

BSIT 3-2 | Group 11 –  
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#	Title	Citation	Problem	Theoretical Foundation	Framework	Data Gathering	Data Analysis	Result	Recommendation
1	Dynamic Bookstore Self-Ordering Kiosk System	ARUMUGAM NAIDU, J., RAVI KUMAR, S., MUHAMAD SHAMBUDIN, U. N., & MASANDIG, H. (2024). Dynamic Bookstore Self-Ordering Kiosk System. Multidisciplinary Applied Research and Innovation, 5(1), 247-255. <a href="https://publisher.uthm.edu.my/periodicals/index.php/mari/article/view/12451">https://publisher.uthm.edu.my/periodicals/index.php/mari/article/view/12451</a>	To develop a self-order kiosk that allows customers to browse, purchase, and check out books without the assistance of an employee (Large bookstores lack self-ordering kiosks, leading to inefficiencies, longer wait times, and customer dissatisfaction. Customers face challenges in independently searching for and purchasing books, requiring staff assistance that can result in delays.)	The project is based on the principles of self-service technology, particularly its impact on efficiency, customer satisfaction, and operational streamlining. It incorporates the Technology Acceptance Model, focusing on perceived usefulness, ease of use, and customer satisfaction.	The methodology used in this study is waterfall methodology, a phrase used to define the many phases of an IT project's development, from concept through implementation. The waterfall model is the Sequential development model. The approach is separated into six stages, each with its own set of processes. This methodology comprises 6 phases: planning, analysis, design, implementation, testing, and maintenance. Quantitative research is essential for gaining a deeper knowledge of its use in the field [11].	Primary data is acquired from a dynamic kiosk system user via online Google Forms. All 51 respondents for the survey have represented the users. We conducted one face-to-face questionnaire for Dynamic Bookstore staff. The data for this study was acquired qualitatively from the target users.	In this study, the respondent's demographic information was gathered using two questionnaires, one before and one after the implementation of a Dynamic Bookstore self-ordering kiosk system. The first survey question is about the respondent before implementing a kiosk system. The questions we are addressing are whether the system helps the consumer find the items, whether there are any issues with using the system, whether the customer prefers using the system, whether it is easy to use and improves the purchasing experience, and whether the customer feels satisfied with the system's implementation. 51 people answered this first survey. There are the following questions:	Fig. 4 shows the survey we got before implementing a kiosk system. Most of them prefer using our kiosk system and are satisfied with the development of the kiosk system. Besides that, the second survey's questions are about the respondents after implementing a kiosk system. The questions we are addressing are to rate the user interface and design, whether the system is user-friendly, whether the customer is satisfied with the product arrangement, whether it is easy to update and manage stock for staff, whether the system reduces the workload on staff, and how satisfied with the admin interface. The respondent for this survey is 55 people. There are the following questions:	The kiosk system may respond to the growing need for digital payment methods by integrating popular mobile payment systems such as Online Banking, Touch n Go, Credit payments, Apple Pay and Google Pay, enhancing user satisfaction and minimizing transaction time [12]. By streamlining the checkout process, bookstore employees will be able to devote more time and resources to giving personalized guidance and recommendations to consumers. This enhances not just customer happiness but also operational effectiveness and productivity. Furthermore, integrating customer data gathered via the kiosk system to enhance the personalized experience might provide substantial insights for advertising and suggestions. By analysing customers' choices, browsing history, and purchase trends, the kiosk system could provide personalized book

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								<p>Fig. 5 shows the survey we got after implementing a kiosk system. Most of the users and our admin are satisfied with the development of the kiosk system. This research has not been fully achieved by the overall analysis and results. In addition, it can summarize the self-ordering ordering kiosk system as very easy for customers to use in large bookstores. The result proved the analysis that customers agree that they do not have issues using a kiosk system. According to the initial data, people prefer utilizing a self-ordering kiosk system since it is simple to use, user-friendly, and improves overall shopping. It additionally enables</p>	recommendations, customized discounts, and targeted notifications [13].

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								staff to monitor, update stock, and reduce workload. As a result of this survey, we may conclude that this self-ordering kiosk technology provides customer and staff satisfaction. Even though this research is only focused on large bookstores, its findings did provide a satisfactory with regarding the development of the self-ordering kiosk for improvement of the features on Dynamic which are large bookstores.	
2	The Implementation of Self-Ordering Kiosks (SOKs): Investigating the Challenges in Fast Food Restaurants	Ishak, F. A. C., Lah, N. A. C., Samengon, H., Mohamad, S. F., & Bakar, A. Z. A. (2021). The Implementation of Self-Ordering Kiosks (SOKs): Investigating the Challenges in Fast Food Restaurants. International Journal of Academic Research in Business and Social Sciences, 11(10), 1136–1150.	Quick-service restaurants (QSRs) face challenges implementing self-ordering kiosks (SOKs) due to internal issues like staffing shortages, untrained personnel, and limited space, as well as external challenges like customer resistance and technological restrictions.	This study situates itself within the context of Industry Revolution 4.0 (IR4.0), emphasizing self-service technology's potential to enhance operational efficiency and customer satisfaction. It also references the Technology Acceptance Model (TAM) to explore user adoption and satisfaction.	This study applied qualitative research methodology to illustrate contextual understanding with the focus to understand behavior, principles, and beliefs (Bell, Bryman, & Harley, 2019). The phenomenology research was designed in which the goal was to describe lived experience rather than to explain or quantify it in any way.	Data were collected through open ended-interview with targeted informants. This method enables the researcher to gather the required information and describe the issues and challenges in implementing digital ordering kiosks in the QSR in Klang Valley. In other words, it aims to explore the internal and external issues faced by the managerial team in digital dining implementation in the restaurant. The qualitative data collection methods allow the researcher to determine the direction and area exploration that the researcher may not have anticipated.  The sampling technique that has been used in this	The data were analyzed through thematic analysis using Atlas. ti software to code, categorized and themed the data.	The restaurant industry appears to be growing, and as time goes by, technology has become more critical as it offers a lot of benefits to the business. Industrial revolution 4.0 has led people towards connection, intelligent automation, a smart teamwork where humans and machines interact to accomplish the goal. It also infers that a fresh perspective to adapt to technological advancement is needed for the QSR to improve the service quality (Radziwill, 2018). This research was conducted to explore the management's internal	It can be concluded that technology has been an excellent tool in the quick-service restaurant but comes with barriers for successful implementation. Thus, the findings on these issues and challenges will undoubtedly benefit the existing and new restaurants and food service industry in improvising and searching for the obstacles they face to improve their service in offering digital dining experience to millennial customers. This study will help the restaurant business effectively understand the issues and challenges in SOKs implementation to enhance guest satisfaction.

