

Impact of Usefulness, Ease of Use, Enjoyment, Attitude and Subjective Norms on Behavioural Intentions and Adoption of Virtual Communities: An Empirical Study

Punita Duhan & Dr. Anurag Singh

Abstract

The advent and proliferation of free-of-charge, democratic, interactive and innovative Web 2.0 technologies have provided more and better internet platforms in the form of Virtual communities, that allow users to build personalised content through participation and sharing, and thereby have impacted individuals and has opened new vistas for business organisations in an unprecedented way. But this has also necessitated the need to understand the factors affecting users' acceptance and need of these platforms in order to make these platforms more marketing friendly and popular. This paper attempts to explore the general users' acceptance of virtual communities using integrated TAM and TRA models. The proposed hypotheses are further tested using Regression Analysis. The obtained results indicate that Attitude of an individual towards virtual communities, Subjective Norms and Perceived Ease of Use have positive influence on his/her Behavioural Intention whereas Perceived usefulness and Perceived Enjoyment did not support the hypotheses. Also, Behavioural Intentions of the individuals were not at all found to be correlated with Adoption of virtual communities. The findings provide substantial insights for marketers and developers of these communities.

Keywords: TAM, TRA, Virtual Communities, Behavioural intention Models.

INTRODUCTION

The unprecedented advances and development in information technologies in the past decade or so have made information technologies widely available as well as affordable (**Armstrong & Hagel, 1995**). The advent and proliferation of free-of-charge, democratic, attractive and innovative Web 2.0 technologies have led to the provision of more and better Internet platforms (**Wu, Chou, Weng & Huang, 2008**) to the individuals and businesses alike. These platforms are providing their users with dynamic and vibrant online social universe (**Horrigan, 2001**) in the form of Virtual communities, that allow users to get engaged in community activities via web and have made it

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possible for them to create Virtual worlds through “glocalisation” (Horrigan, 2001). These communities foster chatter and connection (Horrigan, 2001) and allow people to build personalised content through participation and sharing. All this has impacted individuals on one hand and has opened new vistas for business organisations on the other hand in unimaginable ways. But this has also necessitated the need to understand the factors affecting users’ acceptance and need of these platforms in order to make these platforms more marketing friendly and popular (Wu et al, 2008).

This paper is an attempt in this direction by using extended TAM and TRA to assess the impact of Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment, Attitude towards virtual communities and Subjective Norms on the individual’s Behavioural Intention to use virtual communities and then to assess the impact of users’ Behavioural Intention on the Adoption of virtual communities using Regression Analysis. The elaborated conceptual framework based on above mentioned attempt has been specified in the following sections.

VIRTUAL COMMUNITIES

As per Rheingold, 1993, *Virtual communities (VC) are social aggregations that emerge from the Net when enough people carry on public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace.* As a new type of social formation on the Internet, Virtual communities expand the power of technology to connect individuals by providing unprecedented opportunities of social interaction and relationships development among people with shared interests irrespective of geography and time (Penetina, Prybutok & Zhang, 2008).

According to Porter, 2004 ‘*A virtual community is defined as an aggregation of individuals or business partners who interact around a shared interest, where the interaction is at least partially supported and/or mediated by technology and guided by some protocols or norms*’ and can be characterised by 5P’s,

Purpose (Content of Interaction), Place (Extent of Technology Mediation of Interaction), Platform (Design of Interaction), Population Interaction Structure, and Profit Model (Return on Interaction) (Porter, 2004).

More and more people use the internet to participate in virtual communities than to make purchase transactions (Horrigan, 2001). Popularity of virtual communities is attested by the fact that there are 16 VC having membership in excess of 100 million and out of these Face Book has active membership in excess of one billion (en.wikipedia.org) and this growth in membership and usage is expected to continue (Bressler & Grantham, 2000). Individuals are using virtual communities to fulfill both social and economic goals (Rheingold, 1993), to buy, sell or learn more about products and services, to discuss shared interests, to develop social relations and to explore new identities (Hagel & Armstrong, 1997). In nutshell, people in virtual communities do just about everything people do in real life (Rheingold, 1993).

