VIETNAMESE CUSTOMERS' AWARENESS TOWARD DIGITAL TRANSFORMATION IN F&B SERVICES INDUSTRY IN DIGITAL ECONOMY ERA

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Abstract

Being referred to as a "dragon being unleashed" in terms of digital economy within Southeast Asia, Vietnam's industries are seeing numerous changes in their nature, especially the F&B services sector. Moreover, when the Covid-19 pandemic has hit hard on the performance of this sector, with 95.5% of F&B services businesses in Vietnam being affected, the application of digital technology has been emerging as an opportunity for traditional F&B services businesses to transform and find way to survive in this natural selection. Within the current context of digital economy in Vietnam, this study identified Vietnamese customers' view toward digitalization in F&B services industry.

Through a survey done with 430 respondents, it has been observed that Vietnamese customers are having a friendly view toward digitalization in F&B services industry, being reflected in the increasing trend to use online ordering, digital payment, digital marketing channels and the overall preference toward using digital technologies in F&B services outlets. However, we cannot ignore the socio-cultural aspect, including the habit of using cash and eating at home, the lacking of digital skills or even the unequal development of digital infrastructures which can bring about challenges to F&B services enterprises in promoting digitalization.

Keywords: *Covid – 19's impacts, customers' digitalization awareness, digital economy, F&B services industry*

1. Introduction

Reality has shown that the third wave evolution and the Industrial Revolution 4.0 has greatly impacted almost all aspects of our lives, creating many profound shifts in the society, among which is the emergence of digital economy. Digital economy was first mentioned in Japan by a Japanese professor and research economist during Japan's economic recession in the early 1990s. The term, later, spread to the West and was coined in Don Tapscott's book "The Digital Economy: Promise and Peril in the Age of Networked Intelligence" published in 1995. As believed by Don Tapscott, by combining knowledge and creativity, a new concept of an economy that focuses on the networking of humans through technology so as "to create new social norms on wealth creation and social development" was inevitably formed (Tapscott, 1995). Since then, there have been many different interpretations as well as definitions of digital economy. For us, we would define digital economy as a branch of economic studies that encompasses economics activities based on the combination of knowledge and digital technologies. Such activities are not only limited to the ICT sectors and industries in which their business models based primarily on digital technology but also cover even traditional industries that use digital technology to support their business practices. With the spread of digitalization into the real economy, we can firmly say that the digital economy is undoubtedly turning into just the economy nowadays.

Digital Economy Report 2019 shows that the global digital economy was worth $11.5 trillion USD in 2016, accounting for 15.5% of global GDP. Taking the regional factor into account, with its current rate of development, ASEAN is believed to have a full potential to enter the top 5 digital economies in the world by 2025 (Leopairote 2017). Within this region, Vietnam can be referred to as a "dragon being unleashed". While the average growth rate of the whole Southeast Asia region had reached 33% since 2015, Vietnam's digital economy growth rate in the same period increased by 38%. The value of Vietnam's digital economy in 2019 was $12 billion USD (4 times higher than in 2015), contributed 5% to the national GDP. It is true that Vietnam is now one of the most popular digital investment destinations in Southeast Asia, just behind Indonesia and Singapore.

Digital economy started its "invasion" into Vietnamese economy along with the advent of computers, especially, laptops in the end of the 1980s. By the end of the 1990s, when Internet first came into Vietnamese people's lives, digital economy entered a blooming period within the whole country. Later, when smart phone usage densities reached 50% in 2000, the digital economy gradually became a popular term. The beginning of the 21st century is believed to be the milestone for the development of digital economy in Vietnam with the emergence of the Industrial Revolution 4.0 along with smart phones, AI, blockchain and cloud computing etc. … Nevertheless, despite the fact that the growing speed of digital economy has been quite high in Vietnam, it has been observed that Vietnamese digital economy has basically been in a spontaneous development stage for the previous years without official management from the Government. In fact, not only until 2020 did digital economy receive much attention and become a significant development concern of Vietnamese government, implied through the introduction of the National Digital Transformation Programme. One of the reasons for such concern being raised comes directly from the Covid-19 pandemic, which is believed to be one of the most recent change agents of the digital economy in the world in general and in Vietnam in specific. Besides its negative impacts, we cannot deny the fact that this pandemic can be considered as a natural selection, bringing about an opportunity for the economy to regenerate. For Vietnamese businesses, Covid-19 is a push that led them to be forced into a situation of change. In other words, Covid-19 for Vietnam's digital economy is a significant boost, especially for businesses to engage in digital transformation ranging from corporate governance to online sales etc.

