Vol 5 No 2 (2025) ISSN: 2785-9266

Issues and Perspectives in Business and Social Sciences

Analysing consumer preference factors and their impact on willingness in vehicle leasing in Malaysia

Omar Hamdan Mohammad Alkharabsheh[1*], Pok Wei Fong[1], Raed Hussam Alzoubi[2], Low Mei Peng[1], Pan Ying Qian[1], Muhammad Khalid Shahid[1]

[1]*Faculty of Accountancy and Management, Universiti Tunku Abdul Rahman, Malaysia*

[2]*Department of Administrative Sciences/Crisis Management, Al-Balqa' Applied University, Jordan*

[*]*correspondence: hamdan@utar.edu.my*

Abstract

Vehicle leasing is less developed in Malaysia than in Western countries due to the easy availability of loans for vehicle ownership and the underdeveloped public transport system. This study analysed the factors affecting consumer preferences and willingness to lease vehicles in Malaysia, including cost, convenience, flexibility, and ownership. Data was obtained by distributing 350 questionnaire copies, which yielded 257 responses, after which data was analysed with the help of SmartPLS4 and SEM. The study found that convenience, cost, flexibility, and ownership positively influence consumers' willingness to lease a vehicle. To encourage vehicle leasing, leasing establishments in Malaysia should prioritise these factors. This study is useful for professionals in the Malaysian vehicle leasing market and contributes to the literature on consumer willingness to lease vehicles in Malaysia.

Keywords:
Vehicle leasing;
Convenience;
Cost;
Flexibility and ownership.

Received May 4, 2024
Accepted Dec 15, 2024
Published Jun 2, 2025

1. Introduction

Leasing is a two-party agreement in which one party authorises the other to use an owned asset such as buildings, machinery, real estate, or automobiles, for a given length of time for a specific price. Among the lease markets, the top general ones are finance leases and operating leases. In a capital lease, a longer lease term is provided, whereby by the end of the lease, the ownership shall be passed on to the lessee, while in an operating lease, a shorter lease term is provided, with the lessor remaining the owner of what has been leased (Content Team, 2015). The vehicle industry has two types of business models, namely leasing vehicles and renting vehicles. The former is for the long-term, while the latter is for a short-term lease.

This study's focus is on leasing vehicles whose origin can be traced back to the 20th century U.S. to Walter Jacobs from Chicago Hertz (Hertz, 2022a). In 2023, over one-fifth of new vehicles in the United States were leased, while the remainder were sold outright. In the third quarter of 2021, the percentage of new vehicles being leased in the U.S. was even higher at 26 percent (de Querol Cumbrera). In fiscal year 2016, Japan had about 3.5 million leased vehicles, and it was forecasted

Issues and Perspectives in Business and Social Sciences (2025) Issue 2:96–108.
doi: https://doi.org/10.33093/ipbss.2025.5.2.1

Published by MMU PRESS.
URL: https://journals.mmupress.com/index.php/ipbss

that this number would increase to approximately 4.8 million by 2024 (Arba, 2022). This shows the significant role that the leasing industry plays in vehicle leasing all over the globe (Yang et al., 2008). In the past, the major market players based on the global ranking include Avis, Hertz, and Europcar. However, Hertz incurred huge losses because of the COVID-19 pandemic, and they eventually filed for bankruptcy in May 2020 (Kelly, 2020).

In Malaysia, the major players in the vehicle leasing market include Hertz, backed by Sime Darby, Sepadu Fleet Sdn Bhd (Sepadu), Mayflower, and Orix Leasing Malaysia Group (Orix). Acme Hire and Drive Cars, which is part of the Mayflower car rental division, pioneered the car rental industry in 1963 (Mayflower Car Rental, 2020). After a decade, Orix became a major leasing leader in the Malaysian market, providing different types of leasing services, including commercial vehicles and passenger vehicles, while Mayflower only dealt with the latter. Sepadu also has had its fair share in leasing commercial vehicles to most logistics firms like TNT, J&T, DHL, Aramex, and Nationwide Express. The majority of the firm dealers in Malaysia in the past five years have begun offering services for specific car brands like Toyota, Renault, Volvo, and Mercedes-Benz.

