



**SMALL AND MEDIUM-SIZED ENTERPRISES ENTREPRENEURS'
DIGITAL TRANSFORMATION ADAPTATION, BUSINESS GROWTH,
AND MARKET INTELLIGENCE IN OZAMIZ CITY**

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This thesis entitled “**SMALL AND MEDIUM-SIZED ENTERPRISES ENTREPRENEURS’ DIGITAL TRANSFORMATION ADAPTATION, BUSINESS GROWTH, AND MARKET INTELLIGENCE IN OZAMIZ CITY,**” submitted by **Nadela, Eman L., Estomata, Joy G., and Laranjo, Glen Mark P.**, in partial fulfilment of the requirements for the degree **Bachelor of Science in Business Administration**, has been examined and is recommended for acceptance and approval for Oral Examination.


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ABSTRACT

In an environment of rapidly advancing technology, especially in Industry 4.0, SMEs face a twofold responsibility: taking advantage of emerging possibilities while mastering the complexities of digital transformation. The study aimed to analyze how SME entrepreneurs navigate digital transformation, its impact on business growth, and market intelligence's role in addressing modern commerce's complexities. This study used a descriptive-correlational research design to investigate the relationship between SMEs' digital transformation adaptation, business growth, and market intelligence. The 206 respondents were the owners and managers of SMEs in Ozamiz City. They were selected using a purposive sampling technique to ensure representation from individuals directly involved in digital transformation within their organizations. The adapted questionnaires, The Digital Adaptation Questionnaire, the Market Intelligence Questionnaire, and the Business Growth Questionnaire were adapted questionnaires utilized to gather data. *Frequency, Percentage, Mean, Standard Deviation, and Pearson Correlation Coefficient* were the statistical tools used in the study. The finding suggests that SMEs actively integrate digital technologies into the supply chain process and marketing strategy, which is critical for enhancing operational efficiency and competitive advantage in today's digital landscape. In line with this, SMEs effectively utilize information regarding their competitive landscape, customer preferences, and digital trends, essential for informed decision-making and strategic planning. The researchers recommend conducting further studies on a broader scope related to the findings. In conclusion, SME owners were able to adapt to the overall digital transformation adaptation; Thus, SMEs were productive in navigating their respective businesses to grow.

Keywords: *Business Growth, Digital technologies, Digital Transformation Adaptation, Market Intelligence, SME Entrepreneurs.*

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INTRODUCTION

Rationale of the Study

Small and Medium Enterprises (SMEs) continue to be necessary for the sustenance of nations worldwide and accelerating economic growth, employment, and poverty reduction. Economic dynamism and innovation are essential for building resilience and adaptability in economies, although this process poses significant challenges (Gherghina et al., 2020). In an environment of rapidly advancing technology, especially in Industry 4.0, SMEs face a twofold responsibility: taking advantage of emerging possibilities while mastering the complexities of digital transformation. Thus, SMEs have the potential to achieve operational efficiency and competitive advantage, enhancing their access to international markets in the digital era. However, the speed and scale of this digital change present significant adaptation and strategic foresight demands for such businesses (Matt & Rauch, 2020).

The global business environment is undergoing profound changes driven by digitization, globalization, and evolving consumer behavior (Anguelov & Angelova, 2021). Agility in this dynamic ecosystem is crucial for SMEs to effectively adapt and leverage digital technologies for business growth and market intelligence (Hedvičáková & Král, 2021). Despite their dynamism and capacity for innovation, SMEs in developing contexts face significant obstacles that impede their growth and competitive positioning. Challenges include limited access to financial services, regulatory and tax complexities, increasing operational costs, and deficits in management and innovation (Sarker et al., 2021).

This presents a significant challenge for SMEs, requiring them to develop and implement effective strategies for thriving in a competitive and dynamic business ecosystem. To achieve competitiveness and sustainable growth, SMEs increasingly recognize the strategic importance of advanced market intelligence. This capability enables them to proactively anticipate market trends and consumer demands and navigate competitive threats (Tan et al., 2021).

Numerous literature reviews provide comprehensive insights into various aspects of adapting to digital transformation. Adapting to digital transformation in

Small and Medium Enterprises (SMEs) is a complicated task that spans organizational dynamics, economic viability, and sustainability. Melo et al. (2023) demonstrated how the digital revolution disrupts traditional organizational boundaries, forcing SMEs to reconsider their competitive strategy. SMEs, which have intrinsic flexibility and resource restrictions, navigate this change differently than larger firms, frequently relying on agility and specialization to adapt. However, despite the need to monitor SMEs' performance consistently in the digital era, research in this field is limited (Melo et al., 2023). Beyond economic considerations, SMEs' digital transformation tremendously impacts social and environmental sustainability. While digital transformation may result in employment displacement and higher material consumption, it also has the potential to create jobs and expand international markets, particularly among SMEs involved in digital trade (Melo et al., 2023). Denicolai et al. (quoted in Melo et al., 2023) found a favorable association between Digital Transformation and SMEs' worldwide performance, implying a more nuanced relationship between digital advancement and sustainability objectives.

The importance of digital transformation in helping SMEs adjust to the fourth industrial revolution is highlighted by Teng et al. (2022). Despite limited resources and technological readiness constraints, SMEs are encouraged to use digital technology to improve their agility and decision-making capabilities. The COVID-19 pandemic has accelerated this drive, emphasizing SMEs' importance in investing in digital infrastructure and innovation. However, the path to digital transformation is packed with challenges and unpredictability for SMEs. Many people need help defining strategic goals, overcoming technology barriers, and securing sufficient resources for transformation. Successful digital transformation requires a comprehensive approach that includes technological innovation, organizational change, and strategic vision. Collaboration, government assistance, and human resource investment are essential elements for SMEs starting on digital transformation initiatives (Khurana et al., 2022).

The potential of market intelligence remains untapped mainly within the SME sector, particularly in developing countries, where the capacity to aggregate, analyze, and utilize market insights is underdeveloped. The evolving nature of

competition, marked by the entrance of unconventional players and the blurring of industry demarcations, amplifies the critical need for SMEs to establish and maintain sophisticated market intelligence systems (Anyongodi, 2019).

Several papers contribute to the understanding of market intelligence from various perspectives. Folsom (1991) delved into market intelligence practices, emphasizing their significance and small business owners' perceptions. Gebhardt et al. (2019) investigated dissemination practices of market intelligence and how managers respond to them. Jamil et al. (2019) approached market intelligence as an element of information systems, shedding light on its integration within organizational structures. Maltz and Kohli (1996) explored the dissemination process across functional boundaries and its impact on perceived intelligence quality.

Baumgartner et al. (2009) discussed challenges and solutions regarding web data extraction for online market intelligence, addressing the complexities of extracting meaningful insights from web sources. Christen et al. (2009) tackled the issue of scarce management attention and proposes optimal strategies for managing market intelligence under such constraints. Finally, Ko et al. (2012) introduced *Market Analyzer*, a visual analytics system designed to analyze competitive advantage using point-of-sale data, offering a practical tool for market intelligence analysis. These papers contribute to a comprehensive understanding of market intelligence across different contexts and applications.

Several literature reviews have been carried out to give insight into the strategies to be laid down so that business growth can be realized. Smith and Johnson (2020) conducted a broad review of strategies such as market penetration, product development, market development, and diversification. They emphasized strategic planning, innovation, and effective marketing in realizing sustainable growth. Brown and Wilson (2018) delved into mergers and acquisitions as strategies for business expansion. The review noted several M&A strategies, which include horizontal, vertical, and conglomerate M&As, with a significant point on the importance of due diligence and how best post-deal integration could be implemented for successful outcomes. Literature reviews are essential for capturing diverse strategies for business growth and understanding its complex nature.

This study aimed to analyze how SME entrepreneurs navigate digital transformation, its impact on business growth, and market intelligence's role in addressing modern commerce's complexities. It is an endeavor meant to expound on the strategies employed by SMEs in maximizing the benefits that digital technologies bear towards market presence, operational efficiency, and competitive posture.

This research investigated the relationship between digital transformation, business growth, and market intelligence, revealing how SMEs achieve sustained growth and resilience to digital disruption. In this background, the topic under study serves the prime need of SMEs to ensure market adaptability and strategic innovation to guarantee heightened market responsiveness in a straight and potent relation with the themes of digital transformation, business growth, and market intelligence. This approach aims to address the research questions posed and contribute to the body of knowledge on SMEs in the digital age, identifying gaps and suggesting innovative applications of digital strategies within the SME context.

Theoretical Framework

The base theoretical framework of this paper is anchored on the Resource-Based View (RBV). The current paper takes an analytical capacity of Small and Medium Enterprises (SMEs) adaptive to Digital Transformation needs through a framework predicated on the Resource-Based View (RBV). It is grounded on the belief that the unique resources and capabilities of a firm are the foundation for securing a competitive advantage and holding it (Barney, 1991), RBV is the enabler in understanding how SMEs will be able to secure sustainability toward success within the digital marketplace.

SMEs, characterized by their agility and resourcefulness, are poised to internalize digital transformation effectively. Within the RBV framework, digital supply chain resources, such as bespoke logistics software or unique blockchain-enabled partnerships, are recognized as critical assets for enhancing operational efficiency (Ageron & Gunasekaran, 2020). Automation technology emerges as another strategic resource, transforming business processes and influencing labor dynamics and productivity (Acemoglu & Restrepo, 2019). Additionally, digital

marketing capabilities are seen as unique assets that can harness, establish customer connections, and strengthen brand equity in the digital domain (Herhausen et al., 2020).

As viewed through the RBV lens, business growth is a direct consequence of how SMEs effectively manage and deploy their unique resources. Financial resources and capabilities, including access to capital and financial expertise, are vital drivers of financial development (Guru & Yadav, 2019). The wealth of market knowledge and relationships is a cornerstone for market expansion, enabling SMEs to identify and capitalize on new market opportunities. Moreover, the innovative capacity within an SME is a critical internal resource that propels the creation of new products and services, thereby ensuring long-term competitive standing.

RBV theory further identifies market intelligence as a strategic asset integral to informed decision-making and strategic planning. When effectively harnessed, competitive intelligence informs strategic decisions and operational tactics (Calof et al., 2020). Customer intelligence data becomes invaluable in crafting products and services attuned to customer needs. Digital intelligence, gleaned from various digital channels, equips SMEs with insights to tailor and refine their business strategies within a digitized business landscape.

Accompanying this study is a schematic diagram that encapsulates the dynamic interplay between an SME's internal resources and the external impetus of digital transformation. This visual representation delineates how the strategic leveraging of core resources, as conceptualized by RBV, promotes the effective assimilation of digital technologies, stimulates business growth, and bolsters market intelligence. This study sought to explain such interconnections and attempted to unfold how SMEs may strategically leverage their internal sources to secure sustainable competitive advantages while maneuvering through the complexities of the digital age.

This research uses RBV to focus on how SMEs can strategically tap internal resources and gain a sustainable competitive advantage through digital transformation. It shows that RBV is an excellent source for formulating powerful digital strategies within the context of SMEs.

Conceptual Framework

This conceptual framework examines the dynamics of digital transformation adaptation, defined as the strategic utilization of digital technologies to modify organizational processes and achieve business objectives and its subsequent impact on business growth, underpinned by market intelligence. This framework posits that Digital Transformation, encompassing the Digital Supply Chain, Automation, and Digital Marketing, serves as a catalyst for business growth, measured in terms of Financial Development, Market Expansion, and Innovation, also a catalyst for Market Intelligence, measured in terms of Competitive Intelligence, Customer Intelligence, and Digital Intelligence.

