

# Digital Entrepreneurship And Sustainable Business Models: Evidence Amongst Smes In Lagos State, Nigeria

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## Abstract

Digital entrepreneurship is critical for developing the ever-changing business environment and economic growth. Existing literature has established how digital entrepreneurship could drive firm performance. However, how digital entrepreneurship could drive a sustainable business model in an emerging economy like Nigeria is an ongoing discussion in the existing literature. This study, therefore, investigates the effect of digital entrepreneurship and sustainable business models in small and medium enterprises in Lagos State, Nigeria. The survey research design was adopted in the study. Three hundred and eighty-seven small and medium enterprise managers were surveyed. The results were analysed using regression analysis. The analysis reveals that in addressing the study's first objective, the findings reveal that most of the digital entrepreneurs in Lagos State are ground-up digital entrepreneurs. The empirical result indicates that digital technologies provide unique combinations of sustainable business model components such as integrated value proposition, comprehensive value creation, and multifaceted value capture. This article describes the advantages and disadvantages of digital technologies and provides useful information for designing sustainable business models. The study concludes that there is no one-size-fits-all solution to sustainability via digital technology. A comprehensive but impartial approach to integrating digital technologies to boost the effect of sustainable business models is recommended in this context.

**Keywords:** Digital Entrepreneurship, Value Proposition, Value Creation, Value Capture.

## 1. Introduction

Entrepreneurship has been hailed as a panacea to the world's most pressing social and environmental problems, such as global warming and widening income disparity (Baranauskas and Raisiene, 2022). To achieve sustainability, business models that are commercially feasible and creative and positively influence the environment and society are crucial players (He et al., 2022; Taburchak et al., 2022). Sustainable entrepreneurs face significant challenges because their businesses must integrate environmentally, socially, and economically logical frameworks (Khachaturyan et al., 2021). Entrepreneurs may find themselves at odds with the commercial market's emphasis on financial gain, leading to conflict. If these conflicts

are not addressed in creating the business model (Bogachov et al., 2021), they may lead to economic instability and impede ecological and sustainable value generation. As a result, it is relevant and important, but not yet sufficiently investigated, to investigate how entrepreneurs create and align multiple sources of value within their business models (George et al., 2021). Previous findings have supported the idea that digital technology might help address the issues faced by sustainable entrepreneurs (Chen, 2021; Kitsios et al., 2021; Chia and Liang, 2016). This assumption is based on the transformational power of digitalisation, which modifies the structure of entrepreneurship and improves responses to sustainability challenges (Kitsios et al., 2021).

Digital technology, in particular, facilitates the development of new business models and the creation of new knowledge and skills. It has been shown that digital technology may aid in developing features and benefits that include environmental and social benefits (He et al., 2022; Vrontis et al., 2022). In addition, digital technology enables community growth, co-creation, and wider stakeholder engagement, all of which benefit from unique constellations for value generation components (Bogachov et al., 2020). The complex and multifaceted value may be captured via digital technologies that allow potential effect synergies, sustainability of socio-environmental values, and value spillovers (Rahaman et al., 2020). Findings also illuminate possible logic-related issues inside and between different parts of the business model (Younis et al., 2020). However, the extent to which digital entrepreneurs in small and medium enterprises (SMEs) drive sustainability is a major concern in the existing literature. Vrontis et al. (2020) assert that there is a need to establish the sustainability drive of SMEs through technology since SMEs are the fulcrum on which economies are built

Consequently, some crossovers have yet to be investigated between entrepreneurs' initiatives to enhance sustainable growth and digitisation (Manjon et al., 2022). For this purpose, this study focuses on understanding how sustainable entrepreneurs use digital technology in their value propositions, value generation, and value capture. Thus, this study approaches sustainable business models from an organisational logic standpoint (He et al., 2022). Institutional logic refers to the institutionalised beliefs and values that drive, empower, and restrict the conduct of an individual or group of individuals or organisations (Fairouz et al., 2020; Ye et al., 2020, Karimi and Walter, 2021). From this perspective, sustainable business strategies are composed of many components, such as the value proposition, value creation, and value capture, which exhibit environmental, social, and commercial institutional logic, according to this theory (He et al., 2022). It is presumed in this study, based on the proposition of Manjon et al. (2022), that a new digital logic is evolving that has significant ties with sustainability theories.

