

# Success Factors Influencing Digital Transformation: An Exploratory Study of Street Food Businesses in Yaowarat Area

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## Abstract

This study aims to investigate the factors influencing digital transformation for street food businesses in the Yaowarat or China Town Area and propose guidelines for promoting the effective use of digital technology in this context. Data were collected from 120 street food vendors in Yaowarat or China Town Area using a mixed-method approach. The results revealed four success factors influencing digital transformation for street food businesses including 1) Learning and Growth Perspective; 2) Financial and Internal Business Process Perspective; 3) Culture and Data Security Perspective, and 4) External Environment and Policy Perspective. These findings shed light on the motivations behind the implementation of digital technology among street food business owners in Thailand. Additionally, suitable guidelines for promoting and enhancing the effective use of digital technology for street food businesses were derived from both quantitative and qualitative results including 1) The government sector or related organizations should facilitate the business owners in learning about the financial benefits and security prevention in order to increase the use of digital transformation; 2) The digital transformation should be a top-down policy since it should be driven and supported by the highest levels of leadership; and 3) The government should give rewards or some benefits for the street vendors from some competitive campaigns and facilitate knowledge sharing and collaboration among street food vendors in order to make them learn from culture and external environment. These guidelines aim to support street food vendors in leveraging digital technologies to improve their operations and competitiveness.

**Keywords:** Digital transformation, Street food, Success factors

## I. INTRODUCTION

In this era, technological advancements influence the way of doing business in Thailand and in the world rapidly. The emergence and spread of digital technology seem to affect the way of digitalization for all businesses. Especially in the post COVID-19 period, the desire to use digital transformation journey is considerable for food and beverage businesses (Chatterjee, Chaudhuri, & Vrontis, 2022). In the last few years, digital transformation has become crucial, and the organizations must embrace to respond to today's digital world's new demands (Alhubaishy & Aljuhani, 2021). This is a trend that is being used by almost every industry to increase its competitiveness (Weerasinghe & Nirere, 2022). So, implementing digital technology becomes important since it involves making changes or transformations of businesses to at least one of three important aspects of the organizational functioning system: the customer experience, the operations processes, and the business model (Westerman, Calm  jane, Bonnet, Ferraris, & McAfee, 2011). This means that the digital technology seems to be motivating factors for businesses in order to increase convenience and satisfactions of customers, record reliable and checkable transactions, and decrease time for getting changes between owners and customers. In addition, the development and implementation of digital technology aimed at promoting the offered services, attracting and retaining customers, and improving the level of service (Pyanikova, Kovaleva, & Bykovskaya, 2019). It is accepted that digital technology assists to increase convenience for food and beverage businesses. The government has seen that digital technology and innovation is beneficial for food and beverage businesses, so they form the national strategic plan and action plan in order to change the government to become digital transformation organization. This transformation begins with laying the foundation, setting goals, and operating all sections respectively to add value for consumers (Russell Reynolds Associates, as

cited in Watcharapoj Sapsanguanboon & Wethaya Faijaidee, 2020).

The restaurant industry has considerable quantitative importance in many economies, especially in those with a tourism specialization (Garc  a, Martin-Martin, & Romero, 2022). This industry is a fast-growing industry, which is trending to adopt digital technologies and need technological adaptation to overcome their competitive advantages (Verevka, 2019). The street foods businesses or street food stalls are micro businesses which are important business sector in Thailand. The street food businesses provide convenient, delicious, and cheap meals (Parrada Gaterak, Wassana Srisuk, Ploylalynn Gaterak, & Chidchanok Anantamongkolkul, 2020). Providing not only for food, but the street food businesses also reflect Thai food culture. It tends to be a traditional way to experience local culture among consumers. Beginning in late 2019, the world experienced the respiratory disease COVID-19, and street food is one of the important service industries affected by COVID-19. Because of the lockdown policy and the closure of the country, the street food businesses were inevitably impacted. After the period of COVID-19 pandemic, the restrictions were eased, the people can live a normal life (Patchareeya Kaewchoo, 2022).

Since digital technology has improved rapidly, the use of digital payment affects customers' behavior (Li, 2024). After the pandemic of COVID-19, the customers prefer contactless payment because it simplifies transaction process and helps avoid disease infection. Providing that the street food vendors accept the use of digital technology and use it comprehensively, it can satisfy the customers and can enhance the decision-making process for vendors, allowing them to better meet consumer demands continuously (Wu, Hsiao, & Xiao, 2016).

