

Technopreneurship Conceptualization and New Venture Wellness: A Study of Selected SMEs in Delta State

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ABSTRACT

This study investigates the connection between Delta State's new venture wellness and technopreneurship. The study population consisted of 160 managers and non-managerial employees from seven (7) new businesses that were registered in Delta State. A sample size of 113 was determined using the Krejcie and Morgan sampling technique. A cross-sectional design was employed for this study. A Google online survey was used to collect data for the study. The instrument's reliability was assessed using the Cronbach Alpha reliability test, which yielded results of 0.7 and higher. Pearson's product moment correlation of SPSS version 25 was used for analysis. Multiple regression statistics were used to test the hypotheses that were developed. The outcome from the hypotheses suggested that technopreneurship is highly connected with supporting the wellbeing of new companies. From these data, the study concluded that technopreneurship is fundamentally driven by the pursuit of creative ideas and the transformation of technology skills into viable market offerings; again, technopreneurship serves as a catalyst for the flourishing of new initiatives in Delta State. In order to successfully navigate the processes required to become successful technopreneurs, the study advised technopreneurs to arm themselves with both technical expertise and entrepreneurial understanding.

Keywords: *Adaptability and Resilience, Financial Health, Innovation and product development, Technological adoption and integration, Technopreneurship.*

INTRODUCTION

Technopreneurship, at its core, is the fusion of technology and entrepreneurship. It involves identifying technology-based opportunities and leveraging technological innovation to create, develop, and commercialize new products, processes, or services, often with high growth potential (Selladurai, 2016). A technopreneur is not just someone who uses technology in their business; they are innovators who recognize and capitalize on technological advancements to

disrupt existing markets or create entirely new ones. This often requires a unique blend of technical expertise, business acumen, risk-taking propensity, and a creative mindset.

This subject explores the phenomenon of entrepreneurship in technology. It involves starting a technology venture in the hope of making a profit. The technology entrepreneur, also known as a technopreneur, is a person who identifies a technology-based opportunity and creates a business opportunity from an idea based on technology, innovates through commercializing based upon a robust business model (Ogunbode, 2021). Technopreneurship skills allow people to build and run profitable technology-based firms by combining technical expertise, business savvy, and creative thinking. These skills include seeing possibilities, coming up with creative solutions, and adjusting to changing market demands (Uford, 2022). The journey of launching a new venture, particularly a technology-driven one, is often characterized by intense pressure, long working hours, financial uncertainty, and the constant need to adapt to rapid technological changes.

These demanding conditions can significantly impact the wellness of new ventures, which extends beyond the financial health of the organization to encompass the well-being of its founders and early employees. In this context, wellness refers to a holistic state of physical, mental, emotional, and social well-being that enables individuals to thrive and contribute effectively to the venture's success. New ventures face uncertainty due to Nigeria's variable and frequently ambiguous regulatory environment. Many of these firms struggle to navigate complicated compliance requirements and unstable policies. Duru and Akujobi (2020) posited that even though the Central Bank of Nigeria (CBN) has implemented efforts like the regulatory sandbox to promote innovation. This ambiguity can hinder investment and innovation, which will affect these new ventures companies' growth trajectory.

Ogunbode (2021) asserted that new ventures are faced with a major constraint of obtaining adequate capital. Even though venture capital interest in the industry has grown, a lot of these new ventures still face difficulty securing the required funding to expand. A difficult environment for new entrants is created by investors' preference for more established firms and limited access to early-stage capital (Ogunbode, 2021). Inadequate infrastructure, such as erratic internet connectivity and a lack of power, also limit the expansion of new ventures. These difficulties provide serious operational difficulties, especially for businesses that mostly depend on digital platforms to efficiently provide their services (Igbokwe-Ibeto, 2020).

According to EFINA (Enhancing Financial Innovation & Access) 2023 survey about 26% of Nigerians are excluded from financial activities. This is evidently seen because of the unbanked areas in rural communities, where branches of traditional banks are hardly found (Michael, 2024). Also, considering the increasing rate of Nigeria's youthful population and mobile phone penetration as well as easy accessibility to the internet, Nigeria's new venture market is yet to be close to being fully tapped by leveraging technopreneurship, this has made the new ventures industry remain in developing state. The growth of Nigeria new ventures market has been heavily hampered by cyber-attack & KYC/identity theft problems. When this happens a lot of companies die after some time because they are not able to recover from these attacks. As Nigeria's new venture ecosystem evolves, so do the threats (Israni, 2024). Cyber-attack & KYC/identity theft-related problem is mainly associated to ineffective innovative technologies to tackle these problems.

This study is significant as it investigates the intersection of technopreneurship and the wellness of new ventures within the unique socio-economic context of Delta State, Nigeria. With rising youth unemployment and increasing digital literacy, technopreneurship presents a

viable path for economic empowerment and innovation. However, the intense pressures associated with startup life often led to stress, burnout, and business failure. By focusing on wellness, this study sheds light on the importance of mental health, work-life balance, and resilience in sustaining entrepreneurial success. Evidence from a thorough review of a lot of related literature on technopreneurship and enabling growth of new ventures shows that there is insufficient research on this study. Also, a review of similar literatures indicated that these research works did not adopt the dimensions of this study. The need to fill this gap necessitated this study which intends to explore the impact of technopreneurship on enabling the growth of new ventures in Nigeria, adopting technology innovation and business acumen as the dimensions of the study while market opportunities identification and market penetration were adopted as the study measures.