This study outlines how digital technology may be used to provide sustainable value and adds to studies on sustainable entrepreneurship and business models. In the apriori, it is opined that the unique configurations of sustainable business model components made possible by digital technologies would contribute to the current body of knowledge. This study on sustainability and digital technology provides a new understanding of how innovators can contribute to long-term growth. As a result, this study contributes to the theoretical approaches of the institutional logic viewpoint on sustainable business models and the junction of digital and sustainable features in this line of study by arguing for an emergent digital logic. In line with the identified gap in the literature, this study seeks to achieve the following specific objectives;

- i. Investigate the nature of SMEs' sustainability drive in Lagos State, Nigeria
- ii. Examine how digital entrepreneurship influences sustainable value propositions among SMEs in Lagos State, Nigeria.
- iii. Evaluate the effect of digital entrepreneurship on sustainable value creation among SMEs in Lagos State, Nigeria.
- iv. Assess the influence of digital entrepreneurship on sustainable value capture among SMEs in Lagos State, Nigeria

## 2. Literature Review

### 2.1 Digital Entrepreneurship

Manjon et al. (2022) see digital entrepreneurship as the core of modern technologies, innovation, and entrepreneurship in the digital age. Bogachov et al.'s (2021) definition focus on creating and expanding digital businesses that create income through electronic communications via internet services. Thus, it is a domain that has been around for a long time and was sparked by the internet's arrival. In every recognised era, digital technology advancements and practical events impact the number of publications that occur within that period (Zaheer et al., 2019). However, the research is now being reevaluated. Digital entrepreneurship is becoming more popular among academics (Ngugi and Goosen, 2021; Bican and Brem, 2020) who are examining how digital technologies affect entrepreneurship, and they've realised that "digital

technologies are not only a framework for studying entrepreneurship but also function as an active element (Bican and Brem., 2020). According to Manjon et al. (2022), more publications place digital technology at the core of their frameworks for digital entrepreneurship and even develop whole ecosystems for digital entrepreneurship. The discipline of digital entrepreneurship is already being viewed as a whole distinct academic area. Scholars notice the increasing popularity of communications technology in this integrated approach and seek to incorporate all aspects of it and study entrepreneurship in a digital environment in this system (Chen, 2021; Kitsios et al., 2021; Lamba and Jain, 2021)

Generally speaking, digitalisation refers to the acceptance or greater usage of digital technology by governments, corporations, and organisations. Examples of such innovations include cognitive computing and cloud-based applications, edge technology and 3D printing (Prendes-Espinosa et al., 2021). Digital capabilities are created by the distinctive characteristics of digital technology and relate to new options for action in connection to a specific user or usage environment that may be used by actors such as entrepreneurs (Lamba and Jain, 2021). The application of digital innovation presents itself in new market mechanisms, bringing about fresh values, practises, and processes that influence the existing rules of the game and put current logic configurations to the test (Muafi et al., 2022). Novel initiatives include enterprise resource systems and other universally recognised and customisable digital components. Benchmark digital facilities that coordinate players' interactions, such as market platforms and blockchain technology, are examples of such arrangements (Baranauskas and Raisiene, 2022).

These highly influential digital breakthroughs impact business models (Lamba and Jain, 2021). Scholars contend that the digital capabilities that surround digital platforms and components extend the alternatives and create new paths for the creation, delivery, and capture of value, among other things (George et al., 2021). The transition of economic activity results in the development of fundamentally innovative business models that need the development of certain organisational competencies to be effectively implemented.