F&B services industry can be said to be an indispensable part of any economy, playing a vital role in many countries' economic growth, including Vietnam, by not only contributing significant value to the economy, but also creating employment opportunities. However, this Covid-19 pandemic has hit hard on this sector. According to a survey done by Vietnam General Statistics Office in April 2020, a large number of economic sectors have a high proportion of businesses being affected by the negative impacts of Covid 19, typically: aviation 100%; accommodation services 97.1%; travel agency activities 95.7%; F&B services 95.5%; education and training 93.9% etc. Most notably, among the businesses negatively affected by the Covid-19 pandemic, the rate of businesses in the F&B services industry having to temporarily close down is 54.0%; the revenue decline rate over the same period is 59.7% (only behind the aviation industry with 76.5%). Besides, one fact that cannot be denied is that along with the development of the economy, Vietnamese customer's demand for F&B services is also increasing and reshaping significantly, followed by the appearance of diverse business models as well as competitiveness in the industry. Therefore, the application of digital technology has been emerging as an opportunity for traditional F&B services businesses in Vietnam to transform, especially when agility has now become the competitive advantage almost all businesses seek to develop in this digitalized world.

After Directive 16 / CT-TTg of the Prime Minister on nationwide social distancing, many F&B enterprises from famous brand like Starbucks, Golden Gate, The Coffee House etc. ... to many other small and medium F&B outlets all simultaneously promoted online sales and delivery model to proactively cope with the situation. In fact, by the end of March 2020, before the government officially requested to close unnecessary business services including coffee chains, Starbucks Vietnam's delivery revenue increased by 50% compared to average sales in February. Like Starbucks, The Golden Gate Group also switched to using online technology by launching G-Delivery and I-Cook service home delivery. At The Coffee House chain, revenue from the delivery segment as of March 29, 2020 increased 20% comparing to the previous weeks. Online sale and delivery have really become the saviors of the F&B services industry, especially at the present time, when the "ghost" of Covid-19 is still lingering. Also, in 2020, the food delivery market in Vietnam was estimated to have a capacity of $195 million and is expected to reach $330 million by 2023. It is worth mentioning that the segment of food delivery through applications is growing to more than 30% per year. This is an indispensable trend in the F&B services industry in Vietnam. However, whether this trend will continue to grow or not is a real question posed for the F&B services industry in specific and the whole economy in general.

Thanks to digital technologies, the role of consumers has become more important. It's even not exxagerate to say that within digital economy, the consumers have become more empowered than in the traditional economy, being in charge of deciding the rules of the games. Thus, the final target of digital transformation is to put customers at the center of the business and here comes the need to understand customers' expectations and preferences toward digitalization so as to reach the highest possible level of growth. For such reason, the main purpose of this paper is to identify how Vietnamese customers are perceiving the usage of digital technologies in F&B services industry.

2. Method

Since the main aim of the research is to identify the digital awareness of Vietnamese customers in F&B services industry, it was determined that a quantitative methodology would be appropriate. In more detail, this research consisted of an empirical, quantitative survey and used a self-developed questionnaire. At first, we planned to have the survey done in person, however, due to the Covid-19 situation at the time the surveys were conducted, the online-survey method was chosen. This fact, to some extent, is a reflection of digitalization in our everyday life, which interestingly coincide with the focus of our research topic. The surveys were conducted from August 2020 to October 2020. To ensure that the sample is unbiased representation of the total population, a random sampling technique was used. In terms of questionnaire design, the questions were devised to try to capture almost all aspects of digitalization in F&B services industry, including digital payment, digital marketing, online ordering as well as customers' preference toward digital technology usage in such aspects as digital style services, outlet's own application and platform application. In addition to this, a set of questions relating to Covid – 19 and its impact on reshaping customers' behavior in F&B services industry was also developed.

The total sample size was reached by balancing the level of confidence in the results received with such issues as time and budget. In total, there were 430 valid responses. Among 430 participants in the surveys, 135 respondents were male and 295 respondents were female. The majority of participants were Millennials (Generation Y) from 25 to 40 years old, accounting for 57.21%. This is completely consistent with the fact that the Millennials generation in Vietnam is the largest group, having the most purchasing power in the society and is the segment by age that many brands are targeting. In addition, the pattern of respondents by age group is similar to the standard distribution of the population. 85.35% of participants hold at least bachelor degree, which is higher than the average education levels. In terms of income levels, the respondents' answers represented the standard distribution of level of incomes in Vietnam, with the average ranging from 5 million VND to 10 million VND per month. Over half of the respondents were office workers. The survey sample was constructed to be representative of Vietnamese population in terms of geographical area, with 55.81% of respondents from the North, 26.51% from the Central area, and 17.68% from the South. Respondents coming from 3 major cities including Hanoi, Danang and Ho Chi Minh City accounted for 69.77%.