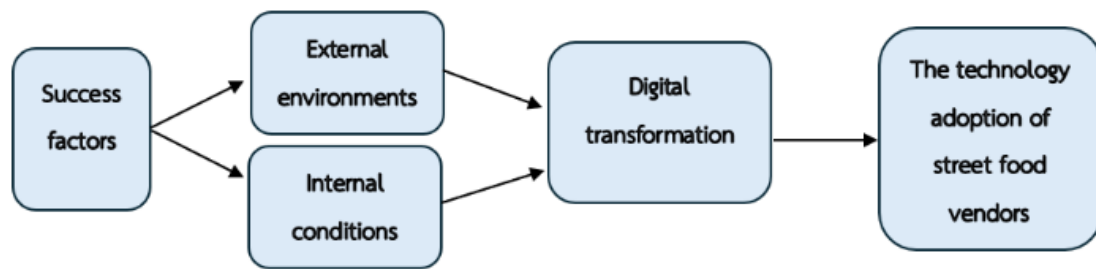


Figure 1: The research model of factors influencing digital transformation of street food businesses

Moreover, the numbers of visiting foreigners have rose dramatically. Therefore, the use of digital technology in terms of mobile transactions needs to be investigated. To fill the gap that exists in the digital transformation field of research, success factors influencing the digital transformation for street food businesses may shed light on the guideline or model of food and beverage businesses in order to make both Thai and foreign consumers satisfied, and finally make profits value for our country.

The aims of this study are 1) investigating factors influencing the digital transformation for street food businesses in Yaowarat or China Town Area and 2) proposing guideline for promoting the effective use of digital technology for street food businesses.

The research is guided by the following questions:

RQ1: Which factors are stated in the literature influencing the digital transformation for street food businesses in Yaowarat or China Town Area?

RQ2: What is suggested guideline for promoting the effective use of digital technology for street food businesses in Yaowarat or China Town Area?

The research framework was developed and shown in figure 1.

## II. LITERATURE REVIEWS

### A. Digital Transformation

In the era of the digital economy, digital transformation has become a new approach for companies or businesses

to gain competitive advantages in a context of intense and dynamic market competition. Companies in almost all industries have undergone or are currently undergoing the digital transformation (Zhang, Xu, & Ma, 2022). Digital transformation is the process of adoption and implementation of digital technology by an organization in order to create new or modify existing products, services and operations by the means of translating business processes into a digital format. Digital transformation is the process by which companies embed technologies across their businesses to drive fundamental change. The starting process of the digital transformation adoption requires a new mindset, and it is a chance to reimagine how companies do things, often from the ground up. Hence, digital transformation is the changes of ideas and the use (Russell Reynolds Associates, as cited in Watcharapoj Sapsanguanboon & Wethaya Faijaidee, 2020). In addition, digital transformation can be applied in business entrepreneurship in order to create opportunities and competitive abilities under technological environment changing rapidly (Watcharapoj Sapsanguanboon, Wethaya Faijaidee, & Preeyakamon Auanguai, 2020). Digital transformation includes more than the adoption of new technologies; it also involves embracing new business models in order to drive innovation, efficiency, and value creation (Saarikko, Westergren, & Blomquist, 2020). It tends to be the process of using digital technologies to improve the overall processes,

culture, services, and customer experiences. Absolutely, understanding digital transformation comprehensively is essential for organizations to navigate the process effectively. This understanding should encompass not only the technical aspects but also the human and customer impacts.

### *B. Digital Transformation Challenges*

It is expected that businesses will experience various challenges and difficulties when they go through fundamental changes. This also applies to digital transformation. If the transition does not happen smoothly, the business's owners may encounter some challenges. The availability of new technologies such as artificial intelligence, cloud computing, and data analytics reveals new opportunities that enable value creation and increase the flexibility of a business's operational processes (Weerasinghe & Nirere, 2022). Business owners must adopt these new technologies and adapt to related changes to fit in today's digital environment. Otherwise, they may not survive (Brunetti et al., 2020). Adopting digital technologies enables business owners with new capabilities which can increase their circulation. However, obtaining the expected digital transformation benefits requires not only to align information technology but also to have capabilities and skills. By adopting digital transformation, organizations may encounter so many challenges that can prevent them from progressing (Watcharapoj Sapsanguanboon et al., 2020). Most of them may be related to lacking the capability to afford new technological equipment, being afraid of system security, and involving complicated processes. Therefore, studying or revealing factors which impact the adoption of digital technologies may reflect important angles to increase or motivate business owners to have open-mindedness and learn to use digital technologies.

### *C. Digital Transformation of Street Foods Businesses*

Digital transformation has had a significant impact on the restaurant industry (Taweerat Jiradilok, Settapong Malisuwan, Navneet Madan, & Jesada Sivaraks, 2014; Weerasinghe & Nirere, 2022). It can be implied that the restaurant business can be justified in both the industrial age and the digital age. Starting from the industrial age, it was difficult to estimate the number of customers who could visit the restaurant since the business owners did not have regular customers data. This may make restaurant owners prepare too much or less food for the customers they expected to have, which resulted in food wastage or food insufficiency. Importantly, it was difficult for restaurant owners to check their income or circulation. In today's digital era, restaurants that digitally transformed their working systems can identify the regular customers with their food preferences as well as the days on which they usually visit the restaurants. Although digital transformation increases the system performance of restaurants, some customers still complain and prefer to keep having physical interactions with waiters rather than digital devices (Beling & Flink, 2017). In addition, the restaurants can check their income or circulation together with calculate budgets from the records. This has become a source of challenge not only for restaurant owners but also for the customers. For restaurant owners, digital transformation seems to be challenging because it requires acquiring new skills maybe in a short period of time to match with the new working digital environment. For these reasons, coping with a digital culture being adopted in the restaurant industry is still challenging (Beling & Flink, 2017). The restaurant owners must be attentive to the challenges associated with digital transformation. This will be a critical input for them to attain a successful digital transformation associated with expected benefits.

