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# Determinants of Customer Experience and Satisfaction Among Users of Digital E-Hailing Service

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**ABSTRACT**

E-hailing has become an increasingly popular mode of transportation in Southeast Asia, with GrabCar being one of the leading platforms offering convenient and affordable mobility solutions. This study aims to investigate the factors influencing customer experience and satisfaction in using GrabCar services. The independent variables include perceived ease of use, perceived fare, perceived trust, perceived risk, and perceived convenience, with customer experience serving as a mediating variable and customer satisfaction as the dependent variable. A quantitative method was applied through a structured questionnaire distributed to 150 respondents from Malaysia, Indonesia, and India, and the data were analyzed using SPSS. The regression results show that customer experience is significantly influenced by perceived ease of use ($\beta = 0.221$, $p < 0.001$), perceived fare ($\beta = 0.174$, $p < 0.01$), and perceived risk ($\beta = 0.423$, $p < 0.001$), while customer satisfaction is affected by perceived fare ($\beta = 0.341$, $p < 0.001$), perceived convenience ($\beta = 0.251$, $p < 0.001$), and customer experience ($\beta = 0.407$, $p < 0.001$). GrabCar should prioritize fair pricing, user-friendly design, safety, and convenience to enhance experience and satisfaction.

**Keywords:** Customer Experience; Customer Satisfaction; E-Hailing Services; Perceived Value; Service Quality

## INTRODUCTION

In June 2012, Grab launched its service in Malaysia. It is a mega app that offers taxi, food delivery, and digital payment services through mobile devices. The emergence of e-hailing services has significantly transformed urban transportation across Southeast Asia, providing a convenient and technology-driven alternative to traditional taxis, with Grab being a pioneer in this field (Kato & Chalermpong, 2024). Grab also plays an important role in the "sharing economy," which not only involves the sharing of property for public participation but also represents a convenient way to connect and develop through technology (Hamari et al., 2016).

Initially, Grab was introduced as a taxi-hailing service similar to Uber (Chalermpong et al., 2023), aiming to provide passengers with a more convenient and dependable means of booking transportation. In 2013, Grab expanded beyond Malaysia, establishing its presence in several Southeast Asian countries, including Thailand, Vietnam, Indonesia, Singapore, and the Philippines. The platform has rapidly replaced traditional taxi services and has become highly favored by users for offering a safer and more efficient transportation alternative (Nguyen & Ha, 2022). Since 2015, Grab has undergone significant expansion and diversification, positioning itself as a market leader in the region. Today, Grab stands at the forefront of the industry, offering customers a comprehensive range of services, including ride sharing, food delivery, digital payments, and other on-demand solutions on a single integrated platform (Joe et al., 2024). It serves as a low-cost, on-demand transport option that has become a vital part of urban living.

Although Grab dominates the market, customer satisfaction varies depending on several factors such as price, app interface, ride rates, driver behavior, and service reliability (Buruhanutheen et al., 2019). To maintain its competitive edge, Grab must identify which of these factors most strongly influence customer satisfaction. Therefore, the purpose of this study is to determine the key factors that impact the customer experience of Grab's e-hailing service. It also aims to evaluate the relationships among these factors, such as perceived ease of use, perceived fare, perceived trust, perceived risk, and perceived convenience and overall customer satisfaction (Jin & Lim, 2021). Additionally, this study provides practical recommendations for Grab and similar service providers to enhance their customer experience and strengthen user loyalty.

Previous studies examining factors influencing customer experience and satisfaction in e-hailing services have shown mixed results. For instance, Kadir et al. (2023) found that perceived ease of use positively affects customer experience, while Ryan et al. (2020) demonstrated that perceived fare significantly influences satisfaction. Trust was found to be a critical factor in customer loyalty, though some studies reported a smaller effect. The influence of perceived risk remains inconsistent (Pelaez et al., 2019), whereas convenience is often associated with satisfaction. Moreover, although customer experience is related to loyalty, trust, and convenience may act as an enabling condition (Najjar & Dahabiyeh, 2021). Finally, satisfaction contributes to loyalty but is influenced by price fairness (Hride et al., 2022). These inconsistencies highlight the research gap that this study seeks to address within the context of Grab.

This study contributes to the growing body of literature on digital platform services, particularly within the transportation industry. By focusing on Grab, the market leader in Southeast Asia, the research provides practical insights into how service quality, pricing, driver behavior, and app convenience influence customer experience and satisfaction. These insights can assist Grab and other similar platforms in identifying key areas for service improvement, thereby enhancing customer retention and brand loyalty.

