



# The Digital Transformation of E-Business Sustainability in the New Normal: A E- Businesses Resilience Program

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**Abstract :** The COVID-19 pandemic in different areas all over the globe seems to cause negative effect on the economy, particularly in tourism, commerce, health, and investment. All that changed throughout the crisis. Most consumers rapidly turned towards e-commerce while the new regular structure was embraced by business owners and various sectors. The digital transformation is a transition induced or affected by technology, such as social media sites, to all aspects of daily life. The distinction on the concepts of digital transformation is described as the applications used to improve business efficiency. In this paper, we evaluate initiatives of abrupt change in business platforms of Medium scale businesses in San Fernando, and the relationship between using the digital transformation platform and surviving the business performance during pandemic and if they are impacted by the new normal. The problem statement evaluates the perceived extent to which digital transformation can assist micro- and small-scale businesses in surviving and winning despite the new normal. The findings show that social media, cashless transactions, delivery couriers, online shopping apps, and private messages have made a significant contribution to easing the pandemic. Using technologies may help and promote the survival of Medium enterprises (MEs) during this outbreak.

**IndexTerms - COVID-19, digital transformation, digital business, business survival, e-commerce, micro-small scale business, cashless transaction.**

## I. INTRODUCTION

Since the emergence of these pandemics, a considerable part of society has been adversely impacted by the developments they introduced and has been driven to use technology. Most company owners are dealing with a slew of overlapping risks and issues as they struggle with COVID-19 and its implications. All are compelled to devise a relevant plan for engaging their businesses. Many companies wanted to keep doing what they were doing, with no regrets, and to create something that could be used to get out of the present situation. The market leaders must have compassion because no amount of planning or future scanning could have projected the tragic effect that has been seen in recent months, let alone what the future could hold. However, corporate decision-making has shifted dramatically over this time frame, becoming much more short-term and strictly tactical.

In periods of disruptive change, such as the present, many businesses continue to operate under the assumption of normal circumstances in their planning processes, thus, resulting in the implementation of yearly or multi-year planning. It is still possible to utilize the plan that emerges from this method, but it is considered to be of less importance (Li, F.,2018), whereas an emerging strategy based on a flexible approach is considered to be of more significance (Doern, R. et al., 2019). According to Warner, K.S., Wäger, M (2019), this method, which replaces the conventional linear model, is iterative in nature and relates to long-term strategic planning and needs a balance between execution and planning.

Jorda, Singh, and Taylor (2020), include that when we are in the midst of a pandemic epidemic, there seems to be no guarantee of survival and it is hard to guess the possible outcome. Given that society has been struck by many crises in history, evaluating the long-term fiscal, behavioral, or cultural implications is complicated because these factors have not been explored in the past (Jorda, Singh, & Taylor, 2020).

In only a few months, the recession changed the way businesses in all markets and regions did business. During the crisis, everything shifted, and the majority of shoppers pushed quickly into e-commerce, while company owners and various industries adopted the new normal structure. This abrupt shift involves the immediate need to move to a remote workforce in order to secure and inspire workers, continue to support clients, and initiate advancement.

It has been established in the literature that one of the strategies used to respond to disruptive environmental changes is the transformation of a company model, aided by digital technology. Specifically, technologies that aid enterprises in the growth of various commercial activities have been recorded (Richter, A., 2020) As an outcome, digital technologies are viewed as an acceptable reaction to the unanticipated changes caused by the pandemic. COVID-19's effect is distinct and profound from the one that is conventional, wherein human ingenuity drives change, according to Gupta, G.; Bose, I (2019) and Richter, A. (2020). Kuckertz, A. et al. (2020) said that, in these circumstances, managers are more concerned with saving firms against bankrupt than with building a sustainable strategic advantage under these situations. Instead of a single action by Li, F. (2020), this external input should be modified and continuing (Li, F., 2020).

According to Outmaneuver Uncertainty:Navigating the Human And Business Impact Of Covid-19 (2020), where they deliver wisdom from experts, some of the leaders are bold and wise even though they are facing a major crisis and still stand up with, driving digital transformation, a spirit of reinvention, creating variable cost structures, and executing quick performance. As a pandemic arises, it requires demand and efforts to generate new methods with the use of technologies to overcome and to survive the outbreak.

Kuckertz, A. et al. (2020) stated that "The long-term effect of the COVID-19 outbreak is still impossible to predict." Nevertheless, researchers think that businesses that used digital technology during the pandemic will have even larger post-pandemic possibilities than those who did not. This unpredictability is prevalent among Small and Medium Enterprises (SMEs) managers, who are often described as "having a strong entrepreneurial spirit." As a result, they are supposed to be adaptable and alter as a result of the environment's uncertainty. Their business models have changed (Doern, R. et al., 2019). According to Williams, T.A. et al. (2017), many enterprises, including small and medium, use crisis management in order to develop resilience in the workplace and restore the functions of their organization to regular operation in order to cope with this situation. Among the characteristics of organizational resilience is the capacity of an organization to continue its regular organizational activities during times of disturbance. It is anticipated that companies will be able to reach "a new type of normal" in terms of how they do their business (Doern, R. et al., 2019). The primary emphasis of this study is on how SMEs' may change their models of business to attain a new type of normalcy in their operations. Making an in-depth analysis of small and medium-sized enterprises (SMEs) from the world's poorest nations, where the degree of digital maturity varies significantly across companies, and which produce a range of goods not covered in the important classification, shall provide practical knowledge on the subject and theoretical.

