

# The Financial Risks of Cashless Payment Methods Among SMEs in Nagcarlan Laguna: A Basis for a Proposed Financial Security Campaign

ALANO, KAYE V.<sup>1</sup>, ARAW, MARY ANN JOY M.<sup>2</sup>, CAPISTRANO, ROVIC P.<sup>3</sup>, DARANG, ANGELALYN L.<sup>4</sup>, MACATUAY, JOAN DANE C.<sup>5</sup>, MERAÑA, MONICA ANNE<sup>6</sup>, NAZARIO, KATLEEN A.<sup>7</sup>, PARUAN, ASHLY MARIE T.<sup>8</sup>, ROSARIO, GENALYN C.<sup>9</sup>, VELANTE, ZYRIEL ANNE<sup>10</sup>, DR. NORAYDA M. DIMACULANGAN<sup>11</sup>

<sup>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11</sup> Department of Accountancy, Laguna University, Santa Cruz, Laguna, Philippines

*Abstract- Numerous books, articles, and research have been written about the effects of cashless payments on customer behavior. However, fewer research has been done to evaluate how the aforementioned payment method affects a company's financial risks. This study aimed to determine the relationship between business profile and financial risks of cashless payment methods among Small and Medium Enterprises in Nagcarlan, Laguna. The study also investigated the relationship between the business profile of SMEs and the financial risks of cashless payment methods. A descriptive-correlational method of research in a quantitative design was used to determine correlation between variables. The instrument was validated through a Cronbach alpha, resulted in 0.90, 0.73 and 0.72 which indicates a good and acceptable index of reliability. Survey questionnaires served as a tool to draw facts about the relationship between business profile and financial risks in the SMEs. Based on the research findings, most of the business profiles (years of operation, number of employees, and monthly income) does not correlate to the financial risks of using cashless payment methods, particularly fraudulent transactions and liquidity risks. Hence, only the type of cashless payment methods correlates to the financial risks of cashless payment methods. The researchers proposed an action plan primarily focused on various campaign that will serve as an awareness to the small and medium enterprises. The study will provide valuable insights for small and medium-sized enterprises and serve as the basis for strategies to reduce the financial risks associated with cashless payment methods. This research opens avenues for future research by conducting an analysis on a particular cashless payment method regarding its weaknesses and cyber security aspects*

*to use as a basis for creating strong security measures.*

*Indexed Terms- SMEs, financial risks, cashless payment methods, financial security, business profile, years of operation, number of employees, estimated income, gcash, paymaya, bank transfer, paypal, debit cards, fraudulent transactions, security risk, liquidity risk*

## I. INTRODUCTION

Nowadays, payment methods have a significant role in daily business transactions. The payment methods have evolved significantly as e-commerce and digital services became popular. The consumers have now an option for their payment method in purchasing products or services. Although digital payment methods like e-wallets, and mobile payments have grown in popularity, cash is still frequently used for in-person transactions in our daily lives. In 2020, a pandemic occurred in the world that gives people restrictions from social interactions and this gives rise to the use of cashless payment methods in purchasing goods and services. Since more people have grown wary of handling real money, the spread of cashless payments has surged. People no longer have to carry cash or worry about withdrawing cash from the ATM machine. They can use their smartphones to make payments which is more convenient and safer. This is often used in online shopping. Numerous books, articles, and research have been written about the effects of cashless payments on customer behavior. However, fewer research has been done to evaluate how the aforementioned payment method affect a company's financial security, due to this, the researchers chose to look into whether there is a

significant relationship between the business profile and financial security.

## II. THEORETICAL FRAMEWORK

The study An Empirical Analysis of Cashless Payment Systems for Business Transactions by Mahfuzur Rahman, Izlin Ismail, Shamshul Bahri, and Muhammad Khalilur Rahman in 2022 adopted Roger's diffusion of innovation theory (DOI) to predict factors influencing the adoption of cashless payment systems. Roger first proposed the theory in 1962, providing an explanation of how innovation spreads gradually among members of a social organization. This theory emphasizes the characteristics of innovation and helps explain the rise of cashless payment when customers want convenient transactions and businesses seek new profit opportunities. The importance of this theory in cashless payment systems is determined by how quickly society is prepared to accept a cashless payment method through the innovation processes and consequently, cashless payment adoption differs in different societies.

The Unified Theory of Acceptance and Use of Technology (UTAUT) states that four main elements can affect a consumer's intent to adopt a technology: performance expectancy, effort expectancy, social influence and facilitating condition. The theory has demonstrated that UTAUT is more effective than other models currently available. A model was constructed that combined trust, social influence, self-efficacy, and perceived security into the Unified Theory of Acceptance and Use of Technology (UTAUT). This model test revealed that perceived usefulness and ease of use are factors in the acceptance of mobile payment, as well as the attitudes and intentions of consumers being influenced by perceived security and trust. Later, UTAUT 38 and Hofstede's cultural dimensions to analyze the effect of national cultural values on the intention to use mobile payment in Qatar. Oliveira, Thomas, Baptista, and Campos (2016) further developed a model by extending UTAUT and DOI. The empirical test, conducted in Portugal, found that compatibility, perceived technology security, performance expectations, innovativeness, and social influence have direct and indirect effects on the adoption of mobile payment.

## III. RESEARCH QUESTION OR RESEARCH HYPOTHESIS OR PROBLEM STATEMENT

This study focused on determining the relationship between the business profile and the financial risks of cashless payment methods among Small and Medium Enterprises. Specifically, this sought to answer the following questions: (1) What is the business profile of the SMEs in terms of years of operation, number of employees, estimate income, (1.1) type of cashless payment method? GCash, PayMaya, PayPal, Debit Cards, Bank Transfer (2) To what extent are the respondents aware of the following financial risks of cashless payment methods? Fraudulent transaction, Security risk, Liquidity risk (3) Is there a significant relationship between the business profile and the financial risks of cashless payment methods among Small and Medium Enterprises? (4) Based from the findings, what financial security campaign may be proposed?

