Journal of Business Strategies, Vol. 15 No.2, 2021, pp 99-112 *DOI:10.29270/JBS.15.2(21).06*

DISINCLINATION IN ADOPTING DIGITALIZED RIDE SHARING SERVICES OR E-HAILING SERVICES IN KARACHI

Ayesha Mushtaq and Dr. Sohaib Uz Zaman

ABSTRACT

This is the era of technology and urbanization. Things are modifying rapidly as trends exist only for short span of time then again it changes as fast as the culture of our growing population has been changing. The majority of product's consumers has gained the level of participation from Pakistan especially after inexperience of the e-hailing business in Karachi. As a result, with the assist of the technology acceptance model (TAM) this study has carefully analyze the elements influencing the levels of ride-hailing engagement. The effects are intended to provide factual and pragmatic insights into the reasons for the low utilization levels of ride-hailing services. The findings of this study are intended to assist governmental authorities and also e-hailing service officials in implementing effective and efficient user-friendly methods by addressing the components which are likely negatively impacting a person's participation decision. Beside this objective it concentrates on examining the cultural elements of Pakistan (Karachi) since it seems to be the primary audience for the acceptance of non-traditional modes of transportation like Uber, Careem & Bykea.

INTRODUCTION

As the trends are changing, lifestyles are also seeming unpredictable. We can expect but can't say it surely about what we will be up to in the next 5 years or 10 years. Considering this same unpredictable scenario few years back when our people travel by public transport or by their personal vehicles. It was the matter of disastrous issues in case of travelling by public transport. Our transportation industry was also facing serious problems of non-serious management, insufficient infrastructure & monetary funding were not sustainable and not enough as well. It is still at the same point especially in

underdeveloped countries like Pakistan. Due to this reason people preferred to have their own transport, for this reason number of vehicles are out of the box compared with previous year's data. Too much pollution & jam-packed roads, noise pollution, accidents and many other serious problems arouse. Increasing inflation also would not allow middle class and lower-class people to have their own vehicle.

In order to avoid such issues and to overcome the serious matters of poverty, inflation, traffic hazards, there was a way to put lower dependency over traditional transportation network. Increasing population in urban areas also enhanced the digitalization and motivate professionals to bring new developments in the society. Technological advancement has taken the ground of unexpected desires and untold needs of people. Trends moved towards the agencies & corporations for mutually understood policies and collective betterment of society. These agencies realized that assets possessions for long period with no justified usage is evitable. This unused asset possession can be utilized for sharing economy concept. Shared economy refers to overcome poverty issues. Sharing economy brings positive changes in current lifestyles. It motivates every sector to contribute themselves in this collective betterment approach. With the help of technology, those unutilized assets of common people bring reasonable solutions of transportation and we would be able to get most output from limited resources.

So apart from above discussion & current economy harming factors forced some agencies to start new ventures on the basis of technology with the help of internet-based applications. Now these new ventures came into existence under the names of UBER, CAREEM & BYKEA in the market and caused a real threat for conventional mode of transport. Uber as a part of sharing resources and economy made it successful that an asset or resource of one person can be availed or used by another individual in return of some economical amount (money) by means of digital application system in smart cell phones.

UBER first introduced & started its operations in March 2009 in San Francisco USA. Founders of such worth paying application and service are "*Garrett Camp" & "Trans Kalanick".* Application of Uber officially launched in the year 2011 and around 2015 it has been operating in more than 65 cities in 45 countries (Cusumano, 2015).

We have known this fact that every society is the mixture of different cultures and they have their own specifications & limitations. People of one class differ from another class so is the case with different countries. On the basis of this fact these agencies were also working to analyze the ratio of adoption of this unique digitalized e-hailing services all over the world. Our observation is restricted to only with Karachi division of Pakistan where we live. Our main aim of this research is to find out the behaviors & intentions of people of this culture (Karachi-Pakistan) regarding the availing of this technological trend in the shape of UBER< CAREEM & BYKEA.

