Factors Affecting Social Commerce Web Sites Usage: An Integrated View

S. M. Samarasinghe University of Sri Jayewardenepura Nugegoda, Sri Lanka Email: Malkanthi [AT] sip.ac.lk M.G.N Maddumarala ISM APAC (PVT) LTD Colombo 09, Sri Lanka Email: gayajith88 [AT] gmail.com

Abstract---- Commercial activities done through the medium of Internet took a paradigm shift with the introduction of web 2.0. Ecommerce was the first of its generation and followed by social commerce which used social networking platforms as the base for commercial activities. Identifying the factors influencing social commerce usage enable organizations to earn more revenue by investing more on improving those factors. Hence, the purpose of this study was to identify the factors affecting social commerce website usage in the context of Sri Lanka. A conceptual model was developed based on an extensive review of literature. The conceptual model was tested using one hundred and sixty usable responses from postgraduate students. Partial Least Square (PLS) method was used to test the model. Measurement model analysis was used to test the reliability and validity of the measurement instrument. Structural model analysis was used to test the model fit and to test the hypotheses. The results of structural model analysis supported six hypotheses. Perceived usefulness and trust toward members were identified as the most significant factors for social commerce website usage. The findings of this study provided important implications for researchers and practitioners interested in social commerce.

Keywords-Community commitment; Social commerce; Social support; Technology acceptance model; Trust transfer theory

I. INTRODUCTION

Social commerce is the latest addition to electronic commerce using social media and online media to carry out commercial activities [1]. Social commerce has been evolving under the social media revolution and social networking sites helped to gain popularity and advancement of social commerce [2]. Social commerce allows customers to be live in the world wide web or the social web. Social commerce is identified as the new dimension of e-commerce [1]. Social commerce not only creates value for customers by enabling buying and selling of products or services but also creates value for electronic vendors by using content created by customers through reviews, recommendations and experiences [2][3]. Social commerce has been most generous money generator in e-commerce with the revenue increase of 10 billion US dollars between years 2015 and 2016 [4]. Even though social commerce is commonly considered as a collaboration of social media and e-commerce, social commerce is different from conventional e-commerce [5]. That is, social commerce emerged on different social media, such as websites (Facebook, Twitter) or apps (Whatsapp, Wechat) and it consists of all important featurs of the social web.

Statistics from PricewaterhouseCoopers [6] showed that 78 percent of consumers are influenced by social media when shopping online. In 2017, 70.7 percent of internet users of the United States used social networks. The time spent on internet among adult users was average 1 hour 15 minutes per day. According to this report it is a popular channel, and marketers are interested to access consumers through social media. Consumers are not gathering in social platforms just to buy a product or a service, but social media plays a valuable role in the initial stages along the path to purchase, as a general influence and a research tool. According to [6] by PricewaterhouseCoopers, online buyers identified social networks as the most used digital media for purchase decision making. Thus, this new loop of social commerce is never going to stop evolving. Retail-friendly advertisements, products and features from the main social networking sites such as Facebook, Instagram and Twitter are constantly been introduced. Hence, influencer merchandising is still a popular tactic. Social commerce is an emerging market. Using the social group to get feedback, wisdom and endorsements has been a growing trend in the recent past. Emphasizing the importance, social commerce research has grown exponentially in the past 10 years and thus, it has been an emerging research area for academics all over the world. [7]. Although, many studies were conducted, most of the research in social commerce either has its focus merely on technological aspect of the social commerce or social aspect of social commerce [5][8][9][10]. Moreover, studies carried out in Sri Lanka has replicated the existing models without considering the social context of Sri Lanka [11]. Thus, a research gap exists in the global and the local scale to examine the overall view; both social and the technological aspects that influence usage of social commerce. Therefore, the purpose of this study was to identify the factors affecting social commerce web sites usage among Sri Lankan customers. The subsequent sections of this paper are organized as follows. The next section presents the review of literature in relation to social commerce theory and concepts. In Section 3 the research model and the hypotheses formulated

based on literature are presented. This is followed by data collection and data analysis in Section 4 and Section 5, respectively. Next section provides a discussion of data analysis followed by the implications to theory and practice in Section 7. Final section of this paper presents the conclusion of the study.

II. LITERATURE REVIEW

The use of different channels to communicate with consumers has increased with the inception of Web 2.0 in 2005 [1]. Consumers of modern day have become active content creators in cyber space rather than passive consumers of information because of social networks and social media [1]. E-commerce is the procedure by which individuals and entities exchange products or services online using the Internet-engaged systems with the help of both the transmission of data and electronic monetary systems [12]. Inclusive extension of e-commerce is known as 'social commerce' [13][14][15] [16]. Even though there are many definitions, there is no standard definition for the term social commerce. Social commerce in general stands for carrying out e-commerce activities through social media, generally, by using social networks and Web 2.0 technologies [2]. Social commerce through social media is known as a subcategory of electronic commerce that contribute to ecommerce activities [17]. Most of the start-up businesses and entrepreneurs tend to use social commerce which result in rapid growth of the technology along the technology life cycle from 'buzz' to 'experimentation,' and then to 'adoption' and 'maturity' [18]. The rise in social commerce has affected the behavior of consumers [19]. Social commerce provide access to social knowledge necessary for the consumer to obtain a better understanding of online purchasing and to take accurate purchase decisions [20]. For businesses today, big or small, social media is a vital component of their marketing strategies. Hence, it is important for businesses to build their businesses considering social media platforms [21][22]. One of the major advantages of social commerce is the possibility to communicate with massive number of buyers [23] [24][25]. Businesses are influenced greatly by social commerce [26] and social commerce modernizes the way the buyers and sellers interact [27].