## IV. DATA AND METHODS

The study made of used of quantitative research and utilized a descriptive correlational approach. The study took place in Nagcarlan Laguna where the respondents are SME owners or managers. The Purposive sampling technique was used to select the appropriate size of the populations. The sample size of 199 respondents was obtained using the Raosoff Calculator.

## V. RESULTS

The business profiles of the SMEs in terms of years of operation, number of employees, estimated income, and type of cashless payment methods were treated statistically using frequency and presented visually using clustered columns and funnel chart.

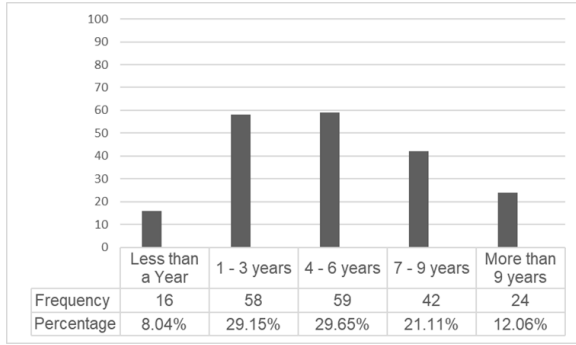


Figure 3. Business Profile of the SMEs in terms of Years of Operation

Figure 3 shows the business profile of the SMEs in terms of years of operation. The range four to six (4-6) years got the highest frequency of fifty-nine (59) or 29.65% of the total respondents. Second is the range one to three (1-3) years with a frequency of fifty-eight (58) or 29.15% of the total respondents. Third is the range of seven to nine (7-9) years with a frequency of forty-two (42) or 21.11% of the total respondents. Fourth is the range more than nine (9) years with a frequency of twenty-four (24) or 12.06% of the total respondents. The range less than a year got the lowest frequency of sixteen (16) or 8.04% of the total respondents. The findings indicate that most of the SMEs started before the pandemic era (year 2020).

According to Nawaiseh (2020), new firms are more profitable and grow faster than large ones because they can create new jobs, achieve local growth, innovate new work procedures, and train their employees, but long-lived firms with pooled resources, extensive experience, a better reputation in the marketplace, and a large amount of information can overcome difficulties and work efficiently. The age of the firm is an essential factor in determining its performance.

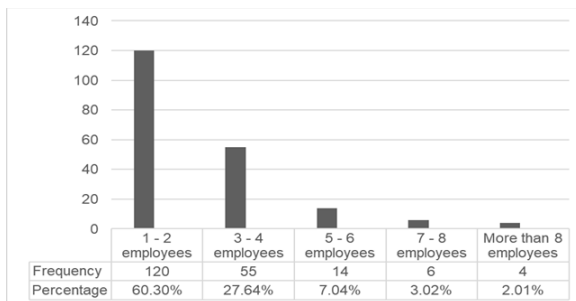


Figure 4. Business Profile of the SMEs in terms of Number of Employees

Figure 4 shows the business profile of the SMEs in terms of numbers of employees. The range of one to two (1-2) employees got the highest frequency of one hundred twenty (120) or 60.3% of the total respondents. Second is the range of three to four (3-4) employees with a frequency of fifty-five (55) or 27.64% of the total respondents. Third is the range of five to six (5-6) employees with a frequency of fourteen (14) or 7.04% of the total respondents. Fourth is the range of seven to eight (7-8) employees with a frequency of six (6) or 3.02% of the total respondents. The range more than eight (8) got the lowest frequency of four (4) or 2.01% of the total respondents. The findings indicate that most of the small and medium enterprises (SMEs) around the public market of Nagcarlan, Laguna operates with one to two (1- 2) employees.

According to Moshin (2023), number of employees can have a significant impact on a business's revenue, profitability, and growth potential. Furthermore, small businesses face challenges related to limited access to funding and intense competition, which can affect their ability to hire and retain employees. Similar to Cronuts (2021), indicates that when a company increases its employee's numbers, it may face several challenges. Some of the problems that may arise include difficulties in communication and managing a larger team, maintaining the company culture, ensuring compliance with legal regulations, and dealing with potential conflicts and issues that arise among employees.

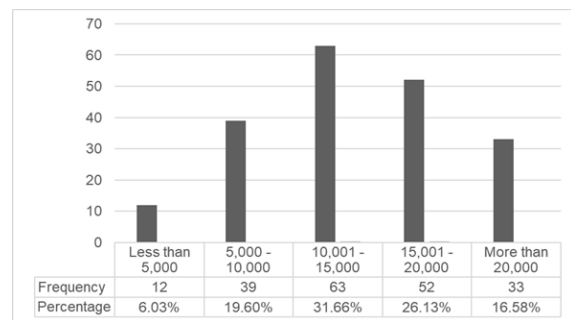


Figure 5. Business Profile of the SMEs in terms of Estimated Income

Figure 5 shows the business profile of the SMEs in estimated income. The range of ten thousand one to fifteen thousand (10,001 – 15,000) pesos got the highest frequency of sixty-three (63) or 31.66% of the

total respondents. Second is the range of fifteen thousand one to twenty thousand (15,001 – 20,000) pesos with a frequency of fifty-two (52) or 26.13% of the total respondents. Third is the range of five thousand to ten thousand pesos (5,000 – 10,000) with a frequency of thirty- nine (39) or 19.6% of the total respondents. Fourth is the range of more than twenty thousand (20,000) pesos with a frequency of thirty-three (33) or 16.58% of the total respondents. The range less than five thousand (5,000) pesos got the lowest frequency of twelve (12) or 6.03% of the total respondents. The findings indicate that most of the SMEs around the public market of Nagcarlan, Laguna has an estimated monthly income of ten thousand one to fifteen thousand (10,001-15,000) pesos.

