Factors Affecting Online Technology Adoption of Small Businesses: A Case of Third-class Municipality in the Philippines

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ABSTRACT

The rapid rise of online technology has brought about significant changes in how businesses operate and interact with their customers. Small businesses, especially those located in less privileged areas, face numerous challenges in staying competitive and improving their product quality, core services, and cost efficiency. However, limited resources often hinder their ability to embrace online technology primarily due to infrastructure and skill limitations. This study, which used a mixed-methods design, aims to examine the preparedness of small businesses in a third-class municipality in the island of Marinduque, Philippines, to adopt online technology and investigate the factors that influence their decision-making process. Using Rogers' Diffusion of Innovation theory, this study explores various variables including relative advantage, organizational readiness, security concerns, costs involved, managerial characteristics, and intention to adopt online technology. Utilizing census sampling, the findings reveal that organizational readiness, perceived cost implications, and managerial characteristics significantly affect the intention to incorporate online technology into business operations. These findings offer valuable insights for small businesses in terms of perceiving online technology as an asset rather than a hindrance.

Keywords: Relative advantage, organizational readiness, managerial characteristics, intention to adopt.

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1. INTRODUCTION

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With the growing dependence on technology of the different business operations, not only in the big ones but also in the micro, small, and medium enterprises, application of online technology is considered really important. More often than not, with limited resources, surviving the business jungle is the main priority of a small business (Chan *et al*., 2019). Improving quality of products and other core services, such as delivery and product flexibility, are their main concerns and obviously the cost on labor (Moeuf *et al*, 2018). Tools to aid the business, such as online technology, is however set aside due to some factors like infrastructure and skill issues (Kilimis, 2019). When pandemic hit the globe and physical contact were limited, online technology became an important aspect of business even for small ones. Online technology became a hit in a more efficient sharing of product information since physical interactions were limited, thus enhancing economic well-being of the business (Bai *et al*., 2020).

Digital divide is closing and access to technology is becoming pervasive (Van Deursen, 2018). The more a technology user is engaged into it, the more satisfaction is felt that leads to technology dependence (Li *et al*., 2021). Challenged areas may have collaborative efforts to increase engagement (Herawaty & Raharja, 2019; Ginting, 2019). These facts may drive small business to consider online technology.

Given the realization that online technology plays an important role in conducting business to reach more customers and enjoy efficient business operations (Redjeki & Affandi 2021) and to advantage to gain digital literacy for the sustainability of small businesses (Purbasari *et al*., 2021), one question lies, and that is, are they ready? For business that do not enjoy the same service privilege as the center of commerce, it is high time to evaluate their readiness to adopt online to technology in order to compete. Considering the limited resources which they cannot afford to lose, there are many things for a small business to consider when adopting an online technology, such as attitude, relative advantage, cost, internet quality, data security, and technical knowledge.

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their readiness to adopt online to technology in order to compete. Considering the limited resources which they cannot afford to lose, there are many things for a small business to consider when adopting an online technology, such as attitude, relative advantage, cost, internet quality, data security, and technical knowledge.

While other studies were conducted in this particular area, this study wants to investigate other variables present in the target as well as appropriate dimensions and to find out how it is in the selected setting given the unique mindset and experiences of the small business with regards to online technology. This study reveals the factors that will lead to the adoption of online technology by small businesses. Also, it shows what specific areas to improve so that online technology will be something that small business would look upon as an asset than a liability.

This paper aims to know the gap in as far as setting is concerned, as well variable dimensions that were introduced in this study with regards to the readiness of small businesses to embark on online technology. The study is focused on this particular setting, Torrijos, Marinduque, because although isolated from the center of commerce in the mainland, technology utilization especially gadgets, are prevalent in the area. This study wants to know how other aspects of technology are working for them based on their perception and experience. The specific objectives of the study are: (1) To know the individual perception on the following study variables: relative advantage, organizational readiness, security, cost, managerial characteristics, and intention to adopt, and (2) To know if the following exogenous variables affect intention to adopt online technology: relative advantage, organizational readiness, security, cost, and managerial characteristics.