There are two segments in the current Malaysian vehicle leasing market: individual clients and corporate clients (Avis, n.d.). The majority of individuals lease a vehicle to use it in Malaysia temporarily, and they do not prefer to dispose of the vehicle when their time in the country is over (Hertz, 2022b). Passenger vehicle has several categories, namely sport utility vehicles (SUV), hatchbacks, multipurpose vehicles (MPV), sedans, coupes, and sports cars, while commercial vehicles include vans, buses, light-duty trucks, pickups, medium-duty trucks, and heavy-duty trucks. On the other hand, corporate clients lease vehicles for a few reasons, including the tax benefits involving the deduction of the car leasing payments – with car ownership, the deduction is confined to the interest on the car loan (ALD Automotive 2019). Other reasons include ease of competitiveness with car leases over a long period of time, as a newer model can be opted for at any time, supporting a business image. Also, it is easier to get approval for a lease with lower payments, particularly for start-ups (Hachenberg et al., 2018; Mills, 2008). Businesses that fall short of raising capital can opt for leasing, which is cost-effective compared to a car loan, with the majority of leases under warranty (being that they generally cover three years), which is quite useful when the situation arises (Wilmar Inc., 2023).

In the West, leasing became a common business in 2007, with the world-leading leasing market being Europe, with 339 billion Euro reported in 2007 alone, the U.S. reported 168 billion, while the Asian markets were left behind (Hachenberg et al., 2018; Mills, 2008). Owing to the development in the economies of the markets, particularly the emerging markets, the leasing market has expanded, and this holds true for Asian Pacific countries (e.g., Malaysia) (Haiss et al., 2009; Zhang et al., 2019). Nevertheless, a gap still exists between the Malaysian market and the Western market when it comes to leasing industries. Malaysia has yet to transform the leasing market into a mainstream industry, which is challenging, considering the locals prefer purchasing or financing to leasing (Rawat, 2023). Leasing is a secondary alternative for those who cannot afford to buy vehicles. This is because property is considered by people as shelter and those who cannot afford to buy vehicles opt to lease instead. Nevertheless, there is another alternative, which is to use public transportation, thereby excluding vehicle leasing as an alternative.

This study mainly aims to determine the factors that drive consumers to lease vehicles, the kinds of vehicle leasing programs in Malaysia compared to other countries, the gap that exists in the market, and the most feasible alternative that locals prefer. The study aims to highlight what is lacking in the Malaysian market and the elements that can meet the local's demands, particularly those in lower income demographic whose loan requests are rejected by financial institutions. The study also aims to determine the benefits and drawbacks of leasing vehicles versus purchasing one from the consumer's perspective for the reassessment of the leasing companies of the target consumers and the offerings of various additional leasing packages to meet the needs of each consumer category. This is not confined to passenger vehicles but also commercial ones that focus

on small business and corporate clients, changing the current leasing packages to accommodate the majority of the population. Additionally, the study aims to contribute to the best practices of vehicle leasing providers by shedding light on the perceptions of Malaysians of leasing vehicles and their top preference factors in deciding whether to lease a vehicle to obtain a higher level of conversion for a lucrative business. Aside from this, the study aims to provide a better understanding of the re-categorisation of potential consumers and the way the product's value can be positioned.

2. Literature review and hypothesis development

As discussed earlier, this study accounts for convenience, cost, flexibility, and ownership as consumers' preferences influencing variables on people's willingness to lease a vehicle. The proposed relationship of the variables has been depicted in Figure 1, the conceptual framework of the study.