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						research was purposive sampling, where it involves informants who have specific criteria and could provide various information on the area.		issues and identify the external challenges in SOKs implementation in the QSR environment. The results obtained from the interview transcription that the technology-based SOKs currently are the most advanced technology utilized in the QSR to improve quality and enhance guest experiences. Internal Issues in Self-Ordering Kiosk (SOKs) The first internal issue related to the implementation of SOKs is the employee's staffing. Staffing is a core function of management that defines and supplies the organization with adequate competent and skilled staff at all levels. The management's staffing roles include recruitment, selection, training, development, appraisal, and personnel remuneration. Derived from the finding, the well-educated and trained staff must ensure the staff can be a coach to educate customers when using the SOKs. The staff needs to be ready to serve the customer during the SOKs process happened. So, no doubt, training is vital to ensure that	

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								employees can acquire knowledge and equip themselves with the proper skills from experienced mentors especially when associating with new technology (Lam & Zhang, 2003). This is supported by Mehrotra, Verma, and Chakraborty (2018), where the staff of QSR was trained to provide friendly and pleasant customer service and satisfactory performance. QSR management may have provided a robust and structured training platform to ensure that the staff are knowledgeable to avoid future problems. "Training is not an issue. [But] staffing, yes. It depends on how long you have been using SOK. We need to educate customers on how to use the SOK. Now the main challenge is that the SOK coach (customer teacher) must always be there" (Informant 6) In addition, another internal issue is the shortage and untrained staff. The restaurant's low staffing level and lack of skilled employees force the team to multitask to offer a better guest experience and achieve the restaurant goal.	

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								Sometimes, the staff needs to switch their position in certain circumstances. The different roles of the task required additional skills and due to this, some of the staff cannot cope with the current situation. This is parallel with the previous research, which noted that the high turnover of staff is a common problem in the restaurant industry for a long time (Seebacher, 2017). The staff is forced to multitask, which leads to demotivation, making them decide to quit their job. Thus, the management needs to find strategies and other alternatives besides depending on human skills to fulfill the customers' demands (Wimalaratne, 2017). "Due to the lack of order taker, the server needs to play this role. He has to change his position". (Informant 6) Moreover, the staffing issue also occurs with the table service due to SOKs implementation, especially for the restaurants with multi-storey buildings. It seems a challenge for the staffs to fulfill the demand to send the order from the customer to the table within the standard	

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								<p>period of time. Thus, it reduces the performance when only selected customer demand can be met with a low staffing level (Slack, et al., 2021). Therefore, restaurants require effective staffing strategies to improve the performance and productivity of the restaurant. "It is challenging to send the Table Service (sending the food to the customer table). This is two-storey high building. [I think] If it is a one-level store, there is no table service issue." (Informant 6)</p> <p>Next, most food and beverage operations have limitations with space. By installing SOKs, it can save some space in the restaurant and reduce the waiting line. It aligns with the previous findings where the implementation of SOKs can easily maximize space to fit the restaurant's needs (Eastwood, 2018). Thus, the ordering kiosks do not consume a large area in the restaurant for its installation. However, location matters have become the problem. Informants highlighted that the kiosks' implementation and activity affect the space</p>	

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								<p>of the restaurants, especially during the peak hours when the queue traffic becomes congested, and the outlet became crowded. Sometimes, the long queue traffic could cause the main entrance been blocked and bump into the other customer's table. To avoid this problem worsen, it is essential to place the SOKs in strategic places that allow customers to place orders while avoiding consuming space and congestion during peak hours (Eastwood, 2018). "The store is crowded due to peak hours and also because it is a small space." (Informant 1)</p> <p>"...The implementation of the SOK took up a lot of space as the restaurant size is quite small." (Informant 2)</p> <p>"...Because the installation is in the middle of the store... Sometimes it collides with another customer's table in the area..." (Informant 4)</p> <p>External Issues in Self-Ordering Kiosk (SOKs)</p> <p>The finding discusses the use of SOKs from the customer perspective and the team managing the technology. The issues pertaining to this system and its</p>	



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								application, which are beyond their controls, have been highlighted. For many years, quality of services has been the subject of comprehensive research in QSR restaurants and significantly affects how customers interact to achieve positive service outcomes. The research related to customers includes acceptance, satisfaction, and loyalty towards products or services offered (Iqbal, Hassan & Habibah, 2018). The result showed that the rejection of SOKs by some customers was based on the customer perception and acceptance before they could fully adapt to the new technology of SOKs. Customers resisted using the SOKs caused by the technology restriction, including unfamiliarity, long queue, time consuming, complex, and difficulty to use. Kincaid and Baloglu (2007) conclude that a restaurant can drive customers' mindset to adopt the new technologies. The inability to encounter SOKs tends to influence the customers' perception of the technologies, thereby dramatically	

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								<p>reducing their usage and acceptance (Toh, 2018). "...customers preferred to order at the counter because some of them didn't know how to order on SOKs." (Informant 1)</p> <p>"...customers sometimes refused to use SOK because they thought the line was very long and they had to queue... they noted that it is difficult to use, complex and confusing. So, it is easier to go and order through the counter." (Informant 2)</p> <p>Typically, restaurants used SOKs because they believe that new technology can enhance customer satisfaction and boost operational efficiency. However, there are also barriers in utilizing the technology, which is caused by the system failure. Issues that may happen during the operation include poor programming usability, support or maintenance of outdated processes, slowed down client aptitudes, and limited system usage. In this case, process failure was considered a source of customer dissatisfaction (Dabholkar &amp; Spaid, 2012; Silva). Therefore, managers need to figure out how to deal</p>	

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								<p>with all of these technology restrictions. "SOKs need an internet connection. Sometimes the PC is jammed and slow to proceed..." (Informant 1) "When the product item is out of stock, the manager needs to close or make the item unavailable. If there is any delay, it will cause a serious problem." (Informant 2) According to them, the problems that usually happened with the SOKs are when the customer placed an order on food items and already paid for the food through kiosks; and suddenly, when the time to pick up the order, the food was currently unavailable. According to the informants, the system connection or connection line can be 'hanged' or jammed, which may slow down the process and drag the total order time. The issue is also found in the cashless method for SOKs, which must be updated regularly to meet the customer's demand. It is crucial to keep customers satisfied and pleased with the quality, service, and products offered by employees to be competitive in this competitive</p>	

