir, and UlHaq (2018) found that there is a positive and significant relationship between environmental dynamism and firm performance.

Several studies have examined the influence of strategic flexibility on firm performance in different environments. These studies reveal that the impact of strategic flexibility is greater in fast changing industries than in slow changing ones (Hitt, Keats, & DeMarie, 1998; Johnson *et al.*, 2003; Nadkarni & Narayanan, 2007). According to Nadkarni and Narayanan (2007) an industry's clock speed moderates the relationship between strategic flexibility and firm performance with strategic flexibility being positively related to firm performance in fast-clock speed industry than in slow-clock speed industry. It has also been established that strategic flexibility has a positive effect on organisational performance during times of turbulence, crisis and unpredictability (Ahmad *et al.*, 2016; Grewal & Tansuhaj, 2001; Nadkarni & Narayanan, 2007). According to Grewal and Tansuhaj (2001) both high demand and technological uncertainty moderates the relationship between strategic flexibility and firm performance. Contrary to this, other studies show that environmental dynamism has no effect on the relationship between flexibility of strategic planning and firm performance (Mbengue & Ouakouak, 2011).

3.0 THEORETICAL REVIEW

This section presents the theories that underpinned the study. These are Dynamic Capabilities Theory, Resource Based View (RBV), and Strategic Choice Theory in addition to considering the Balanced Scorecard model and Performance Prism Framework. The lead theory in this paper is Dynamic Capabilities Theory that outlines how managerial capabilities can enable firms to compete in changing competitive landscape by using dynamic capabilities.

3.1 Dynamic Capabilities Theory (DCT)

This theory holds that dynamic capabilities are the foundations for a firm to gain a competitive advantage. Bleady, Ali, and Ibrahim hold that DCT transcends the idea a firm's sustained competitive advantage relies on its acquisition of strategic resources as advanced by RBV. According to Teece, Pisano and Shuen (1997) dynamic capabilities refer to the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. These dynamic capabilities support the creation, deployment and protection of intangible resources needed for sustained superior firm performance (Teece, 2007). Intangible resources such as unique skills, processes and procedures greatly determine a firm's competitive advantage.

Teece (2007) posited that dynamic capabilities can be grouped into the capability of: sensing and shaping opportunities and threats; seizing opportunities; and reconfiguration of assets and structures to maintain competitiveness. This means that a firm with dynamic capabilities will be able to identify new opportunities existing in the external environment, take action to tap into these opportunities, and combine its existing resources in new ways to enable it to do so. Therefore, dynamic capabilities undergird organisational and strategic routines enabling managers to change their resource bases through acquiring new ones, shedding those that are no longer needed, integrating them and combining them in new ways to create novel value-creating strategies (Eisenhardt & Martin, 2000). For a firm to develop its competitive advantage, it must possess three capabilities: managerial and organisational processes, market positions and opportunities (Teece, Pisano & Shuen, 1997). Managerial and organizational processes are the way things are done in the firm or the patterns of current practices and learning. The market position refers to a firm's current specific resources in terms of technology, intellectual property, complementary assets, customer base, and its external relations with suppliers and

complementors. Strategic alternatives available to the firm, and the past strategies that had been adopted make up the path or the unique history of the firm.

This theory is relevant to this paper because TMT cognitive capability is a dynamic capability that is very important for strategic flexibility. It helps the firm to sense changes in the external environment; and take appropriate action to address this change. The firm also needs flexible resources that can be combined in new ways and to increases their speed of response to unpredictable and unforeseen change. These flexible resources help firms to create opportunities through new product development and new markets to spread risk associated with uncertainty and respond to changes in customers' needs.

3.2 Resource Based View (RBV)

The RBV explains how firms use their resources to achieve a sustained competitive advantage. This is based on the work by Penrose (1959) who conceived firms as a collection of resources. Wernfelt (1994) describes a resource is as anything which could be either a strength or weakness of a given firm; and which is tied semi permanently it. Barney (1991) states that these resources can be tangible and intangible, for example, assets, capabilities, process attributes, information and knowledge. The RBV is based on the assumptions made by Barney (1991) that the firms within an industry have different resource endowments; and these resources are relatively immobile across the firms which makes the assumption of resource heterogeneity a long lasting one.

