CHALLENGES IN DIGITAL TRANSFORMATION OF MICROENTERPRISES IN NUEVA ECIJA: A BASIS FOR RISK MANAGEMENT PLAN.

Abstract.

Digital transformation (DT) has attracted the attention of management and organizational scholars in the past decade. It has become an important factor for the competitiveness of businesses especially with the micro, small, and medium enterprises (MSMEs). The use of technology has been the goal of many MSMEs to push forward in the competition and provide better quality products and services to its customers and improve the customer experience through IT innovation. This paper presents the challenges of digital transformation on the business, its employees and the customers. A structured questionnaire was given to the MSMEs in Nueva Ecija to determine their challenges in digital transformation specifically on how they operate, adopt, and the response of their employees and how it contributes to the overall performance of the MSMEs.

*Keywords:*Digital Transformation; Microenterprises; Risk Management

I. Introduction

The Problem and Its Background

Challenges in any business organization are inevitable. It is this very nature that businesses must compete and stay relevant to be able to stay afloat in the business environment they are operating. Without challenges, business organizations become stagnant and cannot offer innovative products and services that customers highly value. It is a must for business organizations to adopt changes that will improve how they operate and offer quality and efficient products and services to their clients. In this challenging modern business environment, managers and business leaders are challenged on how to integrate digital transformation to improve its operation given the limitations imposed on them.

Digitalization is transforming economies across the world and altering the way firms develop and market goods and services. It holds many promises to spur innovation, generate efficiencies, and improve economic prospects. However, the dynamics of digitalization have not been equally spread across regions, over time, or even across firms within countries. While differences in digitalization between high- and low-income countries remain large, spurred by the declining costs of broadband from the mid to late 2000s and the increasing ease of internet access with inexpensive mobile phones, some developing countries have expanded their digital economies exponentially over the past decade or so. Digital transformation is a driving force for innovative, inclusive, and sustainable growth. Digitalization continues to expand across the globe, understanding how managers' digital literacy affects firm outcomes, such as innovation and performance. Managers' Digital Literacy comprises more than a manager's ability to use digital devices or software. Rather, it involves a complex set of sociological, emotional, and cognitive skills that allow managers to function effectively in the digital environment. These skills broadly include the ability to use digital tools and technologies to identify and access new knowledge. Interestingly, Digital Literacy has been identified as a crucial skill for individuals to help them transform their organizations and achieve superior performance. Indeed, the fourth industrial revolution (i.e., Industry 4.0) has led to increased patronage of digital technologies such as the Internet of Things (IoT), big data, artificial intelligence (AI), robotics, cloud computing, additive manufacturing, augmented and virtual reality, and many

other related digital innovations. The diffusion of these digital technologies is radically transforming organizational processes and business models. Given the rapid and radical transformation brought about by digital technologies, it is critical for managers to embrace the digital revolution in order to innovate and grow (Zahoor, et al, 2023)

Digital tools bring many significant benefits to firms. Digitalization reduces transaction costs by providing better and quicker access to information, and communication between staff, suppliers, and networks. It can help small and medium-sized enterprises (SMEs) integrate into global markets, through reductions in costs associated with transport and border operations and it significantly enhances the scope to trade services. It facilitates access to resources, including finance (e.g. peer-to-peer lending), training, and recruitment channels, including government services, which are increasingly being made available online. It also supports innovation, and greater access to innovation assets, as well as the potential for firms to generate data and analyze their own operations in new ways, to drive improved performance. Yet despite the benefits and opportunities digital technologies bring, and the significant increase in uptake in recent years, many SMEs continue to lag in adoption, and for smaller SMEs, with 10- 49 employees, digital adoption gaps, compared to larger firms, have grown over the last decade. Indeed, in many countries (e.g. Greece, Hungary, Poland, Portugal, and Turkey, where the median share of employees with connected computers in small firms remains at or below 40%), progress has stalled, while large firms in frontier countries (Denmark, Finland, Sweden at about 80% or above) have shown rapid progress over the period. Because digitalization is an important driver of productivity growth, and in turn wage growth, these gaps have contributed to increased inequalities among people, places, and firms. (OECD, 2018)

REVIEW OF RELATED LITERATURE

Related Foreign Studies

Digital transformation is a necessary development that most companies around the world must adapt. Companies that can't adapt to the technological change will become a victim of digital Darwinism. Only those technologically adaptable companies can survive and compete in the ever- changing business landscape.

