# NEXUS BETWEEN INNOVATIONS, DIGITALIZATON AND SUSTAINABLE ENTREPRENEURSHIP IN SMES OF LAHORE, PAKISTAN

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## Abstract

Sustainable entrepreneurship is the newest strategy that connects conventional entrepreneurship with triple-bottom-line principles and has acquired governmental support since the UN adopted the "2030 Development Agenda". However, sustainable entrepreneurship is still relatively new and constantly changing, with an ongoing dispute about its definition, limitations, and drivers. A model was created using several estimating methodologies to investigate how SMEs and start-ups may implement long-term sustainability, innovations, and digitalization strategies. This study used data from the SMEs of Lahore through close-ended questionnaires. The primary data of 380 SMEs has been collected. Descriptive analysis was done to find out the results and findings. The findings reveal that companies recognize innovation, digitalization, and sustainability as crucial factors for their success. Investment in research and development remains insufficient. Sustainability is seen as essential for long-term success.

**Keywords:** Innovation, Research and Development**,** Digitalization

## 1. Introduction

Entrepreneurship is a process of vision, change and creation, requiring energy and passion to create new ideas and creative solutions. It goes beyond just business creation, encompassing seeking opportunities, taking risks and having the tenacity to push ideas through to reality. An entrepreneurial perspective can be developed individually, encompassing a unique perspective on entrepreneurship (Kuratko, 2011). Additionally, it is linked to solving the degradation of the environment and socioeconomic inequalities (Muñoz & Cohen, 2017). While entrepreneurship creates economic benefits and self-employment, it may also direct business sectors towards sustainable growth (Teran & Yepez, 2020). According to (Gedeon, 2010), entrepreneurship is in relation to change, developing new opportunities, innovations, risk, proprietorship, uncertainty, new project formation, characteristics, decision-making power, uncontrolled resources, development or something else. The terms "corporate entrepreneurship", "social entrepreneurship", "sustainable entrepreneurship", and "opportunity entrepreneurship", which were

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previously considered to be incompatible definitions, are currently accepted as describing complementary categories and subdomains of entrepreneurship. To put it more firmly, it is clear that analysts typically use the term entrepreneurship to indicate anything they choose.

Small and medium-sized businesses, or SMEs, play an important role in many economies, particularly in developing nations. It is impossible to adequately describe the importance of the SME sector to a nation's industrial development. In Pakistan, SMEs represent approximately 90 % of all enterprises and 80% of the non-agricultural labor population, creating nearly 40 % of the country's annual GDP (Inam et al., 2020).

Researchers developed the idea of sustainable entrepreneurship by connecting traditional entrepreneurship to environmental and societal issues (Teran-Yepez et al., 2020). At the same time, economic, social and environmental issues have continued to rise despite global economic growth. The depletion of natural resources and the negative effects of environmental degradation, such as flooding, biodiversity loss, and insufficient freshwater, have become serious issues (Greco & Jong, 2017). Furthermore, modern societies' stability and existence are in danger due to climate change. More people are living in poverty and dying of starvation. Gender inequalities, limited access to opportunities and resources and increasing wealth gap are all ongoing issues (Polum et al., 2017). These problems and others vary in severity depending on the situation; they have made sustainable entrepreneurship more important.

Pakistan faces economic issues, which include poverty, unemployment and inadequate infrastructure. Digitalization can help overcome these obstacles and accomplish performance improvement, sustainable growth, and innovation in value creation. This aligns with today’s world, as digitalization is viewed as a development engine. Digitalization has played a significant part in fostering economic growth in Pakistan. The capacity of new technologies to change several industries, such as online trading and financial services, increases the market for financial services and their presence (Malik et al., 2024).

In a progressively competitive market, innovation is an essential factor that enhances enterprises' productivity and competitive advantage. Innovation can be generated internally or acquired from external

sources. Innovation appears as product, process, and administrative or technical advancements, which can be developed through enterprises' resources and research endeavours in response to local demands. Adoption is seen as an innovation since it encompasses the products, processes, and administrative or technical advancements assimilated by firms from their rivals at local, national, or worldwide levels. Various skills, resources, and organizational environments are necessary to promote both the production and acceptance of innovation. The acceptance of innovation must be differentiated from its development since distinct talents, distinctive assets, and attitudes are necessary to foster each form of innovation (Kamal et al., 2016). This study picks up the opportunities and challenges for SMEs in combining further innovation, sustainability and digitalization to stay competitive and for the firm's growth. The opportunities and challenges may include limited resources, difficulty balancing growth and quality, lack of awareness or knowledge, technology restraints and trouble finding compatible employees. Therefore, it is important to examine the contribution of innovation and digitalization to the firm growth of small and medium-sized enterprises.

### 1.1: Research Questions

1. Can the characteristics of firms and entrepreneurs affect the use of sustainability, digitalization and innovation strategies?
2. How much does a firm's growth depend on sustainability, digitalization and innovation?

### 1.2: Research objectives

- To investigate the importance of the convergence of the digitalization, sustainable entrepreneurship, and innovation in small and medium size business, explaining the advantages and effects of this dynamic partnership.
- To explore how variables like digitalization, sustainability, and innovation affect a firm’s reported growth.

### 1.3: Hypotheses

**$H_1$:** There is a relationship between innovation, sustainability and digitalization that affects the better economic performance of the SMEs.

**$H_2$:** Firm growth and competitive advantages of the firm are dependent on sustainability, innovation and digitization.

## 2: Literature Review

This section aims to explore all the variables, dependent and independent variables, and their relationships. This section is significant because it provides previous theories and studies. Furthermore, it gives direction for future research and gives the whole meaning and definition of the study as well as its evaluation.

Small and medium-sized companies (SMEs) are crucial to the global financial system. The emergence of the COVID-19 pandemic has profoundly affected several economies, leading to considerable changes in different facets of SMEs. The acceleration of digital transformation has significantly reacted to the current epidemic. Using digital transformation to promote innovation may boost sustainability, improve productivity, and allow for customizing goods and services. The investigation included three key areas: the technical aspects of digitalization, sustainability aligned with the triple bottom line (including economic, environmental, and social issues), and the business characteristics unique to SMEs. This study analysis clarified the technology breakthroughs that assist SMEs in their quest for sustainability Advancement. This research consolidates information about the sustainability dimensions of the triple bottom line and the particular facets of Industry 4.0 technologies that have been used. This research significantly contributes to attaining sustainable development goals (SDGs) and provides essential insights for policymakers and SMEs aiming to transition their manufacturing processes regarding sustainability and digitalization (Raihan, 2024).

Denicolai et al., (2021) Internationalization, digitalization, and sustainability represent three key avenues for corporate success. The modern economy emphasizes digital transformation as a key catalyst for innovation and company revitalization, particularly for established small and medium-sized firms (SMEs). It examines the influence of Artificial Intelligence preparedness on global performance. It explores how sustainability preparedness influences the link between digitalization and internationalization. The preparedness for Artificial Intelligence significantly enhances the global achievement of SMEs. Furthermore, we see that digitalization and sustainability are positively correlated, yet they become conflicting trajectories for development when business expands internationally.