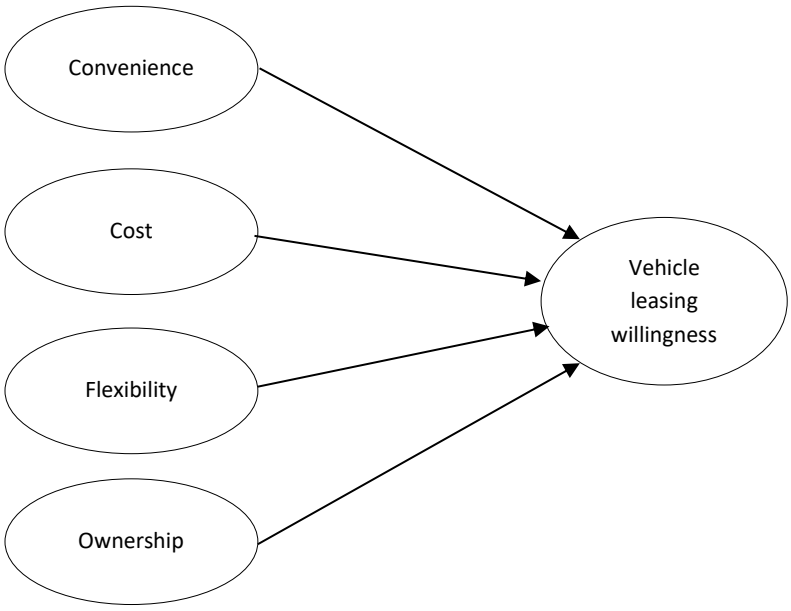

Figure 1: Conceptual Framework

2.1 Convenience

Based on the sharing economy definition, shared mobility through various ways, such as car sharing, ride splitting, bike sharing, scooter sharing, ride sharing, and on-demand ride services, can make for convenient traveling and easy access to transport facilities. In the transportation field, leasing vehicles is an efficient manner to decrease purchase willingness and the number of vehicles on the road – it is also convenient for people based on flexibility, convenience, and low cost in shared trips (Zheng et al., 2019).

In past relevant studies, several variables have been pinpointed to influence the willingness of consumers to rent cars, which included gender, age, income, household composition, vehicle ownership, living location in proximity to a grocery store, shared mobility, comfort, and satisfaction with the car rental service provided by the agencies and products convenience and quality (Barbour et al., 2020). According to White and Sintov (2017), there are several factors that influence the inclination of consumers to lease or purchase vehicles, and these include the reduction of vehicle emissions that bring about climate change and the convenience of charging

electric vehicles (EVs). Added to this, business models offered by the market also play a key role in successful vehicle leasing, not just technology, as evidenced by Liao et al. (2019). The authors examined three business models, which are battery leasing, vehicle leasing, and mobility guarantee, and based on their findings, vehicle leasing is the top preferred option while the least preferred is battery leasing. Also, obtaining high scores on the pro-convenience factor indicates that some people view leasing to be beneficial given the fact that it is trouble-saving and minimizes risks, especially in EVs. Generally, people are aware of the convenience offered by private leasing when they are inclined towards car renting.
H1: Convenience of vehicle leasing has a positive effect on consumer's willingness to lease a vehicle.

2.2 Cost-related matters

One of the major elements to be considered when leasing cars is cost, and decision-makers need to keep this in mind when deciding to lease/purchase vehicles. According to Daifen (2022), factors influencing customer intentions toward leasing or purchasing vehicles include financial benefits, infrastructure readiness, environmental concerns, and policy privileges. These findings indicate a positive relationship with vehicle purchasing or leasing. Thus, leasing vehicles is advantageous as it reduces the financial burden compared to purchasing high-priced vehicles. Therefore, cost and convenience should be considered when deciding whether to lease a vehicle.

In the context of Malaysia, locals are mostly concerned about cost. In May 2022, the inflation in the country increased by 0.6% in a month (Department of Statistics Malaysia Official Portal, 2022). The Indonesian Rupiah and the Malaysian Ringgit experienced a modest 5–6% devaluation against the U.S. dollar. Because of the fluctuance of currency and inflation, Malaysians felt that all the prices had been hiked while the salaries remained the same. Inflation has made locals price-sensitive. As a result, they opt for lower-priced products (Wunder et al., 2021). Thus, the cost difference between financing and leasing would be an important factor in people's decision to lease a vehicle. In the current times, most financial institutions require 10% of the asset value as a down payment for financing, which is not mandatory in leasing – this is one of the benefits of leasing. However, despite such benefits, in some cases, lessors in Malaysia charge a deposit of 2-3 months' lease fare as a deposit, although consumers with a strong financial background and proven experience are exempt from such a deposit. The Malaysian market charges a monthly fixed rate, with unavailable options for daily, weekly, bi-weekly, quarterly, semi-annual, and annual rates, with a corporate credit term of 30 days. On this basis, this study proposes that.
H2: The cost of leasing a vehicle has a positive effect on consumer's willingness to lease a vehicle.

2.3 Flexibility

Leasing vehicles is a part of the service sector, keeping at par with the dynamic technological changes and uses in the service, economic, and industry sectors. According to Ding and Keh (2016), service sectors like McDonald's, Wal-Mart, Benetton, Shell gas stations, Holiday Inn, AMC cinema, and taxi transportation have adopted technology, allowing them the flexibility of engaging in service delivery model that customers demand. Flexibility and customization in service have both benefits and drawbacks. The benefits include enhancing consumers' perceived control and satisfaction, improving corporate reputation, and building trust between customers and the company. However, the drawbacks involve increasing the perception of risk. Ultimately, leasing companies that can effectively communicate the benefits of their flexible and customizable options while minimizing perceived risks can better cater to a broader range of consumer preferences, thereby enhancing their market appeal and competitive edge.