Previous studies have justified social support as an important determinant of consumer behavior. Referencing [28] found that motivation of the user and the motivation of other users in the social networking site as an important factor affecting the user behavior. Therefore, it is evident that, social support theories are important in understanding consumer behavior in the social commerce context [2]. Social support theory has been defined by different scholars. Referencing [29] defined social support as "Verbal and nonverbal communication between recipients and providers that provides information that reduces uncertainty about the situation, the self, the other, or the relationship and functions to enhance a perception of personal control in one's life experience". Social support is a multidimensional concept, in

which components could be different from circumstance to circumstance [30]. Further, according to [31] informational support has a positive effect on consumer decision making process. Referencing [5] and [32] also found informational social support as a resource for individuals in a social networking site and to build good relationships with other members.

In addition, organizational membership or person's enduring desire to be a part of a group has been extensively examined and studied in the topic of community commitment [33]. Scholars have identified that there is a major involvement toward a virtual community and the majority of the individuals are engaged and present in the community [34][35]. In previous research [36][37] commitment along with other social interactions such as trust and electronic word of mouth have been identified as factors affecting the business success with increase in sales.

Furthermore, trust an important determinant when people decide in relation to with whom to interact with [38][39]. One of the critical aspects human behavior is the need to understand the social environment. Individuals must know how his/her behavior will influence behavior of others beforehand. In electronic commerce, trustworthiness is an important factor with the uncertainties and risks surrounding social commerce web sites [40]. Due to the importance of the trust factor, studies tend to focus more on identifying relationships between trust and social commerce intentions [41]. Identifying the importance, trust transfer theory has been used in this context of study [5][17]. According to research trust transfer can occur both in real life as well in virtual life and real-life trust can be easily transferred to virtual life where social media works as a communication channel [5]. In e-commerce literature trust has been commonly studied in online business contexts [42][43]. Trust in social commerce largely based on the quality of information such as accuracy, reliability and objectivity [44]. Therefore, informationbased trust is known as an important element of social commerce trust, and it measures the trustworthiness of information published in the social commerce websites.

In addition, in the socio-technical perspective, mostly the Internet related interactions depend on a set of technical tools that are combined to be used as mediation objects by which the operator of that object can use it to achieve a certain task [45]. Technology acceptance and adoption studies on information systems uses different models established in literature. Among those theories, Technology Acceptance Model (TAM) is the commonly used theory to understand the acceptance or adoption of information systems [46]. Review of literature indicated that many factors have been considered in diverse contexts in determining the factors that influence consumers to use social commerce to do commercial activities. Most research undertaken in social commerce context has been descriptive and lacks a solid theoretical foundation. The studies reviewed either has more focus on technological aspect of the social commerce or social aspect of the social commerce. The present study combined both

technological aspects and social aspects together to determine the social commerce adoption intention of consumers. Thus, this study developed a comprehensive integrated model to examine the impact of social commerce on consumer decision making combining both the social support perspective and technological perspective.

In Sri Lanka, for over 5 years, it maintained over a 20 percent year growth in internet penetration. By the mid of year 2017 there were 6.1M+ internet users in Sri Lanka] with an increase of mobile penetration by 124 percent by March 2017 [47]. Even with this kind of progress over the web usage, e-commerce still failed to capture the desired market share in Sri Lanka [48]. Starting from mid-2016, the Sri Lankan numbers on Facebook increased from 4 million to 5 million with more than 20 percent penetration. According to this data over 80 percent of the Internet users in Sri Lanka at least interact with a single social networking site (SNS). This user group provides a huge opportunity to Sri Lankan organizations to explore new business model using social commerce websites and its community base to utilize this customer base, organizations need to identify the perspective of Sri Lankan customers. In the Sri Lankan context, none of the studies examined the influence of trust, social aspect and technology aspect together on social commerce. Thus, the review of literature evident a gap in the literature to provide a more comprehensive view of the factors influencing social commerce website usage, in the Sri Lankan context. Thus, this study presents a comprehensive model integrating social support theory, trust transfer theory, community commitment theory and TAM which would provide a better overview of social commerce web site usage.

III. RESEARCH MODEL AND HYPOTHESES

This study combined four well established theories in formulating the conceptual model. Communities have issues regarding the transactions done via electronic media with unknown vendors and it has been a well-studied aspect for electronic commerce adoption [49] [50]. The same applies for the social commerce adoption in Sri Lanka as well [11]. However, with the social aspect playing a major role in consumer decision making, trust on online commerce activities is increased [1]. Trust in social commerce has two ends to it with regard to online vendors themselves and members of consumer community who rely on information they provide [5]. This study concentrated mainly on two aspects of trust. That is trust toward social commerce websites and trust toward members of social commerce websites. Above two constructs were derived from the Trust Transfer Theory (TTT). According to TTT, trust can be built upon the strong relationships build among community members who inspire consumers to use certain social commerce websites [5]. Therefore, people can easily share information, opinions on product/service or consumer experience with their peers on social networking sites [17]. In addition to TTT, to measure the social aspect of social commerce website usage in Sri Lanka, Social Support Theory [5][17][51] and Community Commitment Theory [5][17][35] was used. Perceived ease of use and perceived usefulness are two constructs of TAM which has been widely studied, as a model to predict a user's intention to accept a technology [3]. These two constructs have been tested and proved to play an important role in adopting a new technology. Therefore, these two constructs were also included to provide a better understanding of the factors affecting social commerce web site usage in Sri Lanka. Based on the extant literature it is evident that individual intention to use social commerce can be enhanced by improving the commitment to community, informational support, trust and acceptance of the technology for every individual. Thus, based on the above justification the conceptual model for this study was developed (see Fig. 1).

A. Trust Towards Social Commerce Community Members

Trust toward social community members is referred to as one's inclination to rely on the feedback of other members in the community [5]. Social commerce website usage intention was defined as the aim or plan to use social commerce websites to fulfill commercial activities [17]. Literature suggested that trust toward members has a positive relationship with participatory behaviors [52][53].