According to the Ministry of Commerce, the restaurant industry can be divided into four types: 1) Fine Dining; 2) Casual Dining; 3) Fast Dining, and 4) Footpath or Kiosk. Additionally, the restaurant industry can be divided into 5 types according to their food's types: 1) General national food such as Thai food, Korean food, and Japanese food; 2) Local food such as Isan food and southern food; 3) Specialized food such as vegetarian food and Keto food; 4) Food divided according to cooking methods such as Sukiyaki and Grilled food and 5) International buffet. Street foods or Footpath food businesses are challenging with the digital technology adoption. Even though their businesses are quite small scale, the customers buying their food and beverage tended to unexpectedly. Since the use of digital transformation may make restaurant owners estimate sufficient food, check their income or circulation, increase their sales, promote their business and so on, the adoption of it among street food stalls seems to be challenging and interesting. After post COVID-19 period, tourists seem to return to Thailand and take experience with various kinds of Thai street food. The post-COVID street food landscape may favor technologically agile owners looking towards more socially shareable food experiences (Aquino, 2021).

#### *D. Success Factors for Thai Restaurant Business*

The implementation of digital technology is a complex process and is accompanied by many internal and external factors which seem to be likely leading to the success or failure of digital technology (Neirotti & Pesce, 2019). Success factors tend to increase the likelihood of success. These factors are the key areas that must be exceptionally completely operate for an organization to be successful. It is one of the most important drivers for companies seeking to implement digital technology (Lucas, Agarwal, Clemons, El Sawy, & Weber, 2013). Therefore, identifying success factors and related

leadership practices, as well as understanding their nature and root causes, are important prerequisites for achieving the adoption of digital technology (Zhang et al., 2022). After the spread of COVID-19, restaurant businesses probably changed their operating process. The change is the step for leading the business to the period of Next Normal. As stated in Prutchaya Heonsawang and Chanchai Jewjinda (2020), the fundamental success factors for operating a Thai restaurant business in foreign country were labor, investment, materials, and tools and equipment respectively.

According to previous studies, digital transformation in various business types was influenced by internal and external factors.

In terms of environmental context, competitive pressure was viewed as factors influencing digital transformation of construction enterprises (Zhang et al., 2022). Competition pressure describes the degree to which companies are motivated by their competitors to adopt new technologies (Westerman, as cited in Zhang et al., 2022). In addition, the educational level of entrepreneurs or managers, their levels of motivation, and their ambition for growth favor the digital transformation of their restaurant companies (García et al., 2022). So, one of reasons for using digital technology was because of learning and growth perspective.

Moreover, the perception of top management or policy support is also reflected in the organization of the enterprise. Policy support refers to the assistance offered by governments or related organizations to encourage businesses accomplish digital transformation. In terms of policy, governments or related organizations can encourage or prohibit businesses from adopting new technologies by implementing relevant policies. For example, Luo and Yu (2022) found that the influencing factors of digital transformation for enterprises were the external environment including customer needs, market competition, government policy and

digital technology, while the internal conditions include digital strategy, leadership, and organization capability.

Specifically, government policy support has a positive effect and can promote the digital transformation of enterprises. If the government supports enterprise digital transformation in terms of finance and technology standards, top management of companies often respond positively, increasing the possibility of promoting digital transformation. The need for customer satisfaction is a major influencing factor of the current dramatic shift that the world is experiencing (Eluekezi Nnewuku & Tuncay, 2021).

Additionally, data security, the process of transforming the organization digitally implies that several data will be gathered, is crucial for adoption of new technologies. This data must be understood and properly stored for the digital transformation process to be successful. This factor deals with the safety of all data obtained from the process.

Culture seems to be an influencing factor for technology implementation. Culture refers to overall attitude with regards to digital transformation. It is linked with how the people in the community behave. It affects the communication level of communication and affects the choice of technology made (Santos & Martinho, 2020).

It was also found that social support, government support, private sector support, and community leaders support influenced the operating process of Thai restaurant business in foreign country. As stated in Gaterak et al. (2020), digital technology is used as a way to promote the products for street food vendors during the pandemic of COVID-19 in Phuket. Although many dimensions of success factors were revealed, the factors influencing the street food vendors in Thailand were rarely found.

