

# Nexus between Customer Expectation and E-Purchase Intention: Exploring the Role of Perceived Justice

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#### **Abstract**

This study focuses on the factors influencing the customer purchase trends through online shopping in presence of moderation of perceived justice. The study fills the gap by integrating two theories unified theory of acceptance and use of technology (UTAUT2) and perceived justice theory as underpinning theories. An established questionnaire was used to collect primary responses from 384 users of online cab booking service. Data have been analyzed through partial least squares structural equation modeling (PLS-SEM) approach by using Smart PLS software. Results revealed that from customer's expectation factors, effort expectancy (EE), performance expectancy (PE) and perception of trust (PT) has found a substantial impact on individual's purchase intention (PI), which further affects perceived behavior (PB). It also revealed that most important customer's expectation factors can help the brands to tackle customer's mindset. Practically this study also provides a guideline for service sector to train their frontline employees because in service sector behavior of service deliver personal is most important factor. This is a rare study which explores the nexus between customer expectation and e-purchase intention in online cab booking service. It also extends conceptualization of UTAUT2 with exploring the role of perceived trust and moderation of perceived justice.

**Keywords:** Effort Expectancy, Performance Expectancy, Perceived Justice, Distributive Justice, Procedural Justice, Interactional

#### Introduction

In today's world, usage of internet in various fields of life became inevitable. Online buying and selling by using internet has also become advanced throughout the globe. With the passage of time, use of online buying and selling services as e-market has gained more growth than physical market. Recently, it has been observed that online shopping has captured more

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and more customers. Due to this trend, companies are now considering and moving toward online channels to have more interaction with their customers. A recent report of Forrester showed that online retail sales in United States have reached to \$334 billion till 2015 (Mulpuru, Boutan, Johnson, & Wu, 2016). E-commerce has been growing rapidly in competitive market. Estimations by experts had recently estimated online market size in Pakistan to be \$25-30 million a year. Forrester forecasts that online sales revenue will reach to \$480 billion till 2019 (Mulpuru et al., 2016).

The worldwide e-commerce sales have amounted to be \$2.29 trillion in 2017. It is expected to grow to \$4.48 trillion by 2021 (Statista, 2017). From this in 2017 only worldwide online travel booking segment amounted for revenue of \$212.69 billion. The reason of customer switching to online shopping is a busy lifestyle and easily approachable alternative brands of different products and services. Studies have shown that consumers use online shopping for various reasons. There has been a recent shift in purchase intentions also due to excessive use of e-commerce. Such intentions are termed as e-purchase intentions and are related with online customers (Namakula et al., 2020).

Past studies identified that e-buyers may need more product or service information, variety and personalization offered to them, as compared to regular offline buyers (Zhai, Cao, Mokhtarian, & Zhen, 2017). Some of the research studies have already shown that there is a huge gap between e-shopper trend and a regular buyer (Ganesh, Reynoldsb, Luckett, & Pomirleanu, 2010).

Online shopping called e-commerce is also viewed by some researchers as a major threat to traditional physical retail stores and other technological aspects (Hsiao & Ming-Hsiung, 2009). It has been directly dependent upon the usage and acceptance of information and communication technology. In technology acceptance field, many significant models have been proposed. The prime model for technology acceptance was put forward by Davis (1989) named as the "Technology Acceptance Model" (TAM). The study conducted by Fishbein and Ajzen (1975) explained TAM that it was established following roots of theory of reasoned action (TRA). TAM includes two dimensions perceived usefulness and ease of use for predicting user's information technology (IT) acceptance. Another popular approach denotes intention of user in the form of theory of planned behavior (TPB) given by Ajzen (1991). A hybrid model was also suggested by Taylor and Todd (1995) that is a combination of TAM and TPB. Particularly in Pakistan, research has explored and endorsed antecedents of online purchasing behaviour as outcome of antecedents involved in model of theory of planned behaviour attitude (Sardar, Murtaza & Minhas, 2020).

Studies have been conducted in context of e- buying of tangible goods, and without moderation of Perceived Justice between Purchase Intention and Purchase Behaviour (Faqih, 2016; Pascual-Miguel, Agudo-Peregrina, & Chaparro-Peláez, 2015). Namakula et al. (2020) explored service quality, facilitating conditions and customer's attitudes and critical determinants of e-purchase intentions. Trust has been noted as one of the major drivers towards purchase decisions (Ramanathan et al., 2020). Prasetyo and Zen (2020) has witnessed mediation of perceived risk among discount price of the commodity and purchase intentions.