The results of the study will provide valuable inputs to the different stakeholders of online technology of similar culture and experiences. Other small businesses will get an idea of what to prepare prior to adoption. Online technology service providers will have an idea on which area to capitalize in order to sell the idea of online technology adoption and what service area to improve on. Further, for the government to strengthen policies covering the subject to entice small business to engage in online technology while they feel it is good and safe. Study results will be shared to the respondents and other concerned entities such as the local government unit for their reference in formulating policies and improvement of services relevant to the subject. To the researcher, this study helps to explore more and discover some more phenomenon regarding this particular subject.

2. THEORETICAL BACKGROUND

2.1 Theoretical framework

This study is based on Rogers' Diffusion of Innovation (DOI) Theory (1995), which outlines that innovation adoption follows a normal distribution curve and occurs in five stages: knowledge, persuasion, decision, implementation, and confirmation. A lack of knowledge can result in disinterest in the innovation. With knowledge, individuals seek more information, analyze it, and decide whether to accept or reject the innovation. They then gather more details to finalize their decision and use the technology fully. The DOI theory explains factors influencing adoption, such as relative advantage, compatibility, complexity, trialability, and observability. It provides insights into how small businesses

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adopt technology and how innovations are accepted and spread within society.

2.2 Literature Review

The intention to adopt online technology refers to a person or an organization's decision to use a new online technology (Venkatesh & Davis, 2000). The intention may be affected by certain factors. The study identified the following factors:

2.2.1 Relative advantage

Relative advantage is a key factor where the benefits of technology outweigh the drawbacks for an organization (Kuan & Chau, 2001, as cited in Singh & Mansotra, 2019). It significantly influences cloud computing adoption (Alghushami *et al*., 2020; Senarathna *et al*., 2018) and is crucial for cloud adoption in Indonesia's MSMEs (Gui *et al*., 2020). In Saudi Arabia's SMEs, relative advantage strongly correlates with technology adoption (AlBar & Hoque, 2019, as cited in Bin & Hui, 2021). For Malaysian SMEs, it is a significant factor in adopting blockchain (Wong *et al*., 2020). Studies consistently show that relative advantage is a key indicator of technology adoption (Min *et al*., 2018; Prause, 2019), though implementation for most businesses takes time (Gui *et al*., 2020). In view of the above findings, it is hypothesized that:

H1. Relative advantage has a significant effect on the intention to adopt online technology.

2.2.2 Organizational Readiness

Organizational readiness refers to an organization's preparedness to adopt and utilize new technology (Akinwale *et al*., 2020). Jain *et al*. (2019) found that organizational readiness and the availability of internal IT resources positively affect the intention to adopt online technology in SMEs. The ability to use technology enhances ease of use, influencing technology adoption (Sukmadewi *et al*., 2023). Kim and Lee (2020) confirmed that organizational readiness significantly impacts the intention to adopt online technology, influenced by IT infrastructure, employees' technology awareness, and organizational support. In Philippine SMEs, organizational readiness also positively affects technology adoption (Villanueva, 2021). Key factors include IT resources, perceived benefits, technology awareness, and training support. Thus, organizational readiness is crucial for adopting online technology. Based on the previous findings, it is hypothesized that:

H2. The perceived organizational readiness has positive significant effect on the adoption of online technology.

2.2.3 Security

Online technology security encompasses measures to safeguard sensitive information and prevent unauthorized access (Gefen & Straub, 2003). Chen and Lai (2022) highlighted SMEs' primary concern regarding information security in the technical dimension. Kim and Lee (2020) revealed that security concerns, like data privacy, negatively influence online technology adoption in SMEs, whereas technology security level, perceived ease of use, and usefulness positively impact adoption. Jain *et al*. (2019) identified security concerns as a significant barrier to online technology adoption in SMEs, emphasizing the role of perceived security and technical support availability in reducing concerns and fostering adoption intention. Similarly, Villanueva (2021) found that perceived security and technical support availability mitigate security concerns, thereby enhancing intention to adopt online technology among SMEs. Hence, it is hypothesized that:

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H3. Security has significant positive effect on the adoption of online technology.