Digital technologies may have their competencies but still develop rationale that exists alongside and affects the interpretations and performance of other paradigms, as shown by the introduction of new behaviours, values, and frameworks (Bogachov et al., 2022). According to He et al. (2022), digitisation unfolds around the principles of inheritability, variability, availability, connections, interactions, and accessibility. Using these concepts, this study proposes that a digital logic comprised of these notions, and as such, enabling current innovations, may be introduced to the repertory of alternative rationales that can be shaped at the business model level. A critical aspect of the digital entrepreneurship future research will be how this newly developed logic interacts with current logic, specifically the adversarial and constructive interactions between digital and non-digital logic.

## **2.2 Sustainable Business Model and Measurements**

Entrepreneurs who build a company to serve both their self-interests and the collaborative interests of society by tackling unaddressed social and environmental needs are defined as sustainable entrepreneurs by Karimi and Walter (2022). This definition captures the field's coalescing emphasis on the enterprise and its entrepreneurs and its purpose. The emphasis on sustainable business models, also known as business models for sustainability, among academics and practitioners has increased dramatically in recent years. It is a streamlined depiction of the value creation, value generation and delivery, value propositions, and value chain aspects inside a given organisational unit (Baranauskas and Raisiene, 2022; Bogachov et al., 2022; He et al., 2022; Karimi and Walter, 2021). Sustainably designed business models combine proactive multistakeholder administration with the generation of financial and non-values for a diverse group of stakeholders and have a long-term outlook. (Rodrigues and Franco, 2021) According to Manjon et al. (2021), although the idea of business model innovation is rather unclear, it may be defined as a shift in the firm's service offering (or value proposition shift). But it extends beyond the firm's product and service offerings and

emphasises how business is conducted in the organisation (Ngugi and Goosen, 2021).

Furthermore, sustainability indicates that business models should be modified to emphasise capturing value for all parties involved, rather than just the corporation, resulting in creating a value network (Passaro et al., 2020). As a result, sustainable business model innovation focuses on capturing the enterprise's environmental, social, and economic value while maintaining a low environmental footprint (Ye et al., 2020; Manjon et al., 2022). To deal with environmental consequences, businesses must incorporate sustainability into the very heart of their operations via the development of sustainable business models (Bica and Brem, 2020). By incorporating sustainable principles into the organisation's fundamental beliefs, sustainable development will become a normal way of working rather than a counter-measure to the firm's unsustainable behaviour and practices (Ye et al., 2020; Fairouz et al., 2020). However, given that several organisations have failed to develop their business models, it may be easier than it sounds.

In the face of complicated social and environmental concerns, the sustainable business model is a relatively new contribution to entrepreneurship. Since the definition of sustainability in the Brundtland Report (1987), several large corporations have established corporate social responsibility agencies to create socio-emotional outcomes from a subset of core competencies while keeping those activities separate from business functions (Andriushchenko et al., 2020). However, a smaller subset of corporations has sought to integrate prosocial options into their strategic imperatives, practises, and procedures (Ye et al., 2021). This is the approach used by Boneva et al. (2018), who trace the development of sustainable business practices as a progression in business alignment across time (Andriushchenko et al., 2021). Fairouz et al. (2020) describe how this progression begins with a shift in goal-setting from resource conservation and less harm and going green to a more groundbreaking devotion to rectifying market imperfections at the economic, social, and environmental levels. The most aggressive entrepreneurs then set out to create net positive environmental consequences for their businesses (Lamba and Jain, 2021). When fully

developed, sustainability may bring together increased emphasis on enhanced processes with a triple bottom line to optimise the firm's economic, social, and environmental value (Bogachov et al., 2022).

