E-Commerce Ethics into Expectation-Confirmation Model: Emerging Case of Pakistan’s B2B SMEs

Muhammad Arif Nawaz 1 Dr. Khawar Naheed 2

1. Ph.D Scholar, Department of Commerce, Bahauddin Zakariya University, Multan, Punjab, Pakistan
2. Assistant Professor, Department of Commerce, Bahauddin Zakariya University, Multan, Punjab, Pakistan

E-commerce ethics enhance the online repurchase intentions of e-commerce buyers and provide rudder and rudder to the small and medium enterprises (SMEs) to survive in a competitive environment across the globe. Covid-19 has completely altered the game of business to business (B2B) e-commerce that led towards multifaceted ethical issues. Paradoxically, limited research in empirical side has been conducted in the area of e-commerce ethics. This study investigated the influence of e-commerce ethics in terms of buyers’ perception of suppliers’ ethics (BPSE) on online repurchase intentions. Partial least square structural equation modeling as an analysis technique has been used in this research. The data was collected through questionnaire from 387 respondents belonging to four metropolitan cities; Islamabad, Lahore, Karachi, Multan and Sialkot. The findings of this study revealed the direct and all indirect effects of e-commerce ethics on online repurchase intentions are significant and have positive relationship along with mediators. This study contributes to existing literature by using ethical theories and expectation confirmation theory (ECT), testing for empirical and practical side of e-commerce ethics in case B2B SMEs of Pakistan. Moreover, e-commerce services providers will be able to get advantages from BPSE to increase repurchase intentions of B2B SMEs in future.

Keywords: E-Commerce Ethics, Ethical Theories, Expectation Confirmation Theory, Online Repurchase Intentions, SMEs, Pakistan

Introduction

The e-commerce, owing to technological advancement, social commerce, neural networks, digital image processing and artificial intelligence, is evolving as a viable alternative to traditional face to face business practices.
The usage of the internet for business growth and transaction explains the significance of B2B SMEs e-commerce. The novel Covid-19 pandemic has resulted in an increase in business through e-commerce platforms. Moreover, e-commerce platforms on social commerce have brought e-commerce ethics in Pakistan and other parts of the world. Furthermore, the researcher suggests that e-commerce businesses in online trading sectors are thriving in lockdown and pandemic situation (Donthu & Gustafsson, 2020). Additionally, the researcher suggests that rapid growth in e-commerce opportunities in pandemic situation brings ethical issues as well, that businesses have to resolve. Therefore, the present research aims to consider e-commerce ethics and online repurchase intentions of B2B SMEs in the context of Pakistan. E-commerce issues are BPSE concerns highlighted as security, privacy, reliability, non-deception, shared values, service recovery, and communication. These elements of ethics are based on ethical theories research. Other variables that are considered important are perceived usefulness, confirmation of expectation, and e-satisfaction is taken from expectation confirmation theory (ECT).

**Background of Study**

The scope of e-commerce is very wide which include B2B and B2C business among firms and consumers. The World Trade Organization (WTO) in 2020 presented a report which shows that 90 % of e-commerce revenue depends on the B2B e-commerce trade worldwide (WTO, 2020).

Due to the unethical behavior, the new environment of e-commerce faces several ethical issues. For this purpose, digital media focuses on the insights of the business community. The scholars developed the scale which measures the buyer’s views similar to the ethics of online retailers and B2B context (Linet al., 2019; Roman, 2007).

The perception of ethics includes the components like privacy, reliability, security and non-deception, security, shared values, service recovery and communication. The views and perception of buyers determine the repurchase intentions and it results in their satisfaction to the organization. The instrument which determines the integrity and responsibility of the firm is to deal with the customers in honest, confidential, fair and secure manners that protect the interest of buyers in terms of their profits.

These factors are taken form ethical theories i.e. ethical egoism, utilitarianism, deontology theory, the ethics of care theory and rights theory. The ethical factors like security and privacy which affect the repurchase intentions of the buyers from the online market in businesses were considered important in research. Different cultures have shown different impacts on the repurchase intentions of the buyers. These behaviors of buyers also depend on the cultural differences and infrastructural development of the organization (Agag, 2017).
To facilitate the interactions and transactions among the different firms the B2B SMEs e-commerce plays a significant role. There are different functions that are performed in the B2B SMEs e-commerce which help the sellers and buyers. For this purpose, the evolution of the internet is very important in terms of technological development. The Internet have significant role in the establishment of SMEs. E-commerce provides the competition globally among the B2B SMEs and provides them access to big national and international markets. B2B e-commerce facilitates a good association between the SMEs and their consumers. Due to importance of B2B SMEs in the country and research, this research is looking at ethical issues of e-commerce for betterment of business owners and managers in e-commerce. Further, online repurchase intentions bring repurchase perception of business owners through satisfaction of the buyers towards the organization. Further, Buyer confirmation of expectation and perceived usefulness is very important which determines the repurchase intentions of the Buyers in e-commerce ethics. Further, SMEs are considered the backbone of country and are important for its economy.

It is also determined that satisfied buyers will have to pay higher prices for their products to the organizations. So in this way buyers’ satisfaction improves the growth and profit of the organization (Lawson-Body and OKeefe, 2006). Literature shows that perceived usefulness, confirmation of expectation and e-satisfaction are important variables in consideration with e-commerce. These factors are taken into consideration from the expectation confirmation theory (ECT). According to the intentions of this research, B2B buyers are experiencing perceived usefulness in e-commerce experience and ethics are also followed by the rules and regulations. Additionally, confirmation of expectation is the expectations and perceptions from the side of buyers for website and e-commerce interaction. Buyers in B2B SMEs are more focused on usage of e-commerce interaction with e-commerce ethical consideration. Further, the researchers argued that B2B e-commerce was different from B2C e-commerce because B2B e-commerce was influenced by the global factors while B2C e-commerce is affected by local factors (Gibbs et al. 2003, Al-Tit, 2020).