Table 1. Demographic characteristics of sample

Question	*Answers*	*Percentage*	*Answers*	*Percentage*
Gender	*Female*	68.60%	*Male*	31.40%
Age group	*< 25*	23.02%	*41 – 55*	14.88%
	25 – 40	57.21%	*> 55*	4.88%
Educational level	*High school*	10.93%	*Bachelor*	50.47%
	College	3.72%	*Higher degree*	34.88%
Income level	*< 5 million VND*	18.37%	*10 million VND – 15 million VND*	20.00%
	5 million VND – 10 million VND	31.63%	*15 million VND – 20 million VND*	11.63%
	> 20 million VND	18.37%		
Jobs	*Office worker*	55.81%	*Students*	14.88%
	Lecturers / Teachers	16.28%	*Unskilled labor*	3.26%
	Others	9.77%		
Geographic area	*Hanoi*	42.79%	*Other Central cities / provinces*	10.00%
	Other Norther cities / provinces	13.02%	*Ho Chi Minh City*	10.47%
	Danang	16.51%	*Other Southern cities / provinces*	7.21%

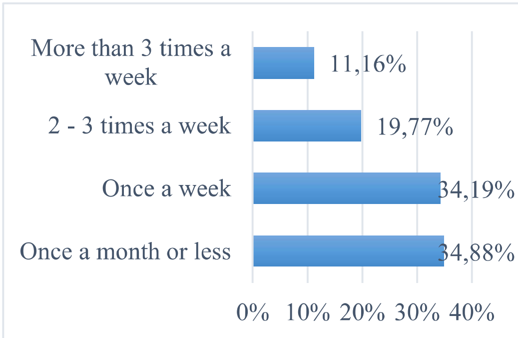
3. Results

3.1. Frequency of eating out and ordering online

In terms of eating out habit, 34.88% of the participants being asked went to restaurants or coffee shops once a month or less, while 34.19% ate out about once a week. The remaining 30.93% goes for participants who frequently ate out (at least 2 times a week). Counting the generations factor, it can be seen that eventhough in general, traditionally a Vietnamese would prefer to eat at home, the increasing number of Generation Y and Generation Z in Vietnam along with their exposure to global culture has raised the tendency of using food services anytime, anywhere among Vietnamese, especially when compared with the previous generations. This indicates the potential growth of F&B services industry in Vietnam. In fact, the F&B services industry in Vietnam is developing more and more thanks to the increasing eating out habits of young people.

Figure 1. Frequency of eating out *Figure 2. Frequency of eating out by*

generation



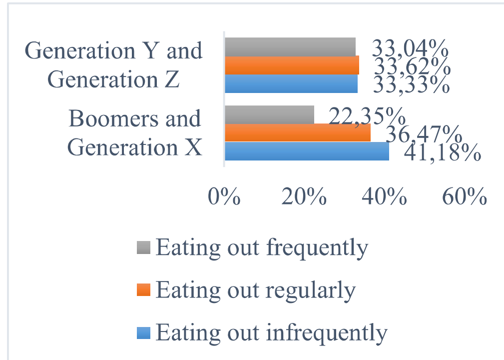
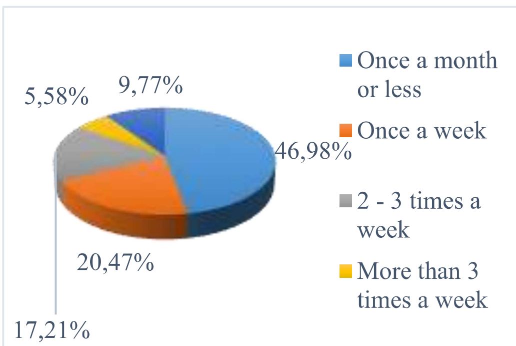
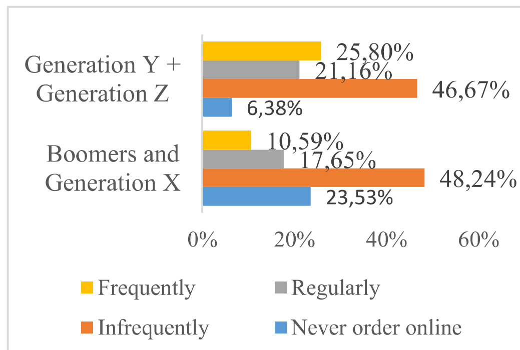


