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The American University in Cairo

School of Global Affairs and Public Policy

**THE COGNITIVE AND AFFECTIVE ANTECEDENTS TO
CONSUMER BEHAVIOR TOWARDS ON-DEMAND
TRANSPORTATION SERVICES IN EGYPT**

A Thesis Submitted To

The Department of Journalism and Mass Communication

In partial fulfillment of the requirements for
the Degree of Master of Arts

By Islam Nasser Salah Eldin Asaad

Under the supervision of Dr. Ahmed Taher

December 2018

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ABSTRACT

In the recent few years, smartphones have shaped and assisted in the creation of new business models to formulate and develop some additional dimensions such as shared-economy or shared-mobility. Since transportation is one of the most essential aspects of shared-economy, it is vital to this study to focus and investigate the consumers' intention to use the new commuting services provided by Transportation Network Companies (TNCs) in Egypt. Consequently, this research aims to examine and understand the cognitive and affective antecedents to consumers' behavior towards TNCs in Egypt. Therefore, the model of the Unified Theory of Acceptance and Use of Technology (UTAUT2) has been applied to understand and explain the factors that influence the behavioral intention (BI) to use TNCs services. The factors of Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Price Value (PV), and Habit (HT) tested through surveying 200 respondents thru online (Google Forms) and offline (Self-Administered Questionnaires) techniques. The results showed that consumers' intention to use TNCs services in Egypt, was positively affected by the factors of (performance expectancy, social influence, price value, and habit). However, the variables of (effort expectancy, facilitating conditions, and hedonic motivation) showed a negative influence on the intention to use TNCs services in Egypt. Thus, upon the evaluation of the gathered data and discovered findings, the market acceptance and share of TNCs services can be increased if these services considered the factors affecting the consumers' intention that mentioned earlier.

Keywords: Shared-economy, Shared-mobility, On-demand Mobility, On-demand Transportation Services, Transportation Network Companies, TNCs, Ride-sourcing Companies, UTAUT2.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
Apps	Applications
BI	Behavioral Intention
CAPMAS	Central Agency for Public Mobilization and Statistics
CMC	Computer-mediated communication
CPUC	California Public Utilities Commission
CS	Customer satisfaction
CV	Customer value
EE	Effort Expectancy
FC	Facilitating Conditions
GPS	Global Positioning System
HM	Hedonic Motivation
HT	Habit
IRBs	Institutional Review Boards
IT	Information technology
P2P	Peer-to-peer
PE	Performance Expectancy
PM	Price-multipliers
PV	Price Value
SI	Social Influence
SM	Surge multiplier
TNCs	Transportation Network Companies
UTAUT	Unified Theory of Acceptance and Use of Technology
UTAUT2	Unified Theory of Acceptance and Use of Technology 2
VKT	Vehicle kilometers traveled
VMT	Vehicle miles traveled
WoM	Word-of-Mouth

CHAPTER 1: INTRODUCTION

During the last few decades, technology has shifted the way individuals live, and a new era of digitalizing of products and services has started to emerge. This era of digitalization started to change the current landscape of numerous business sectors and areas related to products and services. The enthusiasm of using state-of-the-art technologies counting the expectancy, intention to use, perception, as well as concrete usage behavior that determines consumers' recognition and acceptance (Chen, Wolfram, & Akram, 2017).

Generally, this user acceptance has been researched to clarify and understand the intention to use as well as the adoption of countless distinctive developing innovations, technologies, and services. For instance, the appearance of Web 2.0 allowed uncountable chances for a new market access beyond the borderlines. One of the most extensively debated topics considering the evolving market appearance as a consequence of the existence of Web 2.0 technology is "sharing economy business."

This advanced sharing economic model is describing the capability of groups or individuals to make revenue from underutilized resources. The need for such model has been originated from the development of the world population, which suffer from a shortage of resources. Meanwhile, consumers search for the ultimate solutions to meet their requirements (Hawapi, Sulaiman, Abdul Kohar, & Talib, 2017).

Likewise, sharing economy is the potentially more sustainable method to apply the resources. Presently, collaborative consumption which is a part of the sharing economy has benefited from the presence of Web 2.0 technology. This peer-to-peer (P2P) constructed

interest is managed throughout on-line platform as a channel of communication. Indeed, shared economy is regularly linked with a P2P model where the information technology (IT) becomes the platform for individuals to share and offer under-utilized assets, that are financial, social, and environmental (Hawapi et al. 2017).

Moreover, in shared economy, everybody is capable to completely use resources by modifying the budget of the ownership throughout the act of renting, subscribing, sharing, reselling, loaning, donating, and/or exchanging. With the excessive escalation in the amount of smartphones and mobile consumers, the shared economy started to be more developed and available through a countless number of services and products.

The current era has seen a fast explosion of mobile devices with a vast number of 5 billion mobile subscribers worldwide at the end of 2017 (Gsm, 2018). Apart from offering entertainment content and apps to consumers; mobile devices/platforms such as tablets and smartphones develop the consumers' productivity through an overabundance of mobile applications. Examples of such apps contain but are not limited to shopping (e.g., Amazon), news organizer (e.g., flip- board), transportation (e.g., Uber), project management (e.g., slack), health/fitness (e.g., Fitbit), payment (e.g., square), note taking (e.g., Evernote), and so on (Tamilmani, Rana, & Dwivedi, 2018).

Accordingly, these devices and apps provide users' geolocations, allow immediate peer-to-peer interaction, and support ubiquitous communications, giving escalation to a new category of businesses "on-demand companies", which target to efficiently adhere consumers, services such as (computer programming and home cleaning), and vendors of resources such as (parking spaces and houses) and charge very low transaction charges.

These types of businesses are reshaping our daily lives and shaking up their industries. (Zha, Yin, & Yang, 2016).

Furthermore, as a standard sample of the on-demand shared economy, ride-sourcing establishment or Transportation Network companies (TNCs) like Lyft and Uber are changing the method we use to commute in cities. These types of companies offer online platforms and ride-hailing apps that intelligently links contributing drivers to consumers. A consumer/rider can view and monitor in a real time setting and distance the position of the oncoming requested vehicle and get notified when it reaches (Zha et al. 2016). Besides, TNCs offer the real-time feature, through online-based platforms that cleverly source the trip requests to nearby connected available private drivers. Unlike the conventional dispatch taxi system, the internet-based selection does not have a human interference, which makes it conceivable for dispatch system to enhance the service (Zha, Yin, & Xu, 2018).

In Egypt, TNCs like (e.g., Uber, Careem, Swvl, and others) started to be more prominent and to take the market from regular taxis and other local transportation modes. The competition between Uber-like services to acquire the Egyptian market is a strong example of user acceptance and adoption of TNCs. As an example, in October 2017, Uber has announced a \$20 million for investing on its new support in the center of Cairo (Hamdi, Mourad, & Knecht, 2018).

From the time when the digital and online platforms have become the originators of shared economy, technology recognition also might influence the acceptance level of shared economy business — the term "Technophilia" or in other words the dependence on internet

platform to do stuff more easily and efficiently is one of the aspects that have an impact on individuals' adoption rate in shared economy (Hawapi et al. 2017).

As the development of these types of technologies and innovations spans from the initial computer systems to the contemporary mobile applications and devices, new theories and models expanded correspondingly. One of the theories and models is the "Unified Theory of Acceptance and Use of Technology" (UTAUT2), which is a model of clarifying consumer's acceptance and usage of specific technologies and systems (Venkatesh, James, and Xu, 2012).

Accordingly, this research study is attempting to understand and analyze the cognitive and affective antecedents to consumers' behavior towards the new sharing economy businesses represented as TNCs (Uber, Careem, Swvl, etc.). In this paper, the user's usage and acceptance of TNCs embed the 'intention to use' of the TNCs' services and mobile applications (apps) by Egyptian consumers. Hence, the UTAUT2 model is used to fully utilize the aspects that affect the behavioral tendency of TNCs' consumers in Egypt. All these aspects make this study interesting to explore and understand why Egyptian users are vulnerable to sharing economy in general, and TNCs in specific.

CHAPTER 2: LITERATURE REVIEW

2.1 Smartphones history and development

Nowadays, people use smartphones as their personal assistant to locate and explore restaurants, hotels, and stores. Furthermore, Islam and Want (2014) said that people use smartphones in locating their positions on maps, monitoring their health system through activity recording, purchase of products from the Internet, and watching videos. The smartphones are being even more common, and their market is increasing endlessly (Daponte, De Vito, Picariello, & Riccio, 2013).

Islam & Want (2014) stated that people experienced an extraordinary transformation in which mobiles had developed from devices that make phone calls, to smart devices that made individuals connected with each other, furthermore the information is accessible almost all the time.

This transformation had made Internet applications, previously available to desktop users only, easily available to anyone who has a mobile device at any time and accessible from anywhere. Additionally, numerous inventions and developments were serious in the implementation of smartphones—specifically, high-performance networks like 3G and (4G/LTE), which had been broadly adopted; recent operating systems with user-friendly interfaces as well as wealthy programming instruments; besides business models for installing applications like app-stores (Islam & Want, 2014).

Latest memory technologies associated with smartphones have provided greater capacities, cheaper, and usage of less power; which enables smartphones to save terabytes of information data. Consequently, this will evoke a new variety of applications that collect and

store personal context and content, improving the privacy of user information and the speed of access (Islam & Want, 2014).

Although mobile platforms are distinctive from desktop computers (PC's) and laptops due to the limitation of screen size and keyboard, they provide features (e.g. Global-Positioning System GPS, camera, and scanners. This marks mobile marketing field as favorably distinctive from large screen PC-Internet as well as conventional marketing (Ström, Vendel, & Bredican, 2014). Hence, the Mobile Marketing Association defined mobile marketing as:

"A set of practices that enable organizations to communicate and engage with their audience interactively and relevantly through any mobile device or network" (as cited in Ström, Vendel, & Bredican, 2014).

Relatedly, consumers observed gratification and media image opportunities differently; this justifies consumers' selections between one media compared to the others. Mobile Internet consumers viewed mobile phones as timely and enjoyable, identifying the three main benefits: Users' convenience (e.g., the flexibility of determination regarding location and time), efficiency, and companionship compared to the PC (Ström, Vendel, & Bredican, 2014).

2.1.1 Smartphones application usability

In the last few years, improvements in communication and information technology have allowed new services that deliver an extensive variety of demand-responsive and real-time trips. Companies like Sidecar, Uber, and Lyft have appeared proposing mobile phone

applications to connect passengers with registered drivers (Rayle, Shaheen, Chan, Dai, & Cervero, 2014).

These examples of Transportation Network Companies (TNCs), also referred as "ride-sourcing," or "on-demand ride services" are used through smartphone applications (apps) to match and connect passengers with community drivers (Shaheen & Chan, 2015). Moreover, Passengers request a trip from a (generally) non-commercially licensed driver who drives a private owned vehicle through a smartphone application, consequently links the driver to the passenger's location via GPS (Rayle, Shaheen, Chan, Dai, & Cervero, 2014).

According to Rayle, Shaheen, Chan, Dai, and Cervero (2014), these applications request a distance-variable fare, relatively Eighty percent of the payment represent the driver's share, and the remaining twenty percent to the TNC being the service provider.

Some of these apps provide a mutual "rating system" and content-aware process that enables both the drivers and the passengers to rate each other after the ride completion. The users' credit card data can be kept in the TNC's computer system to use for future rides. A comprehensive classification of ride-sourcing is hard because these types of services are rapidly developing (Rayle, Shaheen, Chan, Dai, & Cervero, 2014). In fact, Islam and Want (2014) mentioned that context-aware process for smartphones enables an improved user-experience by adjusting smartphones' behavior based on the location, characteristics of the user, and nearby objects.

By leveraging improvements in technology, ride-sourcing companies like Lyft, Uber and their competitors, TNCs, or more equally, "ride-sharing"— assure to rise trustworthiness

and lessen waiting times of point-to-point transference (Rayle, Shaheen, Chan, Dai, & Cervero, 2014). Additionally, mobile phones are very individualized media and are used more actively compared to laptop and desktop computers (Pescher, Reichhart, & Spann, 2014).

Switching between PC and the mobile Internet might be clarified as a balancing media to the DSL Internet in high involvement circumstances, although mobile Internet operated as an alternative in inferior involvement circumstances (Ström, Vendel, & Bredican, 2014).

As a result of the convergence of mobile and wireless devices technology, customers are now untethered or unbound from their desktops, office and homes, with the capability to share, access, and communicate information within their usage of buying products, social networks, and playing games thru location-based mobile applications (Rohm, Gao, Sultan, & Pagani, 2012).

2.2 App-based On-demand Mobility Services (Transit apps)

Car-sharing (Shared Vehicle), ride-sharing (Car-pooling / Van-pooling), ride-sourcing (e.g. Lyft, Uber, and Sidecar), and e-hailing services (Normal Taxis) are all sorts of on-demand mobility; the differences of these types are as follows:

1) Car-sharing is short-definition to a shared vehicle, the notion of car-sharing started in 1994 in Canada and then it became vivid by 45 operators in several countries like Brazil, USA, and Mexico. In this respect, individuals took advantage of their private vehicles' usage without the obligations and costs of ownership overheads, because the payment is per-use and / or agreed monthly fees (Greenblatt & Shaheen, 2015).

2) Ride-sharing services are also referred to as car-pooling and van-pooling, in its conventional sense the users share a vehicle for trip-making with the same destination, origin or both. These ride-sharing services help in reduction of the number of automobiles existing on the road (Greenblatt & Shaheen, 2015).

3) Ride-sourcing services, which are also identified as "Transportation Network Companies" shortly named "TNCs" offer on-demand as well as pre-organized transportation facilities with several payment options; that happens by linking drivers of private vehicles with other passengers. In fact, TNCs connect and link the users (both drivers and passengers) through smartphone applications that are used for ordering, ratings and cashless payment. Moreover, ride-sourcing services started in 2012, in San Francisco, CA, since its launch the services have been extent rapidly all over the USA and the globe, facing both resistance and support (Greenblatt & Shaheen, 2015). Additionally, Rayle, Shaheen, Chan, Dai, and Cervero (2014) selected to signify these services as "ride-sourcing" because it briefly delivers the needed technology; a platform which used to "source" trips from a driver collection.

Ride-sourcing has origins in sharing behaviors of traditional taxis and ride-sharing. Despite the arguments of some ride-sourcing proponents, *ride-sourcing* varies from *ride-sharing*; which includes the notion of grouping passengers in a private vehicle, each going to a similar direction, with the purpose of reducing fuel consumption, travel costs, vehicle emissions, and congestion. In contrast, *ride-sourcing* drivers' motivation is income, so they typically don't share a direction with passengers (Rayle, Shaheen, Chan, Dai, & Cervero, 2014).

In some conditions, ride-sourcing might become more related to ride-sharing by letting unconnected passengers to share a ride. Nevertheless, ride-sourcing in its present condition is more closely to look like a taxi when a driver asks for a ride in exchange for a fare. Ride-sourcing supporters preserve that, unlike taxis, ride-sourcing allows more effective use of a vehicle that is owned by the drivers. Others also claim that ride-sourcing differs from traditional taxis because of its reliability, efficiency of the pricing tools and matching platform, alongside with the liability of the evaluation system (Rayle, Shaheen, Chan, Dai, & Cervero, 2014).

4) E-hailing services is one of the on-demand mobility methods that depends on "for-hire" vehicle services; this service works by using specific smartphone applications to electronically haul an available taxi on-request. Although all vacant taxis can be dispatched or reserved, through direct street dispatching or hailing via a phone operator call. Currently, e-hailing applications are implemented as ride-sourcing services and that has concurrently multiplied in the on-demand mobility area. Similarly, both e-hailing and ride-sourcing services enable real-time connection between passengers to drivers as well as electronic payment (Greenblatt & Shaheen, 2015).

These modes are all essential types of "Shared-Mobility" or as also referred as "On-demand Mobility Services" which is sharing the usage of a bicycle, vehicle, or some other low-speed methods, through an advanced transport method that facilitates immediate access to transport methods "as-needed." To users. Furthermore, shared-mobility contains private sharing of vehicles; peer-to-peer (P2P) car-sharing, shuttle-services sharing, scooter-sharing, bike-sharing, ride-sharing, and on demand ride services and facilities (Shaheen & Chan, 2015).

Many debates had gone into clarifying these services; currently, there is no agreement on a specific terminology. Additional terms like: "parataxis", "on demand rides", "real-time ride-sharing", "app-based rides", "ride-matching", and "Transportation Network Companies (TNCs)" (Rayle, Shaheen, Chan, Dai, & Cervero, 2014; Zha, Yin, & Yang 2016).

Typically, ride-sharing is not aiming for profit; however, the provision of TNCs-like facilities is mostly driven by financial motivation. Consequently, the California Public Utilities Committee in the United States of America recommended using the term "Transportation Network Companies" to classify TNCs-like companies/services (Zha, Yin, & Yang, 2016).

These services are experiencing numerous major expansions, using improvements in mobile related technology to enhance and spread the recognition of shared vehicle systems for trip-making (Greenblatt & Shaheen, 2015).

Shared-mobility might also involve commercial "delivery-vehicles" offering a flexible method for commodities movement. Furthermore, the shared-mobility resulted in a transformational effect on various international cities by improving the mode of transportation accessibility as well as instantaneously decreasing ownership of personal vehicles (Shaheen & Chan, 2015).

Lately, TNCs have launched new services of on-demand mobility that allow riders to split and share the fees of a charge, which is referred to as "ride-splitting." For instance, some TNCs like UberPool, Line, Lyft, and Sidecar Shared Rides target to group riders with related routes and trips into car-pools (Greenblatt & Shaheen, 2015).

Since 2014, a rise took place related to the implementation of e-hailing services, specifically in major urban areas by using mainly third-party dispatch and haul mobile applications such as Curb and Flywheel. Several regions and states throughout the country are approving legislation to allow TNCs/ride-sourcing companies to operate (Greenblatt & Shaheen, 2015).

In the perspective of common ride-sharing (such as car-pooling and van-pooling) and on demand mobility facilities, such as (Transportation Network Companies - TNCs), lots of the related suppliers use information technology (IT) to enable the matching of drivers and riders for trip-making (Shaheen & Chan, 2015). At their mainstream, the ride-sourcing platforms decrease the friction in dispatch and matching for transport. A typical operation on these service apps is represented as follows: a possible consumer launches the mobile application on his/her phone and then demands a ride, and after that, the automated system authenticates his/her to the closest available driver (Banerjee, Johari, & Riquelme, 2016).

2.2.1 History and development of on-demand mobility services

In 1994, the first car-sharing and bike-sharing programs started in North America, and during the mid-1990s the "shared-mobility" services developed rapidly. Besides, car-sharing and bike-sharing, there was an expanding activity and newly establishes in respect to IT-based ridesharing; car-sharing P2P, scooter based-sharing and on demand ride sharing services like (Sidecar, Lyft, and Uber) (Shaheen & Chan, 2015).

Undoubtedly, the car-sharing business has developed notably over the last few years all over the globe, and it revealed infinite possibility as well as offering a viable transportation mode, and that implies powerful business chances (de Luca & Di Pace, 2015).

Uber was one of the first TNCs that was established in San Francisco in 2009, primarily with the intent of challenging what was commonly treated to be the city's insufficient and inefficient taxi service. Later, its policy of audacious and persistent expansion has supported it to rapidly increase its services and coverage internationally, consequently by (2017) Uber was operating in more than seventy countries, with nearly 16 billion US\$ spent in the establishment since it started. The range of its growth was exemplified by the expected valuation provided of 70 billion US\$, making Uber the best valuable privately-owned technological company in the whole world (Dudley, Banister, & Schwanen, 2017).

The company's growth has resulted in broad consequences that do not only offer transportation but also varying examples of urban related planning concerns, forms of mobility, employment and business throughout the 21st century. The effective growth of Uber was based on speciously easy usage of contemporary technology applications where the primary reservations, the path, the calculation of charge, and lastly the payment are all performed and completed by the assistance of a smartphone application (Dudley, Banister, & Schwanen, 2017).

In operative terms, Dudley, Banister, & Schwanen, 2017 highlighted that this technological service brings the notion of "sharing economy" that targets to adhere consumers and suppliers together by means of the creation of a spare capacity. In this respect, for a vehicle that is usually idle for almost 90% of the time, the driver can install the Uber application and go live with the customers who are utilizing the same application.

Technology that offers 'sharing economy,' should be more effective in the matching process of demand and supply rather than the traditional taxi services. Additionally, Uber employs adjustable pricing systems that can be implemented to deal with times of peak demand, whereas both customer and driver run score ratings for each other. Mainly for regulatory reasons, Uber defined itself as a 'technology platform' rather than a 'taxi company' to distinguish itself from its rivals, and it classifies its drivers as 'registered partners' not as employees (Dudley, Banister, & Schwanen, 2017).

2.2.1.1 History and development of on-demand mobility services in Egypt

In Egypt, Uber was launched in 2014 in Cairo, and then in 2017, the service expanded to help more than four million users, with nearly 160,000 drivers who are working as partners with the company. Today, Uber Egypt operates in eight distinctive areas across the country: (Cairo, Alexandria, Tanta, El Gouna, Hurghada, Mansoura, Zagazig, and Damanhour) (Elewa, 2018).

As for its services, Uber provides some different methods and types for its users; starting with 1) Uber X which is (the service any user can get at everywhere, associated with comfortable sedans presenting fabulous but reasonable everyday rides). Likewise, 2) Uber Select, which is (sleeker and newer cars that deliver more luxurious rides at a premium price) (Elewa, 2018).

Moreover, 3) Uber TukTuk, which is available only in El Gouna, it allows any user to transfer from one area to another in the coolest way possible. And lastly, 4) Uber Scooter, which is the most recent method is simpler, quicker, and brilliant for beating the traffic jams (Elewa, 2018).

Careem is the second well-known TNC provider in Egypt and the main competitor to Uber, and it started in late 2014 in Cairo (Al-Ahram Weekly, 2016). Afterward, the company expanded its services and cities; Currently according to the main website of Careem Egypt, the company operates in the following cities (Cairo / Alexandria / El-Sahel / El-Gouna / Damanshour / Tanta / Mansoura / Hurghada / Port Said / Suez / Ismailia / Zagazig / Damietta / Banha and El-Sokhna). Likewise, Careem provides a number of different methods and types for its users such as (Go Value, Go+ Comfort, White Taxi, and Bike) (Careem Website, n.d.).

Similar to Uber and Careem, a new company started to take place in transporting individuals through its vehicles called Swvl. It started in 2017, and it works on the concept of van-pooling to decrease the number of vehicles on the streets, lessening the limited resources like time, money, and space. The company now operates and handles over 600 Lines in Cairo and Alexandria (Swvl Website, n.d.).

2.2.2 On-demand Mobility Significance

On demand mobility methods conveyed a number of social, environmental, and “transportation-related” benefits. Numerous studies have pointed out that the lessening of ownership, vehicles use, and vehicle distance covered (miles/kilometers) traveled (VMT/VKT) (Shaheen & Chan, 2015).

Shaheen and Chan (2015) mentioned that cutting costs and the attenuated convenience are often quoted as the most popular reasons for changing to a shared transportation mode. “Shared modes” can moreover expand to the coverage of public transit sectors, and possibly have a vital role in linking the existing gaps in the transportation networks consequently encouraging “multi-modality” by tackling the first & last mile concern in respect to the access of public transit.

de Luca and Di Pace (2015) stated that, the speedy development of car-sharing originates from two distinctive reasons that complement each other. Firstly, car-sharing turned out to be a substitute method of traditional city transportation, which lets it achievable to complete various aims of transportation planning concurrently aiding in the viable urban growth. Consequently, car-sharing introduces a suitable mode of transportation for every trip, it favors trip-chaining and decreases spontaneous trips. Secondly, car-sharing is a sort of 'incentive' added to the earnings of the vehicle riders, contrasting the majority of the transportation strategies that target to suggest 'sticks' versus vehicles. Undeniably, transportation riders can benefit from the vehicle's flexibility without suffering from its fixed charges.

Furthermore, on demand mobility is supposed to offer some economical gains in terms of the budget savings, improved economical activity close to the public transit locations and multiple-transportation centers, and improved reachability by generating chances for possible new trips that were not previously available by usual public transit plus facilitating new (one-direction) or (point-to-point) service choices (Shaheen & Chan, 2015).