The aim of this study is to develop the framework which determines the impacts of the online services on the repurchase intentions of B2B and their satisfaction for the organizations through perceived usefulness, confirmation of expectation, and e-satisfaction in case of B2B e-commerce.

The advent of information technology and Covid-19 pandemic has brought dynamic changes in world of e-commerce. Businesses have established online platforms to increase profits during and after pandemic crisis in the world as well as in Pakistan (Bhatti, et al. 2020). Moreover, the increase in profits was also followed by an immense increase in ethical issues (Agag, 2019). Research stream was conducted on the rise of e-commerce but only a limited number of studies are available on the ethical issues of e-commerce and the variables related with it (Agag, 2019; Shin et al, 2013). Moreover, role of mediation in e-satisfaction, confirmation of expectation along with perceived usefulness in the empirical model shows paucity in research on B2B SMEs e-commerce. Therefore, this research aims as fulfilling the gap
of e-commerce ethics with major components along with mediation relation in B2B SMEs in the context of Pakistan.

**Literature Review**

SMEs play significant role for the development of country. The Asian context research defines that e-commerce can provide business opportunities and encouraging start-ups in B2B e-commerce (Lurong, 2020). Moreover, It is said that SMEs are considered as the main support of country development and for the economy’s growth. It is determined that e-commerce comprises 80%-90% of national business establishments. But as compared to large business the SMEs have some issues like lack of knowledge, acceptance, infrastructure, and recognition for the large competition (Chen and Kimura, 2020). However, e-commerce helps B2B SMEs to enter into the global market with fewer resources i.e. (communication technologies, artificial intelligence, digital image processing and neural networks). The BPSE i.e. (privacy, security, shared values, communication and) reliability have additional positive impact on the repurchase intentions.

The user behavior in e-commerce can be identified through the number of dimensions using the important theories. The theory of reasoned action (TRA) recommended by Fishbein and Ajzen (1980), it is established on the beliefs that affect the performance of person according to their behavior. This theory defines the actual behavior of buyers for performing business transactions online for the particular service. The stronger intentions of buyers will determine their actual behavior. The theory of planned behavior (TPB) proposed by Ajzen, it suggests that the online transaction depends on the buyers’ attitude, intentions, and beliefs of buyers. Further, TPB defines the buyers’ behavior according to the perceived behavioral control. This is used to overcome the issues in the original TRA model. Technology acceptance model (TAM) proposed by Davis et al. (1989), TAM focus on both concepts of TRA and TPB and concentrate on the belief-attitude-intentions relationship. Unified theory of acceptance and use of technology (UTAUF) predicts the buyers’ intentions towards the use of technology subsequently (Peiris, Kulkarni, and de Silva Mawatha, 2015). Moreover, the main theoretical concerns of this research, expectation-confirmation theory (ECT) proposed by Oliver (1980), it defines the confirmation of expectation with a perceived usefulness which will lead to the most satisfaction of different buyers. This theory predicts the continued use of technology by the buyers (Ayatollahi, et al, 2016). ECT shows users continuation of IT system based on consequences as confirmation of expectations of buyers during and after purchase, perceived usefulness of buyers on the basis of e-system transaction process and satisfaction of buyers during and after e-commerce transaction experience.

Business ethics theories revolve around e-commerce issues to help an increase in e-commerce activities by solving ethical problems. As business ethics concentrate integrity, fairness justice and honesty therefore ethical theories as normative theoretical aspects as theory of moral right and utilitarian revolve around
E-Commerce Ethics into Expectation-Confirmation Model: Emerging Case of Pakistan’s B2B SMEs

e-commerce ethical issues (Derry and Green, 1989; Laczniak, and Murphy, 2019). Utilitarian aspects of ethical theory focused on consequence based on actions and plans of human activities (Crane, et al, 2019). Moreover, the theory of rights and morals are based on rules, aspects of free speech, freedom, rights on privacy, security, free speech and process(Crane, et al, 2019). Moral aspects of these theories depend on compensation norms rules and values. Researcher describes these ethical theories as base for the foundation of BPSE i.e. privacy, security, reliability, communication, shared values, service recovery and non-deception.

Hypothesis Development

The relationships of BPSE with online repurchase intentions, e-satisfaction, perceived usefulness and confirmation of expectation