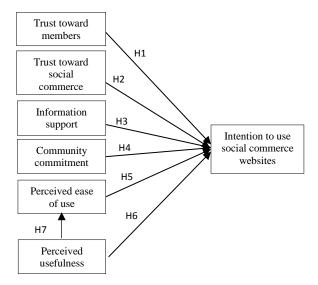


Figure 1: Conceptual Framework

Further, some studies have justified the relationship between trust toward the members of on-line communities and intention to do on-line transactions [38][54][55]. In a trustworthy environment people tend to seek help from others as well as give help to others [5]. Information gathered from trustworthy sources will be used

for decision making and considered as valuable [56]. Similarly, people seek help from people who they trust when they want to know about a certain product or a service or to buy certain products and services [17]. Therefore, based on the above justification, following hypothesis was formulated.

H1: Trust towards social commerce community members has a positive effect on intention to use social commerce websites.

B. Trust Towards Social Commerce Community

Trust toward a community means the individual perception towards a community as a reliable, trustworthy and foreseeable place for social activities [5]. The relationship between trust towards community and intention to interact with that community has been examined in previous studies [57][58][59]. The rules among on-line communities and to what extent the rules are been followed determines individual's intention to interact with that community. Brand of the social commerce supplier platform and its ability to meet consumer expectations has been considered by users when compiling trust on social commerce websites [60]. Therefore, based on the above justification, following hypothesis was formulated.

H2: Trust toward social commerce web site community has a positive effect on intention to use social commerce websites.

C. Informational Support

Informational support is defined as the understanding gained by individuals, which can be in any form such as an advice, recommendation or simply an experience of using any product or service [17]. In online communities such as social networking sites, users tend to exchange information and support with each other [2]. Informational support can be classified into different forms. It can be a recommendation, review, advice or an experience about product or service [17]. As per previous studies when choosing a service or product to purchase, consumers strongly depend on the informational support from other individuals to take their decisions [60]. On-line informational support can be identified in the context of on-line commercial activities as the user-generated content, circular among users with the goal of sharing opinions and experiences, giving advices and support decision making, perception, intentions and behaviors toward products/services or brands [5][37][61][62]. Thus, information support plays a vital role in the social commerce aspect as well. Therefore, based on the above justification, following hypothesis was formulated.

H3: Informational support has a positive effect on intention to use social commerce websites.

D. Commitment to Social Commerce Websites

Community commitment defined as the organizational membership or person's enduring desire to be a part of a group [33]. Commitment is not merely the feeling of emotional attachment or obligation [63]. As per explanations from prior research, commitment is identified as an aspect that needs to maintain a worthwhile relationship between consumers and businesses [34]. Referencing [63] described commitment as a bond where individual's intentions will not change under different circumstances. Interactive communication between community members creates a favorable attitude about the community and due to that, it will enhance the level of commitment of members to the community [64]. Further, prior studies have proven that the interactions or belongingness with on-line communities influence the level of commitment on the online community [34][35]. Feeling of a safe and secured environment; having friends, family on the same community make people attached to online communities. Social networking websites plays the role of the community in the social commerce context [17]. Therefore, based on the above justification, following hypothesis was formulated.

H4: Commitment to social commerce website has a positive effect on intention to use social commerce website.

E. Perceived Ease of Use and Perceived Usefulness

TAM suggested two constructs - perceived ease of use (PEOU) and perceived usefulness (PU) as important predictors of individual's intention to use a technology. Perceived ease of use is defined as the degree to which an individual believes that using a system would be free of effort (Davis 1989). Prior studies have demonstrated the application of TAM in information systems and technology acceptance research [65][66], and specifically in e-commerce research [50][67]. Perceived usefulness is the degree to which a person believes that using a system would enhance his or her performance. Prior research has demonstrated that PU has a direct effect on intentions to use a system [67]. Similarly, to PEOU, PU also have been proved as a main construct of the TAM and PU is an important determinant on how well the perceived usefulness influence the intention of using social commerce websites. According to [68], there is a direct effect of perceived ease of use on perceived usefulness. As [68] elaborated, if a user becomes more efficient user of a technology because of ease of use improvements uses become more efficient. Making a system easier to use, should make the system more useful [46]. Referencing [46] proved perceived ease of use as a determinant of perceived usefulness. According to [69], if a system is easy to use, the users will use more, and it will in turn will increase job performance. Therefore, based on the above justification, following hypotheses were formulated.

H5: Perceived ease of use has a positive effect on intention to use social commerce website.

H6: Perceived usefulness has a positive effect on intention to use social commerce website.

H7: Perceived ease of use of social commerce websites has a positive effect on perceived usefulness of social commerce websites.

IV. DATA COLLECTION

The sample of this study comprised of postgraduate students. This sample represented a cross-section of the population that has an online presence in Sri Lanka. Postgraduate students in any country are a great representation of the country, with different backgrounds, different demographics and different careers [70]. Thus, this sample can give an accurate measurement to conduct this study. The sample was selected using the convenience sampling technique. This study mainly focused on seven constructs; information support, community commitment, trust toward members, trust toward community, perceived usefulness, perceived ease of use and social commerce website usage intentions. To measure these constructs items from previous studies were used [2][5][10][70][71] with a seven-point Likert scale anchored from 'Strongly agree' to 'Strongly disagree'. Research confirmed that data from Likert items are less accurate when the number of points in the scale is below five points or when number of points are above seven [72]. Thus, the current study used the seven-point Likert scale. The questionnaire was developed in three sections where Part A had two items to know whether the respondent is using a social commerce website. Part B had seven sections, with items relating to each construct. Part C was dedicated to collect demographical data of the respondents. Questionnaire was developed using Google forms since it has features to see the responses in a graphical format. The questionnaire sent out to respondents via electronic mail. A reminder also was used and sent out after two weeks to potential respondents to increase the number of responses. Before the main survey, a pilot study with 40 postgraduates students was carried out. Some minor wording changes were done, and the test results indicated that the questions were reliable and valid. In the data collection, 304 questionnaires were sent out using the mailing lists and 162 responses were usable for the study.

