

ICTHM 2023**International Conference in Technology, Humanities and Management****EMPOWERING THE ENGAGEMENT OF DIGITAL MARKETING
DELIVERY SERVICES INNOVATION APPS**

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Abstract

Middle East, Türkiye, Malaysia, and Thailand have more than ten online food distributors. Food delivery service apps (FDS) use digital tools to engage and retain the countries' foodies. This project improves digital marketing, technology, and social media app practices. The speed of services, food prices, delivery rates, selections, deals, apps user interface, UI, user-friendliness, etc. distinguish them. Thus, this study examines the main factors influencing Türkiye, Malaysia, and Thailand customers' engagement using online food delivery services. The study collected 512 responses. The study examined the most important factors affecting customer engagement for food delivery services (FDS). We are focusing on four independent variables: types of digital media and tools, digital media selection in terms of technique, time, price, convenience apps motivation factor, and food illustration tools in engaging customers and sustaining business competitive advantage. The research will reveal the most important exogenous variable directly and sequentially affecting customer engagement. Customers want fast, easy, convenient transactions. Time factor consuming and convenience apps significantly affected customer engagement in food delivery services (FDS). This novel research project will improve FDS businesses, entrepreneurs, and the food industry.

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1. Introduction

In addition to revolutionising interpersonal communication, social media has paved the way for social commerce, a relatively new approach to online trade that has been developing since the early 2010s (Chiu et al., 2023). E-commerce and mobile platforms are quickly replacing the traditional brick-and-mortar paradigm as the preferred method of shopping for consumers (Srivastava et al., 2021). Customers are leaning towards internet stores at a rapid clip. Others have validated the significance of perceived usefulness in digital payment (P.H., 2023) and technical acceptability studies, demonstrating that consumers are more willing to buy when persuaded of the technology's utility (P.H., 2023). Researchers have found that social media influencers and network marketing significantly affect customers' purchase propensity. Due to the prevalence of online meal delivery services, the countries of Türkiye, Malaysia, and Thailand were selected as the unit of analysis. Occasionally, we may have been oblivious to shifts like the transactions occurring all around us (Chai & Yat, 2019). Whether they realize it or not, more and more people are using online food delivery (OFD) services while they dine out.

2. Problem Statement

E-commerce has flourished over the previous decade as more consumers have begun making their purchases online. The market determines the significance of some of these features, while others apply everywhere. Improvements in electronic payment security, the proliferation of online retail outlets, and the education of online consumers are all results of these trends (Ibrahim et al., 2022; Li et al., 2020). More and more people are using food delivery services, and most countries have at least one major operator. The internet food delivery sector is aggressively penetrating new consumer niches. According to research carried out by Li et al. (2020), Foodpanda's user base grew by a factor of 10 in 2018 after a promotion effort offering significant discounts. By 2023, the online food delivery sector is predicted to bring in \$2.31 billion in revenue. These points to a massive and steadily increasing need for food delivery services. The market experienced significant growth due to the COVID-19 Pandemic. The growth is noticeable in almost every industry. But what exactly drives consumers to make online grocery purchases? Why do some sectors expand at such a rapid rate? The attractiveness of the pictures and information provided, the accessibility of the food being sold, and the ease with which the client may order the food online are all elements that can impact a customer's inclination to buy (Le et al., 2023). Customers in Turkey (using services like Yemeksepeti, which has over 35,000 member restaurants, 18 million users, and 520,000 daily orders), Malaysia (using services like Grabfood, Food Panda, Air Asia Food, Shopee Food), and Thailand (using services like Grabfood, Line Man, Robin Hood, Food Panda) consider the savings in transportation costs when deciding whether or not to order food online.

Do people in Turkey, Malaysia, and Thailand believe that the money they save on transportation, gas, and parking when they order food online and have it delivered to their doorsteps outweighs the additional cost of doing so, or do the photos of appetizing food on the websites and apps influence people to make purchases? Despite the widespread adoption of alternative delivery apps, many restaurants in Turkey, Malaysia, and Thailand still use traditional methods. Turkey's demographic, economic, social, and environmental factors all play a role in the online shopping behaviours of individual households

(Karaaslan, 2021). Third-party delivery apps are extremely important to the success of many small restaurants in Malaysia, especially those without their own courier service (Ibrahim et al., 2022). Thai restaurants can increase their sales by relying on food delivery apps like Grab Food, Line Man, Food Panda, and Get Food (Jaroenwanit et al., 2022). This is because the food manufacturing firm is understaffed and inexperienced. Some are quite pricey because of complicated logistics and the expense of launching a whole delivery operation, including servers, software, drivers, and more. Well-known companies like McDonald's, Starbucks, and Burger King use these third-party platforms because of the scarcity of runners and the difficulties they provide in terms of logistics.