Additionally, a rising form of empirical indication implies that on demand mobility services can deliver transportation, social, environmental, and land oriented optimization benefits. Whereas influence findings on round-trip car-sharing are fairly broad, the effects of ride-sharing and the latest service methods of ride-splitting, ride-sourcing, and e-hauling services are less understood and studied (Greenblatt & Shaheen, 2015).

The latest appearance of on-demand and app-based ride services has generated a debate on their role in urban transit (Rayle, Shaheen, Chan, Dai, & Cervero, 2014). Therefore, a case study formulated by Shaheen and Chan (2015) in San Francisco was on 380 TNC's users, discovered that ride-sourcing customers were mostly younger and better educated than the city average.

Moreover, decreased vehicle ownership is the most prominent effect of round-trip car-sharing. In fact, every shared vehicle subtracts nine to thirteen vehicles from the roads. A latest study in San Francisco, CA asked TNC's / ride-sourcing users for essential trip data such as destination/origin, wait times, and trip purpose (Greenblatt & Shaheen, 2015).

Accordingly, the respondents listed that if ride-sourcing services were unavailable, 39% highlighted that they would take a taxi, and 24% would take a bus. Moreover, the respondents recommended TNC's / ride-sourcing can operate as a first-/last-mile trip. Likewise, the study discovered that ride-sourcing waiting times managed to be noticeably shorter than regular taxi dispatch and haul idle periods. Compared to taxis in the analysis of matched pair, ride-sourcing vehicles occupancy levels were higher by having the average of 1.8 indifference to 1.1 passengers (Greenblatt & Shaheen, 2015).

Another example by Rayle, Shaheen, Chan, Dai, and Cervero (2014), who surveyed customers of three main ride-sourcing companies: Lyft, Sidecar, and Uber. Uber suggests several choices that involve both ride-sourcing and professional driver facilities. The cheapest option is "UberX," which matches passengers with regular drivers who typically don't have a "commercial vehicle license." Furthermore, UberX is consider as a "genuine" ride-sourcing facility rather than both Uber SUV and Uber Black, which use particular drivers and vehicles

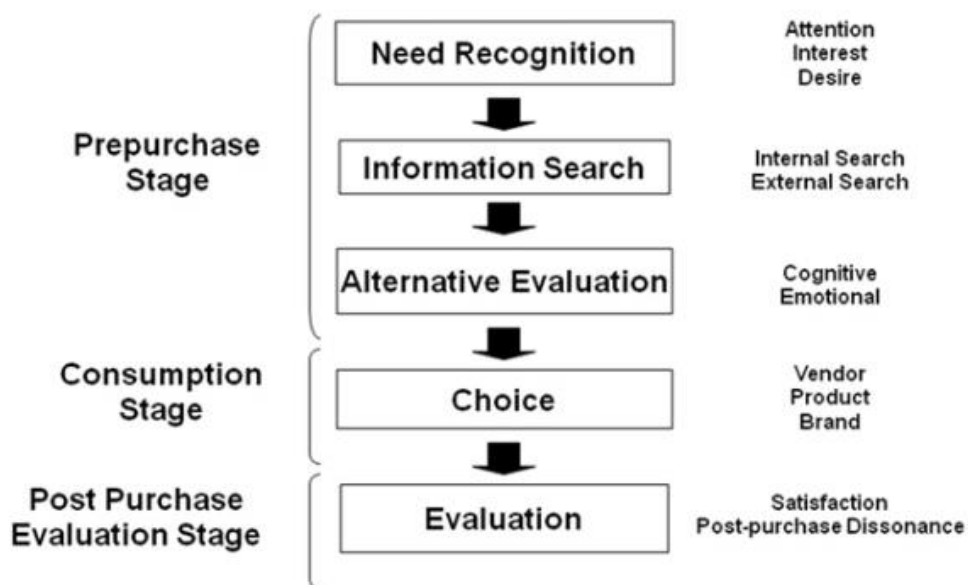
with a “for-hire” license. Both Sidecar and Lyft offer ride-sourcing services that deliver on-demand rides over a system of group drivers.

Furthermore, TNCs’ services as facilitated by smartphones’ applications and exchanging generational expectancies might be more wide-ranging by the time of 2020s and raise the occupancy levels through sharing the personal transportation by 2050. People will be convenient by the notion of self-driving cars, while consumers/passengers’ complete other duties for instance talking, texting, reading, or watching TV; vehicles might develop among richer passengers to develop a sort of a “mobile home,” proposing recreation, eating, sleeping, or workspace tasks during the journey (Greenblatt & Shaheen, 2015).

2.3 Consumer decision-making processes

Based on previous research (Hafstrom, Chae, & Chung, 1992; Lysonski, Durvasula, & Zotos, 1996) of decision-making, processes showed that it became more significant and complex for consumers than in ever before (as cited in Sam & Chatwin, 2015). Likewise, literature done on the consumer decision-making process (Hawkins, Best, & Coney, 2001; Blackwell, Miniard, & Engel, 2006; Hawkins & Mothersbaugh, 2014; Karimi, Papamichail, & Holland, 2015), suggested that a purchase decision method is the behavioral form of an individual or a consumer who follows and determines the process of decision-making including numerous phases to make a certain choice or action.

Figure 2.1: The Consumer Decision Model



Adapted from: Engel, Blackwell, & Miniard (1993)

The traditional purchase behavior model is a “linear model” as demonstrated in Figure 2.1, exemplifies the core phases of the purchase process. It includes the following stages: 1) The need recognition phase; 2) The information search phase; 3) The evaluation of alternatives phase; 4) The purchase phase and; 5) finally the post-purchase phase. Decision-

makers/consumers frequently don't follow all stages or even sometimes they skip stages in the linear form and process instances regularly comprise differences from the main iterations and route between stages (Karimi, Papamichail, & Holland, 2015).

de Lorimier and El-Geneidy (2013) had discovered that vehicle's proximity and age to the users are vital decision aspects (as cited in Zoepf & Keith, 2016). However, Zoepf and Keith (2016) argued that car-sharing literature still didn't reflect the ordering decision-making from the perception of different consumers, highlighting the impact of operational characteristics like the availability and the relevant location of the vehicle to the consumer(s) desired time as well as place.

Moreover, literature has revealed that kind of (products/ brands) that affects the nature of information investigation and eventually the decision-making process that customers apply to choose a certain product (Senecal, Kalczynski, & Nantel, 2005). The primary literature on car-sharing has explored a range of concerns involving the effect of car-sharing on vehicle ownership, elements persuading the success of car-sharing schemes, vehicle miles traveled (VMT), the demographics of car-sharing users, and the connection between car-sharing and other transportation types. Generally, shared-mobility services are currently a fascinating field for the analysis of the behavior intention as well as the decision-making process, because consumers take systematic and obvious decisions showing their own preferences and beliefs (Zoepf & Keith, 2016).

Consumers' awareness of products is a personal feature that has been demonstrated to have an influence on the decision-making procedure. Besides, decision-making, which also expressed as the tendency to maximize or satisfy a choice, is the person's behavior that has

been represented to be a forecaster of making a decision and a factor in the method decision-making procedures unfold (Karimi, Papamichail, & Holland, 2015).

During the procedure of selecting a product/brand, customers are proposed to do a domestic search (e.g., trusting the previous information of brands) and, if essential, an exterior search. Accordingly, the latter might include behaviors like collecting more information around the product and requesting suggestions from other related sources. Correspondingly, dissimilar customers might use distinctive decision-making tactics to perform a selection decision (Senecal, Kalczynski, & Nantel, 2005).

Consequently, Senecal, Kalczynski, and Nantel (2005) highlighted that customers who implement their personal grounded decision selection processes that could be manipulated by suggestions, but don't depend on these suggestions entirely to perform decisions. For example, a customer might request a familiar friend opinion about the characteristics which are significant to reflect on a certain product; nevertheless, he/she might also collect corresponding data from other sources of information such as sales-people, advertisements, and store visits to decide the related product characteristics to be considered.

At different stages of the process, several aspects that influence consumer decision-making may be measured using demographic, socio-metric, and psychographic variables as well as through consumer usage personalities (Pescher, Reichhart, & Spann, 2014).

2.3.1 Online decision-making process

Online decision-making process is highly flexible and dynamic process, as the decision-making process reveals, individuals make decisions during the process and might use distinctive paths. This type of flexibility has been outlined as the capability to adapt the process outflow on demand thru skipping, adding, or structure reordering of the process stages. Similarly, knowledge of the product influences the purchase behavior and has exemplified to affect the information processing steps as well as the information search steps (Karimi, Papamichail, & Holland, 2015). Moreover, in online contexts, Chircu and Mahajan (2006) hypothesize the online consumer experience process as follows: 1) store/shop accessibility, 2) searching, 3) evaluation as well as selection, 4) making an order, 5) payment method, 6) the order gratification, and 7) after sales services (as cited in Pham & Ahammad, 2017).

Furthermore, Klaus (2013) classifies online consumer purchase process with three fundamental phases involving a prior-, a during- and an after- purchase. Therefore, the prior-purchase phase contains behaviors like searching for information as well as evaluating the information gathered. The purchase phase contains behaviors such as (selection of the product/service, then ordering, and afterwards paying it). The after- purchase phase includes behaviors like (evaluating of benefits) (as mentioned by Pham & Ahammad, 2017).

In the pre-purchase stage, an online consumer frequently performs a set of actions involving search information about the product, compare different alternatives, check consumer reviews to take the ultimate purchasing decision. Previous findings recommend that several aspects of the vending website containing website simplicity of use/performance, customization, website design and appearance, and information quality make consumer experience in the phase of pre-purchase and have a major impact on consumer satisfaction with online providers (Pham & Ahammad, 2017).

In view of research done on customers' use of related sources in the pre-purchase exterior investigation attempts and inattention of the appearance of online information providers offering individualized suggestions (Maes, 1999) as well as Senecal and Nantel (2002) stated that online reference sources can be classified into major three classifications: 1) The important others (e.g., acquaintances, friends, and relatives), 2) individual specialists (e.g., independent professionals, and salespersons) and 3) systems that assists the customer which are experienced systems such as "intelligent-agent-based systems and recommender systems" (as cited in Senecal, Kalczynski, & Nantel, 2005).

The electronic commerce is growing quickly, our knowledge of e-consumer behavior is still limited, and Internet purchase behavior doesn't essentially obey traditional consumer purchase behavior. In fact, several attempts have been initiated to interpret and model online purchase behavior. Hence, some studies have discovered behavioral variation, considering personal features such as trust, involvement, perceived risk, and Web skills. However, there are variances in our understanding of how distinctive persons act in the purchase decision-making processes and how these processes unfold (Karimi, Papamichail, & Holland, 2015).

As a matter of fact, consumers with higher levels of knowledge related to the product/service are more aware of their desires and are likely to start the decision process with a minor studied set of alternatives (Karimi, Papamichail, & Holland, 2015). Therefore, profiling consumer decision-making types are essential to the advertisers as well as the marketers. The appearance of e-commerce activities, is crucial to study online users' needs and desires in making decisions that impact their enthusiasm to purchase products. Subsequently, one of the methods that describe consumer types is the categorization of the consumer, through

focusing on the affective and cognitive orientations associated with consumer decision-making (Sam & Chatwin, 2015).

Undoubtedly, better market share of shared-cars relies on the possibility to make TNCs more appealing according to thoughtful understanding of individual's decision and selection process of joining a TNC service (Kim, Rasouli, & Timmermans, 2017). Accordingly, any E-businesses that offer self-service technologies to address consumer needs can provide aspects that can produce constructive responses on the online platform. Businesses that implement self-service abilities (e.g., product/service search engine, order tracking, or communication stations for product/service inquiry) can enlarge customer satisfaction by 65% and customer retention by 39%, these are considerably greater rates that doesn't exists in the businesses that depend only on cost bargain (Sam & Chatwin, 2015).

2.3.2 Factors Affecting Decision-making

According to Chocarro, Cortiñas, and Villanueva (2013) who stated that the initial studies had showed that the main factors of actual and intended practice of a particular purchase platform are users' opinions of the platform's characteristics, personal behaviors toward using them, the factors of the underlying technologies, users' experience as well as consumption of technology, consumers' psychographic, psychological, socio-demographic characteristics, and product features.

Alongside the technological expansions, companies are gradually attaining their customers across a range of platforms (e.g., electronic commerce, mobile commerce, and brick-and-mortar establishments). Research done commonly centralized the attention on how consumers use, evaluate, and accept certain platforms/channels and the ecosystem associated with the purchase (e.g., aspects like uncertainty, risk, and trust) which plays a vital role

throughout the adoption and selection process. While these findings enhance our knowledge of the degree of which consumers are frequently starting their decision-making duties on distinct platforms/channels, a small number of studies focused on examining the variation of channels that affect the decision-making process as well as the channel choice, thru a mixture of platforms/channels (Maity & Dass, 2014).

Moreover, the online capability to transfer only written and particular types of graphical information has been questionable of its appropriateness as a shopping platform and routed the studies in resulting a mass of product/services attributes constructed on perceived, deep-rooted or other characteristics, like the degree of differentiation, tangibility, complexity, and price (Chocarro, Cortiñas, & Villanueva, 2013).

2.3.2.1 Situational Variables Factors

Situational variables represent the aspects that is related to specific place and time of inspection, which doesn't follow from an awareness of stimulus (choice-alternative) or personal (intra-individual) attributes. Consumer behavior is mostly determined by these mentioned variables or other shopping variables, which can inspire their process in search the information (Gehrt and Shim 2002, Mattson and Dubinsky 1987), price sensitivity (Wakefield and Inman 2003), product/service selection, product/service evaluation, and preferences (Belk 1974, 1975), their choice of purchase channel, and other variables such as their consumption of in-store features like the self-service equipment and their preferred store layout (Chocarro, Cortiñas, & Villanueva, 2013).

Situational variables initially were categorized as follows (Belk 1975):

1. Variables that is related to the physical contexts in which the decision is formulated based on place; contain crowdedness, the weather, distance-to-store, and likewise store atmosphere variables (e.g. tidiness and background music).

2. Variables that are related to time, which contain day-of-the-week or time-of-day, product availability, time pressures, and urgency of purchase.

3. Variables related to the social setting, like (the opportunity for social interaction, the existence of others who are important to the consumer at the time of the selection process, and the prominent roles of such people.

4. Variables related to antecedent states, involving moods, fatigue, and temporary mental or physical states.

5. Variables related to task-definition such as the motivational and cognitive characteristics of the purchase setting (whether the product is for personal use or needed as a gift, etc.) (as cited in Chocarro, Cortiñas, & Villanueva, 2013).

Similarly, Chocarro, Cortiñas, & Villanueva, (2013) discovered the significance of the characteristic dimensions of situational variables, and the social, time and the physical-related dimensions affect consumers' preferences on virtual against physical purchase channels.

In the online-purchasing process consumers perform as both product/service users as well as buyers of the web-based technologies. Once consuming the Internet to purchase products/services, the essential risks appears with privacy and trust concerns, the degree to which consumers perceive that consuming the online nature will be secure, the time consumed searching for particular information, the difficulty of navigation, the inability of purchasers to

directly engage with the seller, and vagueness about the aftersales service warranty compared to more traditional modes of shopping (Pappas, 2016).

2.3.2.2 Mobile Marketing and Advertising Factors

Mobile as a technology symbolizes the quickest developing marketing communication areas, and the selection of the mobile platforms are in extensive use across the planet. Concurring with the great implementation of both 3G and 4G smartphones between users, mobile marketing has progressively developed a core tactic in the brands' promotion and advertising settings. Brands like Puma, Ralph Lauren, Chanel, FIFA, Starbucks, Dunkin Donuts, and Volkswagen signify a few number of customer brands varying from Asia, Europe, and United States, which had begun to hostilely implement un-tethered mobile marketing programs to produce related and closer links with certain consumers (Rohm, Gao, Sultan, & Pagani, 2012).

There is no doubt that businesses can circulate a marketing message with the objective of inspiring the consumers to redistribute the targeted message to their own contacts (e.g., relatives, acquaintances or friends) (Pescher, Reichhart, & Spann, 2014). Furthermore, Ström, Vendel, and Bredican (2014) stated that the research was regulated to personal reviewed journals and was grounded on terminologies like: “m-marketing”, “mobile marketing”, “m-commerce”, “mobile commerce”, “m-advertising”, “mobile advertising”, “m-loyalty”, and “mobile loyalty”.

Pescher, Reichhart, and Spann (2014) said that mobile devices similar to smartphones improve users' capacity to easily, rapidly, and electronically share information about products/services and to get mobile advertisements instantly in any location and at any time (e.g., through mobile text message advertisements). In fact, mobile applications and mobile

devices provide dealers more than just a chance to use a fresh channel/ platform to reach consumers and provide opportunities to combine interaction alongside with information search and phone functionality while consuming a product/ service or shopping in a store (Ström, Vendel, & Bredican, 2014).

In academic studies, the added value generated by mobile platforms and services for users was originated from being reachable, being independent of place and time, and being personalized; based on personal profile, location, and time, self-ascribed roll types (e.g., private (off duty), professional (on duty)) and stance types (e.g., waiting, busy, time on hand,). Furthermore, the value is the advantages proposed by the service or product related to the consumer sacrifices for the use and acquisition of the service and product relevant to competition and varies based on the consumer product knowledge. Perceived value has an effect on the acceptancy and usability of mobile technology, marketing, and loyalty to mobile marketing and services (Ström, Vendel, & Bredican, 2014).

Mobile marketing and services observed values are different founded on “*situational value*” and “*novelty value*.” Pilström and Bruschi (2008) mentioned that the situational value affected emotional, utilitarian, monetary, and social value, whereas novelty aspects affects only the social and emotional value for both entertainment and information facilities, as well as financial values for the information facilities (as cited in Ström, Vendel, & Bredican, 2014).

Therefore, in pursuing to understand the marketing stand view of the mobile as a powerful medium, companies often create the most repetitive mistake of observing mobile marketing area as a platform of “one-size-fits-all” which is executed in the same approach

within international markets, regardless of other media-related platforms (Rohm, Gao, Sultan, & Pagani, 2012).

Ström, Vendel, and Bredican (2014) presented results that demonstrated better reply choices in mobiles' push- advertising, which improved customization and playfulness features in mobiles' game- advertising, followed by boosted perceived constructive attitudes and interactivity regarding mobile game- advertising and push- advertising.

On the other hand, the drawback that Rohm, Gao, Sultan, and Pagani (2012) had discovered that companies frequently fail to study individual characteristics like (risk perceptions) and culture-specific aspects such as (Customer's overall thoughts of the platform).

Another common error companies do frequently is considering the mobiles' marketing as a separate and standalone channel/ platform that utilities impartially from the remaining of the marketing eco-system, involving conventional media (Rohm, Gao, Sultan, & Pagani, 2012).

Rohm, Gao, Sultan, and Pagani (2012) claimed that both large and small businesses who features mobile marketing plans into their comprehensive marketing plans should distinguish that costumers' reception of mobile marketing can vary; differing on where they work and live. Also, content quality and reliability had a solid outcome on loyalty towards mobile marketing and services (Ström, Vendel, & Bredican, 2014).

As individuals, we are currently at an intersection where the marketing strategy encounters the next-generations' mobility and interactivity. Therefore, to survive and thrive in

this different point of marketing, corporations have to discover involvement of customers thru worldwide markets as well as the digital and traditional platforms/channels where they 'live.' (Rohm, Gao, Sultan, & Pagani, 2012).

Mobile Marketing Association (2008), theorized mobile marketing as brands', companies' as well organizations' attempts to sell, inform, promote, or similarly push customers to make certain kind of activity thru using the mobile channel/platform (as cited in Rohm, Gao, Sultan, & Pagani, 2012).

Mahatanankoon et al. (2005), classified useful mobile business process as possible user-based apps. Hence, apps of a particular concentration for mobile platform consumers appeared to be delivering a content (e.g., searching and obtaining information concerning dealers, brands, varieties, prices, and much more), transaction-based functions (e.g., payment and order services), location-based functions (getting more personalized, time-based/location-based, suitable offers, route and map navigation to the closest store via (GPS system), advertising, discovering usage instructions and products in-store) (Ström, Vendel, & Bredican, 2014).

Rohm, Gao, Sultan, and Pagani (2012) also offered three different individual features of risk avoidance, innovativeness, and personal attachment that influence and/or moderate the direct outcome of perceived practicality of smartphones' programs and content as well as customers' thoughts toward mobile marketing.

Some researches had covered mobile advertising efficiency, and the effect of the value linked with marketing activities in all of the following: mobile pull-advertising, push-

advertising, value chain, as well as cross-media outcomes of Internet pull- and mobiles' push-advertising. Initial findings revealed great recognition of mobiles' pull- advertising strategy (e.g. SMS), purchase intentions, and reply rates, accordingly surpassing results were recorded of direct-marketing, whereas the results of branding outcomes were low to moderate. Thus, mobiles' push-media could alternate conventional direct-marketing assets to specific user classes rising communication efficiency for low and high involvement types for both services/products (Ström, Vendel, & Bredican, 2014).

Consequently, marketing executives should be aware that mobiles' interaction with customers allows them to knock into two distinctive paybacks: 1) smartphones' technology is being gradually location-/timely-based, therefore, delivers marketers from getting customers solitary within the physical boundaries of either office or home and 2) smartphones' are extremely interactive, personal, and engaging medium. Whereas traditional media (e.g. outdoor advertising), which is founded on the location, where it's neither as attractive nor interactive as the mobiles' advertising (Rohm, Gao, Sultan, & Pagani, 2012).

2.3.2.3 Word-of-Mouth Factors

Word-of-mouth (WoM) was a subject of interest to marketing scholars for more than five decades. It can roughly be described as the way information is shared concerning a (e.g. product, promotion, and etc.) among the consumer and colleague, relative, or other friend. Furthermore, WoM had shown a noticeable impact on consumers' behavior and attitude, also in influencing brand swapping decisions WoM is up to seven times more efficient than traditional printed advertising (Kaplan & Haenlein, 2011).

Moreover, a huge amount of research was done in the recent years that is studying WoM in online space. Chevalier & Mayzlin (2006), argued that parallel to traditional WoM, electronic WoM, (e.g, book reviews shared on websites like Amazon.com) had shown to impact purchase behavior and lead to the attainment of better value customers (as mentioned in Kaplan & Haenlein, 2011).

The Internet intensely simplifies user inter-connections; forums of online users, newsgroups, and e-mail recommendations, as well as consumers' feedbacks stimulated by commercial websites that enable users to share their information and thoughts further naturally than ever done before. This inter-connectivity is an international experience that smooth the distribution of both negative and positive WoM, dissemination that can't be precisely controlled by brand managers or marketers (De Bruyn & Lilien, 2008).

Nevertheless, De Bruyn and Lilien, (2008) said that marketers have noticed that customer-leveraging options the Internet presents, between the viral marketing that is included as the most fascinating extent of online marketing. The purpose of viral marketing is to use a peer-to-peer (or a consumer-to-consumer) channels, as disparate to a company-to-consumer channels to distribute information related to a service or product, thus achieving further cost-efficient and rapid acceptance in the market.

This gives fascinating organizational implications, as the essential anonymity of online feedback tools which can make such platforms subject to tactical manipulations by companies, accordingly it would increase their sales throughout promising observations. Likewise, the effortlessness of which electronic WoM can be gathered and evaluated enables companies to use comments shared thru newsgroups (Kaplan & Haenlein, 2011).

There is no doubt that the responsibility of experts and professionals in the information flow and guidance over social networks platforms, which has been one of the most extensively examined features of WoM communications. In fact, consumers are motivated in obtaining the opinion from and be persuaded by the specialist sources rather than being persuaded by non-specialist ones; accordingly, there are explanations to be considered in the discovery of applying the viral marketing framework (De Bruyn & Lilien, 2008).

Furthermore, electronic WoM has two core advantages compared to traditional WoM that was only limited to exchanging information thru traditional face-to-face communication. E-WoM firstly lies in its advanced dissemination rate for different bits of information; and secondly, it is considerably easier to monitor than usual WoM, which can only be analyzed through a fairly tedious method (Kaplan & Haenlein, 2011).

The viral marketing notion proposes that marketing practionars can influence the supremacy of personal channels to endorse a product/service. Besides, the idea of viral marketing suggests that electronic peer-to-peer or (e-P2P) communications are efficient resources to convert channels networks electronically into influencing channels, in which it captures receivers' attention, triggers interest, and ultimately leads to sales or adoption (De Bruyn & Lilien, 2008).