V. DATA ANALYSIS

SPSS version 23.0 was used to screen the data and to describe the characteristics of the study sample of this study. The model testing was done using Partial Least Squares based Structural Equation Modelling (PLS-SEM) (SmartPLS 3.0). [73]. SEM allows the evaluation of both the measurement model and the structural model simultaneously [1]. This approach has many advantages over other methods such as regression analysis (Gefen *et al.*; 2000). The Partial Least Squares (PLS) method was used in this study. The reasons to use PLS method in the present

study were, since it is quite useful and widely used software in the behavioral sciences [74][75]. Further, PLS is good when the sample is small [60]. Studies similar to the current study have used PLS for data analysis and therefore the findings of this study could be easily compared with existing literature. Moreover, according to [75] PLS is more appropriate for new models while covariance-based techniques are more suitable for well-established models.

Data screening was the first step of preparing the data set for main data analysis. Manual check by the researcher was carried out to ensure that all questions were answered. This helped to identify some rows with missing values which exceed the 80% of total columns. Those responses were removed and used mean substitution for imputing other missing data [76]. Box plot method in SPSS was used to identify any outliers in the dataset. There were no outliers in the data set. According to the analysis of demographic data, 100 percent of the respondents were using social commerce websites. Findings revealed that more than 80 percent of respondents are using Facebook as their preferred social commerce website.

A. Measurement Model Analysis

To establish the strength of the research model, tests for reliability and validity were carried out. Item reliability, internal consistency reliability, convergent validity and discriminant validity were evaluated to establish the strength of the measurement model [76]. 0.7 was considered as the threshold value for item reliability [77]. Further, 'Cronbach's alpha' and composite reliability values were used to measure internal consistency reliability. Threshold value for internal consistency reliability in this study was considered as 0.7 [76]. In the factor loadings all the factors had loadings higher than the threshold level of 0.7 except for the item PU1 (0.67) [76]. Thus, after removing the PU1, measurement model analysis was carried out again. The loadings for all the items were above the threshold value (0.7) (see Table 1).

As given in Table 2, the values for each construct under composite reliability and Cronbach's Alpha were above the acceptable value, 0.70 [76]. Thus, internal consistence reliability for all constructs were achieved. Construct validity can be established with convergent validity and discriminant validity [78]. Convergent validity refers to the degree to which two measures of the same construct are highly correlated and that the scale is measuring its intended construct [79]. Factor loadings and the Average Variance Extracted (AVE) were used to determine the convergent validity. Acceptable threshold value for AVE was 0.5 [80]. AVE values of all the constructs were above .5 and was greater than the threshold value [80], confirming the convergent validity.

Discriminant validity refers to the degree to which measurement items that should not be related are in fact unrelated [79]. Discriminant validity was identified by calculating the

square root of AVE for each latent construct [81]. If the values in the diagonal are larger than other correlation values among the latent variables, discriminant validity could be established. Further, as given in Table 3, the square root values of AVE are greater than other correlation values among the latent variables. Thus, the discriminant validity is established [81].

Table 1.	I andings of t	the measuremen	t itome

Table 1: Loadings of the measurement items							
Items	CC	INFS	PEOU	PU	SCWUI	TTC	TTM
CC1	0.94			•			
CC2	0.96						
CC3	0.97						
CC4	0.97						
INFS1		0.91					
INFS2		0.96					
INFS3		0.93					
PEOU1			0.79				
PEOU2			0.83				
PEOU3			0.86				
PEOU4			0.81				
PU2				0.91			
PU3				0.93			
PU4				0.93			
SCWUI1					0.86		
SCWUI2					0.90		
SCWUI3					0.91		
SCWUI4					0.89		
SCWUI5					0.86		
SCWUI6					0.84		
TTC1						0.90	
TTC2						0.86	
TTC3						0.87	
TTM1							0.93
TTM2							0.94
TTM3							0.92

Note: CC: Community commitment, INFS: Informational support, PEOU: Perceived ease of use, PU: Perceived usefulness, SCWUI: Social commerce website usage intentions, TTC: Trust toward community, TTM: Trust toward members

Table 2: Internal consistency reliability and convergent validity

Constructs	Cronbach's Alpha	Composite Reliability	AVE
Community Commitment	0.97	0.98	0.93

Informational Support	0.93	0.95	0.87
Perceived ease of use	0.85	0.89	0.68
Perceived usefulness	0.91	0.94	0.85
Social commerce website usage intention	0.94	0.95	0.77
Trust toward community	0.85	0.91	0.77
Trust toward members	0.92	0.95	0.86

	00	TNIEC	PE	DII	SCW	TTC	TOTAL
	CC	INFS OU PU	PU	UI	TTC	TTM	
CC	0.96						
INFS	0.47	0.93					
PEO U	0.59	0.53	0.82				
PU	0.64	0.48	0.71	0.92			
SCW UI	0.57	0.58	0.57	0.68	0.87		
TTC	0.54	0.41	0.60	0.53	0.64	0.87	
TTM	0.60	0.53	0.74	0.63	0.71	0.64	0.92

Note: CC: Community commitment, INFS: Informational support, PEOU: Perceived ease of use, PU: Perceived usefulness, SCWUI: Social commerce website usage intentions, TTC: Trust toward community, TTM: Trust toward members

B. Structural Model Analysis

After establishing the validity and reliability with the measurement model analysis, to determine the explanatory power of the conceptual model and to test the hypotheses, structural model analysis was carried out. By examining the coefficient of determination (\mathbb{R}^2) the explanatory power of the research model was tested [76]. The cause-effect relationship strength can be calculated with path coefficient values [76]. To measure the effect of each path, bootstrapping method was used [76]. The statistical significance of path coefficients was calculated using the t-test with 95 percent confidence level. SmartPLS version 3 can generate both T values and p values using bootstrapping.

