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Sustained Adoption of Online Food Delivery Applications: Insights from Northern Malaysia

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ABSTRACT

In Malaysia, online food delivery (OFD) services have seen a surge in popularity due to the convenience they offer consumers. This research explores the factors influencing users' ongoing intention to use online food delivery applications (OFDAs), specifically focussing on the customers' perspectives in the northern region of the country. Utilising a quantitative methodology, data were gathered through questionnaires from 477 participants. The analysis was conducted using the Partial Least Squares (SmartPLS). The findings revealed that factors such as performance expectancy, social influence, hedonic motivation, habit, and information quality play a significant role in shaping continuous usage intentions. These insights may also be applicable to other regions, providing a broader understanding of what drives OFDA adoption.

Keywords: Continuous intention, online food delivery, online food delivery applications

INTRODUCTION

Online Food Delivery (OFD) services facilitate food orders through websites or mobile apps, linking customers with food service providers (Ray, 2019). The rise in OFD

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adoption is attributed to the convenience and accessibility offered, especially during the COVID-19 pandemic (Müller, 2022). In Malaysia, 79% of respondents reported using OFDs during the pandemic due to dining restrictions (Tan et al., 2021). Even in the endemic phase, customers continue using OFDAs, highlighting a shift in behaviour towards digital convenience.

Food delivery applications (FDAs) represent a subset of online-to-offline (O2O) services, providing various features such as search filters, live tracking, and multiple payment options (Alalwan, 2020; Rabaa'i et al., 2022). This study examines the factors that influence the continuous intention to use online food delivery applications (OFDAs) in the northern region of Malaysia, with particular attention to critical issues such as technological literacy, trust, and service quality.

LITERATURE REVIEW

This study utilises the Unified Theory of Acceptance and Use of Technology (UTAUT) framework to predict user behaviour in the context of technology adoption. Additionally, trust and information quality are considered to examine their influence on continuous intention.

Numerous studies have highlighted the significance of performance expectancy in technology adoption, suggesting that individuals are more likely to adopt a technology when they believe it will enhance their efficiency and convenience (Alalwan, 2020). Effort expectancy is also a critical factor, as technologies that are perceived to be user-friendly and easy to navigate are more likely to encourage sustained usage (Gupta, 2020). Social influence, particularly from peers and family members, has been shown to impact technology acceptance, as individuals tend to conform to group norms when making technology adoption decisions (Ye-Eun et al., 2017).

Furthermore, hedonic motivation, or the enjoyment derived from using technology, has been highlighted as a significant driver of continuous use. Habit formation, wherein users develop a routine around using OFDAs, further reinforces continuous intention. Information quality is another critical determinant, as accurate and timely information enhances trust and satisfaction with the service (Koiri et al., 2019). Trust, in particular, has been extensively studied, with findings indicating that privacy concerns and perceived security significantly influence customers' willingness to share personal information and make online transactions (Hu & Chen, 2018).

Continuous intention is influenced by habit, price value, performance expectancy, information quality, facilitating conditions, effort expectancy, social influence, hedonic motivation, and trust. Gender is introduced as a moderating variable. Unlike previous studies, this research excludes age and experience as moderators, focussing on a cross-sectional analysis.

METHODOLOGY

A quantitative, cross-sectional design was employed, with data collected via a Google Form distributed to respondents in Perak, Perlis, Kedah, and Pulau Pinang. A total of 477 participants completed the questionnaire, which comprised two sections: Section A gathered

demographic data, while Section B focussed on OFDA usage. Respondents' perceptions were measured using a 7-point Likert scale (Hussey & Hussey, 1997), and the data were analysed using the SmartPLS.

Purposive sampling was employed to ensure the inclusion of individuals with prior experience using OFDAs, aligning the sample with the study's objectives. Respondents assessed their experiences based on ease of use, perceived usefulness, social influence, and overall satisfaction. The cross-sectional design enabled data collection at a single point in time, providing a comprehensive overview of user perceptions and behaviours.