Figure 3. Frequency of ordering food and beverages online

Figure 4. Frequency of ordering food and beverages online by generation



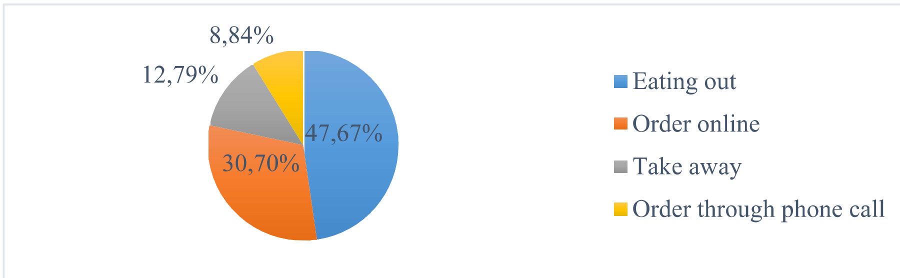


When mentioning the frequency of ordering food and beverages online, almost half of the participants (46.98%) engaged in such activity on an infrequent basis, while 20.47% ordered online regularly. The other 22.79% ordered food and beverages online frequently. One interesting fact is that 9.77% of participants asked never order food and beverages online. Taking the generation factor into account, the differences can be seen rather obviously. While the majority of both groups ordered food and beverages online infrequently, the trend is that Generation Y and Z seemed to use the online ordering function more often than the previous generations. Only 6.38% of the participants in Generation Y and Z had never ordered food and beverages online, comparing to 23.53% of the participants in Boomers and Generation X. Also, the number of the youth ordering cuisine products online on a regular or frequent basis was higher than the old (21.16% and 25.80% in comparison with 17.65% and 10.59% respectively). This is a promising foundation for the utilization of online ordering function for the F&B services sector, emphasizing the increasing number of Generation Y and Z in Vietnamese society.

3.2. Expenses on F&B services

When being asked about the type of F&B services activity that participants spent more on, 47.67% chose eating out, while placing order online stays at the second position with 30.70%. This is a true reflection of Vietnamese's customers' view toward F&B services outlet as a socializing hub. However, ordering food and beverages online has also become an indispensable trend within Vietnamese society. Only 12.79% of participants spent more on take away form. The remaining 8.84% was on calling the outlets directly to place order.

Figure 5. Expenses on F&B services

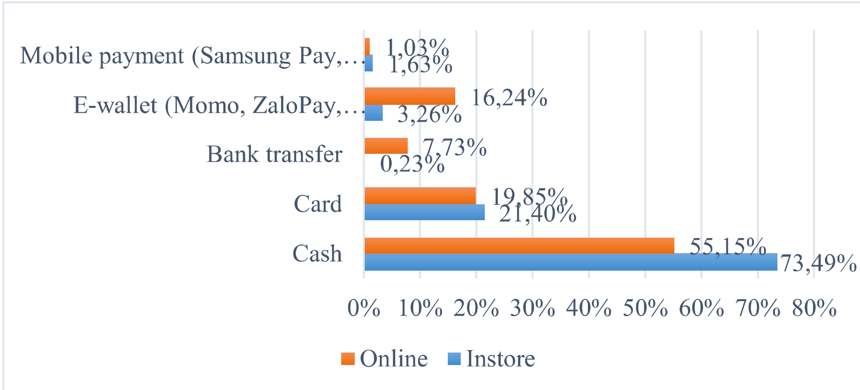


3.3. Digital payment

Talking about payment methods when eating out, the majority of participants mainly used cash (73.49%), showing a true reflection of Vietnamese's image of a cash society. Despite the government's effort in promoting cashless payments along with the increasing number of Vietnamese having bank accounts, only 21.40% of the participants used card as their payment method. Other digital payment methods including e-wallet, Samsung Pay, QR Code etc. … accounted for only 4.88%. Counting the generation effect, the payment methods the Boomers and Generation X used were either cash or card only. On the other hand, Generation Y and Z tend to try various other forms of payment.

Regarding online payment for food and beverages, again, the majority of respondents preferred to use cash-on-delivery, accounting for 55.15%. Card was still the second most preferred method of online payment with 19.85%. E-wallet and bank transfer's usage as online payment method increased significantly with 16.24% and 7.73% respectively in comparison with instore usage. Participants who chose these online payment methods mainly were Generation Y and Z.