Viral marketing is defined as (e-WoM) or electronic word-of-mouth, which is a sort of a marketing message that is related to either a service, brand, product, or company, and transferred at an exponential rate frequently via the usage of social media platforms. Kaplan & Haenlein (2011) stated that viral marketing has two major fundamentals: 1) is the better reproduction, or growth rate which indicates that every receiver exchanges the message to other

individual(s). 2) Social media applications usage; which is referred as a collection of Internet-based apps that formulated based on the technological and ideological basis of the technology of Web 2.0, therefore it allows the exchange and creation of "User Generated Content".

It is an umbrella term defining diverse kinds of applications such as content communities like (i.e, YouTube), blogs/micro-blogs (i.e., Twitter), collaborative websites and projects (i.e., Wikipedia), social networking platforms (i.e., Facebook), virtual-social as well as virtual-game worlds (i.e., Second Life, World of Warcraft) (Kaplan & Haenlein, 2011).

Practitioners and academics have focused their concentration on Word-of-mouth communications for long periods of time. Since 1950s, investigators have showed that individual discussions and informal conversations of information between connections not only convince consumers' purchase and selections decisions, but also form consumers' anticipations before-usage approaches and similar after-usage insights of a service/product (De Bruyn & Lilien, 2008).

Several studies have stated that WoM effect is more superior than personal selling, radio, and print advertising, while Van den Bulte and Lilien (2001), mentioned that several of those results and impacts have been exaggerated (as cited in De Bruyn & Lilien, 2008).

Likewise, Viral marketing is a fairly contemporary phenomenon and has been reviewed in the literature underneath a range of different terminologies some of which are "word-of-mouth marketing, buzz marketing, word-of-mouth, and stealth marketing", (Kaplan & Haenlein, 2011).

De Bruyn and Lilien, (2008) argued that extensive research pointed extensively that utilizing the consequences and antecedents of WoM. As, the current literature can be categorized into three distinctive streams. First stream highlights the motives and reasons behind the consumers who proactively disseminate information about services/products that they have experienced. The second stream targets a better justification of consumers who seek information, or more precisely, beneath what conditions the consumer depend on WoM communications in comparison to the alternative origins of information to formulate a purchasing decision.

As in the third stream, which was aimed to examine why specific individual sources of information exercise further impact than others. As a matter of fact, researchers have classified elements that includes perceptual affinity, demographic relationship, source expertise, and tie strength, as significant antecedents of WoM influence (De Bruyn & Lilien, 2008).

It has been claimed extensively that it's worthy to observe the consumer's purchasing decision due to its multi-phases and complex processes; hence, those phases are theoretically different while not essentially obvious. De Bruyn and Lilien (2008), stated that the multi-staged decision process model includes a series of conceptual cognitive levels or stages that consumer practice during the purchasing decision or the theoretically known by (the final stage). The structure normally involves the subsequent phases:

First stage is *Awareness*, in which the consumer identifies the alternative endures, but might not have either passion in it or adequate information to entirely grasp its possible paybacks. Certainly, *Interest* is the second stage, in which the consumer is informed, advances some attention, and henceforth chooses to understand more about the product. The third and

final stage is the *Final decision*, in which the consumer has instantly acquired a noticeable action, thus obtaining a service, good, or constant acceptance of an innovation

2.4 An Overview of the Cognitive impacts

Currently, most research investigates the elements influencing online consumer experience through focusing on the factors associated with consumers' behaviors in the stages of pre-/post- purchase such as the characteristics of the vending website, which contains the website performance and design, ease of use, security, and information quality (Pham & Ahammad, 2017).

Progressively, the quantity of private vehicles worsens environmental harms like lessening the limited resources, emission, and acquiring insufficient land for parking and road spaces. The harshness of these harmful outcomes is more challenging as it is recognized that personal vehicles are parked nearly all the time. Additionally, public transportation might be a respectable substitute; however, it has some limitations concerning the flexibility, door-to-door access, carrying goods and customization. In this perspective, TNCs' networks have lately involved the attention gradually. These systems offer users the paybacks of the privately-owned vehicles without the responsibilities and costs of vehicle-ownership (Kim, Rasouli, & Timmermans, 2017).

Promoters view ride-sourcing as a type of a set of transportation choices that serves formerly unachieved demand for convenient, flexible, and fast mobility in urban spaces. By offering an interesting substitute for driving, these services can decrease ownership, automobile consumption, and environmental issues (Rayle, Shaheen, Chan, Dai, & Cervero, 2014).

Shaheen et al. (2006) highlighted that there are five main demographic marketplaces in which car-sharing might be an effective transportation substitute: for business, neighborhood, school, commute, and low-income. Between them, it was pointed by the authors' that the inter-urban trip request can be an interesting possible market, particularly among cities that considerably deal with each other (as cited in de Luca & Di Pace, 2015)

Primary, the availability of a shared-vehicle shows a vital role in taking the decision of selecting a sharing vehicle; Secondly, the gratification with the recent surroundings considerably influences individual's intention to join or use a TNC; and thirdly, according to the flexibilities, a structure cutting the deposit, the hourly rate and the monthly membership payment can be more effectual than a structure cutting the operating fee counting the fuel cost and the distance-based rate, in relation to the rising numbers of vehicle-sharing members (Kim, Rasouli, & Timmermans, 2017).

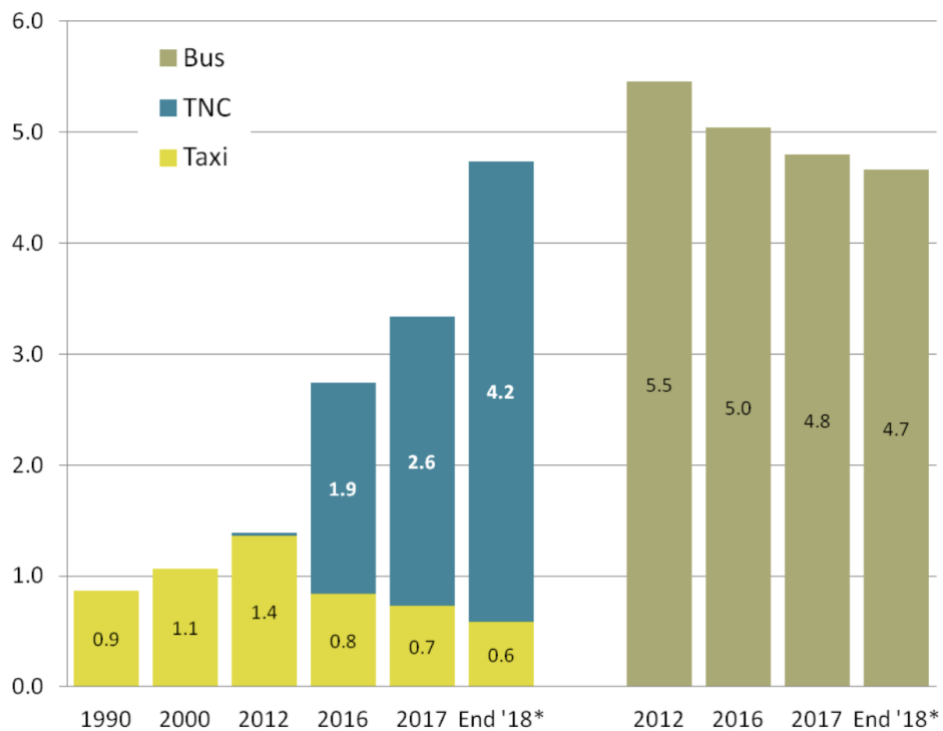
Similarly, order fulfillment was expressed as the facility to deliver the guaranteed service accurately and dependability. More precisely, according to (Coyle et al., 1992; Davis-Sramek et al., 2008; Stock and Lambert, 2001), order fulfillment means a corporation's capability to provide:

“the right amount of the right product at the right place at the right time in the right condition at the right price with the right information,” (as quoted in Pham & Ahammad, 2017).

2.4.1 Transportation apps as a low involvement product

Social, environmental, and economic factors have adduced shared-mobility from the unconventional to the conventional, as its position in urban-mobility had become a widespread subject of analysis and discussion (Shaheen & Chan, 2015).

Figure 2.2: TNCs Ridership Chart in USA



Derived from: Washington Metropolitan Area Transit Authority (2018)

For instance, as shown in the above-mentioned Figure 2.2, Washington Metropolitan Area Transit Authority discovered that TNCs is rapidly increasing and will take the ridership and the advantage over the other methods of transportation.

The majority of studies is generally focused at urban contexts in North America, and they have most commonly been concentrated across analyses of real data and/or focus groups or throughout discovered preferences (ex-post) (de Luca & Di Pace, 2015).

Kim, Rasouli, and Timmermans (2017) argued that taking a decision of using shared vehicle can be considered as either “mid-term” and/or a “short-term” commuting choice; thus, from the perception of a mid-term commuting choice (i.e., buying a public transportation seasonal ticket, car-ownership decision, or more), the choice is whether or not to use TNCs to obtain this commuting preference for forthcoming travel-demand. When taking this choice, the future-demand is ambiguous since it varies on different unexpected and expected requirements for specific activities.

From the standpoint of a short-term commuting choice, the user(s) build their decision on which type or method to select for handling a particular day-to-day activity. After picking a car-sharing company, users might consider a shared-car for a precise trip, and they compare it to other transport types like public transportation, bicycle, and more. Henceforward, individual intention to use ride-sourcing companies might vary between both the mid-term and the short-term decisions (Kim, Rasouli, & Timmermans, 2017).

2.4.2 Information availability

Nowadays, technological improvements push information transform and growth to the way that individual(s) share information. Accordingly, there is a demand to utilize the shift to networked backgrounds which affects individual's cognition, specifically, decision-making (Marusich et al., 2016). In fact, the most important core goal that face the marketers is to provide information to consumers/users on which they develop their decisions (Ariely, 2000).

It is mostly recognized that people have limited capacity of processing the information, as studies have presented the duration of processing information for individuals, which is between five to nine chunks (Gao, Zhang, Wang, & Ba, 2012). Additionally, processing online information is impacted by the level of engagement environment associated with this medium. Individuals can choose their needed information to read, in which order and length that they prefer (Sicilia & Ruiz, 2010).

Besides, Bei, Chen, and Widdows (2004), highlighted that dissimilar to conventional information providers involving examples of magazines, TV, and newspapers; the Internet serves its users with additional interactional communications that it is an exclusive feature this medium.

In virtual setting, Sicilia and Ruiz (2010), stated that users access websites looking for precise information. Taking the benefit of the Internet capability to transfer numerous information to the users swiftly and effortlessly is a crucial aspect to e-commerce success. Considerably there are many information systems (IS) studies related to e-commerce that aimed to provide further great information to gratify consumers (Gao, Zhang, Wang, & Ba, 2012).

Likewise, the rising Internet dependency had led to explore information that is caused by the subsequent features: a simpler accessibility to the product and price information, comfortable purchase of related products/services, low transaction costs, and the capability to reach mass volume (Bei, Chen, & Widdows, 2004).

In this respect, recent studies have noticed that the consequences of the quantity of information has been raised on consumer's behavior. Selected studies were done by Chen, Clifford, and Wells (2002); Luo (2002); Wang et al. (2007), have offered experimental outcomes that implied that more information is better; however, others mentioned that negative effects were resulted from delivering the consumers too much amount of information (as cited in Sicilia & Ruiz, 2010).

All products/services can be positioned on a scale varying from an easy level to a difficult level to evaluate; hence, their position on the scale relies on the level or the amount of information obtained, categorizing information as experience, credence, or search products. Nelson (1974), described search goods as those items categorized by product characteristics where comprehensive information around the product is obtained before the purchase; as for the experience goods which is categorized according to experience characteristics that can't be recognized until the purchase phase and afterwards the use of the purchased product (as mentioned by Pham & Ahammad, 2017).

For instance, search goods like electronic and technological products are linked with a greater level of standardization. Therefore, these types of goods are easily assessed before purchase. Goods like telecommunication, vacations reservation, restaurants or books depend on the expertise characteristics as a resultant of their intangible environment which prevents consumers from assessing the desired quality unless they are purchased or consumed. Accordingly, these experience-based goods should be linked with the minimal degree of standardization. Credence goods like the financial investments, education, as well as legal services are hard to evaluate, even succeeding the purchase and use. They are linked with the lowest degree of standardization (Pham & Ahammad, 2017).

The increased amount of info might be stimulating to individuals' reduced processing capability. From this angle and point of view, offering more knowledge to consumers could not assure improved consumer satisfaction (Gao, Zhang, Wang, & Ba, 2012). Moreover, studies done on the amount of info in the consumers' decisions area indicates that offering excessive information to consumers will result in negative effects for the marketer. The impact on "decision-quality" researches, has been said that excessive information can lead to bigger selectivity in the phase of information processing as well as consumer confusion, and in common dysfunctional processing (Sicilia & Ruiz, 2010).

Another research aspect finds that the studies related to information processing concludes that information quantity and information quality are between the most significant aspects, that disrupts decision-quality (Gao, Zhang, Wang, & Ba, 2012). As a matter of fact, a firm that offers information online to consumers related to the establishment, its services, products, promotions, news, facts, (and/or) figures, as well as many other criteria, will be far better than the offline media, because the consumer extracts more info from the Internet rather than the regular offline media, which raises a possibility of its outperforming the consumers' processing capability (Sicilia & Ruiz, 2010).

This condition is particularly unfavorable for online experience product purchases. These experience goods are categorized by equivocality, indecision, and are challenging to assess. These features make the buying of experience products / services over the internet a considerably complicated mission if compared to the mission of buying search products or services (Gao, Zhang, Wang, & Ba, 2012).

Bei, Chen, and Widdows (2004), defined search products as products that have many integral features on which the need for full information to be obtained before purchase like mobile phones or athletes' shoes. In contrast, the experience products are governed by features that can't be identified until the buying decision takes place and the actual use of the product, or due to the search for information which is pricier and / or challenging than the direct goods and product experiences, like dinning at new restaurants and travel packages.

Additionally, individuals' informational related costs of searching are generally somewhat uniquely built on the features and attributes of search products versus the experience products. Essential attributes of the search products are found to be more objective, easily accessed, and solid for comparing the quality of the product. On the other hand, consumers depend on more external cues to judge and analyze the quality of the experience based products and services (Bei, Chen, & Widdows, 2004).

For instance, Bei, Chen, and Widdows, (2004) mentioned that the info for choosing an adequate travel package is relatively theoretical and oriented to experience. Accordingly, others suggestions might be applicable for experience goods more than search goods.

Furthermore, Westbrook and Fomell (1979), argued that information sources are generally characterized into neutral, commercial, and personal sources. The neutral information sources involve magazine articles, consumer reports, books, the commercial information sources contain stores visits and media, and the personal information sources involve seeking opinion or advice of family, neighbors, or friends. Equally, Hawkins and Mothersbaugh (2014), well-defined the available sources of information based on five main sources or types:

- Personal sources such as family, friends, and others.
- Personal experiences, low-involvement learning, and memory of past searches.
- Independent sources like government agencies, consumer groups, and magazines.
- Marketing sources like websites, advertising and sales personnel.
- Experiential sources like product trial and inspection.

Empirical studies by Hill, King and Cohen, (1996); King and Balasubramanian, (1994), have recommended that consumer search for experience products depends on the Word-of-Mouth (WoM) product testing assessments, communications and related sources of a group or individual decision concerning quality of products (as cited in Rha, 2002).

2.4.3 Price and value impacting application adoption and usage choices

In comparison to the traditional taxi market, ride-sourcing significantly varies in the essential market principles like demand, supply, price, and competition. In fact, the competition between Lyft, Sidecar, and Uber set prices at competitive levels. For instance, McBride (2015), claimed that UberX is the cheapest service against its rivals and it costs less than traditional taxis services in nearly all major cities around the world. In this respect, many consumers will formulate their decisions based on price, and the fact that ride-sourcing normal fares are cheaper than those of traditional taxis enables them to have a competitive advantage.

The research proposes that customers are sensitive to the price factor when they request a ride. Relatively, consumers are expected to cancel their trips if they are not served instantly. Genuinely, consumers who utilize ride sourcing apps must experience paying an amount of waiting period price that depends and varies based on the number of consumers who are simultaneously demanding the services, the available nearby drivers, and the matching technology criteria adopted by that specific ride sourcing. (Zha, Yin, & Du, 2017). Likewise,

clear information and waiting time concerning price most obviously encourage efficiency for consumers (McBride, 2015). Accordingly, the consumers are sensitive to both the average waiting time and the fare price.

Similarly, vehicle ownership is linked with an enlarged likelihood of greater revenues and employment chances, yet the ownership of vehicles can be an extra burden for the low income persons because they can hardly tolerate the costs of acquisition, maintenance, and fuel (Dillahunt, Kameswaran, Li, & Rosenblat, 2017).

There is no doubt that the capability to expect trip fares through the ride-sourcing company's platform promote increases consumer understanding concerning a trip - as the GPS systems simply estimate the time and distance required of the possible trip. A consumer's capability to know the price enables his/her to fairly assess the trip's utility and sort decisions accordingly (McBride, 2015). Moreover, real-time ride-sourcing services can decrease the charge of transference through making use of idle private vehicles (Dillahunt, Kameswaran, Li, & Rosenblat, 2017).

Besides, the entire trip-related costs are generated by the automated payment and pricing functions of that specific ride sourcing company, that consequently eliminates the mess resulting from bargaining and soliciting that repeatedly arises after a taxi market is decontrolled (Zha, Yin, & Yang, 2016). The smartphone app generates the fare with no physical meter; unlike taxis, that require a physical meter (McBride, 2015).

Studies were done by Zha, Yin, and Yang (2016); Zha, Yin, and Xu (2018), showed that these ride-sourcing apps are free to use and applying a similar ride payment schema as conventional taxi services, which embeds distance-based, time-based, and frag-drop charges. Although, every accomplished ride/ transaction, the company usually charges 20–25% of the

cost paid by the consumer as a commission. Thanks to their competitive prices and convenience, ride sourcing companies managed to effectively attract many consumers, corroding the conventional taxi marketplace.

In spite of the less charges, these ride sourcing services might still be unreachable for individuals with weak income because of the payment techniques required to use these services, furthermore the requirement of mobile Internet data access which is not available for all slices (Dillahunt, Kameswaran, Li, & Rosenblat, 2017).

2.4.3.1 Surge Pricing

The major key aspect of differentiation in the ride sourcing market is the offered price variation and accompanied strategies, e.g., Lyft and Uber surge-pricing systems. The differentiation of price is both spatial and temporal. Also, it is promoted to be generated when there is a shortage in vehicles supply (or equally if there was a demand surge) subsequently, to appeal more drivers to be online or operate in the zones suffering from supply shortages, additionally bound the service to customers with the greater eagerness for payment (Zha, Yin, & Xu, 2018).

Alongside the unregulated supply, and the shortage of pricing regulation that forms an environment with charges below that of taxis throughout normal periods within Lyft and UberX (McBride, 2015). As a matter of fact, these TNCs provide price controls target to protect both riders and drivers (McBride, 2015).

Although, the main drawback of the ride-sourcing pricing system is the "surge-pricing", that multiplies the price of Uber-like services', accordingly rides fare jumps by multiple times of the base fare on the holidays, weekends and rush hours (The Economist, 2014). Banerjee, Johari, and Riquelme (2016), mentioned that both Uber and Lyft have been using a dynamic

pricing strategy (referred to as 'Surge-Pricing' in Uber & 'Primetype Pricing' in Lyft) for many consecutive years.

Surge pricing, basically described as a “dynamic pricing system” that adapts the trip’s cost in real time. It is based on the market circumstances in respect of a geographical range, the base trip’s cost is adapted by an automatic surge multiplier which is generated from the application’s algorithm. Information derived from the surge multiplier (SM) and the price-multipliers (PM) is displayed to both the driver and the customer before a commitment transaction starts (McBride, 2015; Zha, Yin, & Du, 2017).

Equally, ride-sourcing consumers determine their pricing preferences when choosing whether or not to agree on a higher fare. Following a user’s request for a trip, he/she is informed that surge pricing is valid and inquired whether he/she would like to take a ride for the higher fare, or to be notified when the surge pricing period ends (McBride, 2015). Furthermore, the surge-pricing is encouraged to promote a rational amount of waiting time for customers (Zha, Yin, & Du, 2017), and typical price-multipliers are related to the specified area based on geolocation which is updated frequently (Zha, Yin, & Xu, 2018).

Surge pricing commonly function properly with the TNCs present policy of charging a calculated fixed percentage of commission consequently earning outcomes close to the ideal agreement, the app continuously establishes and calculates both the wage for the drivers and the price for the customers. Thus, it helps to increase the company’s profit though the resulting effect on customers’ surplus is still unclear. (Zha, Yin, & Du, 2017).

Furthermore, Uber's price surge aims to solve this issue, through a countless technology businesses, Uber is a middle-man; that links the independent vehicle drivers with customers requesting a ride similar to the manner that Google does when it connects advertisers and

searchers in addition to those who eBay links bidders & sellers (The Economist, 2014). Likewise, Identifying the role of waiting-time in customers' the demand causes a distinctive comprehension of the fundamental technique, which is mainly significant to assess the agents' satisfaction in surge-pricing (Zha, Yin, & Du, 2017).

Business model performs if successful links are complete, since cost points increase the payment that Uber's drivers obtain (the drivers receive Eighty % of any charge, if they use their owned vehicle), more vehicles are attracted on the roads at intervals of high-demand. The prices go high at 2 am at the weekend because some people are willing to pay more to find a vehicle. Additionally, some drivers are not willing to work during the weekends (The Economist, 2014).

Nevertheless, the business practice of surge like pricing resulted in opposition among its customers. Many are disappointed and also annoyed consequent to being charged particularly with considerably high tariffs. Others stated their concern about these platforms regarding the use of surge-like tariffs to gather higher income benefiting from the existing percentage and commission schema (Zha, Yin, & Xu, 2018).

A few studies conducted by Hall and Krueger (2015); Chen and Sheldon (2016), about exploring how the supply of labor replies about surge-pricing by Uber-like services: however, no robust sign that surge-pricing stimulates drivers to work in highly surged areas specifically in a short time period during the surge. (as cited by Zha, Yin, & Xu, 2018).

2.4.4 Service quality

During the past twenty years, literature done on conventional quality of service that is related to the retailing experience or an interpersonal service, has presented a better clarification through providing the notions and factors of “the aspects, the consequences, and

the antecedents". In fact, factors like credibility, appearance, communication, understanding, availability and accessibility are similarly appropriate to the electronic commerce; because they are related to the conventional retailing (Bressolles, Durrieu, & Deans, 2015).

Likewise, quality of the service contains some aspects that is associated to the delivery of the service process as well as tackling the intangible standards of the added value, security, and ease of manipulation of the information to consumers (Kahn, Strong, & Wang, 2002). Besides, Zha, Yin, & Xu² (2018) argued that the present attempts are still trying to maintain and ensure the quality level of the service provided like (i.e., driver censoring, inspection of the vehicle, and requirement of an insurance coverage).

Over a long period of time, the quality of the service has been the most significant area to study the consumers' assessment of the service provided (Anselmsson & Johansson, 2014). Besides, Mehta, Lalwani, and Li Han (2000), emphasized that quality of the service is gradually being proposed by marketers as a strategy to place themselves more effectively in the market. Thus, the research on quality provides more exclusive sights, defining quality in one of four common means: as value, conformance to qualifications, excellence, and/or exceeding or meeting consumer expectations (Kahn, Strong, & Wang, 2002).

Kahn, Strong, and Wang (2002), claimed that information consumers don't obviously differentiate between the characteristic features of information as well as the characteristic features of both the software and hardware structures that bring this information. On the other hand, information that is considered as a service emphasis on the behaviors happening once the info is saved as a final-product in the database: gaining and consuming information. Information related to the quality of the service tackles these hidden features that become

obvious throughout the consumption (e.g. whether the information is clearly accessible and can simply be manipulated and aggregated).

