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## Research Article

### Social Media Integration and Financial Performance of Selected Micro Retail Businesses in Cebu City

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## ABSTRACT

The tremendous shift towards digital platforms has prompted businesses to go online during the heights of the pandemic. Among those who embraced this enormous shift are the Micro, Small and Medium Enterprises (MSMEs), which are the backbone of the economic growth in developing countries. The efficient use of social media marketing has been a key player in the success of companies in today's business environment, and the quest for sustainable development gives rise to the need for better strategic decisions in the MSMEs. This paper analyzes whether there is a relationship between social media integration and the financial performance of selected micro retail businesses in Cebu City. The level of social media integration and the total assets turnover of 385 selected micro retail businesses were correlated using Pearson's correlation, with their related advertising expenses as the moderating variable. As observed in a non-contrived setting with minimal interference, our results showed a weak positive correlation among the variables correlated with such relationships varying per business industry. Our analysis also revealed that the average total assets turnover of businesses employing social media is higher than those which do not. The results also showed that the more integrated the business is, the more likely they are to invest in social media advertising.

**Keywords:** *Financial performance, Micro retail businesses, Online businesses, Social media, Social media integration*

## Introduction

The advent of technology has changed every facet of people's lives and has been widely used in improving their abilities to do more with less and deliver better results — from individuals to firms, and even on a national level; may it be in their daily lives, their jobs, or the day-to-day operations of their

businesses. Incorporating and utilizing technology has significantly improved communications, production, cost reduction, and promotions, particularly in business. Firms are developing methods to support their digital growth as the world transitions to online marketing, making it crucial for businesses to exist online just as offline (Sharma, 2017). Businesses

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constantly seek new methods to boost profitability by incorporating this new platform into their existing business models.

With the rise of the global pandemic, businesses, especially Micro, Small, and Medium Enterprises (MSMEs), were forced to outmaneuver the uncertainties by abruptly changing courses as conditions changed. The COVID-19 crisis called for rethinking the "new normal," which has been in place since World War II (Beng, 2020). The environment altered when legislation evolved, and measures had to be put in place to restrict the spread of the virus and safeguard public health — accelerating a digital transition and pushing firms to go online even if they had not considered it before (Rios, 2020). Social media has evolved into a new playground for people of all ages, providing unrestricted access to such a large pool of potential clients for any product — it has become every marketer's dream brought to life (Fountain, 2021). As a result, small company owners that rely on brick-and-mortar locations immediately turned to online platforms to keep their operations afloat as restrictions pushed them to close or curtail their operations (Rios, 2020).

Dave Chaffey (2023) of Smart Insights reported that over 4.62 billion individuals have social media accounts or 58.4% of the world's population. These people spend, on average, 2.27 hours a day on social media platforms like Facebook, YouTube, Instagram, and Twitter, accounting for more than a quarter of all online activities. If used efficiently, this is a tremendous opportunity for businesses of all types and sizes to reach prospects who are just taps and clicks away. Pettersson and Tadesse's (2019) research has shown that the impact of social media has provided new ways for small firms to compete. Small businesses may now compete with larger firms by incorporating social media to attract a broader range of customers.

Several studies have been conducted on the benefits of social media marketing in MSMEs. As discovered in a study conducted by Rosario et al. in 2016, electronic word of mouth indeed significantly correlates with sales, but the impact varies depending on the platform, product, and measured parameters. Moreover, Paquette (2013) claims that research from the

perspective of small retailers is limited, particularly research that addresses how smaller enterprises used social media within their business models and the effectiveness of social media in terms of growing their customer base, brand exposure, and sales. As such, the previous research could not fully quantify the relationship between integrated social media marketing and the financial performance of a micro retail business as defined in this study, especially in the local context.

This study aims to correlate the social media integration and financial performance of selected micro retail businesses in Cebu City. The study will also determine the relationship between the social media integration of selected micro retail businesses and their advertising expenses. The results of this study shall be the basis for providing recommendations useful for selected micro retail businesses in their decision-making in terms of integrating social media to maximize profits.