Digital technology is central for designing a new and more competitive business model. However, digital technology alone is not sufficient to make enterprises improve its position and perform well in the market. There must be constant, adequate guidance and integral use of modern digital technology in the business activities of changing products, business processes, structure of the organization, organizational culture and the business model as a whole focusing on the optimal objective of customer satisfaction. Continuous improvement of existing and fast absorption of new technologies is a manifestation of digital transformation. The constant emergence of new technologies integrated into the business process affecting the activities of a company enables the continuity of digital transformation. When asked, many would say that technology is the main driver in the digital transformation process, but that is not the complete picture. Digital technologies like social, mobile, analytics, cloud, and others are just one picture. The strength of those digital technology lies in the use and the preparation of the company in the implementation and use of those digital technology. This means that the success of digital transformation requires knowledge on how to integrate, capability and resources to make the necessary transformation with the goal of improving the products, the process, people and the company with the use of digital technology. However, digital technology alone is not sufficient to make enterprises improve its position and perform well in the market. There must be constant, adequate guidance and integral use of modern digital technology in the business activities of changing products, business processes, structure of the organization, organizational culture and the business model as a whole focusing on the optimal objective of customer satisfaction. The strength of those digital technology lies in the use and the preparation of the

company in the implementation and use of those digital technology. This means that the success of digital transformation requires knowledge on how to integrate, capability and resources to make the necessary transformation with the goal of improving the products, the process, people and the company with the use of digital technology. (Pantic, et.al , 2019)

Digital transformation refers to the comprehensive integration of digital technologies into all aspects of an organization, fundamentally changing how it operates and delivers value to its customers. It goes beyond adopting individual technologies and encompasses a strategic, organization-wide shift towards a digitally-driven culture and business model. At its core, digital transformation leverages technologies such as artificial intelligence, cloud computing, data analytics, and the Internet of Things to enhance business processes, improve decision-making, and foster innovation. The aim is to create a more agile and customer-centric organization that can adapt to rapidly changing market conditions. Digital transformation is not just a technological shift; it involves a cultural and organizational change. Leaders need to inspire a mindset of continuous improvement, collaboration, and openness to new ideas. It requires investments in employee training and development to ensure that the workforce is equipped with the skills needed in a digital era. Several notable organizations have successfully undergone digital transformation, leading to increased efficiency and competitiveness. For example, companies like Amazon, Netflix, and Uber have disrupted traditional industries by embracing digital technologies and redefining customer experiences.
Digital transformation is a crucial process that organizations undergo to leverage technology in order to improve efficiency, customer experience, and overall business operations. The benefits of digital transformation are multifaceted and can significantly impact various aspects of a business.

One of the key advantages is enhanced operational efficiency. Through the implementation of digital tools and technologies, businesses can streamline their processes, automate routine tasks, and reduce manual errors. This leads to increased productivity, faster decision-making, and cost savings. For example, the integration of cloud-based solutions allows for better collaboration among employees, irrespective of their geographical locations, fostering a more agile and responsive work environment (Smith, 2018).

Improved customer experience is another critical benefit. Digital transformation enables businesses to better understand their customers' needs and preferences through data analytics and customer relationship management (CRM) systems. This information can be utilized to personalize products and services, provide more targeted marketing, and enhance overall customer satisfaction. For instance, the use of AI-powered chatbots can provide instant and personalized customer support, enhancing the overall experience (Davenport, Harris, & Shapiro, 2019).Furthermore, digital transformation facilitates better decision-making through data-driven insights. Big data analytics allows businesses to collect and analyze vast amounts of data, providing valuable information for strategic planning. Real-time data analysis enables organizations to make informed decisions promptly, adapting to market changes and staying ahead of the competition (Westerman, Bonnet, & McAfee, 2014).