To regulate a business quality of a service, it is critical to pay attention on particular characteristics that are regarded as significant to the selected consumers and to also provide the suitable and respectful kind of services (Anselmsson & Johansson, 2014). Literature done in information systems and marketing (Barnes and Vidgen, 2002; Bauer et al., 2006; Bressolles, 2006; Collier and Bienstock, 2006; Cristobal et al., 2007; Loiacono et al., 2007; Parasuraman et al., 2005; Wolfinbarger and Gilly, 2003; Yoo and Donthu, 2001), suggest that five key aspects of online quality of service that is commonly applied to evaluate electronic service quality (as cited in Bressolles, Durrieu, & Deans, 2015).

1. Information: the lack of communication with the provider of the service throughout the online purchasing may rises the demand for precision as well as clarity of information. This aspect measures the online consumer's insights of the quantity and quality of both technical and commercial information concerning the services/products that the online provider offers.
2. Aesthetics: are related to the prosperity and richness associated with the demonstration of the website's context as allied to its proper appearances, such as images, videos, graphics, icons, colors, animated structures, and much more. These aspects provide the feeling, appearance, and ambiance of the website.
3. Ease of use: online payment transactions may appear as a complicated action and thus it might terrify some users. In fact, the ease of use of a website is an imperative element on electronic service quality. Eventually, the ease of use was signified to as "Usability" of the online context. Moreover, usability as an element in the substantial world, indicates the layout of the store/shop. Comparably, usability for a website, signifies the

capability of the consumer to locate the information or make transactions with the minimum extent of effort used.

4. Security and privacy: is identified as defending and saving the consumer from any potential risk of imitation or monetary losses. While privacy defined as protecting the user's private information and the explicit or implicit settlement not to exchange or sell the user's private data that was collected throughout process of completing the purchase. Therefore, this aspect is important and specific to e-commerce.
5. Reliability: in a conventional environment, is associated to the capability of online suppliers to sustain their guarantees to satisfy the standings of the trading as well as distributing the product as it was originally requested (as regards of the description, amount, and cost) whereas fulfilling the service needs and admiring the stated delivery time frame.

Furthermore, both product and service quality are significant features of information quality (IQ), while the conservative opinion of IQ is product-oriented (Kahn, Strong, & Wang, 2002). Additionally, service quality is associated with some consumer outcomes: purchase intentions, customer satisfaction, and attitudinal loyalty. However, no agreement occurs on the magnitude, direction, or statistical significance of the impacts of the quality of the service on such consequences. Miranda, Tavares, and Queiró (2018), when research evaluate the relation between satisfaction and service quality, their results are unreliable. Whereas some studies suggested a powerful impact, others discover a much weaker impact. Carrillat et al. (2009) discovered that the service quality is positively affect and impact the satisfaction (as cited in Miranda, Tavares, & Queiró, 2018).

In previous literature two models were dominating the studies on the service quality. The first model is "SERVQUAL", which is constructed and grounded on the theory of

"disconfirmation of expectations" which depends on the variation among the consumer's anticipations around a certain service/product and the assessment of the perception regarding the service/product. Also, the SERVQUAL model is a multi-dimensional method that applies the aspects of empathy, tangibles, responsiveness, assurance, and reliability. In addition to the second model of the "SERVPERF" method, which undertakes only service quality that requires to be assessed by applying the consumers' perception of the perceived quality. Both models demonstrate the presence of a relation between consumer satisfaction and quality of service (as cited by Miranda, Tavares, & Queiró, 2018).

Some consumers believe that online payment transactions are subjected to delay dates of delivering the products, or total failure to deliver, unnecessarily complex, experience a shortage of reply response to the e-mails, and don't offer enough information concerning the products. Thus, this might provide a negative impact on the customer value (CV) as well as customer satisfaction (CS) with the online familiarity and electronic loyalty. Similar to the conventional retailers, service quality presents an essential part in the survival and success of online providers (Bressolles, Durrieu, & Deans, 2015).

Bressolles, Durrieu, and Deans (2015), mentioned the definitions of four core dimensions of CV. These elements were utilized for the online environment; as the Social value: is originated from the website's capability to improve social self-belief; similar to the website's ability to be allied with the social status, group, and class; As for the functional value: which is originated from the expected performance and obtained quality of the website; the observed utility gained from a website's capability for utilitarian and/or functional performance.

In monetary value: the provided utility is originated from the website throughout the decrease of its observed costs over long-term and short-term periods; it is motivated and

impacted by factors like convenience, time savings, and economic value for money; Emotional value: is originated from the affective states and/or feelings that the website produces.

Moreover, satisfaction as mentioned earlier is crucial in the perceived service quality; therefore, satisfaction as a concept is a pre-post assessment of the consumers' consumption or experience of the product/service, and it is recorded as a negative, identical, or positive emotion. Additionally, satisfaction is well-defined as it is the effective condition happening from an activity of cognitive and affective assessment of a particular payment transaction. Besides, mainstream elements of satisfaction are consumer assessments of the service as well as the service features, their perception of fairness or equity, consumer feelings during the time the service was consumed, and the impact of others (e.g. family and friends) who use the service simultaneously or occasionally (Bressolles, Durrieu, & Deans, 2015).

In other words, satisfaction can be defined as a general assessment grounded on the overall buying decision as well as the gained experience associated with the product/service over time. The concept of gratification has developed from a mental-based perception to a mental-emotional perception. Otherwise, the concept of complete satisfaction is quite commonly applied to measure the overall assessment according to the aggregate accumulated experiences linked within the company, product, or service in a justifiable manner, which explains the prolonged time limit (Miranda, Tavares, & Queiró, 2018).

Currently, Electronic satisfaction represents the most vital aspects of service quality, E-satisfaction as a concept had become increasing prominence in marketing research in current years. Accordingly, e-satisfaction is referred to the consumers' selection of their online selling experience via there retailer's website that is compared to the experiences they had previously with different traditional or online stores (Bressolles, Durrieu, & Deans, 2015).

Similarly, CS is defined as the consumer's inclusive assessment of a certain product/service following the purchase phase. Plus, CS is a result of consumer's experiences throughout the purchasing process and shows an essential function that straightforwardly affect the consumers' potential behavior (Pham & Ahammad, 2017).

In this respect, CS is a crucial element to generate customer loyalty, as consumer loyalty influences behavioral consequences like a positive WoM, repurchase intention and eagerness to pay a little more. Numerous reports have discovered indications for a positive correlation between the repurchase intentions and the consumer satisfaction. When consumers are disappointed after doing a purchase, they are expected to provide a negative WoM, while satisfied consumers are expected to deliver positive WoM (Pham & Ahammad, 2017). Henceforth, Oliver (1997) well-defined customer loyalty as:

“Deeply held commitment to rebuy or re-patronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior,”
(Oliver, 1997, p. 392).

Normally, loyalty contains two basic dimensions (the attitudinal and the behavioral). The Attitudinal loyalty, is understood as the behavioral intention of sharing or repeating positive outcomes related to the same product/service. Attitudinal loyalty is considered as the final result of any other evaluation (Bressolles, Durrieu, & Deans, 2015).

In the online environment, e-loyalty is referred to the consumer eagerness to sustain and secure a stable connection in the future and similarly to involve in a repetition behavior of ac certain purchase and/or visits of online services/products, through using the firm's website as the basic primary select among alternatives, maintained thru positive emotions and

promising viewpoints towards the online firm, in spite of marketing efforts and situational impacts that leads to the transference of a behavior (Bressolles, Durrieu, & Deans, 2015).

The gradually organized usage of the internet in the processes of the consumers' decision, is attached with the improvement of e-commerce that has guided the practitioners and researchers to inspect the correlation between the service quality, CS, CV as well as loyalty in the online setting. Furthermore, at any selling framework, the greatest method to improve CS and eventually enhance loyalty is to provide excellent added value that is oriented from exceptional service quality (Bressolles, Durrieu, & Deans, 2015). As a matter of fact, research demonstrations that perceived service quality is considered to be an antecedent of the consumer satisfaction. In fact, service quality is a variation among the anticipations of the consumers and their insights about the service performance (Miranda, Tavares, & Queiró, 2018).

2.4.5 Delivery of incentives

The common brand-oriented advertising doesn't have the necessary effect on the consumer anymore. A crucial matter for businesses is the improvement of mixed product-promotion strategy where the mechanisms complement and support each other. Efficient sales promotion management can boost purchasing, even in the situation a consumer was initially attracted to an alternative brand (Karpenko, 2016).

Moreover, to encourage consumers to use a new service on a mobile platform underneath an aggressive competition, companies have applied several mobile application marketing strategies, exclusively on sales promotion, to battle over the number of transactions and users (Suriyamongkol, 2016).

Currently, there is no agreement between the practitioners and scholars of marketing regarding a unified method to describe types of sales promotion. Simultaneously, several

methods and types of sales promotion are extensively applied in practical marketing activity (Karpenko, 2016).

Sales promotion is an effective aspect of marketing communications as they enable enhancing and accelerating reverse consumer's response, to form consumers demand in a particular place and at a specific time. Thus, it can be considered as an instrument to enhance and incentive motivation (Karpenko, 2016).

Usually, tools of sales promotion (in common research is regularly used a term below-the-line tools – BTL tools) include purchasing with a discount card (coupon discount); sampling which is a free tasting (or offer) of a product sample; lotteries, games, competitions, purchasing with a gift, merchandising, contests for consumers, brand souvenirs, and promotional pack (Karpenko, 2016).

Furthermore, price incentives policy is applied by methods of discounts, usage of coupons and promo codes at the sites of distributors and entrepreneurs (Karpenko, 2016). For example, Ackaradejruangsri (2015) argued that the fare of on-demand transportation services could be paid either by credit card or by cash, and several promo codes can be applied as a discount to the fare.

Karpenko (2016), mentioned that picking any specific sales promotion tool relies on the objectives of the entrepreneurs. Modern sales promotion tools are divided into three main categories:

- 1) Price quotations such as (selling with discount coupons, decreased prices, cumulative discounts, discount ticket, etc.)
- 2) In-kind offers such as (free product samples, premium, etc.)

3) Special active offers such as (Lotteries, contests for customers, games, etc.)

Contemporary sales promotion tools have to be technological and individualized. Instantaneously, they have to be a straightforward mechanism of execution, and have substantial impact on the progress of purchasing (Karpenko, 2016).

As a result of implementing incentives to on-demand transportation services area, several TNCs are established with the notion of sustainability in concentration, although TNCs needs to provide incentives to attract multiple passengers (Retamal, 2017).

Suriyamongkol (2016), mentioned that two prominent transportation network services in Thailand (Grab and Uber), have been heavily providing promotions and discounts on their services; such as (Discount Promo Code, Free ride trial, Discount by limited area or time, Referral program, etc.).

Besides, Grabhase generated much more different promotional messages than Uber with numerous types of sales promotion methods, such as (area discount, holiday campaign, credit card promotion, co-promotion with other brands, etc.). In contrast, Uber sales promotion techniques typically offer more general methods at a longer period of time, and sometime Uber involved with a special event, specific places or locations (Suriyamongkol, 2016).

Overall, Suriyamongkol (2016) said that both companies have rare common limitations for sale promotion practice and they both apply similar techniques such as (Discount amount, eligible times, promotion period or usage date condition, time of day and area or location conditions).

Leesa-nguansuk (2015) claimed that greater marketing promotions and incentives must be presented to consumers and drivers to push the ride-sourcing app market, which justifies this insistent sales promotion between the new ride-sourcing service apps.

Such promotion tools can improve sales within the shortest achievable period by 300 to 500%, but if the product/service itself was poor in quality, then sales promotion can weaken the sales and reducing the credibility of the brand (Karpenko, 2016).

It is worth to highlight that sales promotion tools can't be perceived as an instrument for the long-standing communicative influence. These communicative activity tools are beneficial for the short-term impact on the market, emphasizing one specific brand, and creating a customer flow (Karpenko, 2016).

2.5 Problems and challenges

Recently, these on-demand mobility services have developed quickly in terms of drivers, customers, and geographic ranges operated. In the current situation, ride-sourcing companies seem similar to taxis, which had made an excessive tension and policy confusion “fairness” in regulatory dealing between ride-sourcing companies and taxis (Rayle, Shaheen, Chan, Dai, & Cervero, 2014).

Since their beginning in 2009, TNCs have experienced enormous achievement, but also generated several debates. Since the traditional taxi market is typically restricted in terms of entry, fare, as well as service quality whereas relatively less regulatory demands that have been forced on TNCs’ services; likewise, imbalanced competition was claimed mostly by taxi drivers and their managers, who filed lawsuits and prepared strikes all over the world. TNCs have caused a headache to the legislators and government representatives (Zha, Yin, & Yang, 2016).

As several legislators and government officials are still speculating on what to do regarding the ride-sourcing services, some of them have already determined to forbid and/or consider these services as illegal; while others accepted these services as a new sort of transportation provider, and others have approved them according to laws and regulations. While these rules and laws had some variances, in terms of largely unify the inspection protocols, drivers’ background checking, and insurance coverage that applied already by the TNCs’ services. There is no involvement in the size and the number of the associated fleet (i.e., the amount of available vehicles) or service fares (Zha, Yin, & Yang, 2016).

Likewise, opponents mentioned that ride-sourcing services are unfairly doing the following: ignore current regulations, rise jamming at peak times, battle with public transport,

endanger public safety and misinform customers through blurred pricing practices (Rayle, Shaheen, Chan, Dai, & Cervero, 2014). In this respect, de Luca and Di Pace (2015) highlighted the most critical problems rely on the fixed costs of the TNCs' services as well as the overvalued or undervalued profits, mostly decided by the misinterpretation of riders' behavior.

The success of TNCs has raised the worries on the regulation related to the taxi market that is frequently complained about its limited supply. Features like mutual rating (the reputation system) and real-time rider/driver matching presented by the TNCs to improve the communication between the riders and drivers. In fact, on-demand transportation industry is considered as self-regulated due to the competition between multiple TNCs' services that might decrease the costs and diminish the market control of a specific major platforms (Zha, Yin, & Yang, 2016).

Furthermore, the research proposes that the individuals with low-income don't benefit as much as the individuals with higher-income, because several drivers are unwilling to work in poorer zones due to distance and observed safety issues. Despite what these services offer as a substitute to vehicle ownership which accordingly can dramatically lesser the budgets of transportation by making personal vehicles more effective and useful, scholars have discovered that families with low-income are not as likely as families with high-income in using and gaining benefits from these types of services (Dillahunt, Kameswaran, Li, & Rosenblat, 2017).

On the other side, the present-day trend shows that the car-sharing industry is fighting to attain profitability even as membership rises over time. Undoubtedly, several existing car-sharing programs had been (and are) monetarily sustained by governments and communities thru marketing, free parking spaces, starting investments, tax incentives, etc. Simultaneously

alternative methods to make car-sharing more cost-effective are targeting to escalate the quantity of their members (with charge), however there is a reduction in the rate of use (de Luca & Di Pace, 2015).

As an example, the kind of service delivered by Uber is unique compared to some of its competitors like Lyft and Sidecar in San Francisco itself, who already afforded app-based services similar to the ones that presented by Uber in 2010. In fact, Lyft still a main opponent in the United States, although Uber had met main regional competition from companies as Ola services in India, Gett services in Israel, and Grab services in South-East Asia (Dudley, Banister, & Schwanen, 2017).

In several cities and nations, Uber has implemented an intrusive method which has wanted to bypass regulatory systems. As a result, this was mostly obvious in Europe, where the company has challenged severe battles with regulators, governments and traditional taxi operators in Belgium, France, Italy, and Germany, as in 2016 in Hungary, Uber was effectively as illegal and pitched out of the nation by its regulators (Dudley, Banister, & Schwanen, 2017).

Dudley, Banister, and Schwanen (2017), emphasized that the critical political dilemma for regulators and governments is that, while Uber offers an effective and fairly cheap service that is common with the customers, which can threaten the existence and status of traditional operators, and make regulatory systems look unsuccessful. Likewise, by involving into idle capacity, Uber can perform as an essential initiator of occupations. Simultaneously, the company rejected to treat its drivers as employees in which can cause pressures in terms of hours operated, broader social security, and the payment of benefits.

Therefore, the California Public Utilities Commission (CPUC) — released desist and terminate letters to all the companies like Uber, Lyft, and Sidecar, which were obeyed by

citations of \$20,000 each in 2012 for claimed illegal operations. In September 2013, the CPUC created a new classification of motorized vehicle transporters, identified as Transportation Network Companies (TNCs). Besides, the CPUC described the TNCs as operators that offers pre-arranged transport services for a fare-using an online-based platform or application like (smartphone applications) to associate passengers with the drivers who are using their personal vehicles (Rayle, Shaheen, Chan, Dai, & Cervero, 2014).

Underneath the new procedures, companies that accepted to operate as a TNCs were requested to take a license from the CPUC, have a driver teaching program, provide criminal background reports of all drivers, preserve a “zero tolerance” rule on alcohol and drugs, and keep at least \$ 1 million for each accident as an insurance coverage (Rayle, Shaheen, Chan, Dai, & Cervero, 2014).

CPUC approved other policy provisions considering secondary insurance through two main phases of TNC operations: 1) “app-on” as well as 2) “in-service” (passenger(s) in the vehicle) (Rayle, Shaheen, Chan, Dai, & Cervero, 2014).

2.5.1 Trust and Privacy safeguards

Trust is considered to be a major obligation for the shared-economy including TNCs to be successful, otherwise distrust in Internet may result in safety concerns. Therefore, the users are not that comfortable with the notion of providing their personal credit card information and disbelieved other users’ evaluations of suppliers for companies like Lyft. In fact, trust is associated with safety, privacy, monetary transactions administered by the online platform, trust between strangers, and time investment as well as upfront social commitment to shaping trusted relationships. As a matter of fact, all the current apps require trust as an essential function to be successful, particularly the technologies that depend on both social and monetary transactions (Dillahunt, Kameswaran, Li, & Rosenblat, 2017).

Trust has been considered through distinctive disciplinary lenses, in fact former research associated to trust in the e-commerce environment tends to be loosely integrated, case-specific, and/or disjointed. For instance, most literature on technological trust has focused closely on concerns of public key infrastructure, security, privacy, and other technical parts of trust. Some contemporary studies have based their attention on the behavioral and social dimensions of trust in an e-commerce setting, but these were also barely focused (e.g., focused on trust in the society of retailers as a group, or researches focused on a restricted amount of trust antecedents), and consequently researchers had not yet settled an inclusive utilization of the elements that anticipate consumers' trust in the e-commerce context (Kim, Ferrin, & Rao, 2008).

Characteristics of trust had been studied in several types of researches in many distinctive fields, such as management, economics, social, institutional, and technology contexts, consumer psychology and behavior. Trust as a factor is grounded on the consumer's anticipations towards the vendor who did not take advantage of the situation and did not have an opportunistic attitude, but will perform in an ethical, dependable, and socially suitable manner, achieving his/her promises despite the consumer's dependence and vulnerability. Accordingly, the consumers' perceptions of trust-worthiness are expected to control the final purchasing decision between the consumer and seller (Pappas, 2016).

Dillahunt, Kameswaran, Li, and Rosenblat (2017), highlight some important characteristics of trust such as the lack of transparency about the control the platform like (decision-makers, surge-pricing decisions, monetary transactions) as well as trust between strangers. Likewise, a shortage in transparency according to the means of how surge pricing

system is implemented; similarly, shortage of digital literacy and/or accessibility (i.e., an accessibility shortage to either the Internet, Wi-Fi, or smartphones), restricted accessibility to credit cards, mobility and accessibility concerns.

The connection between behavior and intention is grounded on the belief that people effort to perform reasonable choices according to the information offered. Accordingly, an individual's behavioral intention to complete (or not to complete) certain behavior is resulted as an instant factor of that individual's genuine behavior (Kim, Ferrin, & Rao, 2008).

Additionally, it has been discovered that individuals are more possible to believe the information offered by other consumers like themselves more than the information that offered by companies. Thus, throughout the consumers' positive trust in recommendations or opinions distributed by dissimilar other consumers, online platforms could escalate their transactions (Hsiao, Chuan-Chuan Lin, Wang, Lu, & Yu, 2010).

Consumers might pay slightly more on online transactions that sellers provide to defend their personal information. A huge number of United States consumers have worries towards the online security and privacy, as they are suspicious of dealing with online businesses that don't have acceptable security system, according to their point of view. Businesses, consumer groups as well as governmental agencies agreed that confidentiality should be significantly enhanced (Sam & Chatwin, 2015).

Kim, Ferrin, and Rao (2008) argue that there are four types of antecedents that affect consumers' trust as well as consumers' perceived risk regarding electronic commerce bodies. These include the following types: 1) *Cognition/observation-based* antecedents (i.e.,

information quality, security protection, privacy protection, system reliability, etc.). 2) *Affect-based* antecedents (i.e., word-of-mouth, reputation, recommendation, referral, purchasers' feedback, and much more). 3) *Experience-based* antecedents (i.e., familiarity of the product or service as well as Internet and e-commerce experience). 4) *Personality-oriented* antecedents (i.e., the tendency to trust, style of shopping).

2.5.2 Other Potential Risks

In order to deliver an improved experience and expand consumer participation in on-demand mobility services, the risk related to this new market must be recognized. In the performance risk, the probabilities of an element lacking to fulfill the performance desires initially proposed during the purchase. The consumer satisfaction level is profoundly affected by the performance risk, when the service obtained isn't fulfilled and met the expectations. Similarly, performance risk is very close to operative risk in which it includes the user's conviction of the obtained product/service that did not provide the desired remunerations to the consumer (Hawapi, Sulaiman, Abdul Kohar, & Talib, 2017).

Most the TNCs' drivers are not professional drivers, as they are likely to be unaware with exact places or roads. Figures adopted from Benenson Strategy Group in (2014), demonstrates that almost 64 percentage of Uber drivers, does not have former driving. Likewise, riders worry about the vehicle's availability at the required time they chose. So, product availability as a risk is categorized as the noticed product/service risk (as cited in Hawapi, Sulaiman, Abdul Kohar, & Talib, 2017).

One of the external aspects of psychological risk is a social risk that is defined as the possibility of making the purchase decision depending on others. Alternatively, the social risk

is similarly described as the possible damage to standing in a social belief as a consequence result of accepting a product/service. One of the reasons for rejecting the social recognition regarding collaborative consumption is due to the licensing and unfair tax obligation (Hawapi, Sulaiman, Abdul Kohar, & Talib, 2017).

Reputation as a risk was defined as consumers' noticed perception of a particular product/service or inclusive perception of the noteworthy features regarding the products/services or companies. Likewise, reputation is clarified as the observed value gained from the product/service according to previously gathered behavior of the value. Moreover, reputation might be negative influence by the gap happened in the time resulted by wrong or late transaction, which it is reliable on the recent done transactions; accordingly, it may be diminished over time. Inclusive evaluation founded on long-term behaviors lessen reputation from the associated risk, which is linked to short-term behavior evaluation (Hawapi, Sulaiman, Abdul Kohar, & Talib, 2017).

CHAPTER 3: THEORETICAL FRAMEWORK

3.1 Unified Theory of Acceptance and Use of Technology (UTAUT / UTAUT2)

To explain consumers' acceptance and use of TNCs, there have been numerous theoretical academic models, established from distinctive theories in the sociology and the psychology areas. One of them is “the Unified Theory of Acceptance and Use of Technology” or as known as (UTAUT) that was developed and created in 2003 by Venkatesh, Morris, Davis, and Davis.

In fact, Venkatesh and his colleagues reviewed, compared and summarized eight previous models/theories of technology use: 1) the Technology Acceptance Model (TAM); 2) the Innovation Diffusion Theory (IDT); 3) the Social Cognitive Theory (SCT); 4) the Theory of Reasoned Action (TRA); 5) the Theory of Planned Behavior (TPB); 6) the Motivational Model (MM); 7) the Expectation-Confirmation Theory (ECT); 8) and the Model of PC utilization (MPCU).

Research on UTAUT has shown that this model has four significant constructs: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Conditions (FC), which has an influence on the behavioral intention (BI) to use a technology and/or technology use (Venkatesh et al. 2003; Venkatesh et al. 2012; Chang, 2012; and Arenas-Gaitán, 2015).

