Research Article

Service attributes, customer satisfaction and return usage: A case of Uber Malaysia

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Abstract

The transportation industry is one of the largest sectors in the global economy, and it changes in-tandem rapidly with the innovations of technology. Uber is one of the latest technology advancements in the transportation industry. The primary purpose of this study is to measure customer satisfaction level on the service attributes of Uber. Specifically, this study will address the issues of service attributes of Uber with customer satisfaction and return usage. The quantitative research approach was chosen to obtain the relevant data for this study which was conducted among Uber users who experienced Uber services at least once in Kuala Lumpur and Selangor. A total of 400 questionnaires were distributed to the users to allow for attrition rate from the sample size via google docs. The results of this study revealed that service attributes of Uber namely safety, price, convenience, and information and communications technology (ICT) do influence customer satisfaction and return usage. This study found that it is imperative for Uber operators to improve their services and provide better services that fit the current consumer demands on public transportation. In addition, ICT is crucial in transportation and tourism industry because it has a great impact on ensuring sustainable global and tourism development.

Keywords:

Service Attributes; Customer Satisfaction; Return Usage; Uber; Malaysia

1 Introduction

Transportation is a fundamental driver of the tourism industry as it is a precondition for travel since it facilitates mobility and the movement of tourists from their place of origin (i.e., their home area) to their destination and vice versa. Concerning this statement, it can be seen that transportation has a symbiotic relationship with tourism in which one cannot occur without the other, and the two are co-dependent. Taxis, in various forms and with various names, have been around for at least several centuries. Modern taxis are generally considered to have evolved from the horse-drawn carriages for hire in Paris and London in the mid-1600s. Ridesharing companies like Uber and Lyft, are activated by using a smartphone app to match consumers requesting rides with drivers that will take them there. Since its inception in 2009, Uber has gained significant market share in the United States and worldwide (Uber, 2016; Vasudevan, 2015).

The advancement in technologies has delivered new trends in almost anything, transportation included, in this modern era. Nowadays, people start to look into the latest and latest trend to go about their daily life. Transportation wise, the growth in technology has transformed the customer's preferences to use Uber over any other mode of transportations. Uber is a Transportation Network Company developed to connect passengers and drivers through a smart application. In the past, tourist or customer used to hail the taxi by the roadside. Now, by utilizing mobile smartphones, people can request for Uber easily using mobile phones. Even though Uber has grown and expanded internationally in the past seven years, it still faces legal and social issues especially the uproar among taxi drivers, operators, and several other groups in countries that provide such services. It has become the transportation industry’s disruptor world-wide, inclusive of Malaysia.

Locally, Uber has been conducting their operations for over a year. The public seemed to be responsive to their services and started switching their mode of public transportation from the regular taxi, bus, etc. to Uber services. This has created some problems. For instance, The Malaysian media reported that taxi drivers once staged a protest towards taxi apps Uber and GrabCar along the city's main shopping belt. This caused the traffic in central Kuala Lumpur coming to a halt in March 2016 since early in the morning (Lee, 2016; News Straits Times Press, 2016).

Additionally, when looking back at the history of the taxi industry, it is easy to see comparisons between events that happened nearly a century ago and what is presently going on between taxi corporations and ride-sharing companies. According to Sobzack (2016), the fundamental business model of Uber and other new ride-hailing offerings distinguishes themselves from the other taxi industry. Despite the popularity of Uber services as a new means of public transport, not much study has been conducted on these phenomena. There are minimal studies regarding the determinants of Uber rides as a substitute for a traditional taxi service and other public transport (Azmi, Buliah, & Ismail, 2016). Thus, there is confusion as to what mode of vehicular public transport it falls under, either under carpooling or ridesharing, or just a modification of the taxi. Also despite its rising popularity, not much is known about the services that are provided by

the Uber services from the consumers' perspective, i.e. whether they are satisfied with the services provided by Uber, or vice versa. This is a gap area that needs to be addressed. Hence, this study is intended to fill these gaps by examining the relationship between services attributes of Uber with customer satisfaction and return usage.

The main purpose of this study is to measure customer satisfaction level on service attributes of Uber. Specifically, this study will address the issues of service attributes of Uber with customer satisfaction and return usage. To respond to the research gaps aforementioned, this paper aims to answer the following research questions. First, by providing what the services attributes of Uber taxi that significantly predicts customer satisfaction (safety, price, convenience and ICT) are. Secondly, to show the effects of services attributes of Uber on the likelihood of return usage. Finally, this study seeks to verify whether customer satisfaction mediates the relationship between service attributes of Uber and return usage. Overall, this study intends to provide some insights and guidance to the smart transportation industry for their international market strategies in the hope of seeking global growth through improved cross-national customer satisfaction.

2 Literature Review

2.1 Overview of Uber

Uber was launched in 2010 as UberCab, but it primarily only facilitated on-demand access to private black cars driven by professionally licensed drivers (Wortham 2011). According to McCarthy (2011) at the time of its New York City launch in 2011, CNET described it as "a limousine-booking start-up." At this stage, Malik & Graham (2011) confirmed that an Uber was not directly competing with existing private car services so much as involving existing black car and limo drivers with passengers during off-peak hours. Uber is beneficial for the hospitality and tourism industry as it takes tourists to their desired destinations in case they prefer a better choice from other public transports (e.g. taxi or bus). Choosing Uber requires travelers to pay up to 50% less than the cost of a taxicab, plus most of the time the Uber driver is a local born and familiar with the area. On top of that, Uber is also an excellent alternative for tourists with a small budget as they can get around places cheaper and save more money.