3. Literature review and hypotheses development

Nguyen et al. (2023) found that time-sensitive consumers, who are typically busy and on the lookout for time-saving solutions to their dining demands, should have their orders prioritised by food delivery applications. Because of this, users who are in a hurry may rely on food delivery applications to get their orders quickly and accurately. The time factor (TF) is one of among the most critical and influential aspects of utilising OFD services. Several individuals today just do not have the time or energy to prepare elaborate meals at home and then travel to a restaurant for dinner (Euromonitor, 2015). That's why we recommend a pull factor where their food is delivered to them. This helps individuals save time by allowing them to accomplish a task in less time than possible. Customers benefit from OFD services because of their convenience, ease of use, and order correctness (Dixon et al., 2009). A lack of in-depth research into determining specific information content stands in contrast to the fact that prior research has demonstrated that information quality plays a vital influence in developing good opinions of food delivery app customers. Despite the fact that prior studies have demonstrated the importance of high-quality information in shaping favourable impressions, this is still the case. According to Food on Demand (2019), customers' biggest gripes with meal delivery apps are a lack of customization options and long wait times for their food. This suggests that meal-delivery app services should include more information on the menu and the estimated time of delivery (Lee et al., 2023). About 70% of these food orders are supplied to households, implying that some of these deliveries are specifically designed for the household market. Based on that number, it appears that households are the primary source of capital for the food distribution business. Online shoppers gain value because of the time they save. Customers value online shopping because it offers conveniences like longer store hours, faster checkouts, and time savings and energy savings. The apps also provide instant, accurate details about the restaurants, their menus, and their prices. They also allow clients to observe the order's progress at each stage (Algharabat et al., 2017; Timur et al., 2023) for greater transparency. In addition, Inthong et al. (2022) found that the perceived utility of food-ordering applications greatly influenced people's intentions to use them. Customers' willingness to use Online Food Delivery services in Türkiye, Malaysia, and Thailand increases as a function of TF.

A study in Thailand found that if online food delivery services incorporated product and price, promotion, transaction information, information access, and customer service, it would increase consumer satisfaction and usage of the services (Cattapan & Pongsakornrunsilp, 2022). Customers are more likely to make a purchase when they have access to transparent information on pricing, ingredients, and

nutritional value (Le et al., 2023) when making a meal-ordering decision. Fair pricing is linked to increased consumer happiness and loyalty, as Yela Aránega et al. (2022) reported. Previous studies have found that consumers can choose from a wide range of food options and purchase things from a vast array of vendors at a variety of prices (Cho et al., 2019). In addition, Pandey et al. (2022) discovered that customers were more likely to adopt FDAs if they had more food options to choose from. The company that can provide the lowest price would see this as the most valuable website because customers can easily compare costs by going to different pages or using different OFD services applications. Liang et al. (2023) conducted research to learn how different price labelling techniques affect consumers' perceptions of price differences and subsequent purchasing decisions while making purchases online. The price inattention model and the theory of the numerosity effect provided the theoretical foundation for their results. Customers in Türkiye, Malaysia, and Thailand are more likely to use online food delivery services if the prices are lower.

Part of (Davis et al., 1989), (Dinev & Hu, 2007) Technology Acceptance Model (TAM) is used in this research. Many factors affect a consumer's decision to adopt and use a new technology when they become aware of it, as shown by TAM. Customers and businesses alike have used this term to describe the criteria that determine whether or not they would accept a new technology or system. It was found that usefulness positively influenced adoption intentions, and that ease of use was a major component in determining both usefulness and usefulness (Lee et al., 2023). Business graphics systems, e-commerce (Kim & Forsythe, 2008), smartphones (Chun et al., 2012), social networking (Pinho & Soares, 2011), mobile police (Lindsay et al., 2011), telework (Pérez et al., 2004), and social media, in particular, instant messaging services (Zhao et al., 2016), are all examples of such environments. These studies have demonstrated that the perceived usefulness and user-friendliness of various technologies can account for the ease or difficulty with which individuals adopt them. The rising demand for convenience has contributed to the rise in popularity of food delivery apps. After COVID-19, consumers have been found to place a higher value on noncontact consumption as a means of protecting their health (Arora & Sagar, 2023; Chotigo & Kadono, 2021; Kumar & Shah, 2021). A study by Inthong et al. (2022) found that in Thailand, app features should be used to attract customers who wish to order food quickly and easily. This facilitates instantaneous interaction between apps and users regarding product information, payment, and food delivery.