### III. RESEARCH METHODOLOGY

#### *A. Population and Sampling*

This study was conducted on the ground of exploratory research because it aims to uncover new ideas and patterns of factors influencing digital transformation of street food vendors in Thailand which rarely found. If unexpected factors were discovered, it can help to develop strategies and policies in order to make digital transformation successfully. This research employed a mixed method in order to have a better understanding and provide conclusive results of the existing research problem, here is the adaptation of digital technology among street food vendors. The target population were the street food vendors in Yaowarat or China Town Area. For the purpose of this study, factor analysis was used to investigate the dimensions of success factors influencing digital transformation. It was suggested that sample size for conducting factor analysis should be at least 100 (Gorsuch, as cited in MacCallum, Widaman, Zhang, & Hong, 1999). In addition, when the number of samples increases, factor analysis solutions are more stable and accurate. Then, purposive sampling, which seems to be a selective sampling process where units are selected for inclusion in the sample due to their characteristics, was employed in order to select a good representative of street food business owners. Purposive sampling was used because it allows for the selection of participants who are most relevant to the research question. It seems to be an effective method for small samples, but it is also an inherently biased method (Campbell et al., 2020). The samples were chosen consciously according to their presence. The three characteristics of owners were designed. Firstly, they should be the vendors of street food businesses in Yaowarat Area. Next, they were at their stalls on the dates of collecting data. Finally, they were comfortable answering the questions and giving information.

### B. Instrumentation

The questionnaires and semi-structure interviews were used in order to triangulate data. The questionnaires consisted of three parts: 1) demographic data questions; 2) investigate the factors influencing the digital transformation; 3) open-ended questions. The questionnaire for investigating the success factors influencing digital transformation was adapted from Technology Acceptance Model (TAM) questionnaire of Astiti, Prayoga and Imbayani (2023); Ghani, Hamzah, Ramli, Daud, Romli and Mokhtar (2019); Masihuddin, Khan, Mattoo and Olanrewaju (2017); Park, D. Kim, Moon, Kim, Kang and Bae (2022). Responses of the second part were given according to a five-point Likert-type scale. In order to reduce confusion for respondents who was Thai street food vendors, the questionnaire was constructed in both Thai and English. Then, the items were sent to five raters in order to evaluate validity by using Index of Consistency Values (IOC). The IOC values of all question items were more than 0.6. Yet, some items were suggested to edit in terms of ambiguous words. After the improvement of questionnaire items, they were piloted among 30 vendors for finding the reliability by using Cronbach's alpha and the 30 owners were excluded in the study. The reliability of the questionnaire was 0.838 which was acceptable since 0.7 is an acceptable reliability coefficient (Nunnally & Bernstein, 1994).

The completed questionnaires were administered to the street food vendors by hands based on the criteria as they should be the vendors of street food businesses in Yaowarat Area at the presence of their stalls on the dates of collecting data and were comfortable answering the questions and giving information. After the quantitative data were collected, the interview was conducted from representatives of each type of food by asking for their comfortability to interview.

According to the collecting data process, the samples were 120 street food vendors. Exploratory factor analysis and descriptive statistics were used to analyze quantitative data, while content analysis was used to interpret the interview, gather key words and prioritize by frequency.

## IV. RESULTS

As shown in table 1, the results of 120 street food vendors were analyzed. The majority of respondents were female, the age was between 36-45 years. Most of them graduated from primary education. The business type was specific food and had 51-100 customers per day.

### 1. Lower than primary education

Table 1: Ranking of demographic data

Variables	Frequency	Proportion (%)
Gender		
1. Female	100	83.33
2. Male	20	16.67
3. Others	0	0.00
Total	120	100.00
Age		
1. < 25 years	12	10.00
2. 25-35 years	15	12.50
3. 36-45 years	38	31.67
4. 46-55 years	22	18.33
5. > 55 years	33	27.50
Total	120	100.00
Educational background		
1. Lower than primary education	8	6.67
2. Primary education or equivalent	49	40.83
3. Secondary education or equivalent	31	25.83
4. Bachelor's degree or equivalent	32	26.67
5. Higher than bachelor's degree	0	0.00
Total	120	100.00

Table 1: Ranking of demographic data (Cont.)

Variables	Frequency	Proportion (%)
Types of food		
1. Chinese food	24	20.00
2. Seafood	12	10.00
3. Specific food such as shark fin, bird's nest health drink, and noodles	46	38.33
4. Desserts and drinks	38	31.67
Total	120	100.00
Numbers of customers per day		
1. 1–50 customers	22	18.33
2. 51–100 customers	38	31.67
3. 101–150 customers	24	20.00
4. More than 150 customers	36	30.00
Total	120	100.00

RQ1: Which factors are stated in the literature influencing the digital transformation for street food businesses in Yaowarat or China Town Area?

In order to answer the first research question, the results were analyzed by a factor analysis technique. After collecting data process, the data of all 120 respondents were analyzed by Principal Component Analysis (CPA) with varimax rotation. To assess whether the set of items in the correlation matrix was suitable for principal components analysis, the Kaiser-Meyer Olkin (KMO) measure of sampling adequacy was computed. The KMO computed for this study was 0.926

which yields high values above 0.70, then the correlations among items are sufficiently high to make factor analysis suitable (de Vaus, 2002). In order to investigate the success factors influencing the digital transformation for street food businesses in Yaowarat or China Town Area, the 20 questionnaire items were extracted factors. To determine the number of factors, three criteria were used: Eigenvalues, scree plot and interpretability of the dimension meaning. According to determination based on Eigenvalues, only dimensions with Eigenvalues greater than 1.0 were retained (Field, 2018; Rietveld & van Hout, 2011). In the principal component analysis, the first factor accounted for the most part of the whole variance, so most items loaded on this factor. Varimax rotation was used to ensure that most variables have high loadings on the most important factors and small loadings on all other factors. According to eigenvalues, there were four factors greater than 1.0 as shown in table 2.