In terms of competitiveness, digital transformation is a key driver. Businesses that embrace digital technologies are better positioned to adapt to market trends and changing customer expectations. This adaptability fosters innovation, allowing companies to develop new products and services, enter new markets, and gain a competitive edge (Bughin, Hazan, Lund, Subramaniam, & Wehner, 2018).Moreover, digital transformation can lead to significant cost savings in the long run. While the initial investment in technology implementation may be substantial, the efficiencies gained through automation, improved processes, and reduced operational costs can result in a positive return on investment over time (Ross, Beath, & Mocker, 2019).Digital transformation also enhances cybersecurity. As businesses adopt advanced technologies, they become more aware of the importance of cybersecurity measures to protect sensitive data. This includes implementing robust encryption, regular security audits, and employee training programs to mitigate cyber threats (Litan, 2015). The benefits of

digital transformation are diverse and impactful. From operational efficiency and improved customer experience to better decision-making and enhanced competitiveness, businesses that embrace digital transformation are better positioned for long-term success in the rapidly evolving digital landscape.

Digital Transformation of SME's

Digital transformation offers numerous benefits for small and medium enterprises (SMEs), playing a pivotal role in enhancing their competitiveness and sustainability in today's dynamic business environment. This comprehensive process involves the integration of digital technologies into various aspects of business operations, leading to improved efficiency, innovation, and overall growth.

One primary advantage of digital transformation for SMEs is enhanced operational efficiency. Through the adoption of digital tools and technologies, businesses can streamline their processes, automate repetitive tasks, and reduce manual errors. This increased efficiency translates into cost savings and allows employees to focus on more value-added activities. For instance, implementing customer relationship management (CRM) systems can help SMEs manage customer interactions more effectively, leading to improved customer satisfaction and loyalty (Smith, 2018).Moreover, digital transformation enables SMEs to gain valuable insights through data analytics. By collecting and analyzing data from various sources, businesses can make informed decisions, identify market trends, and understand customer preferences. This data-driven approach empowers SMEs to tailor their products and services to meet customer demands, ultimately leading to increased sales and revenue (Westerman et al., 2019).

Innovation is another key benefit of digital transformation for SMEs. Embracing digital technologies fosters a culture of innovation within the organization, encouraging employees to explore new ideas and solutions. Cloud computing, for example, provides SMEs with access to scalable and flexible resources, facilitating the development and deployment of innovative products and services (Chui et al., 2018).Additionally, digital transformation enhances the customer experience, a crucial factor in today's competitive business landscape. SMEs can leverage digital channels to engage with customers, provide personalized experiences, and offer convenient online services. Mobile apps, social media platforms, and e-commerce websites enable SMEs to reach a broader audience and create meaningful connections with customers (Hirt & Willmott, 2018).Furthermore, digital transformation contributes to better risk management for SMEs. With cybersecurity measures and data protection protocols, businesses can safeguard sensitive information and mitigate the risks associated with cyber threats. This not only protects the organization's reputation but also builds trust among customers and partners (Bughin et al., 2018). Digital transformation presents a multitude of benefits for small and medium enterprises, ranging from enhanced operational efficiency and innovation to improved customer experience and risk management. By embracing digital technologies, SMEs can position themselves for sustained growth and competitiveness in an increasingly digitalized business landscape.

Challenges of Digital Transformation:

Digital transformation has become imperative for businesses in today's dynamic and competitive environment. While larger enterprises often have the resources to navigate this transformation seamlessly, SMEs encounter distinct challenges that can impede the process. In this discussion, we will explore some of these challenges with a focus on their implications for SMEs.

Limited Resources

One of the primary challenges faced by SMEs is the constraint of limited resources, including financial and human capital. Unlike larger enterprises, SMEs may struggle to allocate funds for comprehensive digital transformation initiatives. This limitation can hinder the adoption of advanced technologies and the hiring of skilled personnel, slowing down the overall transformation process (Duan, Xu, & Zhang, 2019).