Virtual communities also help organisations to fulfill business goals. Virtual communities are becoming an integral part of their online strategies to achieve increased sales (Brown, Tilton & Woodside, 2002), for product support and service delivery (Armstrong et al, 1995), for positive word-of-mouth (Bickart & Schindler, 2001), for e-WOM (electronic Word of mouth) (Hennig-Thurau, Gwinner, Walsh & Gremler, 2004) etc. Virtual Communities facilitate stronger relationships between firms and their customers (Brown et al, 2002; Hagel et al, 1997). Marketers are primarily interested in virtual communities due to their utility as Marketing information (viz. trends, tastes, preferences, new product ideas) sources (Muniz & O’Guinn, 2001), and hence their potential to affect sales (Hennig-Thurau et al, 2004). Due to their increasing presence and expanding membership virtual communities hold a strong potential for marketing and therefore deserve attention (Pentina et al, 2008).

TECHNOLOGY ACCEPTANCE MODEL(s)

Researchers over the years have propounded various models with borrowings from information systems, psychology, and sociology, each with different sets of acceptance determinants to explain how and why individuals adopt new information technologies by using intention or usage as a dependent variable (Davis, Bagozzi & Warshaw 1989; Taylor & Todd, 1995a; Venkatesh, 2000; Venkatesh, Morris, Davis & Davis, 2003).

The Theory of Reasoned Action (TRA), drawn from social psychology, is one such model that is widely applied to explain one's actual behaviour using three core constructs: Behavioural Intention (BI), Attitude (A) and Subjective Norm (SN). TRA proposes that an individual's behaviour is determined by the intention to perform that behaviour, which in turn is determined by attitudes and subjective norms (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980). Though TRA has been successfully employed to a number of applications across various disciplines, yet it has been criticised for being a weak predictor of new technology adoption because TRA is not designed specifically for technology adoption (Cha, 2011).

Technology Acceptance Model (TAM), an extension of TRA, using two core constructs of Perceived Usefulness and Perceived Ease of Use to explain the adoption of an information system and specifically adapted to on the job IS contexts (Davis, 1989; Davis et al 1989; Davis, Bagozzi & Warshaw, 1992) can be used to mitigate the shortcoming of TRA (Cha, 2011). TAM, a robust, parsimonious and widely used model, has proven to be a useful theoretical model to understand and explain the acceptance of information system or technology (Davis, 1989; Davis et al 1989; Venkatesh, 2000). An analysis of 24 studies across diverse application areas including electronic service, mobile data service, self-service technology and electronic learning etc. revealed that the empirical testing of TAM, with additional variables, has also yielded

statistically reliable results (Chen, Li & Li, 2011). Despite being a very robust model, TAM has been criticised on the grounds that it disregards human and social change variables such as subjective norms.

In this regard, it is expected that the integration of TAM (focusing on benefits or attributes of a system or technology) with TRA (focusing on social influences) will explain the adoption of Virtual communities more realistically. Hence the researchers are proposing a frame to be adopted as a model integrating TRA and TAM.

THEORETICAL MODEL AND HYPOTHESES

Figure 2 illustrates the model used in this study. As the purpose of the study is to identify the specific factors affecting adoption of Virtual communities, present study combines the Attitude and Subjective Norm constructs in TRA with three components i.e. Perceived Usefulness, Perceived Ease of Use and Perceived Enjoyment of TAM.

Behavioural Intention and Adoption:

Behavioural intention is a measure of one's intention to perform a specified behaviour (Fishbein et al, 1975). The basic conceptual framework utilised as a starting point by various models explaining individual acceptance of information technology is shown in figure 1. In accordance and consistency with the underlying framework for the intention models, it is expected that behavioural intention will have a significant positive influence on technology usage.

