Investigating The Impact of Virtual Customer Experiences on the Tendency to Social Commerce in Virtual Sales Sites

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Abstract: This research is aimed to study the impact of virtual customer experiences on the tendency to social commerce in digi-kala sale site, Telegram and Instagram networks while investigating previous studies and collecting valid information. In order to identify variables, the results of previous researches were firstly studied by library method and their results were used to design research's conceptual model and field and questionnaire method was also applied to collect information. Applied research method is used in this study based on objective and non-experimental method; and correlation research method was used based on method of conducting study. This study also used cross-sectional research method for time interval of data collection. Set of convergent and divergent validity methods were used to test validity of research tool and Cronbach's alpha and combined reliability were used to test its reliability. Structural equation analytical approach was used to test research's model. This research was conducted through "Partial Lest Squares" collection method and Smart PLS. This research's statistical population included buyer and purchase users of digi-kala sale site and Instagram and Telegram selected through simple random method. The obtained results of this research show that all the research's hypotheses have been acceptable.

Keywords: Social commerce, Customers' experiences, Virtual customers, Virtual networks

INTRODUCTION

Rapid social media and web development have provided great potential to change and transform the e-commerce approach from a product-centered to customer-centered business in a social environment. As it is observed, social media with remarkable size of its clients, which spend a lot of time in their daily activities, provide a very good field for introducing, marketing and selling products and service. A concept entitled social commerce is formed in this atmosphere. Social commerce was firstly discussed in November 2005 by Yahoo Company referring to a certain form of e-commerce, which pursues a social, creative, and interactive-oriented approach to online markets (Wikipedia). In fact, using online social media, supports users' social interactions and participation, facilitates marketing, comparison, buying, selling and sharing product and service. In a simpler definition, social commerce is the use of social media potential in the field of e-commerce exchanges. If we want to give a comprehensive definition of social commerce, we can refer to the following definition: The use of social media is considered as an effective tool in information socialization and facilitation in order to develop a new approach of e-commerce (Liang, T et al., 2011). Today, 10 to 25 percent of commerce is taken place electronically in the world in

which Iran has no share at the present time. This is due to absence of necessary infrastructure, shortage of qualified personnel especially in the areas of network security and online payment systems, and the lack of proper understanding of the issue and the inadequate use of the minimum infrastructure available (telephone, internet and mobile) in the country (Hamid ShafiZade et al., 2013). The emergence of the possibility of e-commerce in the country as it has happened in the world will be the source of significant changes in the country and its relationship with outside the world. Cost savings, precision, and facilities for those having barriers to community participation, disabled people and children, and therefore reducing the number of daily trips and traffic volumes are among the tangible and immediate benefits for creating this possibility in the country. The present research's purpose is investigating the effect of virtual customers' experience on tendency to social commerce in digi-kala sale site and Telegram and Instagram networks.

2. Theoretical principle and extension of hypotheses
2-1. Virtual customers' experience
Virtual customers' experiences as their inner modes suggest that the stimulant impacts of technological environments on customer behavior are examined through customer experiences. Some studies on social commerce acknowledge the three most important categories of customer experience that play a role in determining customer behavior: 1- social support, 2- social presence, and 3- flow.

2-1-1. Flow
Rapid development of social media and websites has provided a huge potential for transferring e-commerce from one product-centered environment to a social and customer-centered environment. In fact, social media is referred to applied programs based on the Internet, while websites are referred to a concept and an operating system for controlling collective intelligence. Customers in such environments access to some social knowledge and experiences which help them better understand the online purchase goals by them and make more correct and more informed purchasing decisions.

2-1-2. Social decision
Social networks will be converted to a powerful tool by managers of stores, and good and service distribution centers if they are applied properly. But, due to working nature in these stores, this communication tool is also made more important and vital. The fact is that products are as their communicative tool and customers' experience of them (whether in-store purchase and online shopping) depends on more and deeper communication channels. Customers may prefer store x to store y for purchasing a pair of sneakers because of some reasons including "the sellers of this store are more intimate, they offer better suggestions to customers or the store's atmosphere is more consistent with their current condition and thousands of other reasons, but when customers say that store x recognizes me better than others and it is aware of my choices, what will you say then? In your opinion, except for social networks, is there a better way to know the brand and have a full understanding of customers? (Davis et al., 1989).