Similar to other companies, SMEs want to make as much money as possible. The abilities, function, and contribution of SMEs vary from sector to sector and country to country. SMEs encounter a variety of issues, just like other companies, which occasionally hinder their profitability and expansion. Having a knowledgeable and capable business manager is essential to the firm in order to handle the frequent, quick changes in the business environment. Given the aforementioned situation, the pertinent and intriguing question to be taken into account at this time would be variables to assure the success and profitability of the SMEs sector in Nigeria. As a result, the empirical analysis of the variables influencing SMEs' profitability will be examined in this study (AIProject Hub, 2020).

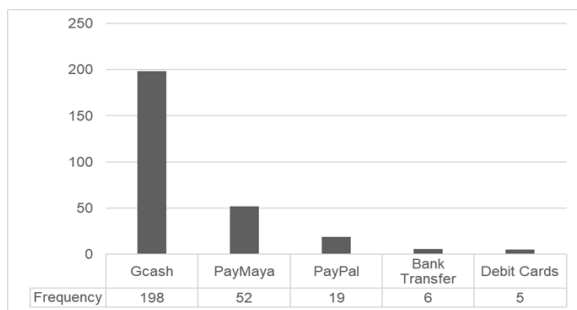


Figure 6. Business Profile of the SMEs in terms of Type of Cashless Payment Methods

Figure 6 shows the business profile of the SMEs in terms of the type of cashless payment methods that the SMEs around the public market used. There are one hundred ninety-eight (198) SMEs that uses GCash as

cashless payment methods, fifty-two (52) SMEs are using PayMaya. Meanwhile, there are nineteen

(19) SMEs that uses Paypal, six (6) are using Bank Transfer and lastly five (5) SMEs are using Bank Transfer as their cashless payment method. The result indicates that most of the SMEs around the public market of Nagcarlan, Laguna are using GCash as their cashless payment.

According to Eli (2019), a recent study conducted by The Nielsen Company shows that 4.9 million out of the country's 6.4 million mobile wallet remitters, or 76%, utilize GCash. GCash services more Filipinos for cashless transactions, making them the favorite E-wallet provider. Cashless transfers are described as the use of any device or instrument to send and receive money online, including bank transfers. Filipinos who use cashless transactions currently account for 19 percent, or 9.3 million, of the projected total 49 million who perform money transfers. Overseas remittances utilize GCash to send money to loved ones in the Philippines. As a mobile wallet, GCash provides simple cash-in and cash-out options through debit card and connected bank accounts, as well as offline at 7-Eleven, MLhuillier, MoneyGram, and a variety of other locations. You may also utilize the CLIQQ booth at participating 7-Eleven locations or download the CLIQQ app to receive incentives. According to the report, users of mobile wallets prefer GCash since it charges minimal or no service costs for digital transactions. With the recent launch of GCash Customer Protect, a program that provides compensation for unauthorized financial transactions on their GCash app, GCash on Messenger, or GCash Mastercard platforms caused by incidents such as stolen mobile phones or identity theft, GCash also provides users with increased security and peace of mind when using the app.

- Extent of the Respondents' Awareness on the Financial Risks of Cashless Payment Methods
- The extent of the respondents' awareness on the financial risks of cashless payment methods in terms of fraudulent transactions, security risks, and liquidity risks were treated statistically using mean and standard deviation and presented visually in tabular form.

Table 1. Extent of the Respondents' Awareness on the Financial Risks of Cashless Payment Methods in terms of Fraudulent Transactions

INDICATOR	MEAN	SD	REMARKS
1. I understand what constitutes a fraudulent transaction.	4.54	0.60	Strongly Agree
2. I understand that fraudulent transactions can occur on my accounts without my consent.	4.38	0.68	Strongly Agree
3. I believe that reporting fraudulent transactions promptly can limit my liability for losses.	4.36	0.69	Strongly Agree
4. I am aware that it is important to regularly monitor my financial statements for any suspicious activity.	4.39	0.71	Strongly Agree
5. I understand that promptly reporting suspicious transactions can help prevent further losses and mitigate potential damage.	4.37	0.73	Strongly Agree
<b>OVERALL</b>	<b>4.41</b>	<b>0.68</b>	<b>STRONGLY AGREE</b>

Table 1 shows the extent of the respondents' awareness on the financial risks of cashless payment methods in terms of fraudulent transactions.

According to the previous table, the extent of the respondents' awareness on the financial risks of cashless payment methods in terms of fraudulent transactions has an average mean of 4.41 with a standard deviation of 0.68 and is interpreted as Strongly Agree. The respondents claimed that they understand what constitutes a fraudulent transaction with the highest mean of 4.54 and a standard deviation of 0.60 and was interpreted as Strongly Agree, whereas they also mentioned that they believe that reporting fraudulent transactions promptly can limit their liability for losses with the lowest mean of 4.36 and a standard deviation of 0.69 and was interpreted as Strongly Agree. This means that the respondents very much understand the importance of being aware

of the financial risks caused by fraudulent transactions.

In relation to this, a study of PutriSKGmAB and Sumitra (2020) which aims to examine and evaluate the impact of digital wallets on small enterprises. The findings show that digital wallets have a significant impact on small enterprises. The use of digital payment methods has grown in acceptance and is now widely used. Technology advancements lead to solutions in the form of payment applications that serve as platforms for microbusinesses to enable trade. Digital wallets are available to make their users' lives easier. The use of digital wallets in electronic payment systems has increased efficiency, decreased the fraud caused by counterfeit money, and innovated the payment system, all of which have an impact on the growth of sales. Making payments or transactions for products and services through electronic media is made easier with the use of digital wallets.