With the increasing number of buyers towards the e-commerce, the privacy, security, non-deception and reliability for the buyers are very important for behavioral marketing managers. The behavioral markets are not focusing on the privacy of the buyers as a result of this issue e-commerce will lose their satisfied and loyal buyers as well as their sales when security becomes doubtful for the buyers. The targets of e-commerce include the use, sale, and collection of information about the buyers (Ajzen & Sheikh, 2013). Different strategies are also used to secure personal information and reduce the amount of information as communication through digital ads. The privacy, security and other elements of buyers are very vital for the development of the e-commerce business. Buyers’ privacy can be defined as the privacy which can be affected by the behavioral marketers. The growth of e-commerce depends upon the buyers’ privacy, security, communication and other elements of e-commerce ethics from the perspective of behavioral marketers. This kind of awareness will protect from future security breaches. Behavioral marketers intend to understand the social norms, attitudes, and perceived behavioral control of the marketing managers (Jones, 2019). There are four major concerns of buyers for online business and three of them are related to ethical issues from the research point of view. One of them is associated to the privacy and sharing of person’s information, the second one is related to the security system and the third one is related to online fraud regarding the fraudulent behavior of online retailers. Further, Forsythe et al.(2006) develops the three-factor scale which is used to determine the perceived risks faced on online shopping. The financial risk defines as the potential reduction in total money and increases customer’s insecurity related to the use of online credit cards. There are some important ethical issues which are related to the SMEs B2B e-commerce including security, privacy, reliability, non-deception, shared values, service recovery, and communication. According to B2B SMEs e-commerce, BPSE express as the perception of buyers related to the responsibilities and integrity of the firm which deals with the protection of buyer’s interests (Agag, 2017). The internet provides big opportunities for businesses. For the delivery of information and services to the buyers, the internet makes it very easier. But the new environment of the internet has unethical behaviors like issues in privacy, transaction security, and unsolicited mails. Due to these issues, a large number of users avoid online shopping. Moreover, scholars define the perception of buyers
regarding e-commerce (Roman and Cuestas, 2008). A number of researches have been performed to identify the e-commerce ethics constructs, buyers’ perception related to online shopping, and explores online retailing and e-commerce ethics (Choi, and Lee, 2019; Huang, and Chang, 2019). While other studies focusing on satisfaction of e-commerce users and online repurchase intentions. The e-commerce ethics factors focus on the satisfaction; shared values and service recover of buyers. BPSE can also be defined as the positive perception of buyers that deals with the buyers’ fair, honest, confidential, and sincere behaviors and protect their interest. Further researcher suggest that reliability of service will lead to the satisfaction of e-commerce users and trustworthiness of the buyers indirectly (Agag, et al, 2016; Lin et al, 2019). Therefore, hypothesis are proposed as follows:

**H1** There is a positive relation of e-commerce ethics and online repurchase intentions.

**H2** E-commerce ethics and e-satisfaction is positively related to each other.

**H3** There is a positive relation of e-commerce ethics and perceived usefulness.

**H4** E-commerce ethics and confirmation of expectation is positively related with each other.

**The relationship of confirmation of expectation with e-satisfaction, perceived usefulness and online repurchase intentions**

Confirmation of expectation refers to the expectations of the buyers that are being confirmed after purchase (Hossain, & Quaddus, 2012). There is evaluation process and beliefs of buyers’ attitude that generate positive expectations (Yeh & Teng 2012). Moreover, in e-commerce B2B settings, business managers focus on system quality, information quality support of a system performance etc. are characterized as successful factors (Malaysia and Hong, 2015; Tam et al, 2020). Hence satisfaction and expectations plays important role in e-commerce repurchase intentions in e-commerce environment. According to ECT Buyers’ attitude is formed through experience of information systems and its adoption makes expectations, perceived usefulness and satisfaction become pervasive in confirmation of expectation. Further, Online repurchase intentions is result of perceived usefulness, confirmation of expectation and satisfaction from e-commerce business. Therefore, following hypotheses are proposed to shows the relation.

**H5** There is a positive relation of confirmation of expectation and e-satisfaction in e-commerce user.

**H6** Confirmation of expectation and perceived usefulness is positively related to each other.
H7. There is a positive relation of confirmation of expectation and online repurchase intentions.

Moreover, buyers’ satisfaction plays vital role in formation of attitude and expectations of buyers in post-purchase experience (Malaysia, and Hong, 2015). In information system when buyers’ expectations are enchanted due to quality, transactions, support, reliability, security, non-deceptive practices favorable response in the form of online repurchase intentions takes place (Tam, Santos, and Oliveira, 2020). According to the literature, e-satisfaction and online repurchase intentions are correlated to each other in information system of B2B and SMEs network. Hence following hypothesized relation is suggested to test the model:

H8. E-satisfaction and online repurchase intentions is positively related to each other.

The relationships of perceived usefulness with online repurchase intentions and e-satisfaction

According to researchers, perceived usefulness is about manager’s attitude towards e-commerce website and system that will provide services, convenience and productivity usefulness in help of business (Malaysia, and Hong, 2015; Tam, et al, 2020). Additionally, perceived usefulness, in online system of e-commerce users make business conducive. Online repurchase intentions is antecedent of perceived usefulness efficiency and effectiveness in e-commerce environment (Yeh, et al, 2012; Rafique et al, 2020). Likewise, perceived usefulness and e-satisfaction in e-commerce user consequences online repurchase intentions as a resultant effect. Therefore, following hypothesized relation is recommended to in the research:

H9. Perceived usefulness and online repurchase intentions is positively related to each other.

H10. There is a positive relation of perceived usefulness and e-satisfaction in e-commerce user.

Mediating role of e-satisfaction and perceived usefulness

E-satisfaction refers to buyers’ gratitude, favorable perception and attitude towards e-commerce firm and its repurchase (Anderson and Srinivasan, 2003; Alalwan, 2020). Buyer satisfaction is formed through evaluations and contentment of buyer through e-commerce platform usage in B2B SMEs. Moreover, e-commerce ethics perception is important in creation e-satisfaction. Researchers endorsed that e-commerce ethics leads to successful e-commerce business through privacy support system, information security, reliability in e-commerce transactions and systems and avoidance of deception in services. Further, e-satisfaction increases online repurchase intentions otherwise dissatisfaction will decrease online repurchase intentions in e-commerce users. Likewise, perceived usefulness of e-commerce system and confirmation of expectations of business users also brings e-
satisfaction. The research is investigating e-satisfaction as a mediator and perceived usefulness in hypothesis due to importance of this construct in e-commerce and B2B context. Therefore, following hypothesized relation is suggested:

H₁₁ E-satisfaction mediates the relation between e-commerce ethics (BPSE) and online repurchases intentions.

