

## AI-assisted Food Ordering and Delivery Management System for KFC: Insights from Malaysia, Indonesia, and India

Loke Kean Koay<sup>1</sup>, Padmavathy A/P Sanderan<sup>2</sup>, Hui Ling Pong<sup>3</sup>, Zi Ying Poon<sup>4</sup>,  
Sahliny A/P Marimuthu<sup>5</sup>, Aulia Purdiana Gisca<sup>6</sup>, Manshi Gupta<sup>7</sup>, Mansi Saxena<sup>8</sup>,  
Daisy Mui Hung Kee<sup>9</sup>

ViTrox College<sup>1</sup>

Universiti Sains Malaysia<sup>2, 3, 4, 5, 9</sup>

Universitas Brawijaya<sup>6</sup>

APJ Abdul Kalam Technological University<sup>7, 8</sup>

Correspondence Email: [padma\\_2302@student.usm.my](mailto:padma_2302@student.usm.my)

ORCID ID: 0009-0008-0132-3932

### ARTICLE INFORMATION

#### Publication information

#### Research article

#### HOW TO CITE

Koay, L. K., Sanderan, P., Pong, H. L., Poon, Z. Y., Marimuthu, S., Gisca, A. P., Gupta, M., Saxena, M., Kee, D. M. H. (2023). AI-assisted Food Ordering and Delivery Management System for KFC: Insights from Malaysia, Indonesia and India. *Journal of The Community Development in Asia*, 6(3), 331-345.

DOI: <https://doi.org/10.32535/jcda.v6i3.2540>

Copyright © 2023 owned by Author(s).  
Published by JCDA



This is an open-access article.  
License: Attribution-Noncommercial-Share Alike (CC BY-NC-SA)

Received: 20 July 2023  
Accepted: 20 August 2023  
Published: 20 September 2023

#### ABSTRACT

AI-assisted food ordering and delivery management systems are revolutionary technologies which aims to improve the ordering and delivery process of food by incorporating artificial intelligence. Hence, most of the restaurant owners had implemented AI-assisted food ordering and delivery management systems for improving the business efficiency and customer satisfaction. The objective of this paper is to evaluate how the AI-assisted service can create efficient planning and better customer satisfaction, predict consumer behavior which can save time and wastage of products for the restaurants. There were 100 respondents who participated in the online survey. The study and findings indicate that perceived convenience, reliability, price, ease of use, enjoyment, trust, social influence, and attitude influence consumers' behavioral intentions for food delivery services. Subsequently, this research contributes to a deeper understanding of the AI-assisted food ordering and delivery management system for restaurants. Recommendations and consequences were presented.

**Keywords:** Attitude, Behavioral Intention, Ease of Use, Enjoyment, Perceived Convenience, Social Influence, Trust

## INTRODUCTION

Artificial intelligence, or AI, is the ability of computers to understand, learn, and make decisions similarly to humans. It basically involves the development of computers that can perform human tasks such as voice recognition, speech recognition, decision-making, and translation of languages. Although the idea of AI was developed as early as the first half of the 20th century, John McCarthy and Marvin Minsky first used the term "artificial intelligence" in 1956 at the Dartmouth Summer Research Project on Artificial Intelligence (DSRPAI), where they discussed how humans could use machines for problem-solving and decision-making (Anyoha, 2017). AI is one of the advanced technologies that has transformed food ordering and delivery management systems. The system is designed with artificial intelligence that allows it to learn the restaurant's menu, track orders, and make informed decisions based on the client's preferences. With this system, restaurants can easily manage their operations, optimize their menus, and make their services more efficient.

Whether in Malaysia, Indonesia, India, or around the world, AI-assisted food ordering and delivery management systems have significantly improved food ordering and delivery services as well as customer satisfaction. AI technology is integrated into this system to enhance the automation of food ordering and delivery processes (Jessica, 2022). This system ensures more streamlined and efficient services for customers. The fast-food industry is no exception and is gradually transitioning to align its operations. Based on this, one company that has adopted AI in its food ordering and delivery management system is KFC, a popular fast-food chain that has been expanding its reach globally. KFC, which stands for Kentucky Fried Chicken, is a renowned fast food restaurant chain known for its mouthwatering fried chicken. KFC was the main fast-food chain that led the industry and was expanded globally (Lew et al., 2023). Founded by Colonel Harland Sanders in 1952, KFC has grown into a global brand with thousands of outlets across the world. Its signature blend of 11 herbs and spices has become a legendary recipe, continuing to tantalize taste buds and captivate consumers worldwide. With its emphasis on quality ingredients, efficient service, and consistent flavors, KFC has established itself as a dominant player in the fast-food industry.

KFC is known for its slogan "It's Finger Lickin' Good!" The slogan perfectly captures the essence of the fast-food chain's mouthwatering and irresistibly delicious fried chicken, enticing customers to indulge in a finger-licking experience like no other. This remarkable slogan encapsulates the core value of the brand, emphasizing the quality and satisfaction that KFC consistently delivers. Another aspect that sets KFC apart is its focus on customer service. From the moment you step into their restaurants, you are greeted with a warm and friendly atmosphere. The staff is well-trained, attentive, and ensures that every customer's needs are met. They handle order accuracy diligently and provide prompt service, ensuring minimal waiting times. Moreover, KFC maintains a strong online presence, making it convenient for customers to place orders and provide feedback, further enhancing their overall experience.