Customers in Türkiye, Malaysia, and Thailand are more likely to use online food delivery services if the Convenience Motivation Factor (CMF) is high.

In order to give a meal with an appealing aesthetic that would entice customers to purchase it, a study performed by Singh et al. (2022) found that emphasising the traditional appearance and character of a region's food is necessary. He also said that proprietors of eateries and food markets would do well to consider the prospect of producing a visually appealing image of food in order to draw in more consumers. As previously mentioned, the presentation is crucial as it reveals the initial impressions the product makes on the customer. High-quality food may be recognised by its superior ingredients, visually pleasing presentation, and flavour that completely satisfies the diner. A well-designed menu for an internet eatery should attract clients by highlighting the establishment's best sellers (Le et al., 2023; Saeed Meo et al., 2020). Moreover, customers are more likely to enjoy their meals when they are presented with

the perfect blend of ingredients. Spence (2020) agreed with the findings that customers' perceptions are heavily influenced by their sense of sight when it comes to enhancing their eating experiences. According to research conducted in Thailand by Siripipatthanakul et al. (2022), OFD service quality, convenience motive, and attitude, all had a role in customer engagement. Great service quality and appetising food images had a significant impact on customers' inclination to use OFD services, but they also resulted in high levels of customer engagement. One predictor of how a client rates the effectiveness of an application's output is the quality of the information and its presentation, according to research conducted in Turkey (Erkmen & Türegün, 2022). Customers' interest in and use of online food delivery services in Türkiye, Malaysia, and Thailand is positively correlated with the Food Illustration Factor (FIF).

4. Research Questions

- i. Is there any relationship between the time factor and customer engagement in using Online Technology Food Delivery services?
- ii. Is there any relationship between the price factor and customer engagement in using Online Technology Food Delivery services?
- iii. Is there any relationship between the convenience motivation factor and customer engagement in using Online Technology Food Delivery services?
- iv. Is there any relationship between the food illustration factor and customer engagement in using Online Technology Food Delivery services?
- v. Is there any relationship between the apps innovativeness factor and customer engagement in using Online Technology Food Delivery services?
- vi. Is there any relationship between the trust towards apps factor and customer engagement in using Online Technology Food Delivery services?

4.1. Conceptual Framework

The figure 1: conceptual framework illustrates how the IV and DV interact with one another. The model's independent variables (IV) are the time factor, cost factor, motivational factor of convenience, and illustration of food. The usage of apps for food delivery services online (OFDS) is the dependent variable (DV). Independent variables (IV) and dependent variables (DV) were mapped out in a way to test the hypothesis. Scientific issues and research aims inspired the following hypothesis:

Hypothesis 1: Time factor (TF) positively correlates with customer engagement of using Online Food Delivery services.

Hypothesis 2: Price Factor (PF) has a positive relationship with e customer engagement of using Online Food Delivery services.

Hypothesis 3: Convenience Motivation Factor (CMF) positively correlates with customer engagement of using Online Food Delivery services.

Hypothesis 4: Food Illustration Factor (FIF) has a positive relationship with customer engagement of using Online Food Delivery services.

Hypothesis 5: Apps Innovativeness Factor (AIF) has a positive relationship with customer engagement of using Online Food Delivery services.

Hypothesis 6: Trust Towards Apps Factor (TTF) has a positive relationship with customer engagement of using Online Food Delivery services.

