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**Peter M. Kiilu
Vincent N. Machuki
Evans Aosa**

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STRATEGIC AGILITY AND ORGANIZATIONAL PERFORMANCE: A CRITICAL REVIEW OF LITERATURE

Peter M. Kiilu¹, Vincent N. Machuki², Evans Aosa³

Abstract

Strategic management scholars and practitioners in the 21st century are preoccupied with the challenge of performance enhancement and business model innovation. The continuous and unprecedented hypercompetition, technological innovations and changing customer preferences and tastes, calls for organizations to be agile in sensing, seizing and responding to the turbulent environment. Strategic agility has emerged as an effective competitive framework that influences performance. Studies, both conceptual and empirical, show a strong correlation between organizational effectiveness and strategic agility. However, the explicit relationship remains contested and inconclusive. Research is ongoing on the role of possible contingency factors in the direct influence of strategic agility on performance. It is in this context that this paper seeks to explore the knowledge gaps by critically examining empirical and conceptual studies, on the possibility of the effects of environmental turbulence and organizational culture on the strategic agility-performance linkage. It advances emerging propositions that underpins strategic agility and organizational performance. Therefore, in order to fill in the existing knowledge gaps, empirical research in various situations could follow the postulations made in this study.

KeyWords: Strategic Agility, Environmental Turbulence, Organizational Culture, Organizational Performance

¹ PhD, Candidate, Department of Business Administration, University of Nairobi- пкиилу@uonbi.ac.ke

² Associate Professor, Department of Business Administration, University of Nairobi,

³ Professor Department of Business Administration, University of Nairobi

Introduction

Businesses today are operating in more volatile situations due to fundamental shifts in technology, business dynamics, and consumer demands. The firm's exceptional business performance and competitive advantage are untenable. According to D'Aveni, Dagnino, and Smith (2010), sustainable competitive advantage is now a temporary benefit. The product life cycle has been shortened, production technologies are rapidly rendered obsolete and the global markets are experiencing hyper-competition. Traditional and contemporary strategic management models; resource-based view (RBV), strategic planning (SP), and sustainable competitive advantage (SCA) are inadequate in advancing superior firm performances in the uncertain and unpredictable business environment (Bennett & Lemoine, 2014).

Scholars have recommended a more superior competitive orientation that organizations should adopt to address the strategic discontinuities and business disruptions as a result of rapid and unprecedented environmental changes. This competitive orientation is called strategic agility (Ivory & Brooks, 2018; Weber & Tarba, 2014). This is due to the shortcomings of the earlier concepts (Resource Based View, Sustainable Competitive Advantage, and Strategic Planning) and today's market, which is becoming dynamic and customer-driven. Strategic agility (SA), according to Battistella et al. (2017), is the firm's capacity to quickly change and reposition the strategic direction by promptly responding to shifting needs, opportunities, and trends. According to Clauss et al. (2020), strategically agile organizations work to gain and keep a competitive edge by concentrating on their strategic choices while also being aware of

unpredictable volatility in their industry. Strategic agility is a type of dynamic competence, and organizations that embrace it can recognize external, unprecedented developments and opportunities as well as threats, according to Goldman (2007) and Sambamurthy et al. (2003). They then quickly reorganize, put together, and use their resources, systems, expertise, and connections to respond quickly to environmental turbulences. In recent years, academics have noticed that strategic agility has greatly aided company success, particularly in a fast-paced setting (Kurniawan et al., 2020; Vagnoni & Khoddami, 2016). However, a 2015 study by Shin et al. suggested that financial performance is unaffected by strategic agility.

According to academics, contextual variables can affect the explicit direct impact of strategic agility on organizational performance. These contextual factors are very important in the interplay between organizational performance and strategic agility. The entrepreneurial literature (Lumpkin & Dess, 1996) supports firm age. Firm size is supported in the research on small and medium-sized enterprises (SME) as a factor in the strategic agility and organizational performance relationship (Reed, 2020). Environmental turbulences that take the form of technological advancements, modifications in consumer tastes, and shifting market demands also have a big impact (Vagnoni & Khoddami, 2016). According to Roberts and Grover's (2012) empirical study, firms can improve their customers' competitiveness and agility by using their information technology (IT) infrastructure.

Underlying organizational culture values have been found to fundamentally enhance

capabilities that enable companies to recast their business models (Hocks et al., 2015). Other equally influencing contingency factors that strategic management scholars have studied include; market orientation (Kurniawan et al., 2020) and organizational structure (Yang & Liu, 2012). The literature makes it abundantly evident that uncontrollable events may have an impact on the relationship between organizational success and strategic agility. This study investigates how organizational culture and environmental volatility relate to strategic agility and performance.

The strategic agility concept has been gaining and continue to gain momentum in various research streams since the inaugural seminal report by Nagel and Dove (1991) and subsequent strategic management seminal paper by Doz and Kosonen (2008; 2010). However, as a relatively new concept, the research is ongoing. The literature reviewed shows lack of consensus on the concept definition among scholars. The large number of diverging definitions is a manifestation of researchers not speaking the same language. Zhang and Sharifi (2000) refer to the concept perspective as a paradigm. Bessant et al. (2001) view it in capability perspective while Zhang and Shariffi (2007) as a manufacturing strategy.