H₁₂ Perceived usefulness mediates the relation between confirmation of expectations and e-satisfaction.

Perceived usefulness and confirmation of expectations in mediation with BPSE and online repurchase intentions

BPSE consideration and its impact on repurchase intentions of buyers in e-commerce is the main consideration of the present research. Literature plays vital role of technology acceptance and its system in e-commerce in accordance to perceived usefulness and confirmation of expectations of e-commerce users (Hossain & Quaddus, 2012; Wu, et al, 2020). Therefore, expectations of B2B SMEs users are confirmed to transactional experience with ethical considerations then online repurchase intentions is likely to occur in post consumption behavior. Favorable perception of users in relation to transactional experience and quality along with usefulness brings perceived usefulness in consumer attitude (Hsu, et al, 2014; Wu, et al, 2020). As per given importance of perceived usefulness and confirmation of expectations as mediators, the research investigates the role with e-commerce ethics (BPSE) and online repurchase intentions of buyers in B2B SMEs context. Therefore, this research investigates following hypothesis and their relations are suggested:

H₁₃ Perceived usefulness mediates the relation between e-commerce ethics (BPSE) and online repurchase intentions.

H₁₄ Confirmation of expectations mediates the relation between e-commerce ethics (BPSE) and online repurchases intentions.
Model 1  Shows hypothesis relations proposed in research.

Material and Methods

Sampling and data collection

The target population of B2B SMEs is infinite; thus B2B SMEs are increasing day by day in Pakistan. According Cochran’s equation for infinite population, sample size should be 384 with 95% of confidence level (Cochran, 1977).

Moreover, stratified sampling technique is used in this research and strata include SMEs such as national and international, manufacturer, distributer, Supplier, wholesaler, retailer in B2B sample. Further, The question is categorized into different fields of industries included grocery, garments, sports items, equipment, cosmetics, machinery, and chemical because these segment comprises major volume of Pakistan economy (Pakistan Economic Survey, 2019,2020).Over all, response rate of the research is 76 percent and 410 is total survey data that is collected from 500 distributed survey forms. Further 387 are valid responses. Checking consistency and strength or rationality is important due to revision of items and contextual differences (Ghauri et al, 2020; Gray, 2019; Bell et al., 2018). To check the content validity of the questionnaire, the questionnaire have been sent to eleven management science experts, professors; therefore each construct is evaluated to ensure construct validity.
Measurement Scales

Total 21 items are used in questionnaire section of BPSE. BPSE sub constructs are formed through items of communication (3 items), security (3 items), service recovery (3 items), shared values (3 items), reliability (3 items are taken), privacy (3 items are retain after pretesting of questionnaire), non-deception (3 items), all the sub constructs are adapted from the research of Agag et al. (2016), Agag (2016) and Agag (2019).

Other factors in this study are, perceived usefulness question that has 4 items, adapted from studies of Moon and Kim (2001) and Thong et al.(2006). Confirmation of expectation construct has 3 items, it is taken from the research of Bhattacherjee (2001a, 2001b). E-satisfaction variable is measured through research developed by Spreng and Olshavsky (1993) and Lin et al.(2005), Bhattacherjee(2001a, 2001b) and it has total 3 items. Online repurchase intentions (Thong et al.(2006), Bhattacherjee(2001a, 2001b) has total 3 items, used in questionnaire.

Further, scale of measuring item, this study use Likert scale ranges from 1, strongly disagree as dissatisfied buyers to 5, strongly agree taken as satisfied for scale of measuring items.

Data Analysis

In order to analyze hypothesis of this research, researcher used PLS-SEM research technique owing to its academic relevance (Lee et al, 2011; Hair, et al, 2019). Therefore, this research used Smart PLS 3 to analyze the data into path modeling technique. Moreover its variance base SEM is used to validate, test and predict the models (Henseler et al, 2009; Hair, et al, 2012). Firstly ,the research assess the respondent demographic characteristics. Further, this study assess SEM through two research steps as evaluating the measurement model and then it will proceed towards assessment of structural equation model of the research.

The demographic representative description Table 1, suggest that e-commerce age of respondent’s frequency is range between 1 to 3 years, 4 to 6 years, 7 to 9 years and more than 9 years with 124, 148, 97 and 18 percentages of respondents respectively. Further, professional status shows owner, administrator, supporting staff and others respondents have been mostly analyzed with frequency of 72, 98, 146 and 71 respectively. Moreover in qualification section most of the respondent complete college, bachelor and master, MS/ M.Phil, PhD and others degree with frequency of 4, 43, 170, 99, 35, 19 and 17. Additionally, experience in industry of employees is from 1, 2, 3, 4, 5 years and more than 5 years with frequency of 11, 20, 21, 56,162 and 117. Finally, business types including manufactures, distributor, wholesaler and retailer in e-commerce are evaluated with respondents’ frequency of 108, 127, 104 and 48 respectively along with industry type including grocery,
garments, sports items, equipment, cosmetics, machinery, and chemical with frequency of 47, 87, 65, 66, 51, 48, and 23 respectively.