Moreover, KFC's emphasis on innovation and product diversification helps sustain its expansion. The company continuously introduces new menu items and revamps existing offerings to cater to evolving consumer tastes. By staying ahead of trends and adapting their offerings accordingly, KFC increases its appeal to a wider customer base. Their use of technological advancements, such as mobile ordering and delivery apps, further showcases their intelligence in utilizing modern tools to expand their customer reach. Artificial intelligence has transformed various aspects of KFC's operations, from customer service to cooking efficiency. With the deployment of AI-powered chatbots and voice recognition systems, KFC has enhanced its customer experience by providing personalized and real-time assistance. Moreover, AI algorithms have optimized kitchen operations, reducing cooking times and enhancing food quality. By utilizing AI technology, the fast-food franchise offers a customer experience that stands out from others. The AI technology used by KFC is a clear indication of how the fast-food industry is evolving.

## **LITERATURE REVIEW**

### **Behavioral Intention**

Consumer behavior is the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy their needs and wants. It is a multidisciplinary field that incorporates concepts and theories from psychology, sociology, economics, anthropology, and other related disciplines. Many factors influencing consumer behavior, including psychological, social, cultural, personal, and economic factors. Lackermair, Kailer, and Kanmaz (2013) showed that online reviews and ratings have a strong impact on providing valuable insights and information for consumers and can significantly influence their purchasing intention. Moreover, behavior intentions also refer to the possibility that a customer will do a particular action, including their willingness to pay more for a particular good or service and their intention to spread the news about it. It is individual's likelihood of engaging in the behavior of interest (Aryani et al., 2022). This study investigates the relationship between the behavioral intention of customers to use AI-assisted systems and influencing factors such as perceived usefulness, ease of use, enjoyment, trust, social influence, and attitude. Additionally, the aim of this research is to find out whether attitudes of consumers may be influenced by perceived usefulness, ease of use, enjoyment, trust, and social influence.

### **Ease of Use**

Perceived ease of use refers to consumers' perception of how effortless and user-friendly an AI-assisted system is to interact with. Consumers are more likely to intend to use an AI-assisted system if it is designed to be user-friendly, with a simple and intuitive interface. When consumers find it easy to navigate through the system, locate menu options, and understand the ordering process, it enhances their perception of ease of use and increases their behavioral intention to use it. Research has shown that user-friendliness significantly affects users' acceptance and usage intention of technology (Venkatesh, Morris, Davis, & Davis, 2003). An AI-assisted system that is intuitive and aligns with consumers' mental models and expectations enhances their perception of ease of use. When consumers can easily understand the system's functionalities and predict its behavior, it reduces the cognitive burden and increases their intention to use it. Davis (1989) reported that the perceived intuitiveness of a system positively influences users' acceptance and adoption of technology. As such, the following hypothesis were developed:

*H1: Perceived ease of use positively influences consumer behavior intention.*

*H7: Perceived ease of use positively influences consumer attitudes.*

### **Enjoyment**

Enjoyment refers to the positive and convenient experience that customers have when interacting with the AI-assisted system. Consumers often find novelty and innovation appealing. Introducing novelty and variety can help to counteract this effect and maintain enjoyment. When consumers perceive the AI-assisted system as innovative and unique, offering something different from traditional ordering methods, it creates a sense of excitement and novelty that enhances their enjoyment. The perception of novelty has been found to positively impact users' adoption and acceptance of technology (Agarwal & Prasad, 1998). The study showed that if the AI-assisted system provides engaging and interactive features, such as intuitive navigation, real-time feedback, or personalized interactions, it enhances consumers' enjoyment and satisfaction. Hence, the researchers postulate:

*H2: Perceived enjoyment positively influences consumer behavior.*

*H8: Perceived enjoyment positively influences consumer attitudes.*

### **Perceived Convenience**

Perceived convenience refers to consumers' subjective perception of how easy and efficient the AI system at KFC makes the food ordering and delivery process. When consumers perceive the AI system as convenient, it implies that it offers advantages and benefits that save time, effort, and enhance the overall experience. If the system simplifies the ordering process, reduces wait times, and provides a seamless experience, consumers recognize its usefulness in saving time and effort. According to Obermeier, Klingersberger, and Auinger (2022), customer perception of the self-service kiosk's functionality represents a utilitarian value, and the convenience of the place is an important factor in influencing usage intentions towards a self-service kiosk. Self-ordering kiosks have been found to be useful in improving order accuracy, reducing wait times, and boosting check sizes (Pendril, n.d.). These benefits can contribute to a positive perception of convenience among consumers. Features such as menu customization, nutritional information, or allergy alerts can contribute to a more personalized and enjoyable experience. Perceived convenience is a key factor in retail and services marketing, as it affects customer satisfaction and loyalty. It can improve their overall dining experience at KFC (Venkatesh, Morris, Davis, & Davis, 2003). Hence, hypothesis of this study is:

*H3: Perceived convenience positively influences consumer behavior intention.*

*H9: Perceived convenience of the AI-assisted system positively influences consumer attitudes.*

### **Social Influence**

Social influence refers to how consumers perceive the opinions, recommendations, and experiences of others in their decision-making process. Consumers' perception of the opinions and recommendations of others, such as friends, family, or online reviews, can impact their behavioral intentions. When it comes to using an AI-assisted food

ordering and delivery management system, consumers often rely on social cues from various sources to form their behavioral intention. Positive word-of-mouth, social media endorsements, or online ratings and reviews can increase consumers' intention to use the AI-assisted system. A study conducted by Bickart and Schindler (2001) showed that word-of-mouth has a strong influence on consumer behavior, particularly in the context of technology adoption. Several studies have demonstrated the impact of online reviews on consumers' decision-making and purchase intention (Cheung & Thadani, 2012; Zhu & Zhang, 2010). Endorsements from influencers, bloggers, or celebrities can greatly impact consumers' attitudes and intentions toward using the AI-assisted system. Social media endorsements have been found to have a persuasive effect on consumer behavior and brand attitudes (Jin & Phua, 2014). With this, it is hypothesized that:

*H4: Social influence positively influences consumer behavior intention.*

*H10: Social influence positively influences consumer attitude.*

### **Trust**

Trust is an essential factor in customers' willingness to use AI-assisted food ordering and delivery management systems. Consumers' trust in the AI system and their perception of its reliability are significant determinants of behavioral intention. If consumers trust the system's accuracy in processing orders, maintaining privacy and security, and delivering the expected service, they are more likely to intend to use it. When a brand can continuously meet the expectations of their customers, this leads to long-term relationships with the customers (Shin, Kim, & Severt, 2019). Therefore, this study hypothesizes that:

*H5: Trust in the AI-assisted system positively influences consumer behavior intention.*

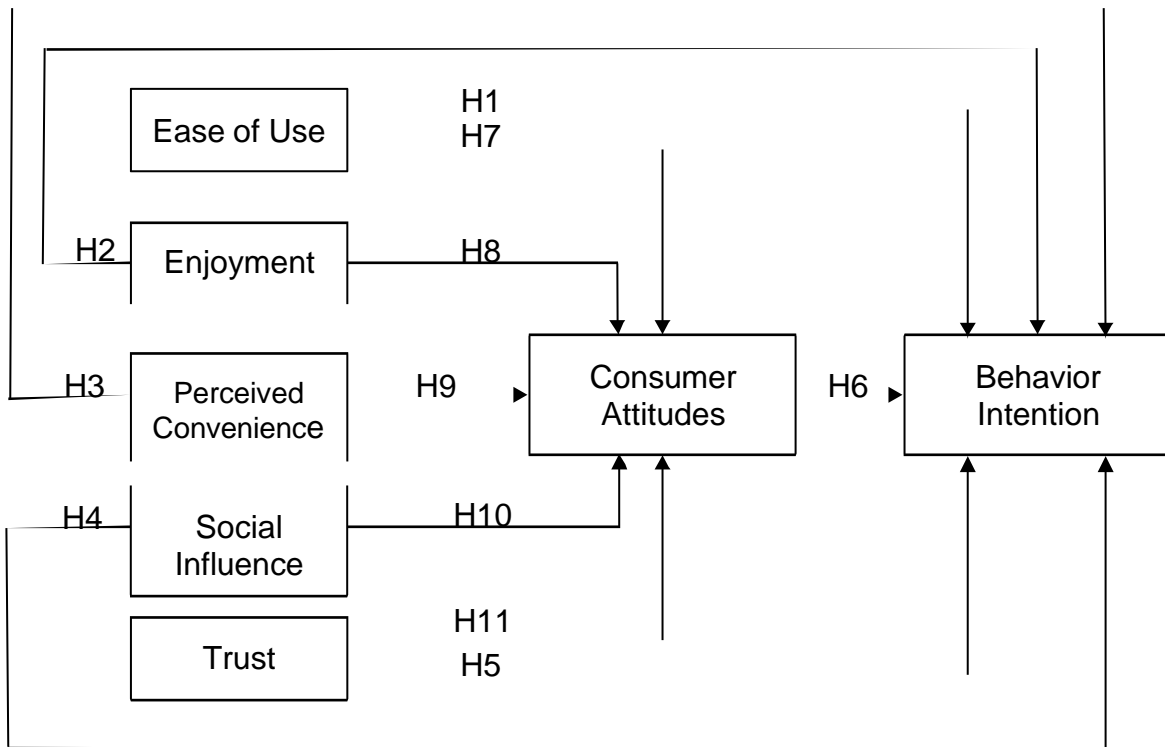
*H11: Trust in the AI-assisted system positively influences consumer attitudes.*