It is also noted that the concept has been conceptualized differently by several scholars (Tallon et al., 2019). The existence of various conceptualizations of SA has contributed to the slow conceptual growth. Podsakoff et al. (2016) argue that the proliferation of different terms of the same concept, manifests in the variety of measurement metrics and consequently divergent findings and results. This would limit the comparability of research results. Scholars have also observed a gap in the

literature of SA in paradoxical tensions presented by ambidexterity (Nejatian et al., 2019). Ambidexterity possess a challenge to managers in pursuit of implementing a simultaneously competing strategic orientation (exploitation and exploration). It is noted that there has been an ongoing debate on how the paradoxical tensions inherent in SA through ambidexterity have been conceptualized differently and it presents a divergent opinion. In light of the disparities in SA definition, conceptualization, attendant paradoxial tensions, and measurement, this paper seeks to critically review extant literature in order to advance a conceptualization that could inform further empirical investigation.

The theoretical perspective of the paper is the Dynamic Capability Theory (Teece et al.,1997) as the anchor theory. It offers the foundation of the conceptualization of the variables relationships in the review study. The complementary theories that also anchor the relationship of the variables; include Contingency Theory (Lawrence & Lorch,1967) and the Competing Values Framework (Cameron & Quinn, 1999). Both Contingency theory and Competing Values Framework (CVF) lents to further understanding and development of the linkage between the concepts to inform the conceptualization of the paper. This paper's major goal is to evaluate and synthesize the body of knowledge that already exists on the study review variables, identify knowledge gaps, and promote a conceptualization that can direct further empirical research to fill the gaps. It appreciates various scholars who have advanced the definitions, dimensions, conceptualizations, theoretical perspectives, and measurement metrics of the study constructs. The available body of knowledge offers the springboard for a new research

stream. The identified knowledge gaps will therefore inform the direction and course of further empirical research.

This paper is organized to highlight critical questions and advance conceptualization that will direct future study. It is structured in accordance with the relevant constructs and comprises of an introductory section outlining the overview of the study's concepts and a brief overview of the theoretical underpinning, a pointer to dilemmas (gap areas), and a statement of the paper's purpose. The rest of the paper comprises of the critical review along the theoretical perspective that draws the anchoring theory and complementary theories in the conceptualization. The relevant literature on the paper's core constructs, the conceptualization view, and the empirical research that illustrates the connections between the important variables are then critically reviewed. Knowledge gaps deduced are presented and conceptual framework which unfolds to the emerging propositions for consideration of further research. Finally, a summary is presented, and a conclusion is drawn.

Strategic Agility

Strategic agility is the main construct of this review paper and this section presents the conceptual and empirical aspects. It underscores the SA definitions, origin and development. Critical analysis of the dimensions and operationalization of SA, and other related constructs are reviewed as well.

Strategic agility is relatively a new concept in the strategic management agility. Formal adoption and application in management is traceable to the works of researchers in the Iacocca Institute (1991,1992). They argued for agililty in manufacturing as opposed to mass production (Gunasekaran, 2001).

Subsequent studies have shown that the agility concept has evolved from mass agile manufacturing to supply chain management, information technology, and organizational structure (Christopher, 2000; Overby et al., 2006). The literature points Roth (1996) to be the pioneer the scholar to define strategic agility though in manufacturing context. She observed that “manufacturing pacesetters have to produce the right products at the place at the right time and the right price”(p.30).

However at the beginning of twenty-first century non-manufacturing firms started to embrace enterprise and organizational agility as a new stream of agility research (Nejatian et al., 2019; Shin et al., 2015). The concept has since then attracted a battery of scholars with varied definitions. Table 1.0 below puts into context the concept as complex, multidimensional, as well as the convergency, and divergency of scholars in definitions. It is defined by Dove and Palmer (2004) in the context of the knowledge generated by businesses that must be efficiently managed and put to use. In order to take advantage of chances for increased business performance, a firm should leverage its knowledge, resources, and connections, according to Setia et al. (2008). Agility, according to Sambamurthy et al. (2003), is the ability of an organization to utilize the assets, expertise, and capabilities of suppliers, distributors, contract manufacturers, and logistics providers through alliances, joint ventures, partnerships, and joint ventures.

It is noted that SA is built on previous concepts in management theory, in which similarities exist (Overby et al., 2006). Katayama and Bennett (1999) posit that for an organization to be fully responsive to turbulent environment and gain high resource efficiency and performance, consideration to

related construct has to be a deliberate decision. These mutually supporting constructs are; strategic responsiveness, organizational adaptability, absorptive

capacity, organizational ambidexterity, organizational agility, and market orientation.