Resistance to Change
The resistance to change is a common challenge in any organizational transformation, but it can be particularly pronounced in SMEs. The close-knit nature of these businesses often results in employees being resistant to altering established workflows and processes. Overcoming this resistance requires effective change management strategies, emphasizing the benefits of digital transformation for both the business and its employees (Tumbas, Ainin, & Tarhini, 2020).

Lack of Digital Skills
SMEs may face difficulties in recruiting and retaining employees with the necessary digital skills. The rapid evolution of technology makes it challenging for SMEs to keep pace with the skills required for successful digital transformation. Addressing this challenge involves investing in training programs for existing employees and collaborating with educational institutions to bridge the digital skills gap (Moghavvemi, Teh, & Jaafar, 2019).

Cybersecurity Concerns
As SMEs increasingly rely on digital technologies, they become more susceptible to cyber threats. However, due to resource constraints, SMEs may struggle to implement robust cybersecurity measures. This exposes them to risks such as data breaches and financial losses. To address this challenge, SMEs must prioritize cybersecurity and explore cost-effective solutions that align with their budget constraints (Dwivedi et al., 2019).

Integration of Legacy Systems
Many SMEs operate with legacy systems that were not designed to accommodate the latest digital technologies. Integrating these legacy systems with modern digital solutions can be a complex and costly process. It requires careful planning to ensure a smooth transition without disrupting ongoing business operations (Al-Debei, Avison, & Bahrami, 2015).

Vendor Selection and Management
SMEs may struggle with choosing the right technology vendors and managing these relationships effectively. Limited bargaining power may result in SMEs being offered less favorable terms compared to larger enterprises. Additionally, inadequate vendor management can lead to issues such as service disruptions and unexpected costs. To mitigate these challenges, SMEs should conduct thorough vendor assessments and establish clear communication channels (Lacity, Willcocks, & Craig, 2014).

Regulatory Compliance
Adhering to evolving regulatory requirements related to digital practices is a challenge for SMEs. Navigating complex legal frameworks requires a dedicated focus on compliance, which can divert attention and resources from core business activities. Staying informed about regulatory changes and seeking legal counsel can help SMEs navigate this challenge effectively (Yuan, Archer, Conrady, & Gong, 2021).
The challenges faced by SMEs in the implementation of digital transformation are multifaceted, encompassing resource constraints, resistance to change, skills gaps, cybersecurity concerns, legacy system integration, vendor management, and regulatory compliance. Overcoming these challenges requires a strategic and adaptive approach, with a focus on maximizing the benefits of digital transformation while minimizing disruptions to business operations.

Philippine Related Studies

The Philippine Government launched several strategies to cater the trend in the 21st century and aims to achieve its vision of the Philippine Government Online thru the Philippine Digital Transformation Strategy (PDTS). The goal of the PDTS is to materialize the effort of the government to establish and electronic government in the

country using development and innovations in information and communications technology. These efforts include the Philippine Digital Strategy of 2011-2016, the Government Information Systems Plan, the Philippine Strategic ICT Roadmap of 2006-2010, and the eGovernment Master Plan of 2012, among others. The Philippines created the Department of Information andCommunications Technology (DICT) that will give focus on the overall goal of establishing a transparent, effective, and citizen-centric e-government. One of the objectives of PDTS is to engage the citizen genuinely through available communication channels like Facebook, Twitter, and other social media platforms on the internet. These strategies are a development plan aimed at transforming the government into a digital platform providing transparent and accountable governance, efficient operations, direct citizen engagement, and innovation (Philippine Digital Transformation Strategy 2022, 2019). According to the report of the DICT, the E-Government Master Plan of 2012 laid the foundation for the government to pursue its goal of improving the way it provides services and how it interacts with the general public through the use of ICT. It built the infrastructure and integrated the whole of the government by providing connectivity, harmonizing information systems, and promoting interoperability. With these, the country was able to gain some grip in terms of online services and human capital development(Trecene, 2021).