Problem Statement

People from different societies have different mindsets and we can't say that people of every culture & society have some school of thoughts regarding adoption of new technology. According to Hofstede (2011), there are 6 dimensions exist on which individual possess their mentality. Those are '*uncertainty avoidance, individualism, masculinity, long time VS short time period orientation, gratification, self-discipline or self-restraint'*. On the basis of those dimension people possess different perceptions and expectations regarding the benefits and cons of particular thing, trend or service. According to Davis (1989), any adoption of availing any new benefit can be decided by two key variables, *Perceived Usefulness* & *Perceived Ease of Use.*

Comprising above detailed discussion we are able to construct a problem statement that is:

'Which elements affect the adoption of non-traditional mode of transport/ e-hailing services in an underdeveloped country'.

LITERATURE REVIEW

Sharing economic system refers to a set of rules or mechanism that enables the sharing or rental of underused belongings or offerings among people or groups via internet (Bostman, 2010). The e-riding accommodation, food service are the examples of sharing economy offerings. Uber is the pre-dominant gamers and also the pioneers of e-riding, along with this they have substantial stake in this business, and it is booming the economy besides, they have predicted economic benefits. In the same line, TAM is the most normally implemented version in concerned studies with figuring out and influencing

variables associated with adoption of a sure technology, consisting of the use of sharing financial system offerings. According to TAM study on technology adoption, there is limited empirical evidence on TAM with ride-hailing services like Grab in Malaysia and Uber in Pakistan. There are three types of qualities on which the conceptual model of believe within the sharing economic system is based. The awareness of this study lies within the *multidimensional elements of believe*. Ability, integrity, and benevolence are some of the components (Hawlitschek, et al 2016). These three beliefs are thought to have an impact on one's behavioral aim and integrity changed into listed as one of the sturdy results on trusting intentions in digital teams (Gefen et al, 2004; Tunio, et al., 2021). In addition, consider in sharing financial system may be considered in 3 distinct angles. Namely, *accept as true with in peer*, *believe in product* and *believe within the foundation*, additionally widely referred to as the *3P's* (Hawlitschek et al, 2016; Gilal, et al., 2020; Tunio, et al., 2021).

Digital Transformation

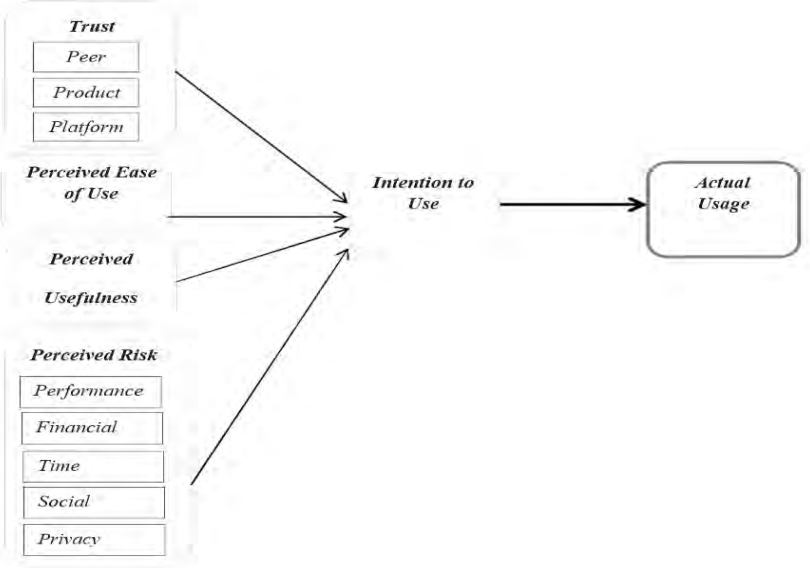
The digital transformation provides technical solutions and new ideas for business owners and customers thus Internet has modified our regular lives. For this variation human beings internationally have come virtually without a doubt. Digital technology is typically utilized to increase contact with consumers. The 'light organizations' (virtual agencies) are now assuming the 'heavy organizations' roles (physical or tangible corporations). Companies are linked to their customers through technology in the digital transformation (Tapscott, 1996).