Bradley J., L. et al. (2015) stated that by removing barriers between people, businesses, and things, Digital Business Transformation is causing significant disruption in businesses across all industries. By overcoming these obstacles, they are capable of creating new services and goods, and also finding efficient methods to be able to operate business. These innovations are taking place in organizations of all sizes and across all industries, according to the report. Their common thread is the capacity to change corporate processes and structures, as well as to empower workforce efficiency and innovation, as well as to personalize customer/citizen interactions and experiences. In order to complete this study, companies require a digital platform for business that is outcome-driven and technology-enabled. Digital Platforms were initially recommended by business owners regarding the unweaved epidemical venture.

Because of lack of knowledge in relation to the impact of COVID-19 on business, this paper contends that it is critical to integrate a more creative mindset into COVID-19 study. This has caused fundamental changes in social variables, including working and living circumstances. In order to adapt to a changing way of life, fresh ways of thinking and cultural change have raised the need for entrepreneurship. Entrepreneurs are seen to be creative, proactive than non-entrepreneurs, and more risk-takers because of the needs of the market and their active minds. This implies that business person will possess specific characteristics and skills that will allow them to react quickly to changing demands.

Therefore, the purpose of this study is to analyze the effects of the digital transformation on micro-small scale businesses' survival in a new normal system and to find out the initiatives of the sudden shift in business platforms and how they adopted the new system in selling and if they are affected by the new normal. In so doing, the researchers examine the performance of business in terms of revenues during pandemic and if there is a significant relationship between using digital transformation platform before and during the pandemic. In this way, the researchers define and explain whether micro-small scale businesses choose to use or not use the internet as a medium to meet their customers' needs, as well as if there is significant relationship between using digital transformation platform and surviving the business performance during pandemic.

## Review of Related Literature

### Digital Transformation

According to Kaplan, B., et al. (2010); Schallmo, D., et al. (2018) & Winarsih (2020), in general, digital transformation is a progressive and all-encompassing change with the use of technology with the goal of maximizing business results. According to one concept of digital transformation, "digital transition is a transition induced or affected by technology such as social media sites to all spheres of daily life." The difference between the concept of digital transformation is described as the applications used to enhance the efficiency of the company.

Other concepts affirm that digital transformation is considered as the highest standard of technological knowledge achieved. It occurs as digital applications promote development and imagination, as well as enable dramatic improvements in technical or information fields. Furthermore, digital transformation is described as "a rapid transition in all tactics because requirements must change and processes must be technological."

### Digital Technologies by MSMEs during COVID-19

Includes Eurostat (2020), the COVID-19 era, consumers have been desirable. The reason is, the fewer social and unnecessary activities, the less the spending of money, but still, the global economy has been tremendously affected. In the first half of the Eurozone, GDP dropped by 3.8%. Italy, Spain, and France from -4.7% to -5.8% show the intense drop since records began in 1995. The US economy dropped off in the first quarter by 1.25% because of the impact of COVID-19.

The largest decrease started when the crisis in financial happened (PWC, 2020). The decrease in production in the UK economy has been around 2%, although for March and April 2020, the monthly GDP decline estimated at 10.4% is considered the greatest fall ever recorded based on the report of the Office for National Statistics.

### **Online Shopping Apps during Pandemic**

In recent years, mobile shopping applications have gained popularity as a handy way to make purchases. The use of this approach for buying has become more popular in the digital era. It has been reported that mobile shopping is becoming more popular than ever before, whether it is for apparel, gadgets, or livestock, according to Rahi et al., (2019). New browsers and apps are being created every year to keep up with the increased demand for quick purchasing.

Smith and Prosser, (2020) stated that because the COVID-19 virus can be spread through one individual to another contact and no cures or vaccination available, in order to prevent exposure, customers are more inclined to do more online transactions.

Online shopping has been one of such advantages, and many manufacturers and retailers have examined and altered their business strategies to take advantage of it as stated by Herath & Herath, (2020); World Trade Organization (WTO), (2020).

Kripesh et al., (2020) mentioned that shopping online is popular because it provides consumers with a diverse range of goods and services. The customer is also given details and options to compare products and prices, as well as to locate everything online, said by Katawetawaraks & Wang (2011).

### **Small Business Owners being affect by COVID-19**

The corona virus has caused widespread closing of retail and company within the U. S. and throughout the globe.

In keeping with Fairlie, R. W. (2020), his study from April 2020 CPS microdata provides the primary estimates of the early-stage effects of COVID-19 on small business owners. He revealed that, from 15.0 million in February 2020 to 11.7 million in April 2020, the number of working business owners dropped straight down due to COVID-19 mandates and demand transformation. The biggest decline in the record was a 3.3 million loss of business owners (or 22 percent).