Table 1
Respondent Demographic

<table>
<thead>
<tr>
<th>Description</th>
<th>Characteristics</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-commerce Age</td>
<td>1 to 3 Yrs</td>
<td>124</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>4 to 6 Yrs</td>
<td>148</td>
<td>38.2</td>
</tr>
<tr>
<td></td>
<td>7 to 9 Yrs</td>
<td>97</td>
<td>25.1</td>
</tr>
<tr>
<td></td>
<td>&gt;9 Yrs or more</td>
<td>18</td>
<td>4.7</td>
</tr>
<tr>
<td>Professional Status</td>
<td>Owner</td>
<td>72</td>
<td>18.6</td>
</tr>
<tr>
<td></td>
<td>Administrator</td>
<td>98</td>
<td>25.3</td>
</tr>
<tr>
<td></td>
<td>Supporting Staff</td>
<td>146</td>
<td>37.7</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>71</td>
<td>18.3</td>
</tr>
<tr>
<td>Qualification</td>
<td>High School</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>43</td>
<td>11.1</td>
</tr>
<tr>
<td></td>
<td>Bachelor</td>
<td>170</td>
<td>43.9</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>99</td>
<td>25.6</td>
</tr>
<tr>
<td></td>
<td>MS/M. Phil</td>
<td>35</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>PHD</td>
<td>19</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>17</td>
<td>2.9</td>
</tr>
<tr>
<td>Experience in Industry</td>
<td>1 Yr</td>
<td>11</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>2 yrs</td>
<td>20</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>3 Yrs</td>
<td>21</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>4 Yrs</td>
<td>56</td>
<td>14.5</td>
</tr>
<tr>
<td></td>
<td>5 Yrs</td>
<td>162</td>
<td>41.9</td>
</tr>
<tr>
<td></td>
<td>&gt;5 Yrs</td>
<td>117</td>
<td>30.2</td>
</tr>
<tr>
<td>Business Type</td>
<td>Manufactures</td>
<td>108</td>
<td>27.9</td>
</tr>
<tr>
<td></td>
<td>Distributor</td>
<td>127</td>
<td>32.8</td>
</tr>
<tr>
<td></td>
<td>Wholesaler</td>
<td>104</td>
<td>26.9</td>
</tr>
<tr>
<td></td>
<td>Retailer</td>
<td>48</td>
<td>12.4</td>
</tr>
<tr>
<td>Industry Type</td>
<td>Grocery</td>
<td>47</td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td>Garments</td>
<td>87</td>
<td>22.5</td>
</tr>
<tr>
<td></td>
<td>Sports items</td>
<td>65</td>
<td>16.8</td>
</tr>
<tr>
<td></td>
<td>Equipment</td>
<td>66</td>
<td>17.1</td>
</tr>
<tr>
<td></td>
<td>Cosmetics</td>
<td>51</td>
<td>13.2</td>
</tr>
<tr>
<td></td>
<td>Machinery</td>
<td>48</td>
<td>12.4</td>
</tr>
<tr>
<td></td>
<td>Chemical</td>
<td>23</td>
<td>5.9</td>
</tr>
</tbody>
</table>
Measurement Assessment Model Results

In measurement model evaluation stage, researcher assess standardize loadings, alpha, convergent validity (CV), average variance extracted (AVE) and discriminant validity (Hair, et al, 2010; 2019). However, according to researcher, confirmatory composite analysis (CCA) is embedded to PLS-SEM analysis of construct validity through measurement model (Hair, et al, 2020). Mainly, construct validity is evaluated through items standardize loadings, average variance extracted (AVE) and reliability (Hair, et al, 2020). Hence, the present research presents measurement assessment model in Table 2.

Individual item reliability is assessed through outer loadings (Haier et al, 2016, 2019). Further, individual construct loadings are represented through each item in Table 2. Academicians provide rule of thumb to retain loadings based on each items. Each item is retained and accepted if the loading is on the threshold of 0.7 and more (Haier et al, 2016; Duarte and Raposo, 2010). Therefore, the investigator drops the items of BPSE sub constructs due to lower threshold of 0.4. Hence, current research is representing the acceptable level of loadings 0.6 or more of standard loadings of latent variables in Table 2.

Internal consistency reliability is evaluated through composite reliability and coefficient of CR is represented in Table 2. Researcher suggests the threshold of composite reliability coefficient is 0.7 or above (Bagozzi and Yi, 1988; Haier et al, 2016). Therefore, this research presents the composite reliability value 0.7 or above to suggested threshold of acceptable level.

Convergent validity is assessed through average variance extracted (AVE) (Fornell and Larker, 1981; Hair et al, 2016). According to scholars (Chin, 1998) acceptable threshold level of average variance extracted (AVE) is 0.5 or above. Table 2 shows the value of AVE of this research study is on acceptable level.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Loadings</th>
<th>Alpha</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPSE</td>
<td>PR1</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privacy</td>
<td>PR2</td>
<td>0.818</td>
<td>0.723</td>
<td>0.639</td>
<td>0.696</td>
</tr>
<tr>
<td></td>
<td>PR3</td>
<td>0.969</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>SE1</td>
<td>0.559</td>
<td>0.703</td>
<td>0.708</td>
<td>0.7691</td>
</tr>
<tr>
<td></td>
<td>SE2</td>
<td>0.683</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SE3</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td>R1</td>
<td>0.638</td>
<td>0.695</td>
<td>0.685</td>
<td>0.691</td>
</tr>
<tr>
<td></td>
<td>R2</td>
<td>0.828</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>R3</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
To assess the discriminant validity, researchers suggest that square root of average variance extracted (AVE) should be more than the latent construct’s correlations (Fornell and Larker, 1981; Hair et al, 2016). Therefore, the present research paper indicates that AVE Square root value is more than the latent variables of the research. The values of discriminant validity in Table 3 shows numerical evidence that this research presents constructs that meet the criteria of acceptable reliability and validity in terms of discriminant validity.