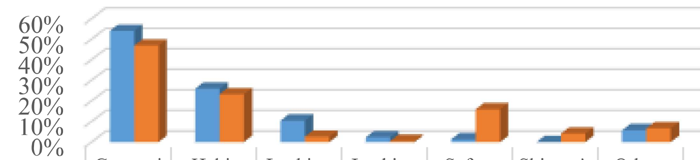
Figure 6. Preferred payment method instore vs. online



The most commonly stated reason for cash being chosen as the main method of payment both when eating out and ordering online is that cash was considered to be the most convenient payment method for its simplicity, being fast as a direct result of its popularity in Vietnam when making payment. The other not less important reason is the person's habit of using cash and having cash with them all the time. For instore payment, the lacking of digital payment infrastructures in most of the small F&B services outlet or in the rural area is the third most concern factor. Whereas, for online payment, safety issue is the third major rationale for cash-on-delivery to be chosen. To be more precise, secure online payment as well as secure delivery service were what customers concerned about. Besides these reasons, some others factor was also noted including the person's lacking of digital skills to use digital payment methods (mainly for the old generation), the ability to manage income and expenses easily when using cash etc. One significant factor affecting Vietnamese online payment context in F&B services industry came from the shippers, most of whom would require to receive cash when products were delivered.

For other payment methods, the most popular reasons mentioned was the ability to get discount through cashback programs of card issuing banks or earning points which can be redeemed for vouchers, along with the convenience of not having to bring cash or change. Especially with e-wallet or mobile payment, all you need to bring is just a smartphone.

Figure 7. Reasons for using cash when eating out vs. online



	Convenient	Habit	Lacking of digital payment infrastructure	Lacking of digital skills	Safety issue	Shipper's issues	Others
Instore	54,05%	26,01%	10,47%	2,36%	1,35%	0,00%	5,74%
Online	46,91%	23,20%	2,58%	0,52%	15,98%	4,12%	6,70%

3.4. Digital marketing

Figure 8. Usage of online marketing channels to find information about F&B services outlets

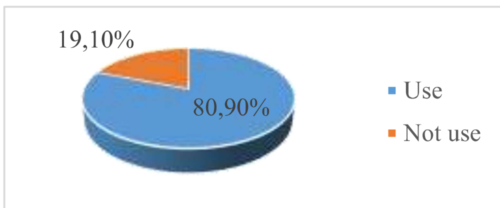
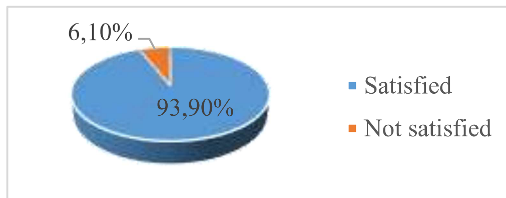
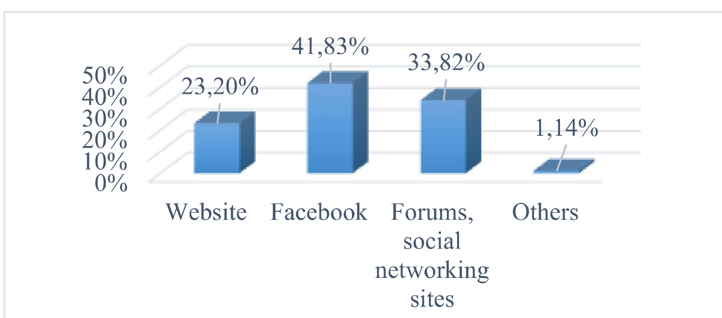


Figure 9. Satisfaction of online marketing channels when finding information about F&B services outlets



80.90% of the participants usually used online channels to find out information about restaurants or coffee shops, reflecting the development of online marketing channels in Vietnam in these recent years. Among them, 93.90% were satisfied with the information from these online channels.

Figure 10. Popularity of online marketing channels for F&B services



Among many types of online marketing channels, Facebook was the most popular one to help users find out information about F&B services outlets. The next channel that most of the participants used was forums or social networking sites, for example: Foody, Tripadvisor, Now etc. …. The main reason for these two channels' popularity is the increasing numbers of social networking sites, especially Facebook user base in Vietnam. According to Kepios (2018), Vietnam ranks 7th in terms of largest user base on Facebook, with 58 million active users. In fact, the context in Vietnam is that where there is a community, where there is a review, wherever someone talks about the product, Vietnamese customers will believe more than information given by the brand. Besides these channels, website of F&B services outlets and Google Maps were also used to support customers in finding the right restaurants or coffee shops.