### **Delivery Courier for Business Survival**

According to the Understanding the Functioning of Courier Services (2020), courier services are delivery firms that assist in the delivery of items to their destinations. Because of the community quarantine that is being imposed to prevent the spread of the virus, this kind of service has grown to become one of the most profitable businesses during the COVID-19 pandemic in the Philippines, as consumers have shifted their purchasing habits to the internet. The speed and efficiency of delivery are critical factors in distinguishing a courier service from other types of delivery services, including regular and large-scale delivery services.

Pantano et al., (2020) said that because of the rise of consumer health concerns, the virus outbreak had also lowered the ease of access of in-store selling resellers, resulting in a rush in urging for alternate channel of distribution.

### **Demand for Digital Transformation**

Gamilla, C. O. (2021) emphasized in January 2021 that the internet penetration in the Philippines was 67 percent. As a result of convenient access to digital devices and tablets, online payment, and a streamlined banking system, there is a spike in online food ordering orders and transactions. Food distribution providers charge nominal shipping fees to cover logistics and convenience costs. The payments earned are enough to cover the rider's petrol and other expenses.

Companies have embraced cross-border technology like social media and e-commerce in recent years, and have done so fast and broadly, according to Rahayu and Day (2015).

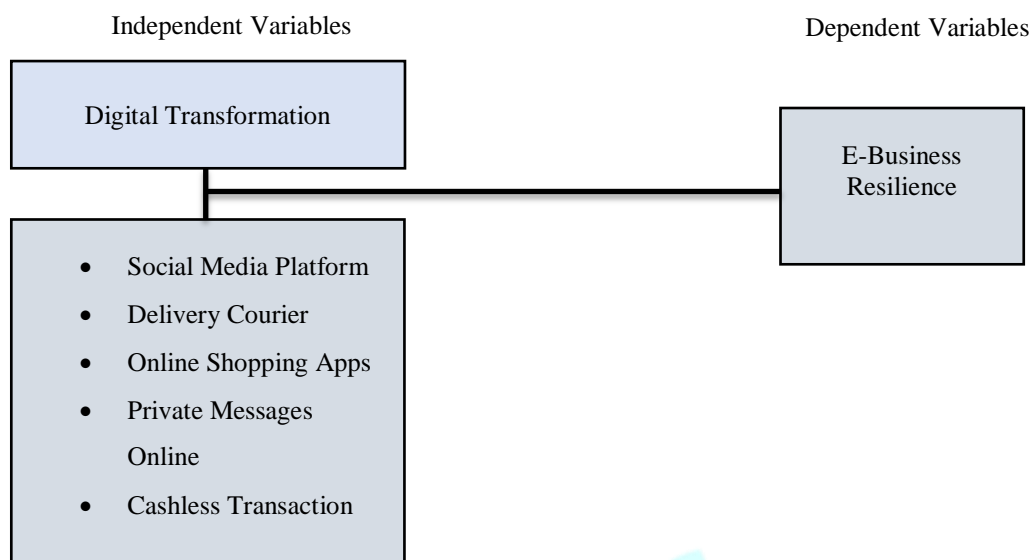
### **Innovation During Digital Age**

Globalization, technological advancements, environmental challenges, changing populations, and other causes, including the worldwide pandemic problem, urbanization, and others, are causing the marketplace to become increasingly unpredictable. Globalization, for example, has now undergone much more profound shifts than the discourse of international conflicts and nationalistic zeal. The world is getting more dynamic as the mega-trends themselves evolve at a rapid pace.

### **High-tech Online Transactions**

Many shoppers have been compelled to shift their shopping habits from high level of personal experiences to high-touch digital purchases as a result of the pandemic. This behavioral shift applies not just to less expensive luxury goods, but also to valuable investments such as watches, paintings, cars, and even real estate. Many technologically frustrated elderly individuals have begun to use the internet for shopping, increasing the number of consumers according to companies that are retail (Bello et al., 2020).

## **Theoretical and Conceptual Framework**



**Figure 1:** Research Paradigm

The above shows the different kinds of digital transformation in online businesses in order to survive the pandemic, such as social media platforms, from only Facebook posting to different platforms like Instagram and TikTok. From meet up and pick up to delivering products to customers, we now have different delivery couriers like Jnt, Jrs Express, Lbc and many more. Sellers also post their products on online shopping apps to reach customers in different areas, like Shopee and Lazada. Private Messages Online from face-to-face selling is also a kind of digital transformation. Cashless transactions are also one of the strategies used by online sellers today to survive this pandemic to reduce contact with different people. All of these strategies that are part of digital transformation are the way of different online business owners to reach their customers.

### 3.2 Research Problem

1. What is the demographic profile of the business owners in terms of:
  - 1.1 Age;
  - 1.2 Sex;
  - 1.3 Years in Business?
2. How does the business performance in terms of revenues change during the pandemic?
3. Does digital transformation help the business owner to survive during the pandemic?
4. Is there a significant difference in using digital transformation platform before and during the pandemic?
5. Is there a significant relationship between using the digital transformation platform and surviving the business performance during the pandemic?