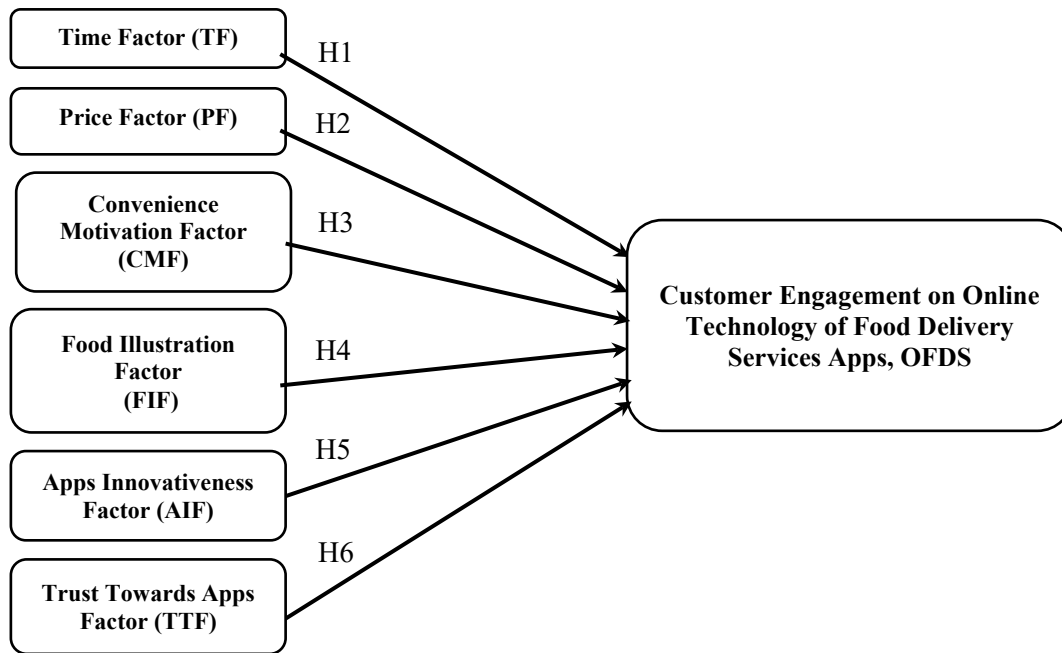


Figure 1. Conceptual Framework

5. Purpose of the Study

This research aims to learn how actively users and consumers in Turkiye, Malaysia, and Thailand are utilising the web technologies provided by meal delivery service apps. To collect information from the respondents, a technique called convenience sampling is used. To assess the constructs, we have created a questionnaire with 42 questions. The simplest approach is called convenience sampling, which involves selecting individuals based on their availability and interest.

6. Research Methods

To create the program for this data analysis, the descriptive quantitative method and analysis design approach will be structured. The analysis of the transformation data will yield information about the independent variable's volatility in the internet-based food delivery services apps, which affects consumer engagement. The decision-making process for this report will be evaluated using a survey, and the analysis's findings will be defined as significant data responses between two variables. This descriptive study's goal is to discover how consumers in Turkey, Malaysia, and Thailand intend to use online technology for food delivery services and what they plan to buy. Using a convenience sample method, the respondent's data are gathered. The non-probability convenience sampling method is the one

we are employing. Because participants are selected based on their willingness and ability to participate, convenience sampling is the most straightforward sort of sampling.

English will be used to administer the survey. Longer queries should be avoided in favour of shorter, simpler ones. Question 1 through 7 of Section A's demographic profile of respondents; Question 8 through Question 12 of Section B's respondents' experience with online food delivery services; Question 13 through Question 17 of Section C; Question 18 through Question 22 of Section E; Question 23 through Question 26 of Section F; Question 27 through Question 30 of Section G; Question 31 through Question 34 of Section H; Question To further understand their involvement with the product, respondents are asked to rate their level of agreement on a scale of 1 to 5, with 1 being completely opposed and 5 being strongly agree, from Section C to Section I. 512 respondents were obtained when surveys were sent to Turkiye, Malaysia, and Thailand utilising Google survey forms and social media sites including WhatsApp, Twitter, and YouTube.

7. Findings

The Reliability Test validated every aspect of the meal delivery service apps' dependability, from their timeliness and affordability to the quality of the photos they provide of the food they bring and the ease with which you can place an order. According to Cronbach's Alpha, the generated objects are a good representation of the variables; therefore they can be used in trustworthy follow-up studies. Analysis of the data demonstrates that the items belong to the same variable and that the data is sufficiently secure to be labelled as redundantly secure, meaning that the variables provided by the various things were in the correct order and placement. This study, which has a Pearson Correlation of 0.874, finds that customers place a premium on ease of use when selecting an online technological food delivery service. Customers place a premium on speed and ease of use, as evidenced by these results. Internet food delivery service users are often too busy to shop for and prepare their own meals, thus these services fill a much-needed void in their lives. They may not have time in their busy schedules to cope with traffic or the inconvenience of taking public transport. They could even use the services for their own family members, such as their parents and children. Products that meet these criteria are highly valued by this demographic. The ordering procedure should be straightforward. A user-friendly app is far more appealing to them. They also expect the app to remember their preferences so that the next time they use it, they may get exactly what they like. Making purchases would be less of a hassle for customers. Repeat customers are crucial since they have already invested in and benefited from the company's offerings. Thus, it is important that the transaction is as painless as possible.