Furthermore, Venkatesh et al. (2012) mentioned that UTAUT had refined the major contingencies and factors related to the prediction of behavioral intention to adopt or use a certain technology and/or technology use. Since its original development, UTAUT has been

used as a standard model and executed to explain a variety of technologies in non-organizational as well as organizational contexts. Various replications and applications of the whole model or selected parts of it took place in either non-organizational and organizational settings. According to Venkatesh et al. (2012), UTAUT integrations/extensions have three broad types:

The first type of integrations/extensions studied UTAUT in new settings, e.g., new cultural settings (such as China, India), new technologies (such as collaborative technology and health information systems), and new consumers' populations (such as healthcare consumers and specialists). The second type was the add-on of new, different variables in order to enlarge the opportunity of the internal hypothetical instruments defined in UTAUT. The third and the last type is the presence of external predictors of the UTAUT constructs. These wide-ranging applications, integrations/extensions, and replications of UTAUT have been valuable in developing the model to UTAUT2 to understand technology usage and adoption as well as increasing the theoretical edges of the provided theory (Venkatesh et al., 2012).

In 2012, Venkatesh et al., provided an updated version to their prior UTAUT model to adapt it to the consumers' setting. The new updated model was (UTAUT2) and combined three new primary variables: Hedonic Motivation (HM), Price Value (PV) and Habit (HT), that plays a major role in the use of innovative technologies by consumers. Furthermore, Arenas-Gaitán (2015) said that fundamental variance between UTAUT and UTAUT2 models is the behavior intention (BI) and the usage relationship that is controlled by the experience associated with technology. Besides, the individual characteristics can moderate the impact of habit on the behavioral intention.

3.1.1 Behavior Intention (BI)

Behavioral Intention (BI) well-defined as a consumer's intention to achieve a exact action, which can be expected similar behaviors when an individual performs actions voluntarily (Islam, Kim Cheng Low, & Hasan, 2013). Similarly, behavior intention is the range to which a consumer has expressed conscious plans to either to perform or not to perform several required future behaviors (Arenas-Gaitán, 2015).

Likewise, behavioral intention is a possibility subjective of carrying out behavior and also the specific cause usage of a behavior (Yi, Jackson, Park & Probst, 2006). Hence, intentions demonstrate the motivational elements that influence behavior (Mafe, Blas & Tavera-Mesias, 2010). According to the UTAUT2 model, all the seven constructs of (performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit) considered as antecedents of behavior intention (Arenas-Gaitán, 2015).

3.1.2 Performance Expectancy (PE)

Venkatesh et al. (2012), described performance expectancy (PE) as the extent to which by means of technology will deliver paybacks to consumers in doing particular actions. Furthermore, Shin (2009), said that three factors that have an impact of performance expectancy are extrinsic motivation (through the Motivation Model), perceived usefulness (through the implementation of Technology Acceptance Model), and job-fit (through the Model of PC Utilization). Besides, each factor was positively strong enough to support performance expectancy to influence the behavior intention in using new technology (Chang, 2012).

In this respect, the actual clarification of performance expectancy is replicating in the work that might be varying on whether tasks or jobs will be resolved easier and faster or the entire production of the work is improved on both quantity and quality through using the system (Chen & Salmanian, 2017).

For instance, Sun, Cao and You (2010), discovered that perceived effectiveness had a constructive impact on behavior intention to use and select m-commerce in China, according to an online questionnaire validated and gathered that applied the structural equation modeling (SEM).

In the light of TNCs, Chen, and Salmanian (2017), performance expectancy (PE) might be measured as working performance, as ordering a TNC vehicle can prevent and save effort, time, and monetary costs, whether it needed by the work or going to the work, consumers can be discharged from the burden of searching for a parking space or waiting for the standard taxi. Accordingly, that raises the effectiveness of working performance.

3.1.3 Effort Expectancy (EE)

Effort Expectancy (EE) was defined as the amount of which a technology is linked to the consumers is easy to use (Venkatesh et al. 2003; Venkatesh et al., 2012). Equally, effort expectancy is also well-defined as the extent of easiness connected with the use of a particular system (Chang, 2012). Davis (1989) discovered that an application perceived by individuals to be easy to use possible to be acceptable (as cited in Chang, 2012).

Moreover, Venkatesh et al. (2003), mentioned that three variables from the current model could imply the effort expectancy: 1) the perceived ease of use (through the implementation of the Technology Acceptance Model/ the Technology Acceptance Model 2); 2) the complexity (through th application of the Model of PC Utilization); 3) and ease of use (through the use of Innovation Diffusion Theory).

In the context of TNCs, effort expectancy reflects on the level of easiness or battle consumers noticing through using the TNC app to order a vehicle and finish the journey by paying the fare when it arrives. It involves the consumer's operating or learning manners about TNCs' apps concerning whether it requires consumers to have a particular level of knowledge ahead or consumers can acquire knowledge by themselves to progress (Chen & Salmanian, 2017).

3.1.4 Social Influence (SI)

Social Influence (SI), is definite as the extent to which a consumer perceives his/her main others (i.e., friends and family), and believe that he/she must accept and use a particular technology (Venkatesh et al. 2003; Venkatesh et al. 2012; Chang, 2012; and Arenas-Gaitán, 2015).

Venkatesh et al. (2003) emphasized that social influence (SI) as a direct factor of the behavioral intention can be exemplified as follows: 1) Subjective norms (i.e., The individual's opinion regarding the most persons who are significant to him/her think that he/she would or would not do a certain behavior); 2) The social factors such as (person's internalization of a reference and specific personal deals that a person has been prepared with others, in particular, social circumstances); and/or 3) The image factor that was described by Moore and Benbasat

(1991), since the extent to which consuming a particular technology innovation is seen to improve individuals' status or image in his/her social group (as mentioned in Chang, 2012).

In the context of TNCs, social influence also proposed that consumers appear to be concerned or inclined to the thoughts and information of their references (e.g., relatives, parents, colleagues, and friends) in deciding to select and use TNCs' services and apps (Chen & Salmanian, 2017).

3.1.5 Facilitating Conditions (FC)

Facilitating Conditions explained the users' insights of the support and resources available to perform a certain behavior (Venkatesh et al. 2003; Venkatesh et al. 2012; Chang, 2012; and Arenas-Gaitán, 2015). Also, facilitating conditions is also referred to the extent of which a consumer considers technical and organizational structure found to assist and support the use of the technology or the system (Chang, 2012).

This definition implies notions expressed by three unique variables: 1) The Perceived behavioral control; 2) The facilitating conditions; 3) and lastly the compatibility. Accordingly, each variable is operationalized to contain features of the organizational and/or technological setting that are considered to eliminate obstacles of use.

In the framework of TNCs, facilitating conditions occur in the shape of essential resources that are necessary for consumers to use TNCs' services and apps effectively and successfully. Afforded with the missing prerequisites like (mobile network, mobile phones, Wi-Fi, or payment methods), TNCs is deactivated anyway. Besides, a team of customer support

accessible in control of technical issues and rich guidance on how to use the TNCs' apps to complete a trip is both parts of facilitating conditions (Chen & Salmanian, 2017).

3.1.6 Hedonic Motivation (HM)

Venkatesh et al. (2012) clearly-defined hedonic motivation as the pleasure or fun originated from using a specific technology, and this construct showed a fundamental role in determining certain technology adoption and usage. Furthermore, research done on hedonic motivation (theorized as noticed enjoyment) has discovered that it is directly influenced technology adoption and usage (Venkatesh et al. 2012; Chang, 2012; and Arenas-Gaitán, 2015).

Several studies designate that hedonic motivation affects behavior intention towards accepting new technologies by consumers, such as (e-commerce, mobile shopping services, e-learning, or the travel advice web) (Arenas-Gaitán, 2015).

According to the framework of TNCs, hedonic motivation is considered as a perception of pleasure, delight, joy, and entertainment that is presented to consumers when they use the TNCs' services and apps. For instance, the presentation of icons of the services regarding price level, such as UberX's vehicle symbol that become a "sculling boat" and Uber Black, which a symbol of "yacht." This innovative change gave consumers pleasurable astonished moods and it is considered to have a higher outcome on consumers' adoption and use (Chen & Salmanian, 2017).

3.1.7 Price Value (PV)

Venkatesh et al. (2012); Chang, (2012); and Arenas-Gaitán, (2015), well-defined price value as the pricing and cost structure, might have a major influence on users' technology acceptance and usage. Furthermore, according to marketing studies, the monetary price/cost is frequently theorized simultaneously with the quality of services/products to decide the perceived value of those services / products (Zeithaml 1988, as cited Venkatesh et al., 2012).

Likewise, price value is described as an individuals' cognitive exchange between the observed benefits of the new technologies and the monetary budgets for using them. Some examples such as (e-commerce, the use of 3G technology, or smartphones), shows how PV affects BI towards adopting a specific technology (Arenas-Gaitán, 2015).

Additionally, the price value is a constructive variable when the benefits associated with using specific technology are seen to be better than the monetary price/costs, and such construct has a positive influence on the consumers' intention (Venkatesh et al., 2012; Chang, 2012).

In the framework of TNCs, price value is the fact that the TNCs' services reasonably valued for the consumers. Commonly, TNCs costs remarkably lesser than regular taxi fare and in utmost circumstances, have a better and clear vehicle condition as the vehicle owned by the private drivers. Consequently, the degree of values and benefits perceived by TNCs' consumers to use the services are extended, as well as the consumer's intention to use TNCs (Chen & Salmanian, 2017).

3.1.8 Habit (HT)

A habit has defined in two different means: firstly, habit observed as previous behavior; and secondly habit is measured as the degree to which a person considers the behavior to be automatic (Venkatesh et al. 2012; Chang, 2012; and Arenas-Gaitán, 2015). Ajzen and Fishbein (2005), mentioned that reviews and feedbacks from prior experiences would impact the countless beliefs towards a technology use (as cited in Venkatesh et al., 2012).

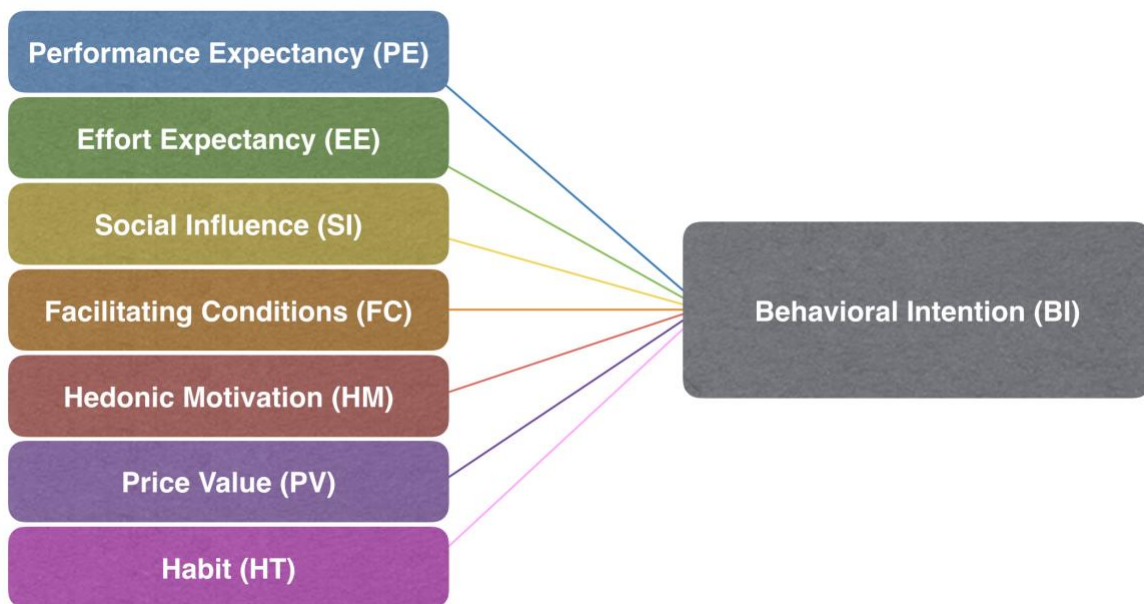
Relatedly, Venkatesh et al. (2012) operationalized the factor of habit based on three distinctive levels according to the time passage: first, when the provided system has originally been offered to use; one month later; and three months later. Research shows that habit is perfectly defined as the degree to which individuals tend to do certain behaviors in an automatically way because of the prior learning (Arenas-Gaitán, 2015).

From the angle of TNCs, habit reflects on consumers using TNCs' services and apps frequently in their daily lives since TNCs convenience can guide consumers to increase dependency on TNCs. With broaden aggregate dependence, consumers can be even more addicted to TNCs as their primary selection for transportation mode (Chen & Salmanian, 2017).

3.2 Research Model

In the light of the reviewed literature and the presented theoretical framework, the below mentioned Figure 3.1, shows the model that will be applied in this study.

Figure 3.1: The UTAUT2 Model



Derived from: Venkatesh et al. (2012)

CHAPTER 4: METHODOLOGY

In respect of the reviewed literature, the current research study is an examination of the consumers' behavior and intention decision towards the on-demand transportation services in Egypt. Accordingly, this study is aiming to fully utilize and investigate the cognitive and affective antecedents to consumers' behavior towards the new sharing economy businesses represented as TNCs (Uber, Careem, Swvl, etc.).

Therefore, the seven different variables of UTAUT2 framework such as 'Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Price Value (PV), and Habit (HT)' will be tested in order to understand the consumers' behavioral intention (BI) towards using these TNCs services.

4.1 Research Significance

In terms of academic significance, this research will provide recent data about the consumers' decisions and intention to use towards TNCs in Egypt. Likewise, regarding the practical significance, this reach will provide to business practitioners in the transportation industry a better indication on how to improve and develop TNCs' services and apps that support consumers' needs and boost the usability of these services. Thus, this research will assist future researchers to understand the nature of the Egyptians' consumer behavior towards TNCs services, because UTAUT2 supports to determine its impact on the behavioral intention of using a particular technology.

4.2 Research Objectives

As mentioned earlier, this attempt to understand and highlight the consumers' intention to use TNCs in Egypt. Accordingly, to reach this purpose, the study will aim to tackle the following objectives:

- To analyze the relationship and influence of performance expectancy on behavioral intention in using TNCs services and apps in Egypt.
- To analyze the relationship and impact of effort expectancy on behavioral intention in using TNCs services and apps in Egypt.
- To analyze the relationship and influence of social influence on behavioral intention in using TNCs services and apps in Egypt.
- To analyze the relationship and impact of facilitating conditions on behavioral intention in using TNCs services and apps in Egypt.
- To analyze the relationship and influence of hedonic motivation on behavioral intention in using TNCs services and apps in Egypt.
- To analyze the relationship and influence of price value on behavioral intention in using TNCs services and apps in Egypt.
- To analyze the relationship and influence of habit on behavioral intention in using TNCs services and apps in Egypt.

4.3 Research Questions

What are the Cognitive and Affective Antecedents to Consumer Behavior Towards On-demand Transportation Services in Egypt?

The question mentioned above was the general question, and the following questions are more specific ones:

Q1: Does performance expectancy (PE) affect the behavioral intention (BI) of using TNCs services and apps?

Q2: Does effort expectancy (EE) affect the behavioral intention (BI) of using TNCs services and apps?

Q3: Does social influence (SI) affect the behavioral intention (BI) of using TNCs services and apps?

Q4: Does facilitating conditions (FC) affect the behavioral intention (BI) of using TNCs services and apps?

Q5: Does hedonic motivation (HM) affect the behavioral intention (BI) of using TNCs services and apps?

Q6: Does price value (PV) affect the behavioral intention (BI) of using TNCs services and apps?

Q7: Does habit (HT) affect the behavioral intention (BI) of using TNCs services and apps?

4.4 Research Hypotheses

H1: Performance Expectancy (PE) is positively correlated to the behavioral intention (BI) of using TNCs.

H2: Effort Expectancy (EE) is positively correlated to the behavioral intention (BI) of using TNCs.

H3: Social Influence (SI) is positively correlated to the behavioral intention (BI) of using TNCs.

H4: Facilitating Conditions (FC) is positively correlated to the behavioral intention (BI) of using TNCs.

H5: Hedonic Motivation (HM) is positively correlated to the behavioral intention (BI) of using TNCs.

H6: Price Value (PV) is positively correlated to the behavioral intention (BI) of using TNCs.

H7: Habit (HT) is positively correlated to the behavioral intention (BI) of using TNCs.

4.5 Identifying Hypotheses Variables

H1: Performance Expectancy (PE) is positively correlated to the behavioral intention (BI) of using TNCs.

Dependent variable: Behavioral Intention (BI)

Independent variable: Performance Expectancy (PE)

H2: Effort Expectancy (EE) is positively correlated to the behavioral intention (BI) of using TNCs.

Dependent variable: Behavioral Intention (BI)

Independent variable: Effort Expectancy (EE)

H3: Social Influence (SI) is positively correlated to the behavioral intention (BI) of using TNCs.

Dependent variable: Behavioral Intention (BI)

Independent variable: Social Influence (SI)

H4: Facilitating Conditions (FC) is positively correlated to the behavioral intention (BI) of using TNCs.

Dependent variable: Behavioral Intention (BI)

Independent variable: Facilitating Conditions (FC)

H5: Hedonic Motivation (HM) is positively correlated to the behavioral intention (BI) of using TNCs.

Dependent variable: Behavioral Intention (BI)

Independent variable: Hedonic Motivation (HM)

H6: Price Value (PV) is positively correlated to the behavioral intention (BI) of using TNCs.

Dependent variable: Behavioral Intention (BI)

Independent variable: Price Value (PV)

H7: Habit (HT) is positively correlated to the behavioral intention (BI) of using TNCs.

Dependent variable: Behavioral Intention (BI)

Independent variable: Habit (HT)

4.6 Identifying the variables, levels of measurement, and their testing questions

The below-mentioned Table is highlighting the variables and its testing questions as well as the level of measurement of each construct. The following constructs were derive from the studies of Venkatesh et al. (2012); Kit et al. (2014); and Chen and Salmanian (2017).

Table 4.1: Variables and their level of measurement

<i>Variables</i>	<i>Constructs</i>	<i>Number of Questions</i>	<i>Testing Questions</i>	<i>Measurement</i>
<i>IV 1</i>	Performance Expectancy (PE)	5	PE1; PE2; PE3; PE4; PE5	Interval
<i>IV 2</i>	Effort Expectancy (EE)	5	EE1; EE2; EE3; EE4; EE5	Interval
<i>IV 3</i>	Social Influence (SI)	5	SI1; SI2; SI3; SI4; SI5	Interval
<i>IV 4</i>	Facilitating Conditions (FC)	5	FC1; FC2; FC3; FC4; FC5	Interval
<i>IV 5</i>	Hedonic Motivation (HM)	7	HM1; HM2; HM3; HM4; HM5; HM6; HM7	Interval
<i>IV 6</i>	Price Value (PV)	4	PV1; PV2; PV3; PV4	Interval
<i>IV 7</i>	Habit (HT)	5	HT1; HT2; HT3; HT4; HT5	Interval
<i>DV</i>	Behavioral Intention (BI)	5	BI1; BI2; BI3; BI4; BI5	Interval

4.7 Operationalization of the model and hypotheses variables used in this research

The below table is defining each variable used in this study

Table 4.2: Variables and their definitions

Behavioral Intention (BI):	is defined as a consumer's intention to achieve a specific act, which can be expected similar behaviors when an individual performs actions voluntarily (Islam, Kim Cheng Low, & Hasan, 2013).
Performance Expectancy (PE):	Venkatesh et al. (2012), explained as the extent to which using a specific technology will deliver benefits to its consumers in doing particular actions. Furthermore, Shin (2009), said that three factors that have an impact of performance expectancy are extrinsic motivation (through the Motivation Model), perceived usefulness (through the Technology Acceptance Model), and job-fit (through the Model of PC Utilization).
Effort Expectancy (EE):	referred as the extent of which a technology linked to the consumers is easy and simple to use (Venkatesh et al. 2003; Venkatesh et al., 2012). Equally, effort expectancy is also well-defined as the extent of ease connected with the usage of a particular system (Chang, 2012).
Social Influence (SI):	Defined as the level to which a consumer observes his/her main others (i.e., friends and family), and believe that he/she must use a specific technology (Venkatesh et al. 2003; Venkatesh et al. 2012; Chang, 2012; and Arenas-Gaitán, 2015).
Facilitating Conditions (FC):	Is explained as the consumers' insights of the available support and resources presented to make a particular behavior (Venkatesh et al. 2003; Venkatesh et al. 2012; Chang, 2012; and Arenas-Gaitán, 2015).
Hedonic Motivation (HM):	Venkatesh et al. (2012) described hedonic motivation as the pleasure or excitement originated from using a certain technology, and this construct showed a critical role in determining certain technology adoptions and usage.

Price Value (PV):	Venkatesh et al. (2012); Chang, (2012); and Arenas-Gaitán, (2015) well-defined price value as the pricing and cost structure that may have a major effect on consumers' technology adoption and usage.
Habit (HT):	Has been defined in two different means: firstly, habit observed as previous behavior; and secondly habit is measured as the degree to which a person considers the behavior to be automatic (Venkatesh et al. 2012; Chang, 2012; and Arenas-Gaitán, 2015). Ajzen and Fishbein (2005), mentioned that users' feedback from prior experiences would impact the diverse beliefs towards a technology use (as cited in Venkatesh et al., 2012).

4.8 Method of Data Collection

This research is aiming to use a quantitative methodology for gathering data that will be useful to acquire descriptive, statistical, objective, and accurate information about consumers' behavioral intention towards TNCs in Egypt. Accordingly, the research will provide a descriptive survey through several types of questions (such as close-ended and multiple-choice questions as well as Likert scale statements) presented to a certain sample of Egyptians; both electronic (by using an online survey) and physical (by using a self-administered survey) surveys will be presented to answer the given questions, consequently support or refute the research hypotheses.

4.9 Population

A population of Egyptian TNCs consumers will be the targeted population for this study, and the targeted sample should be using these types of TNCs' services; additionally, they should have mobile and internet literacy. Therefore, the survey will be distributed online (through Google Forms) and offline (face to face) by using social media platforms such as "Facebook" as well as self-administered in places like "The American University in Cairo" (AUC) and October University of Modern Sciences and Arts (MSA) particularly in front of the gates where these participants are waiting for or willing to use TNCs. The purpose of choosing this population is to reach the appropriate participants for this study to obtain accurate results and data.

4.10 Sampling and Data Collection

As mentioned earlier, the methodology is based on the quantitative technique using non-random sampling, because not all the online or offline consumers had the equal chance of filling the survey; accordingly, purposive sampling was chosen to survey online and offline consumers who are using TNCs. However, the survey is provided and utilized randomly to ensure that there was no potential bias, as a matter of fact, users didn't have to provide their names.

As for the sample size, a total of 200 respondents were required to complete the survey, 100 participants completed the self-administered questionnaire (50) at AUC and (50) at MSA; in addition to 100 participants who completed the online survey through Google forms.

Furthermore, the survey was revised and approved from the IRBs (Institutional Review Boards) and CAPMAS (Central Agency for Public Mobilization and Statistics) to ensure that this survey didn't impose any possible harms on participants; this survey didn't require provision of any personal information like name, and it was based on anonymity procedures where no one person knows the participants of this survey. Accordingly, after the relevant IRBs and CAPMAS permissions, the survey was conducted with the selected participants.

4.11 Questionnaire Design

The survey was designed and developed grounded on relevant findings and studies of Venkatesh et al. (2012); Kit et al. (2014); and Chen and Salmanian (2017), to tackle and test all the sides of the proposed variables and hypotheses, therefore a scale of different questions was developed to measure and test the different research variables; For instance, the survey design was constructed as follows: the first part of the survey, participants were requested to provide descriptive and general statistical information like (Gender, Age, TNCs' services usage, TNCs' services usage rate, and experience, etc.).

While in the second part of the questionnaire, the focus was on the variables and testing the consumers' behavior intention using UTAUT2 model factors of Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Price Value (PV), and Habit (HT); afterward the last part is dedicated to the behavior intention (BI) questions only.

The design of the questions was mainly developed on the multiple-choice questions and Likert scale statements that requested the respondents to signify their agreement or disagreement on a seven-point Likert-type scale, varying from "Strongly Disagree" (1) to "Strongly Agree" (7).

4.12 Survey pilot

A pilot testing was created to avoid any possible problems as well as to elect clear, up to the point and obvious questions. Accordingly, seven survey pilots were distributed on volunteers to test the language, clearness of the questions, and even the online layout. The pilot was essential because the feedbacks of the respondents were valued and thus, some questions were edited or rephrased.