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								marketplace (Lam & Zhang, 2003). The management needs to train and prepared the strategies on how the staff should act if the issues happened.	
3	Self-ordering Kiosk Service System in Selected Food Chain Restaurants Towards Customer Satisfaction	Noble, Roy Allan, Self-ordering Kiosk Service System in Selected Food Chain Restaurants Towards Customer Satisfaction (May 28, 2023). Available at SSRN: <a href="https://ssrn.com/abstract=4646297">https://ssrn.com/abstract=4646297</a> or <a href="http://dx.doi.org/10.2139/ssrn.4646297">http://dx.doi.org/10.2139/ssrn.4646297</a>	The study aims to assess the Self-Ordering Kiosk Service System in selected food chain restaurants towards customer satisfaction Specifically, it sought to answer the following questions: 1. How do the respondents assess the application of Self-Ordering Kiosk Service system of selected food chain restaurants in terms of?; 1.1 Menu Design; 1.2 Order Accuracy; 1.3 Convenience; 1.4 Cashless Payment; and 1.5 Reliability? 2. Is there a significance difference in the assessment of the two (2) groups of respondents on the Self-Ordering Kiosk Service system of selected food chain restaurants based on the aforementioned variables? 3. What are the challenges encountered by the respondents from the usage of Kiosk system of selected food chain restaurants? 4. What are the solutions formulated by the respondents to resolve challenges encountered? 5. What improved Kiosk system may be proposed based on the findings of the study.	The research is framed using the Plan-Do-Check-Act (PDCA) cycle for quality management. It also references ISO 9001 standards and Technology Models (TAM) to assess customer satisfaction and operational efficiency in implementing SOKs.	Conceptual Framework: The relationship between SOK systems, customer satisfaction, and quality service.	The researcher collected data using the probability sampling that involves selecting a sample from a larger population in a way that each member of the population will be involved and Descriptive Research method that aims to describe and explain the characteristics, behaviors, and phenomena of a particular subject or population. It involves observing, documenting, and analyzing data without intervening or manipulating variables. This study is a quantitative approach for data gathering to identify the impact of advance technology on delivering quality service to customer Respondents of the Study A total of 152 respondents participated in the study mostly the general population and respondent of this study were the customers who used self-ordering kiosk in quick service restaurant in Quezon, Valenzuela and Caloocan City. The survey questionnaire will be randomly distributed to every costumer who try to use this kiosk system. Respondents Table 1 displays the profile of the respondents according to	<ul style="list-style-type: none"><li>• Frequency and percentage distribution for respondent profiles.</li><li>• Weighted mean for assessing SOK system features.</li><li>• Mann-Whitney U Test for testing significant differences.</li><li>• Ranking for identifying challenges and proposed solutions.</li></ul>	Based on the research and both group of respondent's assessment, It can be concluded the self-ordering kiosk have positive impact on the customer satisfaction in many cases but also deals with different challenges based on the problem encountered by the respondents. Moreover, Self-ordering kiosk often offer more customizations options for them to be more convenient in any way to the customers and employee/staff. This is much beneficial to the business entity that can lead to the success of the organization as well as the ease for the customers especially that we are dealing with technological advancement where everyone is more incline to adept changes in traditional way of purchasing and communication. Nevertheless, it is relevant to take note that not all customers may prefer self-ordering kiosks, particularly those who	Based on the significant findings and conclusions of the study, the researcher suggests the following solutions to address the issues. 1. Menu Design. It is recommended to make the interface simpler in a way that the customers and employee/staff can easily navigate and understand with clear instructions and minimal steps required to place an order to avoid confusions and save time regardless of the knowledge of the users. The kiosk should be appealing visually and reflect the brand style and aesthetic by using high quality images of menu items and consider using simple animations or other design elements to draw attention and create a memorable experience from the users. The self-ordering kiosk should offer more customization options such as giving more control over their orders such as selecting to add and remove ingredients from their orders to help customers make their choices. This can be done by making the self-ordering kiosk as mobile friendly interface so that the customers can easily use the kiosk as simple as they use their smartphones

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						<p>age, type of respondents, gender and residency. Table 1. Profile of the Respondents According to Age, Type of Respondents, Gender and Residence Table 1. Profile of the Respondents According to Age, Type of Respondents, Gender and Residence</p> <table><tr><th colspan="2"></th><th>F</th><th>%</th></tr><tr><td colspan="4"><b>Age</b></td></tr><tr><td>46 and above years' old</td><td></td><td>4</td><td>2.63</td></tr><tr><td>36 - 45</td><td></td><td>5</td><td>3.20</td></tr><tr><td>26 - 35</td><td></td><td>18</td><td>11.84</td></tr><tr><td>18 - 25</td><td></td><td>125</td><td>82.24</td></tr><tr><td><b>TOTAL</b></td><td></td><td><b>152</b></td><td><b>100</b></td></tr><tr><td colspan="4"><b>Type of Respondents</b></td></tr><tr><td colspan="2">Restaurant Staff/Employee</td><td>11</td><td>7.24</td></tr><tr><td>Customer</td><td></td><td>141</td><td>92.76</td></tr><tr><td><b>TOTAL</b></td><td></td><td><b>152</b></td><td><b>100.0</b></td></tr><tr><td colspan="4"><b>Gender</b></td></tr><tr><td>Male</td><td></td><td>60</td><td>39.47</td></tr><tr><td>Female</td><td></td><td>92</td><td>60.53</td></tr><tr><td><b>TOTAL</b></td><td></td><td><b>152</b></td><td><b>100.00</b></td></tr><tr><td colspan="4"><b>Residence</b></td></tr><tr><td>Caloocan</td><td></td><td>80</td><td>52.63</td></tr><tr><td>Quezon City</td><td></td><td>95</td><td>62.50</td></tr><tr><td>Valenzuela</td><td></td><td>8</td><td>5.26</td></tr><tr><td><b>TOTAL</b></td><td></td><td><b>152</b></td><td><b>100.00</b></td></tr></table> <p>Majority of the respondents (125 or 82.24 percent) are 18 to 25 years of age and 18 or 12% aged 26-35 or 5 or 3% belonged to 36-45 age group and 2% belong to the 46 years old and above group (141 or 92.76 percent). 92 or 60.53 percent are females while 60 or 39.47 percent are males. Residents from Quezon City are the most numbered (95 or 62.50 percent) in the distribution followed by 49 or 32.24 percent residents of Caloocan City. There are few (8 or 5.26 percent) residents from Valenzuela City.</p>			F	%	<b>Age</b>				46 and above years' old		4	2.63	36 - 45		5	3.20	26 - 35		18	11.84	18 - 25		125	82.24	<b>TOTAL</b>		<b>152</b>	<b>100</b>	<b>Type of Respondents</b>				Restaurant Staff/Employee		11	7.24	Customer		141	92.76	<b>TOTAL</b>		<b>152</b>	<b>100.0</b>	<b>Gender</b>				Male		60	39.47	Female		92	60.53	<b>TOTAL</b>		<b>152</b>	<b>100.00</b>	<b>Residence</b>				Caloocan		80	52.63	Quezon City		95	62.50	Valenzuela		8	5.26	<b>TOTAL</b>		<b>152</b>	<b>100.00</b>		<p>are less tech-savvy or who prefer the traditional way of interaction of ordering from human employee. Furthermore, problems such as technical glitches or difficult to use interfaces can potentially lower customer satisfactions with self-ordering kiosk and many other more issues listed in this study.</p>	<p>to order, pay and interact with kiosk. 2. Order Accuracy. Providing clear menu descriptions can help the customers prevent from selecting the wrong item by mistakes this can help too the staff who will process their orders. Providing order summaries in a sense of simple list can be a help to customers to double check their orders to avoid mistakes and ensure that their order is complete and correct. Conducting quality control should be conducted by the restaurant staff on orders to ensure that they are accurate before they are served to the customers by implementing these recommendations, restaurant can help ensure the orders are accurate and lessen the errors that can contribute to overall customer experience. 3. Convenience. One way to achieve this is by using a clear and concise language, along with high quality visual representations to guide the customer through the ordering process. Offering assistance: It can be helpful to have staff members available to assist customers who may have questions or need help navigating the kiosk. Using large and clear fonts: The kiosk interface should use large and clear fonts that are easy to read for all age groups. Incorporating voice commands: Some kiosks</p>
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									can incorporate voice commands, which can be helpful for older customers who may find typing on a screen challenging. 5. Cashless Payment. Restaurant can take steps to make their cashless payment system as user friendly and secure as possible This may include regular maintenance and updates to ensure that their system and programs are functioning properly, providing a variety of payment options, including both cashless and cash based options to accommodate different customer preferences and most especially providing assistance to customers who may be unfamiliar with cashless payment method by having a staff member available to answer questions from the customers. 7. Reliability. This is a key factor in ensuring the delivery of quality service towards customer experience. Investing in High quality machines that can handle heavy usage and demand with less supervision and assistance from human employee. Testing the machines regularly can help the machine to work properly and working efficiently. 8. Challenges Encountered. It is recommended to assess and proposed a new way of implementation of self-ordering kiosk to improve the delivery of service