A study recommended including other variables to improve the variance explained by the predictors of UTAUT, since there are variations in the research environments (Attuquayefio & Addo, 2014). Research by Nysveen and Pedersen (2016) also reveals that some other factors should be added in the model (Nysveen & Pedersen, 2016). Purpose of this study is to fill this gap by analyzing the behavior of service buyers, who use online buying medium (Nikbin et al., 2010). Nevertheless, despite the robust influence of UTAUT in other contexts, literature only



found two previous studies which had applied complete model for the transportation sector but both did not consider justice perception of customer (Adell, 2010; Madigan, et al., 2017). Besides these antecedents, cognitive factors of the consumers also impact purchase decisions. Such as emotional price and experience influence purchase intention via trust (Wang, Zhang, Zhou & Lai, 2019).

Moreover, research conducted by Maxham & Netemeyer (2002), discussed that a paucity being seemed regarding empirical research on the effects of complainant's perception regarding justice of intention and behaviour (Maxham & Netemeyer, 2002). So that, there is also an interest regarding uncovering relative influence of perceived justice dimensions for recovery satisfaction (Del Rio-Lanza, Vazquez-Casielles, & Díaz-Martín, 2009), but the gap still exists for the impact of perceived justice theory on the customer behavior (Nikbin, Ismail, Marimuthu, & Jalalkama, 2010). To fill the gap in existing literature for online service buying behaviour, present research use (UTAUT 2) model with an addition of perceived Justice Theory as moderator on the path of purchase intention and purchase behavior. For this study, we targeted the customers of online cab booking sector to explore the factors involved in pushing buyers from offline to online platforms. This is a rare study which explores the nexus between customer expectation and e-purchase intention in online cab booking service. It also extends and contributes in conceptualization of UTAUT2 with exploring the role of perceived trust and moderation of perceived justice.

## **Problem Statement**

The unified theory of acceptance and use of technology illuminates the importance of customer expectation in determination of purchase intention. The dynamics of customer purchase decisions is yet to be unlocked by uniting UTAUT2 with the perspective of perceived justice in online purchases. The role played by perceived trust on the service provider unfolds the nexus between expectation and purchase intentions of the users. This study intends to explore the customer expectation and e-purchase intention in online cab booking service users. It also extends conceptualization of UTAUT2 with exploring the role of perceived trust and moderation of perceived justice.

# **Literature Review and Hypotheses Development Online Market and UTAUT**

Online communication tools have been used for advertisement of products with ads, promotions or banners that may attract customers' attention and persuade them to purchase certain products (Faraz, Niazi, & Zafar, 2020). Customers before buying the product remain in need of getting more and information about it to select the best one. If the advertisement contains insufficient information then the consumer tries to search it through different online media catalogs or websites (Laudon & Traver, 2009).

Additionally, some researchers have found that individuals have favorable attitude towards product and positive intention towards make purchase when they experience compatibility (Ashraf, Razzaque, & Thongpapanl, 2016). Different stages of family life cycle determine diverse purchase intentions (Amirtha, Sivakumar & Hwang, 2021).

Since online purchasing is linked with user's acceptance of the technology as a medium, thus theory related to IT acceptance becomes useful to predict the outcomes. On the similar theoretical grounds of TAM and Theory of planned behaviour, UTAUT determines three main attributes which determine behavioural intention in perspective of technology (Bleize & Antheunis, 2019). It revolves around expectancy of product's performance, effort, and



regarding social influence and facilitating conditions as predictors of behavioral intention. Prasetyo and Zen (2020) has witnessed mediation of perceived risk among discount price of the commodity and purchase intention. It has become a choice for various models used in IT acceptance related studies in recent literature (Aliaño et al., 2019; Almisad & Alsalim, 2020; Juan-Pedro, 2020; Rahi, Ghani, Alnaser & Ngah, 2018). Its advance version has also been proposed as the extended unified theory of the acceptance and use of technology. It has additional three constructs in the original UTAUT as hedonic motivation, price value and habit (Rodríguez & Carvajal-Trujillo, 2014).

Online shopping has turned out to be progressively well known in business improvement and the quantity of new online stores is continually expanding. A large portion of these online stores, be that as it may, come up short. Research has shown that one of the most compelling motivations why these E-stores fall flat is a result of consumers' lack of trust and consumer's perceived risk (Pascual-Miguel et al., 2015). There are four suggested hazards that serve as proper predictors of online customers' universal danger. However, no more causal impact among perceived uncertainty and purchase attention was discovered (Yang, Sarathy, & Lee, 2016).

