



## RESEARCH ARTICLE

## The Implementation of Self-Service Kiosk at Larkin Bus Station

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ARTICLE INFO	ABSTRACT
Received: Jul 8, 2024	The introduction of self-service machines is crucial for E-commerce services as they have significantly transformed various industries and customers experiences. The machine is designed to allow customers to perform tasks and transactions on their own, reducing the need of human intervention. This study aims to identify the relationship of consumer's perspective towards self-service kiosk features at Larkin Bus Station. To support the research, 100 questionnaires were distributed randomly to the consumers at Larkin Bus Station. It comprised questions about demographic factors and perception of the current features (Graphic User Interface (GUI), user-friendliness, language, and attractiveness). The collected data was analysed by inferential analysis. Results showed that two (user-friendliness and attractiveness) out of four features have strong relationship suggesting that these variables have substantial influence on self-service kiosk successfully implemented.
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<p><b>Keywords</b></p> <p>E-Commerce</p> <p>Self-Service Kiosk</p> <p>E-Ticketing System</p> <p>Comfort</p> <p>Convenience</p>	
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### INTRODUCTION

A self-service kiosk is a convenient device that allows customers to directly engage with a business, allowing them to access services and products at their own convenience. A notable example of this is observed at transportation hubs like at TBS Bus Station and Larkin Bus Station, where self-service kiosks are utilized for the hassle-free purchase of bus tickets. We can see self-service kiosk adaptation in purchasing tickets for a bus stop.

E-ticketing is one of the most major services in E-Commerce (Hwang J, 2020). Mainly in the commercial airline industry, travellers often use E-ticketing which is a paperless electronic document for travel purposes. Moreover, E-ticketing lowers the price of processing tickets, does away with paper forms, and gives travellers and travel agencies more flexibility in changing their travel plans. In case of vehicle e-tickets, security and counterfeit protection is crucial, in other cases client's anonymity is far more important. E-ticket systems must have components that provide security and privacy. These conditions could differ greatly depending on the e-particular ticket's application. While security and counterfeit protection are essential in the case of automobile e-tickets, client privacy is frequently of far greater significance (Kim, S. & Garrison, 2010).

Additionally, if a ticket transformation system employing online facilities is supported by the public transportation service industry, it will expand even further. Users of public transportation services

benefit from online ticket bookings in several ways, including the simplicity with which they may learn about the cost of the ticket and the availability of the travel schedule.

Furthermore, customers are not required to visit the terminal or other traditional ticketing locations to make reservations for tickets and they can do it whenever and wherever they like. This research was conducted at a bus transportation service provider in Larkin, Johor Bahru, where they still sell tickets over the counter if customers must go to the location where they are being sold.

## **LITERATURE REVIEW**

According to Kadir A. (2006) stated that in public transport, E-ticketing systems offer a wide range of opportunities to make public transportation simpler to use, manage, and control because they process enormous amounts of information in addition to serving as a means of payment. They provide chances to introduce integrated pricing structures as well, which are difficult to do with conventional payment methods. Electronic ticketing technologies are classified according to the way they are used for payment. E-ticketing have become such an important issue of concern for organizations in recent years as efforts to expand e-ticketing progress. Organizations are now focusing their attention on the precise factors that influence consumer results when choosing e-ticketing alternatives, including the issue of customer satisfaction in e-ticketing.

Customers are becoming more familiar with receiving service through self-service kiosks, whether they are ordering tickets at a bus terminal station. Any industry or sector, including entertainment, catering, health, transportation, and education, uses self-service kiosks in an effort to enhance the user experience. Customers' comfort level is improved in this way as well. (Partteam & Oemkiosks, 2021) published in a blog website stated that these interactive kiosks provide customers control over completing tasks by allowing interaction, displaying information, or streamlining processes. Additionally, there is a growing need for these kiosks from customers who want a better experience with the ability for customization and more convenience.

(Sofyan Husaini, 2021) published in BNBBC stated that a self-ordering kiosk is a device that allows a customer to connect directly with a business and receive services at their leisure. Purchasing train or bus tickets is the most common example of this. Without waiting in line or asking for assistance, one simply approaches the self-service kiosk, pays, and receives a ticket. Self-ordering kiosks are also extensively used in quick-service restaurants, with the purpose of reducing the time spent ordering and waiting for meals. These kiosks are beneficial for more than just commercial purposes, they can also be used to check in and out of hotels, offices may use them to check in suppliers, ticket for bus transportation and airports can use them to allow passengers to check-in to their flight, saving time for both them and the business.

