

Organisational Design Contingencies and Strategic Entrepreneurship of Small and Medium Scaled Enterprises in Nigeria: Organisational Sustainability Perspective

Matthias O. Nkuda, PhD, Belemenanya F. Okocha, PhD

Department of Management, Faculty of Management Sciences, University of Port Harcourt, Port Harcourt, Rivers State, Nigeria

DOI: <https://doi.org/10.47772/IJRISS.2023.7491>

Received: 26 March 2023; Revised: 12 April 2023; Accepted: 17 April 2023; Published: 16 May 2023

ABSTRACT

This study evaluated organisational design contingencies and strategic entrepreneurship of Small and Medium-Scaled Enterprises in Nigeria: Organisational Sustainability Perspective. The study adopted a cross-sectional online survey and collected data using structured 5-point Likert Scale questionnaire. Using purposive sampling method, a population of 273 SMEs was adopted as the sample size. Through the use of the software programme, Smart PLS 4.0, the survey data were analysed and the proposed hypotheses were tested using the Partial Least Square Structural Equation Modeling (PLS-SEM) technique. The research found that the dimensions of organisational design contingencies (i.e. organisational size, technology, strategy) and measures of strategic entrepreneurship (i.e. exploration, innovation, exploitation) are positively and significantly correlated. Organizational sustainability has a positive significant moderating effect on the relationship between organisational design contingencies and strategic entrepreneurship. This study concluded that organisational design contingencies and strategic entrepreneurship of SMEs in Nigeria: Organizational Sustainability is positively and significantly related. This research recommends that there is a potential to support managers, decision-makers, and researchers to build, test, and validate similar models adding minor reforms and developing innovative and creative combinations of inherent capabilities and resources to realize the organizational sustainability in SMEs.

Keywords: Opportunity seeking, advantage seeking, organisational design, strategic entrepreneurship and organisational sustainability.

INTRODUCTION

Business enterprises irrespective of type, size, age, stages of development and contexts of operations, face and contend, as it were, with hyper-competition in the operating business environment (D'Aveni, 1994; Gupta, Gollakota & Srinivasan, 2009). The competitive landscape becomes compounded by the forces of liberalisation, globalisation, privatisation and disruption (Kazmi, 2002; Sapru, 2013; Wehrich, Cannice & Koontz, 2013). These forces combine to not only exacerbate the business environment but also render competitive business strategies of many businesses ineffective and business models short-lived (Bateman & Smell, 1999; Nkuda, 2021c). Undoubtedly, business organisations remain the veritable framework, organised and managed institutions in and through which individuals work, carry out major task of developed society and make a living (Drucker, 1954; Baridam, 1993; Drucker, 1999; Sapru, 2013). Therefore, business enterprises from micro-economics standpoint, aggregate surpluses from households and government to accumulate investible funds that are deployed to create wealth in the economy via the nexus of saving-investment (Akpan, 2004; Nwakanma, 2018; Nkuda, 2021b).

The contributions of business organisations whether entrepreneurial or established corporate entities are

imperative to attain national and global development goals such as sustainable development goals (SDGs) and as such, the business organisations are expected to be sustainable to be able to deliver SDGs. The sustainable development goals represent, to a large extent, advancement on millennium development goals (MDGs) which milestone ended in 2015 (Olabode et al., 2014).

The millennium development goals consisted of seven goals notably to: eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, combat HIV and AIDS, malaria and other diseases and ensure environmental sustainability (Olabode et al., 2014). The fundamental question becomes: how many of these MDGs did Nigeria, as a country, achieve to warrant being sustained so as to serve as stepping stones under the dispensation of the sustainable development goals? Extant literature confirms that Nigeria did not achieve much in pursuit of millennium development goals due to policy somersault, poor implementation and endemic corruption (Ejike & Anuforo, 2012). On its part, the sustainable development goals consist of seventeen (17) pillars adopted by 193 member states of United Nations on September 25, 2015 notably: “no poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry, innovation and infrastructure, sustainable cities and communities, responsible consumption and production, climate action, life bellow water, life on earth, peace, justice and strong institutions, and partnerships for the goals” (United Nations, 2015).

The SDGs is designed for the duration of fifteen (15) years with its implementation spanning 2015 to 2030 globally. The actual implementation of SDGs in Nigeria context ideally ought to have begun also in 2015. It is in connection with the global efforts to tackle the scourge of poverty and hunger through industry, innovation and infrastructure in keeping with the 2030 agenda of sustainable development goals more than all other pillars of SDGs that this study on organisational design contingencies and strategic entrepreneurship of small and medium scaled enterprises (SMEs) has been conducted from organisational sustainability and management scientist’s standpoint. However, small and medium scaled enterprises (SMEs) are those enterprises that have capital base between N1million and N150million excluding value of land and employing between 10 and 100 persons (Central Bank of Nigeria, 2000 cited in Osemeke, 2018). The SMEs need to be sustainable to be able to continue to make contributions to a more equitable distribution of income or wealth in the economy (Osemeke, 2018).

The concept of organisational sustainability can be defined as the ability of a business enterprise to survive over time and be able to meet denominated obligations to its stakeholders in a dynamic environmental milieu. Wheelen and Hunger (2010) define sustainability as a term that transcends ecological concerns to incorporate and embrace what Crane and Mattern describe as economic and social imperatives. Sustainability basically has to do with the need to preserve the natural environment in all ramifications to ensure constant ecological balance for the use of the present and future generations. Accordingly, the World Commission on Environment and Development (Markku, 2004 cited in Osemeke, 2018) states that “sustainable development entails economic growth organised in the protection of the environmental quality, each strengthening the other.” There are three typologies of sustainability notably: economic sustainability, social sustainability and environmental sustainability (Wheelen & Hunger, 2010). Tersely and in line with Dow Jones Sustainability Index developed in 1999, economic, social and environmental sustainability imposes onus on business organisations to ensure that their operations conduce to economic prosperity reflected in triple bottom line and social harmony without telling negative impacts on environmental health on which business organisations depend for continued survival through inputs-throughput-outputs nexus (Wheelen & Hunger, 2010; Gibson et al., 2003). The economic, social and environmental factors would be the measures of organisational sustainability used as moderating variable in this study.

Strategic entrepreneurship as an aspect of entrepreneurship is a budding and emerging domain in need of

research as extant literature has attested (Foss & Lyngsie, 2011). Acknowledged globally is the fact that entrepreneurship represents the engine and future of most economies in the world (Oshi & Nkuda, 2021). This assertion is weighted on the contributions of entrepreneurship to the gross domestic product (GDP) of the nations, employment generation and attendant reduction in anti-social activities. Therefore, government is urged to reinvent itself as “entrepreneurial state” by creating a private-sector led socio-economic development on the sustainable basis since “a strong positive relationship exists between the rate of entrepreneurial activity and economic development in the country” (Hitt et al., 2013; Mailafia, 2019)). Saaka (2013) buttresses that about 80 million Nigerian youths representing 60% of the total population engage in informal sector via the instrumentality of entrepreneurial pursuits.

However, in the United States of America recognised as the most entrepreneurial country in the world, 550,000 new entrepreneurial ventures spring up daily (Igwe, 2020; Oshi & Nkuda, 2021). This is far from being the case in Nigeria where instead of birthing entrepreneurial ventures; unemployment becomes the order of the day with the humongous figure standing at 23, 189, 389 unemployed persons in Nigeria as at first quarter of 2022 representing 33.3% compared to 21.3 % for the same period in 2021 according to National Bureau of Statistics (2022). Unemployment coupled with unemployability constitutes Siamese twin diseases that plague Nigerian economy (Obeleagu-Nzelibe & Moruku, 2010). The sector that seems to blossom somewhat happens to be the religious sector where there are more religious outfits (Churches) than entrepreneurial economic ventures in the true sense of the word. (Kukah, 2022) reported in (Asuquo, 2022) corroborates that “the number of churches cannot be compared to the number of schools and hospitals in the country.”