## **Impact of Effort Expectancy on E-Purchase Intention**

Effort expectancy is the degree of an individual's perception of ease of use of particular system (Patel, 2013). This concept has been considered as similar to perceived ease of use of TAM. A study conducted in this very perspective found that effort expectancy has positive and significant impact on user's satisfaction and usability expectancy (Raja Yusof, Qazi, & Inayat, 2017). A significant impact of effort expectancy on user's behavior with respect to online shopping has been determined (Tak & Panwar, 2017). Social influence, customization and ease of use has identified as potential determinants of purchase intention in virtual worlds under the light of UTAUT (Bleize & Antheunis, 2019).

A study in Chinese context by having an online survey revealed that effort expectancy has a Strong and positive effect on individual's intention to re-use mobile apps (Fong, Lam, & Law, 2017). It has also been identified that the older is user's effort expectancy the more positive and significant impact it has on individual's intention to use home tele-health services technology (Cimperman, Brenčič, & Trkman, 2016).

Applying the same conceptual foundations to travel industry, Martín and Herrero (2012) found that e-purchase intention of destined accommodation is marginally influenced by effort and performance expectancy. They recommended replicating the same study in different contexts and services sector. Thus, this study has focused online cab booking services to establish relationship between effort expectancy and e-purchase intention. The following relationship has been hypothesized:

 $H_1$ : There is a positive impact of effort expectancy on e-purchase intention.

# **Impact of Performance Expectancy on E-Purchase Intention**

The concept of performance expectancy discusses the extent of benefits received by user for use of a specific technology (Ghalandari, 2012). It also has significant positive impact on satisfaction and usability expectancy of users (Yusof, Qazi, & Inayat, 2017). Performance expectancy affects user intentions to adopt m-learning (Senaratne, Samarasinghe & Jayewardenepura, 2019), e-government (Chen & Aklikokou, 2020), purchasing intentions in e-tourism (Moradi et al., 2017) and using e-commerce (Dakduk et al., 2017).



By using latest version of TAM (Schieben & Merat 2017) it is elaborated that factors influencing acceptance of certain technology like ARTS also include performance expectancy as influencer of individual's intention (Madigan et al.,2017). Rodríguez and Carvajal-Trujillo (2014) also used effort and performance expectancy in their model as antecedent of behaviour intention by using UTAUT. Hence sufficient literature supports the strong and positive impact of performance expectancy on intention to use technology (Taiwo & Downe, 2013). So, the present study has focused on e-purchase intention of online cab booking as outcome of performance expectancy. The following hypothesis has been drawn. hypothesize:

 $H_2$ : There is a positive impact of performance expectancy on e-purchase intention.

# **Impact of Perceived Risk on E-Purchase Intention**

Risk perception or perceived risk is a possible uncertainty associated with the product or service on the time of buying or at time of usage (Roy, Balaji, Kesharwani, & Sekhon, 2017). It is perceived uncertainty about gain or loss from shopping online (Chang, Fu, & Jain, 2016). Perceived risk in online purchase has also been a vital aspect of e-commerce activities and technology acceptances. These risks can be in the form of risk of discount conditions (Ahmadinejad & Ahmadinejad, 2017), time, financial, performance, security, psychological and physical for different online purchases (Park& Tussyadiah, 2017).

Studies found strong negative relationship between risk perception and satisfaction in e-commerce (Yuan, Liu, Yao, & Liu, 2016). A study also founded that risk perception is the essential consideration in mobile communication, especially in context of booking or ordering any product of service (Slade, Dwivedi, Piercy, & Williams, 2015). Perception of risk not just effect new users but also has a strong influence on existing customers equally (Yang et al., 2012). Considering the prominent nature of risk involved in online purchase, his study has intended to launch the following hypothesis

 $H_3$ : There is a negative impact of perceived risk on e-purchase intention.

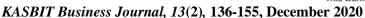
# **Impact of Perceived Trust on E-Purchase Intention**

Perceived trust is the level of belief an individual on a system that by using the system his or her level of performance will be strengthen or boosted (Ogonowski et al., 2014). Literature supports the significant impact of trust in e-commerce adoption indirect or even directs (Chong, 2013).

Besides this, some studies also found that trust is irrelevant for individual's intention to use technology like for adoption of mobile commerce (Alkhunaizan & Love, 2014). In mobile financial services studies, trust has also found to be insignificant (Chemingui & Iallouna, 2013). Leonard and Jones (2019) identified that consumer-to-consumer (C2C) electronic commerce also involves various aspects of trust. It can be on perceived website quality and on third party which determines trust on the seller. Trust also being founded as key antecedent to build loyalty or positive buying behaviour in consumers of beverages industry as well (Ahmad, & Zafar, 2018).