According to Lawlor and Gannes (2012), UberX service which did not require a professional driver or a specific type of car had been initiated by Uber in the mid-2012, along with their competitors, Lyft and Sidecar who launched their "peer-to-peer" ride-sharing services in San Francisco. Uber app is a new innovation to consumers because of its convenience and ease-of-use. The consumer can easily pay for their rides-for-hire service through by a third party, known as Transportation Network Company (TNC) once they downloaded the app in their smartphones. UberX had become their platform that scans or takes a picture of their credit card with the smartphone's camera. Uber has also upgraded its existing navigation service (Google and Apple) with deCarta Mapping Company. This new mapping system will continue to progress Uber's navigation and

location technologies. Moreover, Uber service is a new technological innovation in the transportation industry that connects the drivers and the passenger through smartphone apps.

Based on a previous examination of Uber by Ngo (2015), it was found that Uber offers better service than taxi service with the quicker time, reduces the value of money, cost of waiting, it's far convenient, and they are extra concerned about handicap passenger. Technology advancement has made it possible for Uber service to be always on demand for its availability and accessibility (Hal, Chan & Dai, 2014). Uber had been viewed by the customers as part of a luxury substitute for transport as it serves the demand for fast, flexible and convenient mobility in urban areas which was previously an unmet demand (Azmi et al., 2016). According to Rayle, Dai, Chan, Cervero, and Shaheen (2016) the convenience of using Uber and other factors is an attraction to consumers to use its services over the regular taxi. Very few studies in the extant literature have discussed the service attributes of Uber and how it relates to consumer satisfaction in using it.

2.2 Safety

Safety is one essential aspect that is considered by customers when riding a taxi. An essential factor that can attract customers to take Uber service is safety inspection. Rules and regulation are all prepared to make sure the protection proof Uber's customers. Before the drivers were given the license, they have to obtain the authorization to sit for the driver examination first. The most important aspect is there is no criminal record, and the driver must prove certificate liability insurance. According to Ngo (2015) "the types, model, and vehicle condition, the actual point-to-point route that the car follows, the minimum fuel efficiency standard and data reporting, the car should not be more than 5 years and the requirements for monitoring and evaluation were few of the many conditions that the car registered for Uber have to comply with. Furthermore, Brazil and Kirk (2016) had mentioned that Uber service decreases drunken driving accident."

Customers have to choose the mode of payments in advance for their request in Uber Service, i.e. whether to pay by cash or bank card (Azmiet al., 2016). Also, using the credit card as a mode of payment is far safer than using cash. The benefit for travelers is to avoid getting an extra charge from the driver. According to Azmi et al. (2016), the driver and passengers will be connected via smartphone when using Uber; hence the passenger can engage and examine their driver before agreeing to apply their service for extra safety.

2.3 Convenience

The presence of Uber or also known as an urban taxi in the city has prompted a great concern over the increase in traffic congestion. Even though numerous studies have deeply explored this issue, yet the discoveries are still unclear. According to Li, Hong, and Zhang (2016) who researched this subject, one of the findings was the usage of Uber

in urban territories prompts a considerable diminishment in carbon dioxide discharges and traffic jam. Based on the same research, Uber can be a resolution to reduce the problem regarding traffic congestion in the city areas, and it also provides further proof.

FiveThirtyEight is a statistics source, retrieved from taxi and limousine commission about the analysis of the changes amount of pickups. Alley (2016) said that in light of the insights, Uber could offer rides to places that are troublesome for the taxi to reach. Uber service can help travelers in the simple entry to the particular travel destination in urban territory. Also, Rayle et al. (2014) expressed that contrasting the waiting time and hailing times for taxi against the waiting time for an Uber ride; Taxi took longer time than Uber.

According to Rayle et al. (2014), as cited by Huges and McKenzie (2015), the most common reasons for a customer to use Uber is the ease of payment and in second place is waiting time. Uber is interrelated with the transportation work organization, and it is discovered that the sitting tight time for a car is impacted by travel speed and the length separation between the current location of the driver and the pick-up location (Huges et al. 2015). However, most of them have come up with one assumption that Uber service will not only save one's money but it also can save time (Carazan, Chow, Pham, Roswell & Sun, 2016). In addition, Azmi et al. (2016) highlighted that using Uber can reduce waiting time as the traveler's itinerary differs from bus and train schedule. Also, the possibility of getting lost among the travelers can be avoided as the Uber drivers are from the local area and indirectly act as their travel guides.