Statement of Problem

The rapid evolution of technology has transformed the entrepreneurial landscape, giving rise to technopreneurship as a pivotal avenue for innovation and economic growth. However, new ventures in this domain face significant challenges that can undermine their success and sustainability. One critical problem is the difficulty in balancing technological advancement with the overall wellness of the organization. Many technopreneurs prioritize immediate technological solutions and market competitiveness while neglecting the well-being of their employees, which can lead to high turnover rates, burnout, and decreased productivity. Furthermore, financial instability remains a pressing issue for new ventures. Startups often struggle with securing adequate funding and managing cash flow, which can hinder their ability to invest in both technology and human resources. This financial strain can negatively affect employee morale and organizational culture, creating a vicious cycle that threatens long-term viability.

Additionally, the lack of adaptability to market changes poses a significant risk. Many technopreneurs may become overly focused on specific technologies or business models, resulting in resistance to pivoting when necessary. This rigidity can stifle innovation and ultimately jeopardize the venture's survival. Addressing these interconnected challenges is essential for fostering a more resilient and successful technopreneurial ecosystem.

Objectives of the Study

The general objective of the study is the conceptualization of technopreneurship and its effect on wellness of new ventures. The specific objectives are to:

- i. investigate how innovation and product development relate to the financial health of new businesses in Delta State.
- ii. investigate how innovation and product development relate to the adaptability and resilience of new businesses in Delta State.
- iii. determine how technological adoption and integration relate to the financial health of new businesses in Delta State; and
- iv. evaluate the connection between technological adoption and integration and businesses' adaptability and resilience.

Research Hypotheses

The following hypotheses were formulated to help guide the study:

H01: The financial health of new businesses in Delta State is not significantly correlated with innovation or product development.

H02: Adaptability and resilience of new businesses in Delta State do not significantly correlate with innovation and product development.

H03: The financial health of new businesses in Delta State is not significantly correlated with the use and integration of technology.

H04: In Delta State, there is no discernible correlation between new enterprises' resilience and flexibility and the adoption and integration of technology.

REVIEW OF RELATED LITERATURE

Conceptual Review

Technopreneurship

Technopreneurship is the combination of two concepts 'Technology' and 'Entrepreneurship', it is a jargon that represent the blend of technology with entrepreneurial capabilities. In simple term, Selladurai (2016) defined technopreneurship as simply entrepreneurship in the context of an intensive technological environment. It is the process of integrating technology expertise and entrepreneurial skills and talent. It is the process whereby a business-oriented person use technology to establish, develop and nourish a business venture profitably. This process begins by spotting a business opportunity and then develop a product or service that take advantage of this opportunity. Technopreneurship is characterized by its potential for high growth as well as the large impact it has on knowledge and intellectual property (Mazzarol, 2011). Unlike traditional entrepreneurship, technopreneurship is the integration of technological development into entrepreneurial activities to create products and services tailored towards meeting market demands.

A technopreneur is considered as a person who disrupt the current economic order by, introducing new products and services, penetrating new markets, establishing new types of organization, exploiting new raw materials and new channels of distribution (Shumpeter, 1934). The constant changing state of digitalization has made technopreneurs to develop the distinctive capabilities to navigate this dynamic environment by harnessing the advancements in technology to drive innovation. For a technopreneur to be successful he needs a combination of business acumen, creativity and technical skills. This entails that a technopreneurs must possess the capacity to spot and resolve problems, design and market innovative products and services, and manage the operational and financial areas of their business. All these are directly dependent on the technopreneur level of understanding of emerging innovative technologies and how to leverage them to create value for their customers.

Innovation and product development and wellness of New Ventures

Innovation and product development are core dimensions of technopreneurship, directly influencing the wellness and sustainability of new ventures. Technopreneurship is inherently driven by the pursuit of novel ideas and the transformation of technological capabilities into viable market offerings (Kraus et al., 2022). This innovation-centric approach is crucial for startups aiming to differentiate themselves in highly competitive and rapidly evolving markets. For new ventures, innovation is not merely about technological novelty but about generating customer-centric value through continuous product development. The ability to develop and refine products based on market needs, user feedback, and emerging trends is essential for venture adaptability and growth (Garcia-Torres et al., 2023). Technopreneurs often operate at the intersection of unmet needs and technological potential, making innovation both the engine and the compass of entrepreneurial activity.

Product development in this context involves iterative design, rapid prototyping, and agile methodologies that enable quick market testing and refinement (Blank, 2021). This flexibility is vital for new ventures whose survival often hinges on their capacity to pivot and align offerings with evolving customer expectations. Moreover, a strong product innovation capability contributes to venture wellness by building intellectual property assets, attracting investor interest, and improving market competitiveness (Giones& Brem, 2021).

The wellness of new ventures—measured through sustainability, resilience, and growth potential—is significantly enhanced by successful innovation. Startups that emphasize continuous product development are better equipped to navigate uncertainty, maintain customer engagement, and achieve long-term viability. Innovation also nurtures an entrepreneurial culture of experimentation and learning, which is critical for sustaining momentum in dynamic environments (Zhou et al., 2022).

Furthermore, digital technologies have transformed traditional product development processes, enabling faster and more cost-effective innovation cycles. Tools such as AI, IoT, and 3D printing allow technopreneurs to create smarter, more personalized products, thus expanding their market reach and strengthening customer loyalty (Marion et al., 2021). In essence, innovation and product development form the strategic backbone of technopreneurship. When systematically embedded into the core of new ventures, they not only drive market relevance but also ensure operational health and long-term entrepreneurial wellness.