## II. RESEARCH METHODOLOGY

The researchers employed a valid and reliable data-gathering method using a quantitative research design to develop the study. Quantitative research is concerned with objective measurements and statistical, mathematical, or numerical analysis of data collected by questionnaires or surveys. The methodology focuses on gathering numerical data and generalizing it across groups of people or explaining occurrences. A quantitative research study's goal is to figure out how independent and dependent factors in a population interact. The type of quantitative research design used is survey research process. The researcher used the purposive-convenience sampling which the total number of the respondents is 100 Medium Scale Enterprises with certain criteria of location specifically in San Fernando City, Pampanga and categorized in Medium Scale Businesses or Enterprises. Lastly the study used correlational tool to interpret the statistical results and discussed further the investigation of this research paper.

### Ethical Consideration

The researchers will look for people who are both qualified and eager to take part in the study. Prior to completing the respondents who will complete the survey questionnaire via Google forms, the researchers addressed each person a personal message informing them of the study's goals. The transmitted message also seeks permission from individuals to participate in the current study. Furthermore, each of them was informed that their participation in the study was entirely optional, and that they might withdraw at any time if they so desired. The researchers also acknowledged and strictly adhered to the Data Privacy Act of 2012, which is a federal law that protects personal information.

## IV. RESULTS AND DISCUSSION

**Table 3.1 Frequency, Percentage and Rank Distribution of the Respondents in terms of Age**

AGE	Frequency	Percentage	Rank
16-20	13	13%	2
21-25	63	63%	1
26-30	8	8%	3
31-35	2	2%	6
36-40	7	7%	4.5
41 and above	7	7%	4.5
TOTAL	100	100%	

Table 3.1 shows the frequency distribution of the respondents in terms of age. As shown in the table, majority of the respondents are between 21-25 years old with 63% distribution, followed by 16-20 years old with 13% distribution. There are 8% respondents who are 26-30 years old and both 7% respondents who are 36-40 and 41 and above. Lastly, 2% of the respondent are 31-35 years old.

**Table 3.2 Frequency, Percentage and Rank Distribution of the Respondents in terms of Gender**

GENDER	Frequency	Percentage	Rank
Female	69	69%	1
Male	31	31%	2
TOTAL	100	100%	

Table 3.2 shows the frequency distribution of the respondents in terms of gender. As shown in the table, the majority of the respondents are female, with a 69% distribution, followed by males, with a 31% distribution.

**Table 3.3 Frequency, Percentage and Rank Distribution of the Respondents in Terms of Years in Business**

Years	Frequency	Percentage	Rank
1-2 years	33	33%	2
3-4 years	9	9%	4
5-6 years	1	1%	5.5
7-8 years	1	1%	5.5
Less than 1 year	45	45%	1
More than 8 years	11	11%	3
TOTAL	100	100%	

Table 3.3 shows the frequency distribution of the respondents in terms of years in business. As shown in the table, the majority of the respondents have less than 1 year of business experience with a 45% distribution, followed by 1–2 years with a 33% distribution. Then, respondents with more than 8 years of experience received a 11% distribution. There are 9% of respondents who are 3–4 years in business and both 1% of respondents who are 5–6 and 7-8 years.

**Table 3.4 Frequency, Percentage and Rank Distribution of the Respondents in Terms of Business Performance**

Business Performance	Frequency	Percentage	Rank
A. Decrease more than 50%	19	19%	2
B. Decrease by 30% - 50%	23	23%	1
C. Decrease less than 30%	18	18%	3
D. No change	12	12%	6
E. Increase	13	13%	5
F. N/A	15	15%	4
TOTAL	100	100%	

Table 3.4 shows the frequency distribution of the respondents in terms of business performance. As shown in the table, the majority of the respondents decreased by 30%–50% with a 23% distribution, followed by a decrease of more than 50% with a 19% distribution. There are 18% of respondents who decreased by less than 30%. Then, 15% of respondents who are N/A and 13% of respondents who increase in performance. Lastly, 12% of the respondents have no change.

**Table 3.5 Business Owners who use Digital Transformation Platform**

Uses Digital Transformation Platform	
No	17
Yes	83

**Table 3.6 Weighted Mean who Uses Digital Transformation Platform During the Pandemic**

	N	Weighted Mean	Verbal Description
Digital transformation platform helps my business to survive in this pandemic?	83	3.67	Strongly Agree

Figure 2 shows that amongst the respondents, 83 of them use digital transformation platform during the pandemic. Table 3.5 shows that these 83 respondents said that digital transformation helps their business survive in this pandemic with a weighted mean score of 3.67 (Strongly Agree).