2-1-3. Social support
We are all consumers and this means that we use or consume food, clothing, housing, education, services, ideas, etc. on the basis of a special order. Our decisions about consumption, demand for raw materials, transportation, technical services, or the deployment and allocation of resources will lead to the success of some industries and the failure of others. Therefore, the decision to buy and determine the place of purchase (real space or cyberspace) is an important factor in the recession or the boom of marketing activities. Marketing communications aim to build and maintain loyalty and commitment of the relationship between the consumer and the organization. Studies show that different kinds of relationships with commitment to the customer increase his loyalty. How can we attract and win customers in the market place in social networks where competition is intense; analyze the factors that affect online consumer behavior and examine how social network marketers can perform virtual interactions and sales processes by focusing

marketing efforts on the factors that shape the virtual experiences of consumer behavior and has a positive impact on how to create a safe and secure online environment for marketing activities (Coulson et al., 2005)?

2-1-4. Relationship quality

Everything is not summarized in a simple connection. The important problem and challenge here is the relationship between the meaning and the concept of the product and that is the message transferred to customer. Right transfer of correct content to customers is one of the main concerns of retailers in using social networks (Taylor et al., 2004). Receiving unique and special suggestions reflects the value that the company gives to its customers. The possibility of asking question refers to mutual trust and creating loyalty; and sharing the purchasing experiences is related to customer accreditation. All these stimulant factors depend on the manner of communication of retailer stores with their customers (Caceres et al., 2007).

2-1-5. Trust

According to conducted researches, users trust the information published on social networks like their friends. Even social networks influence users' purchases and advertising in these media will have more impact on users. Trust is the foundation and starting point for social exchange and the basis for interaction in social networks. It seems that "trust" topic is faced with a kind of permanent hazardousness. Paldam believes that social capital is the chain/loop of linking societies to each other. He divides theoretical approaches in the field of social capital into three categories including: trust, cooperation and network. Relying on this key assumption that trust implies ease of voluntary cooperation, he seeks to show this relationship between trust and network. Therefore, Paldam concludes that network definition is proportional to the definition of "cooperator -trust" (Paldam M , 2000).

2-2. Tendency to social commerce

Social commerce focuses on share of social interaction content in community. A large number of customers join a company's e-commerce sites before they make a purchase to get more information. In contrast with e-commerce in which trust is based on the experience of purchasing transactions, trust in social commerce can be created based on customer experiences in the virtual community existed in social business websites. On the other hand, these websites are the online community of customers who have a common interest in specific brands and can share information and exchange them. In this condition, the trust of users in social commerce can be formed based on the characteristics of information and also social features. Trust in social commerce is formed in two ways (Hajli N , 2013): Information based and Identification based

2-3. Tendency to purchase

The differences between e-commerce and social commerce can be highlighted by the three criteria of business goals, customer relationship, and system interaction. Regarding business purposes, e-commerce focuses on maximizing efficiency with strategies for expert searches, one-click purchases, catalogs extracted from features and suggestions based on behaviors following customer purchases. This is while social commerce tends to social goals such as networking, collaborating and sharing information with secondary focus on shopping. In the case of customer relationship, customers usually communicate with e-commerce databases individually and independent from other customers. While, social commerce includes online communities that support social relationships to improve conversations between customers. The increase in the number of social network users of the country provides the field for utilizing the phenomenon of social commerce by online businesses. In this manner, it is necessary that active companies in virtual spaces take advantage of social commerce as a new channel to attract more customers. Since social commerce in our country is considered as an emerging trend, further research in this area is an undeniable necessity (Hajli, N , 2014).

According to mentioned basis, below total hypotheses are discussed and tested in order to achieve research's main objectives:

The first hypothesis: Does virtual customers' experience have a positive and significant impact on tendency to social commerce?

The hypothesis 1-2: Does social support have a positive and significant impact on tendency to social commerce?

The hypothesis 1-3: Does social virtualization have a positive and significant impact on tendency to social commerce?

The hypothesis 1-4: Does flow have a positive and significant impact on tendency to social commerce?

The hypothesis 1-5: Does relationship quality have a positive and significant impact on tendency to social commerce?

The hypothesis 2: Does tendency to social commerce have a positive and significant impact on trust?

The hypothesis 3: Does tendency to social commerce have a positive and significant impact on tendency to purchase?

The hypothesis 4: Does tendency to social commerce have a positive and significant impact on tendency to purchase?

The hypothesis 5: Does trust have a positive and significant impact in relationship between tendencies to social commerce and tendency to purchase?

The hypothesis 6: Does control variables have a positive and significant relationship in mediator effect of trust on the relationship between tendency to social commerce and tendency to purchase?