## Review of Related Literature

Technology indisputably transformed the world as it changed every facet of our lives — from making our daily pursuits much more efficient to providing us with quicker ways of information and communication, especially the use of social media platforms. Bishop (2019) defined social media as an online resource to enhance individual interaction. It comprises several user-driven platforms that allow for the dissemination of content, opinions, and communication to a larger audience (Kapoor et al., 2018). Facebook, Twitter, and Tiktok are typical examples of social media platforms that emerged not only for entertainment but also for information and communication, commonly known as electronic word of mouth.

People usually turn to social media whenever they want to know something with an easy press of a thumb. According to the Philippine Statistics Authority (PSA), Filipinos aged 10 to 64 used the internet more frequently for social media (73.9%) than for research and e-mail (63.6%) in 2022. Communication, information gathering, and social networking can all be accomplished across geographical boundaries with the help of the internet (Khanal & Mishra, 2016). Over the years, social media has also

been widely used as a marketing strategy for businesses. Consumers' purchase decisions in this generation are now primarily influenced by social networking platforms, making it a potential opportunity for industry growth (Onofrei et al., 2022).

Social media integration is an efficient way of understanding and addressing customer needs while achieving key goals such as increasing brand reach and awareness (Killian & McManus, 2015). Social media integration became a step up from competitors. McKay (2010) concluded that this integration could improve information accuracy, reduce manual effort, and provide more in-depth customer insights, which spell out its imperativeness towards business organizations.

Because the COVID-19 virus has negatively impacted corporate activities, the year 2020 calls for rethinking and redefining marketing strategies. As pandemic regulations forced many locations to close and impose some restrictions on their activities, businesses rapidly transformed into online manifestos to keep going (Jacobides & Reeves, 2020). When the local governments restricted everyone and halted in-store shopping for months, people had to resort to digitalized transactions. However, even though they could return to the old ways when stores reopened, people mostly kept shopping online. Amazon and other retail giants like Target and Walmart reaped the rewards as they saw the opportunity social media can offer in the middle of a crisis (Del Rey, 2020). Sutherland (2022) asserts that social media has paved the way for people to do business more accessible and manageable. These online platforms set up customer relations departments to respond appropriately to customers on time, even amid the pandemic.

The advent of social media has provided people and audiences with information that businesses could not have reached in previous centuries. Nowadays, the rise of digital media and its corporate usage is imperative, given that everything is already available online. Info-Tech Research Group emphasized its imperative, which is that integrating social media into business organizations is critical in achieving goals, which essentially fall under satisfying customer needs (McKay, 2010). Small

businesses, in particular, are primarily benefited, given how crucial their finances are. It is critical to pay attention to and research small businesses as they are one of the agents stimulating economic development. According to statistics provided by the Department of Trade and Industry (DTI) in 2020, 99.51% of the businesses in the Philippines are MSMEs. These MSMEs generated 5,380,815 employment opportunities for Filipinos, which account for 62.66% of the total employment in the country. They are also mainly concerned with meeting the population's local needs for goods and services, partaking significantly in the development of rural areas, which is essential for holistic economic evolution.

Despite being an essential part of economic development, MSMEs remain at lower productivity than larger companies mainly because of a lack of market access. According to Francisco & Canare (2020), MSMEs should take advantage of alternative markets, particularly online platforms, to create an appearance in product distribution and display to grow their market significantly. In essence, social media presence is of paramount relevance. Various industries have demonstrated the significance of social media integration in their specific products and services.

Chung et al. (2020) discovered that a firm's social media posts and responses to customers enhance customer satisfaction, which has a significant positive impact on its market performance. The study backs up the notion of using social media appropriately to build and manage customer relationships. Li (2021) also added that social media has influenced every field of life and is one of the most demanded tools in the digital world that is directly associated with business growth and presentation. It positively influences business growth and performance, suggesting that organizations must ensure their presence on social networking sites for significant benefits in the future.