Barney (1991) argues the firm needs to acquire or create resources that possess four attributes which he identifies in the VRIN framework. Valuable resources are capable of achieving or implementing a specific strategy in a manner that enhances efficiency and performance (Barney, 1991). According to Barney (1991) when a valuable resource is owned by many firms there is no possibility of any one firm achieving a competitive advantage since all the firms have an equal opportunity of utilizing it. Barney (2001) argues that resources are perfectly inimitable when other firms cannot imitate the strategies used by the successful firm to achieve a competitive advantage. This can be based on the firm's historical conditions, misunderstanding of the link between the firm's resources and its competitive advantage, and when the resources depend on socially complex interactions within the firm. Finally the resources should not be substitutable;

this means that the other firms should not possess resources that are strategically similar or substitutes to those possessed by a successful firm.

This theory underpins this paper because TMT cognitive capability is a strategic resource that is developed through experience to form unique knowledge bases and inimitable skills. As a strategic resource, TMT cognitive capability can be utilized to quickly assist the firm in taking advantage of opportunities in the environment, and neutralizing sensed threats. Superior TMT cognitive capabilities are needed for a firm to respond quickly to dynamic environments thus leading to superior firm performance.

3.3 Strategic Choice Theory (SCT)

Strategic Choice Theory (SCT) was developed by John Child in the 1970s to address the inadequacies of previous theories which neglected managerial agency. Strategic choice is the process whereby those who hold power within organisations make decisions concerning strategic action to be undertaken (Child, 1972). Previously many of the theories had emphasized that the external environment had a lot of influence on the structure of the organisations, thus totally ignoring the role of agents within the organisation. Therefore, the SCT as an integrative approach emphasizes the interaction between organisational choices, actions and the business environment. Child (1972) posits that although the organisations are partially influenced by the environment, it is the top management' choices that have the greatest impact.

Child (1997) highlights the interactive nature of strategic choice and the organisation's environment. This means that the external environment imposes constraints on the strategic choices available to an organisation while the managers have the responsibility to react with their own subjective definitions to environmental challenges identified as variability, complexity and illiberality. Child (1997) asserts that the evaluation of information, both from within and outside the organisation, enables TMT to identify both opportunities and challenges. As a result organisational learning ensues which leads to strategic choice and action. The review of this theory helps in guiding the development of the arguments in this paper that TMT cognitive capability is crucial in determining the extent of strategic flexibility that will be adopted by a firm.

3.4 The Balanced Scorecard (BSC)

The Balanced scorecard (BSC) is a strategic planning and management system developed by Kaplan and Norton in the early 1990s. This was to address the shortcomings in earlier performance measures that forced mangers to choose either a financial or operational perspective. According to Kaplan and Norton (1992) there is no single measure that can provide a clear performance target or focus attention on the critical areas of the business. Therefore the BSC includes both financial measures that are a reflection of the outcomes of actions that have already been executed; and operational measures which are the drivers for future financial performance (Kaplan & Norton, 1992). It measures four different perspectives of performance: customer, internal business, innovation and learning and financial. Kaplan and Norton (1996) asserts that these perspectives provide a balance between external measure like operating income and internal measures like new product development.

The customer perspective is the heart of strategy (Kaplan & Norton, 2001) and answers the question on how the customers perceive the organisation. Kaplan and Norton (1992) maintain that customers' concern tend to fall into four categories: time, quality, performance and service, and cost. The internal business perspective examines what the organisation can do internally to address its customers' expectations (Kaplan & Norton, 1992). These measures are developed from those business processes that greatly impact customers' satisfaction. The innovation and learning perspective examine the measures that the organization can undertake to continually improve their products and processes and develop new products in an effort to compete successively. The last perspective, financial perspective, examines the attractiveness of the organisation to its stakeholders in terms of profitability, growth and shareholder value (Kaplan & Norton, 1992).

3.5 Performance Prism Framework

The Performance Prism (PP) challenges the top management team to consider the wants and needs of all the organisations stakeholders (Neely, Adams & Crowe, 2001). According to the authors the Performance Prism is a comprehensive second generation performance measurement system that looks at the main business issues of a wide variety of organisations. It is made up of five separate but interrelated perspectives: stakeholder satisfaction, strategies, processes, capabilities and stakeholder contributions. The stakeholder satisfaction perspective seeks to

establish the organisation's important stakeholders, their wants and needs. The performance Prism expands the view taken by the BSC that only has shareholders. The stakeholders include shareholders, customers, employees, suppliers, alliance partners and intermediaries.