According to (Lim, 2022) the small and medium scale enterprises (SMEs) are considered as drivers of job creation and economic growth in the Philippines. Philippines Statistics Authority (PSA) data showed that during the years 2010-2019, 99.5- 99.6% of all business in the country falls under the SME category. These firms can have a huge potential opportunity for considerable increased market access and tremendous growth with the ASEAN's current initiative towards regional market integration. For the Philippines to become a major player in the ASEAN market and in the regional production networks, these smaller businesses must be capable of facing the challenges and opportunities the economic integration brings. Some of the challenges the Philippine SMEs face is the limited access to finance, information gaps, lack of technology and skills, poor product quality and poor marketing that hamper the advantage of the SMEs from the Philippines to compete internationally and to market their products abroad. To deliver to its international commitment in a highly competitive economic region and to align its goals to the ASEAN Strategic Action Plan for SME Development 2016-2025 and to the ASEAN Economic Community (AEC) Blueprint through the ASEAN Common Market and the APEC partnership, the Philippines formulated the Micro, Small and Medium Enterprise (MSME) Development Plan 2017-2022 with the vision to be more globally competitive - regionally integrated, resilient, sustainable, and innovative. The Plan has three focus areas with corresponding themes of emphasis. First, business environment, with emphasis on improving the business regulatory requirements and procedures as well as maximizing access to finance. Second, business capacity, with the aim of strengthening human capital development and improving innovation and technological competitiveness of MSMEs to transform and create new business models and enterprises. Finally, business opportunities whose aim is broadening access to markets. Innovation has always been regarded as the key to business growth and development. In this data age, there has been a rapid transformation of the way things are done as a result of innovation. Additionally, the unexpected occurrence of the COVID-19 pandemic has been a pronounced challenge to strive and continue to stay competitive despite volatile demand and supply.

In the Philippines, the Department of Trade and Industry (DTI) has been pivotal in promoting digital transformation among SMEs. Initiatives such as the SME Roving Academy (SMERA) have aimed to educate and support SMEs in integrating digital tools and technologies into their business models (Department of Trade and Industry, 2020).

Moreover, the COVID-19 pandemic acted as a catalyst for the acceleration of digital transformation in SMEs. With lockdowns and restrictions impacting traditional business operations, many SMEs swiftly pivoted towards digital solutions for remote work, e-commerce, and online marketing. This shift highlighted the significance of digital readiness for business continuity and resilience (Enriquez, 2021).

Despite these advancements, challenges persist. Factors such as limited access to financing, inadequate digital infrastructure in certain regions, and a skill gap in adopting and utilizing digital technologies pose hurdles to widespread digital transformation among SMEs in the Philippines (Paje, 2019).

To facilitate this transformation further, government support, collaboration with tech providers, and the development of tailored programs focusing on digital upskilling are essential. Additionally, initiatives encouraging partnerships between larger enterprises and SMEs can aid in knowledge transfer and resource sharing for a more comprehensive digital integration (Paje, 2019).

II. Methodology

Research Design

The researchers used a quantitative approach using a descriptive survey method in this study. The quantitative approach often, according to McCusker and Gunaydin (2014) uses tools such as surveys or questionnaires to collect numerical data, which will be used in statistical models. This strategy is seen as more efficient than qualitative since the data collection and gathering of data is faster and the researcher tends to remain objective about the subject matter (McCusker & Gunaydin (2014). A descriptive research design can also employ a wide range of research methods to examine one or more variables. (Voxco, 2022). These variables can then be measured, typically with tools, and the resulting numbered data such as microenterprise's socio-demographic profiles, level of digital skills, acceptance level of digital transformation, and challenges encountered in its implementation.

Research Instruments and Sampling Method

An online survey instrument with structured questions was used by the researchers. One advantage of online survey research is that it takes advantage of the ability of the Internet to provide access to groups and individuals who would be difficult, if not impossible, to reach through other channels (Garton, Haythornthwaite, & Wellman, 1999; Wellman, 1997). Online surveying was identified as the most suitable method for the research proposed in this paper, on account of its benefits, as identified by (Jansen, K. J, 2007): due to the narrow time frame quick delivery and easy return were required.