Table 2. Extent of the Respondents' Awareness on the Financial Risks of Cashless Payment Methods in terms of Security Risks

INDICATOR	MEAN	SD	REMARKS
1. I believe that my personal data is securely stored and protected by the organization I interact with (e.g., bank, online platforms, government agencies, etc.).	4.35	0.79	Strongly Agree

2. I believe that my financial information is more secure when stored digitally compared to physical documents.	4.22	0.77	Strongly Agree
3. I am concerned about the security of my financial data when making mobile payments.	4.09	0.90	Agree
4. My personal information is unsafe with cashless payment method because they are widely accepted in a wide range of businesses and locations.	4.11	0.95	Agree
5. I take active steps to protect my financial information (e.g., using strong passwords, two-factor authentication).	4.33	0.82	Strongly Agree
<b>OVERALL</b>	<b>4.22</b>	<b>0.85</b>	<b>STRONGLY AGREE</b>

Table 2 shows the extent of the respondents' awareness on the financial risks of cashless payment methods in terms of security risks.

According to the previous table, the extent of the respondents' awareness on the financial risks of cashless payment methods in terms of security risks has an average mean of 4.22 with a standard deviation of 0.85 and is interpreted as Strongly Agree. The respondents claimed that they believe that their personal data is securely stored and protected by the organization they interact with (e.g., bank, online platforms, government agencies, etc.)" with the highest mean of 4.35 and a standard deviation of 0.79 and was interpreted as Strongly Agree, whereas they also mentioned that they are concerned about the security of their financial data when making mobile

payments with the lowest mean of 4.09 and a standard deviation of 0.90 and was interpreted as Agree. This means that the respondents very much understand the importance of being aware of the financial risks caused by security risks.

This is further supported by Dr. S. Yuvaraj and Sheila Eveline N. (2018), mobile wallets are the second most popular form of payment among consumers, following credit/debit cards. Customers were influenced towards cashless transactions due to factors such as preferences for convenience, privacy, and security. These considerations were the driving forces behind cashless transactions, and it was discovered that consumers were sufficiently aware of the security risks involved.

Table 3. Extent of the Respondents' Awareness on the Financial Risks of Cashless Payment Methods in terms of Liquidity Risks

INDICATOR	MEAN	SD	REMARKS
1. Cashless payment methods introduce new liquidity risk factors that need to be carefully managed.	4.19	0.84	Agree
2. Cashless payment methods have the potential to create liquidity shortages in certain scenarios.	3.96	1.00	Agree
3. When I use cashless payment methods, I feel more secure about the safety of my company's finances.	4.19	0.79	Agree
4. The use of cashless payment systems has increased the growth potential for my company.	4.25	0.80	Strongly Agree
5. Financial security against liquidity risk is at a high degree.	3.92	0.97	Agree
<b>OVERALL</b>	<b>4.10</b>	<b>0.89</b>	<b>AGREE</b>

Table 3 shows the extent of the respondents' awareness on the financial risks of cashless payment methods in terms of liquidity risks.

According to the previous table, the extent of the respondents' awareness on the financial risks of cashless payment methods in terms of liquidity risks has an average mean of 4.10 with a standard deviation of 0.89 and is interpreted as Agree. The respondents claimed that the use of cashless payment systems has increased the growth potential of their company with the highest mean of 4.25 and a standard deviation of 0.80 and was interpreted as Strongly Agree, whereas they also mentioned that the financial security against liquidity risk is at a high degree with the lowest mean of 3.92 and a standard deviation of 0.97 and was interpreted as Agree. This means that the respondents understand the importance of being aware of the financial risks caused by liquidity risk.

This is further supported by Garrido (2022), liquidity risk is the capability of a company to meet its short-term debts based on its current liquid assets. To reduce liquidity risk, companies should maintain sufficient cash on hand, access loans and diversify funding sources, and be able to convert liquid assets into cash quickly.

- Test of Relationship between the Business Profile and the Financial Risks of Cashless Payment Methods

In order to test the relationship between the business profile and the financial risks of cashless payment methods, the data gathered by the researchers were computed electronically and treated statistically using Pearson product-moment correlation.

Table 4. Test of Relationship between the Business Profile and the Financial Risks of Cashless Payment Methods in terms of Years of Operation

BUSINESS PROFILE	FINANCIAL RISKS	R- VALUE	P- VALUE	ANALYSIS	DEGREE OF CORRELATION
Years of Operation	Fraudulent Transactions	-0.073	0.305	Not Significant	Very Low Correlation
	Security Risks	-0.019	0.788	Not Significant	Very Low Correlation
	Liquidity Risks	0.113	0.110	Not Significant	Very Low Correlation

As shown in the table above, the computed r-values between the business profile in terms of years of operation and the financial risks in terms of fraudulent transactions ( $r = -0.073$ ), security risks ( $r = -0.019$ ), and liquidity risks ( $r = 0.113$ ) are all showing very low correlations, further supported by the computed p-values of 0.305, 0.788, and 0.110 among the respective variables which are all much greater than the level of significance ( $\alpha = 0.05$ ). The statistical values indicate that there is no significant relationship between the years of operation and the financial risks of cashless payment methods.

factor in determining its performance. New firms are more profitable and grow faster than large ones because they can create new jobs, achieve local growth, innovate new work procedures, and train their employees, but long-lived firms with pooled resources, extensive experience, a better reputation in the marketplace, and a large amount of information can overcome difficulties and work efficiently. The age of the firm is an essential factor in determining its performance.