### **Attitude**

According to Gupta and Duggal (2021), a consumer's attitude has a substantial impact on his behavioral intention to choose, use, and support the service as well as contribute to its promotion. Consumer attitude refers to an individual's overall evaluation, perception, or feeling towards a product, service, brand, or specific aspect of the marketing mix. It represents the consumer's predisposition or inclination to respond favorably or unfavorably to a particular offering or marketing stimulus. In addition, consumer attitudes are shaped by various factors, including personal experiences, social influences, marketing communications, and cultural factors. Attitudes can be formed through direct experience with the product or service, learning from others, or through exposure to advertising and promotional messages. According to Churchill (1979) and Fishbein & Ajzen (1975), various measurement approaches such as self-report scales, Likert scales, semantic differential scales can help to quantify and understand the strength and direction of consumer attitudes. As such, this study hypothesized that:

*H6: Attitude towards the AI-assisted system positively influences consumer behavioral intention to use it.*

**Figure 1.** Presents the research framework of this study. A total of 11 hypotheses are formulated.



### RESEARCH METHODOLOGY

Both primary and secondary data were used in this research. The Google Form was used to collect primary data from 100 KFC customers from Malaysia, India, and Indonesia. To ascertain their behavioral intention to use KFC's food ordering and delivery platform, targeted users of the company's AI-assisted food ordering and online food delivery services in Malaysia, India, and Indonesia were surveyed online using Google Form. The online questionnaire is chosen because it is more comprehensive in obtaining respondents from a wider scope (Aryani et al., 2022). The response options range from one (strongly agree) to five (strongly disagree) on a five-point Likert scale. The intended respondents, users of online food delivery services that use food delivery software systems and AI-assisted food ordering, received the survey. Appendix 1 has a list of all measurements. Descriptive and multiple regression analyses were done to evaluate the data using IBM SPSS Statistics 26. The internet, journals, publications, KFC's official websites, and other secondary sources were also utilized to assist this study. The theoretical framework directs the researchers in connecting the relevant components and correlating them. Researchers have developed a framework to link attitude, ease of use, enjoyment, perceived convenience, social influence, perceived trust and perceived security to the consumers' behavioral intentions. Through this survey, 100 responses were obtained.

Table 1 shows the summarized respondents' demography. 65% of the respondents are female, and majority are Malaysian (48%). Besides, most of the respondents are Generation Z, 18-24 years old (77%), and 56% of the total respondents were highly educated as their educational level is a bachelor's degree. 57% are from the unemployed, and 63% have no income.

**Table 1.** Respondent Profile's Summary (N=100)

<b>Response</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>		
Female	65	65.0
Male	35	35.0
<b>Age</b>		
18 - 24	77	77.0
25 - 34	18	18.0
35 - 44	2	2.0
45 - 54	2	2.0
55 and above	1	1.0
<b>Country</b>		
India	48	48.0
Indonesia	22	22.0
Malaysia	30	30.0
<b>Education Level</b>		
High School, Diploma or equivalent	15	15.0
Bachelor's Degree	56	56.0
Master's Degree	26	26.0
Doctorate degree (PhD)	2	2.0
Others	1	1.0
<b>Employment Status</b>		
Full time	22	22.0
Part time	3	3.0
Self-employed	6	6.0
Unemployed	57	57.0
Others	12	12.0
<b>Annual Income</b>		
Less than RM 25,000	18	18.0
RM 25,000 – RM 50,000	8	8.0
RM 50,001 – RM 100,000	4	4.0
RM 100,001 – RM 200,000	7	7.0
No income	63	63.0

### Measures

This study adopted the consumer behavioral intention scale measures from Jun, Yoon, and Lee (2021). We applied a sum of 22 items, including "The online food delivery platform is convenience in food ordering", "It is comfortable when I use the technology to order food at KFC" and "Ordering food at KFC is a smooth task" to test consumers' perceived convenience, ease of use and enjoyment of AI-assisted food ordering and delivery systems. Additionally, measures such as "I trust the security of using an AI-assisted system at KFC", "Using the AI- assisted food ordering and delivery system at KFC is a positive idea", and "I will use the AI- assisted food ordering and delivery system at KFC in the future" are applied to test consumers' trust, social influence, attitude and behavioral intention towards AI-assisted food ordering and delivering at KFC. Every item was organized based on a five-point Likert scale, ranging from one (Strongly agree) to five (Strongly disagree) through the questionnaire. Cronbach's coefficients alpha for perceived convenience, ease of use, and enjoyment were 0.083, 0.182, and 0.083 respectively. On the contrary, Cronbach's alpha coefficients for trust, social influence, attitude, and behavioral intention were 0.146, 0.438, -0.121 and 0.105.