Table 3
Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th>Online repurchase intentions</th>
<th>Perceived usefulness</th>
<th>BPSE</th>
<th>Confirmation of expectation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online repurchase intentions</td>
<td>0.874</td>
<td>0.701 0.852</td>
<td>0.692 0.6409 0.792 0.847</td>
<td>0.585 0.497 0.571 0.664 0.842</td>
</tr>
</tbody>
</table>
Structural Model Assessment Results

This research is firstly assessing multicollinearity issue. According to research scholars (Hair et al, 2016), VIF variance inflation factor score of latent variables should be less than 5. The VIF Score of this study is below the threshold level. Further, this research performs bootstrapping process in Smart PLS 3 to obtain path coefficients regarding hypothesis testing. Table 4 shows result of overall path coefficients and estimates of mediation in structural equation model assessment.

Initially, first Hypothesis 1; propose that, e-commerce ethics (BPSE) and online repurchase intentions is positively associated. Results reveal that H1 is supported and substantial (β = 0.673, T-value= 3.0033, P = 0.0018). Hypothesis 2; suggested that E-commerce ethics (BPSE) and E-satisfaction are positively associated with each other. H2 is empirically supported (β=.721, t-value= 2.0037, P value= 0.0017) in the result of Table 4. Moreover, analysis of Hypothesis 3 reveals, e-commerce ethics (BPSE) and perceived usefulness for e-commerce users are positively related (β =.761, t-value= 2.942, P value= 0.0046).

The result of Hypothesis 4; shows e-commerce ethics (BPSE) affects positively and confirmation of expectation of e-commerce users. H4 showed empirical support (β =.607, T=7.184, P= 0.00). However, Hypothesis 5; confirmation of expectation affects positively towards e-satisfaction in e-commerce (β = 0.111, t-value= 0.205, P value= 0.026) but could not support in analysis. Hypothesis 6 indicates the association between confirmation of expectation and perceived usefulness is positive but this hypothesis could not show support in analyses (β =0.0121, t-value= 1.237, P value= 0.126). Moreover, other direct Hypothesis 7, states that, confirmation of expectation and online repurchase intentions are positively related and empirically supported (β =.685, t-value= 4.09, P value= 0.026). Hypothesis 8 indicates that, the affiliation between e-satisfaction and online repurchase intentions is positive (β =0.57, t-value= 3.247, P-value= 0.0021). Hence, H8 is supported in analyses.

Hypothesis 9 shows, perceived usefulness and online repurchase intentions of e-commerce users are related positively. However, this hypothesis empirically supported in analyses (β = .465, t= 1.927, P=0.039). Finally, Hypothesis 10, directly specifies positive relationship of perceived usefulness and e-satisfaction and H10 also shows support of hypothesis in analysis (β =.790, t= 3.387, P=0.0096).

<table>
<thead>
<tr>
<th>H1</th>
<th>E-commerce ethics(BPSE)---Online repurchase intentions</th>
<th>Path coefficient(β)</th>
<th>St. Er</th>
<th>T- value</th>
<th>P- Value</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.673</td>
<td>0.166</td>
<td>3.0033</td>
<td>0.0018</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

E-satisfaction

| E-satisfaction | 0.431 | 0.396 | 0.498 | 0.672 | 0.675 | 0.841 |
Mediation analysis followed by researcher indication (Preacher and Hayes, 2008) shows, Hypothesis 11 is significantly supported in analyses. Table 4, H11; shows e-satisfaction intermediates the connection between e-commerce ethics (BPSE) and online repurchase intentions ($\beta = 0.476$, t-value= 2.0914, P-value= 0.006) along with confidence interval shows Lower Limit= 0.233, Upper Limit=0.451).This interval value does not include 0. Hence mediation effect is supported empirically. Further, mediation effect in H12 indicates that perceived usefulness significantly intervene the association of e-satisfaction and confirmation of expectation ($\beta = 0.705$, T= 3.0314, P= 0.0036) and confidence interval shows acceptable values (LL=0.323, UL=0.562). H13; shows perceived usefulness intermediates the connection between e-commerce ethics (BPSE) perception and online repurchase intentions ($\beta = 0.619$, t-value= 2.0398, P-value= 0.0023) along with confidence interval shows LL= 0.392, UL=0.523).This interval value does not include 0. Hence mediation effect is supported empirically. Further, mediation effect in H14 indicates that confirmation of expectation significantly intervene the association of BPSE and online repurchase intentions ($\beta = 0.598$, T= 4.0810, P= 0.0112) and confidence interval shows acceptable values (LL=0.401, UL=0.732).

| H11 | BPSE --- >E-satisfaction | 0.876 | 0.1136 | 2.0914 | 0.233 | 0.451 | 0.006 | Yes |
| H12 | Confirmation of expectation--- >Perceived usefulness--- >E-satisfaction | 0.705 | 0.1027 | 3.0314 | 0.323 | 0.562 | 0.0036 | Yes |
| H13 | BPSE --- >Perceived usefulness | 0.619 | 0.1201 | 2.0398 | 0.392 | 0.523 | 0.0023 | Yes |
Mainly, F-square shows effect size of variable relation (Cohen, 2013; Hair et al, 2020). However, it suggests F-square determines whether the hypothesized phenomenon exists in the data and further it indicates substantive power in research model. Second important tool for research effectiveness is the predictive power and Q square shows predictive relevancy of research model. Researcher described rule of thumb for F-square value and as small 0.02 medium 0.15 and large 0.35 and above Q-square values and acceptable range values should be greater than zero (Cohen 2013; Sharma, et al, 2019; Hair et al, 2019).