This research examines the influence of digitalization on technical innovations (both product and process) inside German small and

medium-sized firms (SMEs). The impact of digitalization on innovative activity varies across SMEs. Moreover, the consequences of innovation are limited and contingent upon the nature of digitalization and the kind of innovation. The research also examines the moderating influence of internal R&D efforts. The involvement in internal R&D diminishes the innovative impacts of digitalization. The influence of digitalization on innovations in products and processes is lacking in SMEs that engage in institutional R&D, but it is beneficial in non-R&D SMEs (Radicic & Petković, 2023).

The intersection of entrepreneurship, innovation, and sustainable development is a significant concern as society seeks solutions promoting sustainability. The study seeks to establish a relationship between sustainable business and responsible growth by analysing concepts in literature. It is a study of the member states of the European Union. The study findings indicate that sustainable entrepreneurship, seen through the lens of innovative SMEs, constitutes a component of the support system for sustainable development. Entrepreneurial ventures are widely acknowledged as catalysts for innovation and competition, crucial in attaining sustainable development (Kardos, 2012).

Fuerst, et al., (2023) The introduction and utilisation of digital technology is seen as a significant change for sustainability, with sustainable entrepreneurship being essential for addressing major social and environmental concerns. Our research aims to elucidate the significance of digital technologies in creating value, delivering value, and value capture within the business paradigms of sustainable enterprise. This is crucial for comprehending how digital technologies enhance sustainability. The current study asserts that digital technologies enhance socioeconomics in society, augment connectedness, and facilitate more stakeholder participation. Notwithstanding these assertions, this constitutes the most arduous aspect for businesses. Our primary results underscore the limitations of integrating digital technology into sustainable business structures.

Xiumei, et al., (2023) Investigating the complex dimensions of environmental regulation and the crucial influence of digitalization in fostering environmentally friendly innovation serves as an essential guide for advancing green growth. Nevertheless, it is not very interesting among small and medium-sized enterprises (SMEs). This

research investigates the influence of environmental rules on sustainable innovation inside small and medium-sized enterprises (SMEs) and the moderating influence of digitalization. Research using a panel of 871 SMEs from 2012 to 2020 indicates that command control and public-participative rules exhibit a U-shaped correlation with green innovation in SMEs, with digital technologies enhancing their impact. Market-incentive rules demonstrate an inverted U-shaped impact, wherein digitalization amplifies the advantages of pursuing green incentives. These observations underscore the significance of customised strategies that account for regulatory variability and the transformational capacity of digitalization in advancing green growth among SMEs.

Researchers assess the relationship between technological innovation, sustainable development, and its effect on small company success. The investigation used a sample of 204 small enterprises and hierarchical regression models. The survey findings indicate that technology innovation influences environmentally conscious owners, positively impacting the company's performance. Companies that effectively support environmental community initiatives and social welfare and fulfill their commercial obligations may achieve enhanced financial success. Innovative management and employee engagement in environmental protection initiatives promote corporate performance and bolster its reputation among stakeholders. This paper's results augment previous ideas and facilitate the implementation of sustainable practices in developed and developing nations (Chege & Wang, 2020).

Aslam et al. (2025) The environmentally friendly performance of medium-sized businesses (SMEs) is a significant worldwide concern, especially with global warming. This research investigates the contributions of green innovation, technical connections, and knowledge management to the sustainable performance of SMEs, analysing the mediating effect of strategic transformation and the moderating influence of government assistance. The results demonstrate that green innovation, technology connections, and knowledge management substantially improve the sustainable performance of SMEs. Strategic change was identified as a mediator in this connection, although government assistance did not have a significant moderating impact.

## 3: Theoretical Framework

This chapter is divided into several sections. This chapter studies the effect of the characteristics of entrepreneurs and the characteristics of a firm on the business success and firm growth of Small and medium enterprises. The characteristics of firms and entrepreneurs are found to be a significant factor in the success of small and medium enterprises.

### 3.1 Entrepreneur characteristics

In SMEs, entrepreneurial characteristics are important for the success of the company. Entrepreneurial characteristics include demographics, personal attributes, entrepreneurial orientation and entrepreneurial readiness. Numerous studies discovered that personal characteristics and traits, including self-esteem and perseverance, entrepreneurial orientation including autonomy, innovation, competitive aggressiveness, risk-taking, proactiveness and motivation, as well as demographic characteristics like age and gender, and individual background like work experience, education, had an impact on entrepreneurial intention and business (Aminul Islam et al., 2011).

#### 3.1.1 Demographic characteristics

According to (Reynolds et al., 2000), the most entrepreneurially involved people were between the ages of 25 and 44. According to the results of another study conducted in India (Sinha, 1996), successful business owners tended to be younger. According to (Mazzarol et al.,1999), women were less likely than men to start new businesses. Likewise (kolvereid, 1996) discovered that men were substantially more inclined to start their own businesses than women. People with previous business experience have much greater entrepreneurial goals than people without such experience.

#### 3.1.2 Individual characteristics

The owner or manager’s age, management expertise, education, industry experience, and social skills are examples of individual characteristics. According to a study (Charney and Libecap, 2000), entrepreneurship education creates innovative and independent people. Furthermore, they discovered that entrepreneurship education increases the possibility of starting new businesses and creating new goods.

#### 3.1.3 Personal traits

The study of the entrepreneur's personal traits is gaining interest, with some attempts to explain business success or failure in this context. Multiple origins, motivations, and goals among entrepreneurs are the

causes of diversity. Yusuf (1995) argues that personal qualities like self-confidence and perseverance have been proposed to influence the success of businesses. Perseverance means starting a new firm or business can be a more difficult and unpredictable process and entrepreneurs must deal with obstacles and disappointments (Muñoz, 2018).

Sustainable entrepreneurship is an extension of entrepreneurship and is dependent on economics and ecology (Gu & Wang, 2022). A sustainable entrepreneurial mindset may help balance organizational performance and corporate objectives with social satisfaction and environmental preservation. Also, the study revealed that individual characteristics of entrepreneurs are motivated to solve societal and environmental issues.

Firms run by sustainable entrepreneurs stand out from traditional ones because of their unique values and guiding principles. Their passion for protecting the environment and advancing social values is their main source of motivation (Koe & Majid, 2014). They demonstrate eco-friendly values through their entrepreneurial activities, and their individual values and lifestyles are linked to their sense of self-confidence.

### 3.1.4 Entrepreneurial orientation

Some investigators have claimed that entrepreneurial orientation drives success. According to (Lumpkin & Dess, 2021), entrepreneurial orientation focuses on five dimensions: risk-taking, autonomy, competitive aggressiveness, innovativeness and proactiveness.

## 3.2 Innovation, Sustainability and Digitalization

The factors that encourage sustainable entrepreneurs, the strategies they use in the early phases of the business process, and the methods in which sustainable goals might be pursued over time are not well understood (Hota, 2021). Three important societal issues affect sustainable entrepreneurship and change how companies and organizations operate. Innovation is the change of current and revolutionary technology, affecting customers' and staff's expectations and actions in a business environment. Understanding how entrepreneurs and managers handle digitization is critical (Jafari-Sadeghi et al., 2023).