2.2.4 Perceived Cost

Various studies have explored how perceived cost influences intention to use, yielding both inconsistent and consistent findings. Chen *et al*. (2021) noted that higher perceived prices negatively impact users' intention to continue using a technology or service. Conversely, Zulfitri (2019) found a positive influence of lower perceived costs on user interest in online transportation applications. Yu *et al*. (2021) emphasized the direct impact of perceived cost on users' purchasing decisions, alongside factors like interaction, content quality, and peer influence.

Financial preparedness positively correlates with participation in online learning, highlighting the importance of cost readiness (Areche, 2022). Shen and Liu (2022) suggested that higher perceived switching costs may decrease users' long-term willingness to use online learning platforms. However, Nirmawan and Astiwardhani (2021) presented contradictory findings, showing that perceived cost, trust, and customer value addition significantly increase intention to use.

Beyond cost, factors such as satisfaction, perceived risk, and transaction costs also influence intention to adopt (Humbani & Wiese, 2019; Sobti, 2019; Hsu & Lin, 2020). Singh and Sinha (2020) identified several factors affecting intention, yet did not specifically study perceived cost, indicating a potential research gap. Nikou (2019) found compatibility, usefulness, and convenience of use to be significant drivers of smart home technology adoption, with perceived cost exerting a contrary effect. Al-Saedi *et al*. (2020) underscored the importance of perceived cost in the adoption of mobile payment systems, alongside factors like performance expectancy, social influence, and trust. It is then hypothesized that.

H4(-) Perceived cost has significant negative effect on the adoption of online technology.

2.2.5 Managerial characteristics

Managerial characteristics, such as leadership, innovation, and risk-taking, play a crucial role in determining the intention to adopt online technology among small businesses. Azim *et al*. (2021) found that leadership style has a positive effect on the intention to adopt online technology. They found that transformational leadership, which emphasizes the development of followers, has a greater impact on the intention to adopt online technology than transactional leadership, which focuses on reward and punishment.

Innovation has also been shown to be a key factor in determining the intention to adopt online technology (Kim & Bae, 2020). They established that small businesses that are more innovative are more likely to adopt new technology and are more likely to see positive outcomes from the adoption.

Risk-taking behavior is another managerial characteristic that has been shown to have a positive effect on the intention to adopt online technology (Hamdan, 2020). They found small business owners more willing to take risks are more likely to adopt new technology.

Villanueva (2021) found that in the Philippines, managerial characteristics, such as leadership, innovation, and risk-taking, have a positive effect on the intention to adopt online technology among small businesses in the country. Thus, it is hypothesized that

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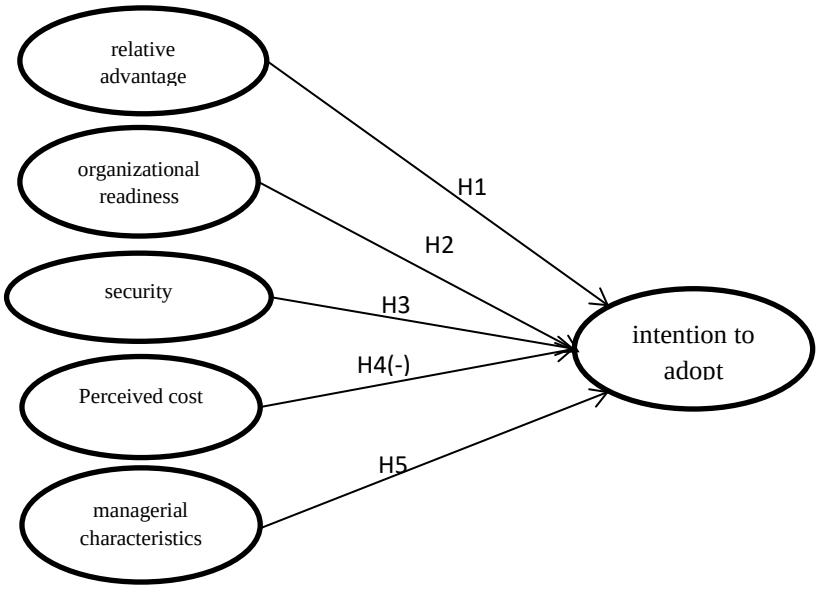
H5. Managerial characteristics has significant effect on the adoption of online technology.