Cogently, the term strategic used to prefix entrepreneurship in this discourse confers on entrepreneurship a more insightful and significant meaning. Hitt et al. (2013) define strategic entrepreneurship as the taking of entrepreneurial actions with strategic perspective. The strategic perspective component of this definition imposes an obligation on organisational leadership to envision what becomes of the organisation now and in the future in terms of its survival, profitability and growth among other important economic ends (Pearce & Robinson, 1991 ; Wheelen & Hunger, 2010). Strategic entrepreneurship obligates on corporate strategic leadership to always think about the well-being of the organisation in the short, medium and long-terms by leveraging opportunity and being advantage seeking-conscious at all times (Foss & Lyngsie, 2011). The sure route to navigate the highly competitive landscape that snuffs life out of many companies and successfully survive its lethal impact is to engage in strategic entrepreneurship reflected in discovery, evaluation and exploitation in which continuous innovation is a part (Foss & Lyngsie, 2011; Hitt et al., 2013). Drucker (1999) buttresses that business organisations that fail or are unable to innovate are susceptible to untimely death. Strategic entrepreneurship being an emerging area of research has witnessed fast accumulation of conceptual researches while empirical works lack behind (Foss & Lyngsie, 2011). This creates a void or lacuna in extant literature that needs to be bridged or filled. This provides the impetus and justification for this current empirical study from the standpoint of organisational design contingencies. However, the key proxies or explanandums with which strategic entrepreneurship could be measured and reviewed include: discovery, evaluation and exploitation reflecting respectively entrepreneurship and strategy from which the adjectival term ‘strategic’ is derived (Foss & Lyngsie, 2011; Hitt et al., 2013). However, in this study, strategic entrepreneurship would be measured in terms of exploration, innovation and exploitation (Siren, Kohtamaki & Kuckertz, 2012). Technically, the ideas of exploration and exploitation are subsumed in ambidexterity in relation to strategic entrepreneurship.

Organisational design contingencies refer to the critical elements that are considered in the process of creating organisational design. By organisational design is meant the process of creating an organisational structure where none exist or modifying an existing organisational structure to suit or cope with the changing rhythm or dynamics of the operating business environment. Giffen (2005) defines organisational design as “the overall set of situational elements and relationships among those elements used to manage the

total organisation. Kates and Galbraith (2007) cited in (Udofot & Akpan, 2017) define organisational design as the process of “configuring structures, processes, reward systems, and people practices to create an effective organization capable of achieving the business strategy.” Characteristically, organisational designs whether mechanistic or organic are never sacrosanct and static but affected by continuous change to which organisational people, processes and situations are subject (Griffen, 2005). The end-product of organisational designs are organisational structures intended to drive corporate, business and functional strategies of business organisations consistent with the strategic nugget of Alfred Chadler (1962) that structure follows strategy. In carrying out organisational design, a bureaucratic model which relies on legitimate and formal systems of authority or behavioural approach which emphasises work groups and interpersonal relationships out which plumule springs forth a source of employee productivity in line with Hawthorne studies of Elton Mayo and Associates can be adopted (Blum & Naylor, 2004 ; Griffen, 2005). However, the organisational design contingencies associated with either approach include: size, technology, environment, organisational life cycle and strategy as well as goals out of which organisational size, technology and strategy would be used as dimensions or explanans (Griffen, 2005; Amah & Nkuda, 2014). In sum therefore, this study aimed at probing the relationship between organisational design contingencies and strategic entrepreneurship of small and medium scale enterprises (SMEs) using organisational sustainability as a moderator from management scientist’s standpoint.

The specific objectives were to: (1) examine the relationship between organisational size and exploration of SMEs. (2) Investigate the relationship between organizational size and innovation of SMEs. (3) Probe the relationship between organizational size and exploitation of SMEs and (4) to examine how technology is related to exploration. (5) Technology and innovation. (6) Technology and exploitation. (7) investigate the relationship between strategy and exploration, (8) strategy and innovation, (9) strategy and exploitation. (10) to evaluate how organisational sustainability moderates the relationship between organisational design contingencies and strategic entrepreneurship of SMEs. Tentatively, the following null hypotheses were formulated: H_{o1} : There is significant relationship between organisational size and exploration of SMEs. H_{o2} : There is no significant relationship between organizational size and innovation of SMEs. H_{o3} : There is no significant relationship between organizational size and exploitation of SMEs. H_{o4} : There is no significant relationship between technology and exploration of SMEs. H_{o5} : There is no significant relationship between technology and innovation of SMEs. H_{o6} : There is no significant relationship between technology and exploitation of SMEs. H_{o7} : There is no significant relationship between strategy and exploration of SMEs. H_{o8} : There is no significant relationship between strategy and innovation of SMEs. H_{o9} : There is no significant relationship between strategy and exploitation of SMEs. H_{o10} : Organisational sustainability does not moderate the relationship between organisational design contingencies and strategic entrepreneurship of SMEs. The content scope revolved around the major constructs and their dimensions and measures. The geographical scope focused on SMEs in Port Harcourt, Rivers State. However, the unit of analysis scope was at micro or individual level because each business enterprise needs to be designed and entrepreneurial instincts to create and invent permeate and traverse organisational hierarchies. The significance of the study consisted in the enhancing competitiveness of SMEs, their survival and growth reflected in ability to innovate and birth new products and empirical contribution to the literature of entrepreneurship, strategic management and strategic entrepreneurship in particular.

LITERATURE REVIEW

The following review revolved around the theoretical and conceptual frameworks built to guide this study:

Theoretical Framework

There are many theories of entrepreneurship notably: hyper-competition, real options and dynamic capabilities theories (Foss & Lyngsie, 2011). However, this work was grounded on dynamic capabilities the

baseline theory.

Dynamic Capability Theory

Dynamic capability perspective or theory is keenly associated with the work of David Teece and his associates in the late 1990s (Teece et al., 1997). Grant (2008) relying on these dynamic capability pioneers, define dynamic capability as “the firm’s ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments.” A dynamic capability can also be viewed as “a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness” (Zollo & Winter, 2002). Eisenhardt and Martin (2000) describe dynamic capabilities as “routines which enable a firm to readjust its resources such as research and development, new product development and acquisition skills.” Yet, Prahalad and Hamel (1990) consider dynamic capabilities as having to do with constant change to make them more flexible and adaptable to changing and uncertain business environment. Dynamic capabilities represent the current coinage for organisational knowledge and competence which different scholars previously referred to as: distinctive competence, organisational routines, absorptive capacity, architectural knowledge and combinative capabilities (Zollo & Winter, 2002). Dynamic capabilities which, by nature are uncommon, depend on operating routines driven by ‘learning by doing’ or heuristics (Oliver, 1997; Zollo & Winter, 2002; Grant, 2008). Dynamic capabilities require both resource acquisition and integration which are largely influenced by organisational culture or social context including values and behavioural norms essentially needed to enhance motivation and collaborations in the organisation (Oliver, 1997 ; Teece et al., 1997; Grant, 2008). Zhou and Wit (2009) corroborate that owing to the limited resources, small and medium scaled enterprises (SMEs) have to reconfigure, reallocate and recombine their resources to accomplish set goals which denotes dynamic capability.

The dynamic capability theory is not only an extension of the resource-based view but also one of the strategic approaches used by firms to pursue competitive advantage. This fact aligns dynamic capability theory with strategic entrepreneurship which is all about opportunity seeking and advantage seeking to attain competitive advantage ultimately. Dynamic capabilities rely heavily on research in critical areas as management of research and development, product and process developments, technology transfer, intellectual property, manufacturing, human resources and organisational learning (Teece et al., 1997; Zollo & Winter, 2002). In the face of the lack of consensus as to what dynamic capabilities really are, their rare and rigid nature, they are however considered to be the basis of competitiveness (Prahalad & Hamel, 1990). Thompson and Strickland (2003) buttress that dynamic capabilities empower strategic managers to envision and anticipate possible changes in customer-market requirements and proactively proceed to build the requisite competences and capabilities to gain competitive advantage over rivals with the right quality products and/or services at the right price, place and time. Dynamic capabilities are associated with Schumpeterian rents because they are essentially inimitable and nonsubstitutable in VRIO framework with which business organisations navigate fast changing environmental contexts (Wheelen & Hunger, 2010, Lim et al., 2012) On this score, dynamic capabilities become relevant and relate to organisational design contingencies which affect business organisations, given their experience of constantly changing operating environment, to help them pursue strategic entrepreneurship.