7.1. Respondent's Profile

Analysis of the data shows that the respondents are users of app-based meal delivery services in the Middle East, Turkiye, Thailand, and Malaysia. The online survey that was administered had a disproportionately large number of responses from women as per shown in Table 1. The figure is 60.7% for females and 39.3% for males. Table 2 shows the median age of the 512 respondents was 29.7 years, and more than 61.1% were between the ages of 20 and 39. Only 5.7% of them were in their thirties. Less

than 5% of the total responses were between the ages of 50 and 59. Table 3 shows graduate and undergraduate students in great numbers answered the survey. A total of 32.8% of respondents with a graduate degree, followed by 31.4% of respondents with an undergraduate degree, and 28.3% of respondents with an A-Level, Diploma, or equivalent. In addition, 41.4% of those surveyed are themselves students. Table 4 shows only 13.3% of the population is employed by the government, whereas 35.4% labour in the private sector. A total of 512 responses came in, mostly from people in Turkiye, Malaysia, and Thailand.

Table 1. Frequencies of respondents' demographics (gender)

Tell us about your gender.	Frequency	Percent (%)	Cumulative Percent (%)
MALE	201	39.3	39.3
FEMALE	311	60.7	100
Total	512	100	

Table 2. Frequencies of respondents' demographics (age)

Tell us about your age.	Frequency	Percent (%)	Cumulative Percent (%)
20-29 years old	313	61.1	61.1
30-39 years old	152	29.7	90.8
40-49 years old	29	5.7	96.5
50-59 years old	18	3.5	100
Total	512	100	

Table 3. Frequencies of respondents' demographics (educational level)

Educational level.	Frequency	Percent (%)	Cumulative Percent (%)
High school and equivalent	38	7.4	7.4
A Level, Diploma, and equivalent	145	28.3	35.7
Undergraduates	161	31.4	67.2
Postgraduates	168	32.8	100
Total	512	100	

Table 4. Frequencies of respondents' demographics (occupation)

Occupation.	Frequency	Percent (%)	Cumulative Percent (%)
Student	212	41.4	41.4
Government employee	68	13.3	54.7
Private sector employee	181	35.4	90
Self-employed	28	5.5	95.5
Housewife	17	3.3	98.8
Unemployed	6	1.2	100
Total	512	100	

7.2. Pearson Correlation Finding and Analysis

Correlation is a statistical measure describing the degree of association between two variables or more. In this study, we used correlation to define the degree of association between factors affecting the intention to purchase using online technology food service delivery applications in the MiddleEast, Turkiye, Thailand, and Malaysia. Using the Pearson Correlation Coefficient, the results of the correlation and the relation between the dependent variable and independent variables can be interpreted. The score could range between -1.00 and +1.00. Table 5 shows the interpretative value.

Table 5. Value of Interpretation

Value	Interpretation
Less than .20	Very week relationship
.20 - .40	Weak relationship
.40 - .60	Moderate relationship
.60 - .80	Strong relationship
.80 – 1.00	Very strong relationship

Table 6. Summary of Pearson Correlation in engaging of Using Online Technology Food Delivery Services Apps in MIDDLE EAST, TURKIYE, THAILAND AND MALAYSIA

	a	b	c	d	e	f	g
a. OFDS Engagement							
b. TIME FACTOR	.874**						
c. PRICE FACTOR	.746**	.773**					
d. CONVENIENCE MOTIVATION FACTOR	.835**	.872**	.739**				
e. FOOD ILLUSTRATION FACTOR	.654**	.690**	.657**	.703**			
f. APPS INNOVATIVENESS FACTOR	.195**	.214**	.179**	.198**	.227**		
g. TRUST TOWARDS APPS FACTOR	.188**	.210**	.179**	.188**	.205**	.917**	

** Correlation is significant at the 0.01 level (2-tailed).

The Pearson Association Analysis in Table 6 reveals a significant positive correlation between two independent variables (the time factor and the convenience motivation component) and the dependent variable (using online technology food delivery apps). Time is the most important factor, with a score of 0.874, followed by convenience motivating factors, with values of 0.835. A correlation coefficient of 0.746 between the pricing element and the dependent time suggests a significant association between the

two. An image factor of 0.654 for food illustrations likewise suggested robust connections. App innovativeness factor and trust factor have the poorest correlation with other factors.