2.3 CONCEPTUAL FRAMEWORK

Figure 1: Proposed model showing the relationship between the independent and dependent variables



Grounding on Diffusion of Innovation Theory (Rogers, 1995), relative advantage, organizational readiness, security, and managerial characteristics are presupposed to have positive effect on the intention to adopt online technology, while perceived cost negatively affect the intention to adopt.

3. METHODS

3.1.1 Research Design

The study employed a mixed methods approach, utilizing explanatory sequential design. The quantitative part employs a correlational research design where the effect of the following variables on the intention to adopt was established: relative advantage, organizational readiness, security, cost, and managerial characteristics.

3.1.2 Study Site, Sample Size, and Data Collection

The population are the fifty (50) small business owners and key personnel in Torrijos, a third-class municipality in Marinduque. Due to the limited number of respondents, census survey was employed. As a follow-up of the responses to the close-ended questionnaires, interview was conducted. Out of 50 respondents, fifty percent (50%) are in a business operation for five (5) years and above, while the other fifty percent (50%) are below 5 years in business operation. In terms of engaging in the internet, forty two percent (42%) are engaged for less than 5 years while fifty eight percent are internet users for five (5) years or more.

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In order to collect data, adopted questionnaire was utilized. Requests for permission to use was made. The respondents were given ample time of one month to accomplish the survey. The data collection tool is free from biases be it gender, class, ethnic, or cultural. The respondents who are not related to the researcher were asked to answer the questionnaire without any favor from the researcher, monetary or otherwise. Meanwhile, the interview took around another month.

3.2 Instrumentation

The survey instrument was adopted from Alam *et al*. (2011). The adopted questionnaire was organized and grouped accordingly per variable. There was a total of 30 items broken down as follows: 6 items for relative advantage, 6 for organizational readiness, 4 for security, 5 for perceived cost, 3 for managerial characteristics, and 6 for intention to use technology. For each of the variables, a Likert scale was used to determine the extent to which respondents agreed with the assertions that were presented. Scoring was based on the numerical scale assignment as indicated in the questionnaire, 6 being "Completely Agree" and 1 being "Completely Disagree". Additionally, there is a part on the profile of respondents.

An interview guide was prepared centering on two questions: the reason for the adoption of online technology, and the challenges encountered in its adoption.

3.3 Data analysis

After collecting the quantitative data, they were organized and summarized. Descriptive statistics were utilized to provide a profile of the respondents as well as a description of their responses on each variable. Regarding the examination of hypotheses, this research made use of multi regression analysis using JASP. Results were interpreted using Pimentel (2019) as a guide.

For the qualitative data, interviews were transcribed and read for a better understanding of the responses of the key informants. A thematic analysis was done on the data looking for patterns to find themes to be able to identify meaning, based on the research questions.

3.4 Ethical consideration

A letter of request addressed to the respondents seeking their approval to be included in the study was sent. The significance of the study to their ongoing economic endeavors was also discussed in the letter, along with its goal. To guarantee that the responses were kept anonymous, names from those who participated were not requested, codes were used during the data gathering process. To eliminate any unnecessary influences or biases, there was no interaction between the researcher and the respondent at the time that the survey was being filled out. Answering the instrument would take less than an hour and the instrument was distributed via online in google form. The data collection tool is free from biases such as gender, class, ethnic, and cultural.