Data Gathering Procedures and Treatment of Data

Since this research targets microenterprises within Nueva Ecija, through a simple random sampling method the researchers asked the permission and assistance of the Department of Trade Industry (DTI) Nueva Ecija Provincial Office, being the primary agency in the promotion and development of micro, small, and medium enterprises (MSME) in the country, to reach as many microenterprises as respondents and lifts the credibility of the study. The online questionnaire was shared with Messenger Group Chats of MSME clients of DTI and the Negosyo Centers using Google Forms.

Using www.raosoft.com's sample size calculator, it was found that at least 359 respondents are necessary for the survey with a confidence level of 95% and an error margin of 5% from the total population of 5,323 microenterprises assisted by DTI in Nueva Ecija in year 2022.

Descriptive statistical tools such as percentage and frequency distribution, tables, and graphs through Microsoft Excel Data Analysis were used to summarize, describe, process, and analyze the data gathered.

Ethical Undertaking

The ethical considerations in this research were maintained including the approval of a request letter by the researchers from DTI and the respondents before administering the questionnaire.

Participation is entirely voluntary. Respondents have the freedom to withdraw from the analysis at any time if they so choose. Throughout the analysis, the researchers retain the highest degree of objectivity and confidentiality in discussions and evaluations. The contributions and engagement of respondents are extremely important and valued.

III. Results and Discussions

Findings from the analysis of quantitative data gathered from the current study are presented below:

Demographics of the respondents:The demographic variables included sex, age, educational attainment, and asset size, as shown in Table 1. The analysis of the data reveals a predominant representation of female respondents, constituting 93.92% of the total sample (N=362). The average age of survey participants is 43 years. In terms of educational background, a majority (56.08%) held a Bachelor's degree, 37.85% had attained some college or vocational degree, and 6.08% possessed a high school diploma.

Furthermore, the findings indicate that the majority of the respondents (87.29%) fall within the micro-enterprise category, possessing total assets of three million pesos and below. This overview of demographic characteristics provides valuable insights into the composition of the study population.

Table 1: Demographic details of Respondents

Indicators	Measure	Percentage
Sex	Male	93.92%
	Female	6.08%
Age	Mean	43
	Range	25-59
Educational Attainment	High School Diploma	6.08%
	Some College or Vocational Degree	37.85%
	Bachelor's Degree	56.08%
Asset Size	Micro Enterprise (3 Million and below)	87.29%
	Small Enterprise (3,000,001 to 15 Million)	12.71%

Level of Digital Skills:The data analysis involves the examination of the mean scores for the level of digital skills across different indicators, specifically in management and employees. The scale used for measurement ranges from 1 (very low) to 5 (very high). The average level of digital skills among individuals in management is moderately high, with a mean score of 3.13. This suggests a reasonable proficiency in digital skills among this group. Employees, on average, demonstrate a similar proficiency in digital skills with a mean score of 3.12. This indicates a consistent level of digital skillfulness across both management and employee categories. The data suggests a moderate level of digital skills within the studied population, both in management and among employees of the microenterprises in Nueva Ecija when it comes to implementing digital transformation.

Degree of Digital Transformation Acceptance: On the survey question, "To what extent have microenterprises in Nueva Ecija embraced and accepted digital transformation as a business strategy" a mean score of 3.5 was generated with a scale ranging from 1 (not at all) to 5 (completely).

Given the scale's nature, where 3 represents a moderate level, a mean score of 3.5 suggests that, on average, microenterprises in Nueva Ecija hold a moderately positive perception regarding their acceptance of digital

transformation as a business strategy. Respondents, on average, indicate a leaning towards acceptance but may not perceive it as fully integrated or implemented.

Level of Technological Adoption. Figure 1 highlights a range of technological adoption among microenterprises in Nueva Ecija, with a significant number (69%) at a moderate level. While many businesses have embraced technology to varying extents, there are opportunities for those with minimal use (12%) to enhance their technological integration. Additionally, businesses with extensive (13%) and comprehensive (6%) use may serve as benchmarks for others looking to advance their technological capabilities.