## RESULTS

**Table 2.** Descriptive Analysis, Cronbach's Coefficients Alpha and Zero- Order Correlations for All Study Variables

Variables	1	2	3	4	5	6	7
<b>1. Ease of Use</b>	<b>.182</b>						
<b>2. Enjoyment</b>	.712**	<b>.083</b>					
<b>3. Perceived Convenience</b>	.712***	1.000***	<b>.083</b>				
<b>4. Social Influence</b>	.262***	.139	.139	<b>.438</b>			
<b>5. Trust</b>	.688**	.535**	.535**	.311**	<b>.146</b>		
<b>6. Attitude</b>	.583	.887***	.887***	.035	.649***	<b>-.121</b>	
<b>5. Behavioral Intention</b>	.204*	.182	.182	.258**	.246**	.105	<b>.105</b>
<b>Number of Items</b>	2	4	4	2	4	3	3
<b>Mean</b>	1.7700	1.8150	1.8150	1.1950	1.4800	2.0400	2.1267
<b>Standard Deviation</b>	.63731	.51200	.51200	.31699	.30912	.65010	.49866

Note: N = 100; \*p < .05, \*\*p < .01. The diagonal entries represent Cronbach's coefficient alpha.



**Table 3.** Regression Analysis

<b>Variables</b>	<b>Behavioral Intention</b>
1. Ease of Use	- .188
2. Enjoyment	
3. Perceived Convenience	.600
4. Social Influence	.123
5. Trust	.389
6. Attitude	-.574
R <sup>2</sup>	.137
F Value	2.996
Durbin-Watson Statistic	1.658

Note: N = 200

The analysis of the corrected data table focuses on the variables: Ease of Use, Enjoyment, Perceived Convenience, Social Influence, Trust, Attitude, and Behavioral Intention. Descriptive statistics provide an overview of the variables, indicating their means and standard deviations. To evaluate the effect of Ease of use, Enjoyment, Perceived convenience, social influence, trust, and attitude on behavioral intention, the researchers must understand the correlation between the variables, as well as the strength or weakness of the correlation. The descriptive statistics and correlations among study variables were shown in table 2.

Ease of Use has a mean of 1.7700 and a standard deviation of 0.63731, suggesting a moderate level of perceived user-friendliness. Enjoyment and Perceived Convenience have a mean of 1.8150 and a standard deviation of 0.51200, indicating a relatively consistent perception of dependability. Social influence has a mean of 1.1950 and a standard deviation of 0.31699. Trust has a mean of 1.4800 and a standard deviation of 0.30912, suggesting a moderate level of confidence. Attitude has a mean of 2.0400 and a standard deviation of 0.65010, indicating a relatively high level of attitude. Lastly, Behavioral Intention has a mean of 2.1267 and a standard deviation of 0.49866, but further information is needed to fully understand its distribution.

Table 3 presents the summary of regression analysis. As detailed in the table, ease of use, enjoyment, perceived convenience, social influence, trust, and attitude were independent variables, while the dependent variable was behavioral intention. Ease of Use show a statistically significant relationship, suggesting that ease of use alone may not significantly impact behavioral intention. On the other hand, attitude does not have a significant positive relationship with behavioral intention. Trust and Perceived Convenience show statistically significant relationships with Behavioral Intention. The overall regression model is statistically significant, as indicated by the F value of 2.996, indicating that the independent variables collectively have some influence on behavioral intention. However, the Durbin-Watson statistic of 1.658 does not provide insights into the relationships between variables.

In summary, based on the updated analysis, Ease of Use, Trust, and Perceived Convenience show significant direct impacts on Behavioral Intention. However, it is important to note that the regression model explains only a relatively small portion (13.7%) of the variance in Behavioral Intention. Further research and analysis may be required to identify additional factors that contribute to behavioral intention in this context.

## **DISCUSSION**

In this research, there are some variables to investigate the relationship between the customer behavioral intentions on KFC's food ordering and delivery system. The research output has proven that perceived convenience, ease of use, enjoyment, and social influence and attitude influenced consumers' behavioral intentions for food delivery services. The variables that most directly impacted the customers' behavioral intentions were perceived convenience and ease of use meanwhile the enjoyment and social influence come in and act as an intermediate variable. Furthermore, this study has shown the analysis results that illustrate the customers' motivation to purchase KFC through food ordering and delivery systems in India, Malaysia, and Indonesia.

First, the outcome has indicated that perceived convenience will be significant to craft the behavior of the public to consume KFC via a food ordering and delivery management system. This is because ordering food online is more convenient for citizens who have busy schedules and do not have enough time to eat well (Orpilla, 2020). Besides, the time-pressed consumers still can enjoy the same good quality products at the restaurant through the convenience of KFC Delivery (KFC Malaysia, 2015). As a result, KFC's convenience system that without impacting the product quality will act as the primary strategy to increase the customer satisfaction and impact a positive behavior of consumers. In addition, the second important variable of customer behavior will be the ease of use for KFC's system. An easier use of the system means that it is simple for the customer to access the additional information and support and thus a much broader range of public can be attracted, and you also can reach more customers (Team, 2017). Hence, KFC needs to strengthen their equipment to be easily accessible for the public which can enhance the customer experience. For instance, KFC India had tried to launch KFC Smart Restaurants with easy-to-use ordering kiosks with multiple digital payment options and accompanying QR codes for quick and easy mobile-based payments across India (ET Hospitality World, 2022). In short, KFC can reach out to more potential consumers and create a good consumer experience for the buyer when it contains an easy food ordering and delivery management system for the public.