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									towards customer over all experience. Restaurant should also considers having multiple kiosk available in the store to mitigate the impact of any downtime or malfunctions. Dealing with additional security features is another way of step up to solved the challenges encountered by the customers to add confidence to complete their transactions using the self-ordering kiosk. Upgrading and installing high speed internet can ease the problem with regards to kiosk system update. Regular maintenance is also another way to avoid technical glitches and difficulties this can include software updates, cleaning and checking the physical attributes of the machines. Another factor is the employee training which can contribute to the delivery of service. Other Recommendations 1. Self-ordering kiosk program their system where the payment process should be quick and easy with multiple payment options available. 2. Considering that many people are now using e-wallet and integrating the mobile payment solutions like Gcash, Paymaya and other online wallet payment scheme. 3. Optimizing the Kiosk Location inside the store is another factor that the food chain restaurants should consider such as

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									placing the kiosk in a visible and easy accessible location preferably near the counter area and adding signage or promotional materials such as guidelines on how to use the kiosk to draw customer attention to the kiosk.
4	Self-ordering kiosk usage and post-purchase behaviour in quick service restaurant	Baba, N., Shahril, A. M., & Hanafiah, M. H. (2020). Self-ordering kiosk usage and post-purchase behaviour in quick service restaurant. <i>Journal of Tourism, Hospitality &amp; Culinary Arts</i> , 12(1), 360-376.	The study addresses the lack of empirical research on the relationship between self-ordering kiosk usage and post-purchase behavior in quick-service restaurants. It explores whether the use of these kiosks influences customer satisfaction and encourages repeat purchases or recommendations.	The research adopts and modifies the Unified Theory of Acceptance and Use of Technology (UTAUT2), incorporating post-purchase behavior as the dependent variable.	<p>The conceptual framework is based on seven dimensions from UTAUT2:</p> <ol style="list-style-type: none"><li>1. Performance Expectancy</li><li>2. Effort Expectancy</li><li>3. Social Influence</li><li>4. Facilitating Conditions</li><li>5. Hedonic Motivation</li><li>6. Price Value</li><li>7. Habit</li></ol> <p>Each dimension is hypothesized to positively affect customer post-purchase behavior.</p>	The study proposes using a quantitative cross-sectional survey method. Data is to be collected from customers who have used self-ordering kiosks in quick-service restaurants through structured questionnaires.	The relationships between predictor variables (UTAUT2 dimensions) and post-purchase behavior are analyzed using statistical techniques, though specific methods (e.g., regression analysis or structural equation modeling) are not detailed in the provided text.	The study aims to validate the conceptual framework and demonstrate how the UTAUT2 dimensions influence customer post-purchase behavior. The findings are intended to provide insights into enhancing self-ordering kiosk usage and improving customer satisfaction.	The study suggests leveraging the identified factors (e.g., ease of use, social influence, and hedonic motivation) to improve kiosk design and marketing strategies. Restaurant operators should focus on these aspects to ensure higher adoption rates and customer satisfaction, thereby increasing revenue.
5	Human and Technology Interaction: Consumer Perception Toward the Touch Screen Ordering Kiosk in Fast Food Restaurant	Yi Wen, T., & Pakir Mohamed, M. I. (2022). Human and Technology Interaction: Consumer Perception Toward the Touch Screen Ordering Kiosk in Fast Food Restaurant. <i>Research in Management of Technology and Business</i> , 3(2), 328-343. <a href="https://publisher.uthm.edu.my/periodicals/index.php/rmtb/article/view/9638">https://publisher.uthm.edu.my/periodicals/index.php/rmtb/article/view/9638</a>	he study addresses the lack of understanding and empirical examination of consumer perceptions regarding the features of touch screen ordering kiosks in fast food restaurants. It identifies factors such as perceived usefulness, ease of use, enjoyment, and risk influencing consumer perception.	The study is based on the Technology Acceptance Model (TAM), which examines consumer perceptions and their impact on the adoption of technology. TAM constructs include perceived usefulness, perceived ease of use, perceived enjoyment, and perceived risk.	The conceptual framework explores the relationship between independent variables (perceived usefulness, ease of use, enjoyment, and risk) and dependent variables (design of interface, security system, and responsiveness).	In this research, the quantitative method involves collecting data from the respondents. Primary data is collected from a large population using online Google Forms or direct paper surveys. This study used a quantitative method to collect data from the target population. It can categorize and analyze statistical figures including frequency, mean, standard deviation, and percentages to clarify the results of the study. Quantitative research is significant to have a better understanding of its use in the field (Boeren, 2018).	The data were analyzed using SPSS software. SPSS is a short form of a statistical package for the social sciences. It is a set of software programs that analyze and manage a large amount of data with comprehensive statistical analysis. The result can be converted into a table and graphical chart that shows the analyzed data in a simple form. Descriptive statistics investigate the basic features of respondents in the form of mean, percentage, and standard deviation. Correlation analysis is used to infer statistics to	4.1 Demographic Analysis In this research, the demographic information of the respondents has been identified in section A of the questionnaire. There was a total of eight questions asked under section A which included gender, age or generation, race, highest education level, employment status, frequency of visits to McDonald's, preference ordering system, and have ever used a touch screen ordering kiosk before. There was a total	<ul style="list-style-type: none"><li>• Enhance features that provide enjoyment, such as an engaging interface or interactive elements.</li><li>• Address consumer concerns regarding security and perceived risks in transactions.</li><li>• □ Simplify the interface design to ensure ease of use for diverse customer demographics.</li></ul>