Empowerment of Shared Economy

Shared economic system is produced due to the dramatic adjustments inside the usage of modern-day technology. Priory, it has been mentioned that the sector has grown to be digitalized and corporations are engaged through barriers, this leads to the facilitation of online marketers specifically.

With time passing by many people understood the conceptual difference between sharing-financial and on-demand system. For instance, most people call uber now instead of taxi. **'**On demand economic system', humans to buy personal offerings. In the "secondhand economy," patrons to customers are granted the right to own transitory physical commodities, implying that consumers are exchanging second-hand items.

Fig. 1

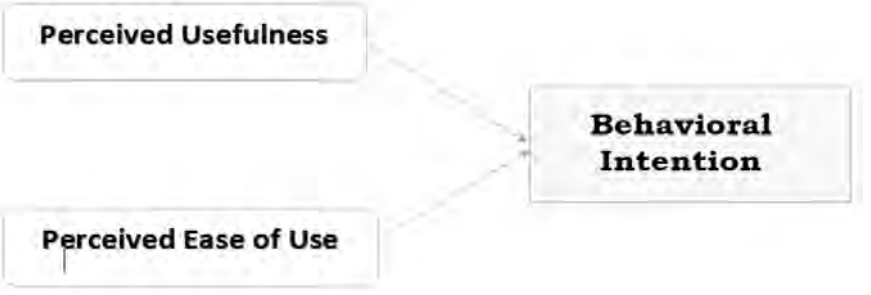


Technology Adoption Model

Along with the assist of advanced and powerful technology Companies attempt to compete within the diverging markets in this technology of globalization. For powerful implementation of digitalization in a marketplace, it's miles obligatory that the particular a blend of the local marketplace must not be overlooked at some point of strategy making plans and implementation.

TAM is usually regarded as the most accurate model for observing technology uptake in a variety of scenarios. There were loads of extensions in TAM however the very last model recommended with the aid of Davis (1989) has 3 additives which can be *perceived ease of use, perceived usefulness and behavioral goal.*

Fig. 2: Adopted Technology Adoption Model



The perception that this version of model increases the customer's notion regarding usefulness and technology ease of use leads towards the customer's behavioral intention. If users locate the technology beneficial and smooth to make use of, this will undoubtedly have an effect on the behavioral intention.

Culture

It defines as the way by which people solve their problems and reconciles their dilemmas (Hofstede, 2001) briefly, it defines as the traits or way of living which is shared by every other human being however, could differ from one group to another.

Hofstede's Cultural Dimensions

- ✓ Power distance
- ✓ Uncertainty Avoidance
- ✓ Individualism
- ✓ Masculinity

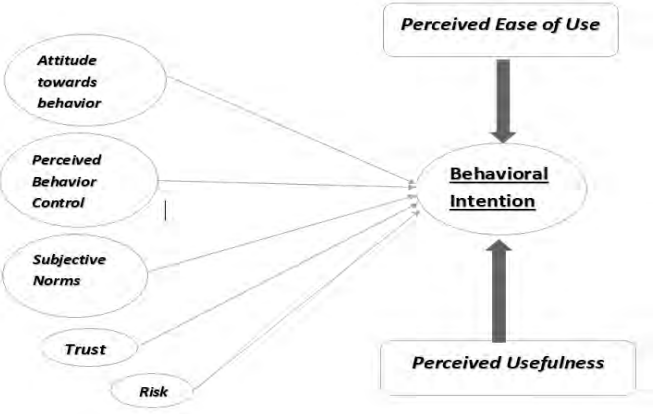
Theory of Planned Behavior

Technology as long as is in used will get attention. By this it will become widely accessible and efficient. There are some points that are taken into consideration when it comes to usage of technology whether it will be used in the society or not it all depends on its merits.