The results in table 2 show that there are four success factors extracted from the questionnaire. The first factor accounted for 33.21%, the second factor accounted for 28.51%, the third factor accounted for 15.41%, and the last factor accounted for 9.10%. Thus, four factors accounted for 85.96% of the whole variance. Then, the scree plot was used to determine the best number of factors and keep factors that occur before it was flattened.

Table 2: Eigenvalues of factor analysis

Total Variance Explained						
Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.40	57.02	57.02	6.64	33.20	33.20
2	2.69	13.48	70.50	5.70	28.50	61.71
3	1.99	9.95	80.45	3.02	15.14	76.85
4	1.10	5.50	85.95	1.82	9.09	85.95
5	0.96	4.81	90.76			
Extraction Method: Principal Component Analysis.						



Table 2 and the scree plot in figure 2 show that the first factor accounts for the largest proportion of variance. Besides, the scree plot gradually flattens

from the fourth factors. For interpretations of factor loadings, the criterion of .40 or above was employed (Field, 2018). Thus, there were four factors to label.

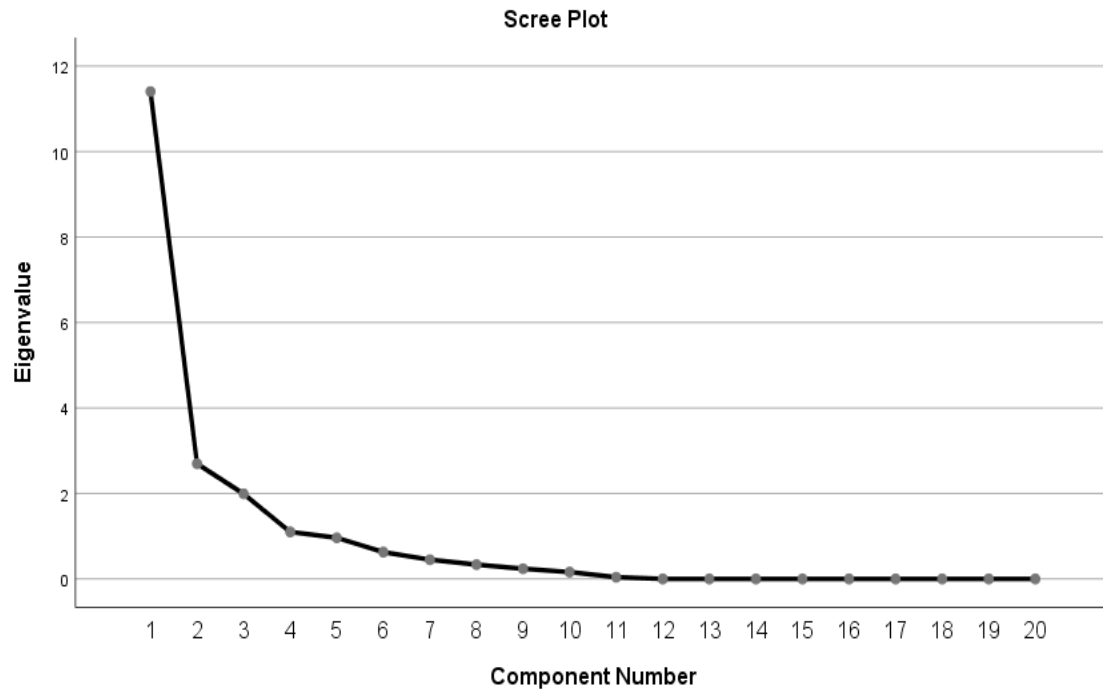


Figure 2: Scree plot of eigenvalues

Table 3: Dimensions of success factors influencing the digital transformation

Factors and Items	Dimension 1: Learning and Growth Perspective	Dimension 2: Financial and Internal Business Process Perspective	Dimension 3: Culture and Data Security Perspective	Dimension 4: External Environment and Policy Perspective
15. The use of digital technology helps businesses to stay modern.	.910	-	-	-
4. The use of digital technology helps create customer awareness or perception.	.868	-	-	-
17. The use of digital technology helps restaurant/ business owners to enhance their digital skills.	.866	-	-	-
16. The use of digital technology simplifies store management.	.816	-	-	-
18. The use of digital technology helps restaurant and business owners stay informed about media and scams.	.790	-	-	-
20. The use of digital technology is flexible and open.	.735	-	-	-

Table 3: Dimensions of success factors influencing the digital transformation (Cont.)