3.5. Channels to order online

The most used channel to order food and beverages online was through such platform applications as Grab Food, Now or Go Food etc. … (accounting for 64.59%). 28.87% of respondents used Facebook or outlet's website as their ordering channels. Due to the limited number of restaurants or coffee shops having their own application, only 5.67% of respondents chose to use this channel.

Regarding the satisfaction when using these online ordering channels, the majority of respondents were happy with the services they received (91.24%). Only 8.76% had bad experiences when ordering food and beverages online.

Figure 11. Preferred online ordering channels

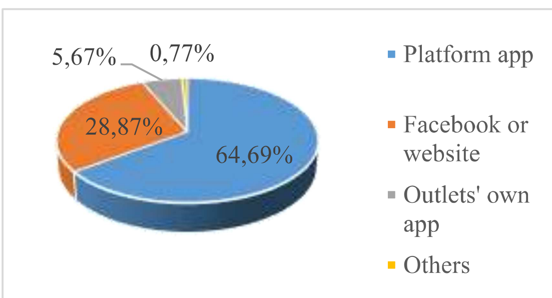
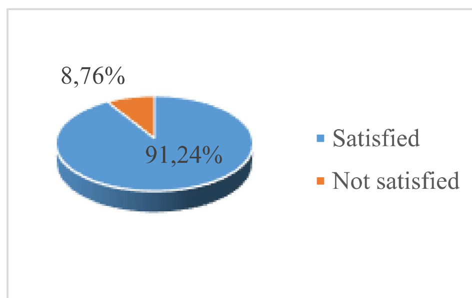


Figure 12. Satisfaction of online ordering channels



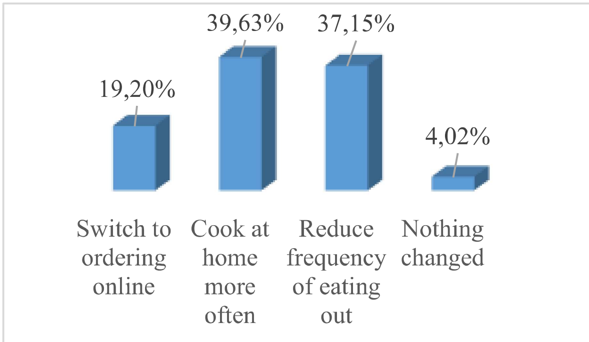
3.6. The impact of Covid–19 pandemic

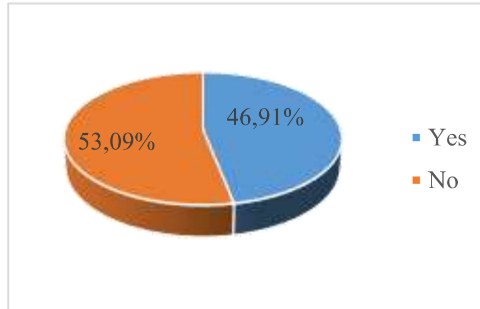
Covid-19 pandemic is the most concerned issue at the moment, not only from international perspective but also from national perspective. Under the hard situation of Covid-19 with lockdowns as one of the main measures to control the pandemic, the customers' behaviors are also reshaped accordingly.

When being asked how the pandemic Covid-19 has changed their habits of going to restaurants or cafes, the majority of the answers was that participants tend to cook at home more often and reduce the frequency of eating out under the impact of Covid-19. Only 19.20% of the response was switching to ordering online instead of going out to F&B services outlets. Also, during the national lockdown period, only 46.91% of the respondents who had experienced ordering online, increased the frequency of ordering food and beverages online, while 53.09% still kept the same basis.

Figure 13. Customers' behaviors changed in the Covid-19 pandemic

Figure 14. Frequency of ordering online changed during the national lockdown period





3.7. Customers' interest toward different types of technology being used in F&B services outlets

So as to assess customers' attitude toward different types of technology being used in restaurants or cafes, participants were asked to determine their interest level toward technology in two categories: digital style services and functions of F&B services outlets' application.

*** Digital style services:**

Looking at customers' interest toward different digital style services at F&B services outlets, a majority of participants were interested in using mobile phones to make payment, using tablet as a menu and placing orders or making payment with self-service kiosk (50%, 48.14% and 38.84% respectively). While mobile payment and tablet menu has existed in Vietnam, self-service kiosk is indeed a new style, promising room for development within Vietnamese F&B services sector.