According to (Patrick & Patrick, 2020), digitalization is the adoption or greater use of digital technology in daily activities, from personal to corporate contexts. New structures, attitudes, and practices that affect

exciting agreements and regulations are associated with digital transformation.

Adopting new technologies increases small businesses' competitiveness and generates value propositions considering social, economic, and environmental factors. This innovation may play various roles in company models and entrepreneurial operations by promoting value co-creation, impact complementarities, and sustainability. Digital entrepreneurship results from integrating start-ups and new company endeavours into business structure and operation using digital platforms, tools, and products. Therefore, digitization promotes financial access, opportunity, efficiency and sustainability while addressing socioeconomic, environmental and governance issues and catalyzing sustainable change (Schaltegger & Wagner, 2011).

### 3.3 Firm characteristics

Scholars have distinguished three causal processes that impact sustainable entrepreneurship initiatives: transformational (collective efforts altering macro-level institutions) action- formation (micro-level responding to macro-level influence), and situational (macro-level impacting micro-level). Micro-level features are influenced by macro-level elements from the political, social, cultural and environmental settings (Johnson & Schaltegger, 2019).

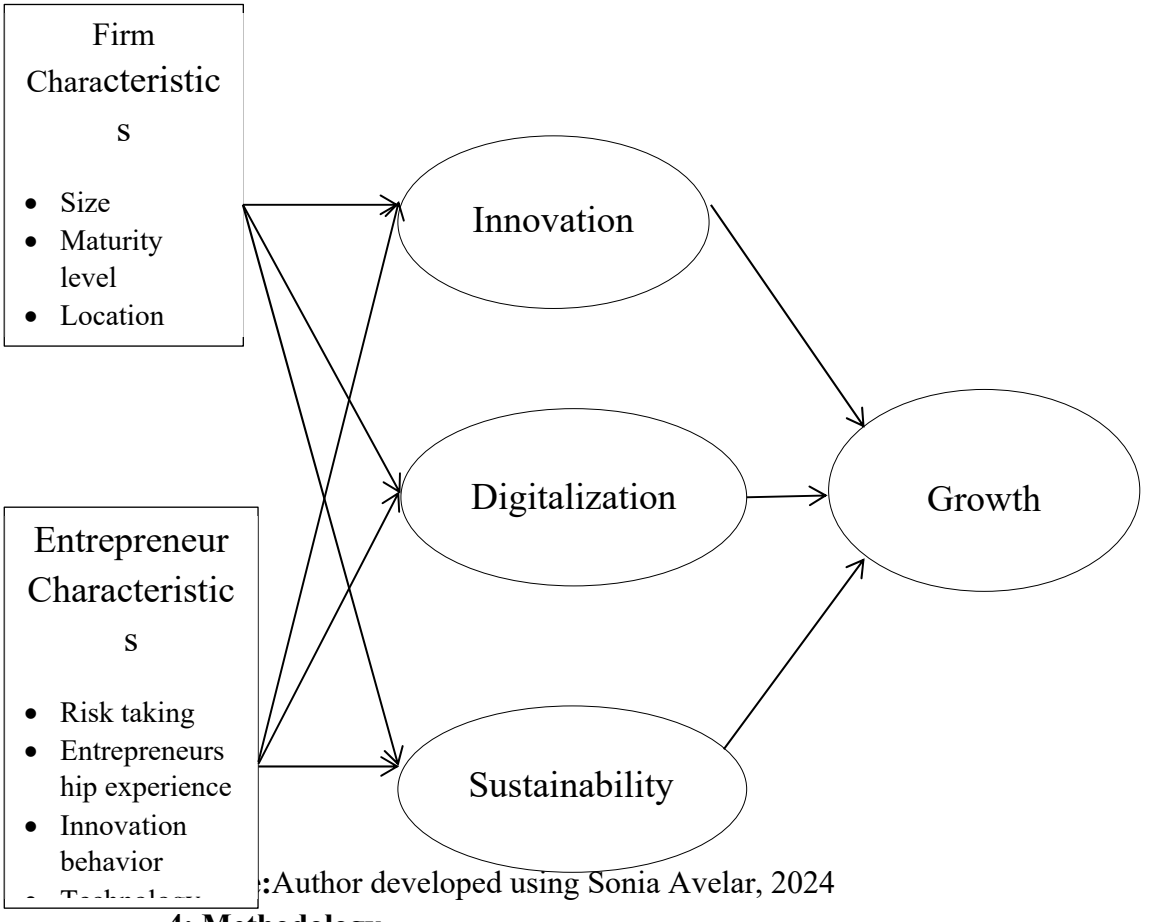
A firm’s size may impact its entrepreneurial orientation and, in return, its sustainable entrepreneurship. For example, larger companies have several advantages in sustainable entrepreneurship because of the availability of resources, such as human and financial ones, which allow them to fund larger, extensive sustainability projects. However, due to their adaptability and willingness to market trends, smaller firms may be creative and quick to implement sustainable strategies and technologies (Muñoz, 2017). A company’s approach to sustainable entrepreneurship is greatly influenced by its location, industry, organizational structure, market circumstances, and leadership’s dedication to sustainability. Finally, the effect of scale on sustainable entrepreneurship differs from one company to another. It is determined by several additional elements, including the maturity level, which is influenced by the experience and knowledge that have been collected.

### 3.4 Schematic Framework

Sustainability is a critical problem from both the strategic and operational levels. Businesses must integrate digital technology and

innovation into their plans to encourage sustainability and unlock substantial growth. This study suggested that a company's innovation, sustainability, and digitization levels indicate its entrepreneurial background, decision-makers viewpoints, and accessible resources. In this study, the impact of innovation, digitization, and sustainability were evaluated on the pathway between some firm characteristics and the attitudes and attributes of the owners and the firm's growth. The following pictures show the schematic framework of this study. Arrows show the relationship between exogenous (firm characteristics and entrepreneur characteristics) variables towards intermediate variables (innovation, sustainability and digitalization) and then the final endogenous dependent variable, firm growth.

**Figure 1: Effects of sustainable entrepreneurship, innovation and digitalization in SMEs**

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**4: Methodology**

This study uses a quantitative research design to investigate the nexus between innovation, digitalization, and sustainable entrepreneurship in Lahore's small and medium-sized enterprises (SMEs). The data collection process was designed to ensure a complete and representative understanding of SME owners' and managers' views on these factors and their effect on business growth and operational efficiency.

**4.1 Research design**

This is a quantitative research design. This study examines the relationship between independent and dependent variables. A structured questionnaire has been used as the primary data collection technique to find out how SME owners and managers perceive these factors' effects on efficiency and business growth. The survey included multiple-choice and Likert-scale questions.

**4.2 Sampling procedure**

The researcher used a random sampling and collected data from 380 SMEs in this study. Random sampling is used to collect data from 380 SMEs from the district of Lahore. The total number of estimated SMEs in the district is 34000. We are using a 95 percent confidence level and 50 % population. Proportion in the sampling, using Cochran's (1971) and Singh and Chaudhury's (1985) sampling size formula, we have 380 sample sizes for SMEs.