The modifications of the questionnaire were minor; however, it was taken into consideration that the participant desires an understandable and clear survey, especially in the questions and answers that provide some terminologies.

Likewise, the online survey's layout script was tested on several browsers to ensure that it was supported on multiple browsers and platforms.

CHAPTER 5: DATA ANALYSIS AND FINDINGS

The results collected from the surveys done in this research will be presented, this chapter will include both descriptive analysis and inferential analysis as well as scale measurement results will be offered and discussed in this thesis chapter.

5.1 Descriptive Analysis

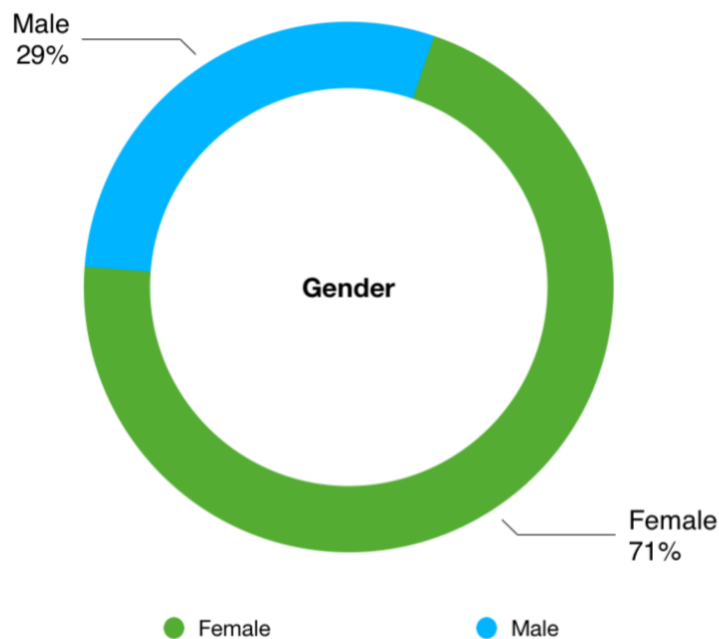
5.1.1 Demographic Profile of Respondents

In this part of the research, the demographic profile of 200 online and offline respondents collected from the survey will be described. In fact, the response rate of the filled surveys was 100 percent.

Table 5.1: Gender Categorization

<i>Gender Categorization</i>	<i>Frequency</i>	<i>Percent (%)</i>
<i>Female</i>	142	71.0
<i>Male</i>	58	29.0
<i>Total</i>	200	100.0

Figure 5.1: Gender Categorization

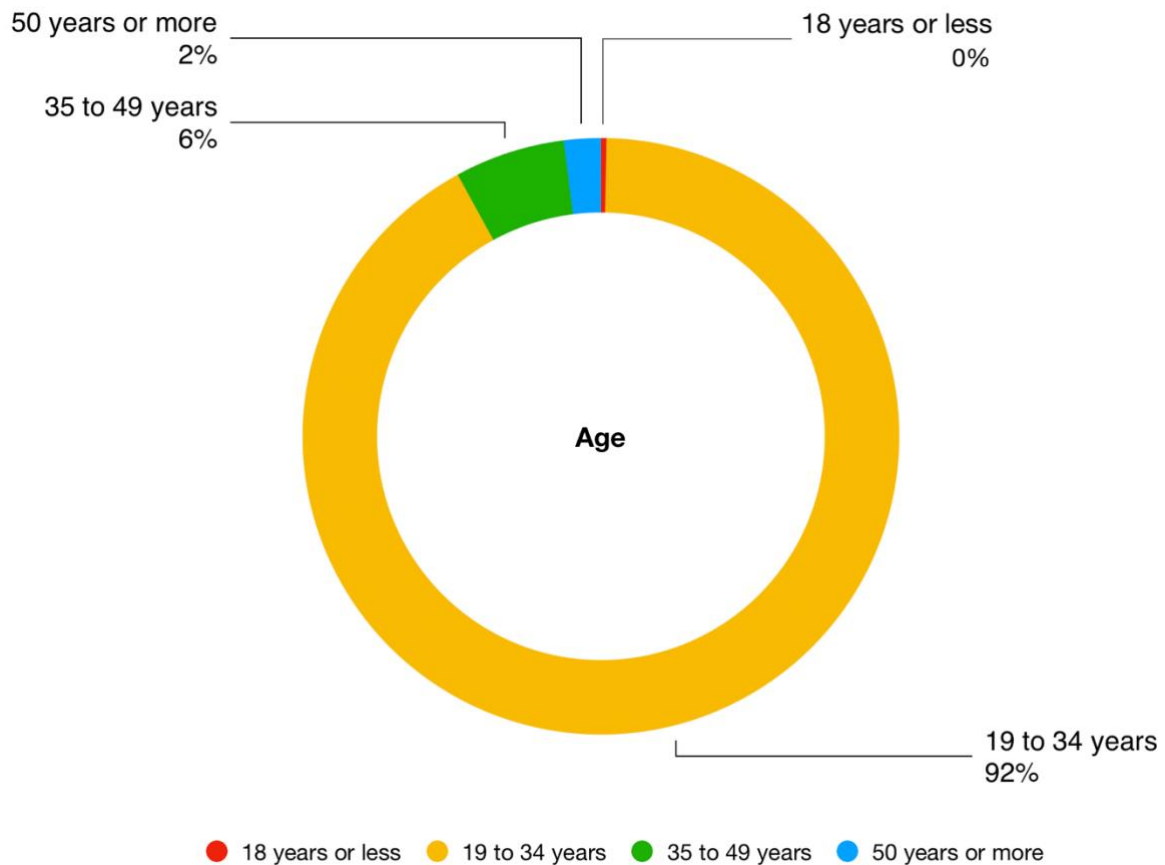


As shown in the above-mentioned Table 5.1 and Figure 5.1, out of 200 collected questionnaires, 142 are females (71.0%), and 58 are males (29.0). The number of female respondents is significantly higher than the male respondents by 42%. Consequently, there is notably variance between the numbers of females' and males' sample in using TNCs.

Table 5.2: Age Categorization

<i>Age Categorization</i>	<i>Frequency</i>	<i>Percent (%)</i>
<i>18 years or less</i>	0	0
<i>19 to 34 years</i>	184	92.0
<i>35 to 49 years</i>	12	6.0
<i>50 years or more</i>	4	2.0
<i>Total</i>	200	100.0

Figure 5.2: Age Categorization



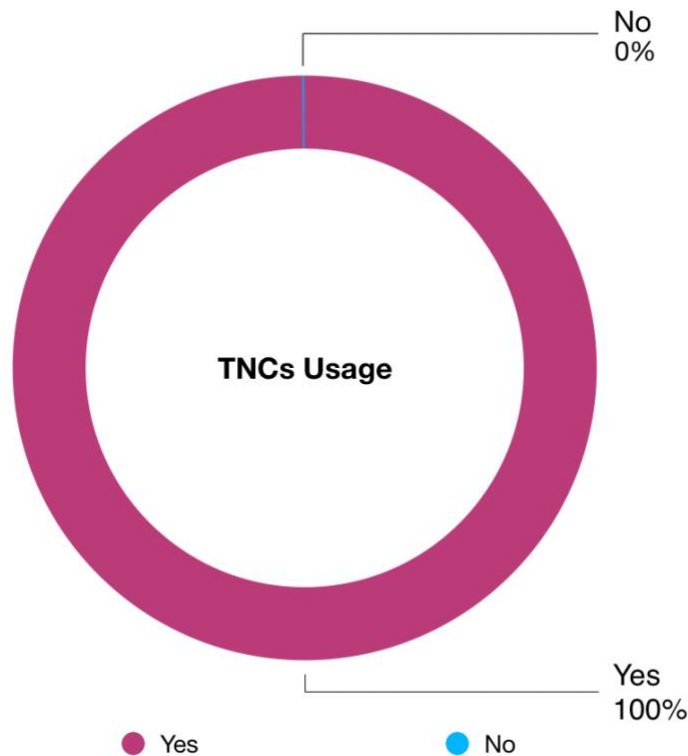
Both Table 5.2 and Figure 5.2 shows that of research respondents age was distributed according to four core age categorizations, which are categorized as follows (1) 18 years or less, (2) 19 to 34 years, (3) 35 to 49 years, and (4) 50 years or more. Thus, no respondent was

in the first category of age (18 years or less); however, 184 (92%) respondents were between 19 to 34 years, 12 (6%) respondents were between 35 to 49 years, and 4 (2%) respondents were between 50 years or more. Accordingly, the majority of study respondents who filled the questionnaire are young age group from 19 to 34 years.

Table 5.3: Respondents who are Using TNCs

<i>Respondents who are using TNCs</i>	<i>Frequency</i>	<i>Percent (%)</i>
<i>Yes</i>	200	100.0
<i>No</i>	0	0
<i>Total</i>	200	100.0

Figure 5.3: Respondents who are Using TNCs

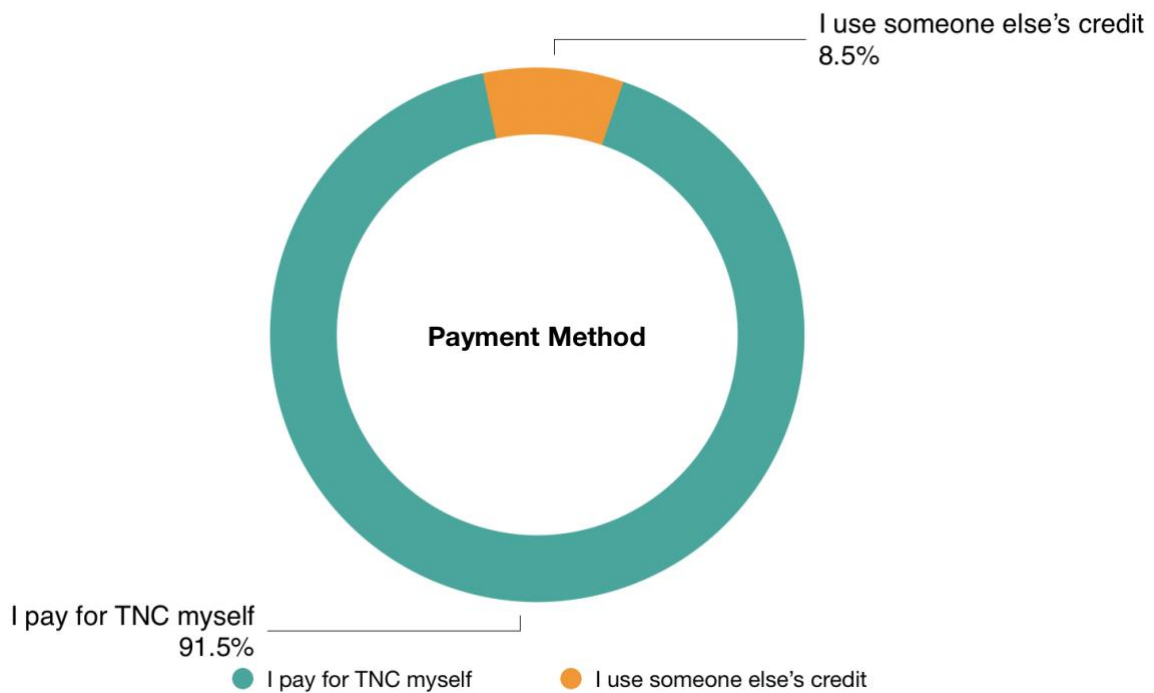


As presented in the above-mentioned Table 5.3 and Figure 5.3, 200 (100%) respondents are using TNCs' apps such as (Uber, Careem, SWVL, etc.) and no respondents selected the no option.

Table 5.4: Payment Method

<i>Payment Method</i>	<i>Frequency</i>	<i>Percent (%)</i>
<i>I pay for TNC myself</i>	183	91.5
<i>I use someone else's credit</i>	17	8.5
<i>Total</i>	200	100.0

Figure 5.4: Payment Method

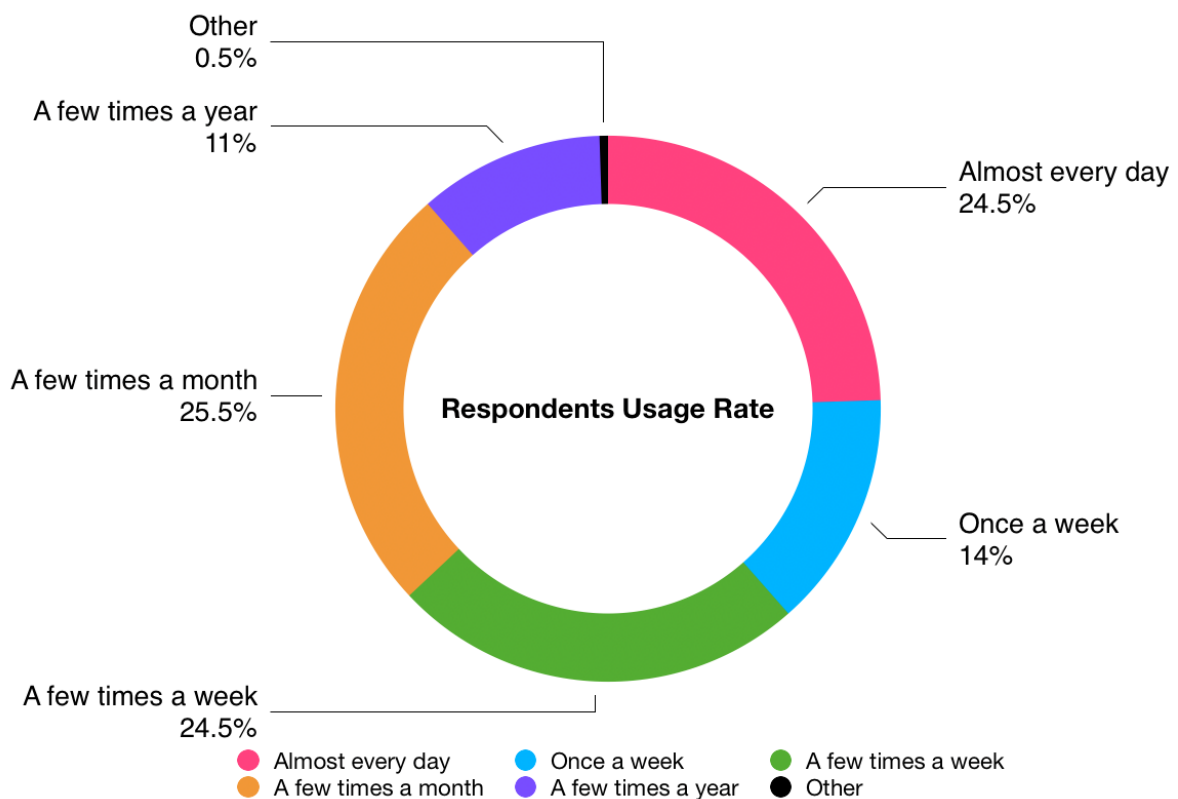


As resulted in the above-mentioned Table 5.4 and Figure 5.4, out of 200 respondents, 183 (91.5%) respondents are paying the TNCs services for themselves, and only 17 (8.5%) respondents are using someone else's credit. Accordingly, this explains that the majority of the respondents pay for themselves rather than using someone else's credit.

Table 5.5: Respondents Usage Rate

<i>Respondents Usage Rate</i>	<i>Frequency</i>	<i>Percent (%)</i>
<i>Almost every day</i>	49	24.5
<i>Once a week</i>	28	14.0
<i>A few times a week</i>	49	24.5
<i>A few times a month</i>	51	25.5
<i>A few times a year</i>	22	11.0
<i>Other</i>	1	.5
<i>Total</i>	200	100.0

Figure 5.5: Respondents Usage Rate

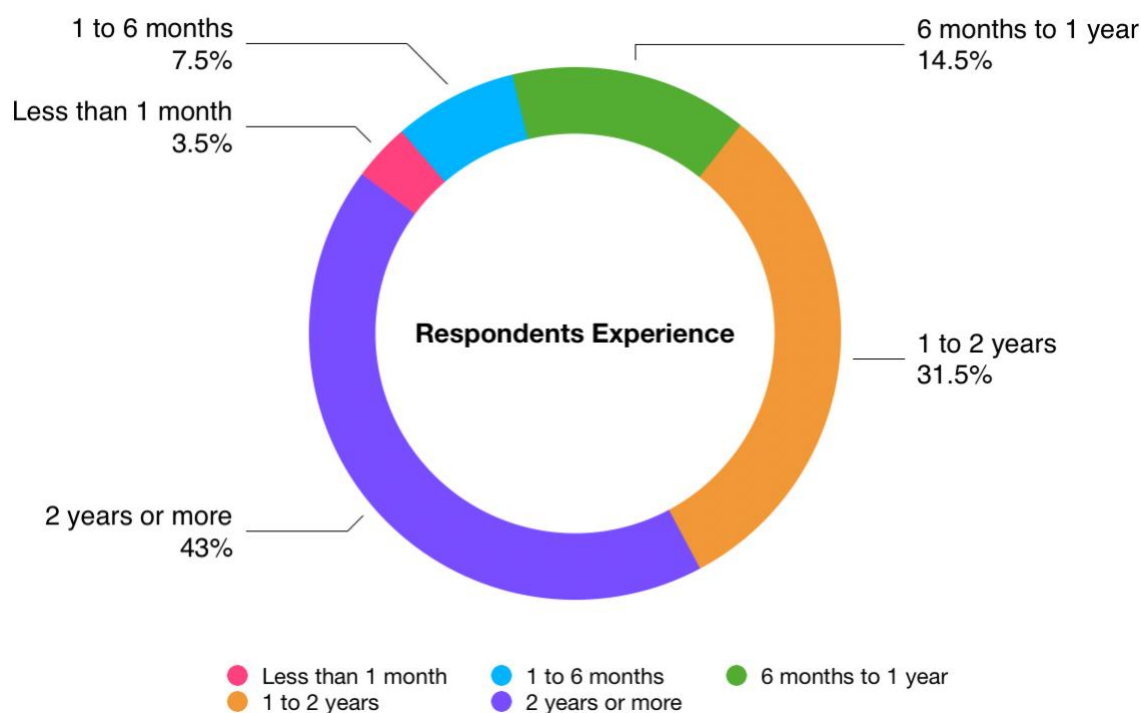


As presented in both above-mentioned Table 5.5 and Figure 5.5, 49 (24.5%) respondents are using TNCs almost every day, 28 (14%) respondents are using TNCs once a week, 49 (24.5%) respondents are using TNCs a few times a week, 51(25.5%) respondents are using TNCs a few times a month, 22 (11%) respondents are using TNCs a few times a year, and only 1 (.5%) respondent chose other as his/her choice and mentioned that he/she uses TNCs “When my car is broke”. Therefore, the highest number of respondents 51(25.5%) are using TNCs a few times a month.

Table 5.6: Respondents Experience

<i>Respondents experience</i>	<i>Frequency</i>	<i>Percent (%)</i>
<i>Less than 1 month</i>	7	3.5
<i>1 to 6 months</i>	15	7.5
<i>6 months to 1 year</i>	29	14.5
<i>1 to 2 years</i>	63	31.5
<i>2 years or more</i>	86	43.0
<i>Total</i>	200	100.0

Figure 5.6: Respondents Experience



From the numbers presented in the previous Table 5.6 and Figure 5.6, 7 (3.5%) respondents only have less than 1 month experience in using TNCs, 15 (7.5%) respondents have 1 to 6 months of experience, 29 (14.5%) respondents have 6 months to 1 year of experience, 63 (31.5%) respondents have 1 to 2 years of experience, and 86 (43%) respondents have 2 years or more of experience in using TNCs. Consequently, almost the majority of respondents have 2 years or more of experience in using TNCs.

5.2 Scale Measurement

5.2.1 Reliability Test

The below-mentioned Table 5.7 demonstrates the “Cronbach’s Coefficient Alpha Test Results” that were gathered. Between the seven different independent variables, Hedonic Motivation (HM) reached 0.952, which is the highest Cronbach’s alpha value. While Price Value (PV) attained 0.804, which is the lowest Cronbach’s alpha value. The variables that have nearly 0.9 as a Cronbach's alpha value indicates high level of reliability and appropriate internal dimension on the scale (George & Mallery, 2003). Consequently, the obtained data that was gathered in this research is highly reliable.

Table 5.7: Reliability Statistics

<i>Variables</i>	<i>Constructs</i>	<i>Number of Items</i>	<i>Cronbach’s Alpha</i>
<i>IV 1</i>	Performance Expectancy (PE)	5	0.887
<i>IV 2</i>	Effort Expectancy (EE)	5	0.923
<i>IV 3</i>	Social Influence (SI)	5	0.862
<i>IV 4</i>	Facilitating Conditions (FC)	5	0.822
<i>IV 5</i>	Hedonic Motivation (HM)	7	0.952
<i>IV 6</i>	Price Value (PV)	4	0.804
<i>IV 7</i>	Habit (HT)	5	0.925
<i>DV</i>	Behavioral Intention (BI)	5	0.905

5.3 Inferential Analysis

5.3.1 Multicollinearity Test

As presented in below-mentioned Table 5.8, a “Multicollinearity Test” was applied, and in all the columns no correlation value was recorded higher than (.90). Therefore, no multicollinearity issue was noticed in this paper. Additionally, the correlation coefficient results are ranges from .073 to .709 which signifies a positive correlation. Thus, the relationships among the different provided variables are statistically significant.

Table 5.8: Pearson Correlation Coefficients

<i>Pearson Correlation Coefficients Test</i>								
	<i>PE</i>	<i>EE</i>	<i>SI</i>	<i>FC</i>	<i>HM</i>	<i>PV</i>	<i>HT</i>	<i>BI</i>
<i>PE</i>	1							
<i>EE</i>	.423**	1						
<i>SI</i>	.471**	.253**	1					
<i>FC</i>	.464**	.631**	.291**	1				
<i>HM</i>	.435**	.160*	.482**	.174*	1			
<i>PV</i>	.162*	.131	.335**	.238**	.488**	1		
<i>HT</i>	.476**	.073	.441**	.139*	.604**	.343**	1	
<i>BI</i>	.564**	.280**	.550**	.327**	.590**	.418**	.709**	1

** . Correlation showed is significant at the 0.01 level (2-tailed).

* . Correlation showed is significant at the 0.05 level (2-tailed).

5.3.2 Multiple Linear Regression (MLR)

Based on the below-mentioned Table 5.9, R^2 of .640 shows that 64% of the difference in the dependent variable Behavioral Intention (BI) is clarified by all of the proposed independent variables of Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Price Value (PV), and Habit (HT). Furthermore, the remaining 36% of the dissimilarity can be described by further aspects and factors that were not considered in this research.

Table 5.9: Model Summary

<i>Model Summary</i>				
<i>Model</i>	<i>R</i>	<i>R²</i>	<i>Adjusted R²</i>	<i>Standard Error of the Estimate</i>
1	.800 ^a	.640	.626	.74616
a. Predictors: (Constant), HT, EE, PV, SI, PE, FC, HM				

In this research, ANOVA test was used to determine whether or not a significance variance was recorded in the treatment results under the presented numbers (Richter, 2012). The Table 5.10 explains that the F-value is 48.680 with 7 and 192 degrees of freedom (df). Likewise, the table below shows the probability of occurrence is 0.000^b, if there is no significant result between the different variables.

Table 5.10: ANOVA of MLR for Behavioral Intention (BI)

<i>ANOVA of MLR for Behavioral Intention (BI)</i>						
<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	Regression	189.718	7	27.103	48.680	.000 ^b
	Residual	106.896	192	.557		
	Total	296.614	199			
a. Dependent Variable: BI						
b. Predictors: (Constant), HT, EE, PV, SI, PE, FC, HM						

Furthermore, the calculated F value is 48.680 and them mean square is 27.103 and 0.557, which can conclude that there is a significant. Similarly, the independent variables (Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Hedonic Motivation (HM), Price Value (PV), and Habit (HT)) can be used to describe the dependent variable Behavioral Intention (BI) [F = 48.680, p < 0.000^b].