The central association of this research study demonstrates, influence of e-commerce ethics on online repurchase intentions, therefore, main hypothesis relationships shows F-square 0.402 and Q-square value 0.16 of effect size and...
predictive relevance of model used in this study. Further R-square 0.461 value is also shown in main hypothesis relations because it shows how much of an explanation is explained through predictive variable in the model is also called as R-square of endogenous variable in the sample of data (Hair et al, 2020). Following table shows direct effect and model predictability values in e-commerce ethics model.

<table>
<thead>
<tr>
<th>Relationship</th>
<th>R-SQ</th>
<th>F-SQ</th>
<th>Effect size</th>
<th>Q-SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-commerce ethics(BPSE) ---&gt; online repurchase intentions</td>
<td>0.461</td>
<td>0.402</td>
<td>0.23</td>
<td>0.16</td>
</tr>
<tr>
<td>E-commerce ethics(BPSE) ---&gt; E-satisfaction</td>
<td>0.391</td>
<td>0.219</td>
<td>0.19</td>
<td>0.19</td>
</tr>
<tr>
<td>E-commerce ethics(BPSE) ---&gt; Perceived usefulness</td>
<td>0.67</td>
<td>0.32</td>
<td>0.28</td>
<td>0.12</td>
</tr>
<tr>
<td>Confirmation of expectation ---&gt; E-satisfaction</td>
<td>0.461</td>
<td>0.319</td>
<td>0.139</td>
<td>0.19</td>
</tr>
<tr>
<td>Confirmation of expectation ---&gt; Perceived usefulness</td>
<td>0.67</td>
<td>0.32</td>
<td>0.28</td>
<td>0.11</td>
</tr>
<tr>
<td>Confirmation of expectation ---&gt; online repurchase intentions</td>
<td>0.59</td>
<td>0.56</td>
<td>0.12</td>
<td>0.21</td>
</tr>
<tr>
<td>E-satisfaction ---&gt; online repurchase intentions</td>
<td>0.69</td>
<td>0.435</td>
<td>0.451</td>
<td>0.41</td>
</tr>
<tr>
<td>Perceived usefulness ---&gt; online repurchase intentions</td>
<td>0.294</td>
<td>0.39</td>
<td>0.312</td>
<td>0.391</td>
</tr>
<tr>
<td>Perceived usefulness ---&gt; E-satisfaction</td>
<td>0.51</td>
<td>0.459</td>
<td>0.17</td>
<td>0.28</td>
</tr>
</tbody>
</table>

Further, mediation BPSE, e-satisfaction and online repurchase intentions shows F-square=0.405 and Q-square=0.189, R-square=0.41 values. Another mediation effect of this research confirmation of expectation, perceived usefulness and e-satisfaction shows F-square=0.2801 Q-square=0.138, R-square=0.402 values respectively. Moreover mediation of BPSE, perceived usefulness and online repurchase intentions shows significant acceptable values of predictive relevance with F-square=0.2301 Q-square=0.1810, R-square=0.690. Likewise mediation BPSE, confirmation of expectation and online repurchase intentions shows F-square=0.2021 and Q-square=0.118, R square=0.650 values respectively. Hence this research indicates that the present research model has acceptable predictive relevance.
Table No 7
Mediation Effect

<table>
<thead>
<tr>
<th>Relationship</th>
<th>R-SQ</th>
<th>F-SQ</th>
<th>Effect size</th>
<th>Q-SQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPSE ---&gt; E-satisfaction --&gt; Online repurchase intentions</td>
<td>0.41</td>
<td>0.405</td>
<td>0.389</td>
<td>0.189</td>
</tr>
<tr>
<td>Confirmation of expectation --&gt; Perceived usefulness --&gt; E-satisfaction</td>
<td>0.402</td>
<td>0.2801</td>
<td>0.198</td>
<td>0.138</td>
</tr>
<tr>
<td>BPSE ---&gt; Perceived usefulness --&gt; Online repurchase intentions</td>
<td>0.301</td>
<td>0.2301</td>
<td>0.301</td>
<td>0.1310</td>
</tr>
<tr>
<td>BPSE ---&gt; Confirmation of expectation --&gt; Online repurchase intentions</td>
<td>0.650</td>
<td>0.2021</td>
<td>0.311</td>
<td>0.118</td>
</tr>
</tbody>
</table>

Discussion, Theoretical and Managerial Implication

This study investigates effect of e-commerce ethics on online repurchase intentions as a core objective of this study is B2B SMEs in the context of Pakistan. Further this study also investigates direct and through meditation of ECT (perceived usefulness, confirmation of expectation and e-satisfaction) impacts of BPSE on online repurchase intentions.

Due to multidimensionality and importance of BPSE construct in literature and practical business situation, this is investigated over seven measurements as privacy, security, reliability, non-deception, service recovery, shared values, communication (Agag, 2019). Further, findings suggest that most of the hypothesized statements are supported in B2B context which indicates the positive connection between the BPSE and online purchasing behavior. In similar vein, the mediating effect hypothesis is also supported.

The relation among confirmation of expectations on e-satisfaction (H5), confirmation of expectations on perceived usefulness (H6) does not support in context of B2B SMEs of Pakistan. Confirmation of expectation of business users towards e-satisfaction and hypothesize association of confirmation of expectation and perceived usefulness could not show empirical support in analyses due to acceptance and embrace of e-commerce in not applied in Pakistan because of absence of belief, trust and dissatisfaction in expectation of e-commerce framework in business users. As research suggests that e-commerce ethical practices and issues are associated with satisfaction and dissatisfaction and expectations (Limbu et al, 2012; Park et al., 2017; Hamidi and Moradi, 2017; Audu, 2018).