In digital transformation, a solid *digital supply chain* is critical. It enables businesses to streamline operations, cut expenses, and increase agility, resulting in higher customer satisfaction and corporate success. Businesses that use digital tools and technologies can improve their efficiency, resilience, and competitiveness in today's changing economy (Barnes, 2024). An evolution to more flexible, transparent, and effective processes is a mandatory development to respond to global supply networks' increasing complexity and volatility. In turn, these SMEs would develop technologies that allow visibility and control over the supply chains, which have been unknown until now, from real-time tracking to predictive analytics for demand forecasting, along with a much more responsive supply chain model. These functionalities are critical for improving customer service, including timely and accurate delivery, integrating supply chains for borderless operations, and adding value through lower costs and excellent reliability. These improvements, combined with organizational sustainability and performance development, may mark a new era when digital advancement is considered the same as excellence in the supply chain (Ageron & Gunasekaran, 2020).

Automation is at the heart of digital transformation, allowing businesses to optimize processes, increase productivity, and provide more value to customers. Businesses can use technology to automate regular operations, workflows, and decision-making processes, allowing human resources to focus on more strategic and creative endeavors (Barnes, 2024). Automation speeds up procedures and increases precision and consistency, resulting in increased productivity and

efficiency. Organizations can use automation to foster innovation, lower costs, and gain a competitive advantage in the digital economy. Automation technologies, from workflow automation to customer service chatbots, change how businesses function and connect with their stakeholders. In digital marketing, digital transformation has brought a new era of customized and data-driven approaches. Digital marketers may now use advanced tools and technology like AI-powered analytics and programmatic advertising to better target customers and deliver customized interactions across many channels (Truong, 2022).

Digital marketing introduces a radical shift in customer engagement and brand communication. The digital age has introduced platforms and technologies that enable SMEs to interact with consumers at an unprecedented level. Alongside email and content marketing, social media enables SMEs to engage directly with their target audience, fostering community development and brand loyalty (Truong 2022). Such digital engagement transcends the conventional kind of advertisement to a point where the company and consumer can have a dialogue: this would enable the company to get some feedback and feel the consumer's needs before responding in real-time. Therefore, the analysis tools make it easy for SMEs to get deeper insights into behavior, preferences, and trends that make up consumers, hence enabling tailoring in marketing strategies with precision. This enhances the effectiveness of marketing campaigns and increases the potential of consumer purchase intentions by delivering precisely what suits that person at that time. Implementing new digital marketing technologies is a significant drive for improving brand value and positioning SMEs to benefit from the opportunities presented by the digital revolution (Herhausen et al., 2020).

The deployment of digital tools promotes SMEs' *financial development*, acting as a driver for economic vitality and sustainability. It will underpin the strategies for using capital efficiently, improving investment, and driving financial efficiencies. These technologies can be applied judiciously for SMEs to enable them to handle the complexities of financial management, new funding avenues, and a more robust financial standing (Guru & Yadav, 2019).

Digital transformation significantly accelerates *Market Expansion*, a critical dimension of business growth. The digital era, with the Internet and social media

penetration, has unraveled traditional barriers to entry into the market. These businesses can target international markets using digital technologies, test new markets affordably with minimal upfront investment, and tailor offerings to a large and diverse customer base. Thus, such a broader canvas is invaluable to an SME seeking to diversify its market presence to reduce dependency on local markets and tap into the vast growth potential emerging in emerging economies. In this way, digital transformation becomes one of the strategic levers for an SME to develop its operations, enter potential markets that have stayed virgin till now, and acquire an advantage over its competitors in the world market (Kollmann & Christofor, 2014).

Innovation, central to sustained growth and competitiveness, is profoundly influenced by digital technologies. The current business, marked by rapid changes in the digital age, will open the possibility for SMEs to develop and launch new products or services quickly. Using digital tools and platforms will enable the organization to create a culture of innovation for quickly experimenting, shaping, and landing solutions to the market. This capability of innovation successively is a prerequisite for adapting to evolving market dynamics, per changing customer expectations and remaining meaningful within a highly competitive business setting. Digital technologies, hence, are not mere enablers of operational efficiency but pivotally drive the strategic innovation agenda of SMEs in ensuring their long-term viability and success amid the constant dynamism of the business landscape (Nambisan, 2017).

Competitive intelligence is a part of the market intelligence structure that presents systematic collection and analysis of information about the competing firms and conditions of the market. This type of intelligence goes further than data collection; it is an analytic activity where the actionable insight gets distilled to supply useful intelligence in decision-making (Diyaolu, 2019). The double objective is that this not only reinforces the competitive position of the SME but also shows the pathway, which could be steeper than prespecified by the business. Effective competitive intelligence involves understanding overt strategies, market trends, and competitors' customer preferences, significantly influencing the strategic decisions of SMEs. It involves anticipating competitors' actions and strategizing to maintain or increase market share. Competitive intelligence presents

a high strategic value that SMEs can always emphasize. It identifies threats and opportunities in the market landscape so that companies can maintain agility and respond to change (Calof J. et al., 2020).

Customer intelligence is the most salient constituent of market intelligence in today's digital age. The knowledge area mainly deals with understanding changing customer behaviors, their preferences, and what they expect due to several digital technologies that have knocked on the doors of all businesses. All these pieces of customer intelligence are collected from various customer touchpoints and processed in such a way as to gather a 360-degree view of the customer journey. This approach ensures that products, services, and marketing messages are as appealing as possible to the target audience. Ultimately, this shift moves from generic offerings to highly customized experiences that deeply resonate with customers, increasing customer satisfaction and loyalty. Moreover, customer intelligence forms the foundation for cultivating long-lasting customer relationships underpinned by a sense of brand loyalty and repeated business engagements. In the competitive landscape where SMEs operate, leveraging customer intelligence can be a significant differentiator, setting a business apart from its competitors by offering uniquely tailored value propositions (Wedel & Kannan, 2016).

Through the lens of digital transformation, *Digital intelligence* is a critical capability for an SME, empowering it to reap meaning out of the huge data generated by digital channels. Digital intelligence goes beyond traditional data analysis; it involves sophisticated analysis that can provide insight into digital interaction, social media engagement, and consumers' online activity. This intelligence enables SMEs to understand the online environment, stay updated with the latest digital trends, and measure the effectiveness of their digital marketing strategies. Armed with digital insights, SMEs can make decisions that are well aligned with their strategic missions, optimizing their digital touchpoints to interact with customers compellingly. More so, this digital intelligence enables the business to find new market opportunities, predict the trend of the consumer, and innovate as the demands of the digital consumer change. In a highly competitive and fast-paced digital economy, the long-term success of SMEs depends on their ability to navigate digital channels and make informed decisions based on data. Hence, digital

intelligence has become a very important enabler as we attain growth and competitiveness that can be supported over time (Kietzmann & Canhoto, 2013).

This conceptual framework, supported by market intelligence, explores the intricate relationship between digital transformation adaptation and its impact on business growth. Adaptation of digital technologies such as the digital supply chain, automation, and digital marketing is a fact identified with business growth, measured in terms of financial development, market expansion, and innovation (Ageron & Gunasekaran, 2020; Herhausen et al., 2020; Guru & Yadav, 2019; Kollmann & Christofor, 2014; Nambisan, 2017).

In summary, the strategic utilization of digital technologies, supported by market intelligence, catalyzes business growth, empowering SMEs to enhance operational efficiency, expand market presence, foster innovation, and cultivate sustainable competitive advantages in the digital age.

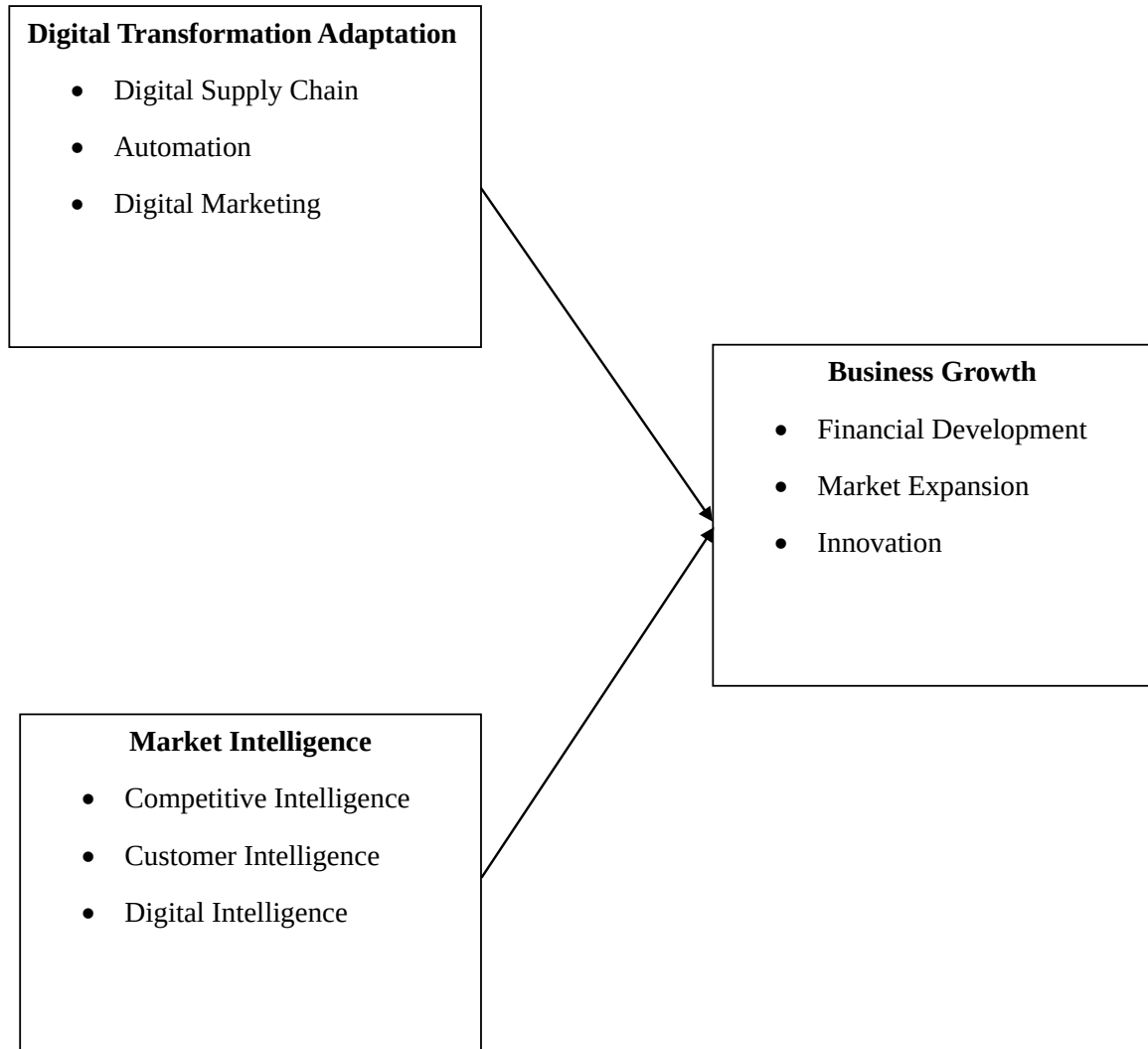


Figure 1 Schematic Diagram of the Study

Statement of the Problem

This study investigated the multifaceted relationship between SMEs' Digital Transformation adaptation, business growth, and market intelligence. To achieve this, the study sought to address the following research questions:

1. What is the level of digital transformation adaptation among SMEs regarding digital supply chain, automation, and digital marketing?
2. What is the level of business growth among SMEs in terms of financial development, market expansion, and innovation?
3. What is the level of SMEs' market intelligence in terms of competitive, customer, and digital intelligence?
4. Is there a significant relationship between Digital Transformation Adaptation and Business growth among SMEs?
5. Is there a significant relationship between Marketing Intelligence and Business growth among SMEs?