2.4 Price

Rates charged may vary from city to city. Regularly, taxi admission is costly contrasted with Uber (Rempel, 2016). Gabel (2016) additionally expressed that the rates for an Uber ride are less expensive than the taxi admission notwithstanding when the charge is higher amid appeal periods. "Surge pricing" is the point at which the clients charged for an upper fare. Before asking for the pickups, the greater cost will be uncovered in the Uber's application; this will help the client decide whether to take the ride or use something else (Rempel, 2016). "Surge pricing" is normally exceptional. Rempel (2016) likewise said a repercussion that happened in March 2014 struck by Uber benefit because of its surge evaluating practice, "Surge Drop" notification has been actualized, the function is to alarm travelers at whatever point there is a reduction in rates in their regions or area.

A previous survey by Partner and Legal (2015) state that Uber rates are much more affordable and cheaper compared to the traditional taxi. People travel at the same time to reduce their cost on the fares, for example, backpackers, and budget travelers. To minimize the travel cost, they would consider the price offered. Uber offers lower rates compared to the rates offered by a taxi. Hence, Uber would be a better choice for customers (Azmiet al., 2016).

2.5 Information and Communication Technology (ICT)

The word “Information and Communications Technology (ICT)” is frequently utilized as a part of a wide sense to depict an arrangement of heterogeneous media transmission and data advancements that take into account electronic communication, data collection and processing in distribution networks (Black &Geenhuizen, 2006; Giannopoulos, 2004; Wang et al., 2015). According to Cohen (2002), ICT at present has been categorized by the dynamic mechanical changes with fast reception and infiltration rates; diminishing expenses for new equipment and features and quickly expanding the scope of utilization and entrance in numerous domains of expert and individual life. The production and facilities package which depend on the range of human resources, skill qualities and additionally an intertwined institutional market region as the private sector appearing in decreasingly regulated surroundings also has been characterized in ICT (Cohen et al., 2002). ICT has presented the chances to establish new or more efficient markets, especially for transport services. One example, for instance, is operative shared rides and access to cars or bikes vehicles (Resnick, 2004). Chan and Shaheen (2012) stated that the key to these new services of achievement is the new markets across the local geographies which could be set up by utilizing ICT.

Nowadays, an Uber service which is the subject studied in this paper is part of the shared economy in public transport, and the ICT has played an essential role in this economy. The sharing economy is an evolving economic-technological phenomenon that is triggered by developments in information and communications technology (ICT), increasing consumer awareness, proliferation of collaborative web communities as well as social commerce or sharing (Hamari et al.,2015; Botsman& Rogers, 2010; Kaplan &Haenlein, 2010; Wang & Zhang, 2012). For instance, a European study proposed an integrated system of ICT to organize a ridesharing service which is part of the sharing economy (Calvo et al., 2004).

According to the United States Department of Transportation, the integration of the ICT includes vehicle-to-vehicle communications, real-time data and information capture, vehicle-to-infrastructure communications and more (US Department of Transportation, 2014). In transit research, the study of Brakewood (2014) has shown that real-time information had given optimistic impacts on transit ridership. To organize rides in real time, Internet-enabled “smartphones” and automated ride-matching software had been used by the Real-time ridesharing.

Ridesharing has become far more efficient and widespread with services due to the ability of mobile applications and internet communications to provide real-time information for rides (Siddiqi & Buliung, 2013). This enables applicants to systematize the time before they take the trip, with passengers picked up and dropped off along the way (Chan et al., 2012). This is especially for busy users who need to manage a hectic schedule. A virtual transportation concierge that can check real-time conditions of the transportation system is important for them to control the best schedule, travel, and mode choices that used to accomplish the activities in a timely and efficient manner (Miller, 2009).

In the sharing economy which is full of ICT, technology and innovation have become the core of this economic system, which make a specialty of finding methods to accomplish matters promptly and simply. Diffusion of innovations theory has been widely used to cite and apply under innovations diffuse throughout the relevant population (Skoglund, 2012). According to Rogers (1995), this theory had been defined as the process of an innovation that communicates through certain channels over time among the members of a social system. According to the diffusion of innovations theory, the adoption of a successful invention resembles a bell-shaped curve as the innovation experiences exponential growth before reaching its asymptote (Rogers, 1983).

By applying Rogers (1983) diffusion of innovation theory, Uber can be observed as facing a fast rate of selection in a short timeframe due to the incorporation of the latest technological advances within the field of ICT into Uber. Through the study by Posen (2015), Uber users use the services because they have personal and social experiences that lead to confidence in which, the ICT functions as a social enterprise. Uber's business model is premised on social interplay, with the awareness being on consumers.

As well as to the transportation services that Uber offers, it also provides social services. Customers now can experience completely unique experience of a service which traditional taxis offered but in a modernized way as it is a technology-driven social experience that customers can select over owning an automobile (Posen, 2015).

2.6 Customer Satisfaction

It is essential to any business entity to satisfy every customer who uses the products or services offered by them. According to Oliver (1999), customer satisfaction is a vital indicator of a company's past, current, and future performance and, hence, marketing experts and scholars has been critically focussing on this since long ago. There are two general conceptualizations of satisfaction that exist in the literature which are transaction-specific satisfaction and cumulative satisfaction in modeling satisfaction (Anderson & Fornell, 1993; Boulding, Kalra, Staelin, & Zeithhaml, 1993). In the transaction-specific perspective, satisfaction is transient (Cronin & Taylor, 1992).