Wong and Mo (2019) have used TAM to address the dynamics of customers' intentions for mobile payments. They also found perceived trust as a potential determinant of consumer intention of payment. Similar to C2C, business to business (B2B) e-commerce also depends upon trust. A study explored moderating impact of trust on relationship of environmental and technological factors on e-commerce adoption (Alsaad, Mohamad & Ismail, 2017). Hence in the context of online buying, trust is considered as most important factor to drive their intention, so this study hypothesized the following relationship as:

 $H_4$ : There is a positive impact of perceived trust on e-purchase intention.



# Impact of E-Purchase Intention on Purchase Behavior

The association of intention to behavior has long been explored by theory of reasoned action (Ajzen & Fishbein, 1975) and theory of planned behavior (Ajzen, 1991). The construct of intention has got several meanings when applied in various aspects. Intention is an antecedent that drives and stimulates the behavior such as customer purchase behavior. It is a plan or willingness to buy a product or service (Haque et al., 2015) and is a degree to which a customer has the willingness to buy a specific product or service (Kuo, Wu, & Deng, 2009; Zafar & Lodhi, 2018). Literature also provides evidence that attitudinal factors are the considerable element in development of an individual's intention (Shaheen, Lodhi, Mustafa, & Zafar, 2020).

Buying or purchase intention can be done offline or through e-purchase buying medium (Elwalda, Lu, & Ali, 2016). It does also seem that promotional activities by a brand could also push customer to buy that specific brand (Zafar, Niazi, & Zafar, 2018). It becomes interesting to explore how intentions to purchase determine behavior in online markets. Hence decision making as shopping behavior is somehow similar in offline and online purchases. Intention has found to have significant effect on individual's buying behavior (Elwalda, Lu, & Ali, 2016). Thus this study hypothesized that:

 $H_5$ : There is a positive impact of e-purchase intention on purchase behavior.

# **Moderating impact of Perceived Justice**

Justice theory by Adams (1963) stated that whenever a transaction or exchange occurs, people rate the input against the output, and also compare them with those of others in similar situation to measure the results. A situation where equality between both input and output exists then the exchange will be considered as "fair", and when the outcome does not meet the expectation, as the result is inequality and considered as "unfair" (Oh & Kim, 2017). A study by Petzer et al. (2017), revived that two types of perceived justice as interactional and distributive justice practices of banks positively and significantly affect customers service satisfaction and also have positive impact on behavioral intention. Another study in Taiwan's restaurant showed that repurchase intention has positively and significantly influenced by perceived justice (Zoghbi-Manrique-de-Lara & Guerra-Báez, 2016). A multi-cultural study also revealed that justice was significantly different in all contexts was distributional justice (Varela et al., 2014).

Customers usually assess the tactics undertaken by the policies of the service recovery, and any misconception may lead to a loss in the productivity of the service recovery (Ortiz, Chiu, Wen-Hai, & Hsu, 2017). This context provokes to evaluate sellers as a justified business entity and justice in providing all expected features of products or services becomes significant both in offline and online purchases. Traditionally justice is theoretically perceived as the multi-dimensional concept which carries three different sub concepts such as distributive, procedural and interactional justice having separate impacts on various outcomes (Migacz, Zou, & Petrick, 2017).

# **Distributive Justice**

Tangible resources provided by the firm to rectify and compensate any service failure or service delivery refer to the distributive justice (Rio-Lanza et al., 2009). In the context of service recovery or service provision, it refers to the fairness in tangible or merchandise provided by firm for service provision (Ha & Jang, 2009). Distributive justice has been mainly applied in the studies of general inter-organizational relationships, buyer-supplier management



and supply-chain management. Ratios must be equal to each side of the buyer and seller (Normann, Ellegaard, & Møller, 2017).

#### **Procedural Justice**

Procedural justice is considered as a method which is used by the business to deal with aroused problems while service delivery in various aspects, like accessibility, timing, process control, and delay to rectify the service failure to deal with concept of service recovery (Cloutier & Lamarche, 2015). Australian context study revolves two types of cooperation first one was related to cooperate with police in "general crime control" efforts, and second one was willingness to report terror threats to police. A study showed that procedural justice perception positively associated with both types of cooperation (Murphy, Madon, & Cherney, 2017). Literature also states that aggressive policies are exerting a negative impact on the attributions of the fairness in the policies through interrelation procedure (Roché & Roux, 2017).