Null Hypotheses

For this study, the following null hypotheses were proposed:

H0₁: Digital transformation adaptation, as characterized by advancements in digital supply chain, automation, and digital marketing, does not have a statistically significant impact on the financial development of SMEs.

H0₂: The application of digital transformation strategies within SMEs has no statistically significant correlation with market expansion and innovation in these enterprises.

H0₃: Market intelligence capabilities, encompassing competitive intelligence, customer intelligence, and digital intelligence, do not significantly contribute to the strategic decision-making process in SMEs undergoing digital transformation.

RESEARCH METHODOLOGY

Design

This study utilized a descriptive-correlational research design to quantitatively investigate the relationship between SMEs' digital transformation adaptation, business growth, and market intelligence. The descriptive component aims to quantify the current state of digital transformation adaptation, business growth metrics, and market intelligence levels among SMEs. The correlational aspect seeks to quantify the nature and strength of relationships between these variables. This design is appropriate for the study since it investigates the multifaceted relationship between SMEs' Digital Transformation adaptation, business growth, and market intelligence.

Setting

The research took place in Ozamiz City, which is known for its diverse economic activities and significant presence of SMEs across various industries. This blend of established and emerging businesses provides an ideal setting to study SME adaptation to digital technologies, highlighting factors that help or hinder digital transformation and offering insights to support more effective strategies for the city's economy.

Respondents

The respondents were the owners and managers of SMEs in Ozamiz City. They were selected using a purposive sampling technique to ensure representation from individuals directly involved in digital transformation processes within their organizations. Based on the results from Raosoft, it was shown that there were 206 respondents from the total population size of 439. The 206 total respondents were based on a 5% margin of error, a confidence level of 95%, and a response contribution of 50%. This encompassed various sectors, including retail, manufacturing, services, and technology, facilitating quantitative exploration of digital transformation and market intelligence practices.

Instruments

A. Digital Transformation Adaptation Questionnaire. This is a four-point Likert scale adapted and modified questionnaire from Agrawal & Narain (2018) and Ageron, Bentahar, & Gunasekaran (2020). The questionnaire consists of three constructs: Digital Supply Chain, Automation, and Digital Marketing. It has 21 indicators. This questionnaire was used to determine level of SME's digital transformation adaptation regarding digital supply chain, automation, and digital marketing (Appendix A-1).

In determining the level of Digital Transformation Adaptation among Small and Medium Enterprises, the following scale was used:

Responses	Continuum	Interpretation
4- Strongly Agree (SA)	3.25-4.0	Very High (VH)
3-Agree (A)	2.50-3.24	High (H)
2-Disagree (D)	1.75-2.49	Low (L)
1-Strongly Disagree (SD)	1.0-1.74	Very Low (VL)

B. Market Intelligence Questionnaire. This is a four-point Likert scale questionnaire that was an adapted and modified questionnaire from Falahat, Ramayah, Soto-Acosta, and Lee (2020) and Calof, Arcos, and Sewdass (2020). It consists of three constructs: Competitive Intelligence, Customer Intelligence, and Digital Intelligence. It has 21 indicators. This questionnaire was used to determine the level of SMEs' market intelligence in terms of competitive intelligence, customer intelligence, and digital intelligence (Appendix A-2).

In determining the level of management skills, the following scale was used:

Responses	Continuum	Interpretation
4- Strongly Agree (SA)	3.25-4.0	Very High (VH)
3-Agree (A)	2.50-3.24	High (H)
2-Disagree (D)	1.75-2.49	Low (L)
1-Strongly Disagree (SD)	1.0-1.74	Very Low (VL)

C. *Business Growth Questionnaire*. This four-point Likert scale questionnaire was an adapted and modified questionnaire from Delmar, Davidsson, & Gartner (2003). The questionnaire consists of three constructs: Financial Development, Market Expansion, and Innovation. It has 21 indicators. This questionnaire was used to determine the level of SMEs' business growth in terms of financial development, market expansion, and innovation (Appendix A-2).

In determining the level of business growth among SMEs in terms of financial development, market expansion, and innovation, the following scale is used:

Responses	Continuum	Interpretation
4- Strongly Agree (SA)	3.25-4.0	Very High (VH)
3-Agree (A)	2.50-3.24	High (H)
2-Disagree (D)	1.75-2.49	Low (L)
1-Strongly Disagree (SD)	1.0-1.74	Very Low (VL)

Data were collected using a structured questionnaire to quantitatively capture information on digital transformation adaptation, market intelligence, and business growth.

The instrument was validated by expert evaluation to confirm its content validity. Experts in relevant sectors evaluated the questionnaire items to verify that they accurately and comprehensively represent the intended features of small and medium enterprises (SMEs) business growth, market intelligence, and digital transformation adaptation. Their feedback confirms that the questionnaire measures the intended domains accurately, increasing the validity and dependability of the study's findings.

Data Collection

Data collection involved face-to-face surveys to accommodate SME owners' and managers' preferences and availability. To have a broader audience efficiently, the researchers used face-to-face surveys to ensure inclusivity, particularly for SMEs with limited digital access due to constraints such as time, resources, or

technological proficiency. The survey administration spans two months, allowing sufficient time for data collection and follow-up with respondents.

Ethical Consideration

Before commencing the study, approval was sought from the dean of the college and the adviser to ensure adherence to ethical standards. Participation in the research is entirely voluntary, and respondents can decline or withdraw at any stage without penalty or impacting their relationship with the researcher. Information consent was obtained from respondents to ensure they understood the study's objectives and their voluntary involvement. Respondents have the right to review and amend any information they provide during the study.

Furthermore, a consent letter was provided to ensure that respondents of legal age fully comprehended the study's benefits, implications, and institutional approval before deciding to participate. Complete anonymity was maintained to safeguard the confidentiality of respondents' personal information. Respondent's names were replaced with numerical identifiers to anonymize their responses. Proper crediting, transparent reporting of results, and accurate interpretation of data were ensured to maintain research integrity and credibility.

Data Analyses

The following statistical tools were used in analyzing and interpreting the data collected in this study:

Mean and Standard Deviation were used to measure digital transformation adaptation among SMEs in terms of digital supply chain, automation, and digital marketing and the level of business growth among SMEs in terms of financial development, market expansion, and innovation.

Pearson Product-Moment Correlation Coefficient was used to identify the extent of the relationship among the variables: Digital Transformation Adaptation, Market Intelligence, and Business Growth.

RESULTS AND DISCUSSION

Level of Digital Transformation Adaptation among SMEs

Table 1 presents the level of digital transformation adaptation among SMEs. According to the findings, SMEs have very high digital transformation adaptation. The overall mean is 3.31, with a standard deviation of 0.56. In terms of the digital supply chain of SMEs, the results showed a Very High level of digital transformation adaptation, with a mean of 3.32 and a standard deviation of 0.56. Meanwhile, SME automation predicts a high result, with a mean of 3.23 and a standard deviation of 0.59. At this point, SME's digital marketing presents a Very High result, with a mean of 3.38 and a standard deviation of 0.53.

The mean and standard deviation representations presented an understanding of the digital transformation adaptation of SMEs in terms of digital supply chain, automation, and digital marketing. The Digital Supply Chain mean score of Very High suggests that the organization has effectively integrated digital tools and processes into its supply chain management, optimizing operations for efficiency and responsiveness. The Automation mean score implies the organization has made significant strides in automating tasks, but there is still room for further development and innovation in these areas. Digital Marketing mean score of Very High of the digital transformation adaptation signifies the critical shift in the organizational strategies necessitating the reevaluation of the traditional business model. Organizations embracing digital transformation can leverage technological advancement to improve efficiency, streamline operations, and enhance customer experiences. The implication is that the firm must adopt digital tools and integrate them into its core business processes to realize its full potential. As digital transformation continues to reshape industries, organizations must foster a culture that embraces innovation and continuous learning to remain competitive in the evolving market.

The findings indicate that the study aligns with the current literature on digital transformation. Dąbrowska et al. (2022) emphasized the current necessity of the multi-level approach to understanding digital transformation implications, highlighting that successful adaptation requires strategic alignment and operational

execution. Trenerry et al. (2021) further supported by providing a framework emphasizing the importance of preparing workplaces for digital change through an integrative review of the factors influencing adaptation. These illustrate that the transition to digital strategies is not merely a technical update but a holistic transformation that involves organizational culture, leadership, and employee engagement.

The high level of digital adaptation within the supply chain indicates that organizations increasingly prioritize customer satisfaction. By investing in digital supply chain technologies, companies can improve visibility, reduce lead times, and enhance service delivery. Adaptation not only strengthens competitive advantage but fosters resilience against disruption. As businesses face uncertainty, the robust digital supply chain becomes essential for sustainable growth and operational continuity.

Supporting the findings on digital supply chain adaptation, Shen et al. (2021) discussed the role of digital technologies in enhancing supply chain performance in the textile industry. The research indicates that companies leveraging digital dynamic capabilities are better positioned to adapt to market fluctuations and consumer demand. Zhu et al. (2021) highlighted that digital transformation in the supply chain leads to improved decision-making and efficiency, corroborating the high level of adaptation observed in the study.

The high level of automation adaptation suggests that organizations recognize the need to minimize inefficiencies and enhance productivity. By implementing automation technologies, businesses can free up human resources to focus on higher-value tasks such as strategic planning and customer engagement. Automation can lead to significant cost savings and improve accuracy, allowing companies to operate more competitively in their respective market. The implication is that the organization must continue to invest in automation technologies to maintain its operational edge.

Kraus et al. (2021) provided an overview of the current research on digital transformation, emphasizing the significance of automation in driving organizational efficiency. Their finding aligns with the study's observed high level of automation adaptation. Gökalp and Martinez (2021) discussed the importance

of assessment automation capabilities within industrial manufacturers, indicating that organizations must evolve alongside technological advancement to remain relevant.

The high level of digital marketing adaptation implies that the organization prioritizes its online presence and customer engagement strategies. With consumers increasingly turning to digital platforms for information and purchases, businesses must invest in effective digital marketing strategies to capture and retain customers. The adaptation enhances brand loyalty and drives sales growth in the competitive landscape. Organizations must stay abreast of trends and consumer behavior as digital marketing evolves to leverage new opportunities effectively.

Supporting this literature, Dąbrowska et al. (2022) highlighted the importance of digital marketing as the critical component of digital transformation, suggesting that businesses need to harness data analytics and customer insight to refine their marketing efforts. Zhu et al. (2021) further emphasized that effective digital marketing strategies significantly contribute to business performance, aligning with the very high score observed in the study.