Conversely, cumulative satisfaction is a customer's evaluation of the total utilization involvement with a product or service to date, which directly affects post-purchase phenomena such as attitude change, repeat purchase and brand loyalty (Johnson & Fornell, 1991). It is common to associate satisfaction with emotional affluence among individual who is experiencing a situation that leads to behaviouralintentions. As an example, Oliver (1993) argued that positive and negative affective responses were partial by consumer attributions about overall customer satisfaction. The contradiction between prior expectation and actual performance is a function of disconfirmation that results in customer dissatisfaction (Bolton & Drew, 1991). For instance, it has been shown that dissatisfied customers generally tend to complain to the establishment or are trying to find redress from them more regularly to relieve cognitive dissonance and failed consumption experiences (Oliver, 1987; Nyer, 1999).

Dissatisfaction can prompt customers spreading out negative outcomes also known as negative word of mouth. If the management does not review back their business, this situation can become worst and affect their performance. Unsatisfied customers will become a saboteur, and at the same time, they will discourage potential customers from entering the business. The customers' evaluation of service quality, purchase intentions and behavior will influence customer satisfaction. According to Lacobucci et al. (1994), empirical studies had shown that the key difference between service quality and customer satisfaction is that quality relates to managerial delivery of the service while satisfaction reflects customers' experiences with that service. Sivadas and Baker-Prewitt (2000), suggested that if improvements of product quality are not based on customer needs, it will not lead to an improvementin customer satisfaction.

This study focused on the service attributes of Uber with customer satisfaction and returned usage. Specifically, it is about the responses that the researcher gets from the customers about their evaluations on satisfaction received by experiencing the Uber. Following Oliver (1997; 1999), customer satisfaction is described as customer's judgment that the consumption of a product or service is providing a pleasurable level of fulfillment of the customers' needs, desires, and goals. High customer satisfaction leads to greater customer loyalty (Anderson & Sullivian, 1993; Boulding et al., 1993; Yi, 1990), which, in turn, leads to future revenue (Fornell, 1992; Bolton, 1998).

Increased customer satisfaction leads to decreased customer complaints and increased customer loyalty (Fornel & Wernerfelt, 1998). According to Anderson and Fornell (2000), to create satisfied customers is the reason behind the existence of business and competition. Those companies that excel at satisfying their customers will attract investors. Gilbert et al. (2004) said that the number of services and goods the company produced would not lead it to success as much as their satisfied customers because these customers will return and keep the business growing. Customer satisfaction is essential in marketing. Thus, the satisfying customer is very important for a varied reason.

With specific reasons, this slogan such as ''our focus is customer satisfaction'' or ''Customer is the King'' are usually being used by the marketer in endorsing their products or services. Customers across 200 firms had been tracked by the University of Michigan to represent all major economic sectors to produce the ACSI (American Customer Satisfaction Index). According to Fornell et al. (1996), an ACSI score computed formits customer's perceptions of quality, value, satisfaction, complaints, and future loyalty had been received by each of the company.

These days, customers are comparing the cost with value to a very extreme level. People value their money, and that is why they are looking for a high-quality product. On the contrary, the establishments are looking forward to making extra money out of their customers. Some tend to forget how important the customer is in profit marketing. They will concentrate too much on profit taking and forgot about what are their customers' needs and wants. Hence, it is important to recognize the authority of the

customers who are the core determinants of business besides the product or the company itself to deliver the best for the customers.

2.7 Return Usage

Return usage is similarly referred to as repurchase intention in which it can be described as having the intention to buy or use an organization's product/service more frequently in the future (Garbarino & Johnson, 1999; Zhang & Bloemer, 2008). According to Lacey and Morgan (2009), it is a person's judgments on buying again a delegated product or service from the identical company, taking into account his or her current situation and likely circumstances. The repurchaseis described as a purchaser's real behavior resulting in the acquisition of the identical service or product on multiple occasions. Peyrot and Van Doren (1994) cited that most consumers' purchases are possible repeat purchases. Consumers purchase similar merchandise repeatedly from similar sellers, and most purchases represent a series of events rather than a single isolated event. Retention is another common term for repurchase (Hennig-Thurau 2004; Narayandas 1998; Zineldin 2006), which is considered to be one of the most vital variables in relationship marketing (Fullerton, 2005)

Following the literature review and by the research objective and questions aforementioned, the followed hypotheses were developed for the study: -

H_1: There is a significant relationship between service attributes of Uber and return usage.

- *H_{1a}: There is a significant relationship between the safety of Uber and return usage.*
- *H_{1b}: There is a significant relationship between the price charged of Uber and return usage.*
- *H_{1c}: There is a significant relationship between the convenience of Uber services and return usage.*
- *H_{1d}: There is a significant relationship between ICT of the Uber services and return usage.*

H_2: There is a significant relationship between services attributes of Uber on Customer satisfaction.

H_3: There is a significant relationship between customer satisfactions on return usage.

H_4: Customer satisfaction mediates the relationship between service attributes of Uber and returns usage.

3 Methodology

3.1 Research Design

The descriptive cross-sectional design was used to investigate the relationship between the service attributes of Uber with customer satisfaction and return usage. The respondents for this study were chosen among individuals who experienced the services of Uber at least once in Kuala Lumpur and Selangor.