Based on the result of the study, the digital transformation has significant effect to the business to survive in this pandemic. This study was supported by the study of Gamilla, C.O. (2021) stated that, emphasized in January 2021, internet penetration in the Philippines was 67 percent. As a result of convenient access to digital devices and tablets, online payment, and a streamlined banking system, there is a spike in online food ordering orders and transactions. Food distribution providers charge nominal shipping fees to cover logistics and convenience costs. The payments earned are enough to cover the rider's petrol and other expenses.

In order to accelerate corporate operations through the use of technological equipment, the purpose of digital transformation is to identify possibilities that may benefit business operations. Businesses are compelled to adjust during this period; the upside is that they may increase promotional efforts with the aid of web software. Implementing tools for digital transformation makes it simpler for firms to develop a variety of strategic strategies for their operations. If a company chooses to transition from their old processes to online apps, the shift will be beneficial. The connection with the various providers may also be accomplished through the use of internet platforms.

According to Kim, R. Y. (2020), before the pandemic, virtual meetings and project management software were extensively used, and many businesses found the shift to the digital world to be rather smooth. As a result, a number of businesses have successfully made the switch to digital operations.

Companies have embraced cross-border technology such as e-commerce and social media in recent years, and they have done so fast and broadly, according to Rahayu and Day (2015).

#### Social Media Platform

**Table 3.7 Wilcoxon Signed Rank Test on the significant difference between Social Media Platform Before and During Pandemic**

	N	Mean Rank	P value	Decision	Conclusion
B. Social Media Platform During Pandemic - A. Social Media Platform Before Pandemic	4 <sup>a</sup>	18.375	0.000	Reject Ho	There is a Significant Difference
Negative Ranks	53 <sup>b</sup>	29.80189			
Positive Ranks	43 <sup>c</sup>				
Ties	100				
Total					

a. B. Social Media Platform During Pandemic < A. Social Media Platform Before Pandemic

b. B. Social Media Platform During Pandemic > A. Social Media Platform Before Pandemic

c. B. Social Media Platform During Pandemic = A. Social Media Platform Before Pandemic

This table shows that 53 respondents had a higher mean rank = 29.80 of social media platform during pandemic versus before pandemic (mean rank = 18.37).

By examining the p value, the researcher can conclude that despite these changes, there is an overall statistically significant difference in the use of social media platform before and during the pandemic.

A Wilcoxon signed rank test showed that the use of social media platform before and during the pandemic elicit a statistically significant difference with a p-value of 0.000 which is less than the level of confidence of 0.05.

Social media as a platform is inexpensive and effective in managing the exchange of information and connections, including disseminating information to visitors, social networking, and conveying user-generated content, services, and other matters. Many businesses use social media to reach out to potential clients and sell their products.

According to Boyle (2020), his study may support the result that social media apps, including Facebook, Instagram, Twitter, and Pinterest, has significant effect during pandemic as social commerce component that many businesses are taking advantage of. Instagram, for example, is described as "one of the most promising platforms" when it comes to putting together a social selling plan".

Further research by Di Pietro and Pantano (2012) found that the most crucial aspect affecting customers' use of social media as a tool to aid in shopping decisions is fun. They discovered that the fun component of Facebook, as well as the opportunity for users to ask for suggestions in a simple and engaging way, motivates individuals to pay more attention to the products presented on the site.

Social media is a tool for communication, information exchange, and self-actualization and cooperation over the internet according to Elbanna, Bunker, Levine, & Giring, (2019). Social media has immense commercial potential, and it has evolved into a simple instrument for internet communication between customers and businesses, as well as between consumers and consumers all over the world, at any time. Because SME's have limited resources such as funds, technological expertise, and so on, this platform is appropriate for them (Rana, Barnard, Baabdullah, Rees, & Roderick, 2019).

**Delivery Courier**

**Table 3.8 Wilcoxon Signed Rank Test on the significant difference between Delivery Courier Before and During Pandemic**

	N	Mean Rank	P value	Decision	Conclusion
B. Delivery Courier (Grab, J&t, Lalamove, Etc.) During Pandemic - A. Delivery Courier (Grab, J&t, Lalamove, Etc.) Before Pandemic	3 <sup>a</sup>	18.5	0.000	Reject Ho	There is a Significant Difference
Negative Ranks					
Positive Ranks	43 <sup>b</sup>	23.84884			
Ties	54 <sup>c</sup>				
Total	100				

a. B. Delivery Courier (Grab, J&t, Lalamove, Etc.) During Pandemic < A. Delivery Courier (Grab, J&t, Lalamove, Etc.) Before Pandemic

b. B. Delivery Courier (Grab, J&t, Lalamove, Etc.) During Pandemic > A. Delivery Courier (Grab, J&t, Lalamove, Etc.) Before Pandemic

c. B. Delivery Courier (Grab, J&t, Lalamove, Etc.) During Pandemic = A. Delivery Courier (Grab, J&t, Lalamove, Etc.) Before Pandemic

This table shows that 43 respondents had a higher mean rank = 23.85 of delivery courier during pandemic versus before pandemic (mean rank = 18.5).

By examining the p value, the researcher can conclude that there is statistically significant difference in the use of delivery courier before and during the pandemic.