Furthermore, the study enriches academic discussions on user-centered innovation and service management in digital platforms.

The present study focuses on customer perspectives of Grab's e-hailing services in Malaysia, Indonesia, and India. It investigates factors affecting customer experience and satisfaction, including ease of use, fare, trust, risk, and convenience. The findings are based on data collected over a defined period and reflect current service expectations and perceptions. This paper is organized into several sections to ensure clarity and coherence. The next section reviews relevant literature on customer experience and satisfaction in e-hailing services, followed by the methodology. Subsequently, the findings and discussion section presents and interprets the key results in relation to the research objectives. Finally, the conclusion summarizes the study's findings, discusses their implications, and offers recommendations for future research and practical applications.

## LITERATURE REVIEW

### Overview of E-Hailing Services

In this era of globalization, e-hailing has become increasingly popular due to the rapid development of transportation services. An e-hailing vehicle refers to a private vehicle used to provide public transportation services to passengers who make bookings through electronic applications. These platforms connect passengers and drivers digitally and serve as an alternative to conventional taxi services (Ubaidillah et al., 2019). Furthermore, these platforms bridge the gap between private and public transportation options. Research by Lim and Fernandez (2022) revealed that although 82% of ride-hailing users own a car or motorcycle, they still prefer to use ride-hailing services because of their convenience. This clearly shows how e-hailing is transforming the way people commute. The growing number of e-hailing users compared to private vehicle owners demonstrates that these platforms are more convenient, affordable, and easily accessible. Therefore, this shift indicates a fundamental change in consumer behavior towards vehicle ownership and usage.

### Customer Behavior Towards E-Hailing Applications

Grab, originally launched as MyTeksi in Malaysia, has evolved into the leading e-hailing service provider in Southeast Asia. Currently, GrabCar operates in almost every major city across the region (Jais & Marzuki, 2020). This rapid expansion illustrates how Grab effectively meets regional transportation needs. Consumer behavior toward e-hailing applications is shaped by a combination of economic, social, and environmental factors (Kurniawati et al., 2021). E-hailing services are more attractive than traditional taxis due to their cost-effectiveness, service quality, and promotional offers (Al-Shakhrit et al., 2021). Additionally, e-hailing services are often viewed as a more efficient and convenient option, particularly in congested urban areas where traffic is unpredictable and parking is limited (Jais & Marzuki, 2020). Thus, the increasing reliance on e-hailing reflects a behavioral shift among consumers toward GrabCar.

### Perceived Ease of Use

Customer experience and satisfaction with e-hailing services are significantly influenced by perceived ease of use. Kadir et al. (2023) noted that individuals prefer programs that are simpler and more user-friendly. Users generally avoid complicated applications that make basic tasks difficult. When a service is intuitive and easy to use, customers are more likely to continue using it. This aligns with the Technology Acceptance Model (TAM), which posits that perceived ease of use directly influences users' attitudes and intentions toward adopting technology. For e-hailing applications like GrabCar, a clean interface, smooth navigation, and clear features enhance customer experience. For

instance, Grab's interface provides a simple layout, quick booking options, and real-time tracking, all of which make booking a ride effortless. Ann and Shafi (2022) further argued that clear design and simple instructions reduce cognitive effort, thereby improving customer satisfaction. Based on this, the following hypotheses are proposed:

H1: Perceived ease of use affects customer experience.
H6: Perceived ease of use affects customer satisfaction.

**Perceived Fare**

Perceived fare is a key factor influencing customers' decisions in using e-hailing services. Customers value affordability and tend to seek cost-effective transportation. However, price is not merely a transactional figure; it also reflects the value that customers receive (Rauf et al., 2023). GrabCar's fares are generally reasonable and vary based on peak hours and travel distance (Zailani et al., 2020). Promotional offers also strongly influence consumers' decisions. Customers are often drawn to discounts and special pricing, as they increase the perceived value of the service (Sadom et al., 2022). Kurniawati et al. (2021) also found that many users prefer Grab over traditional taxis because it is typically more affordable, thereby enhancing user experience and satisfaction. Hence, e-hailing companies must manage pricing strategies carefully to balance profitability with customer satisfaction. Therefore, the following hypotheses are proposed:

H2: Perceived fare affects customer experience.
H7: Perceived fare affects customer satisfaction.