Conceptual Framework

The framework below depicts the concepts reviewed in the study.

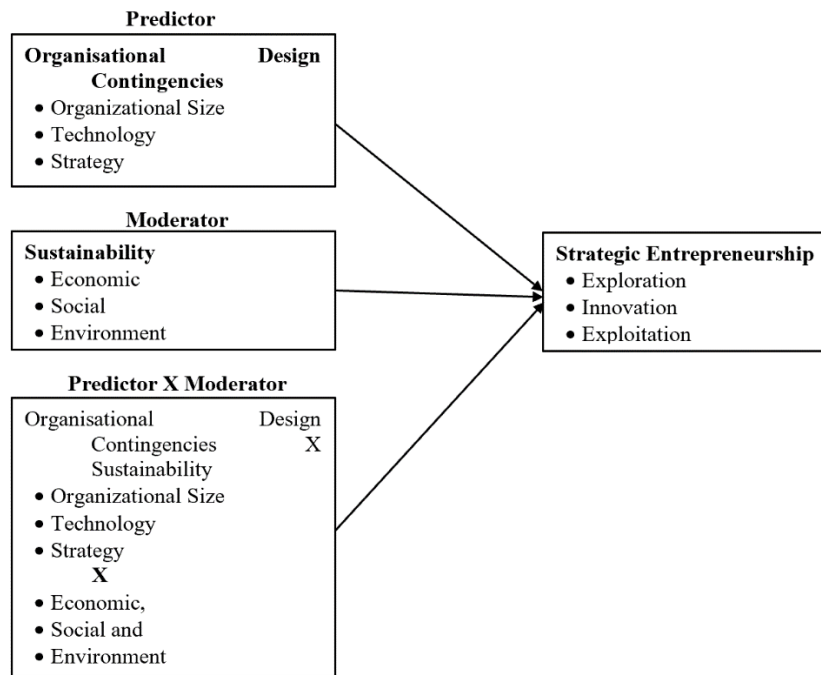


Figure: Conceptual Framework of Organizational Design Contingencies and Strategic Entrepreneurship of SMEs in Nigeria

Source: Researcher’s Conceptualisation (2023) based on dimensions and measures adapted from Griffen (2005), Wheelen and Hunger (2010) and Foss and Lyngsie, (2011) respectively using the frame of reference of Baron and Kenny (1966: 1174).

Organisational Design Contingencies

Organizations are social constructs that have a defined purpose, are intentionally planned as systems of coordinated action, and are connected to their surroundings

Organizations are everywhere; they range from global corporations to non-profits, with a few staff members to hundreds of thousands. In order for an organisation to fulfil their mission and strategy, stakeholders must recognise the potential for performance improvement and participate in the organisation design process by aligning structures, processes, leadership, culture, people, practises, and metrics (Burton & Obel, 2018).

They essentially allude to important factors that must be taken into account when doing organisational design. Organizational structure needs to be created or modified as part of the organisational design in order to drive strategies towards, among other things, the strategic entrepreneurship of corporate organisations. The two most well-known methods for handling organisational design are bureaucratic and behavioural. The bureaucratic organisation modelled after Max Weber’s (1864–1920) emphasis on legitimate and formal institutions of authority is called the bureaucratic model (Gomez-Mejia & Balkin, 2002; Griffen, 2005). While the behavioural approach emphasises the formation of work groups and interpersonal relationships, it is superior to the bureaucratic approach because it fosters team spirit, which is founded on and lubricated by interpersonal relationships, as the basis of high employee productivity. The Hawthorne studies were conducted for 12 years between 1927 and 1939 under the direction of Elton Mayo and Fritz Roethlisberger (Stevenson, 1999; Blum & Naylor, 2004; Robbins, 2005). Depending on the current states and conditions of the environment, the organisational design is typically either mechanistic, organic, or boundaryless (Gomez-Mejia & Balkin, 2002; Robbins, 2005; Griffen, 2005). Organizational size, technology, and strategy were chosen as dimensions or explanans of organisational design contingencies, and are discussed below.

Organizational design contingencies also include goals and the environment (Griffen, 2005; Amah &

Nkuda, 2014; Hitt et al., 2011; Awang et al., 2015).

Organisational Size

According to Griffen (2005), an organization's size is determined by how many full-time equivalent employees it has overall. This helps to explain why some companies are large-scale while others are micro, small, and medium-sized enterprises (MSMEs). Yet, it is acknowledged that most commercial organisations begin small, expand, and scale up over time if they do not face mortality within the first five years, as is frequently the case with small and medium enterprises (SMEs) (Griffen, 2005). All types of company organisations, especially small and medium firms, have a strong desire to expand (SMEs). The capacity of business organisations to unleash their internal resources and capabilities on external opportunities and capitalise on the benefits that accrue therefrom to achieve their strategic intents, which define the hallmarks of strategic entrepreneurship, is one of many factors that determines their potential to grow (Thompson & Strickland, 2003; Foss & Lyngsie, 2011; Hitt et al., 2013). Yet, small and medium-sized businesses (SMEs) and large-sized organisations have different systems in place to coordinate the plethora of organisational activities and levels of specialisation that have emerged as a result of the recent wave of expansion (Gomez-Mejia & Balkin, 2002). In current literature, there is disagreement over the connection between organisational scale and exploration or exploitation (Lavie et al., 2010). However according to Rothaermel and Deeds (2004), organisational size is positively correlated with a willingness to form exploitative coalitions. Similar to this, larger business organisations have better access to internal resources to explore their relationships, according to Beckman et al. (2004). Some research, however, have found little evidence to indicate a link between organisational size and exploration in terms of the range of information acquisition (Sidhu et al., 2004).

Technology

Technology is science-based as it refers to the knowledge gained from science and is deployed to create products and services to enhance the standards of living of the consumers. Depending on the product and service configuration of a business organisations, their operations may vary from low to high-tech defined and shaped in terms of the degree of labour or capital intensiveness (Gomez-Mejia & Balkin, 2002; Griffen, 2005). The 21st century is largely knowledge and information driven and applications of high technology propel most operations of business organisations irrespective of scale. Stevenson (1999) states that application of computer and its different software packages has revolutionised the way and manner most companies now operate in terms of product design, product attractive features, processing techniques, information processing and intra cum inter-organisational communication). However, considering available resources to acquire high-technologies, small and medium scale enterprises have to strive to brace up with the challenge to remain competitive compared to established large-scale organisations. Deployment of technology fast-tracks the time-to-market turnaround time between opportunity seeking and advantage seeking with which strategic entrepreneurship is concerned to pursue zero poverty and hunger in keeping with the mandates of sustainable development goals (SDGs), (Foss & Lyngsie, 2011; Hitt et al., 2013).

Strategy

Etymologically, strategy has its roots in the Greek word 'strategos or strategia' which literally translates as the art of the general (Kazmi, 2002; Thompson & Strickland, 2003; Grant, 2008; David, 2013; Nkuda, 2017, 2021b). Strategy can be defined as a set of choices which determines of the strategic direction along which people are aligned and resources allocated to achieve set goals which may be competitive advantage (Nkuda, 2017). Strategy bears relationship to organisation design which births structures with which strategies at corporate, business and functional levels are implemented (Kazmi, 2002; Thompson & Strickland, 2003; Griffen, 2005; Grant, 2008; David, 2013; Nkuda, 2017, 2021b). Strategy has its integral components such as strategic intent, strategy formulation, strategy implementation and strategy evaluation

and control (Kazmi, 2002; Thompson & Strickland, 2003; Sandada et al., 2014). It is important to put in place the right structure that suits and aligns with the particular strategy which a business organisation pursues aware that structure follows strategy (Chadler, 1962). This is informed by the fact that strategy links business organisations to the operating business environment and thus, creates strategic fit through which entrepreneurial opportunities are identified and exploited to seize attendant advantage while countering possible threats (Kazmi, 2002; Thompson & Strickland, 2003; Grant, 2008; Foss & Lyngsie, 2011; Hitt et al., 2013; David, 2013). Strategy in relation to strategic entrepreneurship involves many activities ranging from structural, behavioural and functional which all need to be successfully handled and implemented to achieve set goals and/or objectives (Amin et al., 2019; Babarinde et al., 2021). Strategy is needed to access critical resources to ensure that strategic entrepreneurial operations are efficiently and effectively carried out just as it is the case in most formal and informal sectors of the economy (Babarinde et al., 2021).