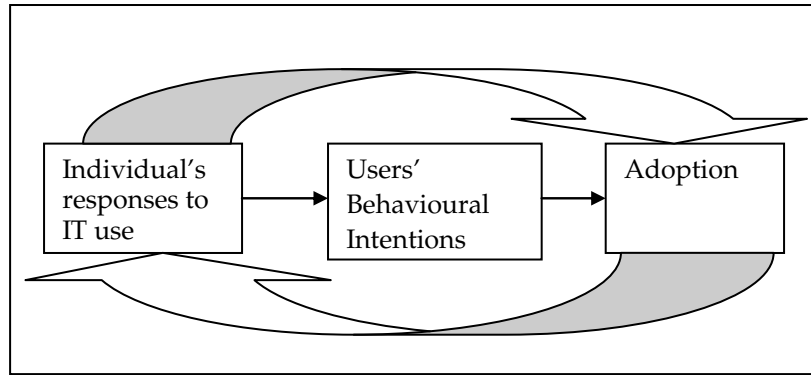


Figure 1

(Source: adapted from Venkatesh et. al., 2003)

H₁: Behavioural Intention (BI) will have a significant positive influence on Adoption (AU).

Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment and Behavioural Intention:

Perceived Usefulness and Perceived Ease of Use of an information system are the two major determinants of attitude toward the system (Davis 1989; Davis et al, 1989). Numerous empirical tests done in contexts of different technologies and settings supported TAM as a parsimonious yet robust model to predict attitude and intentions of a new system adoption (Gefen & Straub 2003; Chen et al, 2011). Previous studies found that Perceived Usefulness and Perceived Ease of Use are significant factors that affect consumers' intentions (Gefen & Straub, 2000; Wu & Wang, 2005; Wang, Chung, Park, McLaughlin & Fulk, 2011; Lorenzo-Romero, Constantinides, Alarco'n-del-Amo, 2011; Cha, 2011). TAM consistently explains about 40% of the variance in individuals' intention to use an IT and actual usage (Venkatesh & Hillol, 2008). Perceived Usefulness is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" and Perceived Ease of Use refers to "the degree to which a person believes that using a particular system would be free of effort" (Davis 1989; Davis et al, 1989).

Another important addition to the TAM model is Perceived Enjoyment. Perceived Enjoyment is

defined as "The extent to which the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use" (Davis et al, 1992; Venkatesh, 2000). Perceived Enjoyment strongly influences the entertainment purposes of the web (Atkinson & Kydd, 1997), affects attitude toward online shopping (Ha & Stoel, 2009) and enhances a member's desire to participate in virtual communities (Bagozzi & Dholakia, 2002; Dholakia, Bagozzi & Pearo, 2004). System-specific perceived enjoyment are stronger determinants over time as users will discover aspects of a system that lead to enjoyment (or lack thereof) (Venkatesh, 2000; Venkatesh et al, 2008). Hence, based on prior Literature, the following hypotheses are proposed:-

H₂: Perceived Usefulness (PU) of Virtual Communities will have a significant positive influence on Behavioural Intention (BI).

H₃: Perceived Ease of Use (PEOU) of Virtual Communities will have a significant positive influence on Behavioural Intention (BI).

H₄: Perceived Enjoyment (PEN) will have a significant positive influence on Behavioural Intention (BI).

Attitude towards Virtual Communities, Subjective Norms and Behavioural Intention:

Attitude towards behaviour is defined as "an individual's positive or negative feelings about performing the target behaviour" (Davis et al.

1989; Fishbein et al, 1975; Taylor et al 1995a, 1995b). The role of affective attitudes in affecting behaviour is quite debatable. Fishbein et al, 1975 assert that beliefs influence behaviour indirectly by influencing attitudes, whereas as per Triandis, 1977 beliefs and attitudes are co-determinants of behavioural intentions and Weiner, 1986 takes attitudes as antecedents of beliefs. Contrary to this Davis, 1989 and Davis et al, 1989 found that attitudes do not fully mediate the effect of perceived usefulness and perceived ease of use on behaviour.

As per TRA, Subjective Norms determine the individuals' Behavioural Intention. Subjective Norm is defined as "the person's perception that most people who are important to him think he should or should not perform the behaviour in question" (Davis et al.1989; Fishbein et al, 1975; Taylor et al, 1995a, 1995b). Subjective Norms

have traditionally been considered a moderating variable affecting the strength of the relationship between attitude towards a behaviour and Behavioural Intentions (Fishbein et al, 1975). Subjective Norms have also been shown to directly influence members' desire and indirectly (through desire) - member intentions to join virtual communities (Bagozzi et al, 2002). Taylor et al, 1995a, 1995b discovered that Subjective Norm has significant effects on Behavioural Intention. Hence, the following hypotheses are being proposed:

H₂: Users' Attitude towards Virtual communities (ATT) will have a significant positive influence on Behavioural Intention (BI).