**Perceived Trust**

Trust fosters a positive perception, strengthens users' confidence in service providers, and enhances their sense of security (Chalermpong et al., 2023). It is one of the critical factors influencing users' experience and satisfaction when using e-hailing platforms. Users are more likely to prefer platforms with strong reputations and transparent practices over those with unethical behaviors, such as overcharging or unlicensed driving. Supporting this view, Yo et al. (2021) found that consumers perceive e-commerce platforms as trustworthy when they conduct transactions honestly and with integrity. Kee et al. (2022) concluded that perceived trust is a primary determinant of customer satisfaction, while Najjar and Dahabiyeh (2021) also found that trust significantly influences behavioral intentions to use ride-hailing services. Accordingly, the following hypotheses are proposed:

H3: Perceived trust affects customer experience.
H8: Perceived trust affects customer satisfaction.

**Perceived Risk**

Perceived risk refers to the psychological cost associated with customers' purchasing behavior, representing uncertainty and potential unfavorable outcomes (Zhang & Yu, 2020). In this study, attention is given to safety and privacy risks. Safety remains a major concern since passengers and drivers are usually unfamiliar with each other. Passengers may question the accuracy of driver information, the adequacy of training, or even criminal background checks. Tran (2020) explained that safety risks arise primarily from information asymmetry between parties involved in service exchange. Furthermore, public concerns—especially among women—about using e-hailing services at night contribute to perceived risk. For example, in 2017, a Malaysian woman was reportedly assaulted by a GrabCar driver (The Straits Times, 2017), which caused public distrust and reduced service usage. Privacy risk also plays an important role, as users fear their personal data may be misused or accessed without authorization. Such

risks negatively affect both customer experience and satisfaction. Based on these considerations, the following hypotheses are proposed:

H4: Perceived risk affects customer experience.
H9: Perceived risk affects customer satisfaction.

**Perceived Convenience**

Consumer convenience refers to the ability of a product or service to save time and effort during consumption (Zeqiri et al., 2023). In the case of e-hailing, GrabCar enables users to schedule rides in advance and access transportation more quickly than traditional taxis. This aligns with the growing consumer demand for time-saving solutions. Lok et al. (2024) observed a similar behavioral shift in the food delivery sector, where convenience has driven the transition from dining out to ordering online. E-hailing platforms likewise address urban challenges such as limited parking availability and traffic congestion. Moreover, they benefit individuals without personal vehicles, such as university students, who use GrabCar for commuting and social activities. Zailani et al. (2020) emphasized that convenience and ease of booking positively influence users' intentions to use e-hailing services, while Yapp and Yeap (2023) stated that convenience directly contributes to satisfaction. Hence, the following hypotheses are proposed:

H5: Perceived convenience affects customer experience.
H10: Perceived convenience affects customer satisfaction.

**Customer Experience and Customer Satisfaction**

Customer experience refers to the psychological state that arises when consumers' expectations before consuming a service are met or exceeded by actual experiences (Majeed et al., 2022). Customer satisfaction, on the other hand, reflects the level of fulfillment, contentment, or happiness customers feel after consuming a product or service (Gan et al., 2024). These two concepts are closely related, as a positive experience typically enhances satisfaction, while a negative one reduces it. According to Rane et al. (2023), customer experience and satisfaction directly influence loyalty, retention, and word-of-mouth recommendations. A positive GrabCar experience thus fosters loyalty, repeat usage, and favorable reviews. Moreover, Gan et al. (2024) noted that customer satisfaction indirectly contributes to a company's financial performance through loyalty and repurchase intention. Therefore, GrabCar should focus on improving ease of use, fare, trust, risk management, and convenience to ensure a positive customer experience and satisfaction. Hence, the final hypothesis is proposed:

H11: Customer experience affects customer satisfaction.

**Conceptual Framework**

To guide the empirical investigation and illustrate the proposed relationships among the study variables, Figure 1 presents the research framework that outlines the hypothesized paths tested in this study.