Facebook has proven to be a powerful platform for small and medium-sized businesses to market their brands without spending much money (Nobre & Silva, 2014). Facebook presents itself as a one-of-a-kind environment that may help businesses attract new customers while providing current customers with a

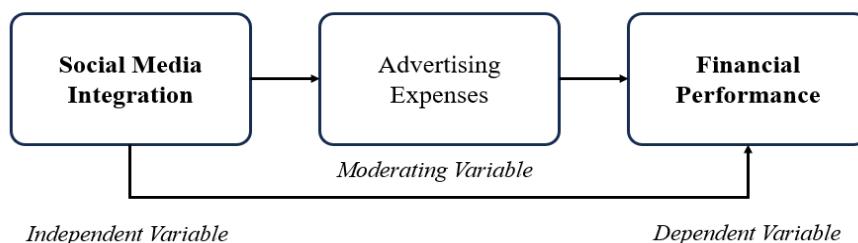
tighter engagement with the brand. As a result, the study found that social media presence can significantly influence relationship development and increased sales/membership.

Pettersson and Tadesse's (2019) research has shown that the impact of social media has provided new ways for small firms to compete. Small businesses may now compete with larger firms by incorporating social media to attract a broader range of customers. Moreover, Susanto et al. (2021) claim that one of the benefits that social media has provided to small businesses and other sectors of the economy is the ability to generate leads in a more efficient, productive, and cost-effective manner. Consequently, businesses are seeing an increase in sales and revenue. Social media integration has been an integral component of success in an ever-changing world as it is a collection of innovative marketing tactics and information-and-communications-based marketing strategies tailored to the current state of the market. Businesses may access more effective customer relationship management tools and increase client satisfaction with the help of digital marketing (Veleva & Tsvetanova, 2020). Dean (2019)

further insinuates that social media marketing strategies are valuable tools for small business owners to reach new customers, increase sales, and grow profitability.

Small businesses are essential to the economy, just as social media does in business. Thus, as part of the effort to assist these industries, researchers are prompted to conduct a research study relevant to this field in the local context (Shpak, 2021). This study aims to correlate social media integration with the financial performance of selected micro retail businesses in Cebu City, which would help them maximize the important use of these platforms for business growth and sustainability. This paper will also reveal specific micro retail industries in Cebu City that benefited the most from social media integration in terms of financial performance, utilizing a correlational research design. The study will further determine the correlations of variables, including advertising expense, social media integration, and total assets turnover ratio as a measure of financial performance, taking into consideration the specific industries of selected micro retail businesses in Cebu City.

### **Conceptual Framework**



*Figure 1. Paradigm of the Research Study*

### **Hypothesis**

This study will examine the relationship between social media integration and the financial performance of selected Micro Retail Businesses in Cebu City. The study also aims to identify the mediating effect of social media advertising expenses in the established relationship therewith. The study will further verify the positive correlation between social media integration and the firm's financial performance in

the context of the Micro Retail Businesses Industry in Cebu City.

The research hypotheses are presented as follows:

$H_0$ : There is a significant relationship between micro retail businesses' financial performance in Cebu City and their advertising expenses among the eight identified industries

$H_a$ : There is a significant relationship between micro retail businesses' financial performance in Cebu City and their social media integration among the eight identified industries.

## Methods

This section presents the research methodology and methods. It concentrates on research design, environment, participants, sampling technique, data gathering procedures, and data analysis.

### Research Design

A quantitative approach was employed throughout this study, where the researchers utilized a quantitative survey as the overall research strategy. This strategy was commonly used in descriptive analysis, where the researchers collected data about people, events, or situations.

The study employed a correlational research design, which is descriptive in nature. The researchers observed a non-contrived setting with minimal interference as factors were examined in a natural environment. A cross-sectional study was conducted in Cebu City with purposely selected micro retail businesses as the sample. The variables studied were social media integration, the financial performance of selected micro retail businesses in the form of their Total Assets Turnover (TATO) ratio, and advertising expenses. A correlational research design helped the researchers identify the relationship among the three variables mentioned to help managers and end-users make sound advertising decisions.