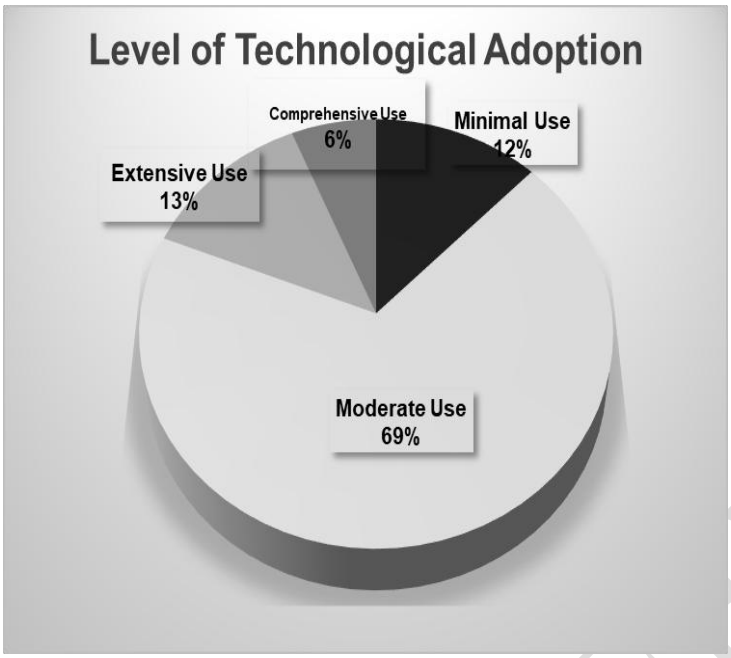

Figure 1: Level of Technological Adoption of the Respondents

Implementation of Digital Transformation by Microenterprises: The ratings given by respondents to the question regarding the overall progress of digital transformation in their business operations, using a scale ranging from 1 (excellent) to 4 (poor), resulted in a mean score of 2.12 which suggests that, on average, respondents rated the overall progress of digital transformation in their business operations as "good." This indicates a generally positive digital transformation effort among the surveyed businesses.

The data analysis reveals a consistent pattern among all respondents, showcasing the predominant use of social media marketing as their primary digital tools or technologies in the context of ongoing digital transformation efforts. The data also showed a notable absence of choices such as cloud computing, the Internet of Things (IoT), and artificial intelligence (AI) as current digital tools among the respondents. Exploring the reasons behind the limited selection of these advanced tools can provide valuable insights into the current state of technology adoption and may guide strategies for broader and more diversified digital transformations within the surveyed microenterprises.

In terms of staff training and skill development relevant to digital transformation, the majority of respondents (62.71%) opt for a comprehensive training approach encompassing all staff. Conversely, 24.86% focus their training efforts on key personnel exclusively, while 12.43% report limited or no staff training initiatives.

Challenges encountered in the process of digital transformation: During the process of digital transformation, microenterprises in Nueva Ecija encounter a range of challenges, as indicated by research findings. A notable

56.3% of respondents identify insufficient financial resources as a prevalent challenge. Additionally, 12.5% acknowledge resistance to change, emphasizing the importance of addressing organizational dynamics. A significant 37.5% of participants recognize a lack of digital skills as a substantial challenge, underscoring the urgency for workforce development. Integration issues with existing systems are reported by 6.3% of respondents, and 18.8% express concerns about data privacy and security, highlighting the critical necessity for robust cybersecurity measures. Collectively, these research outcomes underscore the varied obstacles that microenterprises in Nueva Ecija encounter while implementing digital transformation.

IV. Conclusion and Recommendations

The analysis of the current study highlights valuable information on the digital transformation journey of microenterprises in Nueva Ecija. Key challenges, including financial constraints, resistance to change, and skill gaps, pose significant risks to the successful implementation of digital initiatives. Additionally, concerns regarding data privacy and security underscore the importance of robust risk management strategies.

Recommendation:

1. Conduct regular and updated training for the management and staff on digital skills to keep them abreast on new developments in the use of technology in business.
2. Create a program that will include training management and staff to understand the importance of digital technologies in business so their perception and acceptance to change will improve.
3. Include in the annual plan on how to secure funds to acquire the necessary technologies for the transformation. This may be done by additional capital, savings or bank loans by the owners of the microenterprises.

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