#### **Interactional Justice**

Third type of justice in regarding interpersonal interaction of buyer and seller during service/product delivery can also be elaborated as perception of justice in human interaction with the dealing of customer's with employees of organization during a service failure recovery process (Chih et al., 2017). In the context of recovery of a service failure, interaction justice is considered as the degree of customer's experience regarding justifiable human interaction with the employees of organization who are involved in recovery process. Previous literature states that there are six sub-dimensions for interactional justice (Mattila, Hanks, & Wang, 2014). Another study found negative impact on attributes of fairness this also shows that interactional justice is more important factor (Roché & Roux, 2017).

The reactions of the employees during service recovery are crucial under this terminology, and their respective behaviors and contributions towards the service recovery processes (Nikbin, Ismail, & Marimuthu, 2012). The results are mainly derived from the customer's feedback and outcomes, which indicates how they were communicated in the social exchange relationships (Normann, Ellegaard, & Møller, 2017). Meanwhile later studies enabled the researchers to addin a new dimension known as the informational justice (Nikbin et al., 2010). Keeping in consideration the relevant effect of justice for customer purchase behavior, this study proposed the following hypotheses regarding three types of justice and their moderation:

 $H_6$ : Perceived Justices moderates the relationship between E-purchase intention and purchase Behavior.

 $H_{6a}$ : There is moderating impact of distributive justice on the relationship between e-purchase intention and purchase behavior.

 $H_{6b}$ : There is moderating impact of procedural justice on the relationship between e-purchase intention and purchase behavior.

 $H_{6c}$ : There is moderating impact of interactional justice on the relationship between e-purchase intention and purchase behavior

## Methodology

# **Population and Sample**

The current study has been conducted on online cab service users. It follows quantitative approach to measure the variables quantitatively. Target population was individuals using online cab booking service. Individuals were used as unit of analysis through non-probability convenience sampling. A survey questionnaire was used to attain responses. Estimated population of two online cab booking service Uber and Careem was about 100 Million and 10 Million. A total sample consisted of 384 individuals, as users of these two



services were selected for collecting the data (Krejcie & Morgan, 1970) at 95% confidence level. Both males and females were included in sample. Self-administered and online close ended five-point likert scale (1= Strongly Disagree to 5= Strongly Agree) questionnaire was adopted for collection of data. In offline category questionnaires were distributed to cab drivers to attain responses from their customers who use their cab service.

#### **Instruments Used**

Effort expectancy has been measured by four items as given by Davis (1989). Performance expectancy was measured by 5 items (Davis, 1989; Moore, 1991; Pavlou, 2003). Perceived risk was measured by 7 items as proposed by Teo (2007) and Vijayasarathy (2004). Customer's perceived trust on seller has been rated on 8 items used from Perceived Trust scale (Gefen, 2000). Purchase intention and purchase behaviour was measure by 2 and 3 items as given by Pavlou (2003) and Suki (2013). Customer justice perception has been measured by instrument proposed by Nikbin et al. (2010).

# **Analyses and Results**

For data analyses and hypothesis testing, this study employs partial least squares structural equation modelling technique by using Smart PLS 3.2 software (Ringle, Wende, & Becker, 2015). It included measurement model testing by confirmatory factor analysis and structural model to test hypotheses.

## **Descriptive Statistics**

Descriptive statistics discuss stats are related to respondent's personal details. In present study, descriptive statistics comprised of five features of the sample. This information was collected regarding to usage of online cab service, mostly used cab service, age, gender and occupation.

**Table 1: Demographics** 

		Frequency	Percent	Valid	Cumulative
	Uber	221	59.6	Percent 59.6	Percent 59.6
	Careem	129	34.8	34.8	94.3
	Uber/Careem	8	2.2	2.2	96.5
Online	Cab Ola	8	2.2	2.2	98.7
Service	A-Taxi	3	0.8	0.8	99.5
	Pathao	1	0.3	0.3	99.7
	Didi	1	0.3	0.3	100
	Total	371	100	100	
	18-24	121	32.6	32.6	32.6
	25-31	200	53.9	53.9	86.5
Respondent' Age	ent's 32-38	29	7.8	7.8	94.3
	39-45	8	2.2	2.2	96.5
	45& above	13	3.5	3.5	100
	Total	371	100	100	
	Male	196	52.8	52.8	52.8



Respondent'	<sub>S</sub> Female	175	47.2	47.2	100
Gender	Total	371	100	100	
Respondent's Occupation	Student	236	63.6	63.6	63.6
	Employee	54	14.6	14.6	78.2
	Self-Employee/ Business	81	21.8	21.8	100
	Total	371	100	100	

**Table 1** shows information regarding demographics section of sample. Responses showed that from total respondents, 59.6% were Uber and 34.8% were Careem users. Age slot of 25-31 was having maximum respondents by around 54% Reponses. Data further showed that majority respondents were students and there was not a huge difference between genders.