The level of Digital Transformation Adaptation among the organizations is notably high, with each construct demonstrating the commitment to leveraging digital technologies to enhance operational efficiency, customer engagement, and competitive advantage. The analysis of Digital Supply Chain, Automation, and Digital Marketing indicates the comprehensive approach to digital transformation, emphasizing the need for continuous investment in technology and adaptation of organizational strategies.

Table 1

Level of Digital Transformation Adaptation (n=206)

Construct	M	SD	Interpretation
Digital Supply Chain	3.32	0.56	Very High
Automation	3.23	0.59	High
Digital Marketing	3.38	0.53	Very High
Overall	3.31	0.56	Very High

Note: Digital Transformation Adaptation Scale: 3.25-4.0 (Very High); 2.50-3.24 (High); 1.75-2.49 (Low); 1.0-1.74 (Very Low)

Level of Business Growth among SMEs

The level of business growth among SMEs is shown in Table 2. In line with the findings, SMEs have a Very High level of business growth. The overall mean is 3.50, with a standard deviation of 0.48. In terms of financial development among SMEs, data shows a Very High degree of business growth, with a mean score of 3.41 and a standard deviation of 0.49. Meanwhile, the SME market expansion projects a Very High result, with a mean of 3.43 and a standard deviation of 0.49. In line with this, the SME innovation estimates a Very High result with a mean score of 3.50 and a standard deviation of 0.45.

The mean and standard deviation data analyzed SMEs' business growth in terms of financial development, market expansion, and innovation. The relatively very high means show that SMEs have a generally high level of business growth. The very high level of financial development, market expansion, and innovation suggests that businesses effectively leverage financial resources, improve operational efficiency, and pursue opportunities in the broader market, potentially leading to increased competitiveness and sustainability. The positive business growth indicators can enhance investor confidence and foster an environment conducive to entrepreneurship. Policymakers may focus on reinforcing these trends through supportive legislation and initiatives aimed at fostering innovation and access to finance, particularly for small and medium-sized enterprises, which often serve as the backbone of economic growth.

Supporting literature emphasizes the multi-approach of business growth. Mintah et al. (2022) highlighted the importance of effective business records management in facilitating growth, underscoring how organized data can enhance decision-making and operational efficiency. Miroshnychenko et al. (2020) elaborated on the global growth trajectories of family businesses, noting that unique familial dynamics can influence growth strategies and outcomes. Akcigit and Ates (2021) explored the economic factors affecting business dynamics, providing a framework that underlines the significance of innovative practices in driving growth.

Strong financial development has significant implications. Businesses that manage their financial resources effectively can invest in the necessary

technologies, hire skilled personnel, and expand operations, all of which often face capital constraints. Their robust financial standing can enable them to take calculated risks that can lead to innovative products and services, fostering a competitive edge in the marketplace.

Supporting literature reinforces the importance of financial management in business growth. Haschka et al. (2022) discussed the relationship between financial development and business environment, emphasizing that access to finance is a critical determinant of firm growth. The findings suggest that businesses that leverage financial resources prudently are better positioned to adapt and thrive in competitive markets. Chowdhury and Endres (2021) highlighted the significance of financial stability in promoting long-term growth, arguing that businesses that can manage their finances effectively are more resilient to market fluctuations.

The implications of market expansion are critical for the long-term sustainability of businesses. Expanding into new markets diversifies risk and opens up additional revenue streams. The growth strategy can enhance brand recognition and establish a competitive foothold in various regions, which is a particularly advantageous dynamic in the market environment. As the businesses grow their market presence, they may achieve economies of scale, further enhancing profitability and operational efficiency.

The literature supports the notion that market expansion is the key driver of business growth. Tuominen et al. (2023) emphasized the importance of a customer-centric strategy in facilitating market expansion, arguing that understanding customer needs is important for successful entry into new markets. Bianchi and Vignieri (2021) explored stakeholder collaboration to leverage local resources for market expansions, highlighting that collaborative approaches can yield significant growth opportunities.

The implications of prioritizing innovation are significant, as it positions firms to respond effectively to evolving market demands and consumer preferences. Firms that invest in innovation are likely to experience accelerated growth and can maintain relevance in an increasingly competitive landscape. A strong focus on innovation can foster a culture of creativity and collaboration, further enhancing employee engagement and productivity.

Supporting literature aligns with the findings on innovation. Glyptis et al. (2021) highlighted the relationship between dynamic capabilities and family business growth, emphasizing that innovative capabilities are essential for sustaining competitive advantages. Moreover, Kraus and Kraus (2021) explored the impact of digitalization on business processes, suggesting that innovative practices are increasingly intertwined with technological advancement, thereby contributing to economic growth.

This highlights the positive trajectory for these firms, reflecting effective resource management and strategic foresight. The findings' implications point toward opportunities for further investment and support in these growth areas, while the supporting literature emphasizes the complex relationship of factors contributing to business growth. As the organization continues to navigate the evolving market landscape, maintaining a focus on financial health, market opportunities, and innovative practices will be paramount to its sustained success.

Table 2
Level of Business Growth (n=206)

Construct	M	SD	Interpretation
Financial Development	3.41	0.49	Very High
Market Expansion	3.43	0.49	Very High
Innovation	3.50	0.45	Very High
Overall	3.50	0.48	Very High

Note: Business Growth Scale: 3.25-4.0 (Very High); 2.50-3.24 (High); 1.75-2.49 (low); 1.0-1.74 (Very Low)

Level of Market Intelligence among SMEs

The level of market intelligence among SMEs is shown in Table 3. In line with the findings, SMEs have very high market intelligence. The overall mean is 3.48, with a standard deviation of 0.49. In terms of the competitive landscape of SMEs, the results showed a Very High level of market intelligence, with a mean of 3.25 and a standard deviation of 0.50. Meanwhile, the SMEs' customer intelligence forecasted a very high result, with a mean of 3.41 and a standard deviation of 0.51. Following that, the SME's digital intelligence predicts a Very High result, with a mean of 3.35 and a standard deviation of 0.56.

The mean and standard deviation illustrations present an understanding of the market intelligence of SMEs in terms of competitive landscape, customer intelligence, and digital intelligence. The consistently high mean scores imply that SMEs have a very high intelligence level in these areas of average. The minimal standard deviations suggest a narrow range of data around the mean, emphasizing a constant and tight distribution of knowledge across the surveyed SMEs. It means that most SMEs possess a very high level of market intelligence, suggesting that these enterprises are highly aware of market trends, customer needs, and digital transformation requirements. The low standard deviation value indicates the consistent level of market intelligence across the sample.

The implication of the finding highlights the strong foundation for growth and competitive position among the small businesses in Ozamiz City. The high market intelligence means these businesses are well-prepared to navigate and adapt to changes in the market environment. Enhanced knowledge of customer preferences and competitive dynamics allows them to make informed decisions and develop target marketing strategies, potentially leading to improved customer satisfaction and loyalty. For policymakers and business support organizations, these results point to the value of supporting ongoing digital and market research training initiatives to maintain high intelligence and ensure that these businesses can compete effectively.

Supporting literature underscores the value of market intelligence for small and medium-sized enterprises. Adewale, Shokrollahi Yancheshmeh, and Lam (2022) discussed the importance of market intelligence in identifying and capitalizing on the non-food industry, showing how SMEs with strong market insight are better positioned to exploit the niche market. Bag et al. (2021) emphasized that artificial intelligence framework plays a critical role in market intelligence, supporting strategic decision-making and enhancing firm performance. These findings suggest that a data-driven approach to market intelligence can be especially beneficial for businesses aiming to expand their reach and adapt to the market shift.

The implications of this high level of competitive intelligence are significant. By understanding the dynamics of the competitive landscape, small

businesses can identify gaps in the market and adapt their strategies accordingly, fostering innovation and agility. The level of insight is particularly valuable for SMEs as it allows them to leverage their unique selling proposition and potentially capture a more significant market share. Enhanced competitive intelligence also enables these firms to mitigate the risks associated with price wars or aggressive market entry by larger competitors.

Literature on competitive intelligence supports these findings. Vlačić et al. (2021) highlighted the evolving role of AI in competitive intelligence, where real-time data and analytics provide firms with insight into competitor activities and market trends. Chopra and Sharma (2021) discussed the application of AI in strategic forecasting, which can help businesses better understand competitor actions and market conditions.

The implications of high customer intelligence are extensive. By deeply understanding their customer base, these businesses can enhance customer satisfaction, foster loyalty, and encourage repeat purchases. Focusing on customer-centric strategies can lead to more personalized marketing and improve customer experience. High customer intelligence can aid in developing new products or modifying existing ones to better align with customer expectations, thereby boosting competitiveness.

Supporting literature emphasizes the significance of customer intelligence in modern business practices. Srivastava et al. (2022) highlighted the role of reference price research in understanding customer behavior, noting that such intelligence allows businesses to adjust pricing strategies effectively. Huang and Rust (2021) proposed a strategic framework for AI in marketing where customer insight informs personalized marketing efforts, leading to increased engagement and customer satisfaction. These findings reinforce the importance of customer intelligence as the pillar for growth and market responsiveness.

The implications of high digital intelligence are particularly relevant in the current digital era. With a strong grasp of digital trends, small businesses can enhance their online presence, engage with customers across digital channels, and employ digital marketing strategies to reach a broader audience. The capability is important for growth in both local and global markets, where digital channels play

a critical role in customer acquisition and retention. Policymakers and business support organizations might consider initiatives that further enhance digital competencies to sustain and improve the trend.

Literature on digital intelligence aligns with observations. Kang et al. (2021) emphasized the importance of digital intelligence for business-to-business marketing, noting that digital tools allow firms to reach customers effectively during crises like COVID-19. Jun (2020) discussed the role of business intelligence visualization technology, which enables businesses to analyze large volumes of digital data to make informed decisions.

The result demonstrates a very high level of market intelligence across the competitive landscape and digital Intelligence among the small businesses in Ozamiz City. This intelligence provides these businesses with a strong foundation for growth, allowing them to respond proactively to market trends, customer needs, and digital shifts.

Table 3
Level of Market Intelligence (n=206)

Construct	M	SD	Interpretation
Competitive Landscape	3.40	0.50	Very High
Customer Intelligence	3.41	0.51	Very High
Digital Intelligence	3.35	0.56	Very High
Overall	3.48	0.49	Very High

Note: Market Intelligence Scale: 3.25-4.0 (Very High); 2.50-3.24 (High); 1.75-2.49 (low); 1.0-1.74 (Very Low)

Significant Relationship between SME's Digital Transformation Adaptation and Business Growth

Table 4 shows the significant relationship between the two variables regarding digital transformation adaptation to business growth.

The table illustrates the significant relationship between the adaptation of digital transformation among Small and Medium Enterprises and their business growth. The correlation analysis yields an r-value of 0.88, indicating a Perfect Positive Correlation between digital transformation adaptation and business growth, with a p-value of 0.00, signifying a highly significant relationship. This

suggests that the SMEs enhance the digital transformation effort, and there is a corresponding increase in their business growth metrics.