Research Hypothesis and Models

We focused on 2 models Technology adoption model (TAB) and Theory of Planned Behavior (TPB). According to these models we have developed some hypothesis that would be able to deliver the actual idea of our research question.

Fig. 3



Development of Hypotheses

H1: Power distance & uncertainty avoidance adversely affect the relationship between attitude and behavior control.

H2: The relationship between societal norms and behavioral intention towards shared services impacted by individualistic or collectivist factors.

H3: Perceived behavioral control towards buying intention is affected in high uncertain avoidance societies.

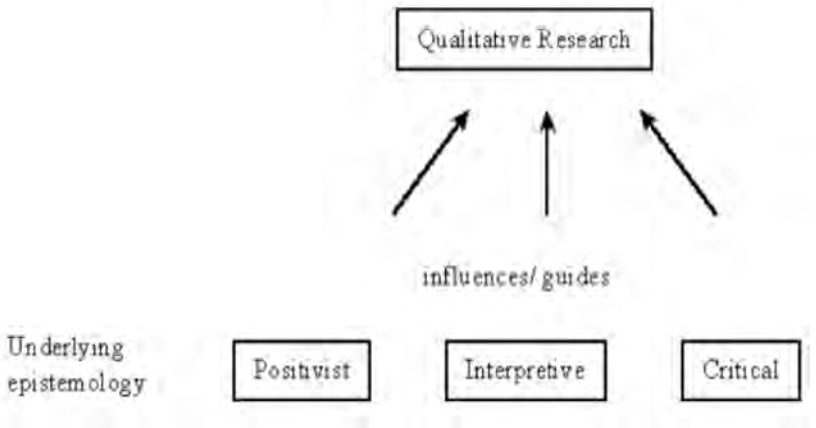
H4: A consumer's trust positively affects the behavioral intention towards purchase and availing e-hailing services.

H5: Higher the risk associated with the service, lower will be the consumer's intention to purchase or avail services.

RESEARCH METHODOLOGY

On the idea of assumptions and hypothesis the whole study has been carried out. The hidden assumptions can be recognized only by conducting qualitative research. The research instead relies upon at the philosophical expectations of the researchers. It is proven inside the graph underneath:

Fig. 4: Underlying hilosophical Assumptions



Research Design

The statements, test and surveys are included in this study design. The experience of clients regarding their use of service and product is being recognized by the researchers. Quantitative methods are constructed up or from the assessment or consequences of the consistently established statistics. The studies layout of this examine contains general customer queries of Uber in Karachi, Pakistan.

Questionnaire Design

In order to directly ask about the elements of the studies such questions are being prepared. To get the questions ready, we had to undergo numerous articles and observed the scale-measuring patterns.

Each of the questions has a metric attached to it on Likert scale from *1 to 5*.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Data Collection

For acquiring the facts for the particular venture primary and secondary strategies are used. The study collected its survey from clients of ride hailing industry for primary one and as for the other types latest and most related studies on sharing journey, shared economy and digitalized has been observed.

RESULTS AND DATA ANALYSIS

Descriptive Statistics

We firstly go for descriptive statistics via SPSS. In descriptive statistics we got little to no v2ariations in our data set. Our means are realistic and showing minor deviations while calculating actually.