## **METHODOLOGY**

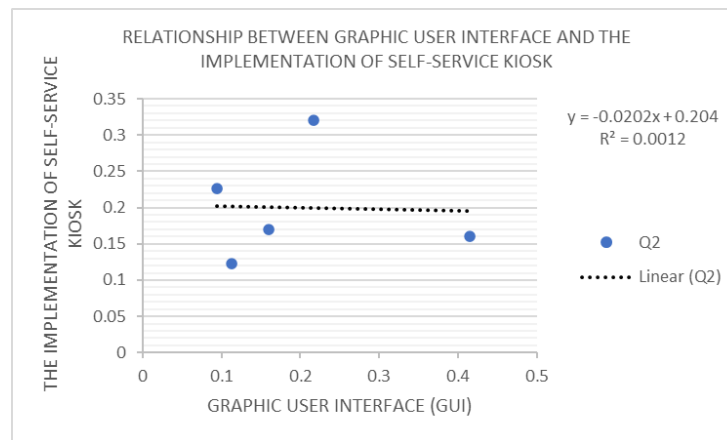
In this study we used quantitative survey methods based on literature review. This study is conducted to identify the relationship of consumer's perspective towards self-service kiosk features at Larkin Bus Station. In this research, the researcher used the survey technique to collect the primary data. A cross-sectional study was conducted between January and February 2022 in Johor Bahru. 100 questionnaires were distributed randomly to the consumers who have experienced using the self-service kiosk.

The study questionnaire was composed of 2 parts; the first part assessed demographic characteristics of the consumer's, such as gender and age. In the second part, for the features of the self-service kiosk, the questionnaire composes of fifteen questions including the features of the self-service kiosk (Graphic User Interface (GUI), user-friendliness, language, ease of use and attractiveness). Each was measured by using a five-point Likert scale.

The score ranges from “not very important” to “very important”, “very difficult” to “very easy”, “very dissatisfied” to “very satisfied”, “very unlikely” to “very likely”, and “not attractive” to “very attractive”. The score ranges from “strongly disagree” to “strongly agree”. The researcher uses the Statistical Package for Social Science (the SPSS program) to analyze the data that was collected.

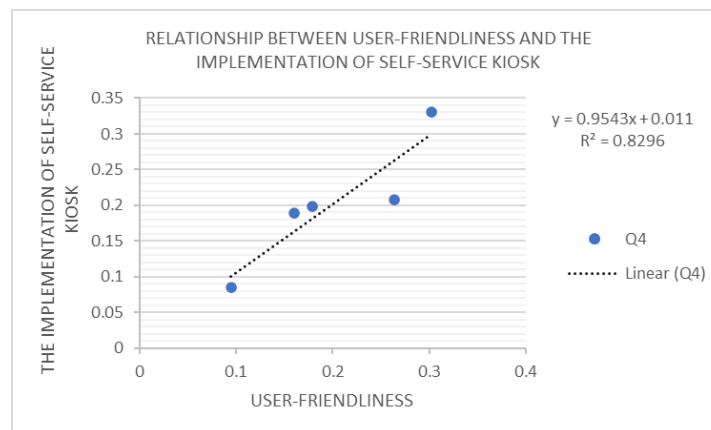
## RESULT AND DISCUSSION

In data collection and analysis stage, the researcher employs a quantitative approach which is distributing a survey to collect data from the user of self-service kiosk at Larkin Bus Station. Utilizing correlation and regression analysis techniques on the gathered data, the researcher will draw conclusions regarding consumer’s perception of the self-service kiosk experience at Larkin Bus Station.



**Figure 4.1 Relationship between Graphic User Interface (GUI) and the implementation of self-service kiosk**

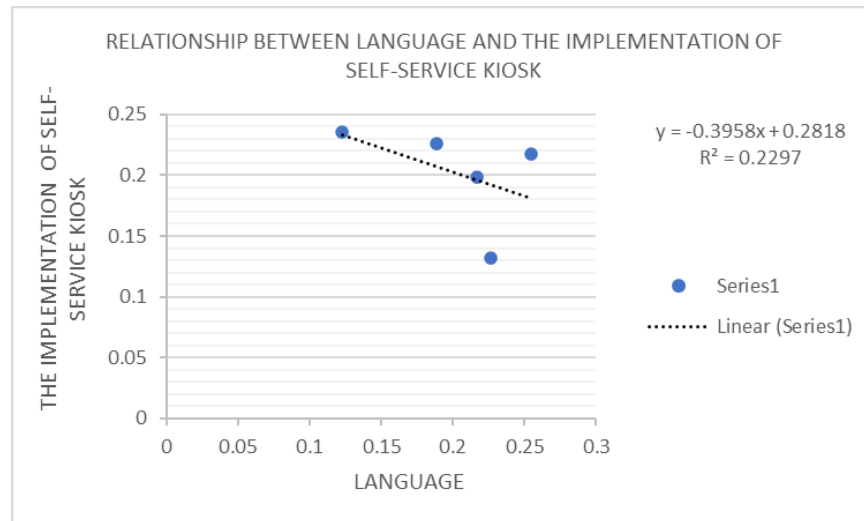
Figure 4.1 shows the relationship between the Graphic User Interface (GUI) and the implementation of self-service kiosk. The GUI of a self-service kiosk is the visual and interactive component that allows users to interact with the kiosk’s functions and services. It is the on-screen interface that users see and use to complete tasks at the kiosk. The above results indicate a negative correlation, suggesting that the presence or absence of GUI does not have a significant influence on how effectively or efficiently a kiosk system is implemented. In other words, the use of a GUI did not seem to be a critical factor in determining the success of the kiosk.