### Research Environment

This research study was based on the selected micro retail businesses in Cebu City. According to DTI, Cebu City is on one of the top lists for MSMEs in the Philippines. In 2019, Cebu City already raised the bar for retail, thriving in physical stores and online retail spaces (Dagooc, 2019). The researchers con-

ducted a study in Cebu City that could help micro retail business owners enhance their future decisions geared towards integration and engagement in social media advertising. Specifically, the researchers surveyed the following barangays: Guadalupe, Tisa, Basak San Nicolas, Labangon, Mambaling, Bulacao, Punta Princesa, Mabolo, Luz, and Duljo Fatima.

### Research Participants

The targeted participants of this study were the selected micro retail businesses in Cebu City. The researchers performed this study in a non-contrived setting; thus, the sample was from businesses in the urban areas of Cebu City, composed of 58 barangays. Ten (10) barangays were purposely chosen based on their population. After calculating the sample size of an unknown population using Cochran's formula, this was allocated to the different barangays based on their demographic density.

In order to determine the respondents consisting of 385 micro retail businesses, the researchers scheduled a visit to each barangay.

### Sampling Technique

The study utilized the cluster sampling technique, specifically the area sampling scheme. In the sampling design, the target population was divided into clusters which were geographic areas based on the environment of the targeted population. The determined clusters were the 58 clusters tantamount to the existing total number of urban barangays in Cebu City. A total number of ten barangays were purposely selected from the identified clusters. The 385 micro retail businesses were chosen from the barangays.

The sample size was calculated using Cochran's formula for an unknown population, as shown in Figure 2, with a 95% confidence level, a 0.5 standard deviation, and a margin of error of 5%. The standard deviation of 0.5 was used because the population is unknown; thus, maximum heterogeneity is assumed.

$$\eta_0 = \frac{z^2 p(1 - p)}{e^2}$$

$$\eta_0 = \frac{(1.96)^2 \times 0.5 (1 - 0.5)}{(0.05)^2}$$

$$\eta_0 = \frac{3.8416 \times 0.25}{0.0025}$$

$$\eta_0 = 385$$

where:

$\eta$  = sample size

$z$  = z-score of the level of significance

$p$  = standard deviation

$e$  = margin of error

Figure 2. Sample Size Calculation

The total number of respondents was distributed per barangay according to their

identified demographic density. The distribution of the sample size is shown below.

Table 1. Geographic Distribution of the Sample Size based on Demographic Density

Urban Barangays	Demographic Density	Respondents
Guadalupe	70,039	83
Tisa	47,364	56
Basak San Nicolas	38,965	46
Labangon	32,825	39
Mambaling	30,459	36
Bulacao	28,675	34
Punta Princesa	22,658	27
Mabolo	21,616	26
Luz	16,175	19
Duljo Fatima	15,851	19
<b>TOTAL</b>	<b>324,627</b>	<b>385</b>

### Research Instrument

The study utilized a set of pilot-tested, personally administered questionnaires as the research instrument. The questionnaire had three parts, namely: the Respondent's Profile, the Social Media Advertising Expenditures, and the Level of Social Media Integration.

The first part of the questionnaire was used to extract the respondents' profiles which specifically asked for the following information: respondent's name, position in the business, the business name, the products and/or services they offer, the number of workers employed, its location, the social media platform utilized (if there were any), the total assets, and the estimated monthly income of the business.

The second part of the questionnaire, Social Media Advertising Expenditures, was used to determine the expenditures of the business in

advertising using social media. This asked the respondents whether they had expenditures related to the following: hiring someone else to manage their social media accounts; creating posters, graphics, layouts, infographics, and pamphlets; and taking photos and videos of the products of the business to be posted on their social media accounts for advertising. It also aimed to ask the respondents how much they have incurred in boosting their posts or any other form of advertising expenses, such as choreographing, planning out, or designing their promotional schemes to increase their social media reach.