**Figure 1.** Research Framework

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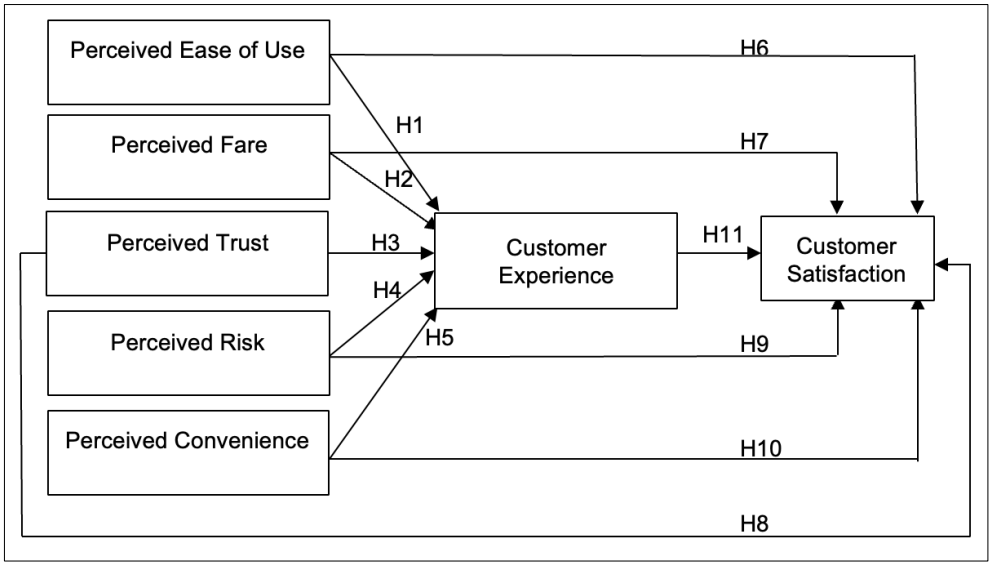



## RESEARCH METHOD

### Sample and Procedure

A structured questionnaire developed using Google Forms was utilized to collect data for this study. The distribution process employed a targeted sampling approach, in which the questionnaire was disseminated to potential respondents through various social media platforms, including WhatsApp, Instagram, and Telegram. Eligibility to participate required respondents to have prior experience using the GrabCar e-hailing service. During the data collection period, a total of 150 valid responses were obtained. The data were analyzed using IBM SPSS Statistics and R software to conduct hypothesis testing and evaluate the research model.

### Measures

All items in this study were measured using a five-point Likert scale, where “1” indicated strongly disagree and “5” indicated strongly agree. The complete set of measurement items used in this study is presented in the Appendix.

#### *Customer Satisfaction*

Customer satisfaction was measured using a six-item scale adapted from the original nine-item instrument developed by Kurniawati et al. (2021). A sample item includes: “I am satisfied with the price offered by GrabCar.” The original scale reported a Cronbach’s Alpha of 0.856, indicating a good level of internal consistency.

#### *Customer Experience*

Customer experience was assessed using a six-item scale designed to capture various aspects of the e-hailing service journey. Example items include: “I feel it is easy to use the mobile Grab application” and “The drivers I encountered were professional and polite.” These items reflect dimensions such as usability, service quality, price fairness, safety, and overall satisfaction with the ride experience.

#### *Perceived Ease of Use*

Perceived ease of use was measured using a six-item scale adapted from the original five-item instrument developed by Kadir et al. (2023). One of the items states: “The Grab app is easy to use,” reflecting users’ interaction and comfort level with the application. The original version of the scale demonstrated strong internal consistency, with a Composite Reliability score of 0.868.

***Perceived Fare***

Perceived fare was evaluated using a six-item scale adapted from the five-item measure developed by Rauf et al. (2023). The adaptation aimed to better represent users' perceptions of pricing in the context of GrabCar services. A sample item reads: "The fare charged by GrabCar is reasonable." The original instrument reported a Cronbach's Alpha of 0.631, which indicates a moderate but acceptable level of reliability.

***Perceived Trust***

A six-item scale was developed to assess respondents' trust in GrabCar services. The items captured multiple dimensions of trust, including safety, data protection, service reliability, and responsiveness. Sample statements include: "I trust GrabCar to provide a safe ride" and "GrabCar has built a good reputation, which makes me trust it." This construct reflects users' confidence in both the platform and its drivers, based on their experiences and overall perceptions.

***Perceived Risk***

Perceived risk was measured using a six-item scale designed to capture respondents' sense of uncertainty when using GrabCar services. This measure included dimensions such as safety, privacy, financial fairness, and comfort in different usage contexts. Example items include: "I feel safe when using GrabCar services" and "I believe my personal information is securely protected when using GrabCar." The construct aimed to assess potential negative expectations and the perceived risks associated with the use of e-hailing services.

***Perceived Convenience***

Perceived convenience was assessed using a six-item scale adapted from the original four-item convenience booking instrument developed by Zailani et al. (2020). The adapted version reflected users' perceptions of accessibility, ease of booking, and suitability of GrabCar for daily transportation needs. A sample item includes: "GrabCar is a convenient choice for my daily transport needs." The original scale demonstrated good reliability, with a Cronbach's Alpha of 0.708, indicating strong internal consistency.