# **Testing the Measurement Model**

Testing measurement model includes confirmatory factor analyses (CFA) analysis for first reflective model. For this starting from goodness by standardized root mean square residual (SRMR) is defined as the difference or variance between the predicted and observed correlation between the proposed framework's variables (Henseler, Ringle, & Sarstedt, 2015). Present study has adequate fit indices in these criteria's i.e. (SRMR=0.071, NFI=0.701, Chi-Square=3,003.34). Subsequently the SRMR permits evaluating average degree of the differences among observed and expected correlations as an absolute procedure for model fit criterion.

## **Convergent Validity**

The concept of convergent validity deals with concept of theoretical correlation between variables and items. In other words, it checks that items and variables are correlated theoretically to some certain extent (Surienty, Ramayah, Lo, & Tarmizi, 2014). It is evaluated through Average Variance Extracted (AVE) as proposed by Fornell and Larcker (1981). Secondly its measured through factor loading values which also measure inter-item reliability. The value for AVE should be greater than 0.5 whereas factor loading value had to be greater than 0.6 and the items which were having lesser value should not be considered for further analysis (Hair et al., 2016).

**Table 2: Measurement Model** 

Constructs	Items	Factor Loading	Factor VIF	Outer VIF	Average Variance Extracted	Cronbach's alpha (α)	Composite Reliability
	EE1	0.669	1.371				
Effort	EE2	0.761	1.623	2.607	0.597	0.771	0.855
Expectancy	EE3	0.863	2.083	2.007	0.397	0.771	0.833
	EE4	0.785	1.639				
	PE1	0.814	2.024				
Performance	PE2	0.823	2.097		0.639	0.858	0.898
Expectancy	PE3	0.820	1.982	4.324			
Expectancy	PE4	0.771	1.816				
	PE5	0.767	1.738				
	PR1	0.819	2.655	2.426	0.629	0.901	0.922



	PR2	0.840	2.904				
	PR3	0.749	2.102				
Perceived	PR4	0.698	1.833				
Risk	PR5	0.725	1.669				
	PR6	0.851	3.062				
	PR7	0.851	3.269				
	PT1	0.828	2.953				
	PT2	0.736	1.818				
	PT3	0.765	2.447				
Perceived	PT4	0.826	2.943	1 000	0.584	0.007	0.010
Trust	PT5	0.794	2.108	1.808		0.897	0.918
	PT6	0.647	1.698				
	PT7	0.683	1.698				
	PT8	0.814	2.786				
Purchase	PI1	0.912	1.842	2.025	0.020	0.007	0.012
Intention	PI2	0.919	1.842	2.025	0.838	0.807	0.912
D 1	PB1	0.847	1.623				
Purchase Behavior	PB2	0.873	2.061	-	0.719	0.805	0.885
Benavior	PB3	0.823	1.750				
Distributive Justice	DJ1	1.000	1.000	1.970	1.000	1.000	1.000
D 1 1	PJ1	0.726	1.185				
Procedural Justice	PJ2	0.820	1.315	1.625	0.568	0.620	0.797
Justice	PJ3	0.711	1.227				
T 1	IJ3	0.915	1.400				
Interactional	IJ4	0.696	1.677	1.105	0.632	0.756	0.835
Justice	IJ5	0.758	1.589				

**Table 2** shows the results of reliability and validity statistics of measurement model testing. Items which did not fall into acceptable range of factor loading as greater than 0.6 were omitted for further analyses. Composite reliability for this study has been in the acceptable criteria for all the items (Hair et al., 2014).

## **Discriminant Validity**

Discriminant validity ensures discrimination and distinction of measurement items from each other sufficiently (Urbach & Ahlemann, 2010). In other words, discriminant concept discusses that items and variables are theoretically different and have their own concepts. While considering its criteria, it is evaluated through two measures, Fornell-Larcker Criterion for inner model and Cross Loadings for outer model (Fornell & Larcker, 1981). Cross loading refers to check loading values of items in model with its own variable as well as with other variables in structural model. Second Fornell-Larcker criteria, it's basically discuss the construct comprehend added variance through its items comparing with any other variable in the model. Another cross check is that Fornell-Larcker is the squareroot value of AVE of each variable. The value of upper diagonal fornell-larcker value should be greater than 0.7.