This is further supported by Nawaiseh (2020), stated that the years of operation of the firm is an essential

Table 5. Test of Relationship between the Business Profile and the Financial Risks of Cashless Payment Methods in terms of Number of Employees

BUSINESS PROFILE	FINANCIAL RISKS	R- VALUE	P- VALUE	ANALYSIS	DEGREE OF CORRELATION
Number of Employees	Fraudulent Transactions	-0.003	0.962	Not Significant	Very Low Correlation
	Security Risks	0.051	0.471	Not Significant	Very Low Correlation
	Liquidity Risks	-0.023	0.744	Not Significant	Very Low Correlation

The computed r-values between the business profile in terms of number of employees and the financial risks in terms of fraudulent transactions ( $r = -0.003$ ), security risks ( $r = 0.051$ ), and liquidity risks ( $r = -0.023$ ) are all showing very low correlations, further supported by the computed p-values of 0.962, 0.471, and 0.744 among the respective variables which are all much greater than the level of significance ( $\alpha = 0.05$ ). The statistical values also indicate that there is no significant relationship between the number of employees and the financial risks of cashless payment methods.

This is further supported by Cronuts (2021), When a company increases its employee’s numbers, it may face several challenges. Some of the problems that may arise include difficulties in communication and managing a larger team, maintaining the company culture, ensuring compliance with legal regulations, and dealing with potential conflicts and issues that arise among employees. As the number of employees increases, it may require new tools and strategies to keep everyone connected and on the same page.

Table 6. Test of Relationship between the Business Profile and the Financial Risks of Cashless Payment Methods in terms of Monthly Income

BUSINESS PROFILE	FINANCIAL RISKS	R- VALUE	P- VALUE	ANALYSIS	DEGREE OF CORRELATION
Monthly Income	Fraudulent Transactions	0.118	0.098	Not Significant	Very Low Correlation
	Security Risks	0.146	0.039	Significant	Very Low Correlation
	Liquidity Risks	0.068	0.337	Not Significant	Very Low Correlation

The computed r-values between the business profile in terms of monthly income and the financial risks in terms of fraudulent transactions ( $r = 0.118$ ), security risks ( $r = 0.146$ ), and liquidity risks ( $r = 0.068$ ) are all showing very low correlations, further supported by the computed p-values of 0.098 for fraudulent transactions and 0.337 for liquidity risks which are both greater than the level of significance ( $\alpha = 0.05$ ). On the other hand, the computed p-value of 0.039

between monthly income and security risks is lower than the level of significance. The statistical values indicate that there is no significant relationship between the monthly income and the financial risks of cashless payment methods, except security risks.

This is further supported by A1Project Hub (2020), Similar to other companies, SMEs want to make as much money as possible. The abilities, function, and



contribution of SMEs vary from sector to sector and country to country. SMEs encounter a variety of issues, just like other companies, which occasionally hinder their profitability and expansion. Having a knowledgeable and capable business manager is essential to the firm in order to handle the frequent, quick changes in the business environment. Given the

forementioned situation, the pertinent and intriguing question to be considered at this time would be variables to assure the success and profitability of the SMEs sector in Nigeria. As a result, the empirical analysis of the variables influencing SMEs' profitability will be examined in this study.

Table 7. Test of Relationship between the Business Profile and the Financial Risks of Cashless Payment Methods in terms of Type of Cashless Payment Methods

BUSINESS PROFILE	FINANCIAL RISKS ANALYSIS	R- VALUE	P- VALUE	DEGREE OF CORRELATION
Type of Cashless Payment Methods	Fraudulent Transactions	0.263	0.000	Significant Low Correlation
	Security Risks	0.277	0.000	Significant Low Correlation
	Liquidity Risks	0.210	0.003	Significant Low Correlation

The computed r-values between the business profile in terms of type of cashless payment methods and the financial risks in terms of fraudulent transactions ( $r = 0.263$ ), security risks ( $r = 0.277$ ), and liquidity risks ( $r = 0.210$ ) are all showing low correlations, while the computed p-values of 0.000, 0.000, and 0.003 among the respective variables are all much lower than the level of significance ( $\alpha = 0.05$ ). The statistical values indicate that there is a significant relationship between the type of cashless payment methods and the financial risks of cashless payment methods.

fraudulent transactions and liquidity risks. On the other hand, only the type of cashless payment methods correlates to the financial risks of cashless payment methods. Hence, it fails to reject the null hypothesis. Therefore, there is no significant relationship between the business profiles and the financial risks of cashless payment methods among small and medium businesses profiles and the financial risks of cashless payment methods among small and medium businesses.

This is further supported by Mohamed et al. (2020) which is conducted in Kemaman found that the most important aspect influencing market adoption of cashless payments is 'perceived Ease of Use', followed by perceived 'usefulness'. The study found that a cashless society in Kemaman was viable in view of the fact that it was easy to use and learn. Their results showed that cashless payments in the country allure more consumers to transact and it has been shown that payments via mobile or e-wallets have been part of their daily lives.

Overall results show that most of the business profiles (years of operation, number of employees, and monthly income) does not correlate to the financial risks of using cashless payment methods, particularly

REFERENCES

[1] AIProject Hub. (2020). An empirical analysis of factors affecting profitability of SMEs. Retrieved from <https://project4topics.com/an-empirical-analysis-of-factors-affecting-profitability-of-smes/>

[2] ABS-CBN News. (2020, August 21). Transport authorities tap PayMaya for 'cashless' push. Retrieved from ABSCBN News: <https://news.abs-cbn.com/business/08/21/20/transport-authorities-tap-paymaya-for-cashless-push>.