3.2 Sample & Sampling Method

A self-administrated survey was conducted for data collection. A total of 400 respondents who experienced the services of Uber were chosen as the respondent for this study participated in the survey comprising of 156 women and 244 men through an online survey using s google docs. The convenience sampling technique was used to select respondents by using an online survey questionnaire. As suggested by Roscoe (1975), a sample of more than 30 and less than 500 is sufficient for most research.

3.3 Construct of Questionnaire

Ordinal and interval scale was used to collect data from the respondents. Demographic variables were measured using an ordinal scale and marathon impact using an interval scale. The questionnaire consisted of 3 sections and designed to examine the relationship between service attributes of Uber and customer satisfaction. Section A was composed of demographic items, while items in Section B explored the service attributes of Uber and Section C relates to Customer satisfaction and return usage of participants. All items in Section B and C was rated using a five-point Likert Scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

3.4 Data Analysis

Data analysis was done by using the SPSS 23 (Statistical Package for Social Sciences). Both descriptive and differential statics was used in performing the data analysis. Preliminary test or pilot test using Cronbach Alpha to test reliability was undertakenbefore conduct the actual study. Descriptive analysis was used to compute the mean score and standard deviation. Inferential statistics method of Multiple Regression was employed to establish the relationship between all the variables in the study. Other suitable statistical techniques were used as appropriate in answering the research objectives, research questions, and hypotheses of this study.

4 Findings

4.1 Introduction

This section provides an overview of the subject who participated in this study. A total of 400 questionnaires were distributed during the data collection process. The respondent's profile includes gender, race, age ranges, education level, working status, monthly income for any source, UBER available in their area, sharing economy and usage

of UBER service. Frequency tables were generated from IBM SPSS Statistics for Windows Version 23. The demographic data were demonstrated by tabular presentations.

Table 1: Demographic Profile

Demographics Variables	Categories	Frequency (n = 400)	Percentage (%)
Gender	Male	244	61.9
	Female	156	39
Race	Malay	188	47
	Chinese	79	19.8
	Indian	93	23.3
	Others	40	10
Age Group	18– 25 years' old	152	38
	26 – 30 years' old	144	36
	31 – 40 years' old	89	22.3
	41 and above	15	3.8
Educational Level	SPM	35	8.8
	Certificates	25	6.3
	Diploma	87	21.8
	Bachelor's Degree	202	50.5
	Master's Degree	47	11.8
	PhD	4	1.0
Are you working?	Yes	337	84.3
	No	63	15.8
Income	Below RM 3,000	220	55
	RM 3,001 – RM 6,000	136	34
	RM 6,001 – RM 9,000	39	9.8
	RM 9,000 and above	5	1.3
Availability of Uber	Yes	376	94
	No	24	6
Do you know what	Yes	336	84
sharing economy is?	No	64	16
Are you using Uber	Yes	355	88.8
Services?	No	45	11.3

N=400

The 400 respondents consisted of 244 males and 156 females. The male respondents represented 61.9% of the responses, and the female respondents represented 39.0% of the total responses. The percentage shows that male respondents are much higher than the female respondents. There are four ethnic groups which are Malay, Chinese, Indian and others. Malay respondents comprise the majority of respondents; contribute about 47.0% (188 respondents). The Chinese, Indian and others ethnic groups are the minority with 19.8% (79 respondents), 23.3% (93 respondents),

and 10.0% (40 respondents). In this study, the majority of the respondents are from the age group 18 to 25 years old, with 152 respondents (38.0%), followed by the age group of 26 to 30 years old, with 144 respondents (36.0%), and the 31 to 40 years old have 89 respondents (22.3%). The minority of the respondents are from the age groups 41 and above, with 25 respondents (3.8%).

As for the education level of the respondents, the majority of respondents possess a tertiary education. Two hundred two respondents (50.5%) are bachelor degree holders. Thisis followed by 87 respondents (21.8%) who are diploma holders, 47 respondents (11.8%) possess a master's degree, and four respondents (1%) are Ph.D. degree holders. The minority of the respondents have lower education, the highest being the SPM holders 35 respondents (8.8%) and those with certificates 25 (6.3%). The majority of the respondents are working with 337 respondents (84.3%), while 63 (15.8%) of them are unemployed. In the monthly income segment, the majority of the respondents, 220 (55%) have an income of below RM3000. This is followed by 136 respondents (34%) whose income are between RM3001 to RM6000, those with income of RM6001 to RM9000 are represented by 39 respondents (9.8%) with 5 respondents (1.3%) having a high income of are RM9000 and above. The majority of respondents,' i.e., 376 respondents (94%) agree that UBER service is available in their area. However, 24 respondents (6.9%) response that there were no available UBER in their area. 336 respondents claimed that they know about sharing economy, and 64 (16.0%) didn't.