Lastly, the third part of the instrument aimed to ascertain the respondents' level of social media integration. This was measured using a 10-point Likert scale with multiple probing questions to test the extent of their usage of social media in their business operations.

### **Data Gathering Procedures**

The researchers initially visited two barangays, Guadalupe and Basak San Nicolas, to assess and identify micro retail businesses to be the respondents for the pilot run of the research study. A total of 12 micro retail businesses were chosen. The pilot run was performed to ensure the effectiveness of the research instrument, the data gathering process, and the analysis thereof.

Afterwards, the researchers continued with the actual survey and visited the ten barangays to identify and administer the questionnaires lasting up to 30 minutes per respondent. The allotted time was sufficient to cover all crucial questions asked by the researchers.

Four teams were deployed to the different targeted locations to gather data, and each team was able to cover at least eight respondents a day. The data gathering was done three (3) times a week and lasted four weeks.

### **Ethical Consideration**

In order to maintain the study's credibility, the researchers incorporated ethical considerations by ensuring that the respondents involved in this study were well-informed of the study's aims and objectives. A data privacy notice and consent form were included, which was done to obtain their personal information and ensure that their responses would be treated with utmost care and confidentiality and should be used only for this research study.

### **Data Analysis**

The researchers utilized Pearson's correlation as the primary analysis tool. The Pearson correlation matrix indicates the relationship's direction, strength, and significance among all measured variables.

The TATO ratio was computed by dividing the business' gross monthly sales by its total assets. The amount of time and effort spent on utilizing social media in their businesses was quantified using a ten-point Likert scale which became the basis for their level of integration. Actual data gathered for advertising expenses were used in the analysis.

The researchers classified the respondents based on their respective business industries to determine the impact of social media on

various industries. The different variables, including the moderating variable, were then correlated as follows: (1) social media integration to advertising expenses, (2) advertising expenses to TATO, and (3) social media integration to TATO. The covariance of the variables will also be computed alongside its correlation coefficient.

Covariance determines the relationship between the variables and whether these fluctuate in the same direction. The analysis is as follows: a positive covariance would mean a direct relationship, a negative covariance would mean that the variables have an inverse relationship, and a variance of zero would indicate the relationship among the variables, as mentioned above, does not exist.

Pearson's correlation coefficient, on the other hand, shall be utilized to determine the strength of the relationship among the variables. Correlation is measured on a scale of -1.0 to 1.0. This shall be analyzed as follows: strong negative relationship would be in the range of -1.0 to -0.5, moderate negative relationship from -0.5 to -0.3, weak negative relationship from -0.3 to -0.1, negligible relationship from -0.1 to 0.1, weak positive relationship from 0.1 to 0.3, moderate positive relationship from 0.3 to 0.5, and, strong positive relationship from 0.5 to 1.0.

This analysis was structured to help the researchers answer the primary problem statement of whether a significant relationship between social media integration and the financial performance of selected micro retail businesses in Cebu City exists. Further, the results guide the researchers in formulating recommendations for the benefactors of this study.

### **Result and Discussion**

In this study, 385 micro retail businesses were chosen out of the entire population as the sample where the data was extracted from using the research instrument. This section lays out and discusses the results of the analysis of these data and is presented in three sections: the respondents' profile, their average social media integration and the correlation between their variables previously mentioned. With this, the following are the salient findings of this study:

## I. Respondents' Profile

As shown in Table 2, 225 respondents, which comprises 58.44% of the total 385 respondents, employ the use of social media in their business operations. Of this number, 224 respondents (99.56%) use Facebook, 24

(10.67%) use Instagram, 12 (5.33%) use TikTok, and 5 (2.22%) use other social media platforms in conducting their daily operations. Therefore, Facebook remains the primary social media platform for reaching out to a specific target market, even among businesses.