**Table 3: Discriminant Validity** 

	DJ	EE	IJ	PB	PE	PI	PJ	PR	PT
DJ	1.000								
EE	0.603	0.773							
IJ	-0.216	-0.149	0.795						
PB	0.772	0.668	-0.206	0.848					
PE	0.591	0.566	-0.172	0.714	0.799				
PΙ	0.660	0.413	-0.203	0.512	0.744	0.915			
PJ	0.414	0.364	-0.056	0.453	0.390	0.427	0.754		
PR	0.658	0.204	-0.213	0.634	0.327	0.729	0.445	0.793	
PT	0.714	0.033	-0.213	0.398	0.633	0.507	0.407	0.590	0.764

The results of Fornell-Larcker criterion is represented in Table 3. Here the utmost and significance testing criteria is that upper diagonal values should be maximum and greater than 0.7 showing substantial variance in the variable due to its owning items. So the diagonal values of the table provide met the acceptance criteria.

# **Collinearity Statistics (VIF)**

Next collinearity statistics is being tested through Variance Inflation Factor (VIF) in dealing with reflective model. It is the concept which deals with variance in measurement as well as structural model regarding variance of the estimated regression coefficients. VIF of outer model is known as outer VIF and is depicted in table 2. It depicts the correlation amongst the items or instruments used for data collection. It should have a value less than 5 (Hair, Hult, Ringle, & Sarstedt, 2014). All items' and constructs' values were less than 5, the acceptance criteria as between 1.000 to 4.324.

## **PLS-SEM Structural Model**

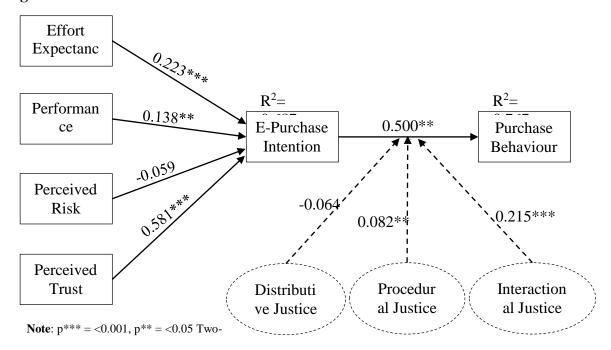
PLS structural mode is the next test considered to measure coefficient ( $\beta$ ) among the latent variable as well as the significance of these relationships. These beta coefficient values are also considered as measure for determining the prediction power between constructs. The magnitude direct towards the power of relationship whereas the positive or negative sign shows the direction of the relationship between latent variables. Literature argues various values in different domains, but while discussing social sciences studies value greater than 0.30 is considered as a certain considerable effect in model (Henseler, Ringle, & Sarstedt, 2015). Next the significance of these values tested through bootstrap analysis through T-Statistics and P-values, which consider the concept of resampling for this purpose (Hair et al., 2016).

**Table 4: Hypothesis Testing** 

	Original	Sample	T	P	Cummontad
	Sample	Mean	Statistics	Values	Supported
$EE \rightarrow PI$	0.223	0.229	3.975	0.000	Yes
$PE \rightarrow PI$	0.138	0.135	2.177	0.030	Yes
$PR \rightarrow PI$	-0.059	-0.057	0.751	0.453	No
PT -> PI	0.581	0.575	8.393	0.000	Yes
$PI \rightarrow PB$	0.500	0.499	11.764	0.000	Yes
DJ Mod PI > PB	-0.064	-0.064	1.804	0.072	No
PJ  Mod  PI > PB	0.082	0.082	2.524	0.012	Yes
IJ  Mod PI > PB	0.215	0.214	8.119	0.000	Yes



Figure 1. PLS-SEM Structural Model



Error! Reference source not found. shows the relationship between all variables and moderation impacts. The inner model shows the impact of exogenous on endogenous latent variables while outer model shows the factor loading values of each indicator. Starting from the impact of EE on PI was 0.223 which showed positive impact of EE on PI as EE has 22.3% positive influence on PI. The path coefficient value was 0.138 for PE on PI which also showed positive impact of PE on PI as it will increase individuals purchase intention by 13.8%. The effect of PR on PI was -0.059 which entails reverse impact of perceived risk on purchase intention. It depicts that with an increase in perceived risk by 100%, it will decrease individual's purchase intention by 5.9%. The impact of PT on PI has coefficient value of 0.581 which shows positive impact of PT on PI, in other words it shows that with an increase in perceived trust by 100%, consequently it will increase individuals purchase intention by 58.1% the strongest impact in the model. The positive effect of PI on PB has a path coefficient value of 0.50 showing impact.

In moderation analyses, distributive justice has found to be a moderator of the relationship of PI and PB. Its path coefficient value was -0.064 which shows that distributive justice weakens the relationship by 6.4%. Conversely, moderating impact of procedural justice has path coefficient value as 0.082 showed that it moderates the relationship positively, and strengthens the relationship by 8.2%. The moderating influence of interactional justice had path coefficient value as 0.215 which shows strongest positive moderating impact among all three moderators. Value showed that interactional justice strengthens the relationship of PI and PB by 21.5%.