## RESULTS

**Table 1.** Summary of Respondents' Demographic Information (N = 150)

| Characteristics | Frequency | Percentage (%) |
|---|---|---|
| Gender | | |
| Female | 92 | 61.3 |
| Male | 58 | 38.7 |
| Age | | |
| Below 18 | 14 | 9.3 |
| 18 - 24 years old | 93 | 62.0 |
| 15 - 34 years old | 24 | 16.0 |
| 35 - 44 years old | 13 | 8.7 |
| 45 - 54 years old | 3 | 2.0 |
| 55 years old and above | 3 | 2.0 |
| Ethnicity | | |
| Chinese | 64 | 42.7 |
| Indian | 37 | 24.7 |
| Malay | 34 | 22.7 |
| Bumiputera | 9 | 6.0 |
| Javanese | 5 | 3.3 |
| Others | 1 | 0.7 |
| Nationality | | |

| | | |
|---|---|---|
| Malaysian | 103 | 68.7 |
| Non-Malaysian | 47 | 31.3 |
| Country | | |
| Malaysian | 103 | 68.7 |
| India | 24 | 16.0 |
| Indonesia | 23 | 15.3 |
| Highest Level of Education | | |
| Secondary School / SPM | 18 | 12.0 |
| STPM / Matriculation / Foundation / Diploma | 27 | 18.0 |
| Bachelor's degree | 86 | 57.3 |
| Postgraduate (Master / PhD) | 19 | 12.7 |
| Occupation | | |
| Student | 102 | 68.0 |
| Government Sector | 12 | 8.0 |
| Private Sector | 29 | 19.3 |
| Unemployed | 5 | 3.3 |
| Retired | 2 | 1.3 |
| Monthly Income | | |
| Less than RM500 | 56 | 37.3 |
| RM500 - RM1,000 | 36 | 24.0 |
| RM1,000 - RM1,999 | 21 | 14.0 |
| RM2,000 - RM2,999 | 18 | 12.0 |
| RM3,000 - RM3,999 | 9 | 6.0 |
| RM4,000 - RM4,999 | 6 | 4.0 |
| RM5,000 and above | 4 | 2.7 |
| Frequency of Using GrabCar Services | | |
| Daily | 9 | 6.0 |
| A few times per week | 33 | 22.0 |
| Weekly | 31 | 20.7 |
| 2-3 times per month | 33 | 22.0 |
| Monthly | 15 | 10.0 |
| Once every 2-3 months | 29 | 19.3 |

Table 1 presents the demographic characteristics of the respondents. A total of 61.3% (N = 92) of the respondents are female, while 38.7% (N = 58) are male. The majority of respondents (62%, N = 93) are aged between 18 and 24 years old, and most of them are Chinese (42.7%, N = 64).

Regarding nationality, 68.7% (N = 103) of the respondents are Malaysian, while the remaining 31.3% (N = 47) are non-Malaysian, consisting of 24 respondents from India and 23 from Indonesia. In terms of educational background, most respondents hold a bachelor's degree (57.3%, N = 86), followed by those with STPM, Matriculation, Foundation, or Diploma qualifications (18%, N = 27).

The occupation data indicate that the majority of respondents are students (68%, N = 102), followed by individuals working in the private sector (19.3%, N = 29), government sector (8%, N = 12), unemployed (3.3%, N = 5), and retired (1.3%, N = 2).

Similarly, the monthly income distribution aligns with the occupation trend, where most respondents earn less than RM500 per month (37.3%, N = 56). With regard to the frequency of using GrabCar services, 6% (N = 9) of respondents reported using it daily, 22% (N = 33) a few times per week, 20.7% (N = 31) once a week, 22% (N = 33) two to

three times per month, 10% (N = 15) once per month, and 19.3% (N = 29) once every two to three months.

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

| Variables | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|
| 1 | Perceived Ease of Use | 0.870 | | | | | | |
| 2 | Perceived Fare | 0.328** | 0.922 | | | | | |
| 3 | Perceived Trust | 0.424** | 0.637** | 0.940 | | | | |
| 4 | Perceived Risk | 0.427** | 0.668** | 0.857** | 0.923 | | | |
| 5 | Perceived Convenience | 0.641** | 0.597** | 0.527** | 0.549** | 0.900 | | |
| 6 | Customer Experience | 0.588** | 0.676** | 0.747** | 0.800* | 0.664* | 0.881 | |
| 7 | Customer Satisfaction | 0.445** | 0.758** | 0.633** | 0.689* | 0.689* | 0.780** | 0.898 |
| Number of items | | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Mean | | 22.5367 | 19.9922 | 21.1156 | 20.7556 | 22.2900 | 21.4500 | 21.6089 |
| Standard Deviation | | 3.04753 | 4.2801 | 3.93473 | 3.93348 | 3.53476 | 3.35045 | 3.49261 |

Note. N = 150; *p < 0.05, **p < 0.01, ***p < 0.001. The diagonal entries represent Cronbach's coefficient alpha.