Innovation and product development are central pillars of technopreneurship, distinguishing technology-driven startups from traditional businesses. In the context of new ventures, innovation is not merely about creating novel products but also about refining business models, optimizing user experiences, and sustaining competitive advantage in rapidly evolving markets (Bican & Brem, 2020). Product development, on the other hand, refers to the systematic process of designing, testing, and scaling technological solutions that meet market demands (Blank & Dorf, 2012). Together, these dimensions determine a startup's ability to achieve long-term wellness—defined as financial viability, operational efficiency, and organizational resilience (Davidsson et al., 2020).

Innovation in Technopreneurship

Innovation in technopreneurship encompasses disruptive and incremental advancements that drive business growth. Disruptive innovation introduces entirely new market paradigms, as seen with companies like Uber and Airbnb, which redefined transportation and hospitality through digital platforms (Christensen et al., 2018). Incremental innovation, meanwhile, focuses on continuous improvements, such as software updates or feature enhancements, ensuring sustained customer engagement (Giones & Brem, 2017).

A key challenge for startups is balancing innovation with resource constraints. While breakthrough ideas attract investors, their execution requires rigorous R&D, agile methodologies, and iterative prototyping (Ries, 2011). Startups that fail to innovate risk obsolescence, particularly in sectors like AI and fintech, where technological shifts occur rapidly (Nambisan, 2017). Innovation and product development are critical to the wellness of technopreneurial ventures. Startups must adopt agile, customer-centric approaches to navigate technological and market uncertainties. Future research could explore how emerging technologies like generative AI reshape product development cycles.

Technological adoption and integration and wellness of New Ventures

Technological adoption and integration play a pivotal role in shaping the trajectory and sustainability of new ventures, particularly within the paradigm of technopreneurship. Technopreneurship, characterized by the innovative application of technology in business, necessitates not only the identification of technological tools but also their strategic and adaptive implementation (Kraus et al., 2022). In this context, technology adoption is more than an operational decision - it is a foundational aspect of the venture's business model, competitive strategy, and long-term wellness.

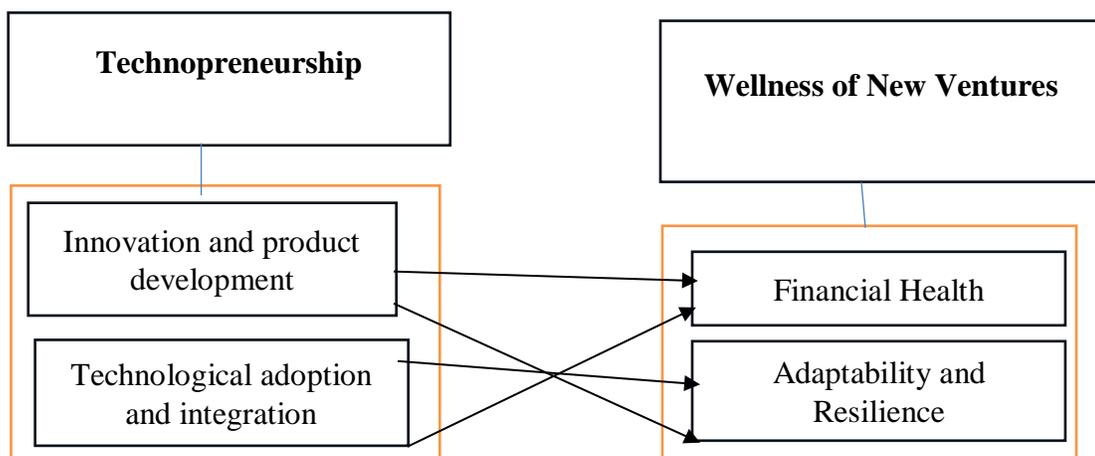
New ventures, often defined by resource constraints and volatile market exposure, face critical

challenges and opportunities in integrating emerging technologies. The ability to swiftly adopt digital tools such as cloud computing, artificial intelligence, and data analytics can significantly enhance operational efficiency, customer engagement, and scalability (Bag et al., 2021). These technologies enable technopreneurs to build agile systems that respond dynamically to market demands and foster innovation-driven growth. Moreover, the wellness of new ventures—encompassing their resilience, adaptability, and sustainability—is intricately tied to the effective integration of technology. Technological integration fosters resilience by enabling startups to mitigate risks through predictive analytics and automation. For instance, cloud-based platforms facilitate remote operations, data security, and collaborative innovation, all of which are vital for continuity in uncertain environments (Rana et al., 2022).

Furthermore, technology enhances stakeholder communication and real-time decision-making, which are crucial for entrepreneurial wellness. Digital platforms enable new ventures to maintain strong customer relationships, attract investors through transparent reporting, and engage with a global market. This digital interconnectedness promotes strategic alignment and boosts venture credibility, contributing to both financial health and brand equity (Nguyen et al., 2023). In terms of entrepreneurial mindset, the willingness and capacity to adopt technology signal a growth-oriented and learning-centric approach—key traits of successful technopreneurs. This mindset facilitates continuous improvement and iterative innovation, which are essential for adapting to rapidly changing technological landscapes (Chatterjee et al., 2021).