According to the findings, coefficient of determination, R^2 , is 0.692 for "Social commerce website usage intention". This means that the six other latent variables explain 69.2% of the variance in intention to use social commerce websites. Further, variable 'Perceived ease of use' explained 50.4% of variance in 'Perceived usefulness'. As shown in Table 4, all hypotheses were supported except hypothesis 4 (H4).

Table 4: Hypotheses testing

Hypotheses	β	р	Outcome
H1: Trust towards social			
commerce community	0.35	0.00	Supported
members has a positive			

effect on intention to use			
social commerce websites.			
H2: Trust in social			
commerce web site			
community has a positive	0.25	0.00	Supported
effect on intention to use			
social commerce websites.			
H3: Informational support			
has a positive effect on	0.23	0.00	Supported
intention to use social	0.23	0.00	Supported
commerce websites.			
H4: Commitment to social			
commerce websites has a			Not
positive effect on intention to	0.01	0.95	supported
use social commerce			
websites.			
H5: Perceived ease of use			
has a positive effect on	0.25	0.03	Supported
intention to use social			
commerce websites.			
H6: Perceived usefulness has			
a positive effect on intention	0.40	0.00	Supported
to use social commerce			**
websites. H7: Perceived ease of use of			
social commerce website has			
bootal commerce weepite hap	0.71	0.00	C
a positive effect on perceived usefulness of social	0.71	0.00	Supported
doctainess of social			
commerce websites.			

VI. DISCUSSION

According to hypotheses testing results, hypothesis H1, trust towards social commerce community members had a positive effect on individual's intention to use social commerce website $(\beta=0.35, p=0.00)$. This finding was consistent with previous studies of [5] and [17]. In [5] they identified 'trust toward community' as a significant factor influencing social commerce intentions. Referencing [17] also found trust towards community as a significant factor influencing social commerce usage. Hypothesis H2, trust towards social commerce community had a positive effect on an individual's intention to use social commerce website (β =0.25, p=0.00). This finding was consistent with previous studies of [5] and [17]. Referencing [5] identified trust toward community as the most significant factor that influence intention to use social commerce websites. Referencing [17] finding was also consistent with the study finding. According to the study findings, trust toward members was a more influential factor than the trust toward community. This finding also was in line with the study of [17]. The reason could be the consumer considers credibility of members more important than the community. Two variables of 'Trust transfer theory' showed higher path coefficient values which suggested trust plays a significant role in influencing individual intention to use social commerce websites. Hypothesis H3, informational support had a significant effect on intention to use social commerce websites (β =0.24, p=0.00). Informational support is one of the five dimensions of social support theory [82]. Previous study findings of [5] [2] and [17] were consistent with the findings of the current study. Hypothesis H4 was not supported by the study findings. As shown in Table 4, hypothesis H4 was not significant, hence we can conclude community commitment does not directly influence individual's intention of using social commerce websites (β =0.01, p=0.95). Referencing [5] and [17] found community commitment to be statistically significant when considering intention to use social commerce websites. However, in this study in the Sri Lankan context, this hypothesis was not supported. The findings of the study revealed that there was a significant positive effect of perceived ease of use on intention to use social commerce websites (β =0.25, p=0.03). Thus, the hypothesis H5 was supported. This implied that users intend to use the social commerce websites more frequently as the system becomes easy to use. This finding was consistent with [46] and [69]. Further, the results of this study aligned with the previous studies on social commerce by [10] as well. According to the study findings, the second most supported hypothesis was the positive effect of perceived usefulness on individual's intention to use social commerce websites (H6) (β =0.41, p=0.00). When a person perceives social commerce website as useful, then the intention towards using that website will also be higher. Much research has been done on e-commerce adoption and the findings of this study were consistent with previous research [3]. Even though PU and PEOU from 'Technology acceptance model' has been recognized as having significant relationship with individual's intention to use social commerce websites, in the current study, perceived ease of use had a much lower effect on intention to use when compared with perceived usefulness $(\beta=0.25, p=0.03)$. The strongest effect found in this study was the effect of PEOU on PU (β =0.71, p=0.00) (Hypothesis H7). This elaborates that when consumers perceive the social commerce websites as easy to use, the users will see them as useful. This finding is consistent with previous studies of [46], who revealed that firms which have strong and favorable perception of the usefulness of the systems use more of them than those with weak or unfavorable perception of the useful systems. Further, finding of this study was consist with [28][83][84][85] and [86], which confirmed perceived ease of use had direct effect on perceived usefulness.

VII. IMPLICATIONS

The findings of this study provided important implications for researchers and practitioners interested in social commerce. In this study a new model with four aspects was established. The current study contributed to narrow down the empirical gap by exploring the factors affecting the usage of social commerce websites in Sri Lanka. The findings of the study provided some important implications for practitioners as well. First, the results of this study found that social factors can play an important role in facilitating social commerce. It revealed the importance of information such as reviews, ratings and recommendations for

organizations and how hard it is to get that information from users into social commerce websites. Information support in this study is one of the influencing social factors involved in social commerce website usage. The reason that informational support is vital in social commerce is because supportive interactions among social website members let them feel closer to each other and more comfortable in exchanging information. The supportive environment will also enable the users in a social commerce web site to continue their association with the web site. Most people join a social networking web site with the belief of interacting with peers comfortably and conveniently. Without such an encouraging environment, the motivation to continued use and information sharing would diminish. Thus, the social commerce providers should facilitate such a supportive and encouraging environment when they design social commerce websites. Another important implication of this study is the lack of significance of the community commitment factor toward social commerce usage intention. Commitment to a community determined by how much time a person spends on a certain community while contributing to the growth of the community. According to the results of this study, in the Sri Lanka context people just want to get the content as viewers but do not like to contribute with recommendations, reviews and ratings. This was revealed in a previous study as well [87]. Further, the impact of trust on the social commerce website usage intention was visible in the present study. Organizations can ensure the authenticity of users and platforms to attain competitive advantage through social commerce. Further, the ease of navigation, attractive designs can be employed by organizations for their websites would improve the ease of use and usefulness attributes of the websites that would ultimately improve intention to use social commerce websites.

VIII. CONCLUSION

This study examined the factors affecting the intention to use social commerce websites in Sri Lanka. Findings of this study revealed that perceived usefulness as the most influential factor when deciding to use social commerce websites followed by informational support, trust toward members, trust toward community and perceived ease of use. But community commitment was not identified as a factor influencing social commerce website usage in Sri Lanka. The high influence from perceived usefulness and ease of use suggested the simplicity in terms of design and technical aspects plays a large role when influencing social commerce website usage. Trust also was identified as one of the main influencing factors for people to use social commerce websites. Higher importance on trust towards members suggested that in the context of Sri Lanka people place more trust on individuals than on communities. Members and their credibility have been highly regarded when making decisions to use social commerce websites. Increasing trust among members as well as towards communities would benefit

influencing individual usage of social commerce websites. Informational support also was identified as a significant construct influencing social commerce website usage among Sri Lankans. Improving the information accessibility and encouraging people to share information would enhance the information support aspect. The underlining reason for not identifying community commitment as a factor influencing social commerce website usage may be because the study focused only on investigating and analyzing the factors that influence the decision to use social commerce website rather than identifying factors that impact continuous usage and loyalty of social commerce website.

REFERENCES

- [1] M. Hajli, "Social commerce adoption model,", UK Academy for Information System Conference Proceedings, 2012.
- [2] T. P. Liang, and E. Turban, "Introduction to the special issue social commerce: A research framework for social commerce." International Journal of Electronic Commerce, vol. 16, pp.5–14, 2011.
- [3] M. Hajli, "Social commerce constructs and consumer's intention to buy." International Journal of Information Management, vol. 35, pp.183–191, 2015.
- [4] Statista, "Social commerce Dossier 2017." Internet: https://www.statista.com/study/13033/social-commercestatista-dossier.
- [5] J. Chen, and X. Shen, "Consumers' decisions in social commerce context: An empirical investigation," Decision Support Systems, vol. 79, pp.55–64, 2015.
- [6] Total Retail Survey, PricewaterhouseCoopers total retail survey, 2017. Internet: https://www.pwc.com/gx/en/industries/retailconsumer/total-retail.html
- [7] X. Lin, Y. Li, and X. Wang, "Social commerce research: Definition, research themes and the trends," International Journal of Information Management, vol. 37, pp.190-201, 2017.
- [8] W. S. Chow, and L. S. Chan, "Social network, social trust and shared goals in organizational knowledge sharing," Information & Management, vol. 45, pp.458–465, 2008.
- [9] L. Jung, "A study of affecting the purchasing intention of social commerce," International Journal of Software Engineering and Its Applications, vol. 8, pp.73-84, 2014.
- [10] J. Shen, "Social comparison, social presence, and enjoyment in the acceptance of social shopping websites," Journal of Electronic Commerce Research, vol. 13, pp.198–213, 2012.
- [11] H. A. H. Hettiarachchi, C. N. Wickramasinghe, and S. Ranathunga, 'Social commerce and consumer decision making: A conceptual

- model from social support perspective," Proc. of The Sixth Intl. Conf. On Advances in Economics, Social Science and Human Behavior Study, 2017.
- [12] R. T. Wigand, "Electronic commerce: Definition, theory, and context," The Information Society, vol. 13, pp.1-16, 1997.
- [13] M. Fraser, and S. Dutta, Throwing Sheep in the Boardroom: How Online Social Networking Will Transform Your Life, Work and World. Hoboken, New Jersey: Wiley & Sons, 2008.
- [14] A. T. Stephen, and O. Toubia, "Deriving value from social commerce networks," Journal of Marketing Research, vol. 47, pp.215-228, 2010.
- [15] E. Turban, N. Bolloju, and T. P. Liang, "Enterprise social networks," Journal of Organizational Computing and Electronic Commerce, vol. 21, pp.202–220, 2011.
- [16] V. Zwass, "Co-creation: Toward a taxonomy and an integrated research perspective," International Journal of Electronic Commerce, vol. 15, pp.11–48, 2010.
- [17] P. Lal, "Analyzing determinants influencing an individual's intention to use social commerce website," Future Business Journal, vol. 3, pp70–85, 2017.
- [18] D. Hinchcliffe, "The social business landscape," Internet: www.enterpriseirregulars.com/23628/the-2010-social-business-landscape, 2010.
- [19] Bazaarvoice, "Social commerce statistics 2017," Internet: http://www.bazaarvoice.com/research-and-insight/social-commerce-statistics/, 2013.
- [20] Z. Huang, and M. Benyoucef, "From e-commerce to social commerce: A close look at design features," Electronic Commerce Research and Applications, vol. 12, pp.246–259, 2012.
- [21] B. A. Osei, and A. N. Abenyin, "Applying the EngellKollat-Blackwell model in understanding international tourists' use of social media for travel decision to Ghana," Information Technology and Tourism, vol.16, pp.1-20, 2016.
- [22] J. H. Heinrichs, J. S. Lim, and K. S. Lim, "Influence of social networking site and user access method on social media evaluation," Journal of Consumer Behavior, vol. 10, pp.347-355, 2011
- [23] W. G. Mangold, and D. J. Faulds, "Social media: The new hybrid element of the promotion mix," Business Horizons, vol. 52, pp.357-365, 2009.
- [24] B. Sago, "The influence of social media message sources on millennial generation consumers," International Journal of Integrated Marketing Communication, vol. 2, pp.7-18, 2010.