A transformational change in this context enables a systems perspective of the enterprise in its socio-ecological setting and a toolkit for long-term effect (Hrlina et al., 2021). In reshaping the determinants of capital structure and organisational cultures, entrepreneurial competencies are generating an increasing number of businesses whose quest for sustainability is a key economic proposition and a means of developing core competencies (Boneva, 2018). In this study, the measures of sustainability adopted are value proposition, value capture and value creation. According to Barmuta et al. (2020) and Ye et al. (2020), these measures reveal the position of the firm and how best to add value to the society while achieving its own specific goals.

### 2.3 Theoretical Review

Teece, Pisano, and Shuen (1997) proposed the term dynamic capacities. One of the most important distinctions between operations strategy and dynamic capabilities is their focus on an organisation's current functions rather than its ability to adapt and grow in response to changing needs and opportunities throughout time. According to this paradigm, short-term market positions may be transformed into long-term competitive advantages by using an organisation's core strengths. Using evolution models of organisation, Bogachov et al. (2022) relate the notion of dynamic capacities to the resource-based perspective of the company and the notion of routines. Boneva (2018) characterises it as a link between the economics-based field of strategic management and evolutionary approaches to organisations. For example, the resource-based perspective of business stresses a competitive edge in the market; on the other hand, a dynamic capabilities approach emphasises survival in quickly changing modern economic circumstances. Prendes-Espinosa et al. (2021) made a case to clarify the internal functions of dynamic capacity creation in certain sectors so top managers could apply the idea more effectively. With the help of

dynamic capabilities theory, top executives of successful organisations may devise strategies for dealing with dramatic, disruptive forces while sustaining basic capability requirements that assure their business's competitive sustainability (He et al., 2022). It's not always possible for enterprises that have long depended on a single production process to quickly adopt new technologies; instead, managers must adapt their procedures to make the most of the assets they have while also organising for future operational processes as they fall in value over time (Bamuta et al., 2020). Similarly, the paradigm emphasises core competencies instead of merely focusing on the organisation's external force in implementing changes. As a result, renewable opportunities for competitiveness may be created via dynamic capacities. Previously, dynamic capabilities have been seen as a means of addressing the problem of intransigence in capabilities, as well as a means of using and making use of information, and some have even claimed that dynamic capabilities may reflect how organisations adapt to change (Karimi and Walter, 2021).

Studies have shown that dynamic talents and organisational performance have a favourable correlation (Chen, 2021). In a study of five high-tech companies, Manjon et al. (2022) concluded that a company's capacity for innovative products enhances its performance and capabilities. In addition, Herlina et al. (2021) found that even tiny differences in a firm's dynamic capabilities may cause considerable variance in the firm's performance. The research also found that even slight differences in a firm's entrepreneurial orientation can influence a firm's entrepreneurial orientation behaviour. Lin et al. (2021) found that using dynamic capabilities may boost the business's growth and profitability and at the same time increase the company's financial position in the global market.

### 2.3 Empirical Evidence

According to most academics, technological improvements are the driving force behind sustainability and globalisation. Rather than being seen as a panacea, technology should be seen as a means to an end. In the research of Mulligan and

Kelly (2021), it was unexpected to discover that the extent of digitisation of value chain activities had no direct impact on the internalisation of born-digital enterprises. According to Fairouz et al. (2020), the born digitals' behaviour may be largely characterised by their business strategy, in light of Chen's (2021) findings. Manjon et al. (2021) ask for further study into this area since these companies are rapidly internationalising due to the degree of digitisation incorporated into their business model at conception (Ye et al., 2020). Business models are continuously developing, and so are their ideas; currently, we may speak about digital and environmental business models that match modern enterprises.

Digitalisation and innovation are becoming increasingly commonplace in the business strategy of new companies, allowing them to generate new value in the market (Bican and Brem, 2020). Using digital technology, a company may design a new digital business model that increases the firm's value creation and appropriation. Businesses' survival relies on their capacity to realign and modify their competencies, objectives, processes, and business models to rapidly changing needs and businesses (Vrontis et al., 2021)

Sustainability challenges are critical to a company's long-term profitability and existence as one of the factors driving change (Lamba and Jain, 2021). It takes new ways and often dramatic adjustments for the company to move from economic development to including environmental concerns in contemporary business, where innovation and technology are not enough. Sustainability objectives must be included in every aspect of a company's fundamental strategy to meet the 2030 Agenda for Sustainable Development (Bamuta et al., 2020). Ecological issues and environmental sustainability are attracting new businesses and investments in the green digital economy. Even though climate change is a global problem, there is a lack of study on innovative clean technology companies. A lack of digital technology-enabled business models has led to an urgent need to build a viable company strategy (He et al., 2022). According to George et al. (2021), digital technologies may aid in tackling climate change and creating sustainability. Moreover, they recommend that future studies concentrate on the

features of digital sustainability business models, a knowledge gap we seek to fill. Businesses that are just starting face challenges such as limited access to capital and the complexity of operating in a global market. The combination of newness, smallness, and foreignness may severely limit the growth of startups (Bovenia, 2018).

On the other hand, Worldwide entrepreneurship theory shows that these fragile businesses may expand quickly and effectively on the international stage. We may examine whether or not these new and rapidly expanding businesses can withstand and even take advantage of these situations by incorporating certain business model traits and capabilities. According to Mulligan and Kelly (2021), innovation is determined by the combination of using current capabilities and developing new ones. To compete in the emerging digital economy, organisations in hyper-competitive environments need to have strong dynamic skills and master agility to quickly invent, execute, and modify business models. In line with the research objectives and the empirical literature discussed, the following hypotheses were raised;

- i. Digital Entrepreneurship does not significantly influence Sustainable Value Proposition among SMEs in Lagos State, Nigeria.
- ii. Digital Entrepreneurship does not significantly influence Sustainable Value Creation among SMEs in Lagos State, Nigeria.
- iii. Digital Entrepreneurship does not significantly influence Sustainable Value Capture among SMEs in Lagos State, Nigeria.

### 3. Material and Method

The study adopted a survey research design. Lagos state was purposively selected as the study area since it houses the highest number of SMEs in Nigeria, totalling 11,663 (CBN, 2019). The state is also the country's economic hub, contributing one-third of its gross domestic product. Managers/Business owners of SMEs in Lagos state constitute the study population. The Taro Yamane formula (1973) was used to specify a sample size of 387 at the 5% level of sampling error. The simple random sampling technique was used to administer a research questionnaire to the respondents. The research questionnaire was developed on the 5-

point Likert scale, ranging from Strongly Agreed-SA to Strongly Disagreed-SD (SA=5, SD=1). The questionnaire is divided into five sections (A –E). Section A captured the demographic characteristics of the respondents, Section B consisted of question items on 'Digital Entrepreneurship', Section C consisted of question items on 'Sustainable Value Proposition', and Section D consisted of question items on 'Sustainable Value Creation. In contrast, Section E contains question items on 'Sustainable Value Capture'. The question items for the core variables were adapted from Hennart's (2014) and Vandana et al. (2019, 2020). These were subjected to a pretest using samples outside the study area and Cronbach Alpha statistics of 0.810, establishing the measuring instrument's reliability. In line with the study's objectives, a simple linear regression model was used to specify the interaction between the independent variable (digital entrepreneurship) and each of the dimensions of the sustainability variables (value proposition, value creation and value capture). The functional relationships are stated as;

$$SVPRO = \beta_0 + \beta_1DE + \varepsilon \quad (1)$$

$$SVCRE = \beta_0 + \beta_1DE + \varepsilon \quad (2)$$

$$SVCAP = \beta_0 + \beta_1DE + \varepsilon \quad (3)$$

Where:

SVPRO - Sustainable Value Proposition

SVCRE - Sustainable Value Creation

SVCAP - Sustainable Value Capture

DE – Digital Entrepreneurship

$\beta_0$  – Regression Constant

$\beta_1$  – Regression coefficient

$\varepsilon$  – error term of regression

It is expected that digital entrepreneurship will influence each sustainability measure ( $\beta_1 > 0$ ). The parameters in the models were estimated using the Ordinary Least Squares (OLS) technique, with the aid of the Statistical Package for Social Sciences (SPSS) version 26. The descriptive analysis of the demographic variables was carried out using frequency tables and percentages, while the inferential analysis involved the Durbin-Watson test, ANOVA test and parameter estimates.

### 4. Results

**Table 1:** Demographic Characteristics

Demographics	Frequencies
Gender	Male (n= 248, % = 64.1) Women (n=139, %=35.9)
Age of Respondents	Below 30 (n=121, %=31.3) 31-40 (n=195, %=50.4) 41-50 (n=44, %=11.4) 51-60 (n=20, %=5.2) 61 and above (n=7, %=1.8)
Education	Primary (n=79, %=20.4) Secondary (n=120, %=31.0) Tertiary (n=188, %=48.6)
Age of Business	Less than 5 years (n=203, %=52.5) 6-10 years (n=103, %=26.6) 11-15 years (n=71, %=18.3) Above 15 years (n=10, %=2.6) Mean age of Enterprises= 1.7years
Number of Employees	Less than 10 (n=241, %=62.3) 10-49 (n=120, %=31.0) 50-99 (n=19, %=4.9) 100-149 (n=7, %=1.8)

Table 1 shows the demographic characteristics of the respondents. Results indicate that majority of the owners/managers of SMEs in Lagos are men (64.1%). The age distribution reveals a mean age bracket of 31-40 (50.4%), implying that majority of the SMEs in Lagos are mostly owned/managed by youths. In addition, results show that 79.6% of the respondents have at least a secondary school certificate, which includes about 48.6% with tertiary degrees. This suggests that more graduates are embracing entrepreneurship in Nigeria, as against seeking for white-collar jobs. Further results also indicates that most of the SMEs have been in existence for less than 5-years (52.5%). This tends to agree with the assertion of Etim (2020) that most SMEs liquidate within the first two years of their operations.

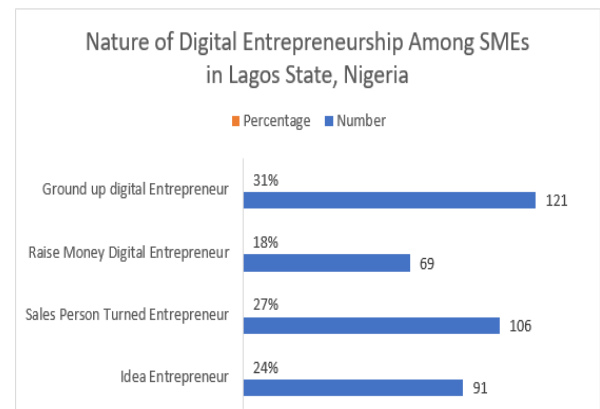
**Table 2:** Hypothesis 1 - Digital Entrepreneurship does not significantly influence Sustainable Value Proposition among SMEs in Lagos State, Nigeria.

Variable	Sustainable Value Proposition				
	B	SE	$\beta$	T-Val	p-Val
Digital Entrepreneurship	0.616	0.043	0.591	14.371	0.000
R-squared	0.349				
Durbin-Watson	2.264				
F-Stat	206.522				
	(p*=0.000)				

The results in Table 2 reveal a positive and significant relationship between digital

entrepreneurship and sustainable value proposition ( $\beta= 0.591$ ). The coefficient of variation ( $R^2=0.349$ ) indicates that digital entrepreneurship induces 34.9% of the variation in the sustainable value proposition. The standard error (SE=0.043) implies an acceptable and approximate size of the prediction errors since they fall below the estimate of 2.5 (Siegel, 2016). The T-value ( $t=14.371, p=0.0$ ) suggests that digital entrepreneurship significantly influence sustainable value proposition. Furthermore, the F-stat ( $F=206.522, p=0.0$ ) indicates that the model is a good fit and explains the interaction between the variables. Lastly, the Durbin-Watson statistics of 2.264 is approximately 2, suggesting the absence of serial correlation between the variables.

### Nature of Digital Entrepreneur in Lagos State Nigeria



**Figure 1:** Nature of Digital Entrepreneurship in Lagos State, Nigeria.

The analysis in figure 2 reveals the nature of digital entrepreneurship in Lagos State, Nigeria. 31% of the respondents are digital entrepreneurs (using technologies to drive every process of their operations), 18% are raise money digital entrepreneurs (only concerned about using digital technology to make money and nothing else. E.g selling on the internet and leveraging social media), 27% are salesperson turned entrepreneurs (concerned about using digital entrepreneurship to drive sales) while 24% are ideal digital entrepreneurs (they believe in what technology can do but only use the peripherals such as mobile apps alone)

**Table 3:** Hypothesis 2 - Digital Entrepreneurship does not significantly influence Sustainable Value Creation among SMEs in Lagos State, Nigeria.

Variable	Sustainable Value Creation			T-Value	P-Value
	B	SE	$\beta$		
Digital Entrepreneurship	0.397	0.043	0.422	9.126	0.000
R-squared	0.178				
Durbin-Watson	1.987				
F-Stat	83.282				
	(p*=0.000)				

Table 3 shows a positive and significant relationship between digital entrepreneurship and sustainable value creation ( $\beta= 0.422$ ). The coefficient of variation ( $R^2=0.178$ ) suggests that digital entrepreneurship explains 17.8% of the variation in sustainable value creation. The standard error (SE=0.043) implies an acceptable and approximate size of the prediction errors. The T-value ( $t=9.126, p=0.0$ ) suggests that digital entrepreneurship significantly influence sustainable value creation. In addition, the F-stat ( $F=83.282, p=0.0$ ) suggests a good model fit and ascertain interaction between the variables. Lastly, the Durbin-Watson statistics (1.978) falls within the acceptable value of 2, which implies that the model does not suffer from serial correlation.

**Table 4:** Hypothesis 3 - Digital Entrepreneurship does not significantly influence Sustainable Value Capture among SMEs in Lagos State, Nigeria.

Variable	Sustainable Value Capture			T-Value	P-Value
	B	SE	$\beta$		
Digital Entrepreneurship	0.634	0.034	0.690	18.683	0.000
R-squared	0.476				
Durbin-Watson	2.114				
F-Stat	349.071				
	(p*=0.000)				

The results in Table 4 indicate a positive and significant relationship between digital entrepreneurship and sustainable value capture ( $\beta= 0.690$ ). The coefficient of variation ( $R^2=0.476$ ) implies that digital entrepreneurship explains 47.6% of the variation in sustainable value capture. The standard error (SE=0.034) indicates the prediction errors' acceptable and approximate size.

Similarly, the T-value ( $t=18.683, p=0.0$ ) suggests that digital entrepreneurship significantly influence sustainable value capture. Furthermore, the F-stat ( $F=349.071, p=0.0$ ) indicates that the model is a good fit and explains the interaction between the variables. Lastly, the Durbin-Watson statistics of 2.114 is approximately 2, indicating the absence of serial correlation among the variables.

**Discussion of Results**

Digital entrepreneurs who use technology in their business models to create sustainable business models (value propositions, value creation and value capture) value were the focus of the research. In examining the nature of digital entrepreneurship in Lagos State, Nigeria, the analysis reveals that In addressing the study's first objective, the findings reveal that most of the digital entrepreneurs in Lagos State are ground-up digital entrepreneurs. This means the entrepreneurs are more inclined to drive all their operations from top to bottom. Entrepreneurs in Lagos State can drive their sustainable business model by adopting digital entrepreneurship. The result is consistent with the position of Gregori and Holzmann (2020), who assert that digital entrepreneurship is key to sustainable business models and that organisations should adopt technologies to stay ahead of the competition.

The findings of objective two indicate that digital entrepreneurship significantly drives sustainable value propositions. The contention is that activities facilitated by digital entrepreneurship encourage the interrelationship of the economic, social and environmental logic. The implication is that entrepreneurs should adopt strategies to balance, calibrate, and mix value is an essential part of sustainable business model design. This research shows that sustainable businesses may use digital technology to generate blended value propositions, a valuable addition. Because sustainable goods and services are connected with higher costs of creating value than their less sustainable equivalents, sustainable offers frequently lack financial value for the client. The findings corroborate Chen (2021) and Muafi et al. (2021) that consumers' pro-environmental behaviour is heavily influenced by factors like time, effort, and money they have to



spend. According to the findings, it is possible to increase convenience and efficiency while cutting costs by using digital technology selectively. This provides better value propositions.

In explaining research objective two, the findings show that digital entrepreneurship influences sustainable value creation. The implication is that integrating a wide range of digital assets into one cohesive system facilitates community building, co-creation, and a more excellent range of stakeholders. Entrepreneurs with a focus on sustainability may better control the parameters of their business models, making them more flexible and adaptable. To bring together a variety of stakeholders, the findings indicate that platform techniques were very beneficial. A company's external ties must be well-managed to incorporate a greater spectrum of varied stakeholders to create sustainable value. These findings are in line with the position of Bogachov et al. (2021) and Ngugi and Goosen (2021) that digital technologies and sustainable business strategies may be synergistically linked to capture several value dimensions.

Lastly, the analysis shows that digital entrepreneurship is critical to sustainable value capture. The study by Karimi and Walter (2021) indicates that digital entrepreneurs worry about the scalability and financial stability of the business models. An essential contribution of this study is offering fresh perspectives on how entrepreneurs use digital technology to grow their targeted value capture and harness impact complementarities. For sustainable business models, impact complementarity is fundamental, and the findings show how sustainable entrepreneurs might accomplish it. Digital technologies, according to the research, may promote both societal and financial value development simultaneously. Here we see how digital technologies are critical to long-term business models and how they help support them.

Nevertheless, this theoretical scalability could contradict the environmental and economic rationale. Sampled entrepreneurs typically limit the use of digital technology because of concerns about CO2 emissions and the support of their local communities. There are signs that the logic and their manifestations in the business model

components may be at odds. So the study contributes to the literature on business models that include various logic and how these logics may both allow and hinder attempts to achieve sustainability.

## 5. Conclusion

The use of digital technology may significantly contribute to long-term development objectives. For entrepreneurs who want to produce social and environmental value via commercially viable business models, however, it is still unclear how this promise may be achieved in reality. Using the information in this article, managers may better understand how digital technology can be used to develop long-term business models. These configurations (integrated value propositions, interconnected supply value creation and multifunctional value capture) might be used by entrepreneurs as an inspiration to design unique, sustainable business models. It is also possible for them to rely on digital tools that help build communities by combining the activities of several different people to achieve one common aim. This may enhance environmental and societal value creation through co-creation initiatives and have ripple effects within the enterprise value aspect. This model illustrates the practical usefulness of the identified themes, but it also illustrates the tangled web of relationships that business model stakeholders must keep in mind when creating long-term strategies. Many distinct value structures must be brought together to create effective business models, and digitisation can't address this problem. Managers need to be mindful of the tensions identified in this study, notwithstanding the claimed substitutability. There is no one-size-fits-all solution to sustainability via the use of digital technology. A comprehensive but impartial approach to integrating digital technologies to boost the effect of sustainable business models is recommended in this context.

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