[3] Agarwal, H. (2022). Mobile banking security: 7 reasons why the apps you use are not safe. Appknox. Retrieved from

- <https://www.appknox.com/blog/mobile-banking-security-unsafe-apps>
- [4] Agwu, M.E. (2018) Analysis of the impact of strategic management on the business performance of SMEs in Nigeria-ProQuest. (2018).  
<https://www.proquest.com/openview/1065e88e84b67d0f10e01eca82a8acaf/1?pq-origsite=gscholar&cbl=38745>
- [5] Alam, S., Md Salleh, M., Masukujjaman, M., Al-Shaikh, M., Makmor, N., & Makhbul, Z. (2022). Relationship between Entrepreneurial Orientation and Business Performance among Malay-Owned SMEs in Malaysia: A PLS Analysis. *Sustainability*, 14(10), 6308. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/su14106308>
- [6] Alzoubi, H., Alshurideh, M., Kurdi, B., Alhyasat, K. & Ghazal, T. (2022). The effect of e-payment and online shopping on sales growth: Evidence from banking industry. *International Journal of Data and Network Science*, 6(4), 1369- 1380.
- [7] Amoah, S. K., & Amoah, A. K. (2018). The role of small and medium enterprises (SMEs) to employment in Ghana. *International Journal of Business and Economics Research*, 7(5), 151-157.
- [8] Anaviso, P. (2022). Cash vs. credit card: should you go cashless? <https://www.moneymax.ph/credit-card/articles/cash-vs-creditcard?fbclid=IwAR2QUN21rU9uuOt1kZH MpzKWocNMQ7Y2ihjeJ5rA pZ6eVGzDV86OHJVAmLs>
- [9] Asian Development Bank. (2021). Asian economic integration report 2021: making digital platforms work for asia and the pacific. manila. <http://dx.doi.org/10.22617/TCS210048-2>.
- [10] Aydiner, A. S., Tatoglu, E., Bayraktar, E., Zaim, S., & Delen, D. (2019). Business analytics and firm performance: The mediating role of business process performance. *Journal of Business Research*, 96, 228–237. <https://doi.org/10.1016/j.jbusres.2018.11.028>
- [11] Bhandari, P. (2022). Population vs. sample | definitions, differences & examples. Scribbr. Retrieved from <https://www.scribbr.com/methodology/population-vs-sample/>
- [12] Belas, J., Gavurova, B., & Toth, P. (2018). Impact of selected characteristics of SMES on the capital structure. *Journal of Business Economics and Management*.
- [13] Cacas, A., Diongson, M. a. A., Olita, G., & Perkins, R. (2022). Influencing factors on mobile wallet adoption in the Philippines: generation x’s behavioral intention to use GCash services. *journal of business and management studies*, 4(1), 149–156. <https://doi.org/10.32996/jbms.2022.4.1.18>
- [14] Cao, T. (2021). The Study of Factors on the Small and medium Enterprises’ adoption of Mobile Payment: Implications for the COVID-19 Era. *Frontiers in Public Health*, 9. <https://doi.org/10.3389/fpubh.2021.646592>
- [15] Contributor, C. (2020). The importance of company manpower. *small business-chron.com*. <https://smallbusiness.chron.com/importance-company-manpower-23763.html>
- [16] Cronuts. (2021). Problems when there is an increase in staff numbers - Blegal.eu. <https://www.blegal.eu/en/problems-when-there-is-an-increase-in-staff-numbers/>
- [17] DeBacker, J., Panousi, V., & Ramnath, S. (2023). A risky venture: income dynamics among pass-through business owners. *American Economic Journal: Macroeconomics*, 15(1), 444–474. <https://doi.org/10.1257/mac.20200134>
- [18] Delos Reyes, J. M., Dural, L. M., Mangaoang, J. S., Victor, G. M., & Borres, R. (2021). An application of analytical hierarchy process in the comparison of the use of gcash, paymaya, and debit card applications as a payment option in the philippines.
- [19] De Leon, E. A. (2018). PayPal study reveals more Filipinos are now shopping online. *Newsbytes.PH*. <https://newsbytes.ph/2018/07/01/paypal-study-reveals-more-filipinos-are-now-shopping-online-2/>
- [20] Dinar, L., Widayaningsih, N., Gunawan, D. S., & Yaramai, J., (2021). Factors Affecting Business Income of Empal Gentong in Cirebon City. *Eko-Regional*, 16(2).