Strategic Entrepreneurship

Entrepreneurship, to which the term strategic is prefixed, has its roots in the French and German words 'entreprendre' and 'unternehmen' literally meaning between-taker or go between or doing something different and to undertake respectively (Long, 1983; Cunningham & Lischeron, 1991; Oshi & Nkuda, 2021). Entrepreneurship and entrepreneur as English equivalents were coined by Richard Cantillon (1775/1931) cited in (Hisrich & Peters, 2002; Fox, 2005; Awang et al., 2015; Oshi & Nkuda, 2021). However, strategic entrepreneurship simply describes a process of opportunity seeking and advantage seeking undertaken by business organisations (Foss & Lyngsie, 2011; Hitt et al., 2011; Siren et al., 2012; Awang et al., 2015). Strategic entrepreneurship is broad and straddles many disciplines such as economics, psychology and sociology as well as organisation behavior and organisation theory (Hitt et al., 2014; Gancarczyk, 2020). Strategic entrepreneurship can be defined as the ability to exploit opportunities in the bid to achieve competitive advantage (Gancarczyk, 2020). It involves taking risks, identification of opportunities, evaluation of the same and using opportunities in novel ways. The opportunity and advantage seeking are imperatively reflected in exploration involving recovery, innovation reflected in evaluation and exploitation which could be the measures or explanans of strategic entrepreneurship (Foss & Lyngsie, 2011). The opportunity seeking underlines entrepreneurship and competitive advantage seeking is within the purview of strategic management (Hitt et al., 2014). However, for the purpose of this study, strategic entrepreneurship would be investigated from the point of view of exploration, innovation and exploitation which respectively embed, as it were, discovery, evaluation and exploitation (Siren et al., 2012). Recourse to the few available empirical research indicates that ambidexterity has positive impact on firm's performance where exploration and exploitation strategies are jointly pursued (Siren et al., 2012).

Exploration

The notion of strategic entrepreneurship begins with exploration which integrates discovery as a process of finding out something which may be beneficial either through serendipity or deliberate research. It reflects in opportunity seeking which entails creativity and invention (Foss & Lyngsie, 2011). Creativity has to do with ideation i.e., the creation of viable ideas which can be novel, retooled or reinvented and thinking outside the box (Hitt et al., 2013; Saaka, 2013; Nkuda, 2021a). The ideation must be subjected to criticism to sieve and pinpoint viable and promising idea that can generate a new product, process, service or redefine existing value for the customers (Verganti, 2016). Creativity involves preparation, incubation, illumination, verification and elaboration (Shefiu, 2019; Nkuda, 2021a). Creativity births invention which refers to the process of bringing a new thing into existence in which creativity serves as a nucleus (Shefiu, 2019). Schumpeter (1934) corroborates that invention is the act of creating or developing a new product or process. Invention in and of itself is not so useful just like crude oil which full usefulness comes out only after refining. Similarly, invention becomes very useful through innovation. Exploration strategy helps to approximate the firm's current technology and product dimension to customer and market segment and as

variety is increased, entrepreneurial activities assist firms to recognise possible viable opportunities and develop cognate knowledge and capabilities required to profitably tap the opportunities for the long-term prosperity and survival of the firm concerned (Siren et al., 2012). Exploration strategy brings about new products, processes and markets as well as technology (Hitt et al., 2013).

Innovation

The next stage of exploration continuum is innovation which is the process of bringing a new thing, product or process into use through instrumentality of enterprise created by entrepreneurship (Nkuda, 2021a). Schumpeter (1934) views innovation as the process of creating a product with commercial value. Innovation is a mixed grills of top priority and top frustrations to many top executives and McKinsey's poll of 84% executives of global repute identifies innovation as critical to growth strategies even as a whopping 94% of the executives surveyed were dissatisfied with innovation performance of their respective business organisations (Christensen et al., 2016). Innovation strategy involves the design and manufacture of products or services that are different from those of competitions to help cope with the changing customers' needs and market nature in the bid to gain and sustain competitive advantage (Miller, 1986; Chang & Huang, 2005). Innovation is critical in the sense that a viable idea that leads to innovation may be difficult to commercialise to appropriate and maximise its benefits (Hitt et al., 2013). Innovation which may be product, process, or marketing involves evaluation which is the process of determining cost-benefit analysis of innovation (Muazu, 2018). Verganti (2016) buttresses thus "to create this screen for assessing ideas, employ an inside-out process that relies on the art of criticism, not ideation." Innovation assumes two levels notably: improvement and new direction. While improvement has to do with finding new solution in terms of product or service that better satisfies existing value, new direction entails the redefinition and reinterpretation of what is of value to the customer (Verganti, 2016).

Besides, the degrees of change in technology and business models characterise dimensions of innovation (Pisano, 2015). For instance, disruptive innovation triggers change in business models and little or no change in technology which explains why google android operating system for mobile devices given away as free disrupts other established companies such as Apple and Microsoft which operating systems are not given away free (Pisano, 2015). It bears to note that innovation is people-driven which explains why Japanese manufacturing managers go to the 'gemba' translated as 'the real place' such as the factory floor to get fresh and first-hand information to advance their innovative efforts (Reeves et al., 2016). An innovation qualifies for exploitation when the resultant values and benefits outweigh the attendant costs. This process normally involves some forms of project evaluation using certain financial metrics such as net present value (NPV), payback methods and internal rate of return to mention but a few (Akpan, 2014). On the whole, innovation as succeeding step to exploration, defines opportunity seeking of strategic entrepreneurship in pursuit of the combat against poverty and hunger as pillars of sustainable development goals (SDGs).

Exploitation

The last part of the strategic entrepreneurship continuum entails the exploitation to the opportunities to the fullest potentials. Leveraging available resources and capabilities, exploitation strategy taps the current competitive advantage of the firm to ensure improvement in the product designs and strengthening of customer relationships (Siren *et al.*, 2012; Hitt et al., 2013). While exploration increases variety, exploitation reduces variety by ensuring operational efficiency and upgrading the capability necessary to adapt the firm to the prevailing business environment (Siren et al., 2012). It may bear to state that it is only to the extent that innovation is successfully commercialised and fully exploited that advantage seeking aspect of strategic entrepreneurship can be said to have been actualised (Dess & Lumpkin, 2005; Foss & Lyngsie, 2011; Hitt et al., 2013). Ability to exploit innovation and achieve competitive advantage helps to tackle the menace of poverty and hunger as some pillars of sustainable development goals (SDGs).

Organisational Sustainability as a mediator

Business organisations generally have many stakeholders both primary and secondary as reflected in a typical schema of business environment. The stakeholders include employees, shareholders, board of directors, customers, suppliers, creditors, trade unions, government agencies, communities etc. (Wheelen & Hunger, 2010). Continued survival and growth of business organisations thus depend on their ability to meet their obligations to the stakeholders as they fall due. To the extent that business organisations are able to achieve these ends, they may be able to achieve the triple bottom line in terms of economic, social and environmental sustainability and vice-versa (Wheelen & Hunger, 2010). The economic sustainability captures indices on the overall well-being and economic performance of the business organisations in a given industry. The social sustainability also emphasises the need to meet the corporate social responsibilities within their operational contexts. Whereas, the environmental sustainability stresses the need to ensure that operations of business organisations do not negatively impact and disrupt the bio-ecological balance of the vicinity in which the business organisations operate. Environmental sustainability targets the control of pollution and proper waste disposal using environment-friendly practices which ensure environmentally responsible manufacturing (Stevenson, 1999). Overall, business organisations are expected, in fidelity to sustainability standards, to subject their operations to assessment of relevant regulatory agencies in line with acceptable global index such as Dow Jones Sustainability Index (DJSI), (Wheelen & Hunger, 2010). The use of organisational sustainability as the moderating variable in this study aligns with previous study which advocates thus: “prior studies argue that the effect of these core elements of strategic entrepreneurship (exploration and exploitation) cannot be fully captured through their direct effects on profit performance but that this relationship consists of moderating factors” (Siren et al., 2012).