The ease of use and perceived convenience of the system will be the factors of most consumers depending on the selection of restaurants when ordering their meals and influence their attitude toward online ordering through KFC Delivery applications. This is because a simple system that reduces the purchasing process and time can create enjoyment for the public. Consumers will feel enjoyment and fun when they can order and check out the process without any obstacles. On the other hand, consumers will always feel troubled and burdened when they need to complete many procedures such as submitting complicated registration that submitting a lot of entry agreements and requirements. In short, KFC should keep updating their system as technology advances, because the ease of the system will influence the attitude, enjoyment, and social influence to attract their behavior intention to buy at KFC. Lastly,

a public relation and social influence will act as the intermediate variable owing to an excellent food ordering and delivery system that can create awareness of the public through the process of the consumer recommending the system for their relatives, friends, and family. Furthermore, people always like to give their feedback in social media such as Facebook, Instagram and Twitter and the viewer will review the feedback to make the purchasing decision. Therefore, feedback will also act as a powerful social influence because good feedback will attract new customers, while bad feedback will keep new consumers away. Consequently, KFC always needs to create an efficient food ordering and delivery management system for their customers to retain a positive public relations and social influence on the public to maintain customer loyalty and draw attention from potential customers.

### **IMPLICATIONS**

As one of the fastest growing markets, food ordering and delivery management systems contain a variety of factors that should be considered by KFC to enhance their system for supplying excellent service which can maintain customer loyalty and satisfaction. The study findings demonstrate the implications for KFC to improve their AI-assisted food ordering and delivery management system in Malaysia, India, and Indonesia. The significant elements that KFC shall be conscious and persuaded of are ease of use, enjoyment, perceived convenience, social influence, trust for food ordering and delivery management system. Hence, KFC is suggested to make a better, more efficient, and user-friendly food ordering and delivery management system by implementing the recommendations and opinions according to the research discussion. For instance, KFC can strive to innovate and improve their Artificial intelligence technology to attract more consumers to order their food on the digital market platform. As research indicates, the privacy or trust of the system will also be one of the essential elements that need to be achieved by KFC. The issue of trust is considered critical in most aspects of business transactions, and the field of e-commerce is no exception (Gazaleh, 2018). This is because consumers are afraid that their data may be used in unauthorized ways, lost, or sold to unknown third parties when updating their private information through online shopping (Gazaleh, 2018).

This is also because customers must transmit their personal and financial information through the site to complete the purchase and pay for the selected service or item. Thus, many consumers will pay attention to the privacy and trust issue of the system when they are deciding to submit their personal details and sensitive payment information through the KFC system. Moreover, customer preferences and behaviors provide a lot of insights for AI-powered solutions. KFC can use this knowledge to improve its menu selections, create marketing plans, and develop new items. KFC can quickly adjust to shifting market trends and customer expectations due to informed decision-making based on data-driven insights. In a sector that is incredibly competitive, KFC stands apart by using AI. In addition to drawing in tech-savvy customers, the innovative nature of AI-powered systems also positions KFC as a leader in embracing new technologies. AI-driven systems can adapt to changes in order quantity and client expectations with ease. Due to its flexibility to scale, KFC can maintain an excellent standard of service even during busy times, special events, or peak seasons.

The consumer experience also should be improved by AI-driven systems' personalized and user-friendly features. The desire for convenience among modern consumers is

satisfied by customized advice, streamlined ordering procedures, and precise delivery time estimations. This increases client happiness and loyalty, encouraging repeat business.

In short, KFC must always concentrate on protecting the information and data of their customers as the more secure the privacy and trust system for KFC, the more consumers' attitudes toward purchasing through KFC's system. Lastly, the rapidly evolving attitudes of consumers should be considered by KFC to plan upcoming quarterly plans more effectively through the prediction of AI ordering systems. AI algorithms can analyze historical data, such as sales figures and customer reviews, to make accurate predictions about future demand and customer behavior (Maff, 2023). Subsequently, KFC should take advantage of AI ordering and delivery management systems that collect information automatically to recommend food and update with new menus and the latest promotion deals in the ordering system. As it makes its way through this digital transition, KFC is well-positioned to gain from improved operations, greater customer relationships, and a distinguished market presence.

### **CONCLUSION**

In conclusion, an AI-assisted food ordering and delivery management system will be a benefit to KFC. The AI-assisted system emerges as an essential driver of KFC's continuous growth, drawing on a culmination of customer research and industry insights. It represents efficiency, precision, and innovation and demonstrates a dedication to not just meeting but exceeding consumer expectations. AI-assisted management systems can streamline the entire process, from taking customer orders to coordinating and optimizing deliveries and the process of ordering and shipping becomes more efficient. Customers can also easily access food delivery services provided by KFC through this AI system. The AI system's optimized workflow can result in increased efficiency and accuracy in order processing and delivery coordination. This reduces the likelihood of errors while simultaneously improving client satisfaction through efficient and trustworthy assistance. In today's fast-paced world, where customers value their time and need hassle-free experiences, convenience becomes more crucial. Furthermore, the accessibility of food delivery services facilitated by the AI system harmonizes well with the shifting preferences of contemporary consumers. As individuals increasingly rely on digital platforms to fulfill their daily requirements, providing a streamlined and user-friendly method to access their preferred food options positions KFC to cater to a broader spectrum of customers, including those who are tech-savvy.