**4.2.1 Formula for Base Sample Size**

$$n = \frac{z^2\,(p)(1-p)}{e^2}$$

Where:

- **Z** = Z value (for 95% confidence level, Z=1.96)
- **p** = Estimated proportion of population (assumed to be 0.5 for maximum variability)
- **e** = Margin of error (0.05 or 5%)

Plug in the values:

$$n = \frac{1.96^2\,(0.5)(1-0.5)}{0.05^2}$$

$$n = 384.16$$

Now that we have this base sample size, we can adjust it for our finite population using the finite population correction as following;

$$\mathrm{n}^{\mathrm{adjusted}} = \frac{\mathrm{n}}{1 + \mathrm{n} - 1/\mathrm{N}}$$

Here:

$n^{adjusted}$ = Adjusted sample size For finite population

n=384 (base sample size)

N=34000 (total population size)

$n^{adjusted} = \frac{384}{1+(384-1)/34000} = 384$

With a comprehensive population size of 34000 SMEs, the minimum sample size is adjusted to 384.

Source: https://www.calculator.net/sample-size-calculator.html?type=1&cl=95&ci=5&pp=50&ps=34000&x=Calculate

**4.3 Data Collection Procedure**

In order to collect data, we used a combination of methods to make the study accessible to respondents having a variety of digital literacy levels. The following methods were used for the collection of data.

**4.3.1 Online Google Form**

The majority of the data was collected using an online survey accompanied by Google Forms. To efficiently reach SME owners and managers alike, email, social media platforms, and professional networks were used to distribute digital questionnaires.

**4.3.2 Printed Hard Copies**

Paper copies of the questionnaire were used to reach entrepreneurs and managers who were unfamiliar with or unaccustomed to digital surveys or online platforms. Data obtained from even those who experienced obvious technological barriers prevented the exclusion of any party.

**4.3.3 Assisted Data Collection**

Researchers directly assisted respondents with educational limitations or difficulty comprehending the questionnaire. In order to retain the integrity and objectivity of the data, they intervened when necessary to facilitate and give particular answers.

**4.4 Data analysis**

For subsequent analysis, statistical software like SPSS was used to enter the collected data. In order to summarize the responses, descriptive statistics with frequency distribution and percentages, multiple charts, and contingency tables cross-tabulations were utilized. Cross tabulation are simply data tables that present the result of the entire group of the respondents as well as results from the subgroups of survey respondents. Cross tabulation is also called as contingency table. A more in-depth statistical analysis was performed to identify correlations between

innovation, digitization, and sustainability and their impact on SME performance.

**4.5 Field survey**

Data were collected from the Lahore region from the first of August to the thirtieth of September. The data was collected from the SMEs of Lahore using a questionnaire based on Google Foam and physical formats. The questionnaire was structured and close-ended. In a challenging situation, some companies or SMEs do not want to disclose information about sustainability, digitalization, and innovation. They felt uncomfortable and frightened to share the information. The researcher was dedicated to explaining his research's purpose and showed the professor's recommended certificate.

**4.6 Questionnaire design**

Primary data is gathered through a researcher-administered questionnaire. The questionnaire is designed to consider the connections between variables like innovation, digitalization, and sustainability and their effect on firm growth. The socio-economic profile, demographic background, and firm characteristics are also added to the questionnaire. The questionnaire will include categorical list questions and structured questions as well.

**4.7 Likert-scale method**

As the data was collected through the questionnaire method, the questions included in the study were ordinal and nominal, while most were based on a Likert scale.

**5: Results And Interpretation**

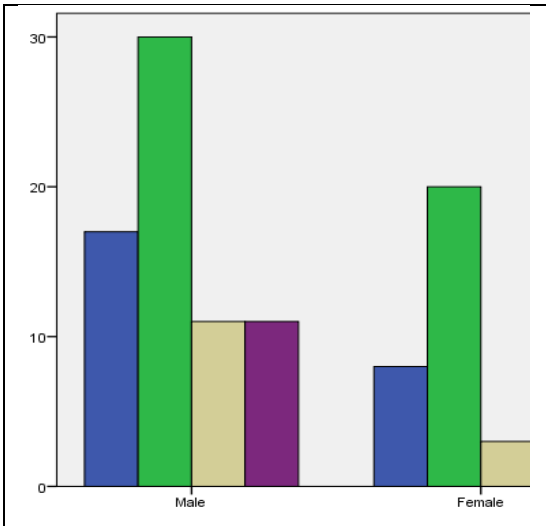
In this study, the descriptive analysis technique was used to find the result of the variables in which we used cross tables, and for illustration, we used bar charts. It gives the result of variables like innovation, digitalization, and sustainable entrepreneurship and the impact of these variables on firm growth and performance. In this study, the Likert scale method was used and coded with 1 to 5 numbers to disagree to strongly agree strongly. Some questions are ordinal, while some are nominal. Secondly, the data are not normally distributed.

In this study, firm growth is based on the independent variables; in this section, researchers explain that the firm growth depends on variables such as the socioeconomic and demographic background of the entrepreneur, firm characteristics, and predictor or intermediate variables like innovation, digitalization, and sustainability. For instance,

researchers hypothesized that the demographic and socioeconomic characteristics of entrepreneurs and firm characteristics influence the firm growth. After collecting the data, the researcher ran several SPSS software analyses and found the result.

Figure 2 shows the two main categories: Male and Female. 69% are male, and 31% are female. There are more male respondents than female respondents. Each gender category is further divided into age groups. The highest value is 30 % male and 20% female in the age group of 30-40, meaning most respondents fall into the 30 40 year age group. The 18-30 age group has 17 males and 8 Females; the 50+ age group only has 11% males. This study shows that most of the respondents are young.

**Figure 2: Gender profile with age**




| | | Gender | |
|---|---|---|---|
| | | Male count | Female count |
| Age | 18-30 years | 17% | 8% |
| | 30-40 years | 30% | 20 % |
| | 40-50 years | 11% | 3 % |
| | 50 + | 11 % | 0 |

Source: Author's own contributions

According to the firm, 52% of respondents are from the manufacturing and retail industry, 16 % are from the education sector, 17% are related to the information technology sector, and 11% are from other industries. Table 1 shows the innovation activities like the company investing in R&D, launching new products and services, sufficient resources, and employee encouragement. This survey result shows the strong effect of the role of innovation in business success. 95% of respondents, 21% agree, and 74% strongly agree that innovation plays an important role in business success, and 5 % remain neutral. This indicated that most employees and owners accept the importance of innovation in long-term growth and improving efficiency. As companies do not show their annual turnover to measure their growth and efficiency growth can be assumed with this survey questions.

**Table 1: Innovation**

| **Innovation** | **Disagree (%)** | **Neutral (%)** | **Agree (%)** | **Strongly Agree (%)** |
|---|---|---|---|---|
| Success factor | 0 % | 5 % | 21 % | 74 % |
| Investing in Research &Development | 49 % | 0% | 25 % | 26 % |
| Launch of New product and service | 27 % | 0% | 73 % | 0% |
| Sufficient resources for innovation | 16 % | 0 % | 58 % | 26 % |
| Encouragement of employees for innovation | 12 % | 0 % | 88 % | 0 % |

Source: Author's own calculations

Innovation is seen as an important element in business growth, but there is a notable divide in opinion when it comes to investing in research and development. While 51 % agree or strongly agree, nearly 49 % of respondents disagree that investing in research and development has a main impact on company growth. This shows that some respondents believe the positive effect of investing in R&D, while half of the other participants notice such investment as either poorly managed or too costly.