Table 1: Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Behavioral Intention	198	4.00	1.50	5.50	4.1364	.70645
Attitude Towards Behavior	198	3.40	1.60	5.00	3.4859	.65833
Perceived Usefulness	198	3.60	1.40	5.00	3.1586	.81689
Perceived Ease of Use	198	4.00	1.00	5.00	3.2542	.82606
Subjective Norms	198	3.60	1.40	5.00	3.3333	.71588
Perceived Behavioral Control	198	3.75	1.25	5.00	3.3346	.77769
Trust	198	4.00	1.00	5.00	3.1465	.77358
Risk	198	4.00	1.00	5.00	3.3030	.96859
Valid N (list wise)	198					

Table 2: Descriptive Statistics

	Variance
Behavioral Intention	.499
Attitude Towards Behavior	.433
Perceived Usefulness	.667
Perceived Ease of Use	.682
Subjective Norms	.512
Perceived Behavioral Control	.605
Trust	.598
Risk	.938
Valid N (list wise)	

Variances of our variables also showing very little variations in data set which suggests that our population shows keen interest in availing e-hailing services and these minor variations in variance can be ignorable at a point where we get rationality from our responses of sample population.

T-Test

Applying *T-Test* over our responses collected from sample population at One-Sample Test, we found out that our dependent and independent variables are much significant.

Table 3: One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Behavioral Intention	82.389	197	.000	4.13636	4.0374	4.2354
Attitude Towards Behavior	74.507	197	.000	3.48586	3.3936	3.5781
Perceived Usefulness	54.408	197	.000	3.15859	3.0441	3.2731
Perceived Ease of Use	55.433	197	.000	3.25421	3.1384	3.3700
Subjective Norms	65.519	197	.000	3.33333	3.2330	3.4337
Perceived Behavioral Control	60.335	197	.000	3.33460	3.2256	3.4436
Trust	57.233	197	.000	3.14646	3.0380	3.2549
RIsk	47.985	197	.000	3.30303	3.1673	3.4388

The mean of *behavioral intention* is 4.1 that is our dependent variable in this research. And if this value varies up & down it would not deviate more than 0.7%. Similarly, if we take our independent variable *Risk,* the population that is perceiving risk while availing e-hailing services their average is only 3.3. If we consider the other independent variable that is *Subjective Norms.*

Perceived Usefulness and *Perceived Ease of Use* are also showing significant results along with the other independent variables, we can conclude that there are positive relationship exists among all independent and dependent variables.

Regression

Table 4: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.200[a]	.040	.005	.70480	.040	1.132	7

Table 5: Model Summary[b]

Model	Change Statistics		Durbin-Watson
	df2	Sig. F Change	
1	190[a]	.344	1.693

a. Predictors: (Constant), Risk, Perceived Behavioral Control, Trust, Attitude Towards Behavior, Subjective Norms, Perceived Usefulness, Perceived Ease of Use

b. Dependent Variable: Behavioral Intention.

Durbin-Watson's model that is used for testing autocorrelation in a model of its residuals (CFI, 2021). The level of acceptance value in Durbin-

Watson lies between 0-4 and if it is equal to 2, this means that there is no autocorrelation exist in residuals from regression analysis. But in our model of digitalized ride sharing services, Durbin-Watson is less than **2 i.e 1.693** so the level of chance to accept the model has increased and showing that there is autocorrelation exist among our dependent and independent variables. Also, our Test statistic with respect to Durbin-Watson is acceptable because it represents a perfect positive correlation.

Level of usefulness is a topic of interest so if we observe that how much this acceptance level of autocorrelation varies and is there any chance of involving error in this test statistics?

Here we found out less variations and only 0.7% chances of error exist. That is also indicating the relevancy and rationality of our variables and its results.

Coefficients

There are very less variations according to our beta values. Indicating we are moving towards the right direction. 'Standard coefficients BETA' with respect to our *Radiator* (dependent variable-*Behavioral intention)* is positively correlated with the independent variable i.e *Attitude toward Behavior.* It means that attitude of our sample population towards their behavioral intention for availing this ride sharing service is positive. They have rational intentions in adopting this new technology-based ride sharing activity.