The strong correlation between digital transformation adaptation and business growth has profound implications. The findings suggest that SMEs embracing digital technologies and processes will likely experience substantial growth in various aspects, including revenues, customer base, and operational efficiency. The correlation emphasizes the need for SMEs to invest in digital tools, training, and infrastructure to fully harness digital transformation's benefits. The significant relationship indicates that businesses failing to adapt to digital trends may risk stagnation or decline, highlighting an urgent call for SMEs to prioritize their digital strategies.

Supporting literature reinforces the importance of digital transformation in driving business growth for SMEs. Alvarenga et al. (2020) explored how digital transformation fosters knowledge management in the public sector and suggested that similar principles apply to SMEs where the digital tool enhances operational efficiencies and innovation. Akcigit and Ates (2021) discussed the relationship between business dynamism and growth, implying that adopting digital strategies can counteract declining business dynamics, thereby positioning SMEs for sustained success.

The adaptation of digital transformation is essential for SMEs, as indicated by the perfect positive correlation with business growth. The relationship demonstrates that digital transformation encompasses various initiatives, including adopting new technologies, enhancing digital marketing strategies, and improving online customer engagement. SMEs that implement these digital strategies effectively are more likely to see improved operational performance, increased market reach, and enhanced business growth.

The implication of effective digital transformation adaptation extends beyond immediate financial gains. By leveraging digital technologies, SMEs can improve their agility, allowing them to respond swiftly to changing market conditions and consumer preferences. Agility can be a significant competitive advantage, enabling SMEs to capture new market opportunities and adapt their business model as necessary. As customer expectations evolve, businesses that

prioritize digital transformation will be better positioned to offer personalized experiences and innovative solutions, further driving growth.

Literature supporting the adaptation of digital transformation in SMEs highlights the relevance to growth and sustainability. Bag et al. (2021) proposed an integrated artificial intelligence framework that aids SMEs in making rational decisions for improving performance, underscoring the necessity of technological adaptation for growth. Bianchi and Vignieri (2021) illustrated how leveraging local area common goods through digital transformation can facilitate abnormal business growth, leading to superior business outcomes.

Business Growth as a variable in the relationship encompasses multiple dimensions, including increased revenue, market share, and customer base. The strong correlation with digital transformation adaptation indicates that SMEs that effectively engage in digital strategies experience more robust growth trajectories. Growth is not solely the function of increasing sales but also involves enhancing operational efficiencies and improving customer relationships resulting from digital initiatives.

The implications of the growth for SMEs are significant. As the business expands its digital capabilities, it can optimize its operation, streamline processes, and enhance customer interaction, leading to sustainable growth. The correlation suggests that the future of SME growth will increasingly rely on digital competencies, making it imperative for business owners to focus on the digital competencies making it imperative for business owners to focus on digital literacy and technological investment as part of strategic planning.

Supporting literature further corroborates the importance of growth through digital transformation. Adedeji Saidia et al. (2021) examined firm-level strategies and value creation, indicating that the SMEs that embrace digital strategies create substantial value for their stakeholder. Chintalapati and Pandey (2021) provided a systematic review of the role of artificial intelligence in marketing, suggesting that technology-driven approaches are important for driving growth and improving customer satisfaction.

The strong relationship underscores the necessity for SMEs to invest in digital technologies and strategies to drive through their growth trajectories

effectively. The implication of these findings calls for a proactive approach to digital transformation, ensuring that SMEs remain competitive in an increasingly digital landscape.

Table 4

Significant Relationship Between Digital Transformation Adaptation and Business Growth (n=206)

Variable	r-value	p-value	Interpretation
Digital Transformation Adaptation and Business Growth	0.88	0.00	Perfect Positive Correlation/ Highly Significant

Note: 1) Perfect Negative Correlation (-0.61 to -1.00), Strong Negative Correlation (-0.31 to -0.60), Moderate Negative Correlation (-0.11 to -0.30, No Correlation (0.00), Weak Positive Correlation (0.01 to 0.10), Moderate Positive Correlation (0.11 to 0.30), Strong Positive Correlation (0.31 to 0.60) and Perfect Positive Correlation (0.61 to 1.00)

*2) **p<0.01 (Highly Significant); *p<0.05(Significant); *p> 0.05 (Not Significant)*

Significant Relationship between SME's Market Intelligence and Business Growth

Table 5 demonstrates the substantial relationship between two variables among SMEs: market intelligence and business growth.

According to the data, market intelligence and business growth have an r-value of 0.94 and a p-value of 0.00. The analysis presents an r-value of 0.94, indicating a "Perfect Positive Correlation" between them.

The strong correlation suggests that as SMEs enhance their market intelligence capabilities, encompassing the collection, analysis, and dissemination of market data, they experience corresponding growth in their business metrics. The finding highlights the important role that informed decision-making rooted in the sold market intelligence plays in driving successful business outcomes.

The implications of the perfect positive correlation are profound for SMEs seeking to thrive in the competitive marketplace. The findings suggest that businesses with robust market intelligence are better positioned to understand market dynamics, customer preferences, and competitive landscape, leading to more strategic decision-making. This understanding can translate into improved marketing strategies, product development, and customer engagement, resulting in

enhanced business growth. SMEs should prioritize the development of market intelligence capabilities to harness the benefit of informed decision-making, thereby positioning themselves for sustained success.

Supporting literature reinforces the importance of market intelligence in driving business growth for SMEs. Research by Adewale et al. (2022) emphasized the critical role of market intelligence in enabling businesses to navigate competitive environments effectively. The study indicates that companies leveraging market intelligence can identify new opportunities, mitigate risks, and make strategic decisions that enhance their performance. Bianchi and Vigieri (2021) discussed how stakeholder collaboration, informed by market intelligence, can lead to superior business growth outcomes.

The supporting literature further emphasizes the critical role of market intelligence in enhancing business growth. Bag et al. (2021) presented the integrated framework that links market intelligence with decision-making strategies in the B2B context, highlighting the potential to improve firm performance. Chopra and Sharma (2021) illustrated how data-driven insight contributes to forecasting and planning, enabling businesses to position themselves advantageously in the market.

As represented in the context of market intelligence, business growth involves expanding revenue, customer base, and market share. The positive correlation with market intelligence underscores that SMEs leveraging market insight will likely experience more robust growth trajectories. Growth is facilitated by informed decision-making processes, which are essential for navigating market complexities and optimizing business strategies. The relationship signifies that market intelligence not only influences immediate business outcomes but contributes to SMEs' long-term sustainability and competitiveness.

The implications of business growth in relation to market intelligence highlight the need for SMEs to adopt data-driven approaches in their operations. By prioritizing market intelligence, SMEs can enhance their strategic planning, optimize resource allocation, and improve customer engagement, leading to sustainable growth. Focusing informed decision-making is particularly critical in

today's fast-paced business environment, where consumer preferences and market conditions continuously evolve.

The strong relationship underscores the necessity for SMEs to invest in market intelligence capabilities to effectively drive their growth trajectories. These findings suggest a strategic emphasis on data collection and analysis to enhance decision-making processes.

Table 5

Significant Relationship Between the Level of Market Intelligence and Business Growth (n=206)

Variable	r-value	p-value	Interpretation
Market Intelligence and Business Growth	0.94	0.00	Perfect Positive Correlation/ Highly Significant

Note: 1) Perfect Negative Correlation (-0.61 to -1.00), Strong Negative Correlation (-0.31 to -0.60), Moderate Negative Correlation (-0.11 to -0.30, No Correlation (0.00), Weak Positive Correlation (0.01 to 0.10), Moderate Positive Correlation (0.11 to 0.30), Strong Positive Correlation (0.31 to 0.60) and Perfect Positive Correlation (0.61 to 1.00)

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

Summary

The study investigated the challenges and opportunities that Small and Medium Enterprises face in Ozamiz City as they navigate the complexities of digital transformation in the context of Industry 4.0. As technology advances rapidly, SMEs must harness these changes to improve their operational efficiency and competitive advantage, which is vital for accessing the international market. The research focused on the relationship between digital transformation adaptation, market intelligence, and business growth among SMEs. The study employed a descriptive-correlational research design surveying 206 owners and managers selected through purposive sampling to ensure relevant insight from those actively involved in the digital transformation processes.

The data were collected using an adapted questionnaire, including the Digital Adaptation Questionnaire, Market Intelligence Questionnaire, and Business Growth Questionnaire. The analysis utilized various statistical tools, including frequency, percentage, mean, standard deviation, and Pearson Correlation Coefficient, to quantitatively assess the relationships between the studied variables. The findings indicate a strong integration of digital technologies among SMEs, leading to enhanced operational efficiencies and significant growth. These results underscore the importance of leveraging market intelligence for informed decision-making, ultimately contributing to successfully navigating digital transformation and business development in today's competitive landscape.

Findings

1. The study revealed that the small and medium-sized enterprises in Ozamiz City exhibit a very high level of digital transformation adaptation, particularly in the realm of digital supply chain automation and digital marketing. These results indicate that SMEs are effectively integrating digital technologies into their operational frameworks.
2. The business growth assessment among SMEs in Ozamiz City revealed a high overall level. The growth is characterized by notable advancement across several constructs, including financial development, market

expansion, and innovation. The very high rating across the dimensions suggests that SMEs are not merely experiencing financial growth; they are also broadening their market presence and fostering innovation in their products and services.

3. The study also assessed the level of market intelligence among the SMEs in Ozamiz City, revealing a very high overall proficiency in gathering and utilizing various forms of market information, including competitive landscape, customer intelligence, and digital intelligence. The very high rating across these categories indicates that these enterprises are aware of the competitive landscape and adept at understanding customer needs and preferences.
4. The study's significant finding is the positive correlation identified between digital transformation adaptation and business growth. This strong correlation highlights the vital role that digital initiatives play in driving business performance among the SMEs in Ozamiz City.
5. The findings highlighted the significant impact of effective marketing intelligence practices on the growth trajectories of the SMEs in Ozamiz City. The strong correlation suggests that SMEs will likely experience substantial business growth as they enhance their marketing intelligence capabilities.

Conclusion

The researchers conclude that;

1. The study revealed that SMEs have made significant strides in adapting to digital transformation, particularly in areas like digital supply chain management, automation, and digital marketing. The achievement indicates that SMEs are actively engaging in essential technological advancement to maintain competitiveness and respond effectively to market demands.
2. The findings demonstrated that SMEs are experiencing noteworthy growth characterized by financial development, market expansion, and innovation. The growth trajectory is vital for the sustainability of these enterprises, indicating that they can capitalize on emerging opportunities within their

markets. The evidence of financial development highlights profitability and operational efficiency, while market expansion reflects the broader customer base and increased market share.

3. The investigation confirmed that SMEs in Ozamiz City possess a high level of market intelligence, including competitive, customer, and digital intelligence. Proficiency in gathering and utilizing market insight is important for making informed strategic decisions, leading to enhanced performance and competitive advantage.
4. The study established a strong positive correlation between digital transformation adaptation and business growth among the SMEs. The correlation highlights that SMEs embracing digital tools and processes are more likely to experience significant growth outcomes. Given the study findings, HO1 is rejected, suggesting that investment in digital transformation is essential for SMEs aiming for sustainable growth and adaptability in changing market conditions.
5. The investigation revealed a strong link between marketing intelligence and business growth in SMEs, emphasizing how effective marketing strategies and insights drive their success. Given this positive correlation, HO2 is rejected.