- [25] D. Evans, Social Media Marketing: An Hour a Day. New York: John Wiley and Sons, 2012.
- [26] S. Aral, C. Dellarocas, and D. Godes, "Introduction to the special issue Social media and business transformation: A framework for research," Information Systems Research, vol. 24, pp.3-13, 2013.
- [27] V. Todri, and P. Adamopoulos, "Social commerce: An empirical examination of the antecedents and consequences of commerce in social network platforms," Thirty Fifth International Conference on Information Systems, Auckland, pp.1-18, 2014.
- [28] M. C. Lee, "Factors influencing the adoption of internet banking: an integration of TAM and TPB with perceived risk and perceived benefit," Electronic Commerce Research and Applications, vol. 8, pp.130-41, 2009.
- [29] T. L. Albrecht, and M. B. Adelman, Communicating Social Support. Thousand Oaks, CA: Sage Publications, 1987.
- [30] B. Xie, "Multimodal computer-mediated communication and social support among older Chinese Internet users," Journal of Computer-Mediated Communication, vol.13, pp.728–750, 2008.
- [31] W. Duan, B. Gu, and A. B. Whinston, "Do online reviews matter?

 An empirical investigation of panel data," Social Science Research Network (SSRN) Working Paper Series, http://ssrn.com/paper=616262, 2005.
- [32] Y. Bai, Z.Yao, and Y. F. Dou, "Effect of social commerce factors on user purchase behavior: An empirical investigation from renren.com," International Journal of Information Management, vol. 35, pp.538-550, 2015.
- [33] R. T. Mowday, "Reflections on the study and relevance of organizational commitment," Human Resource Management Review, vol. 8, pp.387-401, 1998.
- [34] J. Wu, Y. Chen, and Y. Chung, "Trust factors influencing virtual community members: A study of transaction communities," Journal of Business Research, vol 63, pp.1025-1032, 2010.
- [35] P J. Bateman, P. H. Gray, and B. S. Butler, "The impact of community commitment on participation in online communities," Information Systems Research, vol. 22, pp.841–854, 2011.
- [36] H. Lee, and J. Choi, "Why do people visit social commerce sites but do not buy? The role of the scarcity heuristic as a momentary characteristic," KSii Transactions on Internet and Information Systems, vol. 8, pp. 2383-2399, 2014.
- [37] M. Hajli, "A research frame work for social commerce adoption," Information Management Computer Security, vol. 21, pp.144-154, 2014.
- [38] D. H. McKnight, L. L. Cummings, and L. Chervany, "Initial trust formation in new organizational relationships," Academy of Management Review, vol. 23, pp.473-490, 1998.

- [39] A. Zaheer, B. McEvily, and V. Perrone, "Does trust matter? Exploring the effects of inter organizational and interpersonal trust on performance," Organization Science, vol. 9, pp.141-159, 1998.
- [40] C. Wang, and H. Tong, "Research on psychological dimensions of E-Commerce customer satisfaction," International Conference on E-Business and E-Government, pp. 2105-2108, 2010.
- [41] A. Mishra, "Factors influencing consumer intention in social commerce adoption," Information Technology & People, vol. 30, pp.356-370, 2017.
- [42] C. Cheung, and M. K. O. Lee, "Understanding consumer trust in internet shopping: A multidisciplinary approach," Journal of the American Society for Information Science and Technology, vol. 57, pp.479-492, 2006.
- [43] P. Palvia, "The role of trust in e-commerce relational exchange: A unified model" Information & Management, vol. 46, pp. 213-220, 2009.
- [44] C. I. Pletikosa and F. Michahelles, "A case study of the effects of moderator posts within a Facebook brand page". Social Informatics, 6984, pp. 161-170, 2011.
- [45] O. Gibreel, D. A. AlOtaibi, and J. Altmann, "Social commerce development in emerging markets," Electronic Commerce Research and Applications, vol. 27, pp. 28-32, 2017.
- [46] F. D. Davis, "Perceived usefulness, perceived ease of use and user acceptance of information technology," MIS Quarterly, vol. 13, pp. 319–340, 1989.
- [47] Telecommunications regulatory commission of Sri Lanka-2017, Internet: http://www.trc.gov.lk/2014-05-13-03-56-46/statistics.html.
- [48] Lanka Business Online, "E-commerce shakes up Sri Lanka's retail sector, says Takas CEO.", 2017. Internet: http://www.lankabusinessonline.com/interview-e-commerce-shakes-up-sri-lankas-retail-sector-says-takas-ceo.
- [49] D. Gefen, "E-commerce: the role of familiarity and trust," OMEGA, vol. 28, pp.725-737, 2000.
- [50] P. M. Peiris, and D. Kulkarni, "An empirical study of customer adoption of E-Commerce: A customer trust model to support the adoption of E-Commerce among small and medium-sized enterprises in Sri Lanka," International Journal of Business and Information, vol. 10, 2015.
- [51] T. P. Liang, Y. T. Ho, Y. W, Li, and E. Turban, "What drives social commerce: The role of social support and relationship quality," International Journal of Electronic Commerce, vol. 16, pp. 69–90, 2011
- [52] C. M. Ridings, D. Gefen, and B. Arinze, "Some antecedents and effects of trust in virtual communities," Journal of Strategic Information Systems, vol. 11, pp.271-295, 2002.