RESULTS AND DISCUSSION

Demographic Details

The sample consisted of 62.5% females and 37.5% males, with Malays forming the majority (84.9%), followed by Chinese (6.5%), Indians (4.4%), and other ethnicities (4.2%). Most respondents were aged 21-25 (60.0%) and held a Bachelor's degree (47.0%). FoodPanda (55.3%) and GrabFood (43.4%) were the most preferred platforms.

Assessment of the Measurement Model

The outer model confirmed content, convergent, and discriminant validity. Factor loadings exceeded the recommended 0.50 threshold (Hair et al., 2014), and composite reliability ranged between 0.945 and 0.988. The average variance extracted (AVE) values surpassed the 0.50 benchmark, ensuring construct validity.

Hypothesis Testing

Performance expectancy (H1), social influence (H3), hedonic motivation (H5), habit (H7), and information quality (H8) significantly influenced continuous intention (p < 0.05). However, effort expectancy (H2), facilitating conditions (H4), price value (H6), and trust (H9) showed no significant relationship. Gender did not moderate any of the proposed relationships (H10-H13).

CONCLUSION

The findings reveal that continuous intention to use OFDAs is shaped by performance expectancy and social influence, along with hedonic motivation, habitual use, and the quality of information provided. The absence of gender moderation suggests uniform behaviour across genders in the northern Malaysia. For practitioners, enhancing system performance, usability, and awareness can encourage continuous use. Future studies should explore additional variables, expand geographical scope, and consider qualitative approaches for deeper insights.

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REFERENCES

- Alalwan, A. A. (2020). Food delivery applications: A service-based mobile application that allows the customer to order food online. *Journal of Retailing and Consumer Services*, 55, Article 102132. https://doi.org/10.1016/j.jretconser.2020.102132
- Gupta, A. (2020). Online food delivery apps: Convenience or complication? *Journal of Hospitality and Tourism Technology*, 11(4), 463-476. https://doi.org/10.1108/JHTT-09-2019-0138
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2014). Multivariate data analysis (7th ed.). Pearson.
- Hu, J., & Chen, J. (2018). Research on consumer trust in online food delivery service based on expectation-confirmation theory. *Journal of Consumer Affairs*, 52(2), 430-454. https://doi.org/10.1111/joca.12157
- Hussey, R., & Hussey, J. (1997). Business research: A practical guide for undergraduate and postgraduate students. Palgrave Macmillan.
- Koiri, R., Mishra, A., & Singhal, A. (2019). The role of trust in the adoption of online food delivery applications in India. *International Journal of Business and Management*, 14(8), 23-31. https://doi.org/10.5539/ijbm. v14n8p23
- Müller, M. (2022). The impact of COVID-19 on online food delivery services in Malaysia. *International Journal of Food Science & Technology*, 57(4), 2202-2210. https://doi.org/10.1111/ijfs.15478
- Rabaa'i, A., Juhdi, N. F., & Awwad, M. (2022). Food delivery applications: Users' satisfaction and willingness to use. *Journal of Service Science and Management*, 15(3), 327-344. https://doi.org/10.4236/jssm.2022.153021
- Ray, P. (2019). The rise of online food delivery: Connecting consumers with food service operations. *Journal of Hospitality and Tourism Technology*, 10(3), 289-303. https://doi.org/10.1108/JHTT-05-2019-0052
- Tan, A. R., Lo, K. H., & Tan, H. H. (2021). The factors influencing the intention to use online food delivery applications in Malaysia: A partial least squares approach. *International Journal of Business and Management*, 16(1), 1-10. https://doi.org/10.5539/ijbm.v16n1p1
- Ye-Eun, H., Kim, Y. J., & Lee, H. (2017). Consumer behaviour in online food delivery: A study of South Korea and the USA. *Journal of Retailing and Consumer Services*, *34*, 305-313. https://doi.org/10.1016/j.jretconser.2016.11.004