Technological adoption and integration represent critical dimensions of technopreneurship that significantly influence the wellness and sustainability of new ventures. In today's rapidly evolving digital economy, the ability to effectively adopt and integrate emerging technologies determines a startup's competitive advantage, operational efficiency, and long-term viability (Giones & Brem, 2017). This conceptualization examines how technological adoption and integration contribute to venture wellness across financial, operational, and strategic dimensions. Technological adoption and integration serve as foundational elements for the wellness of technopreneurial ventures. Startups that strategically embrace and implement relevant technologies position themselves for sustainable growth, competitive advantage, and resilience in dynamic markets. Future research should explore the role of emerging technologies like quantum computing and extended reality in reshaping technopreneurship paradigms, customers, fostering relationships and increasing sales (Olayah, 2019).

Figure 1: Conceptual Framework



Source: Researcher's conceptualization

Wellness of New Ventures

The concept of wellness in new ventures encompasses a multidimensional framework that evaluates not just financial performance, but also the holistic sustainability, adaptability, and resilience of a startup. Traditionally, venture success has been primarily assessed through profitability and growth metrics; however, modern entrepreneurial ecosystems increasingly recognize the importance of non-financial factors, such as organizational culture, stakeholder relationships, innovation capacity, and adaptability to technological and market disruptions (Markman et al., 2022).

Wellness in new ventures can be categorized into several interlinked dimensions: strategic wellness, operational wellness, technological wellness, and entrepreneurial wellness. Strategic wellness refers to the alignment between a venture's vision, its business model, and the broader market dynamics. Startups with a clear value proposition and market fit are more likely to maintain strategic coherence and respond effectively to competition and change (Snihur et al., 2021). Operational wellness relates to the internal processes, team dynamics, and resource management that enable the venture to execute efficiently. Agile workflows, lean operations, and adaptive leadership contribute to operational robustness (Teece, 2022).

Technological wellness is particularly crucial in the digital age, where technology not only supports operations but also becomes a driver of innovation and scalability. Ventures that effectively integrate technology into their core offerings tend to exhibit better resilience and customer engagement (Giones & Brem, 2021). Furthermore, entrepreneurial wellness, encompassing the mental, emotional, and cognitive health of the founding team, has gained prominence as a critical success factor. High stress, burnout, and lack of support are common issues that compromise decision-making and innovation in startups (Uy et al., 2020). Resilient ventures develop coping mechanisms, such as strategic pivoting, resource reallocation, or ecosystem collaboration, that allow them to withstand disruptions and continue innovating (Kraus et al., 2022; Cohen et al., 2022). In essence, the wellness of new ventures is a holistic concept that transcends traditional metrics and incorporates the startup's ability to sustain itself economically, socially, and psychologically over time. It reflects a balanced interplay of strategic foresight, innovative capacity, internal cohesion, and founder well-being.

Financial Health

Financial health is a critical indicator of the overall wellness and sustainability of new ventures. It encompasses not only profitability but also liquidity, solvency, operational efficiency, and the capacity to secure and manage capital. In the early stages of a startup, financial health serves as both a barometer of internal efficiency and a signal to external stakeholders—such as investors, creditors, and partners—about the venture's viability and long-term potential (Cassar, 2022).

Financial wellness for startups is inherently dynamic and context-dependent. Unlike established firms, new ventures often operate under conditions of uncertainty, limited resources, and evolving business models. Thus, the assessment of financial health must go beyond static metrics like revenue or profit margins and instead incorporate forward-looking indicators such as cash burn rate, break-even point, and customer acquisition cost (Brush et al., 2023). These metrics reflect a venture's ability to manage capital efficiently while navigating the challenges of growth, product-market fit, and scalability.

A strong cash flow position is particularly vital in the early stages of a venture, as it enables the business to cover operational expenses, invest in product development, and absorb unforeseen shocks. Ventures that maintain positive cash flow or are able to extend their

financial runway through funding or revenue generation demonstrate higher resilience and are more likely to reach profitability (Kim & Yasuda, 2022). Financial literacy and disciplined financial planning among founders also contribute significantly to the venture's ability to make sound strategic decisions (Jindrichovska&Kubickova, 2021).

Moreover, financial health is directly linked to a venture's ability to attract external funding. Investors increasingly scrutinize key financial indicators—such as unit economics, gross margin trends, and customer lifetime value—to assess startup potential. Startups that can demonstrate fiscal responsibility, realistic projections, and scalable financial models are better positioned to raise capital and sustain investor confidence (Brown et al., 2022).

Importantly, financial health contributes to the broader wellness of a venture by reducing founder stress, enabling strategic flexibility, and supporting organizational growth. It underpins the stability needed to hire talent, develop products, and enter new markets. In this way, financial health is not merely a measure of monetary status, but a foundational element of entrepreneurial wellness and business longevity (Markman et al., 2022).

Adaptability and Resilience

In today's dynamic and often volatile business environment, adaptability and resilience are increasingly recognized as core indicators of the wellness of new ventures. Unlike traditional performance metrics, these capabilities reflect a venture's internal strength to withstand external shocks, respond to changing conditions, and sustain long-term viability. For new ventures—often operating under constraints such as limited resources, immature networks, and uncertain markets—resilience and adaptability are not just strategic advantages; they are survival imperatives (Shepherd et al., 2023).

Adaptability refers to a venture's ability to pivot or realign its strategies, products, or operations in response to shifts in the market, technology, customer preferences, or regulatory environments. New ventures that exhibit high adaptability are more likely to achieve product-market fit, enter new markets, and maintain relevance in disruptive sectors (Corner et al., 2021). This capacity for change is frequently supported by a flexible organizational culture, agile decision-making processes, and iterative innovation practices (Bock et al., 2022). Founders who exhibit emotional intelligence, cognitive flexibility, and optimism are often better equipped to guide their ventures through adversity (Liu et al., 2022; Williams & Shepherd, 2022).