Unlike three others digital technology, waiter robot technology seems not to receive much concern, with 42.56% of neutral interest and only 24.42% of interest (much lower than other types of technology). Only 4.65% showed great interest in seeing a waiter robot. In fact, in Vietnam there used to be coffee shops using robot as waiters both in Hanoi and Ho Chi Minh City. However, the first robot coffee shops, ROBO Café, had to close after less than 1 year of operation. The other cafes' performance was also not as good as expected.

*** F&B services outlets' application and Platform application:**

Mentioning different functions in the restaurants' or coffee shops' application, the majority of respondents showed interest in all functions, all of which accounted for more than 50% except the function of making payment through application (both online and instore). This is probably a direct result of Vietnamese people's preference of using cash rather than other payment methods, when 39.53% of participants showed interest and another 40.23% said they had only neutral concern. This is also the functions that received more "not interested" choice than any other types.

Summing up the data on this question, the two most liked technology was the function of using promotion codes when making payment, with an average value of 4.04 and the function to accumulate points and redeem offers, with an average value of 3.90. Waiter robots was the least liked technology application, with only 2.96 average value. Other technology's average value ranged between 3.33 to 3.89, showing that there was no high favor or high dislike toward these technologies. However, overall, digital technologies underlying in different functions of F&B services outlets' application are more favored than digital services style.

Figure 15. Customers' interest toward different types of technology being used in F&B services outlets (digital style services)

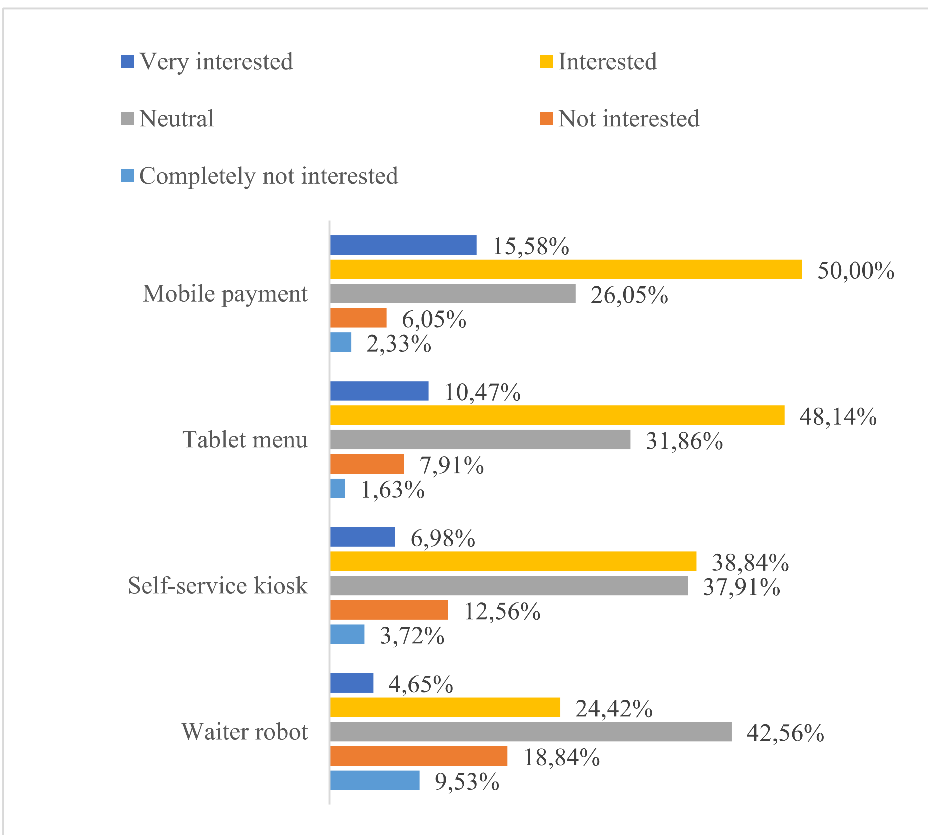


Figure 16. Customers' interest toward different types of technology being used in F&B services outlets' application and platform application