Factors and Items	Dimension 1: Learning and Growth Perspective	Dimension 2: Financial and Internal Business Process Perspective	Dimension 3: Culture and Data Security Perspective	Dimension 4: External Environment and Policy Perspective
10. The use of digital technology helps to increase sales.	.635	-	-	-
11. The use of digital technology is driven by social necessity.	.619	-	-	-
19. The use of digital technology facilitates positive societal changes.	.611	-	-	-
3. The use of digital technology reduces the duration of work processes.	-	.917	-	-
1. The use of digital technology in business facilitates faster business operations.	-	.816	-	-
5. The use of digital technology helps to reduce costs.	-	.816	-	-
2. The use of digital technology helps create a positive customer experience.	-	.790	-	-
8. The use of digital technology stems from government policies.	-	.735	-	-
6. The use of digital technology enables efficient inspection and analysis of data.	-	.695	-	-
13. The use of digital technology is caused by customer demands or pressures.	-	-	-.927	-
12. The use of digital technology is caused by the pressure exerted by restaurants in the same area.	-	-	-.871	-
9. The use of digital technology helps to enhance financial security.	-	-	.542	-
14. The use of digital technology reduces the spread of infectious diseases.	-	-	-	.878
7. The use of digital technology stems from government support.	-	-	-	.706

As shown in table 3, there are four factors influencing the digital transformation for street food businesses in Yaowarat or China Town Area. They include Factor 1) Learning and Growth Perspective, 2) Financial and Internal Business Process Perspective, 3) Culture and Data Security Perspective, and 4) External Environment and Policy Perspective.

#### *A. Factor 1 Learning and Growth Perspective*

There were nine important loading features in this factor. They were all positive loadings. This factor contained item question 15 (The use of digital technology helps businesses to stay modern.), 4 (The use of digital technology helps create customer awareness or perception.), 17 (The use of digital technology helps



restaurant/business owners to enhance their digital skills.), 16 (The use of digital technology simplifies store management.), 18 (The use of digital technology helps restaurant and business owners stay informed about media and scams.), 20 (The use of digital technology is flexible and open.), 10 (The use of digital technology helps to increase sales.), 11 (The use of digital technology is driven by social necessity.), and 19 (The use of digital technology facilitates positive societal changes.). Question item 15 contained the highest loading in this factor (.910). All of these important loading variables can be implied that the street food business owners decided to use digital technology because they perceived that the digital transformation improved their learning level, motivated them to learn with self-directedness and grew their businesses. Thus, this factor was labelled as Learning and Growth Perspective.

#### *B. Factor 2 Financial and Internal Business Process Perspective*

There were six important loading features in this factor. They were all positive loadings. This factor contained item question 3 (The use of digital technology reduces the duration of work processes.), 1 (The use of digital technology in business facilitates faster business operations.), 5 (The use of digital technology helps to reduce costs.), 2 (The use of digital technology helps create a positive customer experience.), 8 (The use of digital technology stems from government policies.), and 6 (The use of digital technology enables efficient inspection and analysis of data.). Question item 3 contained the highest loading in this factor (.917). All of these important loading variables can be implied that the street food business owners decided to use digital technology because it tended to be helpful and they received the financial and internal benefits of system since it helps reducing duration of process, facilitating faster operations, reducing costs, creating impressive

experiences, following government campaigns, and obtaining valuable data. Thus, this factor was labelled as Financial and Internal Business Process Perspective.

#### *C. Factor 3 Culture and Data Security Perspective*

There were three important loading features in this factor. Two of them were negative loadings, while another one was positive loadings. This factor contained item question 13 (The use of digital technology is caused by customer demands or pressures.), 12 (The use of digital technology is caused by the pressure exerted by restaurants in the same area.), and 9 (The use of digital technology helps to enhance financial security.). Question item 13 contained the highest loading in this factor (-.927). The first two items that is the cause of customer demands or pressures and the pressure exerted by restaurants in the same area are negative, so it can be implied that the adoption of digital technology among street food business owners is not influenced by the pressures from customers or restaurants nearby. It seems to be the way of life, social behavior, and norms found in human societies. It can be seen as culture. The other one factor is the benefit of enhancing financial or data security. Thus, this factor was labelled as Culture and Data Security Perspective.

#### *D. Factor 4 External Environment and Policy Perspective*

There were two important loading features in this factor. They were all positive loadings. This factor contained item question 14 (The use of digital technology reduces the spread of infectious diseases.), and 7 (The use of digital technology stems from government support.). Question item 14 contained the highest loading in this factor (.878). All of these important loading variables can be implied that businesses owners intended to use digital technology to reduce the spread of diseases and is supportive by the government. This factor seems to indicate the

external environment of health and policy from the government. Thus, this factor was labelled as External Environment and Policy Perspective.

In order to triangulate quantitative results, semi-structured interviews with purposively selected participants were employed. The participants were selected randomly from each type of business. So, there were four participants in the interview section. The findings have emerged in order to provide a complete picture of the success factors influencing the digital transformation for street food businesses.