Table 5.11: Parameter Estimates of the Constructs

Model		Coefficients				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.131	.367		-.356	.722
	Performance Expectancy (PE)	.166	.064	.156	2.595	.010
	Effort Expectancy (EE)	.087	.064	.078	1.353	.178
	Social Influence (SI)	.163	.056	.157	2.911	.004
	Facilitating Conditions (FC)	.066	.075	.053	.883	.378
	Hedonic Motivation (HM)	.096	.063	.094	1.530	.128
	Price Value (PV)	.118	.053	.115	2.218	.028
	Habit (HT)	.382	.049	.456	7.773	.000
Dependent Variable: Behavioral Intention (BI)						

According to Table 5.11, the values presented to demonstrate that Performance Expectancy (PE), Social Influence (SI), Price Value (PV), and Habit (HT) are positively correlated to the behavioral intention of using TNCs as the resulted p-value were below <0.05. Thus, H1, H3, H6, and H7 are supported and significant.

However, the variables of Effort Expectancy (EE), Facilitating Conditions (FC), and Hedonic Motivation (HM) are not positively correlated to the behavioral intention of using TNCs because the resulted p-value of these variables were higher than >0.05. Subsequently, H2, H4, and H5 are not supported and not significant.

Consequently, the regression equation is written as follows:

$$\text{Behavioral Intention (BI)} = - 0.131 + (\text{PE}) 0.166 + (\text{EE}) 0.087 + (\text{SI}) 0.163 + (\text{FC}) 0.066 + (\text{HM}) 0.096 + (\text{PV}) 0.118 + (\text{HT}) 0.382$$

5.3.3 Moderating Effects

The following tables shows the relationship between the factors of gender, age, payment method, usage rate, and usage experience and the variables of UTAUT2 model, to understand the possibility of any moderating effect. Accordingly, T-test and ANOVA tests were used in order to understand that relationship.

Table 5.12: Gender T-Test Summary

Gender T-Test		
	F	Sig.
Performance Expectancy (PE)	3.083	.081
Effort Expectancy (EE)	.369	.545
Social Influence (SI)	.324	.570
Facilitating Conditions (FC)	5.423	.021
Hedonic Motivation (HM)	.220	.639
Price Value (PV)	4.907	.028
Habit (HT)	2.642	.106
Behavioral Intention (BI)	.174	.677

The above-mentioned table 5.12, shows that “Gender” as a factor had moderating effects on Facilitating Conditions (FC) and Price Value (PV) variables only, as they both recorded lower p-value than <0.05; however, the rest of the variables didn’t not show any significant impact from payment method, as they resulted higher than >0.05 as a p-value.

Table 5.13: Age ANOVA Summary

Age ANOVA Test		
	F	Sig.
Performance Expectancy (PE)	1.872	.157
Effort Expectancy (EE)	.140	.869
Social Influence (SI)	3.376	.036
Facilitating Conditions (FC)	1.120	.328
Hedonic Motivation (HM)	2.897	.058
Price Value (PV)	5.133	.007
Habit (HT)	4.029	.019
Behavioral Intention (BI)	3.453	.034

The above-mentioned table 5.13, shows that “Age” as a factor had moderating effects on some of the UTAUT2 variables. Consequently, age had moderating effects on the variables of Social Influence (SI), Price Value (PV), Habit (HT), and Behavioral Intention (BI) that were significantly resulted lower p-value than <0.05 . However, age didn’t have much impact on the variables of Performance Expectancy (PE), Effort Expectancy (EE), Facilitating Conditions (FC), and Hedonic Motivation (HM) that recorded higher than >0.05 as a p-value.

Table 5.14: Payment Method T-Test Summary

Payment Method T-Test		
	F	Sig.
Performance Expectancy (PE)	.669	.414
Effort Expectancy (EE)	3.895	.050
Social Influence (SI)	3.085	.081
Facilitating Conditions (FC)	5.549	.019
Hedonic Motivation (HM)	1.474	.226
Price Value (PV)	.000	.995
Habit (HT)	.103	.748
Behavioral Intention (BI)	1.108	.294

The above-mentioned table 5.14, shows that “Payment Method” as a factor had moderating effects on Effort Expectancy (EE) and Facilitating Conditions (FC) variables only, as they both recorded lower p-value than <0.05 ; however, the rest of the variables didn’t show any significant impact from payment method, as they resulted higher than >0.05 as a p-value

Table 5.15: Usage Rate ANOVA Summary

Usage Rate ANOVA Test		
	F	Sig.
Performance Expectancy (PE)	12.066	.000
Effort Expectancy (EE)	.776	.542
Social Influence (SI)	3.471	.009
Facilitating Conditions (FC)	.604	.661
Hedonic Motivation (HM)	2.294	.061
Price Value (PV)	.301	.877
Habit (HT)	15.358	.000
Behavioral Intention (BI)	9.982	.000

The above-mentioned table 5.15, illustrates that the “Usage Rate” as a factor had moderating effects on some of the UTAUT2 variables. Thus, the significantly affected variables were Performance Expectancy (PE), Social Influence (SI), Habit (HT), and Behavioral Intention (BI), as they resulted lower p-value than <0.05 . Nevertheless, usage rate didn’t have any impact on the variables of Effort Expectancy (EE), Facilitating Conditions (FC), Hedonic Motivation (HM), and Price Value (PV) that recorded higher p-value than >0.05 .

Table 5.16: Usage Experience ANOVA Summary

Usage Experience ANOVA Test		
	F	Sig.
Performance Expectancy (PE)	2.786	.028
Effort Expectancy (EE)	3.019	.019
Social Influence (SI)	1.019	.399
Facilitating Conditions (FC)	3.566	.008
Hedonic Motivation (HM)	2.282	.062
Price Value (PV)	.705	.590
Habit (HT)	1.984	.098
Behavioral Intention (BI)	1.671	.158

The above-mentioned table 5.16, demonstrates that the “Usage Experience” as a factor had moderating effects on some of the UTAUT2 variables. Therefore, the significantly affected variables were Performance Expectancy (PE), Effort Expectancy (EE), and Facilitating Conditions (FC), as they resulted lower p-value than <0.05 . On the other side, usage experience didn’t show any effect on the variables of Social Influence (SI), Hedonic Motivation (HM), Price Value (PV), Habit (HT), and Behavioral Intention (BI), because they recorded higher p-value than >0.05 .

5.3.4 Bias Differences Test

Table 5.17: Bias Differences T-Test

Group Statistics						Levene's Test for Equality of Variances	
	G	N	Mean	Std. Deviation	Std. Error Mean	F	Sig.
Behavioral Intention (BI)	1.00 ON	100	5.0480	1.27545	.12754	.617	.433
	2.00 OFF	100	4.7060	1.14467	.11447		

In order to check data bias, a T-test was implemented to trace the bias difference among the dependent variable of Behavioral Intention (BI) within the 200 distributed questionnaires. Accordingly, the above-mentioned Table 5.17, shows that no bias difference was recorded between the online (100 Respondents) and offline (100 Respondents) distributed questionnaires. Therefore, the significant between the online and offline questionnaires were higher than > 0.05. Subsequently, the P-value was .433 and the F-value was .617.

CHAPTER 6: DISCUSSION, FUTURE IMPLICATIONS, AND CONCLUSION

In this chapter, the summaries and discussions will be presented about the general statistical analysis and the significant findings based on what was mentioned earlier of the results in chapter four. Likewise, this thesis chapter will also include the managerial implications, limitations, as well as recommendations for future studies alongside an inclusive conclusion about this research study.

6.1 Summary of Literature Review

This study went through different angles and dimensions that are related to the smartphones, apps in general and TNCs in specific. Undoubtedly, this paper highlighted the history and development of the smartphones and the new era of adopting apps as a background, then the literature chapter went through a broad view of the TNCs development and history, and then it was narrowed to Egypt as it is the focus of this paper.

Afterward, the research highlighted the consumer's decision process which is significant to understand how and why to take certain actions to accept or use services such as the TNCs services and apps. Accordingly, it was also important to study and highlight the factors that influence the decision as well as the cognitive and affective antecedents that affects the consumer's behavioral intention to use these type of transportation services.

Consequently, aspects like mobile marketing, word-of-mouth, information availability, price, delivery of incentives, service quality, trust and privacy, and much more were provided and explained to understand what affects the consumers' intention to use certain product/service such as (TNCs).

6.2 Summary of Statistical Analysis

6.2.1 Summary of Descriptive Analysis

Table 6.1: Summary of the demographic profiles' results

<i>Profile</i>	<i>Category</i>	<i>Frequency</i>	<i>Percent (%)</i>
<i>Gender</i>	Female	142	71.0
	Male	58	29.0
<i>Age Categorization</i>	18 years or less	0	0
	19 to 34 years	184	92.0
	35 to 49 years	12	6.0
	50 years or more	4	2.0
<i>Respondents who are using TNCs</i>	Yes	200	100.0
	No	0	0
<i>Payment Method</i>	I pay for TNC myself	183	91.5
	I use someone else's credit	17	8.5
<i>Usage Rate</i>	Almost every day	49	24.5
	Once a week	28	14.0
	A few times a week	49	24.5
	A few times a month	51	25.5
	A few times a year	22	11.0
	Other	1	.5
<i>Respondents experience with TNCs</i>	Less than 1 month	7	3.5
	1 to 6 months	15	7.5
	6 months to 1 year	29	14.5
	1 to 2 years	63	31.5
	2 years or more	86	43.0

As shown in Table 6.1, the demographic profile elements of the research's respondents present a considerable variance between the total numbers of female and male respondents. Therefore, the majority of TNCs' users are females, which is interesting that the gender could

be a major aspect of studying UTAUT2 and consumer behavior towards TNC's in Egypt. In China, Chen and Salmanian (2017), also found in their study that (58%) of females are using TNCs in comparison to (39%) of males, which is a prominently large number.

Likewise, the mainstream of the volunteered respondents were between the age group of 19 to 34 years, and that was close also to the majority of the age group (25 to 30 years) who are using TNCs services in China (Chen & Salmanian, 2017). This indicates the strong connection of the millennial generation towards technology.

Furthermore, all the research respondents have used TNCs' services, and the majority of them pay for TNCs' services by themselves instead of using someone's credit. Besides, the respondents are mainly using the TNCs' services a few times a month, and most of them have 2 years or more of experience in using TNCs.

6.2.2 Summary of Inferential Analysis

Table 6.2: Summary of the Inferential Analysis

<i>Hypotheses</i>	<i>Standardized Estimate</i>	<i>Multiple Linear Regression (MLR)</i>	
	Result	Result	Comments
H1: Performance Expectancy (PE) is positively correlated to the behavioral intention of using TNCs.	.156	.010	Supported
H2: Effort Expectancy (EE) is positively correlated to the behavioral intention of using TNCs.	.078	.178	Not Supported
H3: Social Influence (SI) is positively correlated to the behavioral intention of using TNCs.	.157	.004	Supported
H4: Facilitating Conditions (FC) is positively correlated to the behavioral intention of using TNCs.	.053	.378	Not Supported
H5: Hedonic Motivation (HM) is positively correlated to the behavioral intention of using TNCs.	.094	.128	Not Supported
H6: Price Value (PV) is positively correlated to the behavioral intention of using TNCs.	.115	.028	Supported
H7: Habit (HT) is positively correlated to the behavioral intention of using TNCs.	.456	.000	Supported

According to the above-mentioned Table 6.2, the MLR results present that that Performance Expectancy (PE), Social Influence (SI), Price Value (PV), and Habit (HT) are positively correlated to the behavioral intention of using TNCs. Accordingly, the hypotheses of H1, H3, H6, and H7 are supported. Conversely, Effort Expectancy (EE), Facilitating

Conditions (FC), and Hedonic Motivation (HM) are not positively correlated to the behavioral intention of using TNCs. Thus, the hypotheses of H2, H4, and H5 are not supported.

Additionally, the standardized estimates numbers and results signify that Habit (HT) variable is the strongest factor with positive impact on behavioral intention of using TNCs, followed by Social Influence (SI), Performance Expectancy (PE), Price Value (PV), Hedonic Motivation (HM), Effort Expectancy (EE), and Facilitating Conditions (FC).

6.2.2.1 Moderating Effects

Table 6.3: Summary of the Demographic Effects

<i>Proposed Relationship</i>	<i>Effect Type</i>	<i>Result</i>	<i>Comments</i>
Gender X (PE, EE, SI, FC, HM, PV, HT, and BI)	Moderating Effect	PE: .081	Not Supported
		EE: .545	Not Supported
		SI: .570	Not Supported
		FC: .021	Supported
		HM: .639	Not Supported
		PV: .028	Supported
		HT: .106	Not Supported
		BI: .677	Not Supported
Age X (PE, EE, SI, FC, HM, PV, HT, and BI)	Moderating Effect	PE: .157	Not Supported
		EE: .869	Not Supported
		SI: .036	Supported
		FC: .328	Not Supported
		HM: .058	Not Supported
		PV: .007	Supported
		HT: .019	Supported
		BI: .034	Supported
Payment Method X (PE, EE, SI, FC, HM, PV, HT, and BI)	Moderating Effect	PE: .414	Not Supported
		EE: .050	Supported
		SI: .081	Not Supported
		FC: .019	Supported
		HM: .226	Not Supported
		PV: .995	Not Supported
		HT: .748	Not Supported
		BI: .294	Not Supported
Usage Rate X (PE, EE, SI, FC, HM, PV, HT, and BI)	Moderating Effect	PE: .000	Supported
		EE: .542	Not Supported
		SI: .009	Supported
		FC: .661	Not Supported
		HM: .061	Not Supported
		PV: .877	Not Supported
		HT: .000	Supported
		BI: .000	Supported
Usage Experience X (PE, EE, SI, FC, HM, PV, HT, and BI)	Moderating Effect	PE: .028	Supported
		EE: .019	Not Supported
		SI: .399	Supported
		FC: .008	Not Supported
		HM: .062	Not Supported
		PV: .590	Not Supported
		HT: .098	Supported
		BI: .158	Supported

This Table 6.3, summarizes the relationship and the impact of demographic factors on all the UTUAT2 variables including the behavioral intention. Henceforward, factors of Gender, Age, Payment Method, Usage Rate, and Usage Experience were neither “not supported” nor “supported” in all the research’s variables. Accordingly, it can’t be assumed that a single factor can moderate all the variables, but it can be assumed that it might moderate some of the UTAUT2 variables. For instance, the results showed that Age had moderating effects of the variables of Social Influence (SI), Price Value (PV), Habit (HT), and Behavioral Intention (BI), while Gender as a factor had moderating effects on Facilitating Conditions (FC) and Price Value (PV) variables only.

Furthermore, payment method had moderating effects on Effort Expectancy (EE) and Facilitating Conditions (FC) variables. Usage rate as a factor had an impact on Performance Expectancy (PE), Social Influence (SI), Habit (HT), and Behavioral Intention (BI) variables. Finally, Usage Experience had moderating effects on Performance Expectancy (PE), Effort Expectancy (EE), and Facilitating Conditions (FC) variables.

6.3 Discussion of Major Findings

6.3.1 The Correlation between Performance Expectancy and Behavioral Intention in using TNCs

As mentioned earlier in this paper, performance expectancy (PE) indicates to the degree to which TNCs' users believe its services and apps will help them to develop and enhance their performance. This aligns with the findings discovered by Chen and Salmanian (2017), which showed that this variable positively influences the consumer towards the efficiency of TNCs' services and apps.

In fact, the results gathered in showed that majority of the respondents agreed on the degree of productivity and perceived usefulness that TNCs services offer. Consequently, there is a positive correlation between the variable of performance expectancy (PE) on behavioral intention to use TNCs services. In fact, productivity makes TNCs services and apps cope with shared-mobility and shared economy's main factor to offer access and support without demand for vehicles' ownership (Chen & Salmanian, 2017).

Moreover, participants mentioned that TNCs are beneficial and improve the efficiency in achieve more activities during their daily life, which explains the effectiveness associated with these types of services. Therefore, in light of the UTAUT / UTAUT2 models created by Venkatesh et al. (2003); and Venkatesh et al. (2012), H1 is supported.

6.3.2 The Correlation between Effort Expectancy and Behavioral Intention in using TNCs

As highlighted previously in this study, effort expectancy defined as the degree of which consumers consider TNCs' apps are easy and simple to use. However, the respondents' results of this research showed that effort expectancy doesn't have an effect on behavioral intention to use TNCs services. Henceforward, users consider TNCs' apps as they are not that

easy and clear to use. Which match with what Tan et al. (2011), mentioned on using apps in general, and highlight that apps that need excessive efforts, users can be discouraged from accepting or using them. Thus, in respect of the UTAUT / UTAUT2 models created by Venkatesh et al. (2003); and Venkatesh et al. (2012), H2 is not supported.

6.3.3 The Correlation between Social Influence and Behavioral Intention in using TNCs

As pointed previously, social influence was described as the degree to which important people like (i.e., families, co-workers, friends), assists and guides the user to believe that he/she should use a system or technology like (TNCs). The results presented in this paper showed that there a positive correlation from the social influence factor towards the behavioral intention of using TNCs services.

As a matter of fact, consumers are persuaded by the recommendations, suggestions, and opinions of their important people, when determining which or whether TNCs should be selected. This result of social influence is similar to the findings defined or witnessed in Chen and Salmanian (2017) study that was also related to TNCs' services and apps. Hence, in light of the UTAUT / UTAUT2 models created by Venkatesh et al. (2003); and Venkatesh et al. (2012), H3 is supported.

6.3.4 The Correlation between Facilitating Conditions and Behavioral Intention in using TNCs

As emphasized earlier, facilitating conditions means the extent to which an external infrastructure can affects consumers' intention to use new technology such as TNCs services apps. The findings in this research presented the negative relationship between on behavioral intention to use TNCs services, which was the opposite and accepted in Chen and Salmanian

(2017) research. However, this is not the only construct that provides a negative result in understanding the behavioral intention of the consumers towards TNCs services and apps.

Furthermore, when consumers find TNCs' apps productive and they seek others opinion and suggests, they eliminate the demand for support infrastructure. Accordingly, this justifies why facilitating conditions are discovered to be irrelevant in predicting the behavioral intention since the variables of performance expectancy and social influence that were mentioned in this paper (Venkatesh et al., 2003). Consequently, in view of the UTAUT / UTAUT2 models created by Venkatesh et al. (2003); and Venkatesh et al. (2012), H4 is not supported.

6.3.5 The Correlation between Hedonic Motivation and Behavioral Intention in using TNCs

As mentioned prior, hedonic motivation factor refers to the level of pleasure and enjoyment associated with the technology that the user experience when he/she use, in this paper the technology is TNCs services and apps. The hedonic motivation variable was supported in the several studies Venkatesh et al., (2012); Chang, (2012); Arenas-Gaitán (2015); and Chen and Salmanian (2017).

However, this research findings showed negative correlation between hedonic motivation on behavioral intention in using TNCs services and apps. Correspondingly, users do not experience high levels of enjoyment, pleasure, and entertainment when they use TNCs services and apps. Henceforth, in respect of the UTAUT2 model created by Venkatesh et al. (2012), H5 is not supported.

6.3.6 The Correlation between Price Value and Behavioral Intention in using TNCs

As stressed beforehand, price value refers to whether consumers view technology like TNCs are worth its value or not (Venkatesh et al., 2012). The findings in this paper proved that price value imposes a notably intermediate positive influence on behavioral intention in adopting and using TNCs services. This implies that TNCs' consumers carefully assess financial variances between the available transportation modes and providers.

In a nutshell, TNCs' users are price sensitive, and they evaluate the service alongside other factors before taking the purchase decision. According to Chen and Salmanian (2017), price value is associated to the current shared economy research, in which it shows a significant part as the practice of idle resources that reduces monetary costs. Therefore, in view of the UTAUT2 model created by Venkatesh et al. (2012), H6 is supported.

6.3.7 The Correlation between Habit and Behavioral Intention in using TNCs

As stated before, habit indicates the automatic behavior associated of using a certain technology or system such as TNCs. The findings of this research showed that habit is the strongest factor and predictor of behavioral intention to use TNCs' services and apps. This positively aligns with work of Venkatesh et al. (2012); Kit et al. (2014); and Chen and Salmanian (2017).

As a result, based on the study survey, consumers are addicted to use TNCs' services and apps. Liao, Palvia, and Lin (2006) mentioned that the use of certain apps becomes a more of a routine, thus, habit will be an added factor and element that raises the behavioral intention to stay using particular systems or apps. Consequently, in light of the UTAUT2 model created by Venkatesh et al. (2012), H7 is supported.

6.4 Managerial Implications

The future managerial implications that suggested by this paper to business and marketing practitioners in the transportation industry services to support them in evaluating successful factors for developing, enhancing, and sustain TNCs services and apps.

The factors of habit, social influence, performance expectancy, and price value should be taken into consideration because these variables are the most noteworthy on the behavioral intention of using TNCs in Egypt.

Farther, creating TNCs' services and apps that enhance usefulness, simplicity, and rich information, developers and system designers should try to strengthen consumers' habit with value-added upgrades and services regularly.

Likewise, developers should focus on the TNCs' services and apps functionality as well as usability from the customers' standpoint separately from designing apps and services that are easy to use, access, and navigate. As a matter of fact, Chen and Salmanian (2017) mentioned that TNCs should prioritize the accessibility and the simplicity of its apps.

Additionally, since consumers' adoption and purchase decisions are created based on ratings and reviews, TNCs marketers must keep the right image and quality by solving the problems, provide instant response to negative and positive feedback to help consumers make better decisions. Besides, marketers of TNCs should increase the number of incentives to consumers, which will return of higher usage rate because according to this paper the users are keen and sensitive to the monetary costs of TNCs services.

Due to the strong competition and other methods of computing, TNCs' consumers are considering to get the most attainable high value with low monetary costs. For example,

subsidizing the prices of the services that allows the opportunity of dominant a superior market share and consequently better consumer's adoption and usage of TNC's services (Chen and Salmanian, 2017).

Generally, practitioners can enhance and develop the TNCs' services by understanding and evaluate the performance expectancy in terms of the services performance and usability, effort expectancy in terms of the services and apps clearness and easiness, social influence in terms of seeking advice of other important people, facilitating conditions in terms of information and knowledge availability, hedonic motivation in terms of the services' level of pleasure and fun, price value in terms of the value gained and pricing strategies, and lastly habit in terms of service usage as a daily commuting method.

Lastly, this paper highly suggests that the research and development department in each company should work hand by hand with the marketing department to study the factors that influence the consumers to use the current services, the new ones (e.g., Uber Bus and Careem Bus) as well as the future ones using the framework of UTAUT2 model. The implementation of this model will provide better understanding for TNCs to understand the factors that are associated with the consumers' intention to use their services and apps.

6.5 Limitations of the Study

This research paper had faced some limitations that would be better if it can be solved and tackled on the future studies. Firstly, the main limitation was the population of the study, which was surveying a non-random sample of TNCs users in Egypt over the internet and self-administered surveys in particular areas. Also, the size of the sample (200 Respondents) was limited for this study, which is considered as a limitation. Accordingly, the results gathered cannot be generalized, and thus, the research lacks external validity. Moreover, this study didn't present multi-side models that includes the drivers' side and their behavior towards the TNCs' services, as it focused only on the riders' angle.

Furthermore, this study was limited to investigate the certain variables that affect the consumers' behavior intention to use the TNCs services and apps in Egypt by applying the UTAUT2 framework only. Therefore, other dimensions and aspects might be interesting (e.g., service quality, trust, privacy, pricing systems and structure) to be tested and analyzed.

6.6 Recommendations for Future Research

In order to apply the same techniques or replicate this study, a few of suggests and recommends was pointed to future researchers and scholars. In fact, as mentioned previously in the limitations section, the type and size of the sample might be modified and adjusted in order to have more generalized results, hence achieve an external validly. Likewise, other geographical areas and zones (e.g. Alexandria, Tanta, Mansoura, Damanshour, etc.) or other zones regional or international might be interesting in replicating this study.

Furthermore, selecting a specific TNC (e.g., Uber, Careem, Swvl) or specific method such as the newly announced services (e.g., Uber Bus and Careem Bus) will be highly recommend for future studies and research.

Moreover, applying different methodology is one of the most recommended advice from this study. Actually, this study was focusing on applying surveys only to test the UTAUT2 model; accordingly, the quantitative method was used. Therefore, it is recommended to use a qualitative approach in order to reach more comprehensive and concrete results. As an example, interview different TNCs' employees and practitioners or requesting big data set of the consumers' reviews and feedback on their rides from each TNC in order to fully understand and utilize the consumers' behavior and satisfaction.