Organisational Design Contingencies and Strategic Entrepreneurship

Organisational size, technology and strategy are some of the critical organisational design contingencies (Gomez-Mejia, 2002; Griffen, 2005; Amah & Nkuda, 2014). Strategic entrepreneurship has opportunity seeking and advantage seeking reflected in discovery, evaluation and exploitation as its basic hallmarks (Foss & Lyngsie, 2011; Hitt et al., 2013). The size of business organisations varies from micro, small, medium and large-scaled and the quest for and pursuit of business opportunities apply to all business organisations irrespective of their sizes. In the same vein, almost all business organisations deploy a certain level of technology to carry out their operations. However, the micro, small and medium scale enterprises (SMEs) do have limited resources to acquire the level of technology as established large-scaled organisations depending essentially on the nature of their operations (labour or capital intensive) and product cum service configurations (Gomez-Mejia, 2002; Griffen, 2005; Zhou & Wit, 2009). Yet, technology is critical to exploiting innovation to achieve competitive advantage in the marketplace via automation in some cases. Strategy is needed to connect all categories of business organisations to their respective business environments where competitive battles for advantages can either be won or lost (Grant, 2008). Cogently, to exploit business opportunities and gain competitive advantage depends on the successful implementation of the choice grand strategy. Much as both exploration and exploitation strategies are crucial to the survival and growth all categories of business enterprises, the same poses much more tension for small and medium scaled enterprises with limited resources (Ibrahim et al., 2017). It can therefore be deduced that organisational design contingencies are related to strategic entrepreneurship subject to empirical verification subsequently.

METHODOLOGY

The data for the study were gathered via a cross-sectional online survey. Through the use of the software programme SmartPLS 4.0, the survey data is analysed and the proposed hypotheses are tested using the

Partial Least Square Structural Equation Modeling (PLS-SEM) technique. There are compelling reasons to utilise PLS-SEM in this work, since it has been widely used by researchers in the past for analysis and modelling because it consistently gives accurate results even with tiny and non-normal data (Hair et al., 2011). (Ringle et al., 2010). In a similar vein, the programme SmartPLS is chosen for its capacity to estimate the complex cause and effect relationship encompassing several routes, constructs, and variables and develop a model (Hair et al., 2014; Sarstedt & Cheah, 2019). Since it decreases unexplained variance and raises the explained variance (R²) value of endogenous constructs, PLS-SEM is the technique that works best for assessing causal links in empirical investigations. The researcher was inspired to utilise PLS-SEM as a result.

Research instrument design

The researcher used a survey-based methodology (Pinsonneault & Kraemer, 1993) for gathering primary data using an online survey platform, i.e., Google form, in response to the research hypotheses stated previously in this study. Using an online-generated link, the questionnaire is sent to selected responders via emails and social media platforms like WhatsApp, LinkedIn, Twitter, etc. The study’s primary area of interest is SMEs in Nigeria. The researcher employed a new measuring scale that was created based on the expertise of specialists and currently available methodological literature (Churchill, 1979; Muller et al., 2018b). Only extremely significant and pertinent constructs and associated measurement items were taken into account in this investigation. Before being approved to measure the final constructs, these measurement items are carefully revised, altered, and tested for validity, reliability, and consistency by qualified academic and industry peers. Finally, an online version of this comprehensive questionnaire is created and distributed to all potential participants through email. Based on the data gathered, the constructs are evaluated to examine interrelations, importance, and hierarchy as a whole.

A five-point Likert scale, with 1 denoting “strongly disagree” and 5 denoting “strongly agree,” is used to collect responses to the measurable indicators for the constructs. In its final form, the Likert scale is a five-point scale that is used to allow an individual to express how much they agree or disagree with a particular statement. The 5-point Likert scale is simple to understand and use for survey administrators and respondents alike. It takes less time and effort to complete than higher-point scales (McLeod, 2023). All constructs are evaluated using a reflecting scale (Diamantopoulos & Winklhofer, 2001). 49 indicators are evaluated using the survey instrument that was created, as indicated in Appendix 2. three first-order constructs are used to measure the second-order concept organisational design contingencies (organizational size – seven indicators, technology – seven indicators, strategy – seven indicators). Strategic entrepreneurship’s other second-order components are measured using three first-order constructs (exploration – six indicators, innovation – nine indicators, exploitation – six indicators). Finally, seven variables were used to gauge organisational sustainability.

Table 1. Respondent’s demographic profile

Particulars Corporate role	No. of respondents	Percentage
Proprietor	10	0.04
COO/CEO/CFO/MD	38	0.14
General Manager/Director	29	0.11
Head of Business unit/Head of Department	45	0.16

Senior Manager	17	0.06
Manager	29	0.11
Senior Auditor	65	0.24
Junior Auditor	20	0.07
Data Analyst	15	0.05
Consultant	5	0.02
Educational Qualification		
PhD	20	0.07
Masters	155	0.57
Graduate	90	0.33
Diploma	8	0.03
Work experience in years		
More than 30	9	0.03
21 to 30	100	0.37
11 to 20	135	0.49
Less than 10	29	0.11

Source: Authors' compilation, 2022

Before conducting the survey, the developed questionnaire is pilot tested to validate and confirm the clarity, reliability, and content validity. The inclusion of selected measures is validated statistically as well as by experts (Dillman, 1978). (Dillman, 1978). The active collaboration of fifteen academics and industrial specialists with knowledge in SMEs, operations management, information technology and practitioners managing SMEs assured designed questionnaire's applicability for the present study.

Sampling and data collection

Purposive sampling methods that are non-random are used to gather the data. Nigerian SMEs serve as the sample unit. Depending on the research aims and data availability, a wide range of sample sizes from 89 to 4000 have been taken into consideration in previous studies (Oliveira & Martins, 2010). Similar studies that have employed sample sizes of 65 (Zhu et al., 2010) and 133 (but focused on different constructs) (Wang et al., 2010). The sample size calculator was also utilised by researchers to confirm the sample sizes from earlier studies and to provide an approximation of the sample size in the current situation (National Statistical Service, 2020). Since it was impossible to estimate the population size, the study took into account non-random and purposeful sampling procedures.

To sum up, only respondents with first-hand knowledge of and experience with organisational design contingencies were taken into account in the study. They also had to be members of organisations that had already implemented or pilot tested organisational design contingencies in industrial applications. Using email and social media, industry contacts, partnerships, and professional networks are used to find possible replies. A methodically created questionnaire confirms the respondents' participation in organisational design contingencies once more. According to Hair et al. (2014), Sideridis et al. (2014), and Kock &

Hadaya (2018), a sample size of 150–200 or ten times the number of arrows pointing towards the latent construct is appropriate.

The sample size of 273 is deemed adequate for confirmatory factor analysis and SEM analysis. The respondent’s demographic profile is described in depth in Table 1. Due to their advanced research skills, capabilities, and comprehension of the cutting-edge technologies used to define, measure, and quickly solve business problems in order to keep up with the rapid internal and external developments, it has been observed that employees with a PhD (research degree) encourage applied research and development activities in the company (Shmatko et al., 2020). The respondent with a doctorate contributed 7% of the total sample size. The inclusion of doctoral degrees serves a purpose and increases the validity of this study by utilising the knowledge, experience, and competencies of these holders of the highest research degrees in addressing upcoming difficulties connected to design contingencies and strategic entrepreneurship.

To test the validity of the instrument, the survey questionnaire is distributed to 50 SMEs participants as part of the pilot project. Measures that have a Cronbach alpha () value of less than 0.7, which indicates uncertainty, are reorganised and changed. In Appendix 2, the final structures and test items for the study are described in more depth.