The second perspective in the BSC is strategies. This component seeks to establish the strategies to be used to satisfy the wants and needs of the stakeholders. The third perspective involves the business processes that have been put in place for the strategies to be effective. The fourth perspective is capabilities, which are described as the combination of people, practices, technology, and infrastructure that facilitate the implementation of the business processes in the firm (Neely et al., 2001). This perspective enables the organisation to determine the availability of the required capabilities, the plans to use them and whether they have been sufficiently developed and protected. The last perspective is stakeholder contribution, which seeks to find out what the organisation needs from stakeholders to preserve and develop capabilities. This perspective recognizes the reciprocal relationship that exists between an organisation and its stakeholders. This model underpins this paper because it recognizes the critical role played by stakeholders in the performance of any firm. Therefore, non-financial measures of performance have been included in the study.

3.6 The Call for a Theoretical Model

The review of theoretical literature has brought to the foreground the call for a theoretical model linking strategic flexibility, TMT cognitive capability, environmental dynamism and firm performance. One of the gaps identifiable in the theoretical review is the inadequacy of existing theories in expounding the relationships between the constructs in the study. Two, it has been noted that strategic flexibility is a multidimensional construct. However, extant literature has tended to focus on the dimensions of resource, coordination and strategic action. Consequently, this study has adopted an expansion of its operationalization to include more dimensions. This then highlights the need to propose another theoretical model to incorporate them in examining the link between strategic flexibility and firm performance.

4.0 PROPOSED THEORETICAL MODEL

In view of the foregoing discussion, a model to link strategic flexibility, TMT cognitive capability, environmental dynamism and organisational performance is proposed. In this model, the relationship between the constructs and the indicators to be adopted in measuring them are shown in Figure 1.

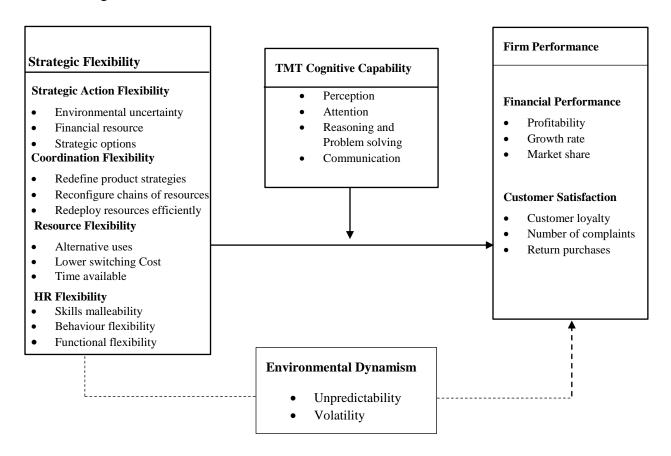


Figure 1: Theoretical model linking strategic flexibility, TMT cognitive capability, environmental dynamism and firm performance

Source: Author (2020)

4.1 Strategic Flexibility and Firm Performance

The turbulence in the external environment has necessitated the adoption of strategic flexibility for growth and survival of all organisations. A review of extant literature has shown that firms that adopt strategic flexibility are able to perform well in dynamic environments. Flexible firms achieve higher financial performance (Combe *et al.* 2012; Nadkarni & Narayanan 2007; Saini & Johnson 2005; Verdú-Jover *et al.* 2005). This is because such organisations are able to identify

and respond quickly to opportunities and threats (Ahmad *et al.*, 2016; Verdú-Jover *et al.*, 2005). Organisations that have rigid resources may not be in a position to quickly shift their resources in response to the demands of environmental changes. Resource flexibility enables organisations to change their resources allocations to pursue alternative courses of action (Zhou & Wu, 2010). Wei, Yi and Guo (2014) suggest that both resource flexibility and coordination flexibility have a positive moderating effect on the relationships between organizational ambidexterity and new product development. Strategic flexibility is crucial in the use of existing strategic resources to create novel sets and develop alternative strategic options appropriate for responding to changes (Nadkarni & Herrmann, 2010; Nadkarni & Narayanan, 2007; Sopelana, Kunc, & Herna'ez, 2014; Wei, Yi & Guo, 2014). HR flexibility is the foundation for a firm's capability in adopting strategic flexibility. The employees should be able to earn new tasks quickly, accomplish and assume responsibility for various tasks from other jobs and adjust their behavior in different circumstances (Wright & Snell, 1998; Xiu, *et al.*, 2017). Hence this study proposes that:

Preposition 1: There is a correlation between a firm's strategic flexibility and its performance.