8. Conclusion

The growth of social media has created an interactive atmosphere that permits extended discussions and direct engagements with customers, therefore fostering connections that are more creative and casual. The theoretical literature around digital marketing will benefit greatly from the study's conclusions. We learned a great deal from the research that may be used to enhance the efficiency and satisfaction of apps that facilitate the delivery of food ordered online. The number of people who rely on their smartphones has skyrocketed in recent years. Smartphones have become indispensable for doing daily tasks and chores. That's why it's crucial for businesses to zero in on what it is that consumers truly value. According to the data, customers regularly place orders for two to four diners at once. As a result, additional options for meals for two to four diners should be made available. Since consumers often spend less than \$10, there is a narrow price window in which to operate. The research also shows that clients prefer to get fast food through online food delivery services rather than other forms of cuisine. It's evident that fast food is where it's at in terms of online meal delivery, with the vast majority of the market share. Perhaps because of their advertising campaigns or for some other reason, certain fast-food businesses are currently seeing growth. However, to compete with other eateries serving the same or similar food, some may need to employ more forceful advertising and promotion methods. This study found that the convenience motivation element was the most influential when choosing which online food delivery service to use. This demographic highly values apps that are simple to access and use. It should be easy to place an order. Customers who have previously purchased from and used a business's products or services are invaluable. This means there shouldn't be a lot of hoops to jump through. On the other hand, customers appreciate it when businesses work fast to deliver their food orders. People don't want to wait around for their meals. Ordered meals should arrive at their destinations in less than 30 minutes. By placing their orders in advance, customers would have more control over the arrival of their food. Because of this, consumers would have a much better experience, as they could manage their time and schedule better and focus on other chores while still having their meals on time, as they want it.

The prices of these services significantly influence the willingness of consumers to use applications that provide online food delivery. They will make sure that their investment pays off for them. In many cases, price will be more important than other considerations. Therefore, both the app service provider and the restaurant must get creative when setting meal prices and delivery fees to meet their financial goals. However, it has been said that visually appealing food plating increases sales. However, it's possible that, at least initially, clients aren't primarily interested in this online food delivery service. The app's food illustration isn't as important to customers as other aspects of the ordering process. Our study concluded that customers' desire to save time and effort when ordering meals online makes convenience the most important consideration in deciding which food delivery app to choose. Any innovative technological advancement aims to make everyone's life easier. More regular usage of the selected apps would lead to consistent repeat purchases, especially among those who frequently use online meal delivery services.

As a result, it is vital for operators and app developers to properly understand their customers and design and maintain their apps to make them as convenient as possible to retain customer loyalty. By adhering to these principles, as well as continuing new and trendy marketing efforts, the company will be able to maintain a significant market share within Türkiye, Malaysia and Thailand in today's ever demanding and extremely competitive industry in the online meal delivery services sector. It is vital for industry players to always update themselves and be completely aware of the changes in consumer demands and wants and being a step ahead of other competitors will undoubtedly become a competitive advantage for a company that always understands its customers better. This research not only aids service providers in providing far better services to their customers, but it may also elevate Türkiye, Malaysia and Thailand food delivery services market.

Finally, consumers are the focal group that will be satisfied with the services and will eventually utilize them more regularly. This will result in increased spending rates for each customer, which will undoubtedly benefit the economy. The service providers' companies will make more money, they have more resources to upgrade their systems and provide better customer experiences. The framework of this study could also be used to study other platforms, such as the online purchasing platform for buying cars. The platform is brand new in Türkiye, Malaysia and Thailand, where understanding what motivates customers to use the services will be able to increase and win more market share.

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References

- Algharabat, R., Abdallah Alalwan, A., Rana, N. P., & Dwivedi, Y. K. (2017). Three dimensional product presentation quality antecedents and their consequences for online retailers: The moderating role of virtual product experience. *Journal of Retailing and Consumer Services*, 36, 203-217. <https://doi.org/10.1016/j.jretconser.2017.02.007>
- Arora, S., & Sagar, M. (2023). Health communication for behavior change: evolution of a marketing framework. *Journal of Social Marketing*, 13(1), 41-62. <https://doi.org/10.1108/jsocm-12-2021-0275>
- Cattapan, T., & Pongsakornrungrungsilp, S. (2022). Impact of omnichannel integration on Millennials' purchase intention for fashion retailer. *Cogent Business & Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2087460>
- Chai, L. T., & Yat, D. N. C. (2019). Online food delivery services: Making food delivery the new normal. *Journal of Marketing advances and Practices*, 1(1), 62-77.
- Chiu, W., Oh, G.-E. G., & Cho, H. (2023). An integrated model of consumers' decision-making process in social commerce: a cross-cultural study of the United States and China. *Asia Pacific Journal of Marketing and Logistics*, 35(7), 1682-1698. <https://doi.org/10.1108/apjml-01-2022-0029>
- Cho, M., Bonn, M. A., & Li, J. J. (2019). Differences in perceptions about food delivery apps between single-person and multi-person households. *International Journal of Hospitality Management*, 77, 108-116. <https://doi.org/10.1016/j.ijhm.2018.06.019>