#### *E. Interview and Content Analysis*

RQ2: What are suggested guideline for promoting the effective use of digital technology for street food businesses in Yaowarat or China Town Area?

According to the findings from the quantitative research survey regarding success factors influencing the digital transformation for street food businesses in Yaowarat or China Town Area were found. The factors include 1) Learning and Growth Perspective; 2) Financial and Internal Business Process Perspective; 3) Culture and Data Security Perspective; and 4) External Environment and Policy. Then the interview was analyzed in order to determine the presence of certain factors found in quantitative data. For this part, the researchers can quantify and analyze the presence, meanings, and relationships of each success factor.

For the first factor, the reason that street food owners transform into digital technology was mainly because of learning and growth perspective among owners and customers. As they said: "The use of digital technology is a good thing changing our society modern, more convenient, increasing sales and we need to adapt it in a business." In addition, they stated "After the spread of COVID-19, we learn that digital technology is an important tool to connect with owners and customers. It is necessary for our lives and can't

reject.". They also think that "digital technology helps restaurant/business owners be more aware of the media and scammers and when we learn about this, we have more knowledge of digital. Then, we are proud of ourselves."

For the second factor, the reason that street food owners transform into digital technology was because of the financial and internal business process perspective (Eluekezi Nnewuku & Tuncay, 2021; Luo & Yu, 2022). The interview with vendors revealed that the first step of using digital technology was because of government policy. Yet, after they passed the period of trials, they said: "The use of digital technology can speed up our business. They can monitor and analyze data efficiently, then can reduce costs.". One of the vendors also added "They can easily get a refund if something goes wrong.". So, they concluded that the reason they use digital technology was because it helps them in finance and business processes.

For the third factor, the reason that street food owners transform into digital technology was because of the culture and data security perspective (Santos & Martinho, 2020). As they said: "We use digital technology not because of people influencing their behavior probably suggested that they should do financial transactions on their mobile phone, yet we learned that they conveniently use it, and it has the advantage to keep data security.".

For the fourth factor, the reason that street food owners transform into digital technology was because of the external environment and policy perspective. As they said: "Digital technology reduces the spread of diseases, and the business owners were supported by the government campaign to get the benefits.". They also explained that the adoption of digital technology reduces contact with money and hands, then they seem to be reassured that it is difficult to get infected.



In order to answer research question 2: the suitable guideline for promoting or increasing the effective use of digital technology for street food businesses was gathered from quantitative and qualitative results. The street food business owners revealed that the reasons of implementing digital technology will be considered in four points: 1) Learning and Growth Perspective; 2) Financial and Internal Business Process Perspective; 3) Culture and Data Security Perspective; and 4) External Environment and Policy. Therefore, the guideline should be as follows:

1. Because the factors motivating the use of digital technology is learning and growth together with financial and internal business process, we should facilitate the business owners in learning about the financial benefits and security prevention if we need to increase the use of digital transformation. If there is a need to enhance digital transformation, it is important to help business owners understand both the financial advantages and the security precautions associated with it. According to the results, the street food business owners have self-directedness and openness to learning. By facilitating this learning process, business owners can make informed decisions about adopting digital technologies and being aware of the risks.

2. The digital transformation should be a top-down policy. It means that the initiative to implement digital technologies should be driven and supported by the highest levels of leadership. Since the street food vendors accepted that they use the digital technology and the use of digital technology is easily driven by the government campaigns, the top-down support is crucial for overcoming resistance, ensuring commitment across all levels, and achieving a successful digital transformation.

3. Digital transformation can instill a sense of pride among people; the government should give rewards or some benefits for them. It is suggested that the government should incentivize this process by supporting.

In addition, culture and external environment are crucial factors. The government should facilitate knowledge sharing and collaboration among street food vendors by providing a platform for them to learn from each other and stay informed about important topics relevant to their businesses. The proposed monthly sessions would be a suitable way for vendors to share insights, best practices, and warnings which will benefit the entire street food community.

## V. CONCLUSION AND DISCUSSION

The fact that technological advancements influence the way of doing business broadly leads the researchers to pay attention to revealing the factors affecting the use of digital technology. The adoption of digital technology is the acceleration process of using the benefits of change in order to create opportunities for business and competitive ability under the technological environments (Taweerat Jiradilok et al., 2014). In the post COVID-19 period, the desire to use digital transformation journey is considerable for food and beverage businesses. It seems to be complex to understand what factors influence the use of digital technology successfully. Moreover, technology plays a significant role in increasing confidence and affecting the experiences of individuals and businesses after the COVID-19 pandemic (Patchareeya Kaewchoo, 2022). In this study, several success factors influencing the digital transformation for street food businesses in Yaowarat or China Town Area including 1) Learning and Growth Perspective, 2) Financial and Internal Business Process Perspective, 3) Culture and Data Security Perspective, and 4) External Environment and Policy were found.