The relationship between our dependent variable-behavioral intention and subjective norms with respect to Beta Coefficient i.e 0.033 also shows significant and reliable intentions of sample population. Our culture *(subjective norms)* is adaptable to change – people are inclined towards the betterment of society. There are very less chances of risk factor with respect to our constant variable *Behavioral Intention* that is also showing positive i-e 0.004.

Our residual statistic table also indicating the *positive correlations* & very less chances of deviating from the mean values.

Chi Square

Chi-square is a test where we find to observe the *goodness of fit*.

"Behavioral Intention*Attitude towards behavior"

Table 6: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	136.046[a]	128	.297
Likelihood Ratio	98.521	128	.975
Linear-by-Linear Association	6.221	1	.013
N of Valid Cases	198		

a. 142 cells (92.8%) have expected count less than 5. The minimum expected count is .01.

When we check the models by comparing *Attitude toward behavior* with the constant variable – *behavioral intention*, we found that our calculated Asymptotic significance value is greater than 0.05 (designated alpha level) so in this case we reject our *Alternative hypothesis* which indicates that these variables do not depend on each other and accept our *Null hypothesis.* Behavioral intentions and Attitude toward behavior are negatively correlated and dependent on each other.

"Behavioral Intention*Perceived Behavioral Control"

Table 7: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	135.858[a]	112	.062
Likelihood Ratio	86.668	112	.964
Linear-by-Linear Association	.480	1	.489
N of Valid Cases	198		

a. 125 cells (92.6%) have expected count less than 5. The minimum expected count is .01.

After making relationship between *behavioral intention and behavioral control,* we found that there are positive relationships exist as our calculated chi-square value is higher than the crucial value of chi-square i.e 0.06 > 0.05. This indicates to understand that people can control their behaviors over their intentions. Controlling behaviors suggests that negative thoughts and bad image of some e-hailing companies/organizations can be ignorable. What people perceive they actually go that way so if they perceive good and beneficial to avail digitalized ride sharing services, they can definitely go and accept this new trend, so their behavioral intention is dependent on their perceived behavioral control.

"Behavioral Intention*Trust"

Table 8: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	107.130[a]	144	.991
Likelihood Ratio	85.408	144	1.000
Linear-by-Linear Association	.036	1	.850
N of Valid Cases	198		

a. 160 cells (93.6%) have expected count less than 5. The minimum expected count is .01.

Trust has no correlation with *behavioral intention* in respect of chi-square test statistic. Computed number of P is higher than the critical value that is **0.9 > 0.05** actually showing that trust on drivers of e-hailing industry has no correlation with behavioral intention of customers in respect of availing this digitalized ride sharing service. People are also using this e-hailing trend irrespective of having trust on drivers or trust on application of this service industry.

"Behavioral Intention*Perceived Usefulness"

Table 9: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	326.322[a]	144	.000
Likelihood Ratio	138.680	144	.609
Linear-by-Linear Association	.043	1	.836
N of Valid Cases	198		

a. 164 cells (95.9%) have expected count less than 5. The minimum expected count is .01.

While comparing *Behavioral intention* with *Perceived usefulness* we got to know that our calculated p-value is less than critical value i.e 0.0 < 0.05 that indicates we will accept our Alternative Hypothesis. This suggests that behaviors are dependent on the usefulness of digitalized ride sharing services.

"Behavioral Intention*Perceived Ease of Use"

Table 10: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	82.610[a]	96	.833
Likelihood Ratio	68.194	96	.986
Linear-by-Linear Association	.393	1	.531
N of Valid Cases	198		

a. 104 cells (88.9%) have expected count less than 5. The minimum expected count is .01.

Comparing *perceived ease of use* with *behavioral intention* suggests p-value 0.8 that is higher than 0.05. We must embrace our *Null hypothesis*, means that it doesn't matter if convenient and easy to use the ride sharing application in mobile phones, the more persons would be inclined towards it. Sometimes people find it easy but reluctant to avail this technological advancement just because of their behaviors that are not adaptable to change.