Another important factor is the impact of launching new products and services that improve the market position, which is also a critical part of interest. According to the survey, most respondents see this positively:

73 % agree that launching new products and services has strengthened the company's position in the market. However, 27 % disagree. This suggests that most people see the benefit of launching new products and services, while other respondents feel that such struggles have not expected market growth.

An additional critical element in promoting innovation is the equal distribution of financial resources. 84 % of respondents believe that the company provides sufficient resources for innovation, with 26 % strongly agreeing, 58% agreeing, and 16 % still disagreeing.

Lastly, encouraging employees to innovate also plays an important role in creating and thinking about a better work environment. According to the study, 88 % of respondents agree that they encourage their employees to come up with innovative ideas. However, 12% disagree. This shows that most organizations value employees and provide opportunities for generating ideas and experiments.

Table 1.1 shows the descriptive statistics of innovation. The descriptive statistics enhance the understanding of the survey responses by revealing insights into the range, mean, standard deviation, and variance. These statistical measures enable an analysis of consistency, dispersion, and overall trends in respondents' perceptions of innovation in their organizations.

**Table 1.1: Descriptive statistics of innovation**

| | **Range** | **Min** | **Max** | **Mean** | **Std. Deviation** | **Variance** |
|---|---|---|---|---|---|---|
| Success factor | 2 | 3 | **Max** | 4.69 | .563 | .317 |
| Investing in R & D | 3 | 2 | 5 | 3.28 | 1.311 | 1.719 |
| New product and service | 2 | 2 | 5 | 3.46 | .892 | .796 |
| Sufficient resources | 3 | 2 | 4 | 3.94 | .952 | .905 |
| encourages employees | 2 | 2 | 5 | 3.76 | .653 | .427 |
| | | | 4 | | | |

Source: Author’s own contributions

Below is provided the cross tabulation between innovation and its various outcomes. There is a strong positive relationship between recognizing innovation as factor in a company's growth and perceiving it as a major success factor in business overall. 92.9 % agreed that innovation is a main factor behind their company's growth and 7.1 % disagreed with this statement. Those who disagreed with this statement still acknowledged its importance for business success in overall.

**Table 5.1.2: Growth vs success factor**

| | | | Success factor | | | Total |
|---|---|---|---|---|---|---|
| | | | Neutral | Agree | strongly agree | |
| Growth | disagree | Count | 0 | 4 | 23 | 27 |
| | | % of Total | 0.0% | 1.1% | 6.1% | 7.1% |
| | Agree | Count | 20 | 77 | 256 | 353 |
| | | % of Total | 5.3% | 20.3% | 67.4% | 92.9% |
| Total | | Count | 20 | 81 | 279 | 380 |
| | | % of Total | 5.3% | 21.3% | 73.4% | 100.0% |

Source: Author's own contributions

Table 1.3 reports the nexus between innovation and growth.

**Table 1.3: Growth vs investing in research and development**

| | | | Investing in Research and Development | | | Total |
|---|---|---|---|---|---|---|
| | | | disagree | Agree | strongly agree | |
| Growth | disagree | Count | 11 | 4 | 12 | 27 |
| | | % of Total | 2.9% | 1.1% | 3.2% | 7.1% |
| | Agree | Count | 178 | 90 | 85 | 353 |
| | | % of Total | 46.8% | 23.7% | 22.4% | 92.9% |
| Total | | Count | 189 | 94 | 97 | 380 |
| | | % of Total | 49.7% | 24.7% | 25.5% | 100.0% |

Source: Author's own contributions

This cross-tab shows the relationship between innovation as growth factor and perceived impact of investment in Research and Development on business growth. 92 % acknowledged the importance

of innovation, surprisingly 46.8 % disagreed that investing in R&D contributes to growth.

On the other hand 7.1 % respondents who disagreed that innovation contributed to the company's growth, more than half 59% acknowledged the impact of R&D. Overall; this cross-tab shows a complex but very informative relationship between growth and the role of formal R&D investment.

**Table 1.4: Growth vs launch of new product and services**

| | | | Launch of new product and services | | |
|---|---|---|---|---|---|
| | | | disagree | Agree | Total |
| Growth | disagree | Count | 3 | 24 | 27 |
| | | % of Total | 0.8% | 6.3% | 7.1% |
| | Agree | Count | 97 | 256 | 353 |
| | | % of Total | 25.5% | 67.4% | 92.9% |
| Total | | Count | 100 | 280 | 380 |
| | | % of Total | 26.3% | 73.7% | 100.0% |

Source: Author's own contributions

Table 1.4 shows the strong alignment between innovation and introduction of new products and services. Most respondents believe that innovation especially when it takes the launch of new product and services enhanced the market position.

**Table 1.5: Growth vs sufficient resources**

| | | | Sufficient resources | | | |
|---|---|---|---|---|---|---|
| | | | disagree | Agree | strongly agree | Total |
| Growth | disagree | Count | 0 | 11 | 16 | 27 |
| | | % of Total | 0.0% | 2.9% | 4.2% | 7.1% |
| | Agree | Count | 61 | 209 | 83 | 353 |
| | | % of Total | 16.1% | 55.0% | 21.8% | 92.9% |
| Total | | Count | 61 | 220 | 99 | 380 |
| | | % of Total | 16.1% | 57.9% | 26.1% | 100.0% |

Source: Author's own contributions

Table 1.5 shows that most companies recognize innovation as growth driver, but not all believe they are allocating enough resources to support it. On the other hand, some respondents from companies that do not credit innovation for their growth still acknowledged the availability of innovation resources, implying that such resources might be underutilized with strategic goals. Overall, the data underscores the

need for SMEs to not only recognize the value of innovation but also to back it with consistent and adequate resources to realize its full impact.

**Table 1.6: Growth vs Encouragement for employees for innovation**

| | | | Encouragement for employees for innovation | | |
|---|---|---|---|---|---|
| | | | disagree | Agree | Total |
| Growth | disagree | Count | 4 | 23 | 27 |
| | | % of Total | 1.1% | 6.1% | 7.1% |
| | Agree | Count | 41 | 312 | 353 |
| | | % of Total | 10.8% | 82.1% | 92.9% |
| Total | | Count | 45 | 335 | 380 |
| | | % of Total | 11.8% | 88.2% | 100.0% |

Source: Author's own contributions

This crosstab results in Table 1.6 show that 92.3% agreed that innovation has a important factor in company growth. And among these 82.1% also agreed that their company encourages employees to create and implement innovative ideas. However, 41 responses disagreed. On the other hand, 7.1 % who disagreed that innovation contributed to growth 6.1% still acknowledged employee's encouragement. This shows a strong alignment between innovation and a supportive internal innovation culture.

One of the main factors in entrepreneur characteristics is the age of the entrepreneur. This study also shows that most of the entrepreneurs are young. Table 1.7 shows that most respondents, 93 %, agree that innovation is the primary or main factor behind the company's growth. This table also shows how people with different levels of education agree that innovation is important to a company's growth.