Flexible lease contracts decrease cost and risk, and for such flexibility to be present in the leasing contract, a model using real options (return and swap) is used to account for various uncertainties like fuel prices, vehicle mileage, CO2 prices, fuel consumption, and technology. The model has been used in a real-world case study in the U.K. to determine the way fuel price uncertainty and

technological development affect the value of the alternatives – the findings evidenced that flexible leasing contracts based on the model assist in firm problem management and reduce risk and cost (Ansaripoor & Oliveira, 2018). By using flexible leasing contracts that are based on real options models, leasing companies can provide more adaptable and cost-effective solutions to their clients. This approach not only deals with the immediate financial and operational concerns of lessees but also aligns with long-term trends in technology and environmental regulations. As a result, this model has the potential to make vehicle leasing a more attractive option for both individual and corporate clients, which could lead to it becoming a more mainstream industry in markets such as Malaysia.

The Theory of Planned Behavior (TPB) aligns with the discussion above, as it highlights the flexibility of in-car access without ownership, offering a pay-per-use short-term rental basis. This service appeals to consumers who use cars infrequently, allowing them to avoid the expenses of purchasing, maintaining, and dealing with the depreciation of a car (Mounce & Nelson, 2019).

Consumers with limited budgets only have a few alternatives when it comes to the models and brands of vehicles, but through leasing, many more alternatives are made available, with the whole difference between the purchase and lease prices to be paid monthly – only slightly higher than leasing. The consumer can choose between the car brand, model, specifications, and conditions for the lease packages in the Malaysian market. Customers can enjoy the experience of using vehicle varieties from different brands, with the option to exchange the car for a higher price, as offered by Renault Malaysia.
H3: Flexibility of vehicle leasing has a positive effect on consumer's willingness to lease a vehicle.

2.4 Ownership

Leasing is another choice to purchase, enabling consumers to confine their period of vehicle ownership to a maximum of 36 months (Hoogland et al., 2023). Moreover, this choice offers significant cost savings to those who prefer low monthly payments to long-term ownership (Edmunds, 2016). According to Liao et al. (2019), among the common business vehicle leasing models are full purchasing and acquiring ownership through full payment, leasing, and battery leasing (for battery electric vehicles). The business model selection is related significantly to pro-convenience, pro-ownership, and pro-EV leasing views, and in light of the mobility guarantee, no significant impact was found on use.

In relation to the above, the barriers to the consumers' access and use of products/services have led to the generation of business models underpinning the sharing economy (e.g., car sharing, bike sharing, renting fashion items, etc.) (Burghard & Dütschke,, 2019; Schaefers et al., 2018). This is owing to the lower cost compared to ownership while enabling access and use for the majority of consumers (Blocker et al., 2013). This may also minimize the financial risk associated with maintenance and repair in ownership. Leasing enables consumers to drive two new vehicles during the leased period and to dispose of the vehicles at a lower cost compared to full purchasing/ownership (Hoogland et al., 2023).

In another study, Trocchia and Beatty (2003) used exploratory interviews to obtain data and found that the inclination towards variety and easier maintenance are what attract consumers towards vehicle leasing. Consumers can enjoy a specific level of independence, and the service providers remain the product owners (Schaefers et al., 2018). In conclusion, leasing may be a good option for those considering a lease as it minimizes the risks of ownership over the product's lifetime. Consumers who want to buy a home, business, equipment, or any asset may hesitate to purchase products, fearing that they may be unsuitable for their needs. Therefore, leasing provides them the opportunity to lease the product for a while, using it without the obligation of ownership. This gives them the experience of using the asset and the ability to make informed decisions (Peltola, 2023).
H4: Ownership of a vehicle has a positive effect on consumer's willingness to lease a vehicle.