H₆: Subjective Norms (SN) of users towards Virtual Communities will have a significant positive influence on Behavioural Intention (BI).

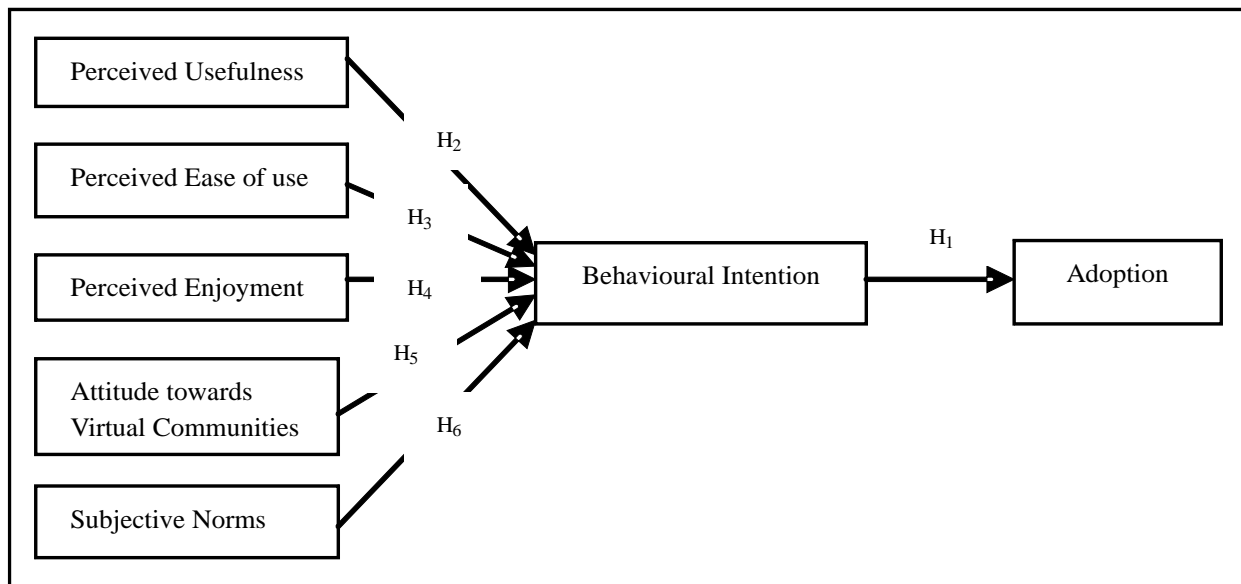


Figure 2 (Research Structure)

Although researches are being done in the area of virtual communities in advanced countries, but thorough literature survey indicates that domestic studies in respect of virtual communities are sparse. Moreover, the studies have either emphasised the technology aspects or the behavioural aspects in respect of adoption of Virtual communities indicating a clear gap for conducting the research on the subject.

METHODOLOGY

Primary as well as secondary data have been used for the study. Secondary data / literature have been drawn from various in-house and proprietary sources available at their websites, various relevant books and research papers published in journals. Primary data were collected by means of a simple worded

questionnaire for easy comprehension of the respondents. The validated items from prior research were used and modified to suit the present study (Davis, 1989; Davis et al. 1989, Venkatesh et al, 2008; Wang et al, 2011; Cha, 2011) and a customised scale including the following variables was developed:-

Perceived Usefulness (PU):

PU1: I find virtual communities useful for information exchange.

PU2: I find virtual communities useful for relationship development.

PU3: I find virtual communities useful for relationship maintenance.

PU4: I find virtual communities useful for social and emotional support.

Perceived Ease of Use (PEOU):

PEOU1: I find virtual communities easy to use.

PEOU2: My interaction with virtual communities is clear and understandable.

PEOU3: It is easy to navigate through virtual communities.

Perceived Enjoyment (PEN):

PEN1: I find using virtual communities to be enjoyable.

PEN2: The actual process of using virtual communities is entertaining.

PEN3: I find using virtual communities interesting.

PEN4: I do not realize the time elapsed (spent) when working on virtual communities.

Attitude towards Virtual Communities (ATT):

ATT1: Using the virtual communities is a good idea.

ATT2: Actual process of using virtual communities is pleasant.

ATT3: Working with the virtual communities is fun.

ATT4: I like using virtual communities.

Subjective Norms (SN):

SN1: People who influence my behaviour think that I should use virtual communities.

SN2: People who are important to me think that I should use the virtual communities.

Behavioural intention to use the system (BI):

BI1: I intend to use the virtual communities in the near future.

BI2: I predict to use virtual communities as soon as possible.

BI3: I will regularly use virtual communities in future.

Adoption (AU):

On an average, how much time do you spend on virtual communities each day?

These items were converted into an undisguised, structured questionnaire. The seven-point (with "1" for Strongly Agree and "7" for Strongly Disagree) Likert scale was used for measurement. The questionnaire was pilot tested for content, sequence and wording. Minor changes so warranted were carried out and then the revised questionnaire was used. Data were collected by means of an online national survey; the URL of the same was made available from 11th July, 2013 through 23rd August, 2013 and was distributed among Indian virtual community users via e-mail, Face Book, Twitter and other social media platforms. The sampling technique used was snowball sampling and as such currently active members of VC were requested to fill out the questionnaire and also share with and forward it to friends and relatives who are active participants in VC. They were requested to base their responses on the one VC they are most actively involved with. Regression analysis and other descriptive statistics analysis were carried out using SPSS version 17.0.

ANALYSIS AND INTERPRETATIONS

Basic Sample Analysis:

A total of 111 responses were received, out of which 104 were found to be using Virtual Communities and were therefore found to be suitable for analysis. After the removal of outliers, finally 100 cases were used for final analysis. Out of these remaining 100 respondents, 53% were males and 47% were females. 39% of the total respondents belonged to the age group of 24 years to 29 years followed by 25% in the age group of 18 years to 24 years

indicating more usage of these platforms by younger population in India. 45% of the respondents were post graduates by qualification and 31% of the total users were students by profession followed by people working in private sectors in lower and middle positions. A Majority of respondents had annual household income ranging between 2 lakhs to 8 lakhs, out of which the income bracket of 2 lakhs to 5 lakhs had 23% respondents and 5 lakhs to 8 lakhs bracket had 21% respondents. Income profile, profession profile and education profile reiterate the fact that Virtual Communities in Indian context are heavily dominated by youth. 48% of the respondents were using internet only for 1-4 hours per day.

Reliability Testing of The Scale Items:

The reliability test for the Scale items was carried out using Cronbach’s Alpha (Table: 1) and the scale was found to be highly reliable with the value of Cronbach’s Alpha being .935. Construct wise reliability (Table: 1) was also checked and all of the measures confirmed reliability, yielding Cronbach’s alphas from .772 to .935. The generally agreed lower limit for Cronbach’s alphas for reliability being .70 (Hair, Anderson, Tatham and Black, 2006) adequate internal consistency is indicated and we conclude that each variable represents a reliable and valid construct.

Table 1: Reliability Statistics

	Cronbach's Alpha	No of Items
Entire Scale	.935	20
PU	.772	4
PEOU	.845	3
PEN	.778	4
ATT	.876	4
SN	.870	2
BI	.870	3

Regression Analysis:

Two regression analyses were carried out. First analysis was done for predicting the influence of Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment, Attitude towards Virtual Communities and Subjective Norms on Behavioural Intention and the second analysis was done in order to find out the influence of Behavioural Intentions on Adoption.

Regression Analysis-I:

Table: 2 gives correlation between predictors (PU, PEOU, PEN, ATT, SN) and the outcome (BI) and a preliminary look at the correlations evidences that there are no substantial correlations ($r > .9$) between predictors, and so no multicollinearity between predictors is indicated (Field, 2009). Out of all the predictors Attitude towards Virtual Communities correlates best with the Behavioural Intention ($r = .749, p < 0.05$).

Table 2

	Descriptive Statistics		Correlations*					
	Mean	Std. Deviation	BI	PU	PEOU	PEN	ATT	SN
BI	2.497	1.229	1.000	.556	.582	.594	.749	.502
PU	2.590	1.102		1.000	.583	.599	.605	.323
PEOU	2.240	1.061			1.000	.669	.611	.285
PEN	2.545	1.038				1.000	.764	.429
ATT	2.447	1.001					1.000	.449
SN	3.375	1.520						1.000

*All Correlations are significant at $p < 0.05$ (1-tailed) $N = 100$

As indicated by the Table: 3, the proportion of variance explained by the model is .629, meaning thereby that the almost 63% of the variance in the Behavioural Intention of the respondent is explained by the predictors. The value of adjusted R² is quite similar to the value of R², so we can say that our model generalizes well. Also cross-validity of the model is good as the value of

adjusted R² using Stein's equation (Field, 2000) comes out to be .584. The Durbin-Watson statistic for the model is 1.957, which is very close to 2, so we can conclude that assumption of independent errors of regression has also been met. The value of F (5, 94) =31.911, p <0.001, indicates that model is a significant fit to the data.

Table 3

Model Summary ^b								
R ²	Adjusted R ²		$\hat{\alpha}$	Coefficients ^a		Collinearity Statistics		Durbin-Watson
				T	Sig.	Tolerance	VIF	
.629 ^a	.610	(Constant)		-.911	.365			1.957
		PU	.106	1.245	.216	.547	1.828	
		PEOU	.198	2.206**	.030	.490	2.040	
		PEN	-.124	-1.147	.254	.335	2.986	
		ATT	.565	5.401***	.000	.361	2.773	
		SN	.211	2.962**	.004	.777	1.288	

a. Predictors: (Constant), Subjective Norms, Perceived Ease of Use, Perceived Usefulness, Attitude towards Virtual Communities, Perceived Enjoyment

b. Dependent Variable: Behavioural Intention

F (5, 94) =31.911***, p <0.001

***Value significant at p <0.001, ** value significant at p <0.05

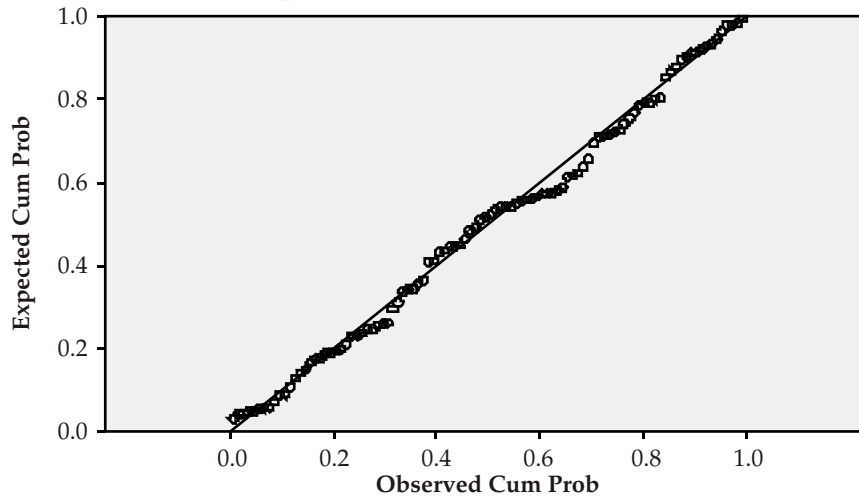
Table: 3 further shows that Perceived Ease of Use (PEOU) (t (96) = 2.206, p < 0.05), Attitude towards Virtual communities (ATT) (t (96) =5.401, p < 0.001) and Subjective Norms (SN) (t (96) =2.962, p <0.05) are significant and contributing significantly to the ability to estimate value of Behavioural Intention (BI). Standardised beta values tell us that ATT (β =0.565, p < 0.001) is the most important significant positive influence on BI followed by SN (β =0.211, p < 0.05) and PEOU (β =0.198, p < 0.05). Hence, Hypotheses H₅, H₆ and H₃ are supported. However, Perceived Usefulness (PU) (β =0.106, n. a.) and Perceived Enjoyment (PEN) (β = - 0.124, n. a.) were not found to be significantly influencing the Behavioural Intention. Hence, Hypotheses H₂ and H₄ are not supported. The collinearity statistics given in the table lead us to safely conclude that there is no collinearity within our data as the VIF values are all below 10 and the tolerance statistics all well above 0.2.