Common method and non-response bias

Researchers have implemented the necessary and appropriate steps at the level of questionnaire design to avoid bias in light of this concern. The main causes of respondent bias are uncertainties and a lack of knowledge on the intended use of the data. The respondents are effectively informed of the scope, objective, and goals of the research by maintaining complete anonymity, enabling the collection of extraordinarily objective and accurate data. Moreover, data is acquired wherever possible from a large number of responders from the same business. Moreover, the most well-known Harman single factor test is used to examine the CMB issue. This test was run using the SPSS v23 software package. The results of the test revealed that the first component was in charge of 33.38% of the total variation. There is no CMB problem with the collected data because the result is well below the maximum criteria limit of 50% (Podsakoff et al., 2003). Testing for non-response bias is a great way to make sure that the findings of the study can be applied broadly. In order to address non-response bias, this study uses the paired samples t-test. The initial 30% of responses are compared to the last 30% of responses in order to calculate the difference between the two groups for the non-response bias (Armstrong & Overton, 1977). The findings, which were supported by a 95% confidence level, show that there is no non-response bias because no statistically significant difference is discovered.

Table 2. Reliability and validity tests results

Constructs	Indicators	Loadings	Cronbach’s Alpha	CR	AVE
Organizational Size (ORS)	ORS1	0.745	0.721	0.764	0.523
	ORS2	0.820			
	ORS3	0.584			
Technology (TGY)	TGY1	0.836	0.913	0.939	0.794
	TGY2	0.929			
	TGY3	0.910			
	TGY4	0.885			

Strategy (STY)	STY1	0.791	0.880	0.918	0.737
	STY2	0.908			
	STY3	0.907			
	STY4	0.823			
Exploration (ETN)	ETN1	0.799	0.884	0.917	0.736
	ETN2	0.876			
	ETN3	0.917			
	ETN4	0.833			
Innovation (INN)	INN1	0.875	0.877	0.923	0.800
	INN2	0.922			
	INN3	0.886			
Exploitation (EXN)	EXN1	0.803	0.706	0.818	0.531
	EXN2	0.724			
	EXN3	0.713			
	EXN4	0.668			
Organizationa l Sustainability (OGS)	OGS1	0.772	0.923	0.938	0.684
	OGS2	0.886			
	OGS3	0.852			
	OGS4	0.870			
	OGS5	0.803			
	OGS6	0.811			
	OGS7	0.788			

RESULTS AND DISCUSSION

Model evaluation

The data collected from the respondents were first analysed using confirmatory factor analysis. Things that load in less than 0.5 seconds are not included. Consequently, Appendix 2 provides the study's final components and related assessed items. To assess the model's validity, PLSSEM is employed in a two-stage analysis, with the measurement model arriving first and the structural model coming second (Hair et al., 2012). The dependability and validity of the reflective measurement model are confirmed, and the parameter significance level and stability are then assessed and confirmed using cross-validation of the model. All presumptive measures accurately reflect the pertinent constructs, according to this review and validation of the measuring model (Choudhury & Harrigan, 2014). The fact that each of these measurements is based on a different set of criteria should be noted by researchers. Any identifying flaws may lead to systematic

mistakes. PLS-SEM has received a great deal of support for modelling indications (Hair et al., 2014).

Measurement model analysis

This model, also known as the outer model, deals with interactions between constructs and measurable objects, which make up the majority of the model’s outer layer. Organizational size and exploitation, which both have loadings below 0.70 but above 0.50 (Kline, 2015), do not significantly affect the constructs’ reliability and validity, so researchers decided not to remove them. Table 2 demonstrates that technology, strategy, innovation, and organisational sustainability all have loadings above the cutoff value of 0.7. The average loading for each construct is discovered to be higher than 0.70 (Hair et al., 2014).

Reliability is the degree to which the measured construct indicators are internally consistent. The reliability of the outer model is validated by looking at the Cronbach Alpha and composite reliability of all the constructs; all of the values obtained are higher than the reference value of 0.70. Since the average variance extracted value (AVE), a measure of convergent validity, is likewise higher than the standard value of 0.50 for all the constructs, all of the constructs are said to exhibit convergent validity and reliability by Ringle et al., (2020).

The heterotrait monotrait ratio (HTMT), which also shows the distinctiveness of the constructs, illustrates the discriminant validity of the components. The HTMT values being less than 0.9 show that there is no duplication of the elements that go into the structures (Henseler et al., 2009). All HTMT values below 0.9 are shown in Table 3, demonstrating the different nature of each construct taken into account in this study.

The measuring model is additionally checked for multi-collinearity in order to determine the correlation between any two predicting constructs. The multicollinearity is shown by a variance inflation factor (VIF). According to the study, multicollinearity among the predictor constructs is not an issue in this study because all of the constructs have VIF values that are between (1,138 to 4,007) below the cutoff value of 5. (Hair et al., 2014; Kock & Verville, 2012).

Table 3. Discriminant validity (Heterotrait-Monotrait ratios).

	ORS	TGY	STY	ETN	INN	EXN	OGS
ORS							
TGY	0.348						
STY	0.253	0.288					
ETN	0.247	0.778	0.494				
INN	0.195	0.242	0.528	0.403			
EXN	0.256	0.365	0.564	0.482	0.526		
OGS	0.139	0.285	0.671	0.374	0.366	0.382	

Note: Organizational Size (ORS); Technology (TGY); Strategy (STY); Exploration (ETN); Innovation (INN); Exploitation (EXN); Organizational Sustainability (OGS).

Structural model analysis

The structural model, also known as an inner model, depicts how key constructs relate to one another. The SmartPLS 4.0 approach is used in the bootstrapping process to establish the statistical significance of the PLS-SEM results, including R2 (coefficient of determination), Q2 (predictive relevance ability), and SRMR (goodness of fit). The R2, which varies from 0 to 1, determines the construct’s interpretive ability; a high value indicates a better potential for interpretation. According to Hair et al., R2 values are 0.75 large, 0.50 moderate, and 0.25 weak (2011). With R2 values of 0.545 for organisational design contingencies, 0.457 for strategic entrepreneurship, and 0.713 for organisational sustainability, this study found that organisational sustainability effectively captured 71.3% of the variation resulting from the exogenous constructs organisational design contingencies and strategic entrepreneurship. Both have the potential to significantly change organisational sustainability by 71.3%, illustrating the connection between organisational sustainability, organisational design contingencies, and strategic entrepreneurship (Chin, 1998; Hair et al., 2014; Henseler et al., 2009). As a result, the model’s reasonable level of interpretive capacity is proven.

Table 4. Construct cross validated redundancy

	SSO	SSE	Q ²
Organizational Design Contingencies	1092.000	693.582	0.365
Strategic Entrepreneurship	819.000	571.458	0.302
Organizational Sustainability	1911.000	1045.607	0.453

One more Q2 criterion is used to confirm the construct’s predictive importance and evaluate the quality of the inner model. To get the Q2 value, the Stone-Geissers test utilising SmartPLS 4.0 is performed with blindfolds (Akter et al., 2017; Henseler et al., 2016). The cross-validated redundancy for the latent components reflecting the Q2 value in this study is shown in Table 4. The fact that the Q2 values discovered are greater than 0 supports the predictive significance of the endogenous construct. Henseler et al. (2009) state that the Q2 values of 0.35, big, 0.15, medium, and small are used to confirm the predictive power. All of the constructions with a Q2 value greater than 0 are listed in Table 4. The results in Table [4](#) show that organisational sustainability, big and strategic entrepreneurship, organisational contingencies, and medium predictive power all contribute to the structural model’s high cumulative predictive power.

The results for the saturated model (0.065) and estimated model (0.071) for this model are below the threshold of 0.08, which indicates a decent approximation of goodness of fit according to the standardised root mean square value (SRMR) for the model (Sarstedt et al., 2017). The measurement indicators are consistent, there is no correlation between the errors, and the overall model has an excellent model fit. The outcome of the bootstrapping procedure is the structural model, which is displayed in Table 5. The structural model therefore satisfies all criteria, proving its validity. The viability of the proposed hypothesis was further assessed in the section that follows.

and exploration ($\beta = 0.364$, $p = 0.000$), technology and innovation ($\beta = 0.151$, $p = 0.005$), technology and exploitation ($\beta = 0.308$, $p = 0.000$), strategy and exploration ($\beta = 0.209$, $p = 0.000$), strategy and innovation ($\beta = 0.143$, $p = 0.011$), strategy and exploitation ($\beta = 0.143$, $p = 0.000$).