Recommendation

Based on the findings, it is recommended that the SMEs in Ozamiz City continue to prioritize and invest in the digital transformation initiative. These enterprises can improve their operational efficiency and responsiveness to market demand by enhancing their digital supply chain management and marketing strategies. SME Entrepreneurs should allocate training and resources to ensure the employees are equipped with the necessary skills to leverage new technologies effectively. Collaborating with technology providers and industry experts can facilitate the adoption of advanced digital tools tailored to the specific needs of SMEs. The proactive approach will enable them to capitalize on emerging opportunities and maintain a competitive edge in the evolving marketplace.

Furthermore, SMES must develop a strong marketing intelligence framework that encompasses competitive, customer, and digital intelligence. By implementing a system for collecting and analyzing market data, SMEs can make informed strategic decisions that drive business growth. Regularly updating their market strategies based on insight gathered from the market intelligence will allow SMEs to stay ahead of the competitors and better meet customer needs. Engaging in continuous market research and fostering a culture of innovation will further enhance their ability to adapt and thrive.

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APPENDIX A

Survey Questionnaires

Appendix A-1

Digital Transformation Adaptation Questionnaire

Read each statement carefully and contain your answer. Be guided by the following scale: 4 - Strongly Agree; 3 – Agree, 2 – Disagree, 1 - Strongly Disagree

INDICATORS	RESPONSES			
A. Digital Supply Chain	4	3	2	1
1. Our organization utilizes advanced digital tools for real-time supply chain tracking and management.				
2. We employ cloud technologies to enhance supply chain visibility and collaboration among stakeholders.				
3. Digital integration has streamlined our supply chain operations, reducing costs and improving efficiency.				
4. Our supply chain operations are integrated with digital platforms for better coordination.				
5. We use digital analytics to predict and manage supply chain disruptions.				
6. Our suppliers and partners use digital systems compatible with ours.				
7. We continuously upgrade our digital supply chain technologies.				
B. Automation				
8. Our organization has automated key operational processes to enhance productivity.				
9. Automation technologies have significantly reduced human error in our business processes.				
10. We use robotic process automation to perform routine tasks, freeing up human resources for more strategic activities.				
11. Our automation systems are regularly updated to incorporate new technologies.				
12. We have seen an increase in output due to our automation efforts.				

Appendix A-1 Cont'd

13. Automation has allowed us to reallocate human resources to more creative tasks.				
14. Our employees are trained to work alongside automated systems.				
C. Digital Marketing				
15. Our digital marketing strategies are data-driven, targeting customers with precision.				
16. We leverage social media platforms to engage with customers and promote our brand.				
17. Digital marketing has improved our ability to reach and attract new customers.				
18. Our website is optimized for mobile devices and search engines.				
19. We use email marketing campaigns to engage our customer base.				
20. Our digital marketing efforts are regularly analyzed for effectiveness.				
21. We invest in online advertising to boost our digital presence.				

Appendix A-2

Market Intelligence Questionnaire

Read each statement carefully and contain your answer. Be guided by the following
scale: 4 - Strongly Agree; 3 – Agree, 2 – Disagree, 1 - Strongly Disagree

INDICATORS	RESPONSES			
A. Competitive Intelligence	4	3	2	1
1. Our organization regularly monitors competitor activities.				
2. We analyze our competitors' strengths and weaknesses to inform our strategies.				
3. Competitive intelligence helps us to anticipate market trends.				
4. We use competitive intelligence to identify market opportunities.				
5. Our organization has a structured process for gathering competitive intelligence.				
6. Competitive intelligence informs our product development strategies.				
7. We allocate resources based on competitive intelligence findings.				
B. Customer Intelligence				
8. We collect and analyze customer feedback to improve our offerings.				
9. Customer intelligence informs our marketing and sales strategies.				
10. We use customer data to personalize our marketing efforts.				
11. Our organization regularly conducts customer satisfaction surveys.				
12. Customer insights drive our customer service improvements.				
13. We segment our customer base based on collected intelligence.				
14. Customer intelligence is integrated into our strategic planning.				
C. Digital Intelligence				
15. Our organization uses digital tools to gather market intelligence.				
16. We leverage big data analytics to gain insights into market trends.				
17. Digital intelligence has enhanced our decision-making processes.				
18. Our digital intelligence tools are regularly updated.				

Appendix A-2 Cont'd

19. We invest in technology to enhance our digital intelligence capabilities.				
20. Digital intelligence helps us identify emerging trends.				
21. We integrate digital intelligence with traditional market research methods.				

Appendix A-3

Business Growth Questionnaire

Read each statement carefully and contain your answer. Be guided by the following scale: 4 - Strongly Agree; 3 – Agree, 2 – Disagree, 1 - Strongly Disagree

INDICATORS	RESPONSES			
A. Financial Development	4	3	2	1
1. Our financial performance has improved significantly over the past year.				
2. We have achieved our financial goals and objectives.				
3. Our business has access to sufficient financial resources to support growth.				
4. We have increased our revenue consistently over the past few years.				
5. Our profitability has grown due to strategic financial management.				
6. We manage our financial risks effectively.				
7. Our cash flow management practices are robust and effective.				
B. Market Expansion				
8. We have expanded into new geographical markets in the past year.				
9. Our customer base has grown significantly in the past year.				
10. We have successfully introduced new products or services to the market.				
11. Our market share has increased over the past few years.				
12. We actively explore new market opportunities.				
13. Our marketing strategies have effectively supported our market expansion.				
14. We adapt our products/services to meet the needs of new markets.				
C. Innovation				
15. Our organization invests in research and development to drive innovation.				
16. We have implemented innovative solutions to improve our products or services.				
17. Innovation has played a key role in our business growth.				
18. We encourage and support innovative ideas within the organization.				
19. Our products/services are known for their innovative features.				
20. We have a structured process for managing innovation.				
21. Our organization collaborates with external partners for innovation.				

APPENDIX B

Sample Filled-Out Questionnaire

Appendix B-1

Digital Transformation Adaptation Questionnaire

Digital Transformation Adaptation Questionnaire

Directions: Read each statement carefully and write a check mark (/) on the columns that contain your answer. Be guided by the following scale: 4 - Strongly Agree; 3 - Agree; 2 - Disagree; 1 - Strongly Disagree

INDICATORS	RESPONSES			
	4	3	2	1
A. Digital Supply Chain				
1. Our organization utilizes advanced digital tools for real-time supply chain tracking and management.		/		
2. We employ cloud technologies to enhance supply chain visibility and collaboration among stakeholders.		/		
3. Digital integration has streamlined our supply chain operations, reducing costs and improving efficiency.		/		
4. Our supply chain operations are integrated with digital platforms for better coordination.		/		
5. We use digital analytics to predict and manage supply chain disruptions.		/		
6. Our suppliers and partners use digital systems compatible with ours.		/		
7. We continuously upgrade our digital supply chain technologies.		/		
B. Automation				
8. Our organization has automated key operational processes to enhance productivity.			/	
9. Automation technologies have significantly reduced human error in our business processes.			/	
10. We use robotic process automation to perform routine tasks, freeing up human resources for more strategic activities.			/	
11. Our automation systems are regularly updated to incorporate new technologies.			/	
12. We have seen an increase in output due to our automation efforts.			/	
13. Automation has allowed us to reallocate human resources to more creative tasks.			/	
14. Our employees are trained to work alongside automated systems.			/	

Appendix B-1 Cont'd

C. Digital Marketing				
15. Our digital marketing strategies are data-driven, targeting customers with precision.		/		
16. We leverage social media platforms to engage with customers and promote our brand.		/		
17. Digital marketing has improved our ability to reach and attract new customers.		/		
18. Our website is optimized for mobile devices and search engines.		/		
19. We use email marketing campaigns to engage our customer base.		/		
20. Our digital marketing efforts are regularly analyzed for effectiveness.		/		
21. We invest in online advertising to boost our digital presence.		/		

Appendix B-2

Market Intelligence Questionnaire

Market Intelligence Questionnaire

Directions: Read each statement carefully and write a check mark (/) on the columns that contain your answer. Be guided by the following scale: 4 - Strongly Agree; 3 - Agree; 2 - Disagree; 1 - Strongly Disagree

INDICATORS	RESPONSES			
	4	3	2	1
A. Competitive Intelligence				
1. Our organization regularly monitors competitor activities.		/		
2. We analyze competitor strengths and weaknesses to inform our strategies.		/		
3. Competitive intelligence helps us to anticipate market trends.		/		
4. We use competitive intelligence to identify market opportunities.		/		
5. Our organization has a structured process for gathering competitive intelligence.		/		
6. Competitive intelligence informs our product development strategies.		/		
7. We allocate resources based on competitive intelligence findings.		/		
B. Customer Intelligence				
8. We collect and analyze customer feedback to improve our offerings.		/		
9. Customer intelligence informs our marketing and sales strategies.		/		
10. We use customer data to personalize our marketing efforts.		/		
11. Our organization regularly conducts customer satisfaction surveys.		/		
12. Customer insights drive our customer service improvements.		/		
13. We segment our customer base based on collected intelligence.		/		
14. Customer intelligence is integrated into our strategic planning.		/		
C. Digital Intelligence				
15. Our organization uses digital tools to gather market intelligence.			/	
16. We leverage big data analytics to gain insights into market trends.			/	
17. Digital intelligence has enhanced our decision-making processes.		/		

Appendix B-2 Cont'd

18. Our digital intelligence tools are regularly updated.			✓	
19. We invest in technology to enhance our digital intelligence capabilities.		✓		
20. Digital intelligence helps us identify emerging trends.		✓		
21. We integrate digital intelligence with traditional market research methods.		✓		

Appendix B-3

Business Growth Questionnaire

Business Growth Questionnaire

Directions: Read each statement carefully and write a check mark (/) on the columns that contain your answer. Be guided by the following scale: 4 - Strongly Agree; 3 - Agree; 2 - Disagree; 1 - Strongly Disagree

INDICATORS	RESPONSES			
	4	3	2	1
A. Financial Development				
1. Our financial performance has improved significantly over the past year.		/		
2. We have achieved our financial goals and objectives.		/		
3. Our business has access to sufficient financial resources to support growth.		/		
4. We have increased our revenue consistently over the past few years.		/		
5. Our profitability has grown due to strategic financial management.		/		
6. We manage our financial risks effectively.		/		
7. Our cash flow management practices are robust and effective.		/		
B. Market Expansion				
8. We have expanded into new geographical markets in the past year.		/		
9. Our customer base has grown significantly in the past year.		/		
10. We have successfully introduced new products or services to the market.		/		
11. Our market share has increased over the past few years.		/		
12. We actively explore new market opportunities.		/		
13. Our marketing strategies have effectively supported our market expansion.		/		
14. We adapt our products/services to meet the needs of new markets.		/		
C. Innovation				
15. Our organization invests in research and development to drive innovation.			/	
16. We have implemented innovative solutions to improve our products or services.		/		

Appendix B-3 Cont'd

17. Innovation has played a key role in our business growth.		/		
18. We encourage and support innovative ideas within the organization.		/		
19. Our products/services are known for their innovative features.		/		
20. We have a structured process for managing innovation.		/		
21. Our organization collaborates with external partners for innovation.		/		

APPENDIX C

Sampling Computation

Sample size calculator	
What margin of error can you accept? 5% is a common choice	5 % The margin of error is the amount of error that you can tolerate. If 90% of respondents answer yes, while 10% answer <i>no</i>, you may be able to tolerate a larger amount of error than if the respondents are split 50-50 or 45-55. Lower margin of error requires a larger sample size.
What confidence level do you need? Typical choices are 90%, 95%, or 99%	95 % The confidence level is the amount of uncertainty you can tolerate. Suppose that you have 20 yes-no questions in your survey. With a confidence level of 95%, you would expect that for one of the questions (1 in 20), the percentage of people who answer yes would be more than the margin of error away from the true answer. The true answer is the percentage you would get if you exhaustively interviewed everyone. Higher confidence level requires a larger sample size.
What is the population size? If you don't know, use 20000	439 How many people are there to choose your random sample from? The sample size doesn't change much for populations larger than 20,000.
What is the response distribution? Leave this as 50%	50 % For each question, what do you expect the results will be? If the sample is skewed highly one way or the other, the population probably is, too. If you don't know, use 50%, which gives the largest sample size. See below under More information if this is confusing.
Your recommended sample size is	206 This is the minimum recommended size of your survey. If you create a sample of this many people and get responses from everyone, you're more likely to get a correct answer than you would from a large sample where only a small percentage of the sample responds to your survey.