Table 1.0: Synthesis of Strategic Agility definitions (1995 – 2022)

Author(s) and year	Strategic Agility definition
Goldman et al.(1995)	A thorough approach to the commercial challenges of benefitting from the rapidly evolving and perpetually fragmenting global markets for premium customer-tailored products and services.
Roth (1996)	The ability to produce the right goods at the appropriate time and place for the appropriate price.
Dove and Palmer (2004)	In a turbulent and ever-changing business environment, a company needs to be able to effectively manage and apply knowledge.
Sambamurthy et al.(2003); and Setia et al.(2008)	The capacity to identify innovative opportunities and capture these market chances by putting together the necessary resources, information, and connections quickly and unexpectedly.
Overby et al.(2006).	The ability of firms to sense environmental change and respond readily.
Setia et al.(2008).	The capacity of businesses to identify market possibilities for competitive advantage and to use their resources, expertise, and connections to grab these opportunities and adjust to unforeseen changes in the business environment.
Tallon and Pinsonneault(2011).	The capacity to recognize opportunities and threats quickly, easily, and deftly.
Doz and Kosonen (2008); Sull (2009); and Weber and Tarba (2014)	The capacity of a company to reinvent itself and be adaptable without sacrificing effectiveness.
Brueller et al. (2014)	The ability to act strategically quickly, nimbly, and with great precision.

Kale et al.(2019)	The company's capacity to evaluate itself and its plan in light of alterations to the business environment.
Clauss et al. (2020)	Ability to maintain competitiveness by concentrating on the firm's goals while also being responsive to unexpected volatility in the business climate.
Vrontis et al.(2022)	Strategic agility is generally understood to be an organization's capacity to routinely adjust to unpredictable and changing situations as cited in Doz and Kosonen (2008).

Source: Researcher (2022).

Strategic responsiveness is the firm's response to changes in the business organization, a corporation must use a variety of competencies. According to Walter (2020), responsiveness tries to ascertain when and how much competence and aptitude will be used. It is reliant on the change's external driver. Strategic responsiveness, according to Ansoff et al. (1984, 2019), is the extent to which management adapts to its organizational competence in response to signals from the environment.

Absorptive capacity refers to the processes that firms employ to gather, understand, transform, and use knowledge to build dynamic organizational capabilities (Zahra & George, 2002). According to Overby et al. (2006), strategic agility activities are sparked by environmental turbulence while absorptive capacity operates more continually. According to the literature, firms that are strategically agile have an advantage over less agile ones when it comes to acquiring and using new information for the retooling of business models that result in firm strategic renewal (Khan et al., 2020). In an organization, the production system is more strategically adaptable than other divisions. It is an organization's capacity to change cost performance in response to demand (Katayama & Bennett, 1999). The

cost-effectiveness of measuring adaptation increases as costs rise as a result of shifting consumer preferences and turbulent markets.

Organizational ambidexterity is the ability of the firm to simultaneously adopt rival strategy orientation (Hu & Chen, 2016; Zhang et al., 2016) while assuring both long-term and short-term organizational competitiveness (Rosing & Zacher, 2016). The capacity of an organization to sense, recognize, and foresee changes in the business environment is known as organizational agility (Zhang & Sharifi, 2000). Teece et al. (2016, p.17) describes organizational agility “as the capacity to efficiently and effectively direct its resources to value-creating and value protecting higher-yield activities as internal and external circumstances warrant”. Market orientation is the process of obtaining market intelligence about the present and future needs of the consumer and disseminating that intelligence across all fronts. Studies reviewed show an increasing development of strategic agility conceptually. Despite the concept being a relatively new paradigm in the competitive strategic management research, it has continued to dominate editorial space in the leading management top-tie journals. The California Management Review Journal (CMR) special issue of 2014 dedicated four articles for strategic agility;

(Brueller et al., 2014; Fourné et al., 2014; Lewis et al., 2014; Weber & Tarba, 2014). Literature reveals that the construct has been conceptualized and operationalized differently by several scholars.

Strategy agility is conceptualized by Doz and Kosonen (2008, 2010) from the viewpoint of looking at the firm internally as the deliberate interaction of three meta-capabilities, namely strategic sensitivity, leadership unity, and resource fluidity. The Doz and Kosonen conception is challenged by Weber and Tarba (2014), who extend the notion of leadership unity to include group commitment. Three aspects should exist: customer agility, operational agility, and partnering agility, according to Sambamurthy et al's 2003 examination of the firm's internal strengths and external leverages. Tallon and Pinsonneault's (2011) study in the information technology sector further supports Sambamurthy and team's three dimensions and operationalization.

Other researchers who have conceptualized the concept includes; Overby et al. (2006) and Chakravarty et al. (2013) in two dimensional advances of entrepreneurial and adaptive capabilities, while Brueller et al. (2014) found knowledgeable sense-making, nimble decision making, and rapid resource deployment to be critical to agile organization. Recently, Reed (2020) empirical study, that investigated the impact of strategic agility moderated by firm age and environmental turbulence on firm performance, operationalized the concept by utilizing fifteen sub-dimensions as cited in the seminal paper of Doz and Kosonen (2010).

Several studies have pointed to a strong position of strategic agility in influencing firm performance either directly (acting as

the independent variable) or indirectly (playing the role of a mediator). Vickery et al. (2010) study on manufacturing industry, Oyedijo (2012) study on Nigerian telecommunication firms, Nematizadeh and Khoshnood (2017) investigation of Iranian private banks, all posited direct strategic agility influence in enhancing firm performance. At the same time, studies in which strategic agility as moderating variable equally revealed a significant influence on firm performance (Laodicéia et al., 2018; Omoush, 2020).