4.2 Reliability Test

The reliability test is a method for checking a scale's internal consistency. The researcher used Cronbach's alpha coefficient as the indicator to check the degree of consistency. Hair et al., (2007) mentioned that the Cronbach's alpha coefficient scale could be accepted if it is above 0.7. The Cronbach's Alpha in this study for safety is .829; Price is .778, Convenience is .815, ICT is .843, customer satisfaction is .870 and Return usage sharing option is .829. Overall, all the variables have a Cronbach's alpha coefficient of more than 0.7. We can conclude that all the items in this study are consistent and reliable.

Table 2: Summary of the reliability analysis

Variable	No. of items	Cronbach's Alpha
Safety	5	.829
Price	5	.778
Convenience	5	.815

ICT	5	.843
Customer satisfaction	5	.870
Return usage sharing option	7	.892

4.3 Descriptive Statistic

This section provides an analysis of mean, standard deviation and percentage for Safety, Price, Convenience, ICT, Customer satisfaction and Return usage sharing option. Descriptive statistics were generated from IBM SPSS Statistics for Windows Version 23. The data were demonstrated by tabular presentations.

4.3.1 Safety

Table 3 shows the mean, median and standard deviation (SD) and the level of safety customer satisfaction level on service attributes of Uber. Overall, the findings showthat the customer satisfaction level on service attributes of safety in Uber is at a high level represented by a total mean score of 4.19, the standard deviation of .76 and percentage 83.9. It can be seen that safety when using Uber service is given great priority and Uber is believed to implement the safety policies, rules,and regulations.

Table 3: Mean, standard deviation and percentage of safety

	Percentage (%)					Mean	SD
Items	1	2	3	4	5		
1. The details of drivers are provided in application	0.8	1.8	13.0	44.0	40.5	4.21	.791
2. The security policy is available	0.5	0.8	10.8	50.0	38.0	4.24	.710
3. The details of passenger is secured (Privacy Policy)	1.0	0.8	14.5	47.3	36.5	4.17	.775
4. Drivers can be trusted (truth worthy)	0.5	2.8	18.3	43.0	35.5	4.10	.826
5. The vehicle is in a good condition	0.5	0.3	12.8	45.8	40.8	4.26	.723

4.3.2 Price

Table 4 present the descriptive analyses of mean, standard deviation and percentage of the price. Overall, the findings show that the customer satisfaction level on service attributes of price in Uber is at a high level represented by a total mean score of 4.19, the standard deviation of .85 and percentage 83.8. It shows that the customer satisfaction about price when using Uber service is high as it is affordable. Uber is cheaper than a taxi in our market.

Table 4: Mean, standard deviation and percentage of price

Items		Percentage (%) 1	2	3	4	5	Mean	SD
1.	The navigation of route arrangement is reasonable and affordable	0.5	2.5	11.5	42.3	43.3	4.25	.793
2.	The small change and receipt is available via e-mail	2.3	2.8	13.3	47.5	35.3	4.11	.863
3.	Sharing economy service offers promotions and discounts	4.0	1.0	11.8	34.0	49.3	4.23	.978
4.	Sharing economy service offers lower prices than traditional businesses with the same offer.	1.0	1.3	13.3	44.8	39.8	4.21	.792
5.	There is no or very little charge for using sharing economy service platform	0.8	2.3	16.0	42.3	38.8	4.16	.825

4.3.3 Convenience

Table 5 present the descriptive analyses of mean, standard deviation and percentage of convenience. Customer satisfaction level on service attributes of safety in Uber is at a high level representedoverall; the findings show that the customer satisfaction level on service attributes of convenience in Uber is at a high level represented by a total mean score of 4.28, the standard deviation of .82 and percentage 85.7. It shows that the customer is satisfied with the convenience factor when using Uber service because it's easy to use and to pay with credit card. Moreover, the customer can even split the fare with other passengers.

Table 5: Mean, standard deviation and percentage of convenience

Items		Percentage (%) 1	2	3	4	5	Mean	SD
1.	Uber service is available in my area	3.0	0.5	8.0	38.3	50.2	4.32	.877
2.	Uber is easy to book	1.5	1.5	8.5	41.0	47.5	4.31	.810
3.	Uber payment transaction is convenient (e.g.Cash ,Debit card, Credit card)	1.5	1.5	8.5	42.5	46.0	4.30	.807
4.	I am able to get the car fast	1.3	2.0	12.8	41.0	43.0	4.22	.837
5.	Uber apps navigation is easy	1.3	0.5	11.0	43.3	44.0	4.28	.777

4.3.4 ICT

Table 6 present the descriptive analyses of mean, standard deviation, and percentage of ICT. Overall, the findings also show that the satisfaction with the ICT service attributes of Uber is at the high level represented by a total mean score of 4.29, the standard deviation of .80 and percentage 85.8. It shows that the concept of sharing economy where goods and services are shared through the use of the internet and other ICT applications as a platform has certainly transformed the way most of the world works.