- <https://doi.org/10.20884/1.erjpe.2021.16.2.1847>
- [21] D Mahbub. (2023, September 25). Dangers of a cashless society you need to consider-Digital Mahbub. Digital Mahbub. <https://digitalmahbub.com/dangers-of-a-cashless-society/#:~:text=Fraudulent%20activities%20like%20identity%20theft%20and%20phishing%20scams,identity%20theft%20and%20phishing%20scams%20can%20also%20occur.>
- [22] Dotong, E. (2019). Cashing in on cashless commerce: analyzing the cashless transaction in the Philippine supermarket through consumer satisfaction. *international journal of business research and development*. 1. 19-31.
- [23] Dr. S. Yuvaraj and Sheila Eveline. N, (2018) Consumers' Perception towards Cashless Transactions and Information Security in the Digital Economy, *International Journal of Mechanical Engineering and Technology*, 9(7), 2018, pp. 89–96
- [24] Durai, T., & G, S. (2019). Digital finance and its impact on financial inclusion. ResearchGate. [https://www.researchgate.net/publication/330933079\\_DIGITAL\\_FINANCE\\_AND\\_ITS\\_IMPACT\\_ON\\_FINANCIAL\\_INCLUSION](https://www.researchgate.net/publication/330933079_DIGITAL_FINANCE_AND_ITS_IMPACT_ON_FINANCIAL_INCLUSION)
- [25] Eli. (2019). GCash serves more Filipinos for cashless transactions making them the preferred E-wallet provider. *ElifestyleManila.com*. <https://www.elifestylemanila.com/gcash-serves-more-filipinos-for-cashless-transactions-making-them-the-preferred-e-wallet-provider/?fbclid=IwAR0q8inPNyOc9QInPF1TCL6HajpalMKBry4XofO0uXzRCU6N9FhuJCY0iT0>
- [26] Espeleta, R. (2022). Utilization of standard electronic payment system among private higher education institutions in the province of Albay. *JPAIR Multidisciplinary Research*. 50. 140-158. 10.7719/jpairv50i1.571.
- [27] Gunu, U., & Adamade, S. S. (2018). The relationship between firm age and financial performance in Nigeria: a panel analysis. *Journal of sustainable Development in Africa*. <https://jsd-africa.com/Jsda/V17No3-Smr15A/PDF/The%20Relationship%20between%20firm%20age%20and%20financial%20performance%20in%20Nigeria3.pdf>
- [28] Gupta, R. (2019). Cash vs. cashless: which is best for the world. *Via News*. <https://via.news/economy/cash-vs-cashless-which-is-best/>
- [29] Hani, A., & Hani, A. (2021). E-Payments continue to drive the philippine economy post-pandemic-openGov Asia. *OpenGov Asia*. <https://opengovasia.com/e-payments-continue-to-drive-the-philippine-economy-post-pandemic/>
- [30] Haralayya, B. (2021). Dr bhadrapa haralayya. *Journal of Advanced Research in Quality Control and Management* 6 (1), 16-18, 2021, 1. <https://doi.org/10.17632/v23njvfc2p.1>
- [31] Harb, A. S. M. (2019). The impact of profitability and financial performance on improving productive efficiency in Jordanian industrial companies. <https://www.abacademies.org/articles/the-impact-of-profitability-and-financial-performance-on-improving-productive-efficiency-in-jordanian-industrial-companies-8465.html>
- [32] Hassan, A., Shukur, Z., Hasan, M. K., & Al-Khaleefa, A. S. (2020). A review on electronic payments security. *Symmetry*, 12(8), 1344. <https://doi.org/10.3390/sym12081344>
- [33] Hood, B. (2021). Bank Transfers: Are they safe to use for sending money? suits me@. <https://suitsmecard.com/blog/bank-transfers-are-they-safe-to-use-for-sending-money>
- [34] INQUIRER.net BrandRoom. (2021). PayMaya leads the way to a “Cashless Philippines” in 2020 and beyond | Inquirer Business. *INQUIRER.net*. <https://business.inquirer.net/315176/paymaya-leads-the-way-to-a-cashless-philippines-in-2020-and-beyond>
- [35] Kadjie, C. F., Hikouatcha, P., Kengdo, A. a. N., & Nchofoung, T. N. (2022). Determinants of adoption of electronic payment by small and medium-sized enterprises (SMEs) in Cameroon. *African Journal of Science, Technology, Innovation and Development*, 1–13. <https://doi.org/10.1080/20421338.2022.2058340>
- [36] Kantar Public. (2022). Study on New digital payment methods. [https://www.ecb.europa.eu/paym/digital\\_euro/investigation/profuse/shared/files/dedocs/ecb.dedocs](https://www.ecb.europa.eu/paym/digital_euro/investigation/profuse/shared/files/dedocs/ecb.dedocs)

- 220330\_report.en.pdf&ved=2ahUKEwjhiqm3krD-AhU5o1YBHYASCJc4FBAWegQIHhAB&usg=AOvVaw0qbRWiPxKZfpCBh s6R2lsI
- [37] Kim, S. S. (2020). Purchase intention in the online open market: Do concerns for E-Commerce really matter? *Sustainability*, 12(3), 773. <https://doi.org/10.3390/su12030773>
- [38] Lucas, D. L. (2020). Pandemic accelerated PH consumers' shift from cash to digital payments| Inquirer Business. INQUIRER.net. <https://business.inquirer.net/311579/pandemic-accelerated-ph-consumers-shift-from-cash-to-digital-payments>
- [39] Manickam, T., & Subramanian, S. M. (2019). Effect of cashless payment methods: a case study perspective analysis. ResearchGate. [https://www.researchgate.net/publication/344198737\\_Effect\\_Of\\_Cashless\\_Payment\\_Methods\\_A\\_Case\\_Study\\_Perspective\\_Analysis](https://www.researchgate.net/publication/344198737_Effect_Of_Cashless_Payment_Methods_A_Case_Study_Perspective_Analysis)
- [40] McCombes, S. (2022). Descriptive Research | Definition, Types, Methods & Examples. Scribbr. Retrieved April 25, 2023, from <https://www.scribbr.com/methodology/descriptiv e-research/>
- [41] Mohamed, M. et., al. (2020). Customer acceptance of cashless payment in Kemaman. <https://tatiuc.edu.my/ijset/index.php/ijset/article/view/15>
- [42] abila, A. S. N., Oktavianti, F. T., & Putri, N. (2022). Using Paypal as e-payment in the international payment system. *asian economic and Business Development*, 4(1), 14–19. <https://doi.org/10.54204/aebd/vol4no1july202203>
- [43] Naeem, M., & Ozuem, W. (2021). The role of social media in internet banking transition during COVID-19 pandemic: Using multiple methods and sources in qualitative research. *Journal of Retailing and Consumer Services*, 60, 102483. <https://doi.org/10.1016/j.jretconser.2021.102483>
- [44] Nawaiseh, M. A. (2020). The effect of firm's age, size and growth on its profitability: Evidence from Jordan. CORE Reader. <https://core.ac.uk/reader/304991380>
- [45] Newmyer, T., & Tan, E. (2023, August 7). PayPal launches digital token in push to capture crypto payments. *Washington Post*. <https://www.washingtonpost.com/business/2023/08/07/paypal-stablecoin- crypto/>
- [46] Newsbytes.PH. (2020, July 31). PH schools adopt cashless payment scheme via PayMaya. Retrieved from Newsbytes.PH: <https://newsbytes.ph/2020/07/31/ph-schools-adopt-cashlesspayment- scheme-via-paymaya/>
- [47] <https://newsbytes.ph/2020/07/31/ph-schools-adopt-cashless-payment-scheme-via- paymaya/>
- [48] Pageone, & Pageone. (2019). GCash strengthens dominance in ph | pageone. pageone | conversations Start Retrieved from <https://pageone.ph/gcash- strengthens-dominance-in-ph/>
- [49] Paing, H. H. (2020). Factors influencing the usage of credit card of private bank staff. 14th international conference of Yue, komyra, KHU & KTRA (pp. 1-12). Yangon: Yangon University of Economics.
- [50] Pallister, B. (2023). What is Correlational Research Design? Innovolo. <https://innovolo-group.com/market-research-terminology/market-research-glossary-c/what-is-correlational-research-design/>
- [51] PayPal. (2021, April 9). Measuring the impact of PayPal's enterprise solutions. PayPal. <https://www.paypal.com/us/brc/article/measurin g-business-impact>
- [52] Phan, T. D., Nguyen, T. T., & Hoang, T. T. (2022). Impact of income diversification on the business performance of Vietnamese commercial banks. *Cogent Business & Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2132592>
- [53] PutriSKGmAB, M. K., & Sumitra, I. D. (2020). The effect of using a digital wallet for small business. *IOP Conference Series*, 879, 012013. <https://doi.org/10.1088/1757-899x/879/1/012013>
- [54] Qureshi, J. a. Q. & S. B. & M. A. (2018). Consumers' attitude towards usage of debit and credit cards: Evidences from the Digital Economy of Pakistan. *ideas.repec.org*. <https://ideas.repec.org/a/eco/journ1/2018-05-29.html>