However, despite the ambiguities emerging from the wide-ranging definitions some converging while other diverging, literature available suggests that there are observable features of strategic agility that are reflected. That strategic agility is referred to an organizational capability (Doz & Kosonen, 2010), in that, it is the set of organizational routines and processes that lead to a desired outcome. Conversely, an organization can exhibit more agility moves than competitors. Sensing, responding, and learning capabilities have a commanding presence in the majority of the reviewed studies (Tallon et al., 2019). They, therefore underpin the the firms' success in turbulent environments.

Literature points that strategic agility thrives best in a rapidly, unprecedented, and continuously changing environment (Reed, 2020). Environmental turbulences manifesting in either technological innovation, changing customer preference, or volatile markets have moderated the effect of strategic agility on the competitive edge. It is also noted that a firm can be agile in one or more domains. Literature on strategic agility shows inclination towards the concept operationalization under customer-based activities (Haider & Kayani, 2020), supply chain activities (Omoush, 2020), or

information technology-based operations (Tallon & Pinsonneault, 2011), hence aligning strategic agility as domain-specific.

Related to the synthesis of the multiplicity of definitions of strategic agility, is the dimensional approach of the construct. Reviewed Studies further suggests that the concept has been operationalized variedly by various scholars, thus some scholars refer to strategic agility as a multidimensional concept comprising of many elements (Sambamurthy et al., 2003; Sampath & Krishnamoorthy, 2017; Yang & Liu, 2012).

From the foregoing definitions, conceptualization, and operationalization of strategic agility in line with reviewed studies, strategic agility is proposed to be the independent variable in this study paper.

Environmental Turbulence

The role of organizational environment in the performance of firms has been an ongoing debate in the strategic management and organization theory literature for along time. Early seminal works (Aldrich,1979; Child,1972; Duncan,1972; Lawrence & Lorsch,1969) set the foundation for subsequent research streams by pioneering how changing business environment impedes strategic decision making in an organization. Ansoff and Sullivan (1993) argue that organizations optimize performances when they align their strategic orientations with environments. Despite, the existence of a large number of studies that address the relationship of environmental turbulences and organization performance, contradictory findings, diversity in definitions and overarching operationalization of the construct has been on the increase (Meinhardt et al., 2018). It thus, makes the comparability of the studies difficult and limited holistic research landscape.

Drawing from the contingency theory the organizational environment, in which a firm operates and interacts, is made up of customers, competitors, suppliers, and the operating technology (Dess & Beard, 1984). Any fundamental changes in the contingency factors will therefore influence the organizations' strategic orientation. Environmental turbulence, therefore, refers to the phenomenon to which the future business environment cannot be anticipated and accurately predicated (Pfeffer & Salancik,1978). The ability of management to lack access to sufficient information during the decision-making process and the inability to anticipate the future leads to environmental turbulence. Okumus et al. (2010, p.178) posit environmental turbulence as “the degree of uncertainty and changes in the task and general environments”. Studies suggest the leading source of environmental turbulences, that are constantly changing and developing are; technology, markets, and competition (Long et al., 2014). Market turbulence reflects the level of changes in customer preferences, tastes and demand for products in the industry (Jaworski & Kohli,1993). Organizations have to constantly monitor and analyse their operating industry environment to fully address their customers preferences. According to Neill et al.(2007) a firm with a strong, open-minded culture will have the sensemaking capability to develop innovatively and on-time strategic decisions to mitigate market changes. Technology turbulence affects the firm through the processes and product life cycle. Rapid technological innovations results to shortned products lifecycle if not obsolete, as well as outdated production processes. Continuous innovations through research and development do reduce the effect of technological turbulences. Competitive turbulences manifest by the firm inability to

respond to intense competition, relative power of competitors and competitor strategies .

Environmental turbulence conceptualization can be traced from the pioneering management scholars such as Dess and Beard (1984), Child (1972), Duncan (1972), and Lawrence and Lorsch (1969). In the investigation of perceived environmental uncertainty, Lawrence and Lorsch (1969) proposed the dimension of uncertainty. Child (1972) argued for three environmental dimensions of variability, complexity, and illiberality. While Aldrich (1979) used six dimensions to uncover environmental circumstances. Except for Dess and Beard (1984) dimensions of (munificence, dynamism, and complexity) that borrowed from the works of Aldrich (1979), all the seminal early works have no linkage to one another. The diversity of environmental turbulence dimensions and conceptualization as research continues, presents a construct in which the scholars have no common language in the development of the concept. However, reviewed literature suggests the dimensions presented by Dess and Beard (1984) are frequently used (Meinhardt et al.,2018). The most popular and relevant dominant dimension in a number of studies is dynamism. The concept has been operationalized and measured in the multiplicity of various approaches which follow either perceived or objective measurement approaches. In the objective organizational environment measurement, the predominantly used measures are the frameworks by Dess and Beard (1984), and Keats and Hitt (1988). Dess and Beard (1984) used 23 variables to operationalize munificence, dynamism and complexity. Other scholars investigated and measured environmental turbulences through indicators

of customers,competitors and technological turbulences(Duncan, 1972; Miller & Friesen, 1983; Daft et al.1988)

It is also noted from the review and analysis of 259 articles in a study by Meinhardt et al.(2018) that environmental turbulence as concept has a convincing position of moderation, by moderating various strategy-performance and behavior relationships. This paper adopts environmental turbulence indicators of technological innovations, competitive and volatile markets, and customer changing preferences and tastes.