2-4. Review on research's background

In a comprehensive research, Curty and Zhang (Curty R et al., 2013) studied "Website features that are promoted for social commerce: a historical analysis," in which they considered social commerce as one of the commercial intermediaries that takes place with social media and social networks' service. They introduced three stages in this relation: interactive, communicative and social. As the result of integrating 174 technical indicators, they showed that (1) all these stages existed in websites and reconstructed their marketing strategies business; (2) communicative sector enjoys more importance. (Zhang H et al., 2014) evaluated the role of technical environments and customer experiences in the tendency to social commerce as they examine "what make customers motivated to participate in social networks". From their point of view, "environmental factors" (including tendency, personality and perceived socialization), as a stimulus influence the "experience of virtual customers" (including social support, social introduction, and flow) as a living entity and will respond to" a tendency toward social commerce. In this study, they also considered age, gender, and Internet shopping experience as an effective control variable. In a research entitled "the effects of different features of social commerce on customers", Kim and Park (Kim et al., 2013) identified the most important social business indicators as fame, size, quality of information, transaction safety, communications, economic justification, economic advice, oral advice, structural assurances, predicted simplicity in utilization and predicted performance. They also described social commerce as an effective factor in trust and this effect (the impact of social commerce on trust) was generally confirmed; but this was rejected in some dimensions such as size and structured trust. In another part of their research, they examined the impact of social commerce on trust performance in which tendency to buy and oral intentions were considered and both effects were considered significant. In a research entitled "The design of social commerce and the customers' tendency to purchase," Hajli and Sims (Hajli N et al., 2015) considered social commerce as a new development in e-commerce, which helps clients' empowerment by using internet. They know the recent benefits of ICT and the necessity of web technologies on social network websites to develop a new social status that facilitates social commerce. They believe that the customers have a higher level of trust and willingness to buy using a social commerce structure.

3. Research method
Method

Considering that the purpose of this research is evaluating the effect of the virtual customers' experience on the tendency to social commerce on the digi-kala sale site and telegram and Instagram networks, so this is an applied study. This research is a cause and effect study regarding relationship between variables because it examines their impact on each other and this is cross-sectional regarding time. Library method was used to collect data and a questionnaire was used in field studies section. Quantitative method was used in this study. Researcher firstly collected different opinions by using questionnaire; then, tested hypotheses and research's conceptual model using PLS method. Considering that the research will be consulted by using a questionnaire to examine the relationship between several independent variables and a dependent variable from the sample population, it can be said that the research is descriptive-survey and correlation research.

Population and sample

Since online shopping of social networks has been happened more likely among persons who were active members of these networks; therefore, the customers and interested people in buying from online networks (especially members of telegram and instagram channels) and also friends joint in telegram and instagram virtual channels pursuing electronic views and selecteing these networks according to these views were considered for this study. Among internet sites for selling goods with respect to research condition, the sample size should be identified in such a way that it would first bring us the desired results and then, it should prevent the waste of time, cost and manpower. Digi-kala internet network and members on social networks of telegram and instagram were selected in this site and accordingly, population size was considered unlimited.

Simple random sampling method was used in this study. According to this fact that statistics were computed by Partial Least Square (PLS), number of sample was calculated by obtaining the largest number after calculating the following two methods:

The product of the maximum number of questions per variable in 10: According to desired questionnaire in which number 5 was the maximum number of questions, number 55 was obtained by multiplying 5 in 11.

Given the desired conceptual model, we found the variable connected to the highest input and output and multiplied this number in 10. The highest input and output in this study was number 2 that number 22 obtained from multiplying 2 in 11 and the highest number was considered as basis among these two status and we examined 40 questionnaires in order to provide studied statistic.

Data collection

This research's data for was collected through questionnaire in April 2015. In this questionnaire, Fisch and Ozjan theory was used to examine the behavioral beliefs of virtual network clients for positive and negative comments. Questionnaire's questions were taken from purchasing intention of Han Zhang et al. A set of convergent and divergent validity methods were used to test research's validity. The reliability was also tested through four ways of evaluating factor loads' coefficients, Cronbach's alpha coefficients, combined reliability and shared values. The results of the measurement of the reliability of the research questionnaire are presented in Table 1.

Table 1- results of reliability test of research's questionnaire

Variable	Number of questions	Cronbach's alpha coefficient
Flow	2	0.875712
Social visualization	2	0.801106
Social support	2	0.791255
Relationship quality	2	0.711604
Trust	3	0.773189
Tendency to buy	3	0.828265
Tendency to social commerce	4	0.805762

Data analysis

We studied the questionnaires' demographic features by using descriptive statistic including distribution tables, percentages, and charts in order to analyze and evaluate data. Structural

equation analysis test was used to respond to research's questions, data analysis, and research's statistical hypotheses testing. Software SPSS and PLS were used for classification, statistical analysis and research's hypotheses testing.