As shown in Table 2, all variables demonstrated Cronbach's Alpha values above 0.870, indicating excellent internal consistency. According to Ahmad et al. (2024), reliability coefficient values between 0.70 and 0.79 represent an acceptable level of reliability, values between 0.80 and 0.89 indicate good dependability, and values of 0.90 or higher reflect excellent reliability. Therefore, the measurement items used in this study are valid and exhibit high internal consistency.

The results also reveal positive correlations between most variables and both customer satisfaction and customer experience. For instance, perceived fare shows a strong correlation with customer satisfaction ($r = 0.758$, $p < 0.01$). Additionally, customer experience demonstrates a strong relationship with customer satisfaction ($r = 0.780$, $p < 0.01$). These findings suggest that when users perceive the service as reasonably priced and have a positive experience, they are more likely to feel satisfied with GrabCar services.

**Table 3.** Summary of Regression Analysis

| Variables | | Customer Experience | Customer Satisfaction |
|---|---|---|---|
| 1 | Perceived Ease of Use | 0.221*** | -0.076 |
| 2 | Perceived Fare | 0.174** | 0.341*** |
| 3 | Perceived Trust | 0.113 | -0.053 |
| 4 | Perceived Risk | 0.423*** | 0.076 |
| 5 | Perceived Convenience | 0.127 | 0.251*** |
| 6 | Customer Experience | | 0.407*** |
| $R^2$ Change | | 0.734 | 0.755 |
| F Value | | 65.715 | 88.602 |
| Durbin-Watson Statistic | | 1.997 | 1.985 |

Note: N = 150; *p < 0.05, **p < 0.01, ***p < 0.001.

Table 3 presents the results of the regression analysis, which examines the influence of independent variables on customer experience and satisfaction. The findings indicate that customer experience is significantly affected by perceived ease of use ($\beta = 0.221$, p

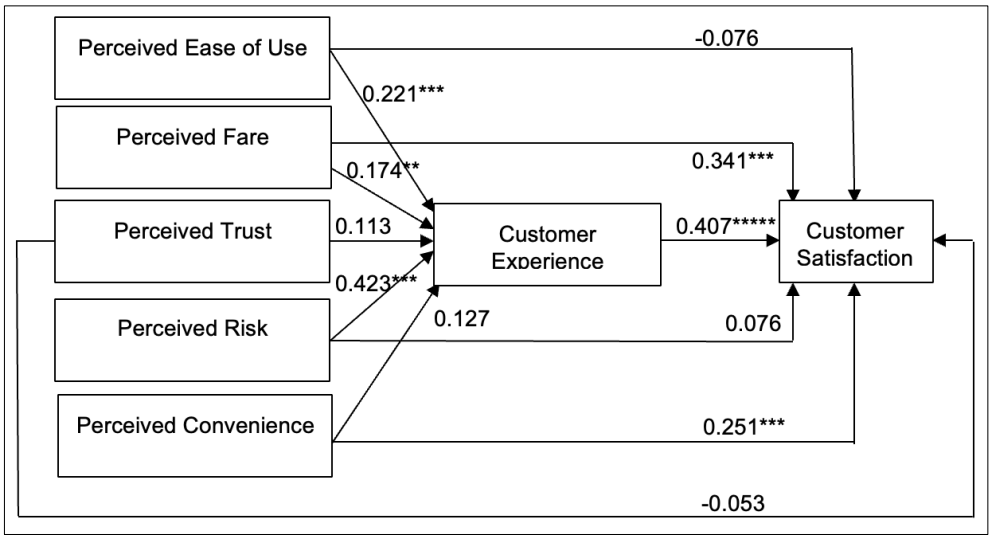
< 0.001), perceived fare (β = 0.174, p < 0.01), and perceived risk (β = 0.423, p < 0.001), which together explain 73.4% of the variance ($R^2$ = 0.734). Therefore, hypotheses H1, H2, and H4 are supported. Among these variables, perceived risk emerges as the strongest predictor of customer experience. Conversely, H3 and H5 are rejected because there is no significant relationship between customer experience and perceived trust or perceived convenience.