Organizational Culture

Organizational culture is a complex and multi-faceted concept. Management literature suggests that, concepts related to organizational change, growth, and innovations are common in most of the organizational culture frameworks. Its definitions, frameworks, measurements are presented in line with the conceptual and empirical studies herein. Studies on organizational culture and its influence on other firms' factors became more pronounced during the 1980s (Hofstede,1980; Ouchi,1980; Pettigrew,1979; Schein, 1984). The growth was due to the research efforts of establishing firms in the Eastern world that seemed to outperform their counterparts in the Western world through their effectiveness due to culture orientations. Japanese supremacy over Americas automobile, that could only be attributable to their innovative culture (Ouchi & Wilkins, 1985).

Various scholars have defined organizational culture as “beliefs, assumptions, and values that members of an organization share of conduct, ritual, customs, administrative procedures, and leadership” (Mehta & Krishnan, 2004; Schein, 1990,1992,1995). Denison (1990), and Denison and Mishra

(1995) define organizational culture in terms of four cultural traits of involvement, consistency, adaptability, and mission. While Ott (1989) posits organizational culture in three levels ; artifacts and patterns of behavior, values and beliefs, and basic underlying assumptions. Organization culture is also viewed as the values and beliefs that guide policies and expected behaviours of the members of an organization (Shein, 1992)

OC is linked to organizational performance through other organizational variables such as innovation, commitment, job satisfaction, strategic planning, authority relationships among others. As a result, empirical evidence posits that OC influences market-oriented behaviours and financial performance (Homburg & Pflesser, 2000), employees' attitudes and firm effectiveness (Gregory et al., 2009). Therefore, many conceptual and empirical studies have situated OC and the dimensions as a significant mediator to firm performance. OC dimensions and measurement that most scholars have adopted are mainly two frameworks of Denison and Mishra (1995), and Cameron and Quinn (1999). Denison and Mishra framework based on cultural traits namely; involvement, consistency, adaptability, and mission. They established that the four dimensions of organizational culture had close linkage to organizational effectiveness. The framework established that the dimensions of involvement and adaptability were strong indicators of openness, flexibility and responsiveness, and had strong influence to growth. Consistency and mission were found to be indicators of direction, integration and vision, and influencing profitability. Reviewed literature indicates the framework has been adopted to operationalize and measure the effect of OC

to OP and a recent study by Khan et al. (2020) adopted adaptability and consistency effect on employee job performance in hotel industry in Pakistan.

Cameron and Quinn (1999) OC framework of Competing Values Framework (CVF) consists of four culture typologies of Clan, Adhocracy, Market, and Hierarchy. Clan culture oriented organization, employees work in very close neat, mentoring, nurturing, team work, loyalty, and mutual trust. Adhocracy culture leaning organizations exhibits high dynamism, innovativeness, and development while Market culture organizations are result oriented with high degree of competitiveness. Hierarchy culture posits that organizations to be very controlled and structured with formal procedures guides what to be done. Previous empirical studies that have operationalized and measured organizational culture includes Kimemia (2013) and Felipe et al.(2017) among others. Kimemia (2013) while investigating organizational culture impact on corruption in the Non-Governmental Organizations (NGOs) in Kenya tested the CVF dimensions by introducing four sub-indicators to each of the four dimension. Felipe et al.(2017) adopted twenty four loading factors within the four dimensions in the study of the impact of OC values in organizational agility in 172 Spain based companies.

Organizational Performance

Organizational performance (OP) is a complex and multidimensional concept (Richard et al., 2009). It is the engine to the operation and survival of many organizations. The primary objective of any research in strategic management is focused on how OP can be enhanced, shaped, and bolstered to help businesses improve their

profitability and long term survival (Bititci et al., 2012; Singh et al., 2016). Kaplan and Norton (1992) defines OP in general terms as a set of both financial and non-financial indicators that point to the extent an organizational goals and objectives have been achieved. Scholars have also highlighted the broadness of organizational effectiveness to OP (Richard et al., 2009). It is noted that OP refers to financial performance, product market performance, and shareholder return. On the broader perspective, organizational effectiveness refers to wider indicators of customer satisfaction, corporate social responsibility and others that are beyond financial quantification, in addition to financial performance (Singh et al., 2016; Venkatraman & Ramanujam, 1986).