4. RESULTS

4.1 Respondents' Perception of the Different Latent Variables

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Table 1: Descriptive statistics of the participants' perception about the different latent variables

	Item	Mean		Median		SD
RA	Relative Advantage	5.38	VH	5.67	VH	0.77
PC	Perceived Cost	4.70	High	4.80	High	0.99
MC	Managerial Characteristics	4.67	High	5.00	High	1.34
OR	Organizational Readiness	3.59	SH	3.33	SP	1.37
S	Security	3.52	SH	3.75	SH	1.06

Interpretation: 1.00 – 1.82 (Very Low/Poor), 1.83 – 2.65 (Low/Poor), 2.66 – 3.48 (Slightly Low/Poor), 3.49 – 4.31 (Slightly high/Good), 4.32 – 5.14 (High/Good), 5.15 – 6.00 (Very high/Good).

Among the four latent variables affecting the intention to use online technology, relative advantage has the highest mean (5.38) and median (5.67), indicating a very high perception. Perceived cost and managerial characteristics were rated high, while security was rated slightly high. Organizational readiness had a slightly high mean (3.59) but a slightly low median (3.33).

Relative advantage is perceived very highly due to beliefs that "Online technology will improve the company's image" (mean=5.58) and "Online technology will increase competitive advantage" (mean=5.52). The overall mean (5.38) and median (5.67) show a left-skewed distribution with a high perception of relative advantage.

The perceived cost of online technology is high, attributed to beliefs that "Device cost is high" (mean=5.20) and "Internet cost is high" (mean=5.00). The overall mean (4.70) and median (4.80) also show a left-skewed distribution with a high perception of cost.

Managerial characteristics are highly valued, with beliefs in "Interest of top management" (mean=4.70) and "Importance of online technology adoption" (mean=4.68). The overall mean (4.67) and median (5.00) indicate a left-skewed distribution with a high perception of managerial characteristics.

Security is rated slightly high, with concerns about "Confidence in the payment system" (mean=3.58) and "Security of online transactions" (mean=3.56). The overall mean (3.52) and median (3.75) reflect a higher perception of security.

Organizational readiness is slightly high overall but mixed. High scores for the availability of mobile devices (mean=4.98) contrast with low scores for external support (mean=2.84) and computer availability (mean=2.86). The overall mean (3.59) is slightly high, but the median (3.33) indicates a slightly poor perception of organizational readiness.

4.2 Respondents' Intention to Adopt Online Technology

Table 2 shows a slightly high intention to adopt online technology. The median of all indicators is 4.0, with means ranging from 4.14 to 4.26. High scores were given to "the use of online technology should be encouraged" (mean=4.26) and "I will recommend online technology" (mean=4.24). The overall mean is 4.19, and the median is 4.0, indicating a left-skewed distribution (Skewness = -0.038) and a higher perception of online technology security among participants.

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Table 2: Descriptive statistics of the participants' the intention to adopt online technology

Item	Indicator	Mean	Median	SD
	Intention to Use	4.19	4.00	1.33
INT1	The likelihood that I would use online technology is high.	4.14	4.00	1.39
INT2	I'm willing to use online technology for business operation.	4.16	4.00	1.33
INT3	In the near future, I intend to use online technology in my business.	4.16	4.00	1.35
INT4	Given the opportunity, I will use online technology in my business.	4.20	4.00	1.41
INT5	I think that the use of online technology should be encouraged by all people.	4.26	4.00	1.32
INT6	I will recommend the use of online technology to my friends and family.	4.24	4.00	1.33

Interpretation: 1.00 – 1.82 (Very Low/Poor), 1.83 – 2.65 (Low/Poor), 2.66 – 3.48 (Slightly Low/Poor), 3.49 – 4.31 (Slightly high/Good), 4.32 – 5.14 (High/Good), 5.15 – 6.00 (Very high/Good).