4. Research's findings
4-1. Evaluation of model fitness
Structural equation models are composed of combining the measuring models and structural one. Measurement models indicate clear indicators, which measure model's hidden structures and structural model indicates relations of model's hidden structures. A kind of factorial analysis is used in structural equations modeling method in order to test measurement models and significance of factor loads. With respect to the results of confirmatory factorial analysis, we can say that which one of indicators has a significant share in measuring the research's structures and which one does not.

Considering the significance and factor load of this study's items, all items have a t statistic greater than 1.96 except for q4, q5, q11, q13, which has a significance less than 1.96 and a factor load less than 0.4. Therefore, the aforementioned items are excluded from the model and the model is tested again. According to factorial load, the indicator having the most factorial load has a larger share in measuring the relevant variable, and the indicator with smaller coefficients plays a smaller role in measuring the relevant structure.

4-2. Significance coefficients (t-value)
According to table 2, we find that all significance coefficients (except for the impact of negative views on purchasing intention 1) are more and this issue shows significance of all the questions and relationship between variables (96 except for the impact of negative views on purchasing intention) at 95% of confidence. Considering this table, we find that all hypotheses are acceptable.

Table 2- values of AVE and reliability indexes values

Variable	AVE (.0.5)	Combined reliability (.0.6)	Cronbach's alpha (.0.7)
Flow	0.728282	0.914682	0.875712
Social visualization	0.714827	0.882616	0.801106
Social support	0.827304	0.905491	0.791255
Relationship quality	0.775548	0.873552	0.711604
Trust	0.815116	0.898142	0.773189
Tendency to buy	0.853130	0.920740	0.828265
Tendency to social commerce	0.631675	0.872607	0.805762

4-3. Direct, total and indirect impacts of research's variables

path	Beta	Standard error	t-statistic of sampling		
			200	500	800
AM -> BMM	0.798	0.021	38.386	66.792	75.795
AM -> FL	0.185	0.074	2.511	4.123	5.454
AM -> FP	0.311	0.046	12.303	19.901	23.068
BMM -> FP	0.235	0.116	2.032	3.496	4.303
BMM -> FS	0.221	0.105	2.261	2.272	2.841
FL -> BMM	0.034	0.036	0.926	1.407	1.583
FL -> FP	0.393	0.042	9.250	12.482	17.666
FP -> FS	0.417	0.083	5.029	7.889	9.233

In table "Total Effects", direct and indirect impacts of relationship between variables are shown. According to below table based on model, behavioral beliefs variable does not directly influence tendency to buy, but this variable can have the impact with 1 value on tendency to buy through the two mediators of positive and negative internet attitudes.

Table 4- Total and indirect effects

	Flow	Tendency to buy	Relationship quality	Tendency to social commerce	Social support	Social visualization	trust
Flow			0.300525				
Tendency to buy	0.370800		0.663288				
Relationship quality							
Tendency to social commerce	0.002663	0.007182	0.004763				
Social support	-0.295242	0.045834	-0.063434	-0.150381			-0.024298
Social visualization	0.021475	0.286904	0.164782	0.169399			0.331834
trust	0.096153	0.259311	0.171998				

Discussion and conclusion

Trust is one of the factors, which are effective in social commerce development, prosperity and success. Cameron Snet in 1999 reported the most important barriers to e-commerce and trust as the third barrier among 10 barriers, and according to Ferry (Ferry et al., 2003), it was expected that e-commerce would quickly become part of everyday life of customers, but in practice, this expectation was not fully met. It is said that lack of customer's trust is one of these reasons of failure. Mistrust is one of the reasons for preventing to buy from internet vendors, which is regularly raised by customers. According to official statistics indicating the increase in the penetration rate of the internet and the expansion of more internet access throughout the country in recent years and also the increase in the penetration rate of credit cards and debts among Iranian users (applicable through internet), it was expected that the development of e-commerce would also be faster in our country. There are many challenges in the world of electronic information providing information including the possibility of copying information, the possibility of producing false information, the possibility of sending incorrect information in the name of others and the possibility of misleading information in the direction of sending it in the domain of electronic commerce. Such challenges can show themselves in different ways such as negotiating with false identities, the ability to withdraw from the electronic account of individuals in their own name, the unlawful change in the documents of others, the possibility of changing the bank accounts of individuals, the possibility of creating fake sites in the name of others and possibility to deny information and electronic documents by the individual. Customers do not simply trust internet sellers and social networks to enter into a trading deal with them. The concept of trust has existed since the advent of humanity and the beginning of interactions between human beings. This concept is widely studied in many disciplines and sciences and each discipline has a particular understanding of this concept and formulates it in its own way. According to definition of Oxford English Dictionary (1971), "trust means confidence or relying on some features or certain attributes of a person or one thing or the correctness of a statement". In spite of definition of Oxford Dictionary, many authors have defined trust in a particular way depending on their specialized topic. In the opinion of Lewis and Vicert, the multiplicity of defining the trust in the subject literature is probably due to two reasons. Firstly, trust is an abstract concept and it is sometimes considered as synonymous of some concepts such as validity, reliability or assurance. Therefore, some challenges are created for researchers to define the term and the distinction between trust and its related concepts. Secondly, trust is a multifaceted concept and has different perceptual, sensory and behavioral dimensions.