Table 5. Results obtained from structural model (direct effect) SN Hypothesis Hyp Structural Stand T P values Decision othe path ardiz statist

	sis code		ed path coefficient	ics		
1 Organizational size is positively related to exploration.	H1	ORS > ETN	0.122	1.970	0.039*	Supported
2 Organizational size is positively related to innovation.	H2	ORS > INN	0.147	3.618	0.000***	Supported
3 Organizational size is positively related to exploitation.	H3	ORS > EXN	0.087	2.214	0.027*	Supported
4 Technology is positively related to exploration.	H4	TGY > ETN	0.364	7.946	0.000***	Supported
5 Technology is positively related to innovation.	H5	TGY > INN	0.151	2.841	0.005**	Supported
6 Technology is positively related to exploitation.	H6	TGY > EXN	0.308	4.685	0.000***	Supported
7 Strategy have a positive relationship with exploration.	H7	STY > ETN	0.209	3.540	0.000***	Supported
8 Strategy have a positive relationship with innovation.	H8	STY > INN	0.143	2.550	0.011*	Supported
9 Strategy have a positive relationship with exploitation.	H9	STY > EXN	0.143	4.532	0.000***	Supported

Note:

- Significant at * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.
- Note: Organizational Size (ORS); Technology (TGY); Strategy (STY); Exploration (ETN); Innovation (INN); Exploitation (EXN); Organizational Sustainability (OGS).

Mediation analysis

To quantify the organisational sustainability mediation effect on the function of organisational design contingencies reduction in explaining the variance of strategic entrepreneurship in the model, bootstrapping mediation analysis is used (Hayes, 2017). Bootstrapping is advantageous for mediation when assessing small sample numbers since it does not presuppose the form of the sampling distribution. When organisational sustainability serves as a mediator in the interaction between organisational design contingencies and strategic entrepreneurship, the findings of the mediation analysis are summarised in Table 6. The results show a direct relationship between organisational design contingencies and organisational sustainability ($r = 0.749$, $p = 0.000$, statistically significant at p -value less than 0.001) and an indirect relationship ($r = 0.150$, $p = 0.005$, statistically significant at p -value less than 0.001) when organisational sustainability acts as a mediator between organisational design contingencies and strategic entrepreneurship.

Table 6. Mediation analysis results.

	Path coefficient	T-value	P value	Decision
Direct relationship				
Organizational Sustainability > ODC Indirect relationship	0.749	24.623	0.000***	Supported
Organizational Sustainability > ODC > SEP	0.150	2.711	0.005**	Supported

Note: Significant at * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.

This leads to the conclusion that organisational sustainability partially mediates the relationship between organisational design contingencies and strategic entrepreneurship because both direct and indirect impacts are important. To corroborate the kind of partial mediation, the product of the direct and indirect effects is also calculated, which results in path coefficients ($0.749 * 0.150 = 0.112$). The obtained score of 0.112 indicates that organisational sustainability provides complementary mediation to the relationship between organisational design contingencies and strategic entrepreneurship (Zhao et al., 2010); therefore, hypothesis H10 is accepted. As both effects are positive, the obtained score of 0.112 is positively significant.

This study provides empirical support for the organisational sustainability's mediating role in the organisational design contingencies reduction model, which is necessary to accomplish strategic entrepreneurship. The findings demonstrate that strategic entrepreneurship is enhanced by including organisational design contingencies and upholding organisational sustainability principles.

DISCUSSIONS

The study's objective is to investigate the relationships among the three key constructs of organisational design contingencies, strategic entrepreneurship, and organisational sustainability. The major objective is to give decision-makers guidance by laying out a plan for achieving strategic entrepreneurship through the development of organisational design contingencies. In order to attain organisational performance both directly and indirectly through organisational sustainability, the study has primarily focused on the contribution that organisational design contingencies make to strategic entrepreneurship.

The study uses theoretical frameworks based on dynamic capacity theory to analyse the role of

organisational design contingencies, strategic entrepreneurship, and organisational sustainability.

The tested structural model's findings indicate that organisational sustainability plays a large mediating role in the relationship between organisational design contingencies and strategic entrepreneurship, as well as a significant positive contributor. The robustness of the constructed model is demonstrated by its outstanding goodness of fit and high predictive power. At a 5 % threshold of significance, ten distinct hypotheses were formulated and investigated. The 10 hypotheses were supported by the findings.

This study makes theoretical and methodological contributions. It confirms the idea that organisational design contingencies frequently result in strategic entrepreneurship. According to the study's conclusions, technology has the best chance of foreseeing organisational design contingencies. The arguments put out by strategy and entrepreneurship experts that management and organisational support should be the top priority in order to foster strategic entrepreneurship are supported empirically by this conclusion. A significant predictor was also shown to be organisational sustainability, which frequently acted as a helpfully substantial mediator to organisational design contingencies and strategic entrepreneurship. This judgement supports past research's conclusions (Meraku, 2017; Kang and Zhang, 2020; Metcalf and Benn, 2013; Whelan and Fink, 2016; Ong et al., 2015; Mroz and Ocetkiewicz, 2021; Wirawan et al., 2020; Coetzer et al., 2017). The dynamic capability hypothesis (Teece et al., 1997; Zollo & Winter, 2002) of these contingencies in predicting strategic entrepreneurship as well as growth and innovation is supported by research on organisational design contingencies (Hitt et al., 201; Zhou & Wit, 2009; Foss & Lyngsie, 2011).

Contributions to methodology should also be appreciated. One sample is offered as a choice. In this study, a representative and sizeable sample (273 firms) that was based on aggregate sampling of the entire population of established Nigerian firms with 30 or more employees rather than random sampling was utilised. contrasted with the typical use of random or deliberate random samples in entrepreneurship survey research. Another addition made when models are empirically tested is the data analysis's rigour, which is frequently lacking in studies of organisational design contingencies. Instead of using multiple regression analysis in this work, linear route modelling using structural equations—a better analysis technique for the estimate of concurrent relationships—was used.

The implications of this work extend to theory, practise, and research. An important implication for theory and research is the advantages of an integrative approach. This study demonstrated how an integrative approach can clarify the relative contributions of organisational design variables both separately and in combination with environmental factors and organisational factors, as well as their respective importance as predictors for strategic entrepreneurship. Comparatively to partial approaches, which concentrate on a smaller number of factors, the integrative approach takes into account a larger number of relevant variables. Hence, integral models have the potential to significantly reduce specification error and give researchers the chance to explore relationships in both relative and interaction terms, which may be difficult to do using partial models. By defining the relative worth of model components, researchers will be able to get more exact conclusions for practitioners and increase the applicability of their study to more people.

There are several managerial conclusions that may be made from this study. Above all else, practitioners need to be aware of the important role that organisational design contingencies can play in promoting strategic entrepreneurship as well as expansion and innovation. More than other organisations, the majority of SMEs exhibit entrepreneurial behaviours and orientations, such as the search for new businesses, the creation of new units or businesses, innovation in terms of products, services, and processes, strategic self-renewal, risk-taking, and proactiveness. Hence, businesses are more likely to perform better when they have more organisational design contingencies than when they have lower levels of strategic entrepreneurship. This study found that important performance elements such as (a) investigation, (b) invention, and (c) exploitation are frequently impacted by strategic entrepreneurship.

Organizational design contingencies are significantly influenced by management and organisational members. To have an effect on strategic entrepreneurship, one should concentrate on improving intra- and inter-organizational factors (internal organisational support and formal controls, and strategic alliances). Of the organisational elements that have been examined, technology and strategy are the most important since they have a significant direct impact on strategic entrepreneurship and a significant indirect impact on exploration, innovation, and exploitation.