Together, adaptability and resilience contribute significantly to the overall wellness of new ventures. They enhance not only the venture's ability to survive but also its capacity to learn and grow from challenges, thereby reinforcing long-term sustainability. These traits are especially critical during early growth phases, when strategic missteps or environmental shocks can be particularly damaging (Obschonka et al., 2022). Moreover, investors and incubators are increasingly prioritizing ventures that demonstrate adaptability and resilience. These qualities are seen as indicators of robust leadership and organizational learning, which are essential for navigating uncertain futures and scaling successfully in competitive ecosystems (Li et al., 2023). In essence, adaptability and resilience are not just reactive traits but proactive strategic assets. They reflect a venture's readiness to evolve and persevere—key attributes that define the wellness, sustainability, and ultimate success of entrepreneurial initiatives.

Theoretical Review

Theory of New Combination (Joseph Schumpeter, 1934)

Joseph Schumpeter presented his entrepreneurship theory in his most famous book, 'Theory

of Economic Development'. The central idea guiding Schumpeter's theory is that of new combinations, which he termed innovations. According to him, an entrepreneur's core function is the combination of the factors of production into a producing organism. Schumpeter also differentiated combinations from new combinations, referring to combinations as the current order in any sphere, and the new combination is innovation. He also posited that innovation is of five types which include a new product, a new method of production, a new market, a new source of raw materials, and the creation of a new type of organization. Schumpeterian entrepreneurship view is also that of "creative destruction", which according to him produces new combinations (innovations) (Ottih, 2020).

The implication of this theory to this study is that new ventures is regarded as a creative destruction because it has produced a disruptive force that has disrupted the traditional banking industry through provision of online services thereby ending an economic order and opening the way for a new order. Also, it relates to Schumpeter's theory on the argument that inventions are not new combinations except only when it's been translated into products that are useful to society. In line with this assertion, new ventures fall into the category of a new combination because of its societal usefulness in financial inclusion.

Diffusion of Innovation Theory (Everett Rogers, 1962)

Everett Rogers introduced this notion in her book "Diffusion of Innovations." Diffusion, according to Rogers, is the gradual spread of an innovation among members of a social system via certain routes. According to Ottih (2020), Rogers went on to define innovation as "an idea, practice, or object perceived as new by an individual or other unit of adoption." According to Rogers, the invention itself, the communication channels, adopters, time, and a social structure are the five primary factors that have a major impact on the dissemination of new ideas. Since innovations reach critical mass at a specific pace and acceptance point, widespread adoption is necessary for self-sustainability.

Rogers's categorizes five adopters of technology as Innovators, adopters, early majority, late majority, and laggards (Ottih, 2020). In relation to this study, high growth of new ventures in Nigeria was enabled due to its high rate of diffusion which was a result of the fast speed in reaching out to the unbanked population of the society who reside in rural areas, and who are the critical masses the innovation is met for. Also, Rogers's five elements (innovation itself, the communication channels, adopters, time, and a social system) influence the spread of new ventures across the nook and cranny of Nigeria.

Empirical Review

Various studies have been undertaken by researchers on technopreneurship and enabling the growth of FinTech. Prisca and Onuoha (2022) conducted a study titled "Technopreneurship and Growth of New Tech Companies in Nigeria". The objectives of the study were to establish the relationship between ICT self-efficacy and market penetration, ascertain the relationship between adaptability and market penetration, and determine the relationship between innovation and market penetration. The study adopted a cross-sectional survey of the quasi-experimental research method. A sample size of 132 was obtained from a population of 376 adopting the Taro Yamen formula. A structured questionnaire was used to elicit information from the respondents. Information was collected from 132 respondents using a simple random sampling technique of which to total of 110 questionnaires were seen as relevant for the study. The study adopted Spearman rank-order correlation coefficient as the method of data analysis. The study result findings revealed that there is a positive significant agreement among the study respondents that technopreneurship through ICT self-efficacy, adaptability, and innovation enhances Tech companies' growth in Nigeria. The study recommended that

technopreneurs should endeavor to obtain the required ICT skills and should be able to adjust to changes in technology while also providing innovative products.

Dutse, Ningi and Abubakar (2013) conducted an empirical study on the topic "An Examination of the Latent Function of Microfinance Banks in Technopreneurship and Enterprise Development in Nigeria." The study's goals were to investigate the connection between the availability of microfinance services, technopreneurial growth, and growth of enterprises in Nigeria, and ascertain the relationship between technopreneurship growth drive of MSMEs and accessibility of microfinance services in Nigeria. The study adopted a survey research method. A sample size of 400 was obtained from the population of 17,284,671 using an approximation procedure. SPSS was used to test the generated data while coefficients of Pearson correlation were used to analyze the data. Findings from the study showed that there is a positive strong relationship between microfinance services accessibility, technopreneurship drive, and enterprise growth. The study concluded that technopreneurship enables the growth of enterprises in Nigeria.

RESEARCH METHODOLOGY

A cross-sectional research design was adopted for this study. 160 respondents make up the population of the study, these respondents include manager and non-managerial personnel from seven (7) new ventures registered and operating in Delta State. These new ventures and their unit population include Asaba Rice Mill – 42 respondents, Delta Leather Works – 26 respondents, Warri Tech Hub – 23 respondents, Green Delta Renewable Energy – 21 respondents, Ugbolokposo Fisheries – 18 respondents, Abraka Heritage Foods – 18 respondents, Sapele Furniture Cluster – 12 respondents. This sums to a total population of 160 respondents.

Krejcie and Morgan sample table was used to determine the sample size of 113 respondents from the population. Google questionnaire was used to collect data. A 4-point Likert scale was used to measure the four-item statements of the study variables. Face and content validity was adopted for the study and Cronbach Alpha test was used to ascertain the reliability of the instrument. After testing the reliability, the results achieved were as follows; innovation and product development = 2 financial health = 0.79, no. of items = 4. Technological adoption and integration = 0.86, no. of items = 4, and Adaptability and resilience = 0.89, number of items = 4. The result shows that the study variables items met the 0.7 reliability benchmark which shows that the study instrument was reliable.

Model Specification

The econometric model used for this study is shown below:

$$FHT = f(WNV)$$

$$WNV = f(IPD, TAI)$$

$$\text{Model 1: } FHT = \alpha_{11} + \beta_1 IPDi + \beta_2 TAIi + \mu_1 \text{ ----- equation 1}$$

$$ADR = f(WNV)$$

$$ADR = f(IPD, TAI)$$

$$\text{Model 2: } ADR = \alpha_{12} + \beta_{12} IPDi + \beta_{22} TAIi + \mu_2$$

Where:

WNV = Wellness of New Ventures

IPD = Innovation and product development

TAI = Technological adoption and Integration

FHT = Financial Health

ADR = Adaptability and Resilience

α_{1-n} = Constant or the intercept coefficient

$\beta_1 - \beta_n$ = Regression coefficient.

$\mu_1 - \mu_2$ = Error term

Data Analysis and Results

Managers and non-managerial personnel of 113 staff were reached using a Google questionnaire of which 106 copies of questionnaires were completed and returned. Thus, the p-values of the hypothesis tested were critically examined so as to either reject or accept any hypothesis stated. The study rejected the null hypothesis has a p-value less the 0.05 (level of significance) value and the alternative hypothesis was accepted. The demographic variables were analysed using descriptive statistics, while the relationship between the independent and dependent variables was tested using multiple regression analysis. This result indicated that a reasonable portion of the participants' responses was in favour of the questionnaire items. The demographic analysis results are as shown below.

Table 1: Demographic Data of Respondents Analysis

Sex	Feedback	%
Male	64	60.4
Female	42	39.6
Total	106	100.00
Age	Feedback	%
18-35 Years	45	42.5
36-45 Years	38	35.9
46-55 Years	23	21.6
Above 55 Years	–	–
Total	106	100.00
Educational attainment	Feedback	%
Two Years Diploma	36	34.0
B.Sc. and HND	45	42.5
MSC and MBA	23	21.7
PhD	2	1.8
Total	106	100.00
Current Position in the Firm	Feedback	%
Managers	61	57.5
Non managerial personnel	45	42.5
Total	106	100.00

Source: Researcher's Desk (2025).

Table 1 above shows that 64(60.4%) were male while 42(39.6%) were female. This indicates that a lot of the respondents were male. Table 1 shows that the majority of the respondents were B.Sc. and HND holders and they represented 45% of the overall respondents, next are respondents with two years diploma qualifications 36(34.0%), and those with MSC and MBA represent 23(21.7%), while only 2(1.8%) of the respondents held PhD degree. Table 1 also shows the respondents age bracket, 45(42.5%) were between 18-35 years. 38(35.9%) were between 36-45 years, 23(21.6%) were between 46-55 years. The table reveals that the majority of the respondents are between the ages of 18-35. Lastly, the result from the table reveals that

managers were 61(57.5%) while non-managers were 45(42.5%). This showed that the majority of the respondents were managers.

Descriptive Analysis

Descriptive statistics were used to analyze the research questions, these descriptive statistics include Mean score and standard deviations. Likert’s 4- 4-point scale was adopted and the criteria for mean score acceptance for the items was 3.0 and higher. The dependent mean was focused on the Likert 4-point scale which is; $(1+2+3+4)/4 = 10/4 = 2.5$. The acceptable level states that the mean score should not go below 2.5. Any mean score that goes below 2.5 was rejected. Table 2 shows the variables’ univariate analysis as well as their mean score and standard deviation shown beside them on the tables, and standard deviation shown beside them on the tables.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Innovation and product development	106	1.00	4.00	2.8721	1.35937
Technological adoption and integration	106	1.00	4.00	3.1236	1.60684
Financial Health	106	1.00	4.00	3.3553	1.52977
Adaptability and Resilience	106	1.00	4.00	2.9627	1.48307
Valid N (listwise)	106				

Source: SPSS Output (2025).

The result in Table 2.; indicates that for all variables n=106, strongly disagree represents the minimum response level which is 1.00and 4.00 which represents strongly agree is the maximum. The mean scores of 2.8721 for innovation and product development, 3.1236 for Technological adoption and integration, 3.3553 for financial health, and 2.9627 for adaptability and resilienceshow that all the variables scored beyond the 2.5 criterion mean on the Likert 4-point scale. Nevertheless, these reveal that there is a positive response in relation to the items on technopreneurship and enabling firm growth in this study.

Test of Hypotheses

This section showed that the null hypotheses formed were tested to determine the influence the independent variables have on the dependent variables. Multiple regression coefficients were applied to achieve this.

Table 3: Model Summary

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change	Statistics			
1	.967a	.952	.942	.33778	R Square Change	F Change	df1	df2	Sig. F Change
					.942	1026.246	2	103	.000
a. Predictors: (Constant), IPD, TAD									
b. Criterion: Financial health									

Source: SPSS Output (2025).

The value 0.967 revealed that there is a reasonable level of prediction. The 0.942 value of “R Square” is part of the variance in the financial health that is explained by innovation and product development and technological adoption and integration. Thus, Table 3.; shows that the variation of 5.8% (100% – 94.2%) is caused by factors that are not the predictor involvement in this model. Thus, a 94.2% proportion of variance in financial health is explained by innovation and product development and technological adoption and integration.

Statistical Significance of the Predictor Variable

The statistical relevance of each of the predictor variables measures if the non-standardized or standardized coefficients were qualified as 0 in the population which means (for each of the coefficient, $H_0: \beta=0$ & $H_a: \beta \neq 0$). If $p < .05$, then the coefficients are said to be statistically relevantly different from 0. The relevance of these significant tests is to determine if each of the test is valid.

Table 4: Coefficients^a

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.065	.065		1.008	.316
	IPD	.660	.107	.615	6.037	.000
	TAI	.336	.077	.347	3.337	.000

a. Dependent Variable: Financial health

Source: SPSS Output (2025)

Seen that, t-value and the corresponding p-value are both in columns “t” and “Sig” respectively, the tests show that the standardized coefficient with beta value of 0.615 is for Innovation and product development when $p(.000) < 0.05$. This represents a positive strong effect of innovation and product development when $p(.000) < 0.05$ on financial health. Again, the .347 of technological adoption and integration has a positive as well as a moderate effect on financial health. What this means is that both independent variables significantly affect financial health.

Table 5: Model Summary

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change	Statistics			
1	.935 ^a	.937	.926	.41541	R Square Change	F Change	df1	df2	Sig. F Change
					.937	556.381	2	103	.000
a. Predictors: (Constant), IPD, TAD									
b. Criterion: Adaptability and resilience									

Source: SPSS Output (2025).

A positive prediction level is indicated by the value of 0.935. The "R Square" of 0.926, or the R² number, indicates the percentage of variance in adaptation and resilience that can be accounted for by innovation, product development, and technological adoption and integration. Thus, Table 5.; reveals 7.4% (100%-92.6%) of the variation is impacted by others than the independents included in the model. Thus, innovation, product creation, and the adoption and integration of technology account for 92.6% of the variance in resilience and adaptation.

Table 6: Coefficients^b

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.501	.093		5.224	.000
	IPD	.991	.155	.545	4.178	.000
	TAI	.374	.121	.373	2.700	.003

a. Dependent Variable: Adaptability and resilience

Source: SPSS Output (2025)

Seen that, t-value and corresponding p-value are in columns “t” and “sig” respectively, the test reveals that innovation and product development has a standardized coefficient with beta value of 0.545 when $p(.000) < 0.05$. This is relevant to the strong impact of innovation and product development when $p(.000) < 0.05$ on adaptability and resilience. Again, the .373 of technological adoption and integration is positive and has an average impact on adaptability and resilience. This indicates that the two independent variables significantly affect adaptability and resilience.

Discussion of Findings

The findings obtained from the analysis are elaborated to clearly understand the relationship that exists between the dimensions of technopreneurship and wellness of new ventures. These relationships are discussed under the following subheadings.

Relationship between Innovation and Product Development and Financial Health

Table 4.; reveals that there is a considerable positive association between innovation and product creation and financial health of new businesses in Delta State. Innovation and product development are pivotal to the financial health of new ventures in Delta State, Nigeria. Recent empirical studies underscore those innovative practices—particularly in product and process development—significantly enhance financial performance, market competitiveness, and operational efficiency among small and medium-sized enterprises (SMEs) in the region.

For instance, Okoro (2024) found a strong positive correlation between process innovation and financial performance among SMEs in the South-South geopolitical zone, which includes Delta State. The study reported a correlation coefficient of $r = 0.602$ ($p < 0.05$), indicating that process innovations substantially contribute to financial success. Similarly, Aginam (2024) demonstrated that financial innovations—such as mobile banking, crowdfunding, and point-of-sale systems—significantly improve organizational productivity in Delta State’s small-scale manufacturing firms. These technologies enhance cash flow management and expand access to capital, thereby strengthening financial resilience.

Moreover, research by Nnajofofor and Ugbomah (2024) highlighted those effective financial operational strategies, including robust internal controls and strategic planning, are essential for improving SME performance in Delta State. The study emphasized the need for tailored financial strategies to navigate the unique challenges faced by SMEs in the region.

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Collectively, these findings suggest that innovation—whether through new product development, process enhancements, or financial technologies—is a critical driver of financial health for new ventures in Delta State. By fostering innovation, startups can achieve greater profitability, sustainability, and competitiveness in the dynamic economic landscape of the region.

The connection between product development, innovation, resilience, and adaptability

Table 6 demonstrates the strong positive correlation between Delta State's new ventures' resilience and adaptation and innovation and product development. For new businesses in Delta State to become more resilient and adaptive, innovation and product development are essential. In an increasingly volatile economic landscape, startups that prioritize innovation are better equipped to respond to market shifts, overcome operational challenges, and sustain growth. The Delta State Government has implemented several initiatives to foster innovation among Micro, Small, and Medium Enterprises (MSMEs). Notably, the MORE Business Upscale Programme (MORE Biz-Up) provides financial grants and advanced business training to 2,000 MSMEs, aiming to stimulate economic growth and empower entrepreneurs to

navigate economic hardships.