Applied suggestions

Since positive internet views have a positive effect on buying intent, it is suggested that social sites' marketers transfer this mentality to site visitors by creating appropriate and free space for presenting customers' views and perspective regarding mentioned site's service and facilities which are safe compared with its service and facilities quality and this issue will have a high effect on attraction of customers' trust. Also, if you post a positive feedback from former customers, chance of social network or site will more attract new people and in the case of receiving negative perspective, we can remove problem and announce troubleshooting following appeasement of complainant customer. We can also make this possibility to sites' visitors by creating voting or scoring system to facility and service in order to benefit from others' views in decision-making. Displaying service and facilities based on the amount of selling or number of visitors of page can be another appropriate solution in order to attract customers' trust and encourage them.

We can also create a network of customers or club of fans with the help of social networks. Extensive facilities and countless users of these networks will increase the speed of the company's popularity. Introducing through a customer to friends and acquaintances will be the most effective way to attract customers' trust.

You do not need to use all of them for effective activity in social networks, but you should choose one or two networks to fit your needs and customers. The study of social network articles and increase in site visits can be a good reference for choosing the network you need. Since negative Internet opinions have a negative impact on purchasing intentions, it is suggested that the marketers try to change customers' attitudes as much as possible if the site collection has enough strength through advertisements and identifying them to customers and if they do not have competitive advantages, they should try to create a positive view in customers by creating unique competitive advantage for themselves.

References

1. Liang, T. P., Ho, Y. T., Li, Y. W., & Turban, E. (2011). What drives social commerce: the role of social support and relationship quality. International Journal of Electronic Commerce Article, 16(2), 69-90.
2. Hamid Shafi Zade & Syed Iman Syedy & Oman Qasemi Delar Sataqi, 2013, presenting a conceptual model of consumer behavior in electronic purchase, marketing management journal, article 2, period 8, no 19, Summer 2013, pages 13- 28.
3. Davis, F. D. (1989), Perceived usefulness, perceived ease of use, and user acceptance of information technology, MIS Quarterly, 13, 319-340.
4. Coulson, N. S. (2005). Receiving social support online: an analysis of a computer-mediated support group for individuals living with irritable bowel syndrome. Cyber Psychology & Behaviour, 8, 580–584.
5. Taylor, S. E., Sherman, D. K., Kim, H. S., Jarcho, J., Takagi, K., & Dunagan, M. S. (2004). Culture and social support: Who seeks it and why? Journal of Personality and Social Psychology, 87, 354-362.
6. Caceres, R. C., & Paparoidamis, N. G. (2007). Service quality, relationship satisfaction, trust, commitment and business-to-business loyalty. European Journal of Marketing, 41(7-8), 836-867.
7. Paldam, M. (2000). Social Capital: One or Many? Definition and Measurement. Journal of Economic Surveys 14 (5), 629-653.
8. Hajli, N. (2013). A research framework for social commerce adoption. Information Management & Computer Security, 21(3), 144–154.
9. Hajli, N. (2014a). The role of social support on relationship quality and social commerce. Technological Forecasting and Social Change, 87, 17–27
10. Curty R., Zhang, P. (Forthcoming 2013), Website Features that Gave Rise to Social Commerce: A Historical Analysis, Electronic Commerce Research and Applications (ECRA), Vol. 12
11. Zhang, H., Lu, Y., Gupta, S., & Zhao, L. (2014). What motivates customers to participate in social commerce?
12. Kim, S., & Park, H. (2013). Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance. International Journal of Information Management, 33(2), 318-332.

13. Hajli, N., & Sims, J., (2015). Social commerce: The transfer of power from sellers to buyