# IMPACT OF ATTITUDE AND SUBJECTIVE NORMS ON BEHAVIOURAL INTENTION OF CONSUMERS TO USE E-COMMERCE IN INDIA: A STUDY BASED ON TRA

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***Abstract:*** In this era of internet technology, e-commerce based businesses are seen rapidly growing in India. Therefore, actual behavioural intention to use e-commerce services is required to study due to scarcity of research in this direction. This research has used theory of reasoned action to measure intention to use by two variables, namely, "attitude" and "subjective norms". Actual behavioural intention is studied by analysing the willingness for "recommendation to others". In this research, quantitative based research method has used questionnaire consisting 16 items and have analysed 170 valid responses. Our findings have identified that both "attitude" and "subjective norms" have significant effects on "intention to use" which further has remarkable impact on "recommendation to others". Our research will contribute in theoretical research as well as aid marketing practitioners improve their e-commerce based services.

***Keywords:*** **TRA, behavioural intention, attitude, subjective norms, recommendation to others.**

## I. INTRODUCTION

"E-commerce refers the purchase and sale of goods and services via electronic channels" (Rivera, 2017).After emergence of the Internet technology, e-commerce has created electronic market for the online sellers to reach directly to the consumers through internet. According to a report, the sale of physical goods via e-commerce platform in India amounted 16.07 billion U.S. dollars in revenues in the year 2016 and it is expected to be 52.301 billion U.S. dollars by 2022 (Statista, 2017). This rapid increase of e-commerce for business created the need of understanding the consumer intended behaviour to use e-commerce for shopping.

Theoretical framework,Theory ofReasoned Action (TRA) introduced by Fishbein and Ajzen's (1975) can determine attitude towards behaviour to use technology and hence helps to understand actual behaviour of consumers about using some technology.The TRA had introduced twoindependentvariables, attitude toward behaviour and subjective norm, which are tied to behavioural and normative beliefs. According to theTRA, behaviour isbest predicted by intentions, and "intentionsare jointly determined by the person's attitudeand subjective norm concerning the behaviour" (Klopping and Mckinney, 2004). Despite the popularity of online shopping there is no study that provides the information about the influence of attitude for e-commerce user's behaviour. Hence, in this research TRA framework is used to study attitude and consumers' behavioural intention towards using e-commerce.This research aims at contributing in theoretical research and improvement of the e-commerce based services.

## II. THEORETICAL BACKGROUND AND HYPOTHESIS

E-business supported by e-commerce technology offers various services to consumers, such as buying and selling goods. E-business includes buying airline and travel tickets, banking services, books, clothing, computer hardware, software, and other online purchases (Joshi, 2017).With the emergence of internet technology,the lifestyle of Indian people has changed. Internet has become important and is being used by operating computers, mobile phones, tablets, etc.

TRA focuses on the constructs of attitude toward the behaviour, subjective norm and social normative perceptions (Montano and Kasprzyk, 2015).TRA deals with theoretical constructs related to individual motivational factors as determinants of the likelihood of performing a specific behaviour. Therefore, TRA is the best predictor of a behavioural intention, which in turn is determined by attitude.Attitude can be measured by the individual's beliefs about outcomes. A person holding strong beliefsthat positive outcome will result from the behaviour, will have a positive attitude toward the behaviour. Whereas,a person holding strong beliefs that negative outcome will result from the behaviour, will have a negative attitude (Montano and Kasprzyk, 2015; Fishbein and Ajzen, 1975). Subjective norm is determined by individual's normative beliefs, that is, individual's beliefs about the extent to which other people who are important to them think they should or should not perform particular behaviours (Trafimow, 2008).

Usefulness is a person's belief that a particular system would be useful and enhance his or her job performance (Duhan and Singh, 2013). Perception of positive feeling of usefulness will enhance positive attitude, whereas negative feeling of usefulness will give negative attitude towards intention to use the system or services. Therefore we can state that:

H1: *Usefulness* will positively affect consumers' intention to use e-commerce technology.

Subjective norms are the perceived social pressures or influence of others an individual faces and influence in making decision to behave in a certain way. Also subjective norm is included as a direct determinant of behavioural intention in TRA (Fishbein and Ajzen, 1975; Pookulangara and Koesler, 2011). Hence, we can state that:

H2: *Peer influence*will positively affect user's subjective norm to use e-commerce technology.

According to TRA, a person's attitude and subjective norm directly influence the intension to use the system and to perform actual behaviour to use particular system or services (Fishbein and Ajzen, 1975). Also satisfied customer will recommend others to use the system or services as per previous researchwhich recommended that intention is the best measure to their purchasing behaviour i.e. actual behaviour (Reichheld, 2003; Keiningham et. Al., 2007).Therefore we can state that:

H3: *Attitude* will positively affect user's intention to use e-commerce technology.

H4: *Subjective norm* will positively affect user's intention to use e-commerce technology.

H5: *Intension to use* will positively affect actual behaviour i.e. recommendation to others.

## III. METHODOLOGY

Methodology used in this research is quantitative research method. Questionnaire comprising 21 items were designed relevant to the topic. In order to conduct a pilot study, 25 questionnaireswheredistributed and collected fromvarious resourcesto validate the items. All the experts had e-commerce based transaction and shopping experience for more than 2 years. After filling the questionnaires, they were subjected to an interview so as to understand their opinion about each item. After analysingthe pilot test result and following the experts' suggestions,16 items were finalised to make the questionnaire relevant in the context of e-commerce basedresearch.

Data for this study was collected using a questionnaire survey from university and collegestudents, employees and home makers. Mixed samples were taken to generalise the findings. Likert scale of 1-5 was used to measure the constructs, where value 5 represents "strongly agree", and value 1 represents "strongly disagree". Altogether, 200 questionnaires were collected; however, 170 valid responses were received.

## IV. DATA ANALYSIS AND RESULTS

PLS 2 software was used to perform structural analysis of research model. Validity and reliability tests were carried out for all the constructs using confirmatory factor analysis. Convergent validity and discriminant validity were also evaluated for the research model according to criteria recommended by Fornell and Larcker (1981), which indicates that average variance extracted (AVE) from each construct should be higher than or equalto 0.50. Table 4.1 shows the reliability validity of the measurement model. Dillon et al. (1991) suggested that AVE greater than 0.50 implies significant validity for both the construct and the individual variables. Square root of AVE must exceed shared variance for all factors in order to achieve requirement of adequate discriminant validity (Fornell & Larcker, 1981; Sutapa & Suraj, 2017).

Table 4.1: Reliability and validity of constructs

| **Constructs** | **CR** | **AVE** | **√AVE** |
|---|---|---|---|
| Usefulness | 0.842 | 0.6398 | 0.799 |
| Influence of others | 0.788 | 0.651 | 0.806 |
| Attitude | 0.8329 | 0.714 | 0.845 |
| Subjective norms | 0.8327 | 0.715 | 0.846 |
| Intention to use | 0.811 | 0.6846 | 0.827 |
| Recommendation to others | 0.898 | 0.815 | 0.903 |

CR = composite reliability; AVE = average variance extracted (also in parentheses).

A commonly acceptable threshold value for composite reliability is 0.7 (Hair et al., 1998). It can be clearly observed from Table 4.1, that reliability and validity of the constructs was satisfied (Hair et al, 1998, Dillon et al, 1991; Fornell and Larcker, 1981). Table 4.2 shows the loadings and t-value of the items.

Table 4.2: loadings and t-value of the items

| Constructs | Questions | Loadings | t-value |
|---|---|---|---|
| Usefulness1 | Using e-commerce fulfilled my online shopping needs. | 0.818 | 7.460 |
| Usefulness2 | Using e-commerce based online services saves time and money. | 0.788 | 7.645 |
| Usefulness3 | Overall, I feel e-commerce based online services are useful for me. | 0.793 | 5.623 |
| Peer Influence 1 | I tend to use e-commerce services because my friends and family members are using it. | 0.753 | 6.067 |
| Peer Influence2 | Overall influence of others has motivated me to use e-commerce services. | 0.857 | 12.310 |
| Attitude towards Using1 | Using e-commerce based online services is a good idea. | 0.810 | 6.916 |
| Attitude towards Using2 | Overall, I feel e-commerce based online services are beneficial for me. | 0.879 | 18.079 |
| Subjective norm1 | People who influence my behaviour think that I should use e-commerce based online shopping and other services. | 0.918 | 33.718 |
| Subjective norm2 | People who are important to me think that I should experience e-commerce based online services. | 0.767 | 5.720 |
| Intension to Use1 | Assuming the advantages of e-commerce based online services, I will use it. | 0.733 | 10.143 |
| Intension to Use2 | I have high intention to use e-commerce based online services. | 0.912 | 30.229 |
| Recommendation to others1 | I would recommend others to use e-commerce based online services for effortless and time saving. | 0.909 | 41.668 |
| Recommendation to others2 | I would recommend others to use e-commerce based online services to buy variety of products which are unavailable in local retail shops. | 0.897 | 42.184 |

Table 4.3 shows the hypothesis testing results. All the hypotheses are significant with p-value <0.01, path coefficients are as per the required values suggested by Hair et al, (2010), i.e., 0.20 is acceptable, whereas, 0.30 is ideal. Figure 4.1 shows the research model with model testing results.

Table 4.3: Hypothesis testing results

| Hypothesis | Path coefficient | t-values | p-values | results |
|---|---|---|---|---|
| H1: usefulness → attitude | 0.335 | 3.636 | ***p <0.01 | significant |
| H2: Peer influence→ subjective norm | 0.654 | 7.811 | ***p <0 .01 | significant |
| H3: Attitude → intentionto use | 0.350 | 2.744 | ***p < 0.01 | significant |
| H4: subjectivenorm → intention to use | 0.173 | 2.082 | **p < 0.05 | significant |
| H5: Intention to use →recommendation to others | 0.509 | 6.542 | ***p < 0.01 | significant |

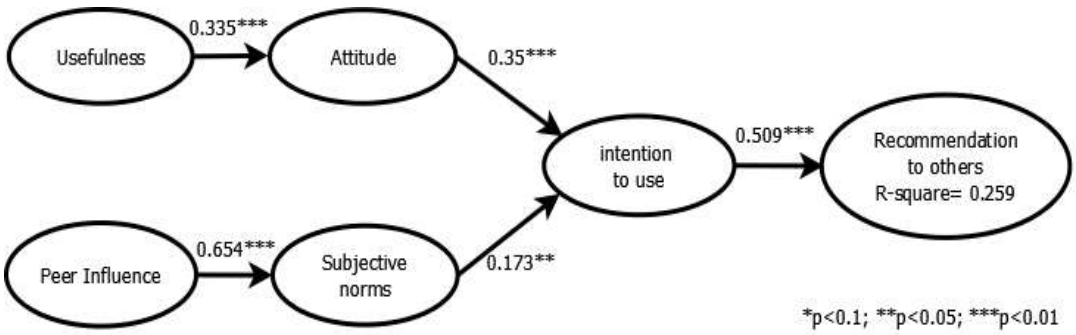


Figure 4.1: Research model and testing results

## V. FINDINGS AND IMPLICATIONS

Analysis shows that "peer influence" have very strong positive impact on "subjective norm" with t-value 7.811. "Usefulness"has strong impact on "attitude" of using e-commerce based services with t-value 3.636. "Intention to use" is strongly influenced by "attitude" (t-value 2.744) compared to "subjective norms" (t-value 2.082). "Intention to use" has very strong positive effects on "recommendation to others" (t-value 6.542).

It is observed that people will use e-commerce based online services if they are influenced by peers and have positive attitude towards using if they find services are useful to them. Sometimes usefulness can be due to availability of products and services, quality of products and services. Some people prefer online services for time and effort saving, because buying products online, booking hotels, purchasing online tickets and online transactions are easily accessible and time saving. Therefore, it is required to design easy, understandable and user friendly websites, also issues like security and privacy of the consumers' information is desirable. Speed of internet and cost of internet uses can be considered for users to use e-commerce based services. Awareness of technology and updated features of using e-commerce technology using devices with low costs are required. If e-commerce service provider gives promotional offers or discounts then more people will tend touse it. All these above mentioned criteria will give positive attitude towards e-commerce based experiences. Another indicator of actual behavioral intention is recommendation to others. It is seen from the previous researches that satisfied customer will recommend to others for the product or services (Keiningham et.al. 2007). In marketing literature recommendations are considered to measure customer loyalty and retention. Therefore, to manage product or service brand it is required to adopt online reputation management (ORM). ORM manages feedbacks of the customers because online review can create influence of using particular service or product.

## VI.CONCLUSION AND FUTURE RESEARCH

Our research findings have suggested that positive attitude and subjective norm will influence in actual behavior of using e-commerce based services. To retain online customers and promote recommendation to others for the services, service providers should take effort to deliver quality products and services. Customers' feedbacks are essential for word of mouth marketing; therefore, getting positive feedback and managing negative feedbacks are required to be considered for e-commerce based marketing management. Future research can focus on analysis of e-commerce based service features to understand customer satisfaction and loyalty.

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