The fact that learning and growth perspective was highly influential towards digital transformation among street food owners is consistent with previous studies. Watcharapoj Sapsanguanboon et al. (2020) studied the digital transformation to enhance competitiveness for

food and beverage business and found that key success factors of digital transformation are management support for changes allowing organizations to benefit in the data validation conveniently, quickly and with accurate information. In addition, García et al. (2022) identified the factors influencing the digital transformation process in the restaurant industry and revealed that the education of entrepreneurs or managers, their entrepreneurial motivations, and their ambition for growth of the digital transformation was one of the affecting factors. Consequently, learning and growth perspective is the fundamental factor in shaping the success and extent of digital transformation efforts.

Apart from learning and growth perspective, financial and internal business process perspective was considered to be another success factor of digital technology adoption. This is in line with considerable previous studies (Neirotti & Pesce, 2019; Pyanikova et al., 2019; Saarikko et al., 2020; Watcharapoj Sapsanguanboon et al., 2020). In terms of financial and internal business process perspective, the results of this study overlapped with the motivation of using digital technology of Watcharapoj Sapsanguanboon et al. (2020). They found that one of the benefits of digital transformation was cost reduction. Since one of the fundamental factors for success in operating a Thai restaurant business overseas was investment, technology adaptation helps the owners to analyze and plan for investment. Then, the owners were probably motivated to use it. This means that financial considerations and operational efficiency are critical factors for business owners when implementing changes or innovations. Business owners prioritize these aspects because they directly impact the profitability, sustainability, and effectiveness of their businesses. Therefore, any new initiative or technology must demonstrate its potential to improve financial performance to gain adoption. This aspect is supported by the interview of the street food owners in the

current study as they said that they use digital technology because it helps to manage income effectively. In addition, the customers prefer using online payments via the digital tool. They were satisfied with the use of digital order and payment. Specifically, digital transformation can lead to dismantle incumbents' competitive advantages, with uncertain consequences for existing firms (Neirotti & Pesce, 2019; Saarikko et al., 2020). Likewise, Pyanikova et al. (2019) found that the introduction and use of digital technologies in the restaurant business will have an impact on the financial activities of public catering enterprises and allow creating permanent customers. They also stated the digital technologies play a crucial role in enhancing various aspects of the restaurant industry including improved service, cost reduction, increased profits, and simplified operations.

The third success factor was culture and data security perspective which similarly found in previous studies. It was vividly found that organizational culture seems to be both an accelerator and inhibitor of digital transformation (Arissara Ngowboonlorn, 2023; Plekhanov, Franke, & Netland, 2023). The transition toward an organizational culture that favors change and supports the digital transformation requires constant adjustments, while avoiding a follower culture that will struggle to achieve overarching strategic objectives (Eden, Jones, Casey, & Draheim, 2019; Westerman & Bonnet, 2015). Cultural agility, an organization's ability to effectively understand, adapt to, and engage with diverse cultural contexts, is essential for organizations to incorporate and interact with diverse cultural contexts. By embracing cultural diversity and fostering an inclusive environment, organizations can enhance their adaptability, innovation, and overall performance.

The fourth success factor was external environment and policy. This factor matched with that found in the previous studies (Prutchaya Heonsawang & Chanchai



Jewjinda, 2020; Arissara Ngowboonlom, 2023). The study of Prutchaya Heonsawang and Chanchai Jewjinda (2020) revealed that the environmental factors including social support, government support, community leaders' support are the high-level success factors of operating a Thai restaurant business in USA. As the street food owners said, they were governed by the policy. It is suggested that they feel their activities are influenced or regulated by government policies. This could imply that they perceive government regulations, rules, or guidelines as having a significant impact on their business operations and practices. According to the study of Arissara Ngowboonlom (2023), the support from external factors such as the budget from government is able to increase the tendency of using digital transformation.

#### VI. IMPLICATIONS AND RECOMMENDATIONS

Exploring the accelerating factors towards the use of digital transformation among street food vendors will benefit not only for street food owners, but also for other businesses, tourism, and economic growth in Thailand. The tendency of using digital transformation seems to be crucial since it has benefits in many angles. Therefore, this study shed light on both theoretical and managerial implications.

The success of digital transformation depends on several factors. It has been learned that digital transformation would be successful since it provides learning and growth for business owners. It also offers the advantage of financial and internal business processes. Thus, we should facilitate the business owners in learning about the financial benefits and security prevention if we need to facilitate the use of digital transformation. In addition, digital transformation should be driven and supported by the government. Top-down support is indeed crucial for the successful implementation of digital transformation. Finally, facilitating knowledge

sharing and collaboration among street food vendors can have numerous benefits for both vendors and the wider community, by providing a platform for this, the government can play a pivotal role in supporting the growth and success of street food vendors.

The current study has identified certain findings, but it's important to note that these findings are based on a limited sample size. Therefore, further research studies should be conducted with a larger and more diverse group of street food vendors, or in different geographical areas, to validate and expand upon these findings. It can also be investigated among vendors who are successful in digital transformation in order to shed light on stronger findings and fill the gaps of digital transformation study. This broader scope of research may uncover additional significant findings and provide a more comprehensive understanding of the topic.

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