In addition, this system can also assist KFC managers in analyzing the market and improving services according to consumer needs and demands that change along with technological developments. This is consistent with our findings where perceived convenience, enjoyment, social influence, and attitudes are the main factors influencing KFC consumers' behavioral intentions towards AI-assisted food ordering and delivery management systems. This innovation is centered on the needs of the customer. The effectiveness of the system, along with its individualized recommendations and catered offerings, contributes to a stronger sensation of individualized attention. KFC effectively anticipates and caters to client preferences by utilizing data analysis, creating a stronger bond between the company and its customers. In a world where technology changes interactions and expectations, KFC's adoption of this AI-assisted system is a deliberate move that demonstrates its commitment to staying ahead of market trends. As the journey goes on, the brand is ready to improve its offerings, strengthen relationships with

customers, and establish itself as a market leader, proving that the combination of AI and delicious food is an effective strategy. By leveraging AI-assisted systems, KFC can stay ahead in the competitive food ordering and delivery market and can continue to provide outstanding service to its customers.

In summary, implementing an AI-assisted food ordering and delivery management system has significant potential to improve KFC's or any other food service provider's efficiency, customer experience, and overall operations. This system automates the entire procedure from order placement to delivery by utilizing cutting-edge technology like artificial intelligence, machine learning, and data analytics. Although there might be some initial difficulties with implementation expenses, system integration, and staff training, these issues disappear in comparison to the long-term advantages. With its AI-assisted food ordering and delivery management system, KFC is at the top of technological advancement in the restaurant sector and is better able to meet the changing needs and preferences of its customers while also enhancing operational excellence. Adopting such approaches as technology develops provides a strategic benefit that can reinforce KFC's position as the market leader in the fast-food industry.

### **LIMITATION**

Nonetheless, there are some limitations that should be noted in this study. A significant limitation arises from the fact that most of the respondents were students belonging to Generation Z. This situation arose because of the employment of a Google Form for data collection and the subsequent dissemination of the survey through social media platforms like Telegram, WhatsApp, Facebook, and Instagram. The endeavor to collect a larger number of responses was challenging within the predefined time limitations. Moreover, the survey questionnaire had a restricted reach, being limited to specific geographic regions within Malaysia, India, and Indonesia. The outcomes of the analysis might have shown variations if the survey could have been ideally distributed across all regions in these countries. Because of these limitations, there is a potential concern that the gathered respondents might not be fully representative of the entire KFC customer base.

To mitigate this potential bias, the researchers suggest that future researchers focus on expanding the participant pool to encompass various demographic profiles. Additionally, a more extensive distribution of the survey across all regions in Malaysia, India, and Indonesia could lead to a more comprehensive understanding of the subject matter. This, in turn, would reduce the risk of drawing conclusions based on a limited and potentially unrepresentative sample. We also recommend that future studies incorporate a wider range of independent variables that have relevance to long-term customer relationships—a critical aspect for the sustainability of any company. Furthermore, expanding the study's sample size in future iterations would contribute to a more accurate representation of the customer base and offer a more comprehensive grasp of the central factors impacting customer satisfaction.

In summary, while this study yields valuable insights into the factors influencing customer satisfaction, it is imperative to acknowledge the limitations stemming from the sample composition and data collection methods. By addressing these limitations through a more diverse participant pool, broader geographical coverage, and an expanded set of variables, future research can contribute to a more comprehensive understanding of the intricate factors shaping customer satisfaction dynamics.

### ACKNOWLEDGMENT

We would like to express our heartfelt gratitude and appreciation to all those who have contributed to the completion of this research paper. Their guidance, support, and encouragement have been invaluable throughout this journey. We would like to acknowledge the following individuals:

First and foremost, the researchers would like to thank our supervisor Dr Koay Loke Kean and our Universiti Sains Malaysia lecturer, Dr Daisy Mui Hung Kee for their expertise, dedication, and patience. Their insightful feedback and constructive criticism have immensely shaped our understanding of the subject matter and played a significant role in improving the quality of our work.

We are also indebted to our team members for their collaboration and intellectual discussions. Our exchanges have provided us with fresh perspectives, challenged our thinking, and enhanced the depth of our knowledge.

Lastly, the researchers are truly grateful for the collective efforts of all those mentioned above. Their contributions have played an integral role in the successful completion of this assignment, and the researchers are thankful for the knowledge and growth that the researchers have gained through this process.

### DECLARATION OF CONFLICTING INTERESTS

The authors declare that there is no conflict of interest.