Table 2. Respondents' Utilized Social Media Platforms

Social Media Platform	Frequency	% of total users	% of total respondents
Facebook	224	99.56%	58.18%
Instagram	24	10.67%	6.23%
Tiktok	12	5.33%	3.12%
Others	5	2.22%	1.30%
Total Users	225	<b>100.00%</b>	58.44%
<b>Total Respondents</b>	<b>385</b>	-	<b>100.00%</b>

The respondents of this research study are limited only to selected micro retail businesses which have a total asset of less than three million pesos. As shown in Table 3, the majority of the respondents had assets ranging from Php

30,001 to Php 500,000, totaling up to 298 respondents (77.41%). Only 4.94% had assets between Php 1 to Php 10,000, and 1.30% owned assets of over Php 1,000,000.

Table 3. Total Assets of the Respondents

Total Assets	Frequency	Percentage
1-10,000	19	4.94%
10,001-30,000	45	11.69%
30,001-100,000	169	43.90%
100,001-500,000	129	33.51%
500,000-1,000,000	18	4.68%
Over 1,000,000	5	1.30%
<b>Total</b>	<b>385</b>	<b>100.00%</b>

For the purpose of analyzing the difference of the correlation between variables among the different industries, eight (8) industries were identified. In summary, 168 respondents were from the Food and Beverage industry, 38 respondents were from the Fashion industry, 20 respondents were from the Spare Parts and

Repair Services industry, 28 were from the Personal Services industry, 24 were from the Electronics industry, nine (9) from Pet Supplies and Services industry, 36 from the General Merchandise industry and the remaining 62 respondents were from the other industries.

Table 4. Number of Respondents per Industry

Industry	Frequency	Percentage
Food and Beverage industry	168	43.64%
Fashion industry	38	9.87%
Spare parts and repair services industry	20	5.19%
Personal services industry	28	7.27%
Electronics industry	24	6.23%

Industry	Frequency	Percentage
Pet Supplies and services industry	9	2.34%
General merchandise industry	36	9.35%
Other industries	62	16.10%
<b>TOTAL</b>	<b>385</b>	<b>100.00%</b>

## II. Average TATO and Integration based on Social Media Utilization

Table 5 shows the comparative average TATO among the following: businesses that utilize social media and have invested in advertising, businesses that utilize social media alone, and businesses that do not use social media in their business operations. As seen in the table, businesses that utilize social media have a higher average TATO than those that do not

employ social media in their operations which only amounted to 1.0497.

However, Table 5 also revealed that, on average, businesses utilizing social media without incurring related advertising expenses tend to have a slightly higher turnover than those who invest in the same. This is evident in their average TATO, which amounted to 1.4129 and 1.3975, respectively.

*Table 5. The Average TATO of the Selected Micro Retail Businesses based on their Utilization of Social Media*

Classification	Quantity	Average TATO
Utilizes social media with advertising expenses	45	1.3975
Utilizes social media with no advertising expenses	180	1.4129
Businesses with no social media utilization	160	1.0497
<b>Total</b>	<b>385</b>	<b>1.2813</b>

On average, the level of integration employed by selected micro retail businesses in Cebu City is 22.91%, as depicted in Table 6. With the level of integration of businesses not employing social media at zero, the average integration between businesses utilizing social

media in their operations becomes apparent. The mean integration of businesses utilizing social media with advertising expenses reaches up to 48.44%, which is 12.52% higher than those using social media with no advertising expenses amounting to 35.92%.

*Table 6. The Average Level of Integration of Selected Micro Retail Businesses Based on their Utilization of Social Media*

Classification	Quantity	Average Level of Integration
Utilizes social media with advertising expenses	45	0.4844
Utilizes social media with no advertising expenses	180	0.3592
Businesses with no social media utilization	160	0.0000
<b>Total</b>	<b>385</b>	<b>0.2291</b>

## III. Correlation Between Variables

The relationship between social media integration and advertising expenses across all industries is shown in Table 7. However, with no advertising expenses incurred for businesses in the spare parts and repair services industry as well as in the general merchandise industry,

the correlation and covariance could not be calculated.