3. Research methodology

This study adopts the quantitative method of data collection and analysis, whereby numerical and statistical data on different human groups are gathered to demonstrate a specific case. Primary data was collected through a questionnaire concerning socio-demographic aspects and preferences. Owing to the limited period and manpower, the entire Malaysian population cannot be surveyed, and thus, sampling was conducted to select the participants for the study. The sample size formula suggested by Kadam and Bhalerao (2010) is as follows.

$$n = \frac{Z^2 * p * (1 - p)}{d^2}$$

In the above equation, Z denotes the statistic for the level of confidence, with a 95% confidence level and a value of 1.96, p denotes expected prevalence, and its value is 0.5, d denotes precision, and its value is 0.065 (for smaller error of estimate generation). Putting the values in place,

$$n = \frac{1.96^2 * 0.5 * 0.5}{0.06^2}$$
$$=266.78$$

In this cross-sectional study, a non-probability sampling method was used. The sample size of 267 was determined using a specific formula. The research employed a convenience sampling method due to its time-saving nature, ease of access, and cost-effectiveness. For example, approaching friends and family for data collection is less risky and easier. The study focused on adults aged 18 and above, which is the eligible age for obtaining driving licenses and owning vehicles in Malaysia.

The questionnaire was designed to have two sections, one with the socio-demographic data and one with the perceptions-based questions. The first section included nine questions, which included household size, race, age, gender, and experience in vehicle leasing, which provided one option each, except for the reason for having a vehicle, which left the participants to choose up to three alternatives. The second part comprised 24 questions, eliciting data on convenience, cost, flexibility, and willingness to lease a vehicle. The items were gauged using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaires were constructed using Google Forms and distributed from January 28 to March 10, 2024. The forms were distributed via multiple social media platforms, such as Facebook, WhatsApp, Microsoft Teams, and Instagram, and shared between respondents.

Based on the demographic profile of the respondents, 42.80% are male and 57.20% are female. Regarding ethnicity, 93% are Chinese, 3% are Malays, and 4% are Indian. As for education levels, 33% held high school certificates, 5% were in primary school, 55% held bachelor's degrees, and 7% held master's degrees. Regarding household size, 54% of the participants were sons/daughters, 25% were wives/mothers, and 21% were husbands/fathers.

Regarding income, 17% reported an income of less than RM2,500, 45% reported an income of RM2,500 – RM5,000, 28% reported an income of RM5,001 – RM8,000, and only 10% reported an income above RM10,000. Furthermore, 350 questionnaires were distributed to respondents in different Malaysian states, and 257 were retrieved, indicating a response rate of 73%, which is acceptable.

The constructs' structural relationship was examined using covariance-based Structural Equation Modeling (SEM), applying the Smart-PLS to verify the study nature (Hair et al., 2021). Examining the relationships between the independent and dependent variables involved two stages: testing

of constructs reliability and the measurement model and testing of structural relationship between convenience, cost, flexibility and ownership and their effects on the willingness to lease vehicle.

Table 1: Demographic Profile

	Group	Percentage
Sex	Male	42.80%
	Female	57.20%
Ethnicities	Chinese	93%
	Indian	4%
	Malay	3%
Education level	Primary School	5%
	High School	33%
	Bachelor's degree	55%
	Master's Degree	7%
Household role	Role in Household	21%
	Father or Husband	25%
	Mother or Wife	54%
	Son or Daughter	
Income	Less than RM2,500	17%
	RM2,500 – RM5,000	45%
	RM5,001 – RM8,000	28%
	Above RM10,000	10%

4. Analysis

4.1 Measurement model

The assessment of the measurement model involved the examination of convergent validity and discriminant validity. Hair et al. (2021) suggested that convergent validity be established using factor loading, Average Variance Extracted (AVE), and composite reliability (CR). Based on the results, the satisfactory criteria were established for convenience, ownership, cost, flexibility, and willingness to lease a vehicle with item loadings exceeding 0.70, with the exception of item CN5 (convenience), which obtained a value of 0.681, item FL3 (flexibility), which obtained a value of 0.649, and items WI1, WI3, WI4 and WI5 (willingness) whose values were less than 0.70. AVE values exceeded 0.50, and CR values exceeded 0.70, aside from 2 items from willingness to lease a vehicle (WI1 and WI5). Convergent validity of the scale measurement was thus established (refer to Table 2).