The debate among the scholars on how to conceptualize OP is ongoing and owing to the multidimensionality of the construct (Santos & Brito, 2012). A comprehensive analysis of the studies on the OP construct shows a preference for return on assets (ROA) or return on investment (ROI) as financial metrics that are more easily attained (Jaleha & Machuki, 2018). It is asserted that organizations must be aware of their many stakeholders' interests and implement corporate procedures that provide a comprehensive understanding of OP. Thus several scholars support the organizational effectiveness as it offers diverse view of the organization than the narrow perspective of financial goals (Kaplan & Norton, 1992; Richard et al., 2009; Venkatrama & Ramanujam, 2016). Objective and subjective methodologies can be used to categorize the literature on OP measures. OP was viewed as a multidimensional construct by Kaplan and Norton (1996) and Richard et al. (2009) that includes financial performance measures,

customer-related results, innovations, and internal organizational procedures. Objective measures are closely linked to financial measures of performance. In an emerging market environment, Darwish and Singh (2013) modified ROA and return on equity (ROE) to assess the performance variation caused by various management practices. They discovered that the inclusion of human resource activities within businesses improves financial performance as measured by ROA and ROE. Similar financial metrics of asset growth and ROI were used in Nurjaman et al.(2021) 's empirical study on the contribution of strategic agility to the business performance of logistics service providers in Indonesia. A 10-item scale created by Crossan and Hulland (2002) was used by Real et al. (2014) to collect opinions on business performance in their study on entrepreneurial orientation and performance.

The sustainability balanced scorecard, which Jaleha and Machuki (2018) support, calls for a variety of performance indicators. Through the adoption of financial and non-financial measures that take social and environmental considerations into account, SBSC addresses both internal and external stakeholders. The debate on SBSC has continued with scholars advancing various architectural typologies and on how organizations apply the framework (Chaker et al., 2017; Hubbard, 2009; Jassem et al., 2021). Holbeche (2018) argue for organizations to strike a balance in the financial, social, and environmental performances.

Strategic Agility and Organizational Performance

Shin et al.(2015) studied the Korean small and medium enterprises (SMEs) by investigating the relationship of strategic agility on firm performance. The findings

were of mixed results of positive influence of SA on customer retention and no influence on financial performance. In relation to this paper, Shin et al.(2015) study did not consider the influence of environmental turbulences and focused on the narrowed firm performance indicators of customer retention and financial performance. A study in the accommodation establishments in Turkey, by Kale et al.(2019) sought to examine strategic agility as a mediator of the relationship between absorptive capacity and firm performance. Basing their research in a single industry (accommodation), they hypothesised that SA with positively influence the relationship. The findings was that SA was positively related to performance and mediated the envisioned relationship of absorptive capacity and performance. The use of single industry and no mediating effect measure of hotel establishment culture informs a knowledge gap.

In their 2020 study, Chan and Muthuveloo set out to look into how organizational traits that promote strategic agility affect the success of private high education institutions (HEIs) working in a challenging economic environment in Malaysia. The findings established that among the organizational capabilities, organizational learning was significant SA in influencing performances of HEIs. The narrow focus of private HEIs, that impedes the generalization of the results to the entire HEIs sector that include a great number of public higher education institutions in Malaysia. A more recent study by Nurjaman et al. (2021) in Indonesia set out to investigate the role of SA in the firm performance of logisitics service providers. The findings affirmed the hypothesized relationship that SA and competitive strategy in combination had positive influence on OP of logisitics service providers. Nurjaman et

al.(2021) study could have been broadened if environmental turbulence indicators like customer preferences, technological innovativeness, and market dynamics, which could have had an effect on the conceptualization relationships. Additionally OP measurement of financial performance could have boosted by adding non-financial OP indicators.

Strategic Agility, Environmental Turbulence, and Organizational Performance

Abbas and Hasasn (2017) investigated the moderating impact of environmental turbulence on the relationship between business innovation and business performance in the Pakistan organizations within the China-Pakistan Economic Corridor. The findings supported the hypotheses of technological turbulence and competitive intensity to significantly enhance business performance, while market turbulences had insignificant influence on the customer relationship management effectiveness (CRMe) and innovations with business performances. The study could have been enhanced if internal organizations factors like culture ,which are influential in the host countries.

Anggraini and Sudhartio (2019) conducted an empirical study in the Indonesia banking sector. The purpose of the study was to investigate the influence of environmental turbulences (market and technological turbulences) on the competitive advantage mediating on the relationship between strategic agility and performance. Conceptualization of SA was purely based on the organizations inward looking approach of Doz and Kosonen (2010). The findings on the hypotheses that strategic agility has a role in enhancing competitive advantage through

exploiting challenges from environmental turbulence (market and technological turbulences) which in turn improves firm performance. The limitation of the study in light with this conceptual paper conceptualization, arises from narrow focus of the sample of the banking sector (use of only one private bank) and also lack of SA indicators like partnering agility as postulated by Sambarmurthy et al.(2003).

Arokodare (2020) investigated the moderating effect of environmental turbulence on the strategic agility - performance relationship. The study findings established that environmental turbulence has a significant impact on the strategic agility influence on the performance of the major marketing Oil and Gas companies in Lagos State. It is noted that the study did not give the individual indicators measurement (especially competition intensity within the Lagos State, which has the highest consumption of oil and gas in Nigeria as per Arokodare (2021) study impact on SA influence on OP.

Strategic Agility, Organizational Culture, and Organizational Performance

Ehtesham et al.(2011) studied the relationship between organizational culture and performance management practices (PMP) in a University in Pakistan. The results indicated that all the four culture traits had significant influence for PMP and leads to increased organizational performance. The study presents knowledge gap in the methodological approach that it was done in one institution (one university) hence further research that covers broader players in the Pakistan Education sector.