A Wilcoxon signed rank test showed that the use of delivery courier before and during the pandemic elicit a statistically significant difference with a p-value of 0.000 which is less than the level of confidence of 0.05.

Since the beginning of the COVID-19, as stated in the studies of Dones, R. E., & Young, M. N. (2020), the demand on the of Courier Services in the Philippines has increased and individuals have been diverted to shopping online owing to community quarantine. Younger generations, such as Gen Z and Millennials, utilize courier services more frequently than earlier generations. Because of the limitations of going outside, people prefer to use courier services to deliver their essentials, particularly food and groceries, and because a significant number of people work from home and take online classes, documents and electronics are more likely to be delivered by a courier service. The delivery speed is the most important element that customers evaluate when selecting a courier (Dones, R. E., & Young, M. N., 2020).

**Online Shopping Apps**

**Table 3.9 Wilcoxon Signed Rank Test on the significant difference between Online Shopping Apps Before and During Pandemic**

			N	Mean Rank	P value	Decision	Conclusion
B. Online Shopping Apps (Lazada, Shopee) During Pandemic - A. Online Shopping Apps (Lazada, Shopee) Before Pandemic	Negative Ranks		3 <sup>a</sup>	13.33	0.000	Reject Ho	There is a Significant Difference
	Positive Ranks		38 <sup>b</sup>	21.61			
	Ties		59 <sup>c</sup>				
	Total		100				

- a. B. Online Shopping Apps (Lazada, Shopee) During Pandemic < A. Online Shopping Apps (Lazada, Shopee) Before Pandemic  
 b. B. Online Shopping Apps (Lazada, Shopee) During Pandemic > A. Online Shopping Apps (Lazada, Shopee) Before Pandemic  
 c. B. Online Shopping Apps (Lazada, Shopee) During Pandemic = A. Online Shopping Apps (Lazada, Shopee) Before Pandemic

This table shows that 38 respondents had a higher mean rank = 21.61 of online shopping apps during pandemic versus before pandemic (mean rank = 13.33).

By examining the p value, the researchers conclude that there is a statistically significant difference in the use of online shopping apps before and during the pandemic.

A Wilcoxon signed rank test showed that the use of online shopping apps before and during the pandemic elicit a statistically significant difference with a p-value of 0.000 which is less than the level of confidence of 0.05.

Online shopping has been one of such advantages especially in the pandemic time, and many manufacturers and retailers have examined and altered their business strategies to take advantage of it as stated by Herath & Herath, (2020). This was actually the other option for consumers looking for a more convenient to buy and easy way to avoid the crowds for safety purposes.

Kripesh et al., (2020) mentioned that shopping online has become popular because it provides consumers with a diverse range of goods and services. The customer is also given details and options to compare products and prices, as well as to locate everything online (Katawetawaraks & Wang, 2011)

#### Private Messages Online

**Table 3.10 Wilcoxon Signed Rank Test on the significant difference between Private Messages Before and During Pandemic**

			N	Mean Rank	P value	Decision	Conclusion
B. Private Messages Online (FB messenger, Instagram, Viber, Whatsapp, etc) During Pandemic - A. Private Messages Online (FB messenger, Instagram, Viber, Whatsapp, etc) Before Pandemic	Negative Ranks		2 <sup>a</sup>	10.50	0.000	Reject Ho	There is a Significant Difference
	Positive Ranks		46 <sup>b</sup>	25.11			
	Ties		52 <sup>c</sup>				
	Total		100				

- a. B. Private Messages Online (FB messenger, Instagram, Viber, Whatsapp, etc) During Pandemic < A. Private Messages Online (FB messenger, Instagram, Viber, Whatsapp, etc) Before Pandemic  
 b. B. Private Messages Online (FB messenger, Instagram, Viber, Whatsapp, etc) During Pandemic > A. Private Messages Online (FB messenger, Instagram, Viber, Whatsapp, etc) Before Pandemic  
 c. B. Private Messages Online (FB messenger, Instagram, Viber, Whatsapp, etc) During Pandemic = A. Private Messages Online (FB messenger, Instagram, Viber, Whatsapp, etc) Before Pandemic

This table shows that 48 respondents had a higher mean rank = 25.11 of private message during pandemic versus before pandemic (mean rank = 10.50).

By examining the p value, the researcher concludes that there is statistically significant difference in the use of private message before and during the pandemic.

A Wilcoxon signed rank test showed that the use of private message before and during the pandemic elicit a statistically significant difference with a p-value of 0.000 which is less than the level of confidence of 0.05.

We are prohibited from going outside during this pandemic, particularly for children and adults aged 60 and older. Our means of communication were only our mobile phones, with messaging apps to get close to our relatives. With the internet, we can



provide for some of our needs. Live selling has become popular too, and to connect with the sellers, we send questions to them about our concerns about what they are selling. We use phones, laptops, and computers to communicate with direct messages.