To maximise organisational exploration, invention, and exploitation, a strategic entrepreneurship-related approach would need to be focused on enhancing entrepreneurial activities and orientations, particularly via establishing the appropriate organisational support. This should be supplemented with a few strategic activities aimed at specific performance factors. While growth-oriented businesses should align their level of strategic entrepreneurship with the rate of demand for new products in their individual markets, younger/smaller organisations may consider aligning their level of strategic entrepreneurship with the rate of industry growth. The enterprises will be able to be more inventive as a result. Organizations should look for growth techniques to enable faster expansion. Additionally, they should ensure that their organisational support levels actually translate into those levels of strategic entrepreneurship by matching their level of strategic entrepreneurship to the rate of industry growth. In order to increase strategic entrepreneurship, SMEs could consider adjusting the amount of design contingency to the level of demand for new products in their particular industry.

CONCLUSION

The importance of organisational design contingencies for strategic entrepreneurship is acknowledged at the organisational level of analysis, but this connection has received less attention in research. However, little is known about the precise consequences of organisational design and how they affect strategic entrepreneurship. This study contributes to a better understanding of how strategic entrepreneurship fosters innovation by developing and testing a structural model that explains the nature of the influences of organisational design contingencies and its environmental and organisational antecedents on strategic entrepreneurship.

The findings of this study demonstrate how strategic entrepreneurship is impacted by organisational design variables, particularly in terms of its significant direct effects. This strategic entrepreneurship is also impacted by a few organisational design contingencies.

Limitations of the Study

There was less current empirical research in this field compared to conceptual literature. The number of small and medium-sized businesses in Nigeria is greater than the number that was the subject of this study, to which the findings were extrapolated.

Competing Interest

The authors declare that there is absolutely no competing interest.

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APPENDIX2

Please tick (?) the most suitable option that described the situation in your firm.

SA (Strongly Agreed), A (Agreed), U (Undecided), D (Disagree), SD (Strongly Disagreed)

S/NO	ITEMS					
	ORGANIZATIONAL DESIGN CONTINGENCIES (ODC)					
	ORGANIZATIONAL SIZE	SA	A	U	D	SD
ORS1	My organizational concentrates on a broad and small market domain.					
ORS2	My organization is always searching for market opportunities.					
ORS3	My organization provides an effective after-sale service and supporting product/service availability.					
ORS4	My organization maintains market strength in all areas in which the company operates.					
ORS5	My organization provides prompt deliveries to clients.					
ORS6	My organization customizes products/services to meet customers’ needs.					
ORS7	My organization emphasizes the efficiency of the existing operation.					
	TECHNOLOGY	SA	A	U	D	SD
TGY1	The market drives our search for new technological solutions.					
TGY2	Technology plays an important role in our approach to tackling an issue, when appropriate.					
TGY3	There are policies, processes and tools to enable employees to explore new technologies.					
TGY4	My organization gathers information from global sources when searching for new technological solutions.					
TGY5	My organization looks for synergy of product/service offerings with existing technologies, resources and competencies.					
TGY6	My organization responds well to any technology information that has a strategic implication.					
TGY7	My organization makes an attempt to co-develop future development plans about its technology with other players in business network.					
	STRATEGY	SD	A	U	D	SD
STY1	Our strategy is made explicit in the form of precise plans.					

STY2	When we formulate a strategy, it is planned in detail.					
STY3	We have precise procedures for achieving strategic objectives.					
STY4	We have strategic decisions based on a systematic analysis of our business environment.					
STY5	Our organization's history directs our search for solutions to strategic issues.					
STY6	The strategies we follow develop from the way we do things around here.					
STY7	The attitudes, behaviours, rituals and stories of this organization reflect the direction we wish to take it in.					
	STRATEGIC ENTREPRENEURSHIP (SEP)					
	EXPLORATION	SA	A	U	D	SD
ETN1	Our firm looks for novel technological ideas by thinking outside the box.					
ETN2	Our firm bases its success on its ability to explore new technologies.					
ETN3	Our firm creates products and services that are innovative to the firm.					
ETN4	Our firm looks for creative ways to satisfy its customers' needs.					
ETN5	Our firm aggressively ventures into new markets.					
ETN6	Our firm actively targets new customer groups.					
	INNOVATION	SA	A	U	D	SD
INN1	Knowing how a product works offers almost as much pleasure as knowing that the product works very well.					
INN2	When I try and to do projects on my own, without exact directions, they usually work out really well.					
INN3	Even if I don't have the right tool for the job, I can usually improvise.					
INN4	After purchase of a product/service, I try to keep track of new accessories that come out in the market.					
INN5	I enjoy expanding and adding on to projects in which that I'm involved on a continuing basis.					
INN6	After the useful life of a product/service, I can often think of ways to use its parts for other purpose.					
INN7	I enjoy thinking of new ways to use old things around the organization.					
INN8	I find myself saving packaging on products to use in other ways.					
INN9	I am very creative when using products/services.					
	EXPLOITATION					
EXN1	Our firm commits to improve quality and lower cost.					
EXN2	Our firm continuously improves the reliability of its products and services.					
EXN3	Our firm increases the level of automation in its operations.					
EXN4	Our firm constantly surveys existing customers' satisfaction.					

EXN5	Our firm fine-tunes what it offers to keep its current customers satisfied.					
EXN6	Our firm penetrates more deeply into its existing customer base.					
	MODERATING VARIABLE					
	ORGANIZATIONAL SUSTAINABILITY					
OGS1	My organization provides optimal job security to its employees.					
OGS2	My organization supports training and development of staff.					
OGS3	My organization has adequate ventilation system that helps air quality assurance.					
OGS4	My organization supports opinions and views for improvement from all levels of employees.					
OGS5	My organization has optimal plans for constant revenue generation over foreseeable number of years.					
OGS6	My organization has clear alignment with its policies and vision.					
OGS7	My organization is investing in right policies for future growth.					

THE FINAL CONSTRUCTS AND ASSESSMENT ITEMS EXAMINED FOR THE STUDY Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = 1 2 3 4 5

Strongly Agree

ORGANIZATIONAL SIZE

My organizational concentrates on a broad and small market domain.

My organization is always searching for market opportunities.

My organization provides an effective after-sale service and supporting product/service availability.

TECHNOLOGY

The market drives our search for new technological solutions.

Technology plays an important role in our approach to tackling an issue, when appropriate.

There are policies, processes and tools to enable employees to explore new technologies.

My organization gathers information from global sources when searching for new technological solutions.

STRATEGY

Our strategy is made explicit in the form of precise plans.

When we formulate a strategy, it is planned in detail.

We have precise procedures for achieving strategic objectives.

We have strategic decisions based on a systematic analysis of our business environment.

EXPLORATION

Our firm looks for novel technological ideas by thinking outside the box.

Our firm bases its success on its ability to explore new technologies.

Our firm creates products and services that are innovative to the firm.

Our firm looks for creative ways to satisfy its customers' needs.

INNOVATION

Knowing how a product works offers almost as much pleasure as knowing that the product works very well.

When I try and to do projects on my own, without exact directions, they usually work out really well.

Even if I don't have the right tool for the job, I can usually improvise.

EXPLOITATION

Our firm commits to improve quality and lower cost.

Our firm continuously improves the reliability of its products and services.

Our firm increases the level of automation in its operations.

Our firm constantly surveys existing customers' satisfaction.

ORGANIZATIONAL SUSTAINABILITY

My organization provides optimal job security to its employees.

My organization supports training and development of staff.

My organization has adequate ventilation system that helps air quality assurance. My organization supports opinions and views for improvement from all levels of employees.

My organization has optimal plans for constant revenue generation over foreseeable number of years.

My organization has clear alignment with its policies and vision.

My organization is investing in right policies for future growth.

FOOTNOTE

[\[1\]](#) .1.4 Hypothesis testing

Direct effect

The hypothesis is tested for 95% confidence level (i.e. $T \geq 1.96$ and $p \leq 0.05$). Table 5 shows path coefficients (β), T statistics, p values indicating organizational size and exploration ($\beta = 0.122$, $p = 0.039$), organizational size and innovation ($\beta = 0.147$, $p = 0.000$), organizational size and exploitation ($\beta = 0.087$, $p = 0.027$), technology Based on the direct relationship among the constructs, as mentioned above, hypothesis H1, H2, H3, H4, H5, H6, H7, H8, H9, are accepted.