Preposition 1a: There is a correlation between resource flexibility and firm performance

Preposition 1b: There is a correlation between coordination flexibility and firm performance

Preposition 1c: There is a correlation between strategic action flexibility and firm performance

Preposition 1d: There is a correlation between HR flexibility and firm performance

4.2 The Role of TMT Cognitive Capability

The TMT plays a crucial role in strategic flexibility because they make the key decisions in the organisation. TMT cognitive capability plays a vital role in successful adoption of strategic flexibility and positive outcomes of firm performance; the cognitive capabilities vital for strategic change are perception, attention, problem-solving and reasoning, and communication (Helfat & Peteraf, 2015). Due to the dynamism in the business environment, it is imperative that TMT perception need to be highly developed, thus aiding in fast interpretation of environmental changes that enables firms to undertake timely strategic responses (Nadkarni & Barr, 2008). TMT perception enables a firm to be aware of changes in the external environment with the potential to have a great impact on the firm. On the other hand, mental bias and inaccurate information processing and analysis is an impediment that may have far-reaching consequences

on firm performance because it leads to incorrect interpretations (Combe & Greenley, 2004). Firms may lose opportunities when the TMT fail to perceive crucial signals and therefore miss out on timely strategic responses.

Attention is the ability of TMT to identify and focus on relevant information; in a dynamic environment where there are many signals clamoring for their attention, TMT with outstanding cognitive skills pertaining to attention will have an intuitive sense of identifying opportunities and threats in the environment. Outstanding cognitive skills pertaining to attention are very crucial in identifying opportunities and threats in an uncertain, unpredictable and complex environment (Souza & Forte, 2019). A firm faced by unpredictability and uncertainty needs TMT who can shift their attention to emerging stimuli quickly as this determines the speed at which a firm moves from one strategic option to another (Cho & Hambrick (2006). In solving challenges that result from environmental dynamism, the TMT relies on reasoning to remove obstacles inherent in a dynamic environment. Superior problem-solving and reasoning capabilities assist CEOs to make wise investments and business models to become the first mover when new opportunities are identified (Helfat & Peteraf, 2015). Through communication, manager interact with employees to rally support for drastic changes that need to be implemented. TMTs with superior communication skills and social cognitive abilities are better placed in drumming up support for reconfiguration of strategic resources, gaining the advantage of timely responses (Helfat & Peteraf, 2015). Hence this study proposes that:

Preposition 2: A firm's TMT cognitive capability mediates the relationship between the extent of its strategic flexibility and performance.

4.3 The Moderating Effects of Environmental Dynamism

The global business environment is characterized by uncertainty and unpredictability caused by rapid technological changes, intense competitive action, more demanding customers and fluctuations in demand, either for products or raw materials. In these situations, strategic flexibility becomes the key to survival in the turbulent business environments, hence it is expected that a high degree of flexibility should be desirable for firms to achieve their objectives (Asker & Mascarenhas, 1984; Hitt, Keats, & DeMarie, 1988; Sharma, Sushil & Jain, 2010; Cingöz & Akdoğan, 2013). For instance, firms that respond proactively will outperform those that are reactive by adopting market-focused flexibility (Johnson *et al.*, 2003). These firms are

able to seize opportunities that their competitors are slow to seize, thus realizing higher financial performance.

Flexible firms will also identify threats that will adversely affect them, and will respond quickly to mitigate such effects by pulling out or reconfiguring and redeploying their strategic resources. In fast-paced industries, the industry's clock speed moderates the relationship between strategic flexibility and firm performance (Nadkarni & Narayanan, 2007). This means that strategic flexibility is more crucial to performance of firms in fast-clock speed industries than to those in slow-clock speed. However, there is need for firms to balance the degree of flexibility desired by a firm with the frequency and intensity of change in the environment. Firms that are too flexible may fail to achieve the degree of stability need for better financial performance (Verdú-Jover *et al.*, 2005). Hence this study proposes that:

Preposition 3: Environmental dynamism moderates the relationship between the extent of a firm's strategic flexibility and performance.