The positive covariance among all industries indicates that there is indeed a positive relationship between the two variables. The strength of this relationship is measured using the calculated correlation shown in the second column as follows:

- The fashion industry showed a negligible positive relationship between the two variables, with a correlation of 0.0455. This indicates that the social media integration does not necessarily influence the businesses' decision in investing in online advertisements.
- The industries that showed a weak positive relationship between the variables are the electronics industry (0.1074), the pet supplies and services industry (0.1846), and the food and beverage industry (0.2148).
- Among the industries that showed a moderate positive relationship between the said

variables are the personal services industry (0.4388) and other industries (0.4184). Among the listed industries, businesses in these industries tend to spend money on social media advertising the most, that is, the higher the business' level of integration is.

In general, the variables showed a weak positive relationship. Although the level of social media integration and advertising expenses of selected micro retail businesses in Cebu City tend to rise together, the said rise in these variables is less likely to be solely and directly attributed to each other.

*Table 7. The Correlation between Social Media Integration and Advertising Expenses among Various Industries*

Industry	Covariance	Correlation
Food and beverage industry	137.22	0.2148
Fashion industry	15.23	0.0455
Spare parts and repair services industry	<i>No advertising expense</i>	<i>No advertising expense</i>
Personal services industry	1,279.84	0.4388
Electronics industry	13.49	0.1074
Pet Supplies and services industry	491.99	0.1846
General merchandise industry	<i>No advertising expense</i>	<i>No advertising expense</i>
Other industries	575.49	0.4184
<b>Total</b>	<b>276.32</b>	<b>0.2032</b>

Table 8 reveals the relationship between advertising expenses and the TATO among various industries. As reflected in their covariance of -446.20, -19.99, and -57.08, respectively, the relationship between the said variables in the food and beverage industry, fashion industry, and electronics industry appears to be negative. This relationship is more accurately measured using their correlation amounting to -0.1360, -0.0074, and -0.1358. These variables have a negligible negative relationship in the fashion industry whereas in both the food and beverage industry and electronics industry, the relationship appears to be negative yet weakly linked.

In contrast, with a positive covariance of 23,937.92, 17,843.87, and 45.69, the relationship of the variables in the personal services industry, pet supplies, and services industry, and other industries appear to have a positive

relationship where an increase in one variable would likely indicate that there has been an increase in the other as well. The relationship between advertising expenses and TATO is strongest in the pet supplies and services industry, with a correlation of 0.8787. Furthermore, such a strong relationship could be seen in the same variables of the personal services industry as well. This means that both variables fluctuate proportionately in the same manner at the same time. However, with a correlation of only 0.0051, this relationship is negligible in the said variables pertaining to other industries.

In general, the correlation between advertising expenses and TATO of the selected micro retail businesses of Cebu City is 0.2366, which indicates a weak positive relationship between the two.

Table 8. The Correlation between Advertising Expenses and TATO among Various Industries

Industry	Covariance	Correlation
Food and beverage industry	-446.20	-0.1360
Fashion industry	-19.99	-0.0074
Spare Parts and Repair Services industry	No advertising expense	No advertising expense
Personal services industry	23,937.92	0.8211
Electronics industry	-57.08	-0.1358
Pet Supplies and services industry	17,843.87	0.8787
General merchandise industry	No advertising expense	No advertising expense
Other industries	45.69	0.0051
<b>Total</b>	<b>1,956.11</b>	<b>0.2366</b>

With a positive covariance across all other industries, it could be inferred that there is a corresponding positive relationship between social media integration and TATO of the respondents, as shown in Table 9. The electronics industry, however, has the lowest relationship among the said variables, which is deemed negligible. It is followed by the food and beverage industry, spare parts and repair services industry, pet supplies and services industry, and the general merchandise industry, which had a correlation of 0.1055, 0.1633, 0.1789, and 0.1940, respectively. This indicates that there is a positive yet weak relationship between the aforementioned variables in these industries. A

moderate positive relationship was seen in the same variables of both the fashion industry and other industries, with their correlation reaching 0.3577 and 0.3697. Still, the highest correlation between the said variables is in the personal services industry, which had a correlation of 0.5171, indicating a strong positive relationship.