Similarly, the relation between perceived usefulness and online repurchase intentions of e-commerce buyers are supported in the context of Pakistan due to hybrid environment and uncertainty in business. These issues can be mitigated using digital marketing efforts ethically, along with efficiency in information system of
organization. Likewise, other research papers related to e-commerce and its ethical practices impact, the academicians and practitioners established theoretical models to be tested for future researches in different context (Kurt and Hacioglu, 2010; Limbu et al., 2011; 2012; Sharma and Lijuan, 2014;2015;Perk et al., 2017; Agag, 2019). Therefore, managers in e-commerce should focus on IT systems and transaction systems that bring quality satisfaction in the e-commerce service process. Furthermore, digital marketing efforts should focus on e-commerce ethical consideration so that the expectations of buyers can be contented along with perceived usefulness in system and processes.

Perceived usefulness, confirmation of expectation, and e-satisfaction are taken from expectation confirmation theory. As these intervening variables incorporated in IT systems for e-commerce buyers’ perception regarding sellers’ expectations enhances resultantly repurchase intentions of buyers will increase. For Perceived usefulness, website quality and online/digital marketing efforts along with purchase and transaction systems must be focused on automation systems that include artificial intelligence, neural networks, and digital image processing embedded systems with practical implications. Further confirmation of expectation, also enhance e-commerce perception and repurchase intentions due expectations are meet with ethical considerations therefore managers must make their system framework in a user friendly manner. Finally e-satisfaction can be enhanced using automated e-commerce experience in a smooth and reliable way. Moreover use of digital marketing tools, and analytics should be used for decision making systems in organization to enhance e-satisfaction of buyers.

Research suggests that all three components of ECT play crucial part between the e-commerce ethical methods and online repurchase intentions of e-commerce market (Rahi and Ghani, 2019; Eid et al., 2011). Based on various research results, it is established that confirmation of expectation and perceived usefulness has direct positive effect on the satisfaction and dissatisfaction of customer in every market, also in the e-commerce market (Wijaya et al., 2019; Shaiu et al., 2011; Huang et al., 2007). From these findings, underlying the ECT concluded that, perceived usefulness of e-customer in business and confirmation of expectation is increased the electronic satisfaction of e-commerce (Lou and Lee, 2011; Kim, 2012).

Moreover, ethical theories i.e.,( ethical egoism, utilitarianism,deontology theory, the ethics of care theory, rights theory) in the concept of e-commerce ethics also established the conclusion that buyers and sellers’ perception regarding ethical practices issues and ethical approaches is also positively affected on all the components of ECT (Rodriguez et al., 2018).Additionally, business ethics theories based on utilitarian views of consequences based on human actions also ground ethical elements of this research. Business ethics work on honesty, integrity, justice fairness and value privacy, security and non-deceptive services for buyers in e-commerce. Hence theoretical lance provide the foundations and justifications of variables present in the model.
Practical research application of this study is related to the business managers. That it should focus on communication, security, service recovery, shared values, reliability, privacy, non-deception for e-commerce ethical issues and e-commerce framework of company to enhance the business existence. The issues of e-commerce can be mitigated using strategy of proper e-commerce framework and acceptance of e-satisfaction using engaging activities because satisfaction relates with BPSE (privacy, security, shared values, reliability, non-deception, service recovery and communication) through digital ad, service experience through social commerce, and sustainable competitive advantage. These activities e.g. complain handling system along with analytics should be established for perceived usefulness, confirmation of expectation and privacy, security, shared values, reliability, non-deception, service recovery and communication. The unavailability of the above-mentioned activities will develop misconception in the mind of the buyers B2B SMEs. Through the findings of this study, practical approaches can be developed for the implications of e-commerce policies and practices for gaining e-competitive advantage.

Conclusion and Future Research Direction

E-commerce B2B SMEs must have to understand and access the practices of e-commerce ethics due to emerging e-competition. Various studies were conducted in the perspective and perceptions of e-buyers and e-sellers regarding ethical practices of e-commerce (Phat, et al, 2018; Choi, and Lee, 2019; Huang, and Chang, 2019).

Additionally, different mediators and moderators have already been analyzed to mitigate the adverse impact of unethical e-commerce issues and how do they influence consumer preferences towards particular products. Other studies have focused only on relationship quality such as, commitment, trust and e-satisfaction as a mediator (Agag, 2019) but this study is among limited studies which focus on ECT and ethical theories such as (ethical egoism, utilitarianism, deontology theory, the ethics of care theory and rights theory). Further this study uses ECT, ethical theories hypothesizes relation and mediator role in the context of e-commerce B2B SMEs operating in Pakistan where all the ethical issues related to e-commerce market have been emerging. Moreover, the study will also identify the possible way outs to avoid those unethical issues that can impact the decision of buyers regarding the e-commerce market.

This research is limited in the conducted analysis of B2B SMEs due to sample and size, it cannot be conducted randomly; therefore, future study should integrate other sample and size with robust analyses technique. Moreover, future study can be conducted specifically under ethical perception model i.e. (privacy, security, shared values, reliability, non-deception, service recovery and communication) with technology acceptance model (TAM) i.e. perceived usefulness, perceived ease of use, attitude, continuance intentions, cognitive model (COG) i.e. confirmation, satisfaction, attitude, continuance intentions and technology continuance theory
(TCT) i.e. perceived usefulness, perceived ease of use, satisfaction, attitude, continuance intentions. The moderating variables such as e-word of mouth, e-brand experience, value co-creation in e-brand passion can also be used for a robust research.
References


of past practices and recommendations for future applications. *Long range planning*, 45(5-6), 320-340.