Table 2: Validity and reliability of the measures

Variable	Item	Loading	CR	AVE
Convenience	CN1	0.869	0.87	0.64
	CN2	0.865		
	CN3	0.786		
	CN4	0.792		
	CN5	0.663		
Ownership	VO1	0.924	0.8	0.81
	VO2	0.876		
Cost	CO1	0.794	0.77	0.58
	CO2	0.78		
	CO3	0.716		
	CO4	0.765		
Flexibility	FL1	0.776	0.84	0.54
	FL2	0.759		
	FL3	0.644		
	FL4	0.705		
	FL5	0.765		
	FL6	0.73		
Willingness in Vehicle leasing	WI2	0.821	0.81	0.56
	WI3	0.686		
	WI4	0.683		
	WI6	0.796		
	WI7	0.731		

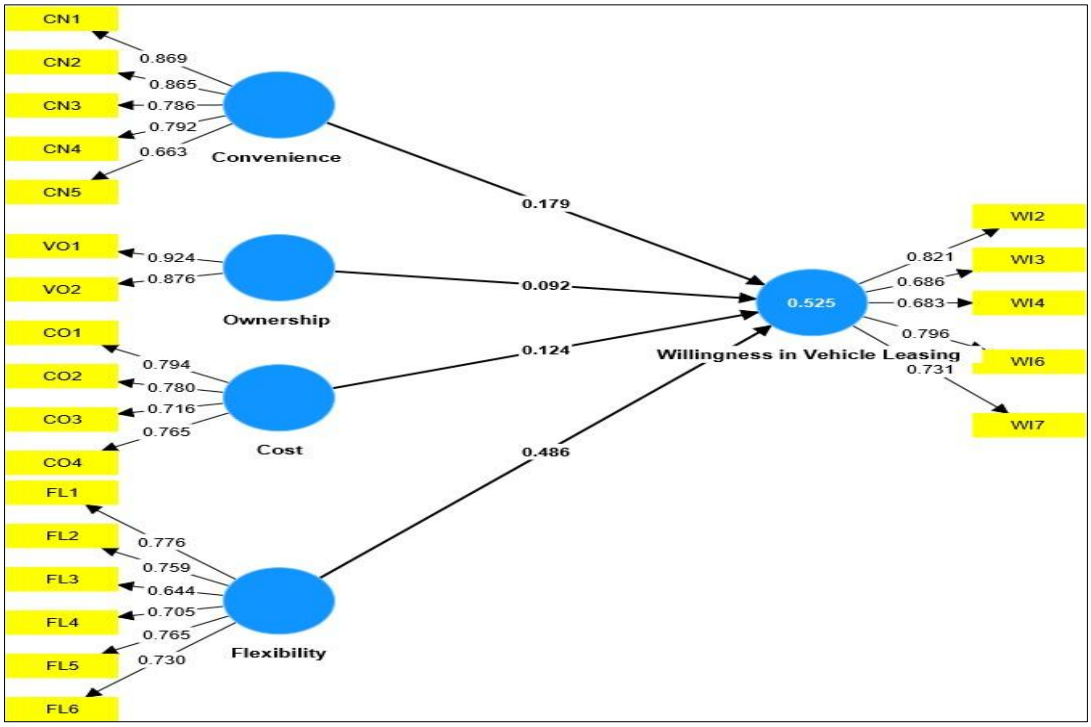

Figure 2: Measurement Model

Next is the discriminant validity; the study used a heterotrait-monotrait (HTMT) approach for assessment, opting against Fornell and Larcker's (1981) criterion, owing to the latter's poor performance in terms of determining issues in discriminant validity (Henseler et al., 2016). HTMT is a statistical test that tests a null hypothesis (H0: HTMT ≥1) against the alternative one (H1: HTMT < 1). In this case, there is a lack of discriminant validity if the confidence interval contains the value of 1.

Table3: Discriminant validity

	1	2	3	4	5
1. Convenience	**0.80**				
2. Cost	0.63	**0.90**			
3. Flexibility	0.63	0.89	**0.76**		
4. Ownership	0.21	0.40	0.27	**0.73**	
5. Willingness in Vehicle Leasing	0.63	0.75	0.81	0.33	**0.75**

Note: Values in diagonals represent discriminant validity as $\sqrt{AVE}$

Further inferential tests were recommended in comparison to HTMT simple cut-off values, and these include HTMT.90 (Gold et al., 2001) and HTMT.85 (Kline, 2011). This recommendation was based on the fact that while inferential tests have a lower power level, they generate fewer false positives in cases when the comparison standard is equal to the actual test criterion (Franke & Sarstedt, 2019).

Table 4: Results of the structural model

	Path relationship	SE	t	p-values	f^2	VIF	Decision
H1	Convenience–Willingness in Vehicle Leasing	0.055	3.252	0.001	0.046	1.458	Supported
H2	Cost –Willingness in Vehicle Leasing	0.066	1.866	0.031	0.014	2.275	Supported
H3	Flexibility–Willingness in Vehicle Leasing	0.068	7.100	0.000	0.226	2.198	Supported
H4	Ownership–Willingness in Vehicle Leasing	0.048	1.926	0.027	0.016	1.101	Supported

The construct's direct relationships were examined using the bootstrapping method with 5000 samples, and based on the findings, all structural relationships were significant, with bootstrap critical t-values higher than 1.64 (one-tailed test) (refer to Table 3). In other words, the direct hypotheses were accepted at $p<0.05$, indicating support for H1 to H4.