APPENDIX D

Informed Consent



MISAMIS UNIVERSITY
Ozamiz City
College of Business and Management



INFORMED CONSENT FORM

Researcher/Investigator:

Name: Eman L. Nadela

Course: Bachelor of Science in Business Administration

College: Business and Management

Email / Contact Number:

Thesis Title: SMALL AND MEDIUM SIZED ENTERPRISES SMES ENTREPRENEURS' DIGITAL TRANSFORMATION ADAPTATION, BUSINESS GROWTH AND MARKET INTELLIGENCE IN OZAMIZ CITY

PART I. INFORMATION SHEET

Introduction	Good day! I am Eman L. Nadela, the principal researcher of the study entitled "SMALL AND MEDIUM SIZED ENTERPRISES SMES ENTREPRENEURS' DIGITAL TRANSFORMATION ADAPTATION, BUSINESS GROWTH AND MARKET INTELLIGENCE IN OZAMIZ CITY" I am an undergraduate student under the program Bachelor of Science in Business Administration at Misamis University in Ozamiz City. I am to conduct the research with SMALL AND MEDIUM SIZED ENTERPRISES ENTREPRENEURS as respondents. In this vein, I am respectfully seeking your voluntary participation, being qualified to give your informed consent to take part in this study. Before you decide whether to participate or not in this study, please read the succeeding information about the study and feel free to ask questions anytime should there be anything you do not understand or want to clarify. If you agree to answer the
	interview, you will be asked to affix your name and signature on this form for which you will be given a copy.
Purpose	The purpose of this the study aims to investigate the multifaceted relationship between SMEs' Digital Transformation adaptation, business growth, and market intelligence.
Type of Research Intervention	This study will be conducted through the adopted and modified research questionnaires. The gathering of data will be conducted in person.
Selection of Participants	This study will select 384 respondents. The selection is based on the following inclusion criteria: Small Enterprises that has 10-99 employees and with an asset size of 3,000,001-15,000,000; Medium Enterprises that has 100-199 employees and with an asset size of 15,000,001-100,000,000.
Voluntary Participation	Your participation has to be voluntary and will not affect your situation or status in any way, including your relationship with the researcher. You are free to decide if you will take part or not. If you decide to participate, you are free not to answer any questions that you do not prefer to answer.

APPENDIX D CONT'D

Procedure	The distribution and retrieval of the questionnaires will be done in your hospital, and the researcher will personally distribute and retrieve the research instruments. To ensure your understanding of the statements indicated in the questionnaires, the statements will be translated into the Bisayan language. In case you will have questions, such will be answered fully. The respondents will be given ample time to complete the questionnaires. The researcher will get your responses for data analysis and interpretation. The information and data provided by you as a respondent will be utilized for this study alone and will be treated with the utmost confidentiality.	token of appreciation in the form of a light snack may be provided during the gathering of the research data.
		Confidentiality of Data Only the researcher will have access to the information and responses of the participants. The personal identifying information of the participants will only be used for research analysis and will be treated with the utmost confidentiality. During the study, all data will be kept in a locked, secure filing cabinet, which will be discarded 6 months after the publication of the results.
		Sharing of Findings The results of this study will be presented during the thesis final defense of the researcher. Also, the research findings may be shared through publications and conferences with the assurance that the identities of the respondents will remain confidential. A printed copy of the completed study will be provided to the participants.
Duration	Answering the questionnaires will last for 10 to 15 minutes.	
Risks and Discomforts	The respondents will be protected from physical, social, or economic risks. In case the items in the questionnaires are too personal and make you feel uncomfortable, you may decline to answer any or all questions and may terminate your involvement at any time you choose.	
Benefits	This study is beneficial to you because the researcher may be able to provide an understanding of the relationship between SMEs' Digital Transformation adaptation, business growth, and market intelligence. Thus, your responses shall be highly valued being deemed important in the field of business.	
Reimbursements	There will be no monetary expenses or costs on your part as a respondent, nor any monetary compensation for your participation in this study. However, a small	Rights to Refuse or Withdraw You are free to withdraw or terminate participation at any stage of the study, without the need to give any reason. You will not be penalized in case of termination of participation.
		Who to Contact Should there be any queries as a respondent, you can contact the researcher through the following details: Name of the Researcher: Eman L. Nadela Cellphone Number/s: e-mail add: STATEMENT BY THE RESEARCHER (PAGPADAYAG SA NAGTUON)

APPENDIX D CONT'D

I will read the Information sheet to the potential respondent. With the best of my ability, I make sure that the respondent will understand the statements of the questionnaires. I can assure that the participant will be given an opportunity to ask questions about the study, and all the questions raised will be answered fully. I can likewise assure that the participant will not be coerced into giving consent that must be free and voluntary. A copy of this Informed Consent Form will be provided to the participant. Print Name of Researcher: <u>EMAN L. NADELA</u>	If Illiterate If the respondent is illiterate, a witness who is literate will sign. The respondent will choose him/ her and who is without connection with the researcher or the research group to attest to this undertaking. The respondent will affix his thumbprint. Thumb mark Name and Signature of the Witness
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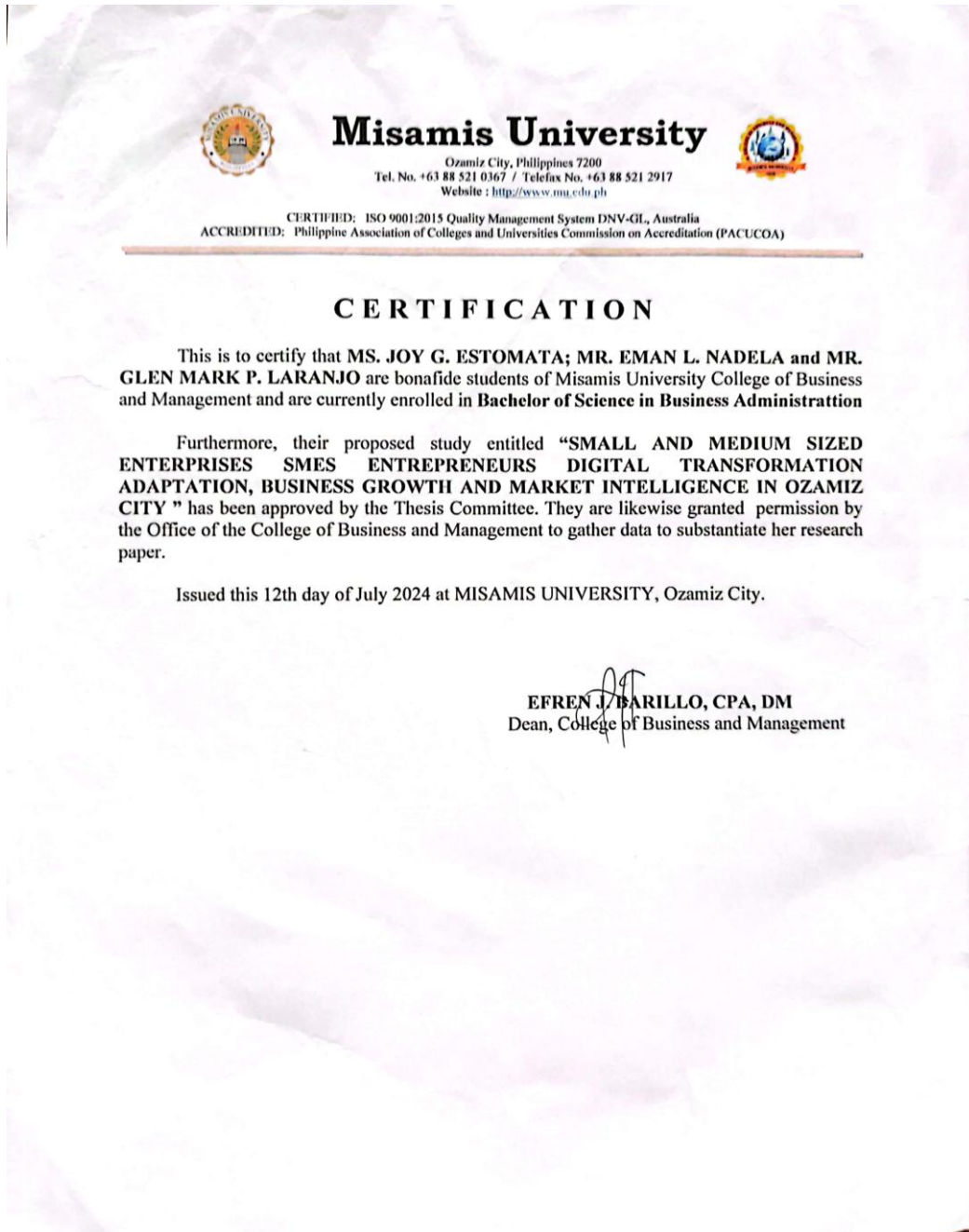
PART II. CERTIFICATE OF CONSENT This research entitled "SMALL AND MEDIUM SIZED ENTERPRISES SMES ENTREPRENEURS' DIGITAL TRANSFORMATION ADAPTATION, BUSINESS GROWTH AND MARKET INTELLIGENCE IN OZAMIZ CITY" by Eman L. Nadela, Joy Estomata, and Glen Mark Laranjo with the aim to investigate the multifaceted relationship between SMEs' Digital Transformation adaptation, business growth, and market intelligence. I have read the foregoing Informed Consent Form, or it has been read to me. I had the opportunity to ask questions, which were subsequently answered fully. I consent voluntarily to be a participant of this study. Print Name of Participant: Signature of Participant: Date: [MM/DD/YYYY]

APPENDIX E

Approved Letters of Consent

Appendix E-1

Approved Letter to Conduct the Survey



Appendix E-2
Approved Letter to the City Mayor



MISAMIS UNIVERSITY
Ozamiz City,
College of Business and Management



April 30, 2024

Hon. Atty. Henry F. Oaminal Jr.
City Mayor
City Hall, Ozamiz City
Misamis Occidental

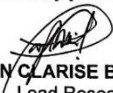
Dear Hon. Atty. Oaminal Jr.:

Greetings of Peace and Prosperity!