5.0 Conclusion and Direction for Future Research

The purpose of this paper was to explore the construct of strategic flexibility in order to highlight its effect on firm performance in the context of dynamic environments and propose a theoretical model that describes this phenomenon. Extant theoretical and empirical literature was reviewed systematically to investigate the nature of the construct of strategic flexibility and its associated phenomena. The theoretical arguments in the paper were anchored on Dynamic Capabilities Theory, Resource Based View, Strategic Choice Theory, Balanced Scorecard and Performance Prism Framework. Consequently, a theoretical model linking the constructs in the study has been proposed. A review of extant literature has revealed that there are contradictory findings on the relationship between strategic flexibility and the outcomes of firm performance; and the moderating effect of environmental dynamism on strategic flexibility. Conceptual and theoretical gaps in previous studies have also been highlighted. It has been shown that the TMT cognitive capabilities of perception, attention, interpretation and reasoning mediate the relationship between strategic flexibility and firm performance because the TMT's capability to identify, zero-in and interpret information on the causes and likely effects of change in the environment determines how the firm is able to weather environmental unpredictability and uncertainty, thus impacting on firm performance. This paper recommends that an empirical study should be

conducted using the proposed theoretical model in order to establish the relationship between the variables in order to contribute to the consolidation of knowledge on the construct of strategic flexibility.

References

- Aaker, D. A. & Mascarenhas, B. (1984). The need for strategic flexibility. *Journal of Business Strategy*, 5 (2), 74-82.
- Abbott, A., & Banerji, K. (2003). Strategic flexibility and firm performance: the case of US based transnational corporations. *Global Journal of Flexible Management Systems*, 4, (1/2), 1-8.
- Abuzaid, A. N. (2014). The Effect of Supply Chain Management Practices on Strategic Flexibility: Applied Study on the Jordanian Manufacturing Companies, European Journal of Business and Management, 6(5), 167-176.
- Ahmad, M., Khwaji, A., Durrah, O., & Allil, K. (2016). The impact of strategic flexibility on the performance of private banks during the crisis in Syria. *IJER*, 13(5), 2089-2097.
- Ahmadi, M., and Osman, M. H. M. (2017). Influence of context on strategic flexibility A critical review. *International Journal of Innovation and Business Strategy (IJIBS)*, 8 (2), 17-29.
- Anand, G., & Ward, P. T. (2004). Fit, flexibility and performance in manufacturing: coping with dynamic environments. *Production and Operations Management*, 13(4), 369–385. JOUR, Wiley Online Library. Retrieved from http://doi.wiley.com/10.1111/j.1937-5956.2004.tb00224.x
- Anwar, J., Shah, S., & Hasnu, S. (2016). Business strategy and organizational performance. *Pakistan Economic and Social Review*, 54(1), 97-122.
- Armstrong, S. J., & Hird, A. (2009). Cognitive style and entrepreneurial drive of new and mature business owner-managers. *Journal of Business and Psychology*, 24, 419-430. https://doi.org/10.1007/s10869-009-9114-4.
- Atwa, E. I. (2013). The impact of strategic intelligence on firm performance and the role of strategic flexibility: An empirical research in biotechnology industry. Unpublished MBA Research Project, University of Petra, Jordan.
- Azadegan, A., Patel, P.C., Zangoueinezhad, A., & Linderman, K. (2013). The effect of environmental complexity and environmental dynamism on lean practices. *Journal of Operations Management*, 31 (4), 193-212.
- Baker, J. (1996). Agility and flexibility: what's the difference? Cranfield University Working Paper SWP 5/96.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Barney, J. (2001). Resource-based theories of competitive advantage: A ten year retrospective on the resource-based view. *Journal of Management*, 27 (6), 643–650