Table 6: Mean, standard deviation and percentage of ICT

Items	Percentage (%)					Mean	SD
	1	2	3	4	5		
1. Uber apps is user friendly	1.3	0.8	10.3	34.0	53.8	4.38	.798
2. The information provided is adequate	0.5	0.8	12.3	44.5	42.0	4.26	.739
3. The multimedia and graphic of the image and sound are synced.	0.3	1.0	12.8	41.8	44.3	4.28	.742
4. The design of apps is attractive	4.0	1.3	7.8	36.3	50.7	4.28	.957
5. The graphic presentation is interesting	0.5	1.5	12.8	41.0	44.3	4.27	.776

4.3.5 Customer Satisfaction

Table 7 present the descriptive analyses of mean, standard deviation and percentage of customer satisfaction. Overall, the findings also show that the Customer Satisfaction on service attributes of Uber is at a high level represented by a total mean score of 4.27, the standard deviation of .78 and percentage 85.4.

Table 7: Mean, standard deviation and percentage of customer satisfaction

Items	Percentage (%)					Mean	SD
	1	2	3	4	5		
1. I am satisfied with the service availability and readiness	0.5	2.3	11.3	30.0	56.0	4.38	.811
2. I am satisfied with the drivers behaviour while driving	0.5	1.5	12.3	49.8	36.0	4.19	.742
3. I am satisfied with the price offered by Uber apps	1.0	2.3	11.3	42.0	43.5	4.24	.817

4.	I am satisfied with the convenience of the apps (user-friendly)	0.3	1.5	11.0	47.3	40.0	4.25	.728
5.	I am satisfied with the service punctuality and reliability	1.0	0.8	13.5	37.5	47.3	4.29	.802

4.3.6 Return Usage

Table 8 present the descriptive analyses of mean, standard deviation and percentage of return usage. Overall, the findings also show that the return usage of sharing option on service attributes of Uber is at the high level represented by a total mean score of 4.34, the standard deviation of .78 and percentage is 86.9.

Table 8: Mean, standard deviation and percentage of return usage of sharing option

		Percentage (%)					Mean	SD
Items		1	2	3	4	5		
1.	I believe that Uber service knows about the needs of their customers and I consider becoming a regular customer of Uber.	0.8	1.8	10.8	38.0	48.8	4.32	.793
2.	My satisfaction of the service highly influence my repurchase intention	0.5	0.8	10.0	45.3	43.5	4.30	.719
3.	I am likely to choose Uber service instead of a regular taxi or a similar sharing option the next time.	0.8	1.5	8.3	36.8	52.8	4.39	.764
4.	If I need public transportation, I would prefer an Uber service.	0.8	4.0	9.8	39.8	45.8	4.25	.847
5.	In the future, I am likely to choose an Uber service instead of other public transportation.	1.0	3.3	10.5	36.0	49.3	4.29	.856
6.	Overall, I will be using an Uber service again in the future	0.8	1.3	6.5	28.0	63.5	4.52	.738

4.4 Inferential Statistics

Table 8 presents regression coefficients and standard errors. Multiple regressions were run to predict the overall customer satisfaction from six predictors: constant, safety, price, convenience, ICT and return usage of sharing option. There was linearity as assessed by partial regression plots and a plot of standardized residuals against the predicted values. There was the independence of residuals, as assessed by a Durbin-Watson statistic of 2.041. The coefficient of safety was .393, p = .000, price was .163, p = .000, convenience was .205, p = .000, ICT was .165, p = .000 and return usage of sharing option was .120, p = .000.

Table 8: Regression coefficients and standard errors

Variables	SE	Beta	t	Sig.
Safety	.038	.394	10.344	.000
Price	.039	.160	4.158	.000
Convenience	.043	.204	4.794	.000
ICT	.037	.154	4.48	.000
Return usage of sharing option	.036	.118	3.30	.000

*Note: * p < .05; B = unstandardized regression coefficient; SE = standard error of the coefficient; Beta = standardized coefficient.*

Table 9 shows the hypothesis that has been highlighted in this study. The researchers have identified one construct of independent variable which is represented by four items, and one each of mediating and dependent variable. There were four hypotheses, with one having four sub-hypotheses. The result from the statistical analysis shows that all of the hypotheseswere supported.

Table 9: Hypothesis testing

Hypothesis		Results
H_1	There is a significant relationship between service attributes of Uber and return usage.	Supported
H_{1a}	There is a significant relationship between the safety of Uber and return usage.	Supported
H_{1b}	There is a significant relationship between the price charged of Uber and return usage.	Supported
H_{1c}	There is a significant relationship between the convenience of Uber services and return usage.	Supported
H_{1d}	There is a significant relationship between ICT of the Uber services and return usage.	Supported
H_2	There is a significant relationship between services attributes of Uber effect on Customer satisfaction.	Supported
H_3	There is a significant relationship between customer satisfaction effects on return usage.	Supported
H_4	Customer Satisfaction mediates the relationship between service attributes of Uber and returns usage.	Supported

5 Implications and Conclusion

The results of this study will hopefully improve transportation services in the tourism industry that initiates and create a diversity of transport modes. The proper classification is important in developing policies and requirements for the legality of this new mode. Further, findings of this study may be used in identifying aspects of the service which have low rankings to be improved on, as well as give clarifications to the most common problems of the service attributes of Uber. To add, the relevant data obtained from this study will significantly contribute to the knowledge on which service attributes appears to have significant positive explanatory power on customer

satisfaction towards Uber services. Suggesting that improvements to service such as safety, price, convenience, and ICT from the findings will likely increase perceived satisfaction amongst existing users. At a more general level, this study demonstrates the level of customer satisfaction on Uber services.