Customer satisfaction demonstrates significant positive relationships with perceived fare (β = 0.341, p < 0.001), perceived convenience (β = 0.251, p < 0.001), and customer experience (β = 0.407, p < 0.001), explaining 75.5% of the variance ($R^2$ = 0.755). These findings support H7, H10, and H11. The results show that customer experience exerts the strongest direct influence on customer satisfaction. However, customer satisfaction is not significantly affected by perceived ease of use (β = −0.076), perceived trust (β = −0.053), or perceived risk (β = 0.076), leading to the rejection of H6, H8, and H9.

The data analysis further reveals that customer satisfaction is indirectly influenced by perceived ease of use, perceived fare, and perceived risk through their direct effects on customer experience. Both models demonstrate robustness, supported by high F-values of 65.715 and 88.602. Additionally, the Durbin–Watson statistics (1.997 and 1.985) indicate a low level of autocorrelation, confirming the reliability of the regression results.

To provide a clearer visualization of these relationships and their tested significance within the proposed framework, Figure 2 illustrates the path coefficients generated from the full structural model.

**Figure 1.** Path Coefficients of the Full Model




## DISCUSSION

### H1 & H6: The Role of Perceived Ease of Use in Customer Experience and Satisfaction

The findings reveal that perceived ease of use has a significant positive influence on customer experience but does not exert a direct effect on customer satisfaction. In other words, when users find the GrabCar application easy to use, their overall ride experience improves; however, ease of use alone does not directly enhance satisfaction. This result partially supports H1, as ease of use clearly enhances user experience in line with the TAM, which states that user-friendly design reduces effort and frustration (Venkatesh & Davis, 2000). The absence of a direct effect on satisfaction suggests that simply making

the application easy to use is not sufficient to create customer happiness; satisfaction depends more on post-service outcomes such as pricing fairness and convenience.

**H2 & H7: The Effect of Perceived Fare on Customer Experience and Satisfaction**
In terms of price perception, perceived fare demonstrated a strong positive influence on both customer experience and customer satisfaction. This indicates that higher perceived fairness and affordability of fares contribute to a more enjoyable ride experience and greater overall satisfaction. These findings align with previous research in the ride-hailing context. For instance, Gan et al. (2024) reported that price is one of the primary factors influencing customer satisfaction in Malaysia, noting that higher or unpredictable surge pricing tends to reduce satisfaction. Similarly, the present study confirms that riders are highly sensitive to pricing fairness; reasonable fares not only enhance the immediate ride experience but also lead to higher satisfaction. Therefore, Grab should maintain transparent and competitive pricing strategies to strengthen customer satisfaction.

**H3 & H8: The Impact of Perceived Trust on Experience and Satisfaction**
The findings indicate that perceived trust does not significantly influence either customer experience or customer satisfaction. This outcome contradicts a substantial body of prior research, which commonly identifies trust as a key determinant in shaping user perceptions and satisfaction in digital and service-based environments (e.g., Cheng et al., 2017). In the context of ride-hailing services, trust often relates to confidence in driver reliability, platform integrity, data protection, and transaction security. However, the rejection of both hypotheses suggests that trust may not be a crucial differentiator for GrabCar users in Malaysia. One possible explanation is that Grab, as an established and reputable platform, has already reached a baseline level of trust among users; therefore, trust no longer functions as a salient variable that significantly shapes experience or satisfaction. Instead, users may take trust for granted and place greater emphasis on more tangible service elements such as pricing, convenience, and safety. Additionally, trust-related concerns may have been overshadowed by users' familiarity with the platform, resulting in limited variability in trust perceptions. From a managerial perspective, this finding implies that while maintaining trust is essential, enhancing trust alone will not substantially improve experience or satisfaction. Instead, Grab should focus on strengthening areas that have demonstrated stronger effects, such as pricing transparency, ride safety, and service convenience.

**H4 & H9: The Influence of Perceived Risk on Experience and Satisfaction**
Furthermore, perceived risk exhibited a strong effect on customer experience but no significant direct influence on satisfaction. This finding suggests that riders who perceive the service as safe and secure tend to report a better overall experience. Safety emerged as the strongest determinant of experience within this model. Logically, when customers feel safe during their ride, they are more likely to enjoy it. Prior studies on online and service-based platforms have also demonstrated that lower perceived risk and higher security increase satisfaction (Majeed et al., 2022). In this study, perceived risk affects satisfaction indirectly through its influence on customer experience. From a managerial perspective, ensuring passenger safety and minimizing risks through rigorous driver background checks, improved in-app safety features, and transparent complaint-handling mechanisms are essential strategies for enhancing user experience. When customers feel secure and comfortable, their satisfaction naturally improves.