We, students of the Bachelor of Science in Business Administration (BSBA) at the College of Business and Management (CBM), Misamis University, are currently working on the study entitled "Micro, Small and Medium Enterprises' Management Styles, Personality Traits, and Business Performance in Ozamiz City." In line with this matter, we want to ask the total number of registered MSME's in Ozamiz City. Through this undertaking we would be able to carefully calculate the sample respondents that will be qualified in our studies. Rest assured that all the information gathered from that prospective office will be used for academic purposes only.

May this request merit your good office as we continuously thrive in making our community a progressive city under your leadership. Thank you and God speed!

Respectfully yours,


JAN CLARISE B. HIYAN
Lead Researcher

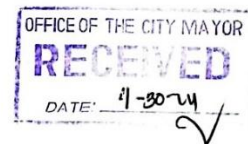
Noted by:


GILDA L. ILUSORIO, DM
Research Adviser


RENZITEO ALF P. CARPIO, DM
Subject Adviser

Approved by:


EFREN J. BARILLO, CPA, DM
Dean, College of Business and
Management



Appendix E-3

Approved Letter from the City Mayor

  **REPUBLIC OF THE PHILIPPINES**
CITY ADMINISTRATOR'S OFFICE
CITY OF OZAMIZ

 **ASENSO**
OZAMIZ

TELEFAX NO. (088) 621-1390
MOBILE NO. (0917) 777 6100
EMAIL: ASENSOOZAMIZADM@GMAIL.COM

8 August 2024

Mr. EFREN J. BARILLO, CPA, DM, Dean
Mr. RENZITELLO ALF P. CARPIO, DM, Subject Adviser
Ms. GILDA L. ILUSORIO, DM, Research Adviser
MISAMIS UNIVERSITY-College of Business and Management

Thru: **Mr. JAN CLARISE B. HIYAN**
Lead Researcher

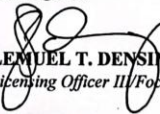
Dear Sir:

With reference to your request for the Total Number of Registered MSME's in Ozamiz City for your study entitled "Micro, Small and Medium Enterprises' Management Styles, Personality Traits, and Business Performance in Ozamiz City," hereunder is the data as of 7 August 2024, to wit:

LARGE	- 51
MEDIUM	- 162
MICRO	- 3,501
SMALL	- 277
UNCATEGORIZED	- 49
TOTAL	4,040

We hope this data supports your research efforts.

Thank you.

Best regards,

LEMUEL T. DENSING, MIST
Licensing Officer II/Focal Person, iBPLS (I.T.)

Noted by

ATTY. SAM NORMAN G. FUENTES
City Administrator

Copy furnished:
City Mayor's Office

Mayor Fernando Bernad, Memorial Hall, Don Anselmo Bernad Ave.,
7200, Ozamiz City, Misamis Occidental, Philippines

APPENDIX F

Statistical Computation

1.What is the level of digital transformation adaptation among SMEs in terms of digital supply chain, automation, and digital marketing?

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Digital Supply Chain	206	1.000000000 0000000	4.000000000 0000000	3.321081830 790569	.5578860214 97542
Automation	206	1.000000000 0000000	4.000000000 0000000	3.233009708 737864	.5916257447 96723
Digital Marketing	206	1.000000000 0000000	4.000000000 0000000	3.375866851 595006	.5305932858 10884
digital transformation adaptation	206	1.000000000 0000000	4.000000000 0000000	3.309986130 374481	.5235822607 24746
Valid N (listwise)	206				

2.What is the level of business growth among SMEs in terms of financial development, market expansion, and innovation?

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Competitive Intelligence	206	1.571428571 4285714	4.000000000 0000000	3.398751733 703193	.5004750627 02154
Customer Intelligence	206	1.428571428 5714286	4.000000000 0000000	3.406380027 739252	.5098364572 70495
Digital Intelligence	206	1.000000000 0000000	4.000000000 0000000	3.352288488 210818	.5554617840 33237
SMEs' market intelligence	206	1.333333333 3333333	4.000000000 0000000	3.385806749 884420	.4920344339 82353
Valid N (listwise)	206				

APPENDIX F Cont'd

3.What is the level of SMEs' market intelligence in terms of competitive intelligence, customer intelligence, and digital intelligence?

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Financial Development	206	2.000000000 0000000	4.000000000 0000000	3.410540915 395285	.4941387111 56905
Market Expansion	206	2.000000000 0000000	4.000000000 0000000	3.434119278 779472	.4897850851 19596
Innovation	206	1.000000000 0000000	4.000000000 0000000	3.497919556 171983	.4534537898 61802
business growth	206	1.714285714 2857142	4.000000000 0000000	3.447526583 448914	.4386271479 72334
Valid N (listwise)	206				

4.Is there a significant relationship between Digital Transformation Adaptation to Business growth among SMEs?

5.Is there a significant relationship between Marketing Intelligence and Business growth among SMEs?

Correlations

			digital transformat ion adaptation	SMEs' market intelligence	business growth
Spearman's rho	digital transformation adaptation	Correlation Coefficient	1.000	.833**	.818**
		Sig. (2-tailed)	.	.000	.000
		N	206	206	206
	SMEs' market intelligence	Correlation Coefficient	.833**	1.000	.874**
		Sig. (2-tailed)	.000	.	.000
		N	206	206	206
	business growth	Correlation Coefficient	.818**	.874**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	206	206	206

** . Correlation is significant at the 0.01 level (2-tailed).

Appendix G
Documentation

Appendix G-1
Conducting Survey Documentation



Appendix G-2
Research Proposal Defense Documentation



Research Paper Defense Documentation



APPENDIX H

Grammarly Report



Report: SMALL AND MEDIUM-SIZED ENTERPRISES ENTREPRENEURS' DIGITAL TRANSFORMATION ADAPTATIO...

SMALL AND MEDIUM-SIZED ENTERPRISES ENTREPRENEURS' DIGITAL TRANSFORMATION ADAPTATION, BUSINESS GROWTH, AND MARKET INTELLIGENCE IN OZAMIZ CITY

by a

General metrics

68,888	9,217	486	36 min 52 sec	1 hr 10 min
characters	words	sentences	reading time	speaking time

Score



This text scores better than 99%
of all texts checked by Grammarly

Writing Issues

71	1	70
Issues left	Critical	Advanced

Plagiarism

This text hasn't been checked for plagiarism

APPENDIX H Cont'd



Report: SMALL AND MEDIUM-SIZED ENTERPRISES' ENTREPRENEURS' DIGITAL TRANSFORMATION ADAPTATIO...

Writing Issues

3	Correctness	
1	Citation style options	
1	Determiner use (a/an/the/this, etc.)	
1	Incorrect phrasing	
38	Clarity	
11	Passive voice misuse	
22	Wordy sentences	
3	Unclear sentences	
1	Intricate text	
1	Paragraph can be perfected	
25	Engagement	
25	Word choice	
5	Delivery	
2	Tone suggestions	
3	Inappropriate colloquialisms	

Unique Words

16%

Measures vocabulary diversity by calculating the percentage of words used only once in your document

unique words

APPENDIX H Cont'd



Report: SMALL AND MEDIUM-SIZED ENTERPRISES ENTREPRENEURS' DIGITAL TRANSFORMATION ADAPTATIO...

Rare Words

46%

Measures depth of vocabulary by identifying words that are not among the 5,000 most common English words.

rare words

Word Length

6.1

Measures average word length

characters per word

Sentence Length

19

Measures average sentence length

words per sentence

APPENDIX I

Turnitin Result



Similarity Report ID: otd:28447:71004816

PAPER NAME

EMAN L. NADELA.docx

WORD COUNT

11518 Words

CHARACTER COUNT

74391 Characters

PAGE COUNT

53 Pages

FILE SIZE

4.3MB

SUBMISSION DATE

Nov 13, 2024 1:48 PM GMT+8

REPORT DATE

Nov 13, 2024 1:49 PM GMT+8

● 28% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

- 13% Internet database
- 8% Publications database
- Crossref database
- Crossref Posted Content database
- 27% Submitted Works database

● Excluded from Similarity Report

- Bibliographic material

Summary

CURRICULUM VITAE

Name: Eman L. Nadela

Age: 22 years Old

Sex: Male

Birthdate: October 8, 2002

Address : Purok-1 Lam-an, Ozamiz City

Mobile No. : 09166927942

Religion : Christian



EDUCATIONAL BACKGROUND

COLLEGE DEGREE : Bachelor of Science in Business Administration

Major in Marketing Management

SCHOOL : Misamis University

S.Y. : 2021-Present

ADDRESS : Feliciano Steet, Aguada, Ozamiz City

SENIOR HIGH SCHOOL

STRAND : Science, Technology, Engineering and Mathematics

SCHOOL : Misamis University

S.Y.: 2019-2021

ADDRESS : Feliciano Steet, Aguada, Ozamiz City

JUNIOR HIGH SCHOOL

SCHOOL : Misamis University

S.Y.: 2015-2019

ADDRESS : Feliciano Steet, Aguada, Ozamiz City

ELEMENTARY EDUCATION

SCHOOL : United Church of Christ in the Philippines SY : 2009-2015

ADDRESS : Lam-an, Ozamiz City, Misamis Occidental

CURRICULUM VITAE

Name: Joy G. Estomata

Age: 21 years Old

Sex: Female

Birthdate: December 25, 2003



Address : Purok-6 Malaubang, Ozamiz City, Misamis Occidental

Mobile No. : 09104204092

Religion : Roman Catholic

EDUCATIONAL BACKGROUND

COLLEGE DEGREE : Bachelor of Science in Business Administration

Major in Marketing Management

SCHOOL : Misamis University

S.Y. : 2021-Present

ADDRESS : Feliciano Steet, Aguada, Ozamiz City

SENIOR HIGH SCHOOL

STRAND : Accountancy, Business, and Management

SCHOOL : Ozamiz City National High School S.Y.: 2019-2021

ADDRESS : Bernad St., Lam-an, Ozamiz City

JUNIOR HIGH SCHOOL

SCHOOL : Malaubang Integrated School S.Y.: 2015-2019

ADDRESS : Purok-3 Malaubang, Ozamiz City

ELEMENTARY EDUCATION

SCHOOL : Malaubang Integrated School S.Y.: 2009-2015

ADDRESS : Purok-3 Malaubang, Ozamiz City

CURRICULUM VITAE

Name: Glen Mark P. Laranjo

Age: 22 years Old

Sex: Male

Birthdate: May 6, 2002

Address : Purok- Bonifacio, Bacolod , Ozamiz City

Mobile No. : 09635615230

Religion : Roman Catholic



COLLEGE DEGREE : Bachelor of Science in Business Administration
Major in Marketing Management

SCHOOL : Misamis University S.Y. : 2021-Present

ADDRESS : Feliciano Steet, Aguada, Ozamiz City

SENIOR HIGH SCHOOL

STRAND : Information and Communication Technology

SCHOOL : Ozamiz City School of Arts and Trade

S.Y. : 2019-2021

ADDRESS : Maningcol, Ozamiz City

JUNIOR HIGH SCHOOL

SCHOOL : Ozamiz City School of Arts and Trade

S.Y. : 2015-2019

ADDRESS : Maningcol, Ozamiz City

ELEMENTARY EDUCATION

SCHOOL : Bacolod Elementary School

S.Y. : 2009-2015

ADDRESS : Bacolod, Ozamiz City, Misamis Occidental