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						The software of the statistical package for the social sciences (SPSS statistical software) could be used to analyze the data collected.	identify the relationship between variables.	<p>number of 330 respondents participating in the survey. (a) Consumer Using Touch Screen Ordering Kiosk Table 1 shows that 323 (97.9%) respondents used McDonald's touch screen ordering kiosks before comparing to the other 7 (2.1) respondents. This question is the utter significance that will decide whether the continuous question can be the answer or not. Therefore, those respondents who never used the touch screen ordering kiosk before will not be able to continue answering for the next section.</p> <table><caption>Table 1: Consumer using touch screen ordering kiosk</caption><thead><tr><th></th><th>Frequency</th><th>Percent (%)</th><th>Valid Percent (%)</th><th>Cumulative Percent (%)</th></tr></thead><tbody><tr><td>Valid</td><td>323</td><td>97.9</td><td>97.9</td><td>97.9</td></tr><tr><td>Not Valid</td><td>7</td><td>2.1</td><td>2.1</td><td>100.0</td></tr><tr><td>Total</td><td>330</td><td></td><td></td><td></td></tr></tbody></table> <p>Reliability is to test how consistent a measure instrument measures for the concept of measuring. The reliability test for the pilot test was 27 items and Cronbach's Alpha is 0.957, which is considered excellent.</p> <table><caption>Table 2: Cronbach's alpha consistency table</caption><thead><tr><th>Cronbach's Alpha</th><th>Internal Consistency</th></tr></thead><tbody><tr><td>0.957</td><td>Excellent</td></tr><tr><td>0.900-0.950</td><td>Good</td></tr><tr><td>0.700-0.900</td><td>Acceptable</td></tr><tr><td>0.600-0.700</td><td>Questionable</td></tr><tr><td>0.500-0.600</td><td>Poor</td></tr><tr><td>0.100-0.500</td><td>Unacceptable</td></tr></tbody></table> <table><caption>Table 3: Result of reliability test</caption><thead><tr><th>Variable</th><th>Cronbach's Alpha</th><th>Number of Items</th></tr></thead><tbody><tr><td>Perceived Usefulness (PU)</td><td>0.776</td><td>4</td></tr><tr><td>Perceived Ease of Use (PEOU)</td><td>0.926</td><td>3</td></tr><tr><td>Perceived Enjoyment (PE)</td><td>0.748</td><td>3</td></tr><tr><td>Perceived Risk (PR)</td><td>0.770</td><td>3</td></tr><tr><td>Design of Interface (DOI)</td><td>0.709</td><td>3</td></tr><tr><td>Security System (SS)</td><td>0.912</td><td>3</td></tr><tr><td>Responsiveness (R)</td><td>0.740</td><td>3</td></tr><tr><td>Overall result</td><td>0.957</td><td>17</td></tr></tbody></table> <p>4.3 Test of Significance</p> <p>Test of significance is the method to identify the significance level of the null hypothesis and</p>		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)	Valid	323	97.9	97.9	97.9	Not Valid	7	2.1	2.1	100.0	Total	330				Cronbach's Alpha	Internal Consistency	0.957	Excellent	0.900-0.950	Good	0.700-0.900	Acceptable	0.600-0.700	Questionable	0.500-0.600	Poor	0.100-0.500	Unacceptable	Variable	Cronbach's Alpha	Number of Items	Perceived Usefulness (PU)	0.776	4	Perceived Ease of Use (PEOU)	0.926	3	Perceived Enjoyment (PE)	0.748	3	Perceived Risk (PR)	0.770	3	Design of Interface (DOI)	0.709	3	Security System (SS)	0.912	3	Responsiveness (R)	0.740	3	Overall result	0.957	17	
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								<p>whether the null hypothesis is accepted or rejected. If P-value &lt; 0.05, the test will be significant. If P value &gt; 0.05. The test is not significant which stated that the distribution data is normal.</p> <p>4.4 Normality Test</p> <p>A normality test is used to determine whether the data collected for research is normally distributed or non-normally distributed. Shapiro-Walk test is the more appropriate method for a small sample size (&lt; 50 samples), while the Kolmogorov-Smirnov test is used for <math>n \geq 50</math>. In this research, the valid sample size is 323 respondents. Therefore, Kolmogorov-Smirnov is used to test the normality.</p> <table><caption>Table 4. Normality Test (Kolmogorov-Smirnov)</caption><tr><th></th><th>Statistic</th><th>df</th><th>Asymp. Sig.</th><th>Exact Sig.</th></tr><tr><td>Normal Q-Q Plot</td><td>0.140</td><td>323</td><td>.000</td><td>Not Normal</td></tr><tr><td>Normal P-P Plot</td><td>0.140</td><td>323</td><td>.000</td><td>Not Normal</td></tr><tr><td>Shapiro-Wilk Statistic</td><td>0.140</td><td>323</td><td>.000</td><td>Not Normal</td></tr><tr><td>Anderson-Darling Statistic</td><td>0.140</td><td>323</td><td>.000</td><td>Not Normal</td></tr><tr><td>Kolmogorov-Smirnov Statistic</td><td>0.140</td><td>323</td><td>.000</td><td>Not Normal</td></tr></table> <p>4.5 Regression Analysis</p> <p>Regression analysis is used for explaining the relationship between one or more independent variables and a single dependent (Faraway, n.d.). Regression is using an ANOVA to compare the means between four groups of the independent variable to examine whether there is a</p>		Statistic	df	Asymp. Sig.	Exact Sig.	Normal Q-Q Plot	0.140	323	.000	Not Normal	Normal P-P Plot	0.140	323	.000	Not Normal	Shapiro-Wilk Statistic	0.140	323	.000	Not Normal	Anderson-Darling Statistic	0.140	323	.000	Not Normal	Kolmogorov-Smirnov Statistic	0.140	323	.000	Not Normal	
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								<p>significant difference in perception toward the design of the interface, security system, and responsiveness.</p> <table><caption>Table 5: Regression of design of interface (ANOVA)</caption><tr><th>Model</th><th>Sum of Squares</th><th>df</th><th>Mean Square</th><th>F</th><th>Sig.</th></tr><tr><td>Regression</td><td>11.742</td><td>4</td><td>2.935</td><td>162.554</td><td>.0000</td></tr><tr><td>Residual</td><td>1.150</td><td>118</td><td>.010</td><td></td><td></td></tr><tr><td>Total</td><td>12.892</td><td>122</td><td></td><td></td><td></td></tr></table> <p>a. Dependent Variable: DDI b. Predictors: (Constant), PU, PEOU, PE, PR</p> <p>The coefficient's most important value is the Beta value, t value, and significance value. The most important is a significant value which shows that PU, PEOU, PE, and PR have significant value to the design of the interface. The result shows that VIF 1 is 2.679, which is less than 10. The quality result that VIF 1 or less than 10 means the value is acceptable.</p> <table><caption>Table 6: Regression of security system (ANOVA)</caption><tr><th>Model</th><th>Sum of Squares</th><th>df</th><th>Mean Square</th><th>F</th><th>Sig.</th></tr><tr><td>Regression</td><td>37.171</td><td>4</td><td>9.293</td><td>162.554</td><td>.0000</td></tr><tr><td>Residual</td><td>10.181</td><td>118</td><td>.086</td><td></td><td></td></tr><tr><td>Total</td><td>47.352</td><td>122</td><td></td><td></td><td></td></tr></table> <p>a. Dependent Variable: SS b. Predictors: (Constant), PU, PEOU, PE, PR</p> <p>The coefficient's most important value is the Beta value, t value, and significance value. The most important is the significant value which shows that PU, PEOU, PE, and P have significant value to the security system. The result shows that VIF is 1.835 to 2.679, which is less than 10. The quality result that VIF 1 or less than 10 means the value is acceptable.</p> <table><caption>Table 7: Regression of responsiveness (ANOVA)</caption><tr><th>Model</th><th>Sum of Squares</th><th>df</th><th>Mean Square</th><th>F</th><th>Sig.</th></tr><tr><td>Regression</td><td>61.444</td><td>4</td><td>15.361</td><td>101.701</td><td>.0000</td></tr><tr><td>Residual</td><td>44.897</td><td>118</td><td>.379</td><td></td><td></td></tr><tr><td>Total</td><td>116.341</td><td>122</td><td></td><td></td><td></td></tr></table> <p>The coefficient's most important value is the Beta value, t value, and significance value. The</p>	Model	Sum of Squares	df	Mean Square	F	Sig.	Regression	11.742	4	2.935	162.554	.0000	Residual	1.150	118	.010			Total	12.892	122				Model	Sum of Squares	df	Mean Square	F	Sig.	Regression	37.171	4	9.293	162.554	.0000	Residual	10.181	118	.086			Total	47.352	122				Model	Sum of Squares	df	Mean Square	F	Sig.	Regression	61.444	4	15.361	101.701	.0000	Residual	44.897	118	.379			Total	116.341	122				
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								most important is the significant value which shows that PU, PEOU, PE, and PR have significant value to responsiveness. The result shows that VIF is 1.853 to 2.679, which is less than 10. The quality result that VIF 1 or less than 10 means the value is acceptable. 4.6 Summary of Hypothesis Testing Table 8 shows the summarized result of the hypothesis tests. All the p-values above are less than 0.05, so all hypothesis is accepted. It means all the data collected is significant. In addition, each of the hypotheses has a positive relationship between the variables. The highest standard coefficient was H3 with a 0.982 value for perceived enjoyment which is the most significant factor affecting consumers' perception of the feature of touch screen ordering kiosks. Then followed by the influence of perceived risk, perceived usefulness, and perceived ease of use on a feature of touch screen ordering kiosks with 0.371, 0.202, and 0.076 standardized coefficients best value, respectively.	