# **Findings and Discussion**

The study findings supported that  $H_1$  regarding impact of effort expectancy on e-purchase intention proved true through data analyses. Literature also supported that EE has impact on PI; study revealed that effort expectancy has a strong and positive effect on individual's intention (Fong, Lam, & Law, 2017). Another study also showed that the main predictor for individual's intention is effort expectancy (Attuquayefio & Addo, 2014; Cimperman, Brenčič, & Trkman, 2016). Similarly,  $H_2$  was related to impact of performance expectancy on e-purchase intention also supported as significant in this study. A study by



Schieben and Merat (2017) explored that performance expectancy has positive and significant impact on individual's intention.

It has been identified that performance expectancy has a strong influence on intentions to use the system (Taiwo & Downe, 2013). The impact of perceived risk on e-purchase intention has been proposed by H<sub>3</sub>. This hypothesis found to be insignificant even the impact of perceived risk was negative on e-purchase intention. Main reason is the perception of trust of customers on online booking applications. Study conducted by Yuan et al. (2016) in context of telecommunication service providers found strong negative relationship between risk perception and satisfaction in mobile banking and e-commerce. Furthermore, study by Slade et al. (2015) found that perception of risk negative impact on individual's intention. Hypothesis 4 pertained to significant positive impact of perceived trust on e-purchase intention as H<sub>4</sub>. Literature also supported that there is a significant impact. Trust is also a considerable factor especially for online buying as significant impact of perceived trust on purchase intention (Chemingui & Iallouna, 2013).

The relationship of intention to behavior has been depicted in this study by H<sub>5</sub> as impact of epurchase intention on purchase behavior. The study found this hypothesis to be true with significant and positive impact of intention to the purchase behavior. These results endorsed literature on association of purchase intentions and behavior like Haque et al. (2015) and Elwalda, Lu and Ali (2016).

This study further proposed moderating effect of perceived justice among intention and behavior relationship as shown by hypothesis 6.  $H_{6a}$  stated the moderating impact of distributive justice on the relationship between e-purchase intention and purchase behavior. Results showed the redetection of hypothesis. The results of  $H_{6b}$  showed that procedural justice significantly strengthen the relationship.  $H_{6c}$  depicted moderating impact of interactional justice between purchase intention and behavior. This hypothesis was also accepted, which shows that customers consider good interaction of service provider and also the process of service delivery.

## **Conclusion**

Online shopping is associated with customer expectations from the service providers. This study has identified the antecedents of customer purchase decisions by considering perception of justice by the customer. It connects UTAUT2 with the perceived justice theory to explore the nexus between customer expectation and e- purchase intention. Results endorsed that the potential role of expectation in terms of effort and performance is undeniably useful in determination of e-purchase behaviors. It has further revealed that expectation acts through intermediate trust on the service provider and justice strengthens this association. Managers can extract the essence of these findings to improve their services in order to enhance expectations as well as build trust on their services. Service providers must take into account justice in their service provisions to attain the perceived justice in their service from the users.

## **Research Implications and Limitations**

This study tried to explore the nexus between customer expectations and online service buying while considering perceived justice as moderator. The role played by perceived trust on the service provider unfolds the relation between expectation and purchase intentions of the users. This study extends conceptualization of UTAUT2 with exploring the role of perceived trust and moderation of perceived justice in online cab users. Relevant firms may apply findings of present study in shape of benefit in getting customers feedback. It also revealed that most important customer's expectation factors can help the brands to tackle customer's mindset.



Furthermore, study also helpful in retaining and attaining customers, which could be beneficial in shape of profit maximization. Not only this, study also provide a guideline for service sector to train their frontline employees because in service sector behavior of service deliver personal is most important factor.

This study also has some limitations which could be footprints for future research. The theoretical limitations guided that future research should use justice perception as antecedent of individual's purchase intention, and also as moderator between expectation factors and intention in order to explore the nexus further. This study also measured impact of three types of justice perception as moderator between PI and PB. Future studies can also add ignored factors of UTAUT model till now. The use of non-probability sampling technique can also realize distinct results if measured with other sampling techniques with diversified sample. Furthermore, to support the current knowledge base, there is a need for more cross-cultural evaluations of the UTAUT and perceived justice theory. Lastly, the present study was conducted on online cab service sector so future researches may incorporate these constructs in comparative studies of different and unique cultures and context.

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