Also, the sample appears to conform to what can be expected from a fairly accurate model, as there are only 4% cases which have a standardised residual within about ± 2 and only 1% cases which have a standardised residual within about ± 2.5 , which is well within limits as we have a sample size of 100 and in an ordinary sample, it is expected that 95% cases will have standardised residuals within about ± 2 , and 99% of cases should lie within ± 2.5 (Field, 2000). As none of the cases have a Cook's distance greater than 1, Mahalanobis distance values greater than 15 and Leverage values within the boundary of three times the average leverage, hence none of the cases is having an undue influence on the model. Further, the analysis of standardised DFBeta statistics shows that none of the cases have undue influence over the regression parameters as the values for all the cases lie within ± 1 .

As shown in figure: 3 the normal probability plot of Regression Standardised Residual indicate the normality of residuals. However the data set violates the assumption of homoscedasticity and indicates the decreasing variance across the residuals. So, we can summarize by saying that

the model appears, in most senses, to be both accurate for the sample and generalizable to the population with a caution, only minor glitch being the violation of the assumption of homoscedasticity.

Figure 3
Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Behavioural intention



The results of the Regression Analysis –I, summarised in Table: 3 & Table: 4, clearly indicate that attitude of an individual toward virtual communities (ATT ($\beta=0.565$, $p < 0.001$)) has positive influence on his/her Behavioural Intention emphasizing the need and importance of inculcating and managing the users’ attitude for successful and faster adoption of VC. Though this finding is inconsistent with Davis et al, 1989 on one hand but also confirms their implication on the other hand that attitude is a determinant of behaviour intention in post -implementation stage since the researchers have taken only those respondents who are not only familiar with VC but also are using at least one of virtual communities which has led to the positive influence towards Behavioural Intention. Moreover, it also implies that the marketers should market their product on those VC towards which people have positive attitude as the probability of the people to be present on these platforms will be high and this may lead to positive attitude towards the product advertised through these VC.

Subjective Norms ($\beta=0.211$, $p < 0.05$), the second important determinant of Behavioural Intention is in contradiction to the implication that Subjective Norms are more significant influencers to Behavioural Intention in mandatory use context in comparison to voluntary use context (Davis et al, 1989; Venkatesh et al, 2000) adoption and use of VC being completely voluntary. But the finding is in agreement to the other studies in the similar context which found that influence of Social pressures are more peer driven in organisational and individual settings (Saidel & Cour, 2003; Liao, Chen & Yen 2007; To, Liao, Chiang, Shih & Chang 2008).

The third significant determinant of Behavioural Intention, Perceived Ease of Use (PEOU) ($\beta=0.198$, $p < 0.05$) is quite close to Subjective Norms in its impact on respondents’ intention and is in agreement with previous studies (Gefen et al, 2000; Wu et al, 2005; Wang et al, 2011; Lorenzo-Romero et al, 2011; Cha, 2011). This implies that virtual communities should

have user friendly interfaces for successful adoption. Marketers can also take a cue from here and should see to it that the interaction of consumer with their products and services through these platforms is hassle free.

With regard to the influence of Perceived Usefulness (PU) ($\beta=0.106$, n. a.) on intention to use the system, the results indicated no significant influence. This finding is incongruent with the earlier findings that perceived usefulness has a significant direct influence on intention toward system use (Davis, 1993; Davis et al, 1989; Taylor et al, 1995). Thus this finding is an indication to the fact that decision to use virtual communities is a decision based more on subjective and social pressures rather than based on rational or pragmatic approach.

The β value for Perceived Enjoyment (PEN) ($\beta= -0.124$, n. a.) evidences that Perceived Enjoyment does not support our assumption that it has a positive influence on the individual's intentions. This is in contradiction to the earlier findings that Perceived Enjoyment strongly influences the entertainment purposes of the web (Atkinson et al, 1997, Cha, 2011) and enhances a member's desire to participate in virtual communities (Bagozzi & Dholakia, 2002; Dholakia, Bagozzi & Pearo, 2004). This finding can be ascribed to the fact that, in comparison to the real life communities, web based virtual communities offer lesser emotional involvement, lesser social interaction (Dittmar, Long & Meek, 2004; Cha, 2011) and lesser multisensory stimulations (Cha, 2011) and almost nil face to face interactions.