Additionally, the state approved a ₦1 billion revolving fund managed by the Bank of Industry, offering low-interest loans to support business scalability and innovation; research underscores the significance of innovation in building organizational resilience. A study focusing on SMEs in Lagos State revealed a positive correlation between entrepreneurial innovativeness and organizational resilience, highlighting that innovative practices enable businesses to withstand and adapt to challenging conditions. While this study pertains to Lagos, the findings are applicable to Delta State's context, emphasizing the universal importance of innovation for SME resilience. Additionally, the Delta State Government has arranged workshops to strengthen entrepreneurs' resilience, acknowledging that the capacity to adjust and persevere in the face of adversity is essential to the sustainability of a business.

The connection between financial health and the adoption and integration of technology

Table 6 demonstrates the strong positive correlation between Delta State's new ventures' resilience and adaptation and innovation and product development. In Delta State, Nigeria, technological integration and adoption are essential to improving the financial stability of new businesses. By leveraging digital tools and innovative financial technologies, startups can streamline operations, improve efficiency, and access broader markets, thereby fostering profitability and sustainability.

A study by Aginam (2024) examined the impact of financial innovations—such as automated teller machines (ATMs), mobile banking, crowdfunding, and point-of-sale (POS) systems—on the organizational productivity of small-scale manufacturing firms in Delta State. The findings revealed that these technologies significantly enhance productivity, suggesting a positive correlation between technological integration and financial performance. Furthermore, research focusing on the South-South region of Nigeria, which includes Delta State, indicates that the adoption of disruptive technologies like mobile applications and digital marketing tools positively influences organizational performance. These technologies contribute to increased efficiency, market expansion, and overall business resilience.

In summary, the strategic adoption and integration of technology empower new ventures in Delta State to enhance their financial health. By embracing digital innovations, these businesses can improve operational efficiency, expand their market reach, and achieve sustainable growth in a competitive economic landscape.

Relationship between technological adoption and integration and adaptability and resilience

Table 6 demonstrates a strong positive correlation between Delta State's new ventures' resilience and flexibility and the adoption and integration of technology. In Delta State, Nigeria, integrating and adopting technology is essential to improving the resilience and adaptability of new businesses. These businesses can manage market turbulence, optimize processes, and stay competitive in a changing business climate by integrating digital tools and platforms.

A study focusing on Micro, Small, and Medium Enterprises (MSMEs) in Asaba, Delta State, revealed that digital literacy and e-commerce adoption significantly improve market positioning. This underscores the importance of digital knowledge in enabling businesses to adapt to changing market demands and consumer behaviors.

Furthermore, research on Nigerian SMEs highlights that emerging digital communication technologies (EDCTs) play a critical role in fostering resilience. These technologies facilitate connections with stakeholders, enable collaborations, diversify processes, and enhance supply

chain flexibility, thereby equipping businesses to withstand disruptions.

In the broader South-South region, which includes Delta State, the adoption of disruptive technologies such as mobile applications and digital marketing tools has been linked to improved organizational performance. These technologies contribute to increased efficiency, market expansion, and overall business resilience.

In summary, the strategic adoption and integration of technology empower new ventures in Delta State to be more adaptable and resilient. By embracing digital innovations, these businesses can better navigate challenges, seize new opportunities, and ensure sustainable growth in an ever-evolving economic landscape.

CONCLUDING REMARKS

Conclusion

Technopreneurship—defined as the fusion of technology and entrepreneurial innovation—has become a pivotal driver of wellness and sustainability for new ventures in Delta State. By integrating digital tools, fostering innovation, and promoting entrepreneurial orientation, technopreneurship enhances productivity, resilience, and economic empowerment among startups and small businesses. Entrepreneurial orientation, encompassing innovative strategies and marketing approaches, significantly improves the productivity of SMEs in Delta State. The research indicates that entrepreneurs' merger internship and marketing strategies determine the productivity of SMEs to a high extent, underscoring the importance of innovative practices in business performance.

Furthermore, the Delta State Government has initiated programs to embed technopreneurship within educational institutions. For instance, partnerships with state universities aim to train students in digital marketing, cybersecurity, and other ICT skills, preparing them to become job creators in the tech-driven economy. Additionally, the government's efforts to train entrepreneurs on resilience emphasize the role of technopreneurship in overcoming business challenges. Workshops organized by the state focus on equipping entrepreneurs with the skills to adapt and thrive amidst economic uncertainties.

In conclusion, technopreneurship serves as a catalyst for the wellness of new ventures in Delta State. By fostering innovation, enhancing digital competencies, and building resilience, technopreneurial initiatives contribute to the sustainable growth and success of emerging businesses in the region.

Recommendations

Revelation from the above findings and conclusion, the researcher drew the following recommendation to the following stakeholders.

- i. Establish more government and private-sector-funded tech hubs and incubation centres that offer hands-on training in digital tools, coding, cybersecurity, and tech-based entrepreneurship.
- ii. Improve internet connectivity, power supply, and access to affordable digital devices across urban and rural areas in Delta State.
- iii. Introduce low-interest loans, grants, and tax incentives specifically for tech-driven startups. Partnering with new ventures and local banks can make these resources more accessible to aspiring technopreneurs.
- iv. Collaborate with tertiary institutions to incorporate technopreneurship courses into entrepreneurship and business programs.
- v. Organize frequent get-togethers, hackathons, and tech fairs to link seasoned technopreneurs with fresh ideas.

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