4.3 Multiple Regression Analysis

Table 3: Multiple regression analysis of the factors affecting intention to adopt online technology with and without control variables

Model	Unstandardized	Standard Error	Standardized	t	P	Collinearity Statistics
						VIF
(Intercept)	1.510	1.153		1.310	0.197	
Relative Advantage (RA)	0.266	0.152	1.153	1.748	0.087	1.344
Organizational Readiness (OR)	0.341	0.121	0.152	2.830	0.007	2.674
Security (S)	0.063	0.162	0.121	0.390	0.699	2.882
Perceived Cost (PC)	-0.334	0.124	0.162	-2.689	0.010	1.490
Managerial Characteristics (MC)	0.294	0.113	0.124	2.612	0.012	2.222
$F(5,44) = 26.00$, $p < 0.001$, $R^2 = 0.747$						

Model	Unstandardized	Standard Error	Standardized	t	P	Collinearity Statistics
						VIF
(Intercept)	1.1456	1.156		0.991	0.327	
Relative Advantage (RA)	0.3173	0.154	0.1835	2.061	0.046	1.42
Organizational Readiness (OR)	0.3727	0.121	0.3830	3.074	0.004	2.79
Security (S)	0.0625	0.160	0.0495	0.391	0.698	2.88
Perceived Cost (PC)	-0.3086	0.125	-0.2297	-2.469	0.018	1.55
Managerial Characteristics (MC)	0.3378	0.114	0.3388	2.962	0.005	2.35
Years of Operation	-0.1952	0.213	-0.1465	-0.915	0.365	1.17
Years of Internet usage	-0.4314	0.242	-0.3239	-1.786	0.081	1.47
$F(7,42) = 19.60$, $p < 0.001$, $R^2 = 0.766$						

The table presents the results of a multiple regression analysis examining the factors affecting the intention to adopt online technology, with and without control variables. This analysis aims to assess the significant predictors and their significant influence in the participants' intention to adopt technology for business operation. The regression model without the control variables is significant, $F(5,44) = 26.00$, $p < 0.001$, and can explain 74.7% of the variability in the intention to adopt online technology ($R^2 = 0.747$). This regression model revealed that their intention to adopt online technology is significantly affected by organizational readiness ($B = 0.341$, $t = 2.830$, $p = 0.007$) and managerial characteristics ($B = 0.294$, $t = 2.612$, $p = 0.012$). However, perceived cost has

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a significant negative effect on intention to adopt online technology (B = -0.334, t = -2.689, p = 0.010). Results also revealed that technology adoption is not significantly affected by Relative Advantage (B = 0.266, t = 1.748, p = 0.087) and security (B = 0.063, t= 0.390, p = 0.699).

When control variables (Years of Business Operation and Years of Internet Usage) are included, the regression model is still significant, F (7,42) = 19.60, p < 0.001, and can explain 76.6% of the variability in technology adoption (R^2 = 0.766). Aside from organizational readiness, managerial characteristics, and perceived cost remain consistent predictors. However, with the control variables, the effect of relative advantage in intention to adopt technology becomes significant (B = 0.317, t = 2.061, p = 0.046). The effect of security remains not significant together with the control variables years of operation and internet usage. With the presence of the control variables, the results of the regression analysis supported hypotheses 2, 4, and 5.

5. DISCUSSION

The study's findings reveal how participants perceive and feel about adopting technology in their company. Overall, the results indicate that online technology offers advantages, such as enhancing the company's image and gaining a competitive edge. Most participants have a positive attitude towards technology. Relative advantage received the highest rating among factors, with respondents recognizing that technology will improve the company's image and increase sales and revenues. The study explores organizational readiness, uncovering mixed results. While participants report device availability, there are low scores in external support and computer availability, suggesting deficiencies in infrastructure and support that could hinder technology adoption. Addressing these gaps is essential for successful implementation. Security concerns impact willingness to embrace technology. Participants raised issues about payment systems and transaction security, indicating the need to build trust and prioritize security to encourage adoption. Perceived cost is another obstacle. Participants believe internet access and device expenses could deter technology adoption.

The results suggest that organizational readiness and managerial characteristics are crucial factors that drive intention to adopt online technology. Organizations with higher readiness levels and managers with wit favorable characteristics are more likely to adopt online technologies. Conversely, higher perceived costs negatively impact adoption intention, indicating the importance of cost consideration in the decision-making process. The non-significant effects of relative advantage and security concerns suggest that these factors may not be as influential in the studied context. Additionally, the organization's years of operation and internet usage have no significant impact on adoption intention when accounting for the main predictors.