### REFERENCES

- Agarwal, R., & Prasad, J. (1998). The Antecedents and Consequents of User Perceptions in Information Technology Adoption. *Decision Support Systems*, 22(1), 15-29. doi:10.1016/S0167-9236(97)00006-7
- Anyoha, R. (2017). *Can Machines Think?*. Retrieved from <https://sitn.hms.harvard.edu/flash/2017/history-artificial-intelligence/>
- Aryani, D. N., Singh, P., Khor, Y. X., Kee, D. M. H., Selvia, K., Lee, C. W., Anantharavoo, L. (2022). Factors Influencing Consumer Behavioral Intention to Use Food Delivery Services: A Study of Foodpanda. *Journal of The Community Development in Asia*, 5(1), 69-79. DOI: 10.32535/jcda.v5i1.1386
- Bickart, B., & Schindler, R. M. (2001). Internet Forums as Influential Sources of Consumer Information. *Journal of Interactive Marketing*, 15(3), 31–40. DOI: 10.1002/dir.1014
- Cheung, C. M. K., & Thadani, D. R. (2012). The Impact of Electronic Word-of-mouth Communication: A Literature Analysis and Integrative Model. *Decision Support Systems*, 54(1), 461–470. DOI: 10.1016/j.dss.2012.06.008
- Churchill, G. A. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16(1), 64-73. DOI: 10.1177/002224377901600110
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *Management Information Systems Quarterly*, 13(3), 319. doi:10.2307/249008
- ET Hospitality World. (2022). *KFC Launches Its Smart Restaurants*. Retrieved from <https://hospitality.economicstimes.indiatimes.com/news/restaurants/kfc-launches-its-smart-restaurants/95030757>
- Fishbein, M.A. and Ajzen, I. (1975) *Belief, Attitude, Intention, and Behaviour: An*

- Introduction Theory and Research, Reading*. Massachusetts: Addison-Westley
- Gazaleh, M. (2018). *Online Trust and Perceived Utility for Consumers of Web Privacy Statements* (Master thesis). University of Westminster Business School, London.
- Gupta, V., & Duggal, S. (2021). How the Consumer's Attitude and Behavioral Intentions are Influenced: A Case of Online Food Delivery Applications in India. *International Journal of Culture, Tourism and Hospitality Research*, 15(1), 77-93. DOI: 10.1108/IJCTHR-01-2020-0013
- Jessica, J. (2022). *How AI is Transforming the Online Food Delivery Industry*. Retrieved from <https://huddle.eurostarsoftwaretesting.com/how-ai-is-transforming-the-online-food-delivery-industry/>
- Jin, S. A. A., & Phua, J. (2014). Following Celebrities' Tweets About Brands: The Impact of Twitter-based Electronic Word-of-mouth on Consumers' Source Credibility Perception, Buying Intention, and Social Identification with Celebrities. *Journal of Advertising*, 43(2), 181-195. DOI: 10.1080/00913367.2013.827606
- KFC Malaysia. (2015). *So Good Fried Chicken with Just A Few Clicks*. Retrieved from <https://dinein.kfc.com.my/news/so-good-fried-chicken-delivered>
- Lackermair, G., Kailer, D., & Kanmaz, K. (2013). Importance of Online Product Reviews from a Consumer's Perspective. *Advances in Economics and Business*, 1(1), 1-5. DOI: 10.13189/aeb.2013.010101
- Lew, T. Y., Paul, G. D., Azmi, N. A. B., Suimi, N. B. A., Azhar, N. H. B., Rozaidi, N. I. B., Maulana, E. (2023). Improving Performance Services for Customer Satisfaction: A Case Study of Kentucky Fried Chicken. *International Journal of Tourism and Hospitality in Asia Pasific*, 6(1), 60-69. DOI: 10.32535/ijthap.v6i1.2197
- Maff, A. (2023). *The Pros and Cons of AI in Restaurants*. Retrieved from <https://blog.revelfsystems.com/pros-cons-ai-restaurants>
- Obermeier, G., Klingersberger, J., & Auinger, A. (2022). *Factors Influencing Usage Intentions Towards a Self-service Kiosk with Biometric Authentication*. doi:10.24251/hicss.2022.578
- Orpilla, H. (2020). *3 Advantages of Online Food Ordering for Customers*. Retrieved from <https://starmicronics.com/blog/advantages-of-online-food-ordering-for-customers/>
- Pendrill, K. (n.d.). *Why Self Ordering Kiosks are Becoming the Secret Weapon for Successful Restaurants*. Retrieved from <https://www.touchbistro.com/blog/why-self-ordering-kiosks-are-becoming-the-secret-weapon-for-successful-restaurants/>
- Shin, Y. H., Kim, H., & Severt, K. (2019). Consumer Values and Service Quality Perceptions of Food Truck Experiences. *International Journal of Hospitality Management*, 79, 11-20. DOI: 10.1016/j.ijhm.2018.12.008
- Team, R. (2017). *Products, Services and Software: Why is Ease of Use So Important?* Retrieved from <https://www.reckon.com/reckon-blog/products-services-software-ease-use-important/>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 425-478. DOI: 10.2307/30036540
- Zhu, F., & Zhang, X. (2010). Impact of Online Consumer Reviews on Sales: The Moderating Role of Product and Consumer Characteristics. *Journal of Marketing*, 74(2), 133-148. DOI: 10.1509/jm.74.2.133