- Beraha, A., Bingol, D., Ozkan-Canbolat, E., & Szczygiel, N. (2018). The effect of strategic flexibility configurations on product innovation. *European Journal of Management and Business Economics*, (27 (2), 129-140.
- Bharadwaj, A.S. (2000). A resource-based perspective on information technology capability and firm performance: an empirical investigation. *MIS Quarterly*, 24 (1), 169-196.
- Brozovic, D. (2018). Strategic flexibility: A review of the literature. *International Journal of Management Reviews*, 20 (1), 3–31.
- Chakravarthy, B. S. (1984). Strategic self-renewal: A planning framework for today. *Academy of Management Review*, *9*(3), 536–547.
- Child, J. (1972). Organizational structure, environment and performance: The role of strategic choice. *Sociology-the Journal of The British Sociological Association SOCIOLOGY*, 6 (1), 1-22. 10.1177/003803857200600101.
- Child, J. (1997). Strategic choice in the analysis of action, structure, organizations and environment: Retrospect and prospect. *Organization studies*, 18(1), 43-76.
- Cho, T. S., & Hambrick, D. C. (2006). Attention as the mediator between top management team characteristics and strategic change: The case of airline deregulation. *Organization Science*, 17(4), 453-469.
- Cho, H., & Pucik, V. (2005). Relationship between innovativeness, quality, growth, profitability, and market value. *Strategic Management Journal*, 26(6), 555-575.
- Cingöz, A. & Akdoğan, A. A. (2013). Strategic flexibility, environmental dynamism, and innovation performance: An empirical study. *Procedia Social and Behavioral Sciences*, 99 (6), 582 589.
- Colman, A. M. (2006). A Dictionary of Psychology (2nd ed.). Oxford University Press: Oxford, U.K.
- Combe, I. (2012). Marketing and flexibility: debates past, present and future. *European Journal of Marketing*, 46 (10), 1257 1267.
- Combe, I. A. and Greenley, G. E. (2004). The Capability for Strategic Flexibility: A Cognitive Content Framework. *European Journal of Marketing*, 38 (11/12), 1456-1480.
- Danneels, E., & Sethi, R. (2011). New product exploration under environmental turbulence. *Organization Science*, 22(4), 1026-1039.
- Dasgupta, S. A., Suar, D., & Singh, S. (2013). Impact of managerial communication styles on employees' attitudes and behaviours. *Employee Relations*, 35 (2), 173-199 DOI 10.1108/01425451311287862.
- D'Aveni, R. A., Dagnino, G. B., & Smith, K. G. (2010). Guest editors' introduction to the special issue: The age of temporary advantage. *Strategic Management Journal*, 31 (13), 1371–1385.
- Dreyer, B., & Grønhaug, K. (2004). Uncertainty, flexibility, and sustained competitive advantage. *Journal of Business Research*, 57(5), 484–494.
- Eisenhardt, K. M. (2002). Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*, 32 (3), 543-576.

- Eisenhardt, K., & Martin, J. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21(10-11), 1105-1121. https://doi.org/10.1002/1097-0266 (200010/11) 21:10 /113. 0. CO; 2-E
- Eppink, D. Jan. 1978. "Planning for Strategic Flexibility." Long Range Planning 11 (August): 9
- Ganesh-Kumar, C., & Nambirajan, T. (2013), Supply chain management components, competitiveness and organisational performance: Causal study of manufacturing firms. *Asia-Pacific Journal of Management Research and Innovation*, 9(4), 399–412.
- Gavrea, C., Ilies, L. & Stegerean, R. (2011). Determinants of organizational performance: The case of Romania. *Management & Marketing Challenges for the Knowledge Society*, 6(2), 285-300.
- Gazzaniga, M., Heatherton, T., & Halpern, D. (2010). Psychological Science, Norton: New York.
- Grewal, R., & Tansuhaj, P (2001). Building Organizational Capabilities For Managing Economic Crisis: the role of market orientation and Strategic Flexibility. *Journal of Marketing*, 65(2), 67-80. https://doi.org/10.1509/jmkg.65.2.67.18259.
- Grimm, C. M., Lee, H., & Smith, K. G. (2005). Strategy as action: Competitive dynamics and competitive advantage. Oxford University Press: Oxford, U. K.
- Haleem, F., Jehangir, M., & UlHaq, Z. (2018). Link between environmental dynamism and firm performance: The role of strategic planning. *Journal of Managerial Sciences*, 12 (3), 260-272.
- Hambrick, D. C. (2007). Upper echelons theory: An update. Academy of Management *Review*, 32(2), 334-343.
- Harrison, J. S., & Wicks, A. C. (2013). Stakeholder Theory, Value, and Firm Performance. *Business Ethics Quarterly*, 23 (1), 97-124.
- Harrigan, K. R. (1985a). Exit barriers and vertical integration. *Academy of Management Journal*, 28, 686–697.
- Helfat, C. E., & Peteraf, M. A. (2015). Managerial cognitive capabilities and the microfoundations of dynamic capabilities. *Strategic Management Journal*, 36(6), 831-850. https://doi.org/10.1002/smj.2247
- Hitt, M. A., Keats, B. W., & DeMarie, S. M. (1998). Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. *Academy of Management Perspectives*, 12(4), 22-42
- Johnson, J. L., Lee, R. P. W., Saini, A., & Grohmann, B. (2003). Market-focused strategic flexibility: Conceptual advances and an integrative model. *Journal of the Academy of Marketing Science*, 31(1), 74-89.
- Kaplan R.S. & Norton D.P. (1992). The Balanced Scorecard: Measures that Drive Performance, Harvard Business *Review*, 83 (7), 71-79.
- Kaplan R.S. & Norton, D.P. (1996). Using the Balanced Scorecard as a Strategic Management System, *Harvard Business Review*, 74, 75-85.