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								<table><caption>Table 6. Result of Hypothesis test</caption><thead><tr><th>Hypothesis</th><th>stat</th><th>df</th><th>F</th><th>sig.</th><th>df</th><th>sig.</th><th>Accepted</th></tr></thead><tbody><tr><td>H1: Perceived ease of use significantly influences the intention to use self-order kiosks</td><td>0.115</td><td>1088</td><td>0.134</td><td>0.000</td><td>0.000</td><td>2.311</td><td>Accepted</td></tr><tr><td>H2: Perceived ease of use significantly influences customer perceived service quality</td><td>0.128</td><td>0.111</td><td>0.075</td><td>0.000</td><td>2.137</td><td>Accepted</td></tr><tr><td>H3: Perceived ease of use significantly influences customer perceived service quality</td><td>0.069</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>H4: Perceived ease of use significantly influences customer perceived service quality</td><td>0.200</td><td>0.010</td><td>0.271</td><td>0.000</td><td>2.479</td><td>Accepted</td></tr><tr><td>H5: Perceived ease of use significantly influences customer perceived service quality</td><td>0.205</td><td>0.017</td><td>0.281</td><td>0.071</td><td>0.000</td><td>1.013</td><td>Accepted</td></tr></tbody></table>	Hypothesis	stat	df	F	sig.	df	sig.	Accepted	H1: Perceived ease of use significantly influences the intention to use self-order kiosks	0.115	1088	0.134	0.000	0.000	2.311	Accepted	H2: Perceived ease of use significantly influences customer perceived service quality	0.128	0.111	0.075	0.000	2.137	Accepted	H3: Perceived ease of use significantly influences customer perceived service quality	0.069							H4: Perceived ease of use significantly influences customer perceived service quality	0.200	0.010	0.271	0.000	2.479	Accepted	H5: Perceived ease of use significantly influences customer perceived service quality	0.205	0.017	0.281	0.071	0.000	1.013	Accepted	
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6	The Impact of Self-Order Kiosk and Service Quality on Customer Experience in McDonald's Citra Garden 6 Jakarta	Stanley, B., Pratama, Y., & Subakti, A. G. (2023). The Impact of Self-Order Kiosk and Service Quality on Customer Experience in McDonald's Citra Garden 6 Jakarta. In <i>E3S Web of Conferences</i> (Vol. 426, p. 02073). EDP Sciences.	The study explores the challenges and impacts of self-order kiosks (SOKs) and service quality on customer experience in a fast-food context. It focuses on identifying how these factors influence customer satisfaction and operational efficiency, addressing issues like waiting times and user interaction.	<p>The research incorporates theories related to:</p> <ol style="list-style-type: none"><li>Self-Order Kiosks (SOK): Examining dimensions like functionality, enjoyment, security, assurance, design, convenience, and customization.</li><li>Service Quality: Based on Parasuraman's dimensions (reliability, assurance, tangibles, empathy, and responsiveness).</li><li>Customer Experience: Using dimensions of sensory, emotional, and social experience as</li></ol>	<p>The conceptual model investigates the relationships between:</p> <ul style="list-style-type: none"><li>Independent Variables: Self-Order Kiosk (SOK) and Service Quality (SQ).</li><li>Dependent Variable: Customer Experience (CE). It hypothesizes:<ol style="list-style-type: none"><li>SOK positively impacts customer experience.</li><li>Service quality positively impacts customer experience.</li><li>SOK and service quality jointly influence customer experience.</li></ol></li></ul>	<p>The study employed a quantitative approach with a questionnaire distributed to 117 respondents who had used SOKs at McDonald's Citra Garden 6. Data were collected over three months using Likert-scale-based questions.</p>	<ul style="list-style-type: none"><li>Reliability Testing: Cronbach's Alpha for SOK (0.907), SQ (0.932), and CE (0.962) indicated excellent reliability.</li><li>Hypothesis Testing: F-tests and T-tests showed significant impacts of SOK and service quality on customer experience.</li><li>Multiple Regression Analysis: <math>Y = -3.696 + 0.666X_1 + 1.320X_2</math> <math>Y = -3.696 + 0.666X_1 + 1.320X_2</math> Concluded both variables positively influence customer experience (<math>R^2 = 88.5\%</math>).</li></ul>	<ul style="list-style-type: none"><li>SOK and service quality significantly affect customer experience, with a combined influence of 88.5%.</li><li>Service quality (Beta = 1.320) had a more substantial impact than SOK (Beta = 0.666).</li><li>Issues like extended waiting times and insufficient cleaning practices were identified as areas for improvement.</li></ul>	<p>For SOK:</p> <ul style="list-style-type: none"><li>Regularly review and improve operational procedures to reduce waiting times.</li><li>Optimize queue management to ensure smoother service flow.</li></ul> <p>For Service Quality:</p> <ul style="list-style-type: none"><li>Maintain cleanliness by implementing frequent checks and cleaning protocols.</li><li>Ensure staff adherence to Standard Operating Procedures (SOPs).</li></ul> <p>For Customer Experience:</p> <ul style="list-style-type: none"><li>Enhance ambiance through better music choices and appropriate volume levels.</li><li>Strengthen brand recognition through consistent marketing efforts.</li></ul>																																														