A study by Felipe et al. (2017) sought to establish the impact of organizational culture (OC) on organizational agility via the

moderating effect of technological intensity. The results held that the three of the four cultural typologies (clan, adhocracy, marketand hierarchy) had positive influence on organizational agility, while market culture ,did not impact on organizational agility. Explicit OP measurement in the conceptualization would have given a clear impact of OC on an agile organization to its performance.

In the Brazilian textile industry, Schuldt and Gomes (2020) examined how organizational culture affected the environment for innovation and organizational success. The data supported and corroborated the claim that organizational culture promotes innovation and, as a result, enhances organizational performance. The other two environmental change indicators (Competition and Customer Preferences and Tastes) were not included in the study because it concentrated on a single environmental indicator of technology. The three environmental turbulence indicators are measured in this conceptual work.

Strategic Agility, Environmental Turbulence, Organizational Culture, and Orgaizational Performance

Researchers have conceptually and empirically looked at the impact of strategic agility on organizational performance, according to the literature (Long, 2000; Doz & Kosonen, 2010). However, this direct casual relationship is compounded by contingent factors that impact positively or negatively. In filling in the knowledge gap, the researcher, through reviewed literature found out environmental turbulence as a moderator and organizational culture as mediator in the conceptualization. In view of the above context, two empirical studies were found to attempt to postulate the entire

conceptualization with several gaps. Reed (2020) studied the effect of firm age and environmental turbulence on the relationship of SA and firm performance in the context of SMEs in Florida, USA. All constructs were measured based on previous studies frameworks. Results held that the relationship between strategic agility and organizational performance is positively moderated by environmental turbulence and firm age. However, organizational culture that spurs innovation within the SMEs could have mediated the relationship with possible influence.

Mati et al.(2020) investigated the joint effect of organizational strategy, organizational culture, and external environment on organizational performance in large private health facilities in Kenya. The findings upheld the hypothesized relationship by noting that the three constructs; organizational culture, and strategy are embedded in the external environment and for optimal performance, the private health facilities have to balance the three factors. In the context of this paper conceptualization and envisioned operationalization, a gap arises since the current paper has different operationalization frameworks that will possibly alter the findings in the future research. Environmental turbulence indicators are technological, market and competition turbulence while organizational culture indicators are Cameron and Quinn (1999) culture typologies.

Summary of Knowledge Gaps

The literature reviewed has shown that there exists mixed findings on the strategic agility and organizational performance linkage. However, it is noted that the mixed or

Table 2.0: Summary of knowledge gaps

inconclusive results could be associated with the different methodologies adapted, how the constructs have been conceptualized, and various differing measurement metrics employed. The effect of contingency factors, is fundamental into the relationship of the key variables in the conceptualization. The complexity and dimensionality of the organizational performance presents multiple operationalization approaches. Empirical studies reviewed indicates reliance on financial performance measurement metrics over the broader approach as advanced by balanced score card (BSC) of Kaplan and Norton (1992). However, a later incorporation of non-traditional performance measures of social and environmental parameters has recasted BSC into SBSC (Chaker et al., 2017; Hubbard, 2009; Jassem et al., 2021).

Organizational performance has not been explicitly examined for the interaction between strategy agility, environmental volatility, and organizational culture. The few empirical research that aimed to investigate the joint effects are one way that this lack is manifested. Mati et al. (2020) made an effort to examine the interaction between various measuring markers of environmental turbulence and tactical agility. The purpose of this research is to fill up this information vacuum by arguing that the moderating impact of external turbulence and the mediating function of organizational culture may limit the influence of strategic agility on organizational performance. The summary of various empirical research and the gaps that underlie the emergent hypotheses are thus presented in table 2.0 below.

	Author/s /Year	Focus of the Study	Study Findings	Knowledge Gaps
1	Ehtesham et al., (2011).	Studied the relationship between organizational culture and performance management practices (PMP) in the case of a University in Pakistan.	All the four indicators of Denison organizational culture framework were found to have influence on organizational performance.	Organizational culture is conceptualized as independent construct and operationalized using Denison and Mishra 1995 framework. Strategic agility and environmental turbulence have not been considered.
2	Shin et al., (2015).	Investigated the Korean small and medium enterprises (SMEs) relationship of strategic agility with firm performance	Strategic agility of Korean SMEs has positive influence on operational performance and customer retention, but not on financial performance.	The innovative and entrepreneurial culture of SMEs mediating effects was not conceptualized and measured.