"Behavioral Intention*Subjective Norms"

Table 11: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	104.102[a]	136	.981
Likelihood Ratio	82.973	136	1.000
Linear-by-Linear Association	.384	1	.535
N of Valid Cases	198		

a. 152 cells (93.8%) have expected count less than 5. The minimum expected count is .01.

Comparing *Subjective Norms* with our constant, indicated that **0.9 > 0.05.** We have accepted *Null hypothesis* means that societal values, cultures and family norms are not correlated with the behavioral intention for using digitalized ride sharing services. There is not any relationship exist among subjective norms and behavioral intentions.

"Gender*Risk"

Table 12: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.074[a]	16	.088
Likelihood Ratio	21.728	16	.152
N of Valid Cases	198		

a. 11 cells (40.7%) have expected count less than 5. The minimum expected count is .02.

We got values of chi-square 0.08 > 0.05 which means these two variables are nor correlated. In Karachi, our population don't bother to avail services of Uber, Careem and Bykea irrespective of gender as they don't feel any fear while calling Uber, careem or Bykea and females feel comfortableness for having this new trend of transport network.

CONCLUSION

This study's recommended structure was shaped by a review of the literature, which is focused on finding solutions to the questions for investigation that have been established and is backed by strong theoretical models. The findings and concluded results of this research is mentioned in order to provide implications of certain strategies and to explore the aim of this research report. After analyzing the results of our data set, some of the hypotheses are not supportive. It shows that some relations among variables are not significant or they don't correlate with each other. Some hypotheses are accepted as well that shows positive relationships and supports our model as well.

This study also indicates that students of Karachi are more inclined to use this e-hailing services & when we observed through filling out the questionnaires, we analyzed that the ratio of females (of all ages except more than 40 years) is greater than the ratio of males in adopting this advancement in transportation network.

We are living in the era of technology that is changing very rapidly. People are seeking to have more convenient ways of living their lives, more useful technological developments, and better ways to provide their contribution in the fast-changing growing economy.

REFERENCES

Botsman, R. & Rogers, R. (2010). *What's Mine is Yours: The Rise of Collaborative Consumption.* New York: Harper Collins.

CFI. (2021). Durbin Watson Statistic: *A test statistic used in statistics to detect autocorrelation in the residuals from a regression analysis.* https://corporatefinanceinstitute.com/resources/knowledge/other/durbin-watson-statistic/

Cusumano, M.A. (2015). How Traditional Firms Must Compete in the Sharing Economy? *Communication of the ACM, 58*(1), 32-34.

Chaudhry, I. S., Paquibut, R. Y., & Tunio, M. N. (2021). Do workforce diversity, inclusion practices, & organizational characteristics contribute to organizational innovation? *Evidence from the UAE. Cogent Business & Management, 8*(1), 1947549.

Davis, F.D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly, 13*(3), 319-340.

Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-Commerce and the importance of social presence: experiments in e-Products and e-Services. *Omega, 32(6),* 407-424.

Gilal, F. G., Gilal, N. G., Channa, N. A., Gilal, R. G., Gilal, R. G., & Tunio, M. N. (2020). Towards an integrated model for the transference of environmental responsibility. *Business Strategy and the Environment, 29*(6), 2614-2623.

Hawlitschek, F., Teubner, T., & Weinhardt, C. (2016). Trust in the sharing economy. *Die Unternehmung, 70*(1), 26-44.

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations (2nd ed.)*. Thousand Oaks, CA: Sage Publications.

Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. *Online Readings in Psychology and Culture, 2*(1). https://doi.org/10.9707/2307-0919.1014

Tapscott, D., (1996). *The digital economy: promise and peril in the age of networked intelligence.* New York, NY: McGraw-Hill.

Tunio, M. N. (2020)2. Role of ICT in promoting entrepreneurial ecosystems in Pakistan. *Journal of Business Ecosystems (JBE), 1*(2), 1-21.