The study also obtained the R^2 and Q^2 values as 0.525 and 0.501, respectively, which is the amount of variance in the endogenous construct explained by the exogenous constructs. The values should range from 0 to 1, where 1 denotes higher predictive accuracy (Ramayah et al., 2018). In this study, values of R^2 for the endogenous construct evidenced that the theoretical model explained 52.5%, which supported good model fit.

5. Discussion

There are two types of leases offered by the Malaysian market, namely operating lease and finance lease, and the majority of the vehicle leasing firms serve corporate consumers rather than individual consumers. The study's main objective is to identify the consumer preference factors influencing willingness to lease a vehicle. There were four examined independent variables based on the vehicle leasing packages offered in the Malaysian market, namely convenience, cost, flexibility, and ownership.

According to the results of the current study, customers unanimously prefer convenience, flexibility, cost, and ownership, which influence their willingness to lease vehicles. These findings align with those reported by Liao et al. (2019), who found that convenience and finances significantly affect the decision to lease or purchase a vehicle. Customers are not overly concerned

about disposing of their vehicles, likely due to the availability of second-hand car dealers who handle this process. However, they do desire hassle-free vehicle repair and replacement as part of their leasing package.

Additionally, the results of this study align with the assumptions of the Theory of Planned Behaviour (TPB). They demonstrate that offering flexible in-car access through pay-per-use short-term rentals attracts consumers who only occasionally need a vehicle, allowing them to avoid the costs associated with car purchase, maintenance, and depreciation. The concept of free-floating car-sharing provides greater flexibility to users compared to station-based and zone-based systems (Mounce & Nelson, 2019). This flexibility allows users to pick up and drop off cars at any location, making it particularly suitable for the first and last mile of multi-modal trips. Free-floating car-sharing is more appealing to potential consumers than station-based and zone-based options because of this flexibility. Users typically use a smartphone app to locate available vehicles. This car-sharing service was first introduced in Germany in 2009, offering two types of cars - electric and gasoline (Mounce & Nelson, 2019).

The findings of the current study also supported cost as one of the factors influencing the willingness of consumers to lease vehicles, which aligns with past studies (e.g., Baklouti et al., 2022; Dasgupta et al., 2007). According to Baklouti et al. (2022), the economic decision of whether to lease/sell used vehicles remains a conundrum faced by individuals and businesses. This involves a fleet of used vehicles of different types, from diesel to electric to hybrid vehicles. Considering the demand from individuals interested in leasing several used vehicles for a specific mission profile, a mathematical model is created for determining the prospects that generate the most profit to lease the used vehicles, the number of vehicles to be leased, and the remaining vehicles to be sold. The developed mathematical model comprises a predicted leasing profit function, combining revenue from leasing to resale, penalties, and costs. The utility and applicability of the model were demonstrated using a numerical, and the findings showed that for every vehicle type, effect on leasing and selling were noted from predicted utilization rates and company-borne costs (Baklouti et al., 2022). In summary, this mathematical model contributes to the vehicle leasing market by optimizing profitability, enhancing strategic decision-making, managing costs, providing adaptability, offering evidence-based insights, and improving market competitiveness.

The findings revealed that several factors influence the decision to lease vehicles in Malaysia, including ownership. This supports past studies such as Hoogland et al. (2022), which found that leasing allows users to utilize two new vehicles over the average vehicle ownership lifetime and incurs minimal disposal costs compared to purchasing. Similarly, Dasgupta et al. (2007) noted that clients prefer leasing to avoid the high maintenance costs associated with car ownership.

Moreover, Helveston et al. (2015) and Hoogland et al. (2022) highlighted that Americans tend to prefer leasing low- and mid-range plug-in hybrid electric vehicles (PHEVs) over plug-in electric vehicles (PEVs) when replacing conventional vehicles. While battery electric vehicles (BEVs) may present a riskier ownership proposition, leasing these vehicles enables consumers to test BEV technology with lower acquisition costs and less long-term commitment. Consumers may also anticipate future technological advancements, such as increased BEV electric range, and opt to lease longer-range BEVs after their initial lease period expires.