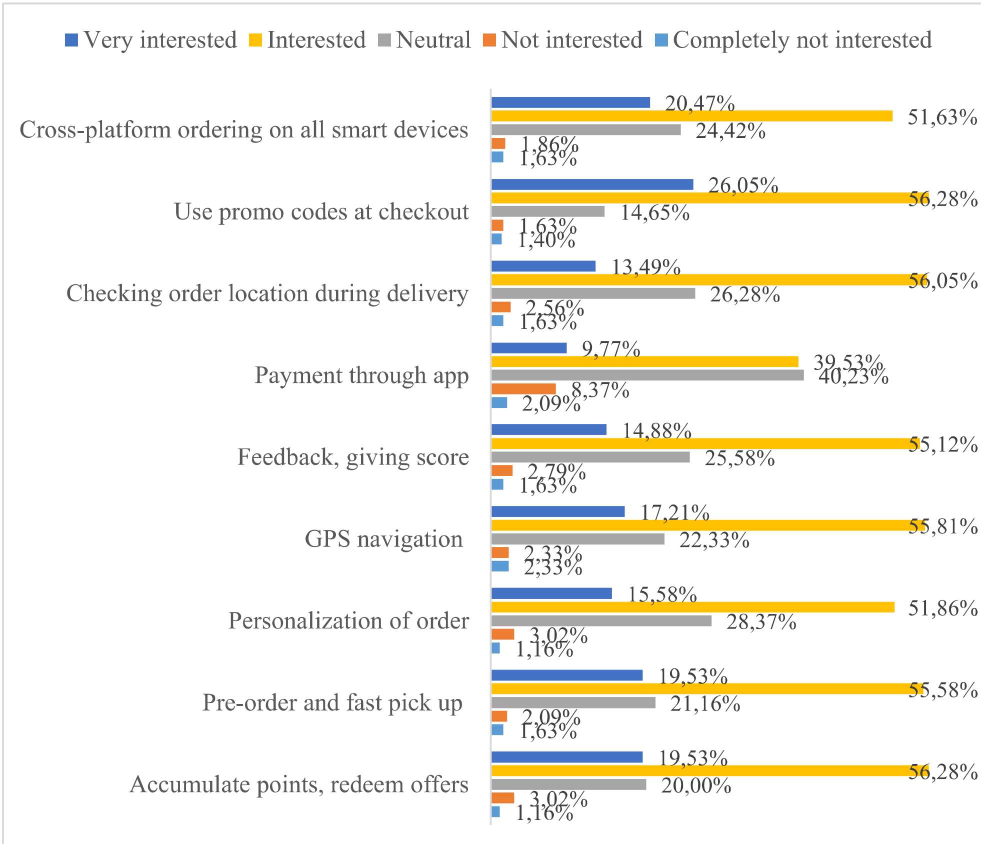


Table 2. Average value of responses on level of interest toward digital technology used in F&B services sector

	Digital technology	*Average score*	*Category*
1	Use promo codes at check out	4.04	Platform application
2	Accumulate points, redeem offers	3.90	F&B services outlets' application
3	Pre-order and fast pick up	3.89	F&B services outlets' application
4	Cross-platform ordering on all smart devices	3.87	Platform application
5	GPS navigation	3.83	F&B services outlets' application
6	Feedback, giving score	3.79	F&B services outlets' application
7	Personalization of order	3.78	F&B services outlets' application
8	Check order location during delivery	3.77	Platform application
9	Mobile payment	3.70	Digital style services
10	Tablet menu	3.58	Digital style services
11	Payment through application	3.47	F&B services outlets' application
12	Self-service kiosk	3.33	Digital style services
13	Waiter robot	2.96	Digital style services

4. Discussion and Conclusion

People often think of digital transformation as the game of those who have a lot of money. However, digital transformation does not mean applying huge, expensive digital technology but, it underlies in the rethinking of business model, turning itself into a customer-oriented organization. To put customers at the center, enterprises have to use data, use tools to capture data, build databases and start analyzing. It is not necessarily to have a big data system but a platform for creating customer data sets, analyzing their behavior, developing customer care and retention etc. … is of great importance. The essence of digital transformation is that we focus on the customer, understanding the customer and knowing how to satisfy the customers. It is true that Vietnamese customers are having a friendly view toward digitalization in general and digitalization in F&B services sector in particular. While Millennials (Generation Y) are the generation with expanding spending power, Generation Z are considered as the "connecting generation" or "the kids in the dot com age". With the growing number of Generation Z and Y, the key generations in the global force, who will determine the consumption future of the economy, Vietnamese customers are more open to digitalization in F&B services sector. This can be proved through the increasing trend to use online ordering, digital payment, digital marketing channels as well as the overall preference toward using digital technologies in F&B services outlets. However, we cannot ignore the socio-cultural aspect of Vietnamese society, including the habit of using cash as the most secure payment method, the frequency when eating at home comparing to eating out, the lacking of digital skills among the old generations or even the unequal development of digital infrastructures between the urban and rural areas, which can bring about challenges to F&B services enterprises in promoting digitalization.

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