**Table 1.7: Innovation is the primary factor of company growth in term of age and education**

| | | Disagree | Agree | Total |
|---|---|---|---|---|
| Age | 18-30 years | 2 % | 23 % | 25 % |
| | 30-40 years | 4 % | 46 % | 50 % |
| | 40-50 years | 0 % | 14 % | 14 % |
| | 50+ | 1 % | 10 % | 11 % |
| Total | | 7 % | 93 % | 100% |
| Education | Matric | 0 % | 14% | 14 % |

| | | | | |
|---|---|---|---|---|
| | Intermediate | 0 % | 11 % | 11 % |
| | Bachelors | 4 % | 29 % | 33 % |
| | Master | 3 % | 39 % | 42 % |
| Total | | 7 % | 93 % | 100 % |

Source: Author's own contributions

Now in Table 2 the analysis is provided for digitalization. The data shows a solid consensus that digital transformation and technology have enhanced the company's efficiency. 12 % of respondents agree, while 64 % strongly agree with this statement. This data reflects that most employees view digital tools as beneficial, cutting down on manual labor and boosting productivity. However, 24 % of employees still disagree with this statement, suggesting that some places may not be experiencing the full advantages of digitalization.

**Table 2: Digitalization**

| **Digitalization** | **Disagree (%)** | **Neutral (%)** | **Agree (%)** | **Strongly Agree (%)** |
|---|---|---|---|---|
| Digitalization improved efficiency | 24 % | 0 % | 12 % | 64% |
| Improved customer interactions | 10 % | 10% | 59 % | 21% |
| Company is highly digitalized | 3 % | 47% | 24 % | 26% |
| Increase in digital spending | 24 % | 0 % | 76 % | 0 % |
| Digitalization is critical for growth | 2 % | 9 % | 41 % | 48 % |

Source: Author's own contributions

Most participants (59 % agree and 21 % strongly agree) think digitalization has improved the company's capacity to interact and connect with customers. Digital platforms like online customer service, social networking, and digital marketing improve customer connections. Only 10 % disagree, and 10% remain neutral about this statement.

When evaluating the company's overall level of digitalization, the responses reveal a more divided viewpoint. Nearly 47 % of responses are neutral, 50 % agree and strongly agree that their organization is digitalized, and 3 % disagree with the statement. This shows that digital transformation activities may be unevenly distributed across

departments and may reflect employees' uncertainty about understanding a highly digitalized firm.

As we see, there are mixed responses about the company's level of digitalization, so there is a need for some investment. Looking at the future digital plan, 76 % of employees agree that the company has to increase its spending on digitalization. However, 24 % of employees disagree, suggesting that they probably do not know about the company plan or think the exciting level of digitalization is enough.

Lastly, about the importance of digitalization for the company's growth. 89 % of respondents (41 % agree and 48 % strongly agree) believed digitalization is important for the company's growth. Only 2% disagree, and 9% are neutral and support the idea that digitalization is an essential strategy for long-term success.

According to the descriptive study, the company generally supports digitization. It shows the overall min, max, mean, standard deviation, and variance value of each response.

**Table 2.1: Growth vs digitization improved efficiency**

| | | | Digitalization improved efficiency | | | |
|---|---|---|---|---|---|---|
| | | | disagree | Agree | strongly agree | Total |
| Growth | disagree | Count | 8 | 73 | 4 | 85 |
| | | % of Total | 2.1% | 19.2% | 1.1% | 22.4% |
| | Agree | Count | 4 | 282 | 9 | 295 |
| | | % of Total | 1.1% | 74.2% | 2.4% | 77.6% |
| Total | | Count | 12 | 355 | 13 | 380 |
| | | % of Total | 3.2% | 93.4% | 3.4% | 100.0% |

Source: Author's own contributions

The crosstabs provided in Table 2.1 shows a strong association between the adoptions of digital technologies that effect growth and improved operational efficiency within firms. Among respondents who agreed that digital adoption positively impacts firm growth, the majority 72.4% also agreed that it enhanced their company efficiency. Even within the group that disagreed about digital adoption influence growth, a significant portion still acknowledged improvement in efficiency. Overall 93.4% of all respondents agreed that technology implementation has improved operational efficiency.

**Table 2.2: Growth vs improved customer interaction**

| | Improved customer interaction | Total |
|---|---|---|

| | | | disagree | Neutral | Agree | strongly agree | |
|---|---|---|---|---|---|---|---|
| Growth | disagree | Count | 16 | 4 | 54 | 11 | 85 |
| | | % of Total | 4.2% | 1.1% | 14.2% | 2.9% | 22.4% |
| | Agree | Count | 24 | 33 | 172 | 66 | 295 |
| | | % of Total | 6.3% | 8.7% | 45.3% | 17.4% | 77.6% |
| Total | | Count | 40 | 37 | 226 | 77 | 380 |
| | | % of Total | 10.5% | 9.7% | 59.5% | 20.3% | 100.0% |

Source: Author's own contributions

This shows a positive relationship between the adoptions of digital technologies and enhances customer interaction. Among those who agreed that digitalization supports firm growth, a large majority 45.3% also agreed that it has improved their company's ability to connect with customers, with an additional 17.4 % strongly agreeing. Among those who disagree with the impact of digital adoption on growth, 14.2 still acknowledged improved customer interaction. Overall 79.8% of all respondents agreed that digital tools have enhanced customer connectivity.

**Table 2.3: Growth vs our company is highly digitalize**

| | | | Our company is highly digitalize | | | | |
|---|---|---|---|---|---|---|---|
| | | | disagree | Neutral | Agree | strongly agree | Total |
| Growth | disagree | Count | 0 | 32 | 22 | 31 | 85 |
| | | % of Total | 0.0% | 8.4% | 5.8% | 8.2% | 22.4% |
| | Agree | Count | 12 | 146 | 69 | 68 | 295 |
| | | % of Total | 3.2% | 38.4% | 18.2% | 17.9% | 77.6% |
| Total | | Count | 12 | 178 | 91 | 99 | 380 |
| | | % of Total | 3.2% | 46.8% | 23.9% | 26.1% | 100.0 % |

Source: Author's own contributions

Table 2.3 demonstrates meaningful relationship between perceptions of digital technology adoption and the extent of a company's digitalization. Among respondents who agreed that digital adoption positively impacts firm growth, a significant portion 38.4% remained neutral about their company being highly digitalized, while 18.2 % agreed and 17.9

strongly agreed. Overall, 49.9% of all respondents agreed or strongly agreed that their company is highly digitalized.

**Table 2.4: Growth vs increase in digital spending**

| | | | Increase in digital spending | | |
|---|---|---|---|---|---|
| | | | disagree | Agree | Total |
| Growth | disagree | Count | 27 | 58 | 85 |
| | | % of Total | 7.1% | 15.3% | 22.4% |
| | Agree | Count | 62 | 233 | 295 |
| | | % of Total | 16.3% | 61.3% | 77.6% |
| Total | | Count | 89 | 291 | 380 |
| | | % of Total | 23.4% | 76.6% | 100.0% |

Source: Author's own contributions

Table 2.4 shows a strong relationship between the belief in digital technology's impact on firm growth and future investment intentions. Overall 76.6% of all respondents confirmed plans to invest more in digitalization. These findings suggest that most firms view digital transformation as a strategic priority moving forward, especially those already convinced of its growth enhancing potential.