**Figure 4.2 Relationship between user-friendliness and the implementation of self-service kiosk**

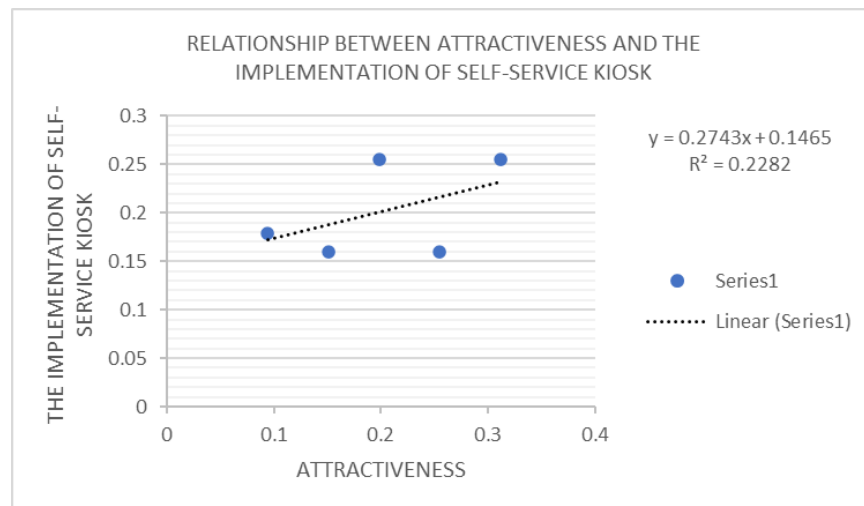
User-friendliness of a service kiosk include its design, location and maintenance. For example, the kiosks are strategically placed near the main entrance to ensure that consumers can easily spot them as they arrive at the station. This will minimize the need for them to search for manual ticketing services.

Figure 4.2 evident that there exists a positive relationship between user-friendliness and the implementation of self-service kiosk. These findings lead to the conclusion that user-friendliness plays a substantial role in influencing the successful implementation of self-service kiosk systems. In other words, if a kiosk system is easy for the user to interact with, it is more likely to be successfully implemented and used effectively.



**Figure 4.3 Relationship between language and the implementation of self-service kiosk**

Figure 4.3 illustrates a negative correlation between language and the implementation of self-service kiosk. Language can significantly influence how effectively self-service kiosks are utilized. It must match the language preferences of the consumers in a given location. Due to multiple languages have been implemented at service kiosk in the Larkin Bus station, it has not impacted on the implementation of the of the self-service kiosk.



**Figure 4.4 Relationship between attractiveness and the implementation of self-service kiosk**

The attractiveness of a self-service kiosk is crucial because it serves as the first point of contact between the user and the technology. When a kiosk looks modern and well-maintained, users are more likely to expect a smooth and efficient experience leading to higher user satisfaction.

Figure 4.4 indicates a positive relationship between attractiveness and the implementation of self-service kiosk. Based on these findings, the researcher can infer that the appeal of self-service kiosk implementation at Larkin Bus Station has favorable influence.

## **CONCLUSION**

Understanding consumer perception towards self-service kiosks is valuable for business and organizations looking to implement or improve these systems. A positive perception can drive increased usage and customer satisfaction while a negative perception may prevent consumers from using the kiosk.

In conclusion, the objective of this research was to examine consumer perspectives on self-service kiosk features. The analysis of findings reveals that even two features did not meet consumer perception, the company should maintain or improve the features to ensure satisfaction in the future. Although certain limitations were encountered, they did not significantly impact the overall outcome of the research.

## **RECOMMENDATION FOR FUTURE STUDIES**

It is suggested that future studies also incorporate alternative research approaches, such as qualitative methods. These could include interviews, case studies, focus groups, and observations, which would provide a more comprehensive understanding of the subject matter. By incorporating a mix of quantitative and qualitative methods, researchers can gain deeper insights and explore the topic from different perspectives.

To obtain more representative and diverse data, future studies should aim to increase the sample size by including a larger number of respondents. This would provide a broader perspective and more accurate insights into the usage and satisfaction levels of the self-service kiosk.

Other than that, is explore the influence of external factors by investigate the influence of external factors such as weather conditions, time of day, and customer demographics on the usage and satisfaction levels of the self-service kiosk. Understanding these external influences can help tailor the kiosk's features and services to better meet the needs of the target audience.

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