- [55] Rahman, M., Ismail, I., Bahri, S., & Rahman, M. K. (2022). An empirical analysis of cashless payment systems for business transactions. *Journal of open innovation*, 8(4), 213. <https://doi.org/10.3390/joitmc8040213>
- [56] Sepino, F., & Garcia-Vigonte, F. (2022). The Study on Circular Flow of Income in the Barangay Micro Business Enterprises. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.4123101>
- [57] Sinambela, E. A. (2021). The role of business capital, level of education, and technology in increasing business income. <https://sisi.thejournals.com/index.php/sisi/article/view/7>
- [58] Singh, C. (2022). India's Success with the Digital Payment System. *Management Journal for Advanced Research*, 2, 32-38.
- [59] Singhraul, B. P., & Garwal, Y. S. (2018). Cashless economy—challenges and opportunities in India. *Pacific Business Review International*, 10(9), 54-63.
- [60] S. Khatri, A. Arora and A. P. Agrawal. (2023). "Supervised Machine Learning Algorithms for Credit Card Fraud Detection: A Comparison," 2020 10th International Conference on Cloud Computing, Data Science & Engineering (Confluence), Noida, India, 2020, pp. 680-683, doi: 10.1109/Confluence47617.2020.9057851. <https://ieeexplore.ieee.org/abstract/document/9057851>
- [61] Srouji, J. (2020). Digital payments, the cashless economy, and financial inclusion in the United Arab Emirates: Why is everyone still transacting in cash? *Journal of Risk and Financial Management*, 13 (11), 260. <https://doi.org/10.3390/jrfm13110260>
- [62] Susanto, E. H., Solikin, I., & Purnomo, B. (2022). A REVIEW OF DIGITAL PAYMENT ADOPTION IN ASIA. *ADVANCED INTERNATIONAL JOURNAL OF BUSINESS, ENTREPRENEURSHIP AND SME's*, 4(11), 01–15. <https://doi.org/10.35631/aijbes.411001>
- [63] Talavera, C. (2021). PayMaya customers reach 28 million. *Philstar.com*. <https://www.philstar.com/business/2021/01/01/2067436/paymaya-customers-reach-28-million>
- [64] TechAhead. (2023). Essentials features that drive mobile payment app like PayPal. Retrieved from <https://www.techaheadcorp.com/blog/paypal-app-features/>
- [65] Titalessy, P. B. (2020). Cashless Payments and its Impact on Inflation. *Advances in Social Sciences Research Journal*. <https://doi.org/10.14738/assrj.79.9074>
- [66] Trencansky, D., & Tsaparlidis, D. (n.d.). The effects of company's age, size and type of industry on the level of CSR. <https://www.diva-portal.org/smash/get/diva2:757602/FULLTEXT01.pdf>
- [67] Vandal, M. D. (2021, July 1). A DETAILED STUDY ON DEBIT CARDS AND USAGE OF VARIOUS DEBIT CARDS IN CHENNAI CITY. <https://www.tojq.net/index.php/journal/article/view/2026>
- [68] Victory, G. (2022). Use Of Digital Payment for Micro, Small and Medium Enterprises (MSMEs).
- [69] Woźniak, M., Duda, J., Gašior, A., & Bernat, T. (2019). Relations of GDP growth and development of SMEs in Poland. *Procedia Computer Science*, 159, 2470-2480
- [70] Yan Zheng L. (2021). Gcash – innovations to promote financial inclusivity. Sustainable finance through fintech solutions. Retrieved from <https://twimbit.com/insights/gcash-transforming-filipinos?fbclid=IwAR2BKDmKEHNqApWCOb5WnEms0hew-NKVaSYD6MUKi0XJ4w42KFQa5vUPzUA>