- [53] J. Salo, and H. Karjaluoto, "A conceptual model of trust in the online environment," Online Information Review, vol. 31, pp.604-621, 2007.
- [54] Y. Lu, L. Zhao, and B. Wang, "From virtual community members to C2C e-commerce buyers: Trust in virtual communities and its effect on consumers' purchase intention," Electronic Commerce Research and Applications, vol. 9, pp.346-360, 2010.
- [55] D. H. McKnight, V. Choudhury, and C. Kacmar, "Developing and Validating Trust Measures for e-Commerce: An Integrative Typology," Information Systems Research, vol. 13, pp. 334-359, 2002.
- [56] S. W. Sussman, and W. S. Siegal, "Informational influence in organizations: an integrated approach to knowledge adoption," Information Systems Research, vol. 14, pp. 47–65, 2003.
- [57] K. Hung, S. Y. Li, and D. K. Tse, "Interpersonal trust and platform credibility in a Chinese multi brand online community," Journal of Advertising, vol. 40, pp. 99–112, 2011.
- [58] S. Ba, "Establishing online trust through a community responsibility system," Decision Support Systems, vol. 31, pp. 323–336, 2011.
- [59] H. Sun, "Sellers' trust and continued use of online marketplaces," Journal of the Association for Information Systems, vol.11, pp.182–211, 2010.
- [60] D. Gefen, E. Karahanna, and D. W. Straub, "Trust and TAM in online shopping: An integrated model," MIS Quarterly, vol. 27, pp. 51-90, 2003.
- [61] M. Hajli, "A research framework for social commerce adoption," Information Management & Computer Security, vol. 21, pp. 144– 154, 2013.
- [62] A. Whiting, and D. Williams, "Why people use social media: A uses and gratifications approach," Qualitative Market Research, vol. 16, pp. 362–369, 2013.
- [63] P. Brickman, Commitment, Conflict, and Caring. Englewood Cliffs, NJ: Prentice-Hall, 1987.
- [64] R. A. King, P. Racherla, and V. D. Bush, "What we know and don't know about online word-of-mouth: A review and synthesis of the literature," Journal of Interactive Marketing, vol. 28, pp.167-183, 2004.
- [65] F. R. Davis and V. Venkatesh, "A critical assessment of potential measurement biases in the technology acceptance model: Three experiments," International Journal of Human-Computer Studies, Vol. 45, pp. 19–45, 1996.
- [66] T. McGill, and S. Bax, "From beliefs to success: Utilizing an expanded TAM to predict web page development success,"

- International Journal of Technology and Human Interaction, vol. 3, pp. 36-53, 2007.
- [67] D. Gefen, and D. Straub, "The relative importance of perceived ease of use in IS adoption: a study of e-commerce adoption," Journal of Association for Information Systems, vol. 1, pp.1-28, 2000.
- [69] V. Venkatesh, and F. Davis, "A theoretical extension of the technology acceptance model: four longitudinal field studies," Management Science, vol. 46, pp.186-204, 2000.
- [70] R. Walczuch, and H. Lundgren, "Psychological antecedents of institution-based consumer trust in e-retailing," Information & Management, vol. 42, pp. 159-177, 2004.
- [71] C. S. P. Ng, "Intention to purchase on social commerce websites across cultures: A cross-regional study," Information and Management, vol. 50, pp.609–620, 2013.
- [72] P. M. Symonds, "On the loss of reliability in ratings due to coarseness of the scale," Journal of Experimental Psychology, vol. 7, pp. 456–461, 1924.
- [73] C.M.Ringle, S.Wende and A.Will, "SmartPLS 2.0.M3. Hamburg: SmartPLS, 2005. http://www.smartpls.de,
- [74] B. M. Bass, B. J. Avolio, D. I. Jung, and Y. Berson, "Predicting unit performance by assessing transformational and transactional leadership," Journal of Applied Psychology, vol. 88, pp. 207-218, 2003.
- [75] J. Hensler, C. Ringle, R. Sinkovics, "The use of partial least squares path modeling in international marketing," Advanced International Marketing. Vol. 20, pp. 227–320 (2009).
- [76] J. F. Hair, C. M. Ringle, and M. Sarstedt, "PLS-SEM: indeed, a silver bullet," Journal of Marketing Theory and Practice, vol. 19, pp.139–151, 2011.
- [77] J. Hulland, "Use of partial least squares (PLS) in strategic management research: A review of four recent studies, Strategic Management Journal," vol. 20, pp. 195–204, 1999.
- [78] W. W. Chin, A. Gopal, and W. D. Salisbury, "Advancing the theory of adaptive structuration: The development of an instrument to measure faithfulness of appropriation of an electronic meeting system," Information Systems Research, vol. 8, pp.342-367, 1997.
- [79] J. F. Hair, W. C. Black, B. J. Babin, and R. E. Anderson, Multivariate Data Analysis. Upper Saddle River, NJ: Prentice Hall, 2009.
- [80] H. Wixom, and H. J. Watson, "An empirical investigation of the factors affecting data warehousing success," The Journal of Business Strategy, vol. 25, pp.17-41, 2001.
- [81] C. Fornell, and D. F. Larker, "Evaluating structural equation models with unobservable variables and measurement error," Journal of Marketing Research, vol. 18, pp.39-50, 1981.

- [82] C. D. Sherbourne, and A. L. Stewart, A. L. "The MOS Social Support Survey," Social Science & Medicine, vol. 32, pp.705-714, 1991
- [83] T. Kim, J. Lee, and R. Law, "An empirical examination of the acceptance behavior of hotel front office systems: An extended technology acceptance model," Tourism Management, vol. 29, pp.500-513, 2008.
- [84] J. W. Moon, and Y. G. Kim, "Extending the TAM for a world wide web context," Information & Management, vol. 38, pp.217- 30, 2001
- [85] I. Wu, and J. Chen, "An extension of trust and TAM model with TPB in the initial adoption of on-line tax: An empirical study," International Journal of Human-Computer Studies, vol. 62, pp.784-808, 2005.
- [86] J. Yu, I. Ha, M. Choi, and J. Rho, "Extending the TAM for a t-commerce", Information & Management, vol. 42, pp.965- 976, 2005.
- [87] L. Liu and R, Du, "Roles of community commitment and community atmosphere: an empirical study of online community success," WHICEB 2013 Proceedings. 87, 2013.