These insights are relevant to the Malaysian context as they underline the importance of ownership costs, technological advancements, and flexibility in influencing consumers' leasing decisions.

6. Conclusion

This study conducted an exploratory analysis of the factors influencing consumers' willingness to lease vehicles in Malaysia. Previous studies have theorized that leasing is theoretically cheaper than purchasing and have identified factors such as ownership, convenience, flexibility, and cost as influencing consumers' decisions to lease vehicles in Malaysia. However, there is a gap in the literature regarding a comprehensive and integrated understanding of these factors within the Malaysian context. To address the gap, this research develops a conceptual framework that synthesizes the key factors influencing willingness towards vehicle leasing in Malaysia, specifically focusing on convenience, flexibility, cost, and ownership.

Based on the findings, vehicle manufacturers should consider providing better incentives to encourage consumers to lease their products. These incentives could include offering more convenient vehicles with lower emissions. Additionally, manufacturers should consider affordability, various leasing options across different price ranges, flexible service provision, and the use of technology to track vehicle usage and maintenance. Addressing these factors can significantly impact consumers' preference for leasing vehicles instead of owning them. By focusing on these areas, manufacturers can better meet consumer needs and preferences, as indicated in the study.

Furthermore, leasing may speed up the turnover of vehicles on the road and, thus, expedite the development of the leased vehicles market. Nevertheless, the supply of shorter-range and lower-reliability vehicles may not bring about a successful leasing vehicles market in the Malaysian case. Based on the results, consumers generally respond to attractive lease costs, flexibility, convenience, and ownership terms in relation to vehicles and thus, such factors may be used to motivate demand. In this case, more studies are needed to be conducted to determine the strategies of vehicle lease firms in light of their distribution, the fact that used vehicles remain in the market within which they were first sold, and if the vehicles are kept on the road. The paper's overall aim is to examine the factors influencing consumers' decision to lease vehicles in Malaysia. Studies in different countries examined the factors influencing such decisions, leaving a gap in the Malaysian context. With the growth of the vehicle leasing market, leasing will remain important to meeting the expectations and needs of consumers.

This study has some limitations, including the sample size (257), which is small compared to the whole population of the country. Consequently, other factors influencing lease inclination may not be fully captured, affecting the generalizability of our findings. A larger sample size would provide a more comprehensive representation of the population's perceptions and behaviors. Also, Malaysia has different states and regions that serve different vehicle selling prices, whose demographics have specific living expenses, areas having differing public transport infrastructure, geographical landforms, and individuals with various income ranges. This may be exemplified by the vehicle selling price in Malaysia that differs on the basis of location – in Langkawi's duty-free market, the prices of vehicles are lower than in other areas, and those in Peninsular Malaysia are lower compared to East Malaysia owing to logistics cost. In Sarawak, public transport is not as convenient as in other areas, and it takes longer to travel from one place to another with little to no travel alternatives – an automobile may be the sole means of transportation. Additionally, Malaysia is made up of many islands, which lessens the importance of automobiles as a means of transportation. For instance, in Pangkor Island, motorcycles are a common sight, while boats are more common when traveling by coastal waters. There is also variation in income and living expenses in urban and rural locations, which could influence vehicle ownership affordability and willingness to lease/purchase a vehicle. Aside from the above, the topic still requires more studies to explore it in the context of Malaysia. As things stand, not many resources are available for comparison.

With regards to future studies and recommendations, larger-sized samples may be used for accurate analysis and with consideration of the background of the respondents. Future studies may conduct a detailed examination of the transportation infrastructure in Malaysia to understand the people's needs. Future studies may segregate the respondents into different groups based on their characteristics for comparison and for the development of a comprehensive model including all the groups. Future studies may also examine other vehicles used in Malaysia other than automobiles. It should be kept in mind that leasing may be the only option for high-priced vehicles as the requested loans may not be easily approved. The findings in this study indicate that Malaysians are cost-saving people, and thus, if leasing costs exceed that of financing, then it would be negatively perceived by the consumers. thus, future studies can explore how leasing costs can be decreased and can offer competitive packages and incentives. Vehicle leasing margin sustainability can be achieved by lowering the costs (vehicle cost, maintenance cost, replacement vehicle cost, human resources, repair cost, insurance cost, and road tax cost).

Acknowledgement

We would like to express our sincere gratitude to the University of Tunku Abdul Rahman (UTAR) for their support in conducting this research.

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