- Kim, K. (2014). Strategic flexibility. PhD thesis, Open Access Dissertations. 305. https://docslib.purdue.edu/open_access_dissertations/305.
- Martínez, D., Rodríguez, J., & Torres, J. (2010). ICT-specific technological change and productivity growth in the US: 1980-2004. *Information Economics and Policy*, 22(2), 121-129.
- Matthyssens, P., Pauwels, P., & Vandenbempt, K. (2005). Strategic flexibility, rigidity and barriers to the development of absorptive capacity in business markets: Themes and research perspectives. *Industrial Marketing Management*, *34*(6), 547-554.
- Mbengue, A & Ouakouak, M. L (2011). Strategic planning flexibility and firm performance: the moderating role of environmental dynamism. *20e Conférence Internationale de Management Stratégique*, Nantes, France, 07-09.
- Miles, M. P., Covin, J. G., & Heeley, M. B. (2000). The Relationship between Environmental Dynamism and Small Firm Structure, Strategy, and Performance. *Journal of Marketing Theory and Practice*, (8) (2), 63-78.
- Muchemi, A. W. (2013). Top management team diversity and performance of commercial banks in Kenya. *Unpublished PhD Thesis, University of Nairobi*.
- Nadkarni, S., & Barr, P. S. 2008. Environmental context, managerial cognition, and strategic action: an integrated view. *Strategic Management Journal*, 29(13), 1395-1427.
- Nadkarni, S., & Herrmann, P. (2010). CEO personality, strategic flexibility, and firm performance: the case of the Indian business process outsourcing industry. *Academy of Management Journal*, 53 (5), 1050-1073. https://doi.org/10.5465/AMJ.2010.54533196
- Nadkarni, S. & Narayanan, V. K. (2007). Strategic schemas, strategic flexibility, and firm performance: The moderating role of industry clockspeed. *Strategic Management Journal*, 28 (3), 243-270.
- Namusonge, A., Mukulu, E., & Mokaya, S. (2017). Relationship between strategic product development practices and financial performance of telecommunication firms in Kenya. *International Journal of Academic Research in Business & Social Sciences*, 7 (11), 309-326.
- Neely, A., Adams, C. & Crowe, P. (2001). The performance prism in practice. *Measuring Business Excellence*, 5 (2), 6-12.
- Nowotny, H., Scott, P. and Gibbons, M. (2001). Rethinking Science. Knowledge and the Public in an Age of Uncertainty. Cambridge: Polity Press.
- Ogunmokun, G. O. & Li, L. (2012). The effect of manufacturing flexibility on export performance in China. *International Journal of Business and Social Studies*, 3 (6), 7-12.
- Okeyo, W. O. (2014). The influence of business environmental dynamism, complexity and munificence on performance of small and medium enterprises in Kenya. *International Journal of Business and Social Research (IJBSR)*, 4, (8), 59-73.
- Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14(3), 179–191.
- Petrus, B. (2019). Environmental dynamism: The implications for operational and dynamic capabilities effects. *Management Sciences*. *Nauki o Zarządzaniu*, 24(1), 28-36.

- Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. New York: Free Press
- Richard, P. J., Devinney, T. M., Yip, G. S. & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, 35 (3), 718-804.
- Selvam, M., Gayathri, J., Vasanth, V., Lingaraja, K., & Marxiaoli, S. (2016). Determinants of firm performance: A subjective model. *International Journal of Social Science Studies*, 4 (7), 90-100.
- Sanchez, R. C. (1995). Strategic flexibility in product competition. *Strategic Management Journal*, 16 (S1), 135-159.
- Santos, J. B., & Brito, L. A. L. (2012). Toward a Subjective Measurement Model for Firm Performance. *Brazilian Article Review*, 9 (6), 95-117
- Sethi, A. K. & Sethi, S. P. (1990). Flexibility in manufacturing: A survey. International Journal of Flexible Manufacturing Systems, 2 (4), 289-328.
- Sharma, M. K., Sushil, & Jain, P. K. (2010). Revisiting flexibility in organizations: Exploring its impact on performance. *Global Journal of Flexible Systems Management*, 11 (3), 51-68.
- Shimizu, K. & Hitt, M. A. (2004). Strategic flexibility: Organizational preparedness to reverse ineffective strategic decisions. *Academy of Management Executive*, 18 (4), 44-59.
- Singh, S., Darwish, T.K., & Potočnik, K. (2016). Measuring organizational performance: A case of subjective measures. *British Journal of Management*, 27, 214-224.
- Singh, D., Oberoi, J.S. & Ahuja, I.S. (2013a). An empirical examination of barriers to strategic flexibility in Indian manufacturing industries using analytical hierarchy process. *International Journal of Technology, Policy and Management*, 13 (4), 313–327.
- Souza, E. M., & Forte, S. H. E. A. C. (2019). A contribution to the theoretical structure for cognitive dynamic capability. *RAM. Revista de Administração Mackenzie*, 20(4), 1-29. eRAMR190171.
- Sopelana, A., Kunc, M., & Hernáez, O.R. (2014). Towards a dynamic model of organisational flexibility. *Systemic Practice and Action Research*, 27(2), 165-183. http://dx.doi.org/10.1007/s11213-012-9274-4.
- Sunayana, & Parveen, R. (2019). Evolution of strategic flexibility and decision making process: A conceptual framework. *Asian Journal of Managerial Science*, 8(1), 85-92.
- Sushil (2015). Strategic flexibility: the evolving paradigm of strategic management. *Global Journal of Flexible Systems Management*, 16 (2), 113-114. https://doi.org/10.1007/s40171-015-0095-z.
- Swanson, R.A. & Holton, E.F.III. (2008). Research in organizations: Foundations and methods of inquiry San Francisco: Berrett-Koehler.
- Taouab, O., & Issor, Z. (2019). Firm performance: definition and measurement models. *European Scientific Journal*, 15(1), 93-106.
- Teece, D.J., Pisano, G. and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18 (7), 509-533.

- Thomas, J., Sussman, S., & Henderson, J. (2001). Understanding 'Strategic Learning': Linking organizational learning, knowledge management and sensemaking. *Organization Science*, 12 (3), 331-345.
- Venkatraman, N., & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *The Academy of Management Review*, 11(4), 801-814.
- Verdú-Jover, A. J., Lloréns-Montes, J. F., & García-Morales, V. J. (2005). Flexibility, fit and innovative capacity: an empirical examination. *Int. J. Technology Management*, 30, (1/2), 131-146.
- Volberda, H. W. (1996). Towards the flexible firm: How to remain vital in hypercompetitive environments. *Organization Science*, 4 (July-Aug), 359-374.
- Wei, Z., Yi, Y. & Guo, H. (2014). Organizational learning ambidexterity, strategic flexibility, and new product development. *Journal of Product Innovation Management*, 31 (4), 832–847.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
- Wei, Z., Yi, Y., & Guo, H. (2014). Organizational learning ambidexterity, strategic flexibility, and new product development. *Journal of Production, Innovation and Management*, 31(4), 832–847.
- Womack, J. P., Jones, D. T., & Roos, D. (1990). The Machine that Changed the World. Harper Collins, New York, NY.
- Wright, P. M., & Snell, S. A. (1998). Toward a unifying framework for exploring fit and flexibility in strategic human resource management. *Academy of management review*, 23(4), 756-772.
- Xiu, L., Liang, X., Chen, Z. & Xu, W. (2017) Strategic flexibility, innovative HR practices, and firm performance: A moderated mediation model. *Personnel Review*, 46 (7), 1335-1357.
- Zhang, M. J. (2006). IS support for strategic flexibility, environmental dynamism, and firm performance. *Journal of Managerial Issues*, 18(1), 84–103.
- Zhou, K.Z. & Wu, F. (2010). Technological capability, strategic flexibility, and product innovation. *Strategic Management Journal*, 31 (5), 547-561.