**H5 & H10: The Impact of Perceived Convenience on Experience and Satisfaction**
Perceived convenience, which includes factors such as booking flexibility, service availability, and ease of access, did not significantly predict customer experience but had a significant positive effect on satisfaction. Although this may appear counterintuitive, it

suggests that while convenience may not strongly shape how users perceive their ride in real time, it plays an important role in determining overall satisfaction afterward. Features such as easy scheduling, a wide range of vehicle options, and flexible payment methods enhance the perceived value of the service. This finding is consistent with previous research, which found that convenience and price are strongly correlated with satisfaction in ride-hailing services, as customers expect e-hailing platforms to save time and effort (Zeqiri et al., 2023). When these expectations are met, customers report higher satisfaction levels.

**H11: Customer Experience as the Primary Driver of Customer Satisfaction**
Finally, customer experience, which acts as a mediating variable, strongly predicts customer satisfaction. Among all examined variables, customer experience demonstrated the most substantial direct effect on satisfaction. This finding aligns with the understanding that even if an application is user-friendly or the pricing is reasonable, poor ride experiences, such as unprofessional driver behavior, route inefficiency, or lack of comfort, can significantly diminish satisfaction (Verma et al., 2022). The model further indicates that perceived fare and perceived risk influence customer experience, which subsequently drives satisfaction. In line with the existing literature, these results highlight that pricing and convenience are the primary determinants of customer satisfaction, whereas safety and risk management are fundamental to shaping customer experience.

## CONCLUSION

This study identifies the key factors that shape GrabCar users' experience and satisfaction. The main findings indicate that perceived ease of use, fare, and low risk significantly enhance the customer's ride experience, while customer experience, together with fare and convenience, significantly improves customer satisfaction. Among these, customer experience emerged as the strongest driver of satisfaction, suggesting that delivering a positive ride experience is the most critical determinant of customer happiness. Perceived fare showed the largest direct effect on satisfaction among the independent variables, underscoring the importance of cost fairness. Convenience, such as service availability and simplicity, also contributed to satisfaction, while trust surprisingly did not show a measurable impact.

These results have both theoretical and practical implications. Theoretically, they reinforce that established constructs from the TAM (ease of use) and key service factors (price, safety, and convenience) remain highly relevant in the modern ride-hailing context. The findings confirm previous studies showing that price and convenience are the primary drivers of satisfaction, while providing additional insights that trust may play a lesser role when the service provider already possesses a strong reputation. The model also highlights the mediating role of customer experience, indicating that improvements in ease of use and safety ultimately enhance satisfaction by improving users' actual ride experience.

From a practical standpoint, Grab and similar e-hailing platforms can utilize these insights to enhance user satisfaction. Since ease of use and app design directly influence experience, Grab should ensure its interface remains intuitive and free from technical glitches. Given the strong effect of fare, the company could refine its pricing algorithms to avoid sudden price surges, improve transparency, and introduce loyalty-based discounts, as these measures are known to improve satisfaction. The significant role of safety suggests that Grab should emphasize its safety initiatives, such as driver background checks, real-time tracking, and SOS features, to reduce perceived risk. In terms of convenience, Grab could expand its service areas, optimize pick-up logistics, and streamline the booking process to further improve ease and accessibility. Overall,

focusing on user-friendly technology, fair pricing, strong safety measures, and convenient service features can lead to better customer experiences and greater satisfaction.

## LIMITATION

This study provides meaningful insights into customer experience and satisfaction with GrabCar's e-hailing services. However, several limitations should be acknowledged. The sample size was relatively small, consisting of only 150 respondents, which restricts the generalizability of the results. Moreover, the majority of respondents were students aged between 18 and 24 years old. As a result, the findings may not accurately represent the perspectives and experiences of other demographic groups, such as working adults or individuals with different income levels. This could introduce bias, as younger users may exhibit distinct behavioral patterns and expectations compared to a more diverse population. Therefore, future research should include a more heterogeneous sample to improve the validity and general applicability of the findings.

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## DECLARATION OF CONFLICTING INTERESTS

The authors have declared no potential conflicts of interest concerning the study, authorship, and/or publication of this article.

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