Taking into consideration all types of businesses, regardless of the industry they are in, the correlation between social media integration and TATO amounted to 0.2471. Therefore, there is a weak positive relationship between the two.

Table 9. The Correlation between Social Media Integration and TATO among Various Industries

Industry	Covariance	Correlation
Food and beverage industry	0.03	0.1055
Fashion industry	0.31	0.3577
Spare Parts and Repair Services industry	0.04	0.1633
Personal services industry	0.22	0.5171
Electronics industry	0.00	0.0071
Pet Supplies and services industry	0.05	0.1789
General merchandise industry	0.03	0.1940
Other industries	0.10	0.3697
<b>Total</b>	<b>0.09</b>	<b>0.2471</b>

$$t = \frac{r\sqrt{N-2}}{\sqrt{1-r^2}} = \frac{0.2471\sqrt{385-2}}{\sqrt{1-0.2471^2}} = 4.9906$$

Figure 3. T-Value Calculation

With a correlation of 0.2471 taken from a sample of 385, the t-value is 4.9906, as calculated in Figure 3. Given that such amount is greater than the critical t-value of 1.9662 at a p-level of 0.05, we can say that the correlation between social media integration and the financial performance of selected micro retail businesses is indeed significant.

### **Hypothesis Testing**

After analyzing the results herewith, it is observed that the calculated t value was greater than the two-tailed critical t value. This means that the probability that the correlation between the level of social media integration and the financial performance of selected micro retail businesses in Cebu City is simply due to error or chance is less than 0.5%. Therefore, the null hypothesis claiming the lack of relationship between the variables should be rejected. In contrast, it is safe to conclude that there is indeed a significant relationship between social media integration and the financial performance of the selected micro retail businesses in Cebu City. In simpler words, businesses employing social media in their operations tend to have higher financial TATO in return.

### **Conclusion**

With the analysis, it is possible to conclude that the integration of social media marketing in the business operations of selected micro retail businesses in Cebu City provides them financial benefits. This relationship is proven valid for businesses in the fashion industry and other industries, which yielded a moderate positive relationship, and in the personal services industry, which showed a strong positive correlation. Furthermore, it was found that businesses with higher levels of integration are also more likely to invest in social media advertising. The personal services industry alongside the pet supplies and services industry also yielded the highest investment in social media advertising the more integrated they are. In conclusion, although found to be relatively weak, there indeed exists a significant relationship between the social media integration and financial performance of the selected micro retail businesses in Cebu City in general, with

varying results depending on the industry they are currently in.

### **Recommendations**

The researchers crafted the following recommendations in light of their findings:

The researchers recommend that further research should be conducted with an improved scope to encapsulate the entirety of Cebu City micro retail proprietors, not only limited to the ten (10) barangays included herewith. Further research may also be made to delve deeper into the specific industries stated in this study. These studies should also employ a probability sampling method to ensure a more objective result. Future researchers may also look into other factors affecting the relationship between the variables that were not taken into account in this research. An interesting account that separates the Food and Beverage industry into food, snacks, and beverages may be looked into further as well. Additional research in many areas can supplement the significant results of this study.

Given the results of this study, the researchers also urge micro retail businesses to integrate social media in their business operations to improve their performance, most especially those in the personal services industry. The difference in the average turnover between those employing social media and those who did not also indicate the same.

The researchers also recommend that government agencies such as the local government units (LGUs) of Cebu City and DTI- Region 7 to consider the findings and seek ways to help businesses utilize social media more effectively. LGUs can help in providing platforms to the different micro retail businesses within the city to increase their social media presence and extend their market reach, as well as in creating programs that will enable these businesses to view social media as an integral part of their operations.

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