Overall, the regression analysis highlights the importance of organizational and managerial factors in predicting the intention to adopt online technologies, while perceived costs serve as a barrier to technology adoption.

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The hypothesis that perceived organizational readiness positively affects the adoption of online technology supports previous literature (Akinwale *et al*., 2020; Jain *et al*., 2019; Kim & Lee, 2020; Villanueva, 2021). These studies emphasize the importance of IT resources, perceived advantages, employee awareness, and training availability in assessing organizational readiness. Some key informants felt they needed to learn the technology first (R5, R14), while another said, "yes, why not" (R12). Others preferred leaving it to their children if necessary (R26, R41), and one expressed a desire for knowledge, saying, "kung maalam sana ako" (if I only know how) (R50). There were those who are already using online technology (R17, R18), while there are those who may use it "if I know how" (R19), since "*hindi ko po alam* (I am not familiar with it) (R40) and "*hindi na kailangan* (we don't need it) (R39), as it is a sentiment that they should be always be "updated in online technology to adopt" (R11).

Key informants highlighted challenges in adopting technology due to lack of knowledge (R5) and old age (R14). Some expressed having no knowledge at all (R23, R26, R34), and noted that provincial customers are less familiar with technology compared to urban ones (R4). While one informant felt technology was unsuitable for their business (R30), others believed they could survive without it (R10), citing their small business size (R9) or its inapplicability (R15). One mentioned the need for personnel training on technology use (R32).

Managerial characteristics was proven to have an effect on the adoption of technology. Among businesses managerial characteristics, such as leadership, innovation, and risk-taking show a positive influence on the adoption of online technology (Azim *et al*., 2021; Kim & Bae, 2020; Hamdan, 2020; Villanueva, 2021).

Some of the challenges raised by key informants revolves around wordings in the internet which he cannot understand (R8), errors in the online booking system being used (R17), scam order (R20). There are also cases of wrong input (R19), lost connection while online (R21), and headache when responses from clients come all at once (R24). Most of these are obstacles and difficulties individuals and businesses encounter in online communication. Thus, managers should take the lead in maintaining effective communication in a digital environment.

Perceived cost negatively impacts technology adoption, supported by Chen *et al*. (2021), and aligns with findings that lower perceived costs have a positive influence (Zulfitri, 2019). Cost readiness also relates to the use of online learning platforms (Areche, 2022). Perceived cost influences decisions alongside satisfaction, trust, and perceived benefits (Hsu & Lin, 2020; Nirmawan & Astiwardhani, 2021; Shen & Liu, 2022; Yu *et al*., 2021). Further research is needed to understand its impact on usage intention, highlighting the importance of addressing cost concerns to encourage adoption.

Although it was hypothesized that relative advantage would positively influence adoption intention, this was not supported. Previous research has highlighted the benefits of relative advantage (AlBar & Hoque, 2019, as cited in Bin & Hui, 202; Alghushami *et al*., 2020; Bin & Hui, 2021; Kuan & Chau, 2001; Senarathna *et al*., 2018; Singh & Mansotra, 2019; Wong *et al*., 2020), but findings on this relationship are inconsistent.

The key informants claimed that relative advantage is needed to meet competition (R1), to be competitive (R6), for modernization (R3), to keep up with the fast pacing market (R4). Further, in a world changing due to technology (R2), there is a demand (R8, R15, R25) for technology adoption to expand business (R24) and generate more revenue (R7).

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Additionally, adoption of technology will mean "*para makilala lalo* (to enhance brand recognition and relevance" (R44), and "*uso na ang online order* (there is a trend towards online ordering" (R45).

The impact of security on the intention to adopt technology was not supported. While some research argues that security is a factor in the adoption of technology, there are studies that contradict this view by highlighting the effects of security concerns on adoption (Jain *et al*., 2019; Kim & Lee, 2020; Villanueva, 2021).