As mentioned by Wanga, H., et al (2020), even a smartphone with a useful app may bring people together, especially when the coronavirus (COVID-19) pandemic separates us. The cycle of life must continue. Students need to be educated, people need food and medication, and the economy needs to remain stable. It should not be difficult to maintain a social distance. You may keep in touch with loved ones, team members, and favorites using these apps. It gives people the impression that they are not in prison but rather participating in social activities (Wanga, H., et al., 2020).

Distance is employed as a form of social obligation. Among the apps accessible are video conferencing, social video chats, medical, entertainment, health & fitness, food & drinks, and applications for visual and hearing impairments.

### Cashless Transactions

**Table 3.11 Wilcoxon Signed Rank Test on the significant difference between Cashless Transaction Before and During Pandemic**

	N	Mean Rank	P value	Decision	Conclusion
B. Cashless Transaction (Gcash, Paymaya, Online Banking, etc.) During Pandemic - A. Cashless Transaction (Gcash, Paymaya, Online Banking, etc.) Before Pandemic	2 <sup>a</sup>	5.00			
Negative Ranks					
Positive Ranks	49 <sup>b</sup>	26.86			
Ties	49 <sup>c</sup>		0.000	Reject Ho	There is a Significant Difference
Total	100				

a. B. Cashless Transaction (Gcash, Paymaya, Online Banking, etc.) During Pandemic < A. Cashless Transaction (Gcash, Paymaya, Online Banking, etc.) Before Pandemic

b. B. Cashless Transaction (Gcash, Paymaya, Online Banking, etc.) During Pandemic > A. Cashless Transaction (Gcash, Paymaya, Online Banking, etc.) Before Pandemic

c. B. Cashless Transaction (Gcash, Paymaya, Online Banking, etc.) During Pandemic = A. Cashless Transaction (Gcash, Paymaya, Online Banking, etc.) Before Pandemic

This table shows that 49 respondents had a higher mean rank = 26.86 of cashless transaction during pandemic versus before pandemic (mean rank = 5.00).

By examining the p value, the researcher concludes that there is statistically significant difference in the use of cashless transaction before and during the pandemic.

A Wilcoxon signed rank test showed that the use of cashless transaction before and during the pandemic elicit a statistically significant difference with a p-value of 0.000 which is less than the level of confidence of 0.05.

Based on the result of the survey, cashless transaction has significant relationship to survive during pandemic as stated by Yakean, S. (2020). Cashless payment system is one that accepts electronic payments (e-payments). The content of a cashless payment system is frequently a digital financial instrument or credit card that has been endorsed by banks or nonbanks. Cashless payments are financial transactions between buyers and sellers that take place through the internet. This payment mechanism enables enterprises to do transactions at a cheap cost. It benefits all sorts of businesses; for small businesses, it helps them improve sales by making it easier for customers to pay for goods and services, as well as helping them to reach out to internet clients who visit their websites, allowing them to sell more products throughout the pandemic.

Companies can save time on money transfers as well as money management costs including labor, cash monitoring, and cash guarding by using electronic payments. Furthermore, the most effective weapon against fraud, destruction, and illiteracy is electronic payment. E-payment transactions can also be completed at home using a web system without the need for actual cash or the presence of a pen, paper, or a physical presence anywhere. This transaction fee has also made it easier for students, housewives, and the elderly to utilize smartphones, tablets, or smartwatches to conduct financial transactions (Yakean, S., 2020).

**Table 3.12 Spearman Rho Correlation Coefficient on the significant relationship between using the digital transformation platform and surviving the business performance during the pandemic**

Spearman Rho Coefficient	P-value	Decision	Conclusion
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B. Social Media Platform During Pandemic	0.362	0.000	Reject Ho	There is a Significant Relationship
B. Delivery Courier (Grab, J&T, Lalamove, Etc.) During Pandemic	0.284	0.004	Reject Ho	There is a Significant Relationship
B. Online Shopping Apps (Lazada, Shopee) During Pandemic	0.228	0.023	Reject Ho	There is a Significant Relationship
B. Private Messages Online (FB messenger, Instagram, Viber, Whatsapp, etc) During Pandemic	0.437	0.000	Reject Ho	There is a Significant Relationship
B. Cashless Transaction (Gcash, Paymaya, Online Banking, etc.) During Pandemic	0.225	0.024	Reject Ho	There is a Significant Relationship

\*\* Correlation is significant at 0.05 level of confidence

This table shows the Spearman Rho Correlation Coefficient on the significant relationship between using the digital transformation platform and surviving the business performance during the pandemic.

Social Media Platform during the pandemic has a significant relationship with the survival of the business in the pandemic with a p value of 0.000. Rho coefficient of 0.362 suggests that relationship is positively weak, which means that the more business uses social media platform, the more that business can survive in this pandemic.

The result was supported by the study of He, W., et al. (2014). As mentioned in on their studies, enterprises may use social media to communicate with current consumers and acquire new ones. Social media is a valuable internet platform for businesses. Only a few studies have looked at the social media techniques that might help small companies survive and even prosper in the face of major rivals in the social media arena. Given the ease with which social media platforms may be set up and maintained at no expense, social media platforms provide a substantial potential for small companies competing with giant corporations to advertise and sell their goods or services on the internet.