**Table 2.5: Growth vs digitalization is critical**

| | | | Digitalization is critical | | | | |
|---|---|---|---|---|---|---|---|
| | | | disagree | Neutral | Agree | strongly agree | Total |
| Growth | disagree | Count | 4 | 8 | 34 | 39 | 85 |
| | | % of Total | 1.1% | 2.1% | 8.9% | 10.3% | 22.4 % |
| | Agree | Count | 3 | 25 | 121 | 146 | 295 |
| | | % of Total | 0.8% | 6.6% | 31.8% | 38.4% | 77.6 % |
| Total | | Count | 7 | 33 | 155 | 185 | 380 |
| | | % of Total | 1.8% | 8.7% | 40.8% | 48.7% | 100.0 % |

Source: Author's own contributions

Table 2.5 highlights a strong association between the belief in digital technology's impact on firm growth and the recognition of digitalization as critical for business success. 89.5% of all respondents either agreed

or strongly agreed that digitalization is essential for growth. These finding suggest that while opinion may vary on the measurable growth outcomes, the vast majority of firms recognize digitalization as a strategic necessity for future development and competitiveness.

**Table 2.6: Digitalization effect on firm growth in term of age and education**

| | | Disagree | Agree | Total |
|---|---|---|---|---|
| Age | 18-30 years | 8 % | 17 % | 25 % |
| | 30-40 years | 13 % | 37 % | 50 % |
| | 40-50 years | 1% | 13 % | 14 % |
| | 50+ | 0 % | 11 % | 11 % |
| Total | | 22 % | 78 % | 100% |
| Education | Matric | 0 % | 14% | 14 % |
| | Intermediate | 1 % | 10 % | 11 % |
| | Bachelors | 8 % | 25 % | 33 % |
| | Master | 13 % | 29 % | 42 % |
| Total | | 22 % | 78 % | 100 % |

Source: Author's own contributions

Table 2.6 shows how the age factor of employees affects digitalization. According to the survey, 78 % of respondents agree that implementing digital technology has positively affected the firm growth, and only 22 % of employees disagree. Younger employees (18-30) have more divided opinions about digitalization 8 % out of 17 disagree. As employees get older, they gain more experience about the benefits of digitalization. Other age groups show that almost everyone agrees that digitalization has positively impacted firm growth. According to the research, digitalization is generally accepted by all age groups. This table also shows how the education of the employees affects digitalization.

Now in this section the nexus is developed with respect to sustainability. Sustainability is critical in business planning, impacting long-term profitably to environmental effect. The survey shows how employees or entrepreneurs see organizational sustainability efforts.

**Table 3: Sustainability**

| **Sustainability** | **Disagree (%)** | **Neutral (%)** | **Agree (%)** | **Strongly Agree (%)** |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Core value | 49 % | 0 % | 51 % | 0% |
| Sustainability policy | 19 % | 0% | 81 % | 0 % |
| Employee engagement | 11 % | 0% | 89 % | 0% |
| Long term strategy | 17 % | 0 % | 83 % | 0 % |
| Business success | 1 % | 7 % | 50 % | 42 % |

Source: Author's own contributions

Only 51 % of employees agree that environmental sustainability is a primary business value, while 49 % disagree. This almost equal distribution shows that while some people see sustainability as a crucial part of the business goal, others do not. This division could result from a variance in departmental focus or a lack of noticeable sustainability measures.

On the other hand, 81% of employees believe the company has policies to balance sustainability with products and services. However, the 19 % disagreement indicates that these programs are poorly explained or their efficiency is being questioned.

Encouraging employee participation in sustainability is a strong aspect of the organization's strategy. 89% of respondents believed that they are encouraged to participate in sustainability efforts. The 11 % disagreement, however, raised the possibility that some employees are ignorant of opportunities to participate or feel excluded.

Similarly, 83 % of employees agree that having a long-term strategy is important for company sustainability. Regarding this strong consensus, the 17 % who disagree may feel that sustainability should not be the primary priority in future planning or that short-term objectives are enough.

Finally, the survey results strongly show that sustainability is crucial for business success. 92% of respondents believe that sustainability is very important for business success, with 42% strongly agreeing and 50 % agreeing. Only 7 % remain neutral, and 1 % disagree. This survey shows a chance for the business to use its sustainability initiatives as a distinguishing feature, drawing in environmentally conscious partners, investors, and consumers.

**Table 3.1: Descriptive analysis of Sustainability**

| | **Range** | **Min** | **Max** | **Mean** | **Std. Dev** | **Variance** |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Core value | 2 | 2 | 4 | 3.02 | 1.005 | 1.01 |
| Sustainability policy | 2 | 2 | 4 | 3.62 | .789 | .622 |
| Employee engagement | 2 | 2 | 4 | 3.78 | .629 | .396 |
| Long term strategy | 2 | 2 | 4 | 3.66 | .755 | .570 |
| Business success | 3 | 2 | 5 | 4.33 | .652 | .425 |

Source: Author's own contributions

According to the descriptive statistics in Table 3.1, the company has overall great support for digitization. It shows the overall min, max, mean, std deviation, and variance value of each response.

**Table 3.2: Growth vs core value**

| | | | Core value | | Total |
|---|---|---|---|---|---|
| | | | disagree | Agree | |
| Growth | disagree | Count | 4 | 19 | 23 |
| | | % of Total | 1.1% | 5.0% | 6.1% |
| | Agree | Count | 181 | 176 | 357 |
| | | % of Total | 47.6% | 46.3% | 93.9% |
| Total | | Count | 185 | 195 | 380 |
| | | % of Total | 48.7% | 51.3% | 100.0% |

Source: Author's own contributions

In Table 3.2, the data shows that 93.9% of respondents agreed sustainability practices improved their firms market position, with strong support from both firms that do and do not consider environmental sustainability a core strategy. This highlights that sustainable practices are widely viewed as beneficial for market competitiveness, regardless of strategic alignment.

**Table 3.3: Growth vs sustainability policy**

| | | | Sustainability policy | | Total |
|---|---|---|---|---|---|
| | | | disagree | Agree | |
| Growth | disagree | Count | 4 | 19 | 23 |
| | | % of Total | 1.1% | 5.0% | 6.1% |
| | Agree | Count | 66 | 291 | 357 |
| | | % of Total | 17.4% | 76.6% | 93.9% |
| Total | | Count | 70 | 310 | 380 |

| | | | | |
|---|---|---|---|---|
| | % of Total | 18.4% | 81.6% | 100.0% |

Source: Author's own contributions

Table 3.3 reveals that 93.9% of respondents agreed sustainability practices enhances their firm's market position, with 76.6 % coming from firms that have policy for reconciling products or services. This suggests that structured policies significantly support market performance improvements.