One of the key informants asked if the platform is safe (R20). Additionally, one of the challenges in the adoption of technology seems to be issues like scammers (R31), and fake news (R3). It is obvious there is a challenge related to safeguarding information and ensuring online security. It encompasses concerns about misinformation and scams, as well as the need for protective measures against online threats. Thus, it is important to stay vigilant and informed about online security threats in the digital age to protect personal and business data from unauthorized access and fraudulent activities.

The key informants claimed businesses need to meet customers demand (R25) and competitor's ability (R21), as this is the trend (R27, R42), to generate more customers (R23) in a high-tech world (R22). They claimed that they will adopt technology if needed (R28, R29), "*para makabenta ng marami* (generate more sales)" (R46), "*mabentahan yung mga taga-ibang bayan"* (to sell to those in nearby places) (R48).

Connectivity and power issues have always been the challenges related to the availability and reliability of technology infrastructure. The key informants raise several challenges, such as issue of power outage (R1, R2, R7), weak internet connection (R1, R7, R11, R13, R22), poor signal (R27, R28), electrical difficulties (R12), power interruptions (R35), "*palaging brownout*" (always brownout) (R18).

6. CONCLUSION

The study investigated the influence of five independent variables on participants' intention to use technology through multiple regression analysis. With the absence of the control variables, findings revealed that three independent variables significantly affected participants' intention to adopt online technology: organizational readiness, perceived cost, and managerial characteristics. These results indicate that higher organizational readiness and better managerial characteristics contribute to a greater intention to adopt online technology. On the other hand, higher perceived cost is associated with a lower intention to adopt online technology. When control variables were introduced, relative advantage became significant along with other significant factors when control variables were not present.

The regression model generated provides an understanding of the factors influencing the intention to adopt technology. A key finding is that the perceived cost has the highest impact, on individuals' willingness to adopt. This emphasizes the need to address cost concerns and offer cost solutions to encourage adoption.

In summary, this study provides evidence that organizational readiness, perceived cost, and managerial characteristics significantly influence individuals' intention to adopt online technology. Considering control years of operation and years or internet usage, relative advantage influence the intention as well. The results underscore the importance

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of fostering organizational readiness and enhancing managerial characteristics to promote technology adoption. Additionally, efforts should be made to address perceived cost barriers in order to encourage higher intention to adopt online technology. These findings contribute to our understanding of the factors influencing technology adoption and can inform interventions aimed at facilitating its implementation.

7. RECOMMENDATION

Based on findings that highlight the impact of organizational readiness, perceived cost, managerial characteristics, and relative advantage (when control variables are introduced) on individuals' willingness to embrace online technology, the following recommendations are provided to facilitate technology adoption:

1. Foster Organizational Readiness:
    a. Set Strategies and Goals: Define a vision and roadmap for adopting online technology, emphasizing its benefits and expected outcomes to align employees' perspectives and enhance their preparedness.
    b. Allocate Resources and Provide Training: Ensure sufficient resources, such as funding and technical support, and offer comprehensive training programs to enhance employees' skills and confidence.
    c. Cultivate a Supportive Culture: Promote innovation, collaboration, and continuous learning by encouraging communication channels for knowledge sharing and calculated risk-taking.
2. Strengthen Managerial Qualities:
    a. Demonstrate Leadership and Support: Managers should lead by example, showcasing their competence with online tools, and actively support and motivate employees during the adoption process.
    b. Promote Training and Learning: Encourage participation in training programs and provide support and feedback to enhance employees' skills with online technologies.
3. Overcome Perceived Cost Barriers:
    a. Conduct Cost-Benefit Analysis: Highlight long-term benefits and return on investment, showcasing cost savings, improved productivity, and competitive advantages to alleviate concerns.
    b. Provide Incentives or Support: Offer incentives such as subsidies or budg*et al*locations to ease financial burdens.
    c. Form Partnerships: Consider collaborations to share expenses and resources.
    d. Emphasize Long-term Value: Highlight the efficiency, effectiveness, and growth opportunities that outweigh any costs.

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