Table 4

Regression Analysis-I			
Dependent Variable	Predictor(s)	Hypotheses	Result
BI	PU	H ₂	Not Supported
	PEOU	H ₃	Supported
	PEN	H ₄	Not Supported
	ATT	H ₅	Supported
	SN	H ₆	Supported

REGRESSION ANALYSIS-II:

Second regression analysis was done in order to find the influence of Behavioural Intention on Adoption. It is evident from the value of R₂, beta value of Behavioural Intention (BI) ($\beta=0.031$, n. a.) and the value of F (1, 98) =0.094, n. a., as given in Table: 5, that model is not at all a significant fit to the data. Hence, Hypothesis H₁ is not supported. This lack of correlation between BI and AU is quite surprising but one plausible explanation for the same emanate from the fact that a majority 62% respondent were accessing internet only for up to 4 hours in day. It appears

that they intend to use virtual community platforms more and more but because of the less usage of internet per day, the adoption of VC is less and not correlated with the Behavioural Intention. Another reason may be the non availability of internet access throughout the day or when people are having leisure time which may be attributed to higher tariff rates of internet connectivity or non-availability of the internet in their homes or during their leisure time. Thus, we conclude that in our sample Behavioural Intention has no significant positive influence on Adoption.

Table 5

Model Summary ^b (Regression Analysis-II)							
R ²	Adjusted R ²		â	Coefficients ^a		Hypotheses	Result
				t	Sig.		
.001 ^a	-.009	(Constant)		4.489***	.000		
		BI	0.031	0.037	.710	H ₁	Not Supported

a. Predictors: (Constant), Behavioural Intention

b. Dependent Variable: Adoption

F(1, 98) = 0.094, n. a.

***Value significant at p < 0.001

LIMITATIONS AND FUTURE RESEARCH

No study is perfect, even after the best of efforts, some limitations are always there. Present study is also no exception. First of all, the adapted scales need to be further refined with additional testing and validity in order to have better measurements. Secondly, though the model could explain almost 63% variance in the Behavioural Intentions, the unexplained 37% variance creates scope for further research to incorporate more variables like risk and trust-related factors beyond the five variables used in this model. Addition of above said variables may increase the predictive power of the model in Indian context. Also, some moderators like age, sex, internet availability, education levels etc. can be used in future studies. Care should also be taken when generalizing the results of this study as a bigger sample size collected using some random sampling method may have yielded better results. Chances of self-reporting bias and the possibility of some of the respondents filling the survey instrument more than once are also there. Besides, depending upon the adoption rate of VC by the Indian consumers, a longitudinal study will provide better comparative insights.

CONCLUSIONS AND IMPLICATIONS

Paper analyzed the influence of Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment, Attitude towards VC and Subjective Norms on the Behavioural Intention and the influence of Behavioural Intention on Adoption

behaviour of the respondents by integrating TAM and TRA models in order to incorporate both the technological as well as social influences on adoption of Virtual Communities in Indian context. Analysis of the primary data partially supported research hypotheses. Overall, the conceptual model was statistically significant in predicting the Intention to use VC by Indian users but could not explain the impact of Behavioural Intention on Adoption.

The findings of the research indicate that there is a need for marketers to inculcate and manage the users' attitude for successful and faster adoption of VC. This also implies that the marketers should market their product on those VC towards which people have positive attitude. Influence of Subjective Norms on Behavioural Intention indicates that social pressures are more peer driven in organisational and individual settings. The positive influence of Perceived Ease of Use on Behavioural Intention implies that virtual communities should have user friendly interfaces for successful adoption and the interaction of consumers with the products and services through these platforms is hassle free.

The lack of correlation between Behavioural Intention and Adoption needs to be investigated thoroughly by further research in order to find out whether this absence of correlation is due to the non availability of internet access and/or higher tariff rates of internet connectivity or due to some other reason. Also, research highlights that there are more unexplored variables affecting the Adoption of Virtual Communities in Indian context.

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