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				proposed by Schmitt.					
7	Improving Fast-Food Restaurants' Method of Operation: Automated Drive-Through Ordering System	Castillo, A. M. M., Salonga, L. J. L., Sia, J. A. L., & Young, M. N. (2020, March). Improving Fast-Food Restaurants' Method of Operation: Automated Drive-Through Ordering System. In <i>Int'l Conf. on Indus. Eng'g. and Ops. Management</i> (pp. 1838-49).	The study identifies inefficiencies in traditional drive-through systems, including long queues, delays, and bottlenecks, caused by outdated operational methods and limited customer ordering flexibility. These inefficiencies negatively impact customer satisfaction and operational throughput.	The study is grounded in service efficiency theories, emphasizing the need for digital transformation in customer-facing operations. It explores how automation and optimized layouts can enhance time efficiency, accuracy, and customer satisfaction.	<p>The proposed framework includes:</p> <ol style="list-style-type: none"><li>Automated Drive-Through Layout: Incorporating staging stations with self-service kiosks for ordering and payment.</li><li>Operational Improvements: Reducing transaction time and queue lengths through automation.</li><li>Customer Interaction Systems: A user-friendly interface that offers options for cashless and cash payments, enhancing convenience.</li></ol>	<ul style="list-style-type: none"><li>A time study was conducted on existing drive-through operations in Metro Manila, Philippines, with 100 trials for the current system.</li><li>The proposed system was simulated using ProModel Software, with 10 trials for a self-service kiosk system.</li></ul>	<ul style="list-style-type: none"><li>Current System: Average transaction time of 6.27 minutes, with 57 out of 100 customers experiencing delays.</li><li>Proposed System: Average transaction time reduced to 3.27 minutes, with delays affecting only 8 out of 100 customers, representing an 86% improvement in operational efficiency.</li></ul>	<ul style="list-style-type: none"><li>The proposed automated system reduced transaction times by 52%, improving customer throughput and satisfaction.</li><li>Delays and bottlenecks were minimized significantly with the introduction of staging stations and self-service kiosks.</li><li>Customer interaction improved due to the availability of user-friendly payment and ordering options.</li></ul>	<p>Implementation:</p> <ul style="list-style-type: none"><li>Install self-service kiosks with integrated payment systems at staging stations.</li><li>Adopt ProModel Software for ongoing operational analysis and improvements.</li></ul> <p>Enhancements:</p> <ul style="list-style-type: none"><li>Introduce reloadable smart cards for payments.</li><li>Develop a mobile app for pre-ordering and pickup scheduling.</li><li>Offer features like order customization and discounts for specific customer groups.</li></ul> <p>Future Research:</p> <ul style="list-style-type: none"><li>Expand the study to different regions and customer demographics.</li><li>Explore applications of similar systems in non-food industries like healthcare and retail.</li></ul>

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8	Bida ba ang Saya sa Makabagong Teknolohiya?: An Assessment of Technological Advancements Implementation in Filipino Food Industry	Samaniego, M. B. A., Lanzaderas, K. C. L., Sespeñe, N. R. A., Ella, S. B. P., & Machado, R. J. S. (2023). Bida ba ang Saya sa Makabagong Teknolohiya?: An Assessment of Technological Advancements Implementation in Filipino Food Industry.	The study examines the impact of technological advancements in food outlets on customer satisfaction in Bacoor, Cavite, Philippines. It identifies commonly implemented technologies and evaluates their performance and customer reception.	The Expectancy-Disconfirmation Model (EDM) by Zhang et al. (2021) is used to measure customer satisfaction. The model evaluates whether technological advancements meet or exceed customer expectations, impacting their overall satisfaction.	The study focuses on: <ol style="list-style-type: none"><li>Identifying technologies used in food outlets (e.g., kiosks, e-menus, reloadable smart cards).</li><li>Assessing these technologies' performance in terms of speed, accuracy, ease of use, and customer satisfaction.</li></ol>	Methodology: Descriptive quantitative research design. Respondents: 147 customers dining in Bacoor food outlets. Instruments: Survey questionnaires distributed using availability sampling.	Descriptive statistics and frequency analyses were used to determine customer feedback on: <ol style="list-style-type: none"><li>Accessibility and usability.</li><li>Efficiency and accuracy.</li><li>Contribution to overall customer satisfaction.</li></ol>	<p>Most Common Technology: Ordering kiosks (42.74% of respondents used them). Robot servers were unavailable in the area.</p> <p>Performance Ratings:</p> <ul style="list-style-type: none"><li>Ordering Kiosks: Rated highly for speed and ease of use, but some concerns about accuracy.</li><li>E-Menus: Generally seen as user-friendly and efficient.</li><li>Reloadable Smart Cards: Recognized for convenience and faster transactions.</li><li>E-Table Numbers: Valued for reliability and reducing food waiting times.</li></ul> <p>Customer Satisfaction: Most respondents agreed that these technologies improved accessibility, organization, and innovation, though there were reservations about speed and safety.</p>	<ul style="list-style-type: none"><li>Enhance user interfaces to improve ease of use and reliability.</li><li>Train staff to handle technology-related issues efficiently.</li><li>Expand the implementation of emerging technologies like robot servers to boost customer experience.</li><li>Focus on addressing safety concerns with better system designs.</li><li>Regularly evaluate technological performance to maintain alignment with customer expectations.</li></ul>
9	A Concept of Consumer Acceptance on the usage of Self Ordering Kiosks at McDonald's	Yaacob, S. A., Abdul Aziz, A., Bakhtiar, M. F. S., Othman, Z., Ahmad, N. A. (2021). A Concept of Consumer Acceptance on the usage of Self-Ordering Kiosks at McDonald's.	Despite the adoption of self-ordering kiosks (SOKs) in McDonald's Malaysia to enhance service quality and customer experience, challenges such as negative customer feedback, technical issues, and slow user	The study employs the Unified Theory of Acceptance and Use of Technology (UTAUT), focusing on factors such as: <ol style="list-style-type: none"><li>Performance</li></ol>	The study explores: <ol style="list-style-type: none"><li>Independent Variables: PE, EE, SI, and FC.</li><li>Mediating Variable: Behavioral</li></ol>	Scope: McDonald's outlets in Malaysia. Methodology: Application of UTAUT framework to assess customer responses. Data Sources: Previous studies, customer	Key constructs of UTAUT were analyzed to understand their influence on customer acceptance: <ol style="list-style-type: none"><li>Performance Expectancy: Strong</li></ol>	<p>☐ Positive Findings:</p> <ul style="list-style-type: none"><li>Customers appreciate the convenience and reduced wait times</li></ul>	<ul style="list-style-type: none"><li>Enhance system design to improve ease of use and resolve navigation issues.</li></ul>