Lastly, new dimensions might be added to future studies on UTAUT2 model like privacy and trust, because both aspects are predictable to make an impact on certain consumer's behavioral intention to use TNCs services and apps. Equally, rather than applying the UTAUT2 model, new frameworks, models, or theories might be interesting to investigate and applied on TNCs, such as studying the service quality of the TNCs using the model of "SERVQUAL" or "SERVPERF."

6.7 Conclusion

There is no doubt that smartphones and digitalization have shaped the path for new business models to form and develop such as shared-economy or shared-mobility. Since transportation is one of the most important and controversial topics in Egypt, it is vital to focus and observe the market growth of the new TNCs in the Egyptian market and how the Egyptian consumer react to these type services.

Accordingly, this paper aimed to understand the Egyptian consumer behavior and his/her intention to use these TNCs services and apps. Therefore, after surveying 200 respondents, the key factors that influence the behavioral intention in using TNCs has been successfully studied and examined by applying the UTAUT2 model.

In fact, the research findings discovered that Social Influence (SI), Performance Expectancy (PE), Habit (HT), and Price Value (PV) are positively correlated to the behavioral intention of using TNCs in Egypt. However, other factors like the Effort Expectancy (EE), Hedonic Motivation (HM), and Facilitating Conditions (FC), are not positively correlated to the behavioral intention of using TNCs in Egypt. Overall, the results achieved from this study are certainly beneficial for the future researchers to replicate the study or for the business practitioners who are interested in understanding the consumers' behavioral intention towards TNCs, in order to develop their marketing strategies.

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Appendix A: IRBs Approval

CASE #2018-2019-039



To: Islam Salah El Din
Cc: Nesrine Azmy
From: Atta Gebril, Chair of the IRB
Date: Nov. 1, 2018
Re: Approval of study

This is to inform you that I reviewed your revised research proposal entitled "**The Cognitive and Affective Antecedents to Consumer Behavior Towards On-demand Transportation Services in Egypt**" and determined that it required consultation with the IRB under the "expedited" category. As you are aware, the members of the IRB suggested certain revisions to the original proposal, but your new version addresses these concerns successfully. The revised proposal used appropriate procedures to minimize risks to human subjects and that adequate provision was made for confidentiality and data anonymity of participants in any published record. I believe you will also make adequate provision for obtaining informed consent of the participants.

This approval letter was issued under the assumption that you have not started data collection for your research project. Any data collected before receiving this letter could not be used since this is a violation of the IRB policy.

Please note that IRB approval does not automatically ensure approval by CAPMAS, an Egyptian government agency responsible for approving some types of off-campus research. CAPMAS issues are handled at AUC by the office of the University Counsellor, Dr. Ashraf Hatem. The IRB is not in a position to offer any opinion on CAPMAS issues, and takes no responsibility for obtaining CAPMAS approval.

This approval is valid for only one year. In case you have not finished data collection within a year, you need to apply for an extension.

Thank you and good luck.

A handwritten signature in black ink that reads "Atta Gebril".

Dr. Atta Gebril
IRB chair, The American University in Cairo
2046 HUSS Building
T: 02-26151919
Email: agebril@aucegypt.edu



Institutional Review Board
The American University in Cairo
AUC Avenue, P.O. Box 74
New Cairo 11835, Egypt.
tel 20.2.2615.1000
fax 20.2.27957565
Email: aucirb@aucegypt.edu

جمهورية مصر العربية



الجهاز المركزي للتعبئة العامة والإحصاء

قرار رئيس الجهاز المركزي للتعبئة العامة والإحصاء

بالتفويض

رقم (٧٨٥) لسنة ٢٠١٩/٢٠١٨

في شأن قيام الباحث / إسلام ناصر صلاح الدين أسعد / المسجل لدرجة الماجستير / قسم الصحافة والإعلام / كلية الشئون الدولية والسياسات العامة / الجامعة الأمريكية بالقاهرة . بإجراء دراسة ميدانية بعنوان : (التساوق المعرفية والتأثيرية لسلوك المستخدم نحو خدمات شركات النقل حسب الطلب في مصر) .

رئيس الجهاز

- بد الإطلاع على القرار الجمهوري رقم (٢٩١٥) لسنة ١٩٦٤ بشأن إنشاء الجهاز المركزي للتعبئة العامة والإحصاء .
- وعلى قرار رئيس الجهاز رقم (٢٣١) لسنة ١٩٦٨ في شأن إجراء الإحصاءات والتعدادات والاستقصاءات والاستقصاءات .
- وعلى قرار رئيس الجهاز رقم (١٣١٤) لسنة ٢٠٠٧ بشأن التفويض في بعض الاختصاصات .
- وعلى كتاب / الجامعة الأمريكية بالقاهرة - الوارد للجهاز في ٢٠١٨/١١/١٨ .

المادة

مادة ١: يتقوم الباحث/ إسلام ناصر صلاح الدين أسعد / المسجل لدرجة الماجستير/ قسم الصحافة والإعلام / كلية الشئون الدولية والسياسات العامة / الجامعة الأمريكية بالقاهرة - بإجراء الدراسة الميدانية المشار إليها علانية .

مادة ٢: تجرى الدراسة على عينة عشوائية حجمها (٢٠٠) مائتان مفردة من مستخدمي خدمات شركات النقل حسب الطلب بمدينة (أوبر - كريم وأخرى) وذلك خلال شبكات التواصل الاجتماعي على الإنترنت بالإضافة إلى توزيع يدوي لبعض المتطوعين (الجمهور المصري العام) بمختلفة القاهرة .

مادة ٣: تجمع البيانات اللازمة لهذه الدراسة بموجب الاستمارة المعدة لذلك وتطبق (باللغة العربية الانجليزية) وعدد صفحاتها أربع صفحات معتمد كل صفحة منها بخاتم الجهاز المركزي للتعبئة العامة والإحصاء .

مادة ٤: يراعى مواءمة مفردات العينة . وسرية البيانات الفردية طبقا لقانون الجهاز رقم (٣٥) لسنة ١٩٦٦ والمعدل بالقانون رقم (٢٨) لسنة ١٩٨٢ وعدم استخدام البيانات التي يتم جمعها لأغراض أخرى غير أغراض هذه الدراسة .

مادة ٥: يجري العمل الميداني خلال شهرين من تاريخ صدور هذا القرار .

مادة ٦: يوافق الجهاز المركزي للتعبئة العامة والإحصاء بنسخة من النتائج النهائية لهذه الدراسة .

مادة ٧: يلتزم الباحث / إسلام ناصر صلاح الدين أسعد - بإبلاغ مدير أمن محافظة القاهرة بصورة من هذا القرار وقبول البدء في التنفيذ مرفقا بها بيانات القائمين بالدراسة الاسم - الرقم القومي - تاريخ بدء وانتهاء تنفيذ الدراسة بمحافظة القاهرة) .

مادة ٨: ينفذ هذا القرار من تاريخ صدوره .

صدر في ٢٠١٨/١٢/٢٤

محمد مندوح محمد
مدير عام الإدارة العامة للأمن



Appendix C: Informed Consent



Documentation of Informed Consent for Participation in Research Study

Project Title: The Cognitive and Affective Antecedents to Consumer Behavior Towards On-demand Transportation Services in Egypt

Principal Investigator: Islam Nasser Salah El Din Asaad and my email is (islam_nasser@aucegypt.edu)

You are being asked to participate in a research study. The purpose of the research is to understand the cognitive and affective antecedents to consumer behavior towards on-demand transportation services in Egypt, through understanding how the consumers make their decisions towards these types of on-demand mobility services, and the findings may be published and presented. The expected duration of your participation is 10 to 15 minutes.

The procedures of the research will be based on an online questionnaire that will be conducted as well as self-administered questionnaire to reach the selected participants who are using transportation network companies.

There will not be certain risks or discomforts associated with this research.

There will be benefits to you from this research. The potential benefits associated with this research will be accomplished by utilizing the position of these transportation network companies in the consumer decision process, and to fully understand the cognitive and affective antecedents of the selected sample.

The information you provide for purposes of this research is anonymous, because the research does not directly require names or personal data.

Questions about the research, your rights, or research-related injuries should be directed to Islam Nasser Salah El Din Asaad at (+20) 1003969755 or e-mail islam_nasser@aucegypt.edu

Participation in this study is voluntary. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue participation at any time without penalty or the loss of benefits to which you are otherwise entitled.

By clicking next, you agree that you have read and understood the information included in this form and agree to participate in this study

Date _____

Survey Number: _____

By answering this survey, you are accepting to contribute to a study by a master's student at the American University in Cairo about the cognitive and affective antecedents to consumer behavior towards on-demand transportation services in Egypt. Your participation is voluntary and you can withdraw from the study at any time. There are no consequences for withdrawing from the study, but completing the questionnaire is highly appreciated. This study presents no risk to participants and their identities are anonymous. In case you need to contact the researcher for any inquiry, please email Islam Nasser Asaad at islam_nasser@aucegypt.edu. Answering this survey will not take more than 10-15 minutes.

Section A: Demographic Profile

In this section, I would like you to fill in some of your personal details. Please tick your answer and your answers will be kept strictly confidential.

QA 1: What is your gender?

1. Female
2. Male

QA 2: Which age group do you fall into?

1. 18 years or less
2. 19 to 34 years
3. 35 to 49 years
4. 50 years or more

QA 3: Do you use Transportation Network Companies' (TNCs) apps such as (Uber, Careem, SWVL, etc.)?

1. Yes
2. No (**If the answer is NO, please don't answer the rest of the questions**)

QA 4: Do you personally pay for Transportation Network Companies' (TNCs) services or do you use somebody else's credit card?

1. I pay for TNCs myself
2. I use someone else's credit.

QA 5: How often do you use Transportation Network Companies (TNCs)?

1. Almost every day
2. Once a week
3. A few times a week
4. A few times a month
5. A few times a year
6. Other (Please Specify) _____

QA 6: How long have you been using TNCs?

- A. Less than 1 month
- B. 1 to 6 months
- C. 6 months to 1 year
- D. 1 to 2 years
- E. 2 years or more

Section B: UTAUT 2

In this section please indicate your level of agreement with the following statements regarding the importance of **Transportation Network Companies (TNCs)**. (Please circle one number per line as a response for each statement)

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
PE Performance Expectancy								
PE1	I find TNCs useful in my daily life.	1	2	3	4	5	6	7
PE2	Using TNCs increases my chances of achieving things that are important to me.	1	2	3	4	5	6	7
PE3	Using TNCs helps me accomplish things more quickly.	1	2	3	4	5	6	7
PE4	Using TNCs increases my productivity.	1	2	3	4	5	6	7
PE5	Overall, I would find TNCs to be advantageous.	1	2	3	4	5	6	7

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
EE Effort Expectancy								
EE1	Learning how to use these TNCs' apps is easy for me.	1	2	3	4	5	6	7
EE2	My interaction with TNCs' apps is clear and understandable.	1	2	3	4	5	6	7

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
EE3	I find TNCs' apps easy to use.	1	2	3	4	5	6	7
EE4	It is easy for me to become skillful at using TNCs' apps.	1	2	3	4	5	6	7
EE5	I find it easy to get TNCs' apps to do what I want it to do.	1	2	3	4	5	6	7

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
SI	Social Influence							
SI1	People who are important to me think that I should use TNCs.	1	2	3	4	5	6	7
SI2	People who influence my behavior think that I should use TNCs.	1	2	3	4	5	6	7
SI3	People whose opinions that I value prefer that I use TNCs.	1	2	3	4	5	6	7
SI4	Friend's suggestion and recommendation will affect my decision to use TNCs.	1	2	3	4	5	6	7
SI5	I would use TNCs because the proportion of my friends uses TNCs.	1	2	3	4	5	6	7

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
FC	Facilitating Conditions							
FC1	I have the resources necessary to use TNCs.	1	2	3	4	5	6	7
FC2	I have the knowledge necessary to use TNCs.	1	2	3	4	5	6	7

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
FC3	TNCs' apps are compatible with other technologies I use.	1	2	3	4	5	6	7
FC4	I can get help from others when I have difficulties using TNCs' apps.	1	2	3	4	5	6	7
FC5	Using TNCs is entirely within my control.	1	2	3	4	5	6	7

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
HM	Hedonic Motivation							
HM 1	Using TNCs is fun.	1	2	3	4	5	6	7
HM 2	Using TNCs is enjoyable.	1	2	3	4	5	6	7
HM 3	Using TNCs is entertaining.	1	2	3	4	5	6	7
HM 4	Using TNCs gives me pleasure.	1	2	3	4	5	6	7
HM 5	Using TNCs is exciting.	1	2	3	4	5	6	7
HM 6	Using TNCs is thrilling.	1	2	3	4	5	6	7
HM 7	Using TNCs is delightful.	1	2	3	4	5	6	7

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
PV	Price Value							
PV1	TNCs are reasonably priced.	1	2	3	4	5	6	7
PV2	TNCs are a good value for money.	1	2	3	4	5	6	7

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
PV3	At the current price, TNCs provide good value.	1	2	3	4	5	6	7
PV4	I have never cancelled a TNC due to high prices.	1	2	3	4	5	6	7

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
HT	Habit							
HT1	The use of TNCs has become a habit for me.	1	2	3	4	5	6	7
HT2	I am addicted to using TNCs.	1	2	3	4	5	6	7
HT3	I must use TNCs.	1	2	3	4	5	6	7
HT4	Using TNCs has become natural to me.	1	2	3	4	5	6	7
HT5	Using TNCs is something I do without thinking.	1	2	3	4	5	6	7

Section C: Behavioral Intention

In this section please indicate your level of agreement with the following statements regarding the behavioral intention of **Transportation Network Companies (TNCs)**. (Please circle one number per line as a response for each statement)

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
BI	Behavioral Intention							
BI1	I intend to continue using TNCs in the future.	1	2	3	4	5	6	7
BI2	I will always try to use TNCs in my daily life.	1	2	3	4	5	6	7

No.	Questions	Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
BI3	I plan to continue to use TNCs frequently.	1	2	3	4	5	6	7
BI4	I will often use TNCs in the future.	1	2	3	4	5	6	7
BI5	I will recommend others to use TNCs.	1	2	3	4	5	6	7

Thank You for Participating in this Survey ☺

Appendix E: Arabic Translated Questionnaire

رقم الاستبيان: _____

من خلال الإجابة على هذا الاستبيان، فأنت تقبل بالمساهمة في دراسة قام بها طالب بالماجستير في الجامعة الأمريكية في القاهرة حول السوابق المعرفية والتأثيرية لسلوك المستهلك نحو خدمات شركات النقل حسب الطلب في مصر. مشاركتك تطوعية ويمكنك الانسحاب من الدراسة في أي وقت. لا توجد عواقب للانسحاب من الدراسة، ولكن استكمال الاستبيان هو محل تقدير كبير. لا تمثل هذه الدراسة أي خطر على المشاركين وهوياتهم مجهولة وغير معروفة. في حال الرغبة في الاتصال بالباحث / إسلام ناصر صلاح الدين أسعد لأي استيضاح أو استفسار، يرجى إرسال بريد إلكتروني الي islam_nasser@aucegypt.edu

القسم أ: الملف الديموغرافي

في هذا القسم، يرجى استيفاء بعض بياناتك الشخصية و وضع علامة على إجابتك وسيتم الاحتفاظ بإجاباتك بسرية تامة.

١: ما هو جنسك؟

١. أنثى

٢. ذكر

٢: ما هي الفئة العمرية التي تمتلك؟

١. ١٨ سنة أو أقل

٢. ١٩ إلى ٣٤ سنة

٣. ٣٥ إلى ٤٩ سنة

٤. ٥٠ سنة أو أكثر

٣: هل تستخدم تطبيقات شركات شبكات النقل مثل (أوبر، كريم، سوبل، إلخ).

١. نعم

٢. لا (إذا كانت الإجابة "لا"، فيرجى عدم الإجابة على بقية الأسئلة).

٤. هل تستخدم بطاقة انتمان شخص آخر أم تدفع شخصياً لخدمات شركات شبكة النقل

أ- أدفع مقابل الشركات خدمات النقل بنفسي

ب- أستخدم بطاقة انتمان شخص آخر

٥: كم عدد المرات التي تستخدم فيها خدمات شركات النقل؟

١. كل يوم تقريبا

٢. مرة واحدة في الأسبوع

٣. عدة مرات في الأسبوع

٤. بضع مرات في الشهر

٥. بضع مرات في السنة

٦. أخرى (يرجى التحديد (_____)

٦: منذ متى وانت تستخدم هذه الخدمات لشبكات النقل؟

١. أقل من شهر

٢. شهر إلى ستة أشهر
 ٣. ستة أشهر إلى سنة
 ٤. سنة إلى سنتين
 ٥. عامين أو أكثر

القسم ب :

في هذا القسم، يرجى الإشارة إلى مستوى موافقتك على العبارات التالية فيما يتعلق بأهمية شركات خدمات النقل، يرجى وضع دائرة حول رقم واحد في كل سطر كاستجابة لكل عبارة

رقم	الأسئلة	ارفض بشدة	لاوافق إلى حد ما	لاوافق	محايد	وافق	وافق إلى حد ما	وافق بشدة
١	توقع الأداء							
١	أجد شركات خدمات النقل مفيدة في حياتي اليومية	١	٢	٣	٤	٥	٦	٧
٢	يؤدي استخدام شركات خدمات النقل إلى زيادة فرص في تحقيق أشياء مهمة بالنسبة لي	١	٢	٣	٤	٥	٦	٧
٣	يساعد استخدام هذه الشركات في إنجاز الأشياء بسرعة أكبر	١	٢	٣	٤	٥	٦	٧
٤	يؤدي استخدام هذه الشركات إلى زيادة الإنتاجية	١	٢	٣	٤	٥	٦	٧
٥	بشكل عام، أجد خدمات هذه الشركات مفيدة	١	٢	٣	٤	٥	٦	٧

رقم	الأسئلة	ارفض بشدة	لاوافق إلى حد ما	لاوافق	محايد	وافق	وافق إلى حد ما	وافق بشدة
ب	الجهد المتوقع							
١	تعلم كيفية استخدام تطبيقات شركات خدمات النقل أمر سهل بالنسبة لي	١	٢	٣	٤	٥	٦	٧
٢	إن تفاعلاتي مع هذه التطبيقات واضح ومفهوم	١	٢	٣	٤	٥	٦	٧
٣	أجد أن تطبيقات هذه الشركات سهلة الاستخدام	١	٢	٣	٤	٥	٦	٧
٤	من السهل بالنسبة لي أن أصبح ماهراً في استخدام تطبيقات شركات خدمات النقل	١	٢	٣	٤	٥	٦	٧
٥	أجد أنه من السهل تطويع تطبيقات هذه الشركات للحصول علي ما أريد القيام به	١	٢	٣	٤	٥	٦	٧

رقم	الأسئلة	ارفض بشدة	لاوافق إلى حد ما	لاوافق	محايد	وافق	وافق إلى حد ما	وافق بشدة
ج	التأثير الاجتماعي							
١	الناس المهموم بالنسبة لي يعتقدوا أنه ينبغي علي استخدام شركات خدمات النقل .	١	٢	٣	٤	٥	٦	٧
٢	يعتقد الأشخاص الذين يؤثرون على سلوكي أنه ينبغي علي استخدام شركات خدمات النقل .	١	٢	٣	٤	٥	٦	٧
٣	يفضل الأشخاص الذين يؤثرون علي قراراتي أن أستخدم شركات خدمات النقل	١	٢	٣	٤	٥	٦	٧

رقم	الأسئلة	ارفض بشدة	لا اوافق إلى حد ما	لا اوافق	محايد	وافق	أوافق إلى حد ما	أوافق بشدة
٤	سيؤثر اقتراح وتوصية صديق لي على قراري في استخدام هذه الشركات.	١	٢	٣	٤	٥	٦	٧
٥	أود أن أستخدم هذه الشركات لأن نسبة كبيرة من أصدقائي تستخدمها	١	٢	٣	٤	٥	٦	٧

رقم	الأسئلة	ارفض بشدة	لا اوافق إلى حد ما	لا اوافق	محايد	وافق	أوافق إلى حد ما	أوافق بشدة
د	العوامل المساعدة في الاستخدام							
١	لدي الموارد اللازمة لاستخدام شركات خدمات النقل	١	٢	٣	٤	٥	٦	٧
٢	لدي المعرفة اللازمة لاستخدام هذه الشركات	١	٢	٣	٤	٥	٦	٧
٣	تتوافق تطبيقات هذه الشركات مع التقنيات الأخرى التي أستخدمها	١	٢	٣	٤	٥	٦	٧
٤	يمكنني الحصول على مساعدة من الآخرين عندما أواجه صعوبات في استخدام تطبيقات هذه الشركات	١	٢	٣	٤	٥	٦	٧
٥	إن استخدام تطبيقات هذه الشركات يكون بالكامل في نطاق معرفتي	١	٢	٣	٤	٥	٦	٧

رقم	الأسئلة	ارفض بشدة	لا اوافق إلى حد ما	لا اوافق	محايد	وافق	أوافق إلى حد ما	أوافق بشدة
هـ	الدوافع النفسية							
١	إن استخدام شركات خدمات النقل أمر يثير البهجة	١	٢	٣	٤	٥	٦	٧
٢	استخدام هذه الشركات ممتع	١	٢	٣	٤	٥	٦	٧
٣	استخدام هذه الشركات أمر مسلي	١	٢	٣	٤	٥	٦	٧
٤	إن استخدام هذه الشركات يسعدني	١	٢	٣	٤	٥	٦	٧
٥	إن استخدام هذه الشركات أمر مثير	١	٢	٣	٤	٥	٦	٧
٦	إن استخدام هذه الشركات مشوق	١	٢	٣	٤	٥	٦	٧
٧	استخدام هذه الشركات أمر رائع	١	٢	٣	٤	٥	٦	٧

رقم	الأسئلة	ارفض بشدة	لا اوافق إلى حد ما	لا اوافق	محايد	وافق	أوافق إلى حد ما	أوافق بشدة
ل	القيمة السعرية							
١	خدمات شركات خدمات النقل تقدم بأسعار معقولة	١	٢	٣	٤	٥	٦	٧
٢	هذه الخدمات هي قيمة جيدة مقابل المال	١	٢	٣	٤	٥	٦	٧
٣	في الوقت الحالي ، تقدم هذه الشركات قيمة مرضية	١	٢	٣	٤	٥	٦	٧
٤	لم أقم أبداً بإلغاء طلب رحلة بسبب ارتفاع الأسعار	١	٢	٣	٤	٥	٦	٧

رقم	الأسئلة	ارفض بشدة	لا أوافق إلى حد ما	لا أوافق	محايد	وافق	أوافق إلى حد ما	أوافق بشدة
م	العادة							
١	أصبح استخدام هذه الشركات عادة بالنسبة لي	١	٢	٣	٤	٥	٦	٧
٢	أنا اداوم على استخدام هذه الشركات	١	٢	٣	٤	٥	٦	٧
٣	أشعر انه يجب علي استخدام هذه الشركات	١	٢	٣	٤	٥	٦	٧
٤	أصبح استخدام هذه الشركات أمراً طبيعياً بالنسبة لي	١	٢	٣	٤	٥	٦	٧
٥	استخدام هذه الشركات هو أمر أفعله دون تفكير	١	٢	٣	٤	٥	٦	٧

القسم ج: النوايا السلوكية

في هذا القسم، يرجى الإشارة إلى مستوى موافقتك على العبارات التالية فيما يتعلق بالنية السلوكية لشركات شبكة النقل (يرجى وضع دائرة حول رقم واحد في كل سطر كاستجابة لكل عبارة).

رقم	الأسئلة	ارفض بشدة	لا أوافق إلى حد ما	لا أوافق	محايد	وافق	أوافق إلى حد ما	أوافق بشدة
١	النوايا السلوكية							
١	أنوي مواصلة استخدام هذه الشركات في المستقبل	١	٢	٣	٤	٥	٦	٧
٢	سأحاول دائماً استخدام هذه الشركات في حياتي اليومية	١	٢	٣	٤	٥	٦	٧
٣	أخطط لمواصلة استخدام هذه الشركات بشكل متكرر	١	٢	٣	٤	٥	٦	٧
٤	غالباً سوف استخدم هذه الشركات في المستقبل	١	٢	٣	٤	٥	٦	٧
٥	سأوصي الآخرين باستخدام هذه الشركات	١	٢	٣	٤	٥	٦	٧

شكراً على المشاركة في هذا الاستبيان ☺