**Table 3.4: Growth vs Employees engagement**

| | | | Employee Engagement | | |
|---|---|---|---|---|---|
| | | | disagree | Agree | Total |
| Growth | disagree | Count | 7 | 16 | 23 |
| | | % of Total | 1.8% | 4.2% | 6.1% |
| | Agree | Count | 33 | 324 | 357 |
| | | % of Total | 8.7% | 85.3% | 93.9% |
| Total | | Count | 40 | 340 | 380 |
| | | % of Total | 10.5% | 89.5% | 100.0% |

Source: Author's own contributions

From Table 3.4, the majority of respondents, 93.9% agreed that sustainability practices have improved firm growth, with 85.3% from companies that actively encourage employee involvement in sustainability. This indicates a strong link between employee engagement in sustainability and perceived business growth benefits.

**Table 3.5: Growth vs Long term strategy**

| | | | Long term strategy | | |
|---|---|---|---|---|---|
| | | | disagree | Agree | Total |
| Growth | disagree | Count | 7 | 16 | 23 |
| | | % of Total | 1.8% | 4.2% | 6.1% |
| | Agree | Count | 56 | 301 | 357 |
| | | % of Total | 14.7% | 79.2% | 93.9% |
| Total | | Count | 63 | 317 | 380 |
| | | % of Total | 16.6% | 83.4% | 100.0% |

Source: Author's own contributions

From the Tabel 3.5, data indicated that 93.9% of respondents agreed sustainability practices have contributed to firm growth, with significant portion 79.2% coming from firms that recognize the importance of having a long-term sustainability strategy. This suggests that long-term planning plays a critical role in maximizing the benefits of

sustainability. Firms with forward looking strategies are more likely to translate sustainability efforts into tangible growth outcomes.

**Table 3.6: Growth vs business success**

| | | | Business success | | | | |
|---|---|---|---|---|---|---|---|
| | | | disagree | Neutral | Agree | strongly agree | Total |
| Growth | disagree | Count | 0 | 4 | 7 | 12 | 23 |
| | | % of Total | 0.0% | 1.1% | 1.8% | 3.2% | 6.1% |
| | Agree | Count | 4 | 23 | 178 | 152 | 357 |
| | | % of Total | 1.1% | 6.1% | 46.8% | 40.0% | 93.9% |
| Total | | Count | 4 | 27 | 185 | 164 | 380 |
| | | % of Total | 1.1% | 7.1% | 48.7% | 43.2% | 100.0% |

Source: Author's own contributions

In Table 3.6, the data shows that 93.9% of respondents agreed sustainability practices have improved company growth; with most of them 46.8% and 40.0% agree also believing that sustainability is critical to business success. This reflects a strong alignment between perceived business growth and the strategic importance of sustainability.

**Table 3.7: Sustainability effect on firm growth in term of age and education**

| | | Disagree | Agree | Total |
|---|---|---|---|---|
| Age | 18-30 years | 2 % | 23 % | 25 % |
| | 30-40 years | 3 % | 47 % | 50 % |
| | 40-50 years | 1% | 13 % | 14 % |
| | 50+ | 0 % | 11 % | 11 % |
| Total | | 6 % | 94 % | 100% |
| Education | Matric | 0 % | 14% | 14 % |
| | Intermediate | 0 % | 11 % | 11 % |
| | Bachelors | 2 % | 31 % | 33 % |
| | Master | 4 % | 38 % | 42 % |
| Total | | 6 % | 94 % | 100 % |

Source: Author's own contributions

The above Table 3.7 shows the opinions of various age groups, whether they agree or disagree, that sustainability has contributed to their company's growth. Most people, 94% out of 100 %, believe that sustainability helps a company's profitability. Overall, participants of all ages believe that sustainability is beneficial. The table also shows the

education level of the respondents and their opinions on sustainability. 94 % out of 100 % agree about the sustainability importance. Regardless of age and education level, most people think that businesses may succeed by using sustainable practices.

**6: Conclusion And Recommendations**

Sustainable entrepreneurship involves starting and running a company that considers the social, economic, and environmental effects of its operations. It entails identifying and producing opportunities that satisfy current requirements without sacrificing potential for the future (Anand et al., 2021).

A sustainable entrepreneur creates beneficial changes for the world and society by combining a business philosophy with social and environmental awareness. They minimize negative impact and encourage sustainable practices while generating profitable endeavors. They put long-term success first and provide goods and services that meet the demands of the current generation without sacrificing the capacity of future generations to meet their own needs. Even when operating small start-up businesses, entrepreneurs with a sustainability-driven business perspective take change into account. (Jafari-Sadeghi et al., 2023).

This study explains whether sustainable entrepreneurship is a trend or a path based on the way sustainability affects a firm's growth and, if it is a path, how it affects a high economic environment and companies' strategies for innovation, digitization, and sustainability. The findings indicate that the amount invested in implementing innovation, digitization, and sustainability impacts a company's growth (Laasch, 2018).

The survey findings show valuable information on how companies observe and apply innovation, digitization, and sustainability to their business plans. There is a strong agreement that innovation is important to success, and introducing new products and services has strengthened their market position. Companies also understand how important it is to support employees in creating and implementing new ideas. However, spending on research and development is still inadequate. Some companies do not invest enough in R&D due to financial limitations or unclear innovation plans. Without enough investment, companies find it challenging to keep up with rivals that are more active in developing new technologies and products.

Digitalization also plays an important role in operational efficiency and company growth. Companies admit that adopting digital technologies has improved consumer interactions, making procedures more efficient and successful. Many companies intend to increase their expenditure on digitalization to remain competitive. Faster digital transformation will likely give businesses a significant competitive edge by increasing efficiency, customer happiness, and overall business adaptability.

Regarding sustainability, companies increasingly incorporate social and environmental responsibilities into their daily operations. Many businesses have strategies to balance their goods and services with environmental issues because they recognize that sustainability is crucial to long-term profitability. Many companies promote employee involvement in sustainability initiatives, which reflects a change in corporate culture toward one that is more environmentally concerned. Even though sustainability is universally considered important, some companies may not have wholly embedded it into their fundamental strategy. According to the research, businesses that create a sustainable plan stand to gain from improved brand recognition and increased adaptability in a business environment that is changing quickly and where stakeholders and customers place a higher value on moral and sustainable behavior.

Businesses generally agree that innovation, digitization, and sustainability are important, but their implementation differs. Although innovation is considered a key factor in success, spending on research and development must be increased. Although many businesses have embraced digitalization, some still lag in using digital technologies. Although sustainability is acknowledged as a priority, further strategic alignment is possible. Businesses will be better positioned for long-term development, competitiveness, and sustainability in a constantly changing market context if they actively balance and invest in these three areas.

**7: Future Recommendation**

To accomplish long-run success, companies should spend money on research and Development to promote innovation and maintain competitiveness. This will make it possible to create new goods, services, and technological advancements. It’s also important to include sustainability in fundamental strategies like eco-friendly projects and sustainable supplier chains. Promoting employee engagement in

sustainability and innovation is important and requires a well-balanced strategy. Monitoring market trends and rival strategies may help businesses stay ahead, improving long-term viability, efficiency, and competitiveness.

## Compliance with Ethical Standards

- **Conflict of Interest:** There is no conflict of Interest.
- **Informed consent:** NA
- **Funding information:** NA
- **Ethical approval:** Not Required
- **Data Availability Statement:** The data will be provided upon request anytime.

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