Taylor, Strutton, and Thompson (2012) affirmed that customers are more inclined to share an online advertisement that is congruent with their identity since it represents who they are and what they appreciate. Thus, "advertisers should think about the symbolic and self-expression aspects of their internet ads and connect them to the self-concepts of their target consumers" (Taylor, Strutton, and Thompson, 2012).

Similarly, delivery courier during the pandemic has a significant relationship with the survival of the business in the pandemic with a p value of 0.004. Rho coefficient of 0.284 suggests that relationship is positively weak, which means that the more business uses delivery courier in their business, the more that business can survive in this pandemic.

The study of Pantano et al. (2020) can supported the said result, that due to increased consumer health concerns, the pandemic has reduced the accessibility of in-store selling retailers, resulting in a surge in demand for alternate distribution channels (Pantano et al., 2020).

The importance of courier services has been emphasized, especially in today's fast-paced world, because they act as a link between businesses and their customers. According to the Importance of Courier Service for Global Businesses (2020), the expectation of receiving things and deliveries the same day or within a few days has now become the gold standard in most countries throughout the world.

The rise of online selling and E-commerce, as well as the increasing number of customers, who want to shop online, has significantly increased the need for such delivery service as stated by Dablanc, L., et al. (2017). Courier services in the Philippines have risen as a result of the rise in online shopping, and the opportunity to buy and sell things online has raised the demand for courier services, was mentioned in Courier Service Philippines (2020).

Likewise, Online Shopping Apps during the pandemic have a significant relationship with the survival of the business in the pandemic with a p value of 0.023. Rho coefficient of 0.224 suggests that relationship is positively weak, which means that the more businesses use online shopping apps in their business, the more businesses can survive in this pandemic.

This result can be supported by the study of Rahi et al. (2019). In recent years, mobile shopping applications have gained popularity as a handy way to make purchases. The use of this approach for buying has become more popular in the digital era. It has been reported that mobile shopping is becoming more popular than ever before, whether it is for apparel, gadgets, or livestock. New browsers and apps are being created every year to keep up with the increased demand for quick purchasing.

Smith and Prosser, (2020) stated that due to the spread of Covid-19 virus through person-to-person contact and there are no effective treatments or vaccines available, consumers are more inclined to conduct business online to avoid being exposed.

Private messages online during the pandemic have a significant relationship with the survival of the business in the pandemic with a p value of 0.000. Rho coefficient of 0.437 suggests that relationship is positively moderate, which means that the more businesses use private messages online in their business, the more businesses can survive in this pandemic.

According to a recent survey, online users in the United States revealed that social media and messaging applications were among the three categories of apps on which 49 percent of respondents spent the most time" (Werliin, 2019). This section of the study will look at the suggested solution of small business restaurants employing a social media strategy to avoid permanent closure by encouraging customers to support their businesses even if they are unable to visit their physical locations.

As said by Desam Sudhakar and Dr. L.S.R.C.V. Ramesh (2020), when the real world-imposed constraints, the virtual world came to life. Virtual gatherings, audio calls, and direct or private messages have replaced traditional business meetings and correspondence. And conventional businesses that have never used these sites before are now accessing them and becoming accustomed to them. This might imply that moving outside of the community or inside the country is no longer necessary, because it can be accomplished through interactive or online conversations.

Lastly, Cashless Transaction during the pandemic has a significant relationship with the survival of the business in the pandemic with a p value of 0.024. Rho coefficient of 0.225 suggests that relationship is positively weak, which means that the more businesses use cashless transaction in their business, the more businesses can survive in this pandemic.

Cashless transactions are also one of the strategies used by online sellers today to survive this pandemic to reduce contact with different people. All of these strategies that are part of digital transformation are the way of different online business owners to reach their customers.

Governments imposed restrictions requiring social separation and face masks, and campaigned for self-isolation, handwashing, and other sanitary measures in an effort to prevent the spread of virus. People's movement and consumption were significantly reduced, owing in part to government-imposed lockdowns, with a shift from in-store to online buying being especially noticeable, according to Bonnie, Camara and Galbraith (2020). When consumers perceive that touching currency poses a greater risk of infection, they choose cashless transactions.

### Recommendations:

The following recommendations are made based on the findings and conclusions of the study:

1. The researchers encourage businesses to use more often social media applications such as Facebook and Instagram as a medium to advertise their product and to reach a wider range of audience since many people nowadays use those apps in their daily lives.
2. Business owners must focus on how they can deliver their products especially during pandemic. Business owners must have a delivery system or courier to deliver their product safe and sound.
3. The researchers recommend all businesses to have also an account on an online shopping application, like Shopee and Lazada, to reach their customers anytime and anywhere.
4. The researchers recommend businesses to have an employee who will handle inquiries, concerns and complaints through private messages so that it will help the business to have a personal connection and conversation with their customers.
5. The researchers recommend businesses to develop and improve the current cashless transaction system for a wide range of payment methods.

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