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		International Journal of Academic Research in Business and Social Sciences, 11(13), 12–20.	acceptance hinder their effectiveness.	Expectancy (PE): Belief that the technology improves task performance. 2. Effort Expectancy (EE): Ease of using the technology. 3. Social Influence (SI): Perception of social pressures to use the technology. 4. Facilitating Conditions (FC): Support infrastructure available for technology use.	intention to use SOKs. 3. Dependent Variable: Actual use behavior.	feedback, and theoretical insights.	predictor of behavioral intention. 2. Effort Expectancy: Significant, but debated for its impact on ease of use. 3. Social Influence: Positively affects behavioral intention via recommendations from peers and media. 4. Facilitating Conditions: Enhances user behavior by providing necessary infrastructure.	offered by SOKs. • Behavioral intention to use SOKs is significantly influenced by performance expectancy and effort expectancy. □ Challenges: • Language barriers, menu navigation issues, and inconsistent payment methods hindered user acceptance. • Negative feedback about technical glitches and user experience.	<ul style="list-style-type: none"><li>• Provide multilingual support to accommodate diverse customer needs.</li><li>• Offer training and support for both customers and employees to maximize adoption.</li><li>• Regularly update technology to address bugs and enhance functionality.</li><li>• Promote awareness campaigns to educate customers on the benefits of using SOKs.</li></ul>
10	Customer Acceptance Towards Self-Service Technology At Mcdonald's	JAMIL, J. B., JALIL, P. N. R. B. A., AFIZ, N. I. B. A., & SUMAR, M. B. (2020). Customer Acceptance Towards Self-Service Technology At Mcdonald'S.	The rapid implementation of self-service kiosks (SSKs) in McDonald's aims to reduce labor costs and enhance service efficiency. However, customers face barriers such as usability issues, perceived lack of control, and enjoyment in using the technology.	The study applies the Wang Model (2012) and examines four dimensions: 1. Perceived Usefulness: How SSKs improve productivity and effectiveness. 2. Perceived Ease of Use: The simplicity and effortlessness of using SSKs.	The conceptual framework highlights the relationship between the four perceived factors (independent variables) and customer acceptance (dependent variable).	Respondents: 80 customers at McDonald's Giant, Shah Alam. Methodology: Surveys distributed face-to-face using convenience sampling. Instruments: 20 questions measured on a 5-point Likert scale focusing on ease of use, usefulness, enjoyment, and control.	Statistical Tools: SPSS 25 for descriptive and inferential statistics. Key Findings: • High reliability across variables (Cronbach's Alpha between 0.660 and 0.798). • Positive relationships	1. Perceived Usefulness: Customers agreed that SSKs improved their ordering efficiency. 2. Perceived Ease of Use: High satisfaction with user-friendly and systematic features.	<ul style="list-style-type: none"><li>• Optimize the user interface to further simplify navigation and ordering.</li><li>• Provide multilingual support for greater accessibility.</li><li>• Offer more training sessions for customers</li></ul>



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				<div><div>3. Perceived Enjoyment: The intrinsic satisfaction derived from the experience.</div><div>4. Perceived Control: Customer confidence and autonomy in managing transactions.</div></div>			between all dimensions and customer acceptance.	<div><div>3. Perceived Enjoyment: Users found SSKs enjoyable and efficient for quick services.</div><div>4. Perceived Control: Customers appreciated the independence offered by SSKs.</div></div>	<div><div>unfamiliar with SSKs.</div><div><div>• Introduce features like interactive tutorials and feedback systems.</div><div>• Conduct regular maintenance to ensure consistent kiosk functionality.</div></div></div>

Study #	Title	Contributors
<b>1</b>	Dynamic Bookstore Self-Ordering Kiosk System	Jevnita Arumugam Naidu, Saanushyaa Ravi Kumar, Umami Noramirah Muhammad Shambudin, Hannes Masandig
<b>2</b>	The Implementation of Self-Ordering Kiosks (SOKs): Investigating the Challenges in Fast Food Restaurants	Farah Adibah Che Ishak, Nurul Amjaad Che Lah, Harnidah Samengon, Siti Fatimah Mohamad, Ainul Zakiah Abu Bakar
<b>3</b>	Self-ordering Kiosk Service System in Selected Food Chain Restaurants Towards Customer Satisfaction	Roy Allan Noble
<b>4</b>	Self-ordering Kiosk Usage and Post-Purchase Behaviour in Quick Service Restaurant	Norhaniza Baba, Azlina Mohd Shahril, Mohd Hafiz Hanafiah
<b>5</b>	Human and Technology Interaction: Consumer Perception Toward the Touch Screen Ordering Kiosk in Fast Food Restaurant	Tey Yi Wen, Mohamed Ismail Pakir
<b>6</b>	The Impact of Self-Order Kiosk and Service Quality on Customer Experience in McDonald's Citra Garden 6 Jakarta	Billy Stanley, Yudha Pratama, Alexander Gregory Subakti
<b>7</b>	Improving Fast-Food Restaurants' Method of Operation: Automated Drive-Through Ordering System	Andrea M. M. Castillo, Larina J. L. Salonga, John A. L. Sia, Mark N. Young
<b>8</b>	Bida ba ang Saya sa Makabagong Teknolohiya?: An Assessment of Technological Advancements Implementation in Filipino Food Industry	Merie Blaize A. Samaniego, Katrina Claire L. Lanzaderas, Niño Reyche A. Sespeñe, Sofia Bernadette P. Ella, Ralph Julian S. Machado
<b>9</b>	A Concept of Consumer Acceptance on the Usage of Self-Ordering Kiosks at McDonald's	Siti Asma Yaacob, Azdel Abdul Aziz, Mohd Faez Saiful Bakhtiar, Zulhan Othman, Noor Azmi Ahmad
<b>10</b>	Customer Acceptance Towards Self-Service Technology at McDonald's	Jarina Binti Jamil, Puteri Nurafilah Rijallah Binti Abdul Jalil, Nur Izzaty Syafiqqa Binti Azly Afiz, Mizaria Binti Sumar