From the practical perspectives, this study reveals the characteristics of Uber services that significantly influence consumer satisfaction. This will be beneficial to the operators of Uber to improve their services and provide better services that fit the current consumer demands on public transportation. The significance of addressing this matter is that an increase in customers' satisfaction on the service would trigger a higher number of return usages of sharing economy services especially Uber. Therefore, service providers can determine the attributes that are considered noteworthy to be improved on to ensure customers' satisfaction towards the Uber service are fulfilled and subsequently encourage them to reuse the service again.

5.1 Limitations

The current study has a few methodological limitations. First, the study focused on Uber only and no other public transportation as a comparison toward customer satisfaction and return usage of sharing option. This can be seen on the participants' profile whereby almost 88.8% of the respondents using Uber services and the rest are not using an Uber service. This limits the participants that possibly take part in this survey. As for this study, the entire participants were an Uber user who lives in Kuala Lumpur and Selangor. Secondly, another limitation of this study is related to a potential of sampling bias. This is because the questionnaires were distributed via google docs to those who used Uber services at least once in Kuala Lumpur and Selangor area. There are many Uber users who live outside Kuala Lumpur and Selangor.

Thirdly, another limitation of this study is Uber had officially stopped its operation on March 8th 2018 in 8 Southeast Asia countries i.e. Vietnam, Thailand, Singapore, Philippines, Myanmar, Cambodia, Indonesia and Malaysia as it has merged with a leading ride-sharing company called Grab which gives Uber 27.5% stake in Grab (Cheok, 2018). Finally, the study is limited in term of the geographical location. The study focuses on Uber users in Kula Lumpur and Selangor only. Therefore, the result obtained might apply to Uber users on that area only to improve on their services and provide better services that fit the current consumer demands on public transportation. The most notable limitation of this study was the study carried out in Malaysia, hence the results may not be fully generalised for other countries, as beliefs and perceptions may differ among countries.

5.2 Recommendations for future research

The public transportation industry is in danger of losing relative market share because of relative improvement in auto and auto-related conditions provided by private transportation services. Future studies should look into the services that are being offered by public transportation service which currently offers services to the

public by the principle of equality, in contrast to private services which are based on differentiation. Good marketing practice recognizes different customer preferences and develops products and services accordingly. Fulfilling customer needs is the foundation for customer satisfaction and repeat purchase. Future study can also be conducted on another type of mode of transportation services that provide the same services. This paper has suggested several factors that can increase stimulus customer satisfaction to use Uber services and return usage. Since the study of Uber service is still at its infancy stage, future research could integrate other moderating variables in researching the relationship between service attributes of and customer satisfaction/return usage. Employing a qualitative study approach would be highly recommended as a first step as interviews or focus groups can help generate new attributes.

6 Conclusion

This study focuses on service attributes of Uber on customer satisfaction and returns usage within the Malaysian context which is not fully understood due to the scarcity of such research. A further and deeper integration of service attributes of Uber, customers' satisfaction theory as well as customers' repurchase intention-behaviour study will offer various resources for further theoretical development and formulation of new research questions.

In the end, this study has successfully achieved all the three objectives set at the onset of the research process. Four service attributes of Uber namely safety, price, convenience, and ICT were found to significantly predicts customer satisfaction (p value= 0.790). The strongest correlation found was between ICT and customer satisfaction. This goes to show that technology is essential to the growing concept of sharing economy especially Uber. On the question of the effects of services attributes of Uber on the likelihood of return usage, based on the elements of service attributes of Uber on the likelihood of return usage, all the dimensions indicated that users of Uber are satisfied on Uber services. All the dimensions on customer satisfaction effects were found to correlate with return usage of sharing option (p value= 0.831). Lastly, the investigation on whether customer satisfaction mediates the relationship between service attributes of Uber and return usage also yielded an answer. Multiple regressions were run to predict the overall customer satisfaction from six predictors: constant, safety, price, convenience, ICT and return usage of sharing option. There is a very strong correlation with p value= 0.831. Thus, customer satisfaction mediates the relationship between services attributes of Uber and return usage.

This study also recommended suggestions to improve customer satisfaction and return usage of Uber users. Based on the findings of this study, it could be concluded that it is very vital for Uber operator to pay attention to their service attributes of Uber as this will result in highly satisfied customers and subsequently increase the number of return usage of their service. The outcome of this study is very beneficial to the operators of Uber in improving their services and consequently s better services that fit the current consumer demands on public transportation. The findings of this study also

point to the fact that ICT is vital in the hospitality and tourism industry as it has a great impact on ensuring sustainable global and tourism development.

This study also recommended suggestions to improve customer satisfaction and return usage. Based on the findings of this study, it could be concluded that it is important for service attributes of Uber to be observant in selecting vital determinants of Uber service that resulted in more highly satisfied customers and subsequently increase the number of return usage of. This beneficial to the operators of Uber to improve their services and provide better services that fit the current consumer demands on public transportation. Based on the findings of this current study, it could be concluded that ICT is vital in the hospitality and tourism industry because ICTs has a great impact on ensuring sustainable global and tourism development.

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