3	Abbas and Hassan (2017)	Investigated how environmental volatility in Pakistani firms affected the link between business innovation and performance.	Technology and competition were found to have a substantial impact on the association between CRM effectiveness, innovations, and performance among the moderators (Markets, Technology, and Competition Intensity).	However, the study did not assess how organizational culture mediated the results.
4	Felipe et al., (2017)	Sought to establish the impact of organizational culture (OC) on organizational agility via the moderating effect of technological intensity in the	Using Cameron and Quinn (1999) culture typologies, the study found that the four typologies were of significant influence to the organizational agility	Culture is conceptualized as independent variable while organizational agility as dependent variable.
5	Anggrain and Sudharto (2019)	Strategic agility environmental turbulence a case of banking sector in Indonesia	The study focused on employees of one private bank while investigating banking sector of Indonesia, established technological and market turbulence positively influence performance through competitive advantage	The investigation and the results may not be able to provide general picture of the entire banking sector in Indonesia. Lack of sufficient data to infer to the general banking sector
7	Kale et al., (2019)	Absorptive capacity and firm performance: The mediating role of strategic agility.	The results were that the agility measure was positively related to performance and mediated the relationship between absorptive capacity and performance.	The study focused on a single industry (accommodation) and lack of mediating effect of hotel culture that could have influence the relationship.
8	Chan and Muthuveloo (2020).	Vital organizational capabilities for strategic agility: an empirical study in the context of private	The constructs of organizational capabilities-environmental scanning, marketing and	The empirical investigation focused on the private HEIs who constitute of small

		higher education institutions in Malaysia.	organizational learning attributed significantly to strategic agility, that influenced the organizational performance of private HEIs in Malaysia.	fraction of the total Malaysian HEIs. Thus, it lacked comprehensive scope of study variables.
9	Mati et al., (2020).	Investigated the joint effect of organizational strategy, OC, and external environment on OP in large private health facilities in Kenya	Results revealed that organizational culture and strategy are embedded within the environment and private health facilities have to establish an optimal balance among the three constructs for enhancement of their performance.	The study did not consider the moderating and mediating effects of environmental turbulence and culture but treated the variables as independent constructs.
10	Schuidt and Gomes (2020).	Studied the influence of OC on the environment of innovation and OP in Brazil textile sector	The findings upheld the hypothesis that organizational culture has favourable influence on the environment of development of innovation and organizational performance of firms within the textile industry.	The analysis used primarily technology indicators to operationalize environmental turbulence. All three environmental turbulence indicators are taken into account in this paper.
11	Reed (2020)	Studied the effect of firm age and environmental turbulence on the relationship of strategic agility and firm performance in the context of SMEs in United States of America	It revealed that environmental instability and firm age work together to limit the association between strategic agility and firm performance.	The influence of firm culture was not considered and could have had a significant influence within the SMEs performance.
12	Arokodare (2021)	Empirical investigation of the moderating effect of environmental turbulence on the strategic agility-	The study findings was that environmental turbulence moderated the relationship of	Measurement of the constructs is not explicitly revealed. This paper explicitly states the

		Performance relationship of major Oil and gas marketing companies in Lagos State,Nigeria.	strategic agility and performance positively.	indicators of the constructs.
13	Nurjaman et al., (2021)	The role of strategic agility towards the firm performance of logistics service providers in Indonesia	The results shows there is propensity of strategic agility and competitive strategy significant influence on performance of Logistics service providers in Indonesia.	The study did not conceptualize and measure environmental turbulence despite being mentioned as key factor in the competitive logistics service providers business environment.

Source :Synthesis of Literature,

Emerging propositions

Reviewed empirical studies have shown a convincing evidence, that strategic agility (independent variable) has significant influence on organizational performance (dependent variable). However the relationship is not explicitly a direct one, scholarly debate on whether strategic agility influences organizational performance is on going (Tallon et al.,2019). Studies that have employed modern advanced methodologies, have found a positive influence of strategic agility on organizational performance. Therefore

Proposition 1 : *Strategic agility could positively influence organizational performance.*

It is argued that moderating effect of environmental turbulence under the indicators of technological innovations, intense competition, and changing customer preference and tastes do play a significant role. According to empirical research, a turbulence-filled environment enhances the

strategic agility's effectiveness. High level of turbulences leads to organizations to be innovative (Abbas & Hassan, 2017; Reed, 2020; Vagnon & khoddami,2016). Consequently;

Proposition 2: *The relationship between organizational performance and strategic agility may be moderated by environmental turbulence.*

Literature has revealed that organizational culture inspires motivation for organizations' staff to lead in the innovative drives of product fronts, customer, and operational agilities. Mishra and Sharma (2021) argue that strong organizational culture has great impact on student engagement in the educational sector in India. Jigjiddorj et al. (2021) study on organizational culture, employee satisfaction, and organizational commitment influence on performance, implores on how organizational culture can impact on organizational performance through committed employees. Therefore;

Proposition 3: *The link between organizational performance and strategic agility may be mediated by organizational culture.*

As scholars and practitioners of strategic management do agree that strategic agility continues to be the new paradigm that organizations have to embrace for relevance in the turbulence business environments, literature also suggests contingency factors constraint the relationship. Thus the inconsistent findings indicate lack of evidence linking explicit relationship between strategic agility and performance. Therefore, proposition of possible contingency factors that could possibly explain the mixed findings.

Proposition 4: *The relationship between strategic agility and organizational performance could be moderated by turbulence environment and mediated by organizational culture.*

Conclusion

The study has identified a number of knowledge gaps relating to the interaction between organizational performance, environmental turbulence, strategic agility, and organizational culture. The findings of the reviewed studies presents mixed inconclusive influence of strategic agility on performance. This paper proposes for further empirical study to test the contingency factors responsible to performance through strategic agility. Literature has shown a direction of environmental turbulence and organizational culture as contingent factors with significant influence on the linkages of SA and OP.

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