- Chotigo, J., & Kadono, Y. (2021). Comparative Analysis of Key Factors Encouraging Food Delivery App Adoption Before and During the COVID-19 Pandemic in Thailand. *Sustainability*, 13(8), 4088. <https://doi.org/10.3390/su13084088>
- Chun, H., Lee, H., & Kim, D. (2012). The Integrated Model of Smartphone Adoption: Hedonic and Utilitarian Value Perceptions of Smartphones Among Korean College Students. *Cyberpsychology, Behavior, and Social Networking*, 15(9), 473-479. <https://doi.org/10.1089/cyber.2012.0140>
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982-1003. <https://doi.org/10.1287/mnsc.35.8.982>
- Dinev, T., & Hu, Q. (2007). The Centrality of Awareness in the Formation of User Behavioral Intention toward Protective Information Technologies. *Journal of the Association for Information Systems*, 8(7), 386-408. <https://doi.org/10.17705/1jais.00133>
- Dixon, M. J., Kimes, S. E., & Verma, R. (2009). Customer Preferences for Restaurant Technology Innovations. *The Centre for Hospitality Research*. https://www.aecoc.es/aecoc/download.php?id_doc=25184&id=CORNELLSTUDY.pdf&folder=documento_socio
- Erkmen, E., & Türegün, N. (2022). Success model of online food delivery system: The role of brand image in customer responses. *Innovative Marketing*, 18(2), 148-160. [https://doi.org/10.21511/im.18\(2\).2022.13](https://doi.org/10.21511/im.18(2).2022.13)
- Euromonitor. (2015). *Consumer foodservice in 2022: The big picture*. Retrieved on May 10, 2023, <http://www.euromonitor.com/consumer-foodservice-in-malaysia/report>
- Food on Demand. (2019). *Survey identifies big delivery gripes, driver's dirty secrets*. Retrieved on May 10, 2023, <https://foodondemandnews.com/07252019/survey-identifies-big-delivery-gripes-drivers-dirty-secrets/>
- Ibrahim, M. A., Ruslan, R. A. H. M., Abd Hamid, N. H., & Bin Abdullah, M. F. (2022). The impact of online food delivery services on the financial performance of restaurant businesses in Malaysia. *Journal of Entrepreneurship, Business and Economics*, 10(2S2), 55-70.
- Inthong, C., Champahom, T., Jomnonkwo, S., Chatpattananan, V., & Ratanavaraha, V. (2022). Exploring Factors Affecting Consumer Behavioral Intentions toward Online Food Ordering in Thailand. *Sustainability*, 14(14), 8493. <https://doi.org/10.3390/su14148493>
- Jaroenwanit, P., Abbasi, A., & Hongthong, P. (2022). Determinants of customers' intention to use online food delivery platforms in Thailand. *Uncertain Supply Chain Management*, 10(3), 747-758. <https://doi.org/10.5267/j.uscm.2022.4.007>
- Karaaslan, K. Ç. (2021). Determinants of online shopping attitudes of households in Turkey. *Journal of Modelling in Management*, 17(1), 119-133. <https://doi.org/10.1108/jm2-04-2021-0101>
- Kim, J., & Forsythe, S. (2008). Adoption of Virtual Try-on technology for online apparel shopping. *Journal of Interactive Marketing*, 22(2), 45-59. <https://doi.org/10.1002/dir.20113>
- Kumar, S., & Shah, A. (2021). Revisiting food delivery apps during COVID-19 pandemic? Investigating the role of emotions. *Journal of Retailing and Consumer Services*, 62, 102595. <https://doi.org/10.1016/j.jretconser.2021.102595>
- Le, T., Tuyet, N. B. T., Anh, T. L., Kim, N. D. T., Thai, N. T. T., & Lan, A. N. (2023). The effects of online restaurant menus on consumer purchase intention: evidence from an emerging economy. *British Food Journal*, 125(7), 2663-2679. <https://doi.org/10.1108/bfj-10-2022-0916>
- Lee, W. S., Song, M., Moon, J., & Tang, R. (2023). Application of the technology acceptance model to food delivery apps. *British Food Journal*, 125(1), 49-64. <https://doi.org/10.1108/bfj-05-2021-0574>
- Li, C., Miroso, M., & Bremer, P. (2020). Review of Online Food Delivery Platforms and their Impacts on Sustainability. *Sustainability*, 12(14), 5528. <https://doi.org/10.3390/su12145528>
- Liang, W., Zhou, D., Rizwan, M., & Huseynov, S. (2023). How price labeling strategy affects consumers' purchase intention? The role of perceived price difference in price assessment. *Asia Pacific Journal of Marketing and Logistics*. <https://doi.org/10.1108/apjml-11-2022-0917>
- Lindsay, R., Jackson, T. W., & Cooke, L. (2011). Adapted technology acceptance model for mobile policing. *Journal of Systems and Information Technology*, 13(4), 389-407. <https://doi.org/10.1108/13287261111183988>

- Nguyen, T., Huang, E., & Nguyen, D. M. (2023). Food delivery app continuance: a dual model and segmentation approach. *International Journal of Retail & Distribution Management*, 51(5), 569-589. <https://doi.org/10.1108/ijrdm-06-2022-0217>
- P.H., H. (2023). Mobile payment service adoption: understanding customers for an application of emerging financial technology. *Information & Computer Security*, 31(2), 145-171. <https://doi.org/10.1108/ics-04-2022-0058>
- Pandey, S., Chawla, D., & Puri, S. (2022). Food delivery apps (FDAs) in Asia: an exploratory study across India and the Philippines. *British Food Journal*, 124(3), 657-678. <https://doi.org/10.1108/bfj-01-2020-0074>
- Pérez, M. P., Sánchez, A. M., De Luis Carnicer, P., & Jiménez, M. J. V. (2004). A technology acceptance model of innovation adoption: the case of teleworking. *European Journal of Innovation Management*, 7(4), 280-291. <https://doi.org/10.1108/14601060410565038>
- Pinho, J. C., & Soares, A. M. (2011). Examining the technology acceptance model in the adoption of social networks. *Journal of Research in Interactive Marketing*, 5(2/3), 116-129. <https://doi.org/10.1108/17505931111187767>
- Saeed Meo, M., Kanwal, S., Ali, S., Abd Karim, M. Z., & Zamir Kamboh, A. (2020). The Future and Challenges of Applying Innovative Technologies in the Tourism and Hospitality Industry in Asia. *Handbook of Technology Application in Tourism in Asia*.
- Singh, G., Singh, G., Ferraris, A., & Sharma, R. (2022). Exploring consumers' domestic gastronomy behaviour: a cross-national study of Italy and Fiji. *International Journal of Contemporary Hospitality Management*, 34(9), 3353-3375. <https://doi.org/10.1108/ijchm-10-2021-1251>
- Siripipatthanakul, S., Limna, P., Siripipattanakul, S., & Auttawechasakoon, P. (2022). The Impact of TPB Model on Customers' Intentions to Buy Organic Foods: A Qualitative Study in Angsila-Chonburi, Thailand. *Psychology and Education Journal*, 59(2), 419-434. <https://ssrn.com/abstract=4109868>
- Spence, C. (2020). Multisensory Flavour Perception: Blending, Mixing, Fusion, and Pairing within and between the Senses. *Foods*, 9(4), 407. <https://doi.org/10.3390/foods9040407>
- Srivastava, R., Rathore, J. S., & Singh, H. (2021). An empirical study on channel attributes of online and offline channels based on Engel-Kollat-Blackwell (EKB) model. *World Review of Entrepreneurship, Management and Sustainable Development*, 17(6), 864. <https://doi.org/10.1504/wremsd.2021.10042150>
- Timur, B., Oğuz, Y. E., & Yilmaz, V. (2023). Consumer behavior of mobile food ordering app users during COVID-19: dining attitudes, e-satisfaction, perceived risk, and continuance intention. *Journal of Hospitality and Tourism Technology*, 14(3), 460-475. <https://doi.org/10.1108/jhtt-04-2021-0129>
- Yela Aránega, A., Ferraris, A., Baima, G., & Bresciani, S. (2022). Guest editorial: Sustainable growth and development in the food and beverage sector. *British Food Journal*, 124(8), 2429-2433. <https://doi.org/10.1108/bfj-08-2022-084>
- Zhao, Q., Chen, C., & Wang, J. (2016). The effects of psychological ownership and TAM on social media loyalty: An integrated model. *Telematics and Informatics*, 33(4), 959-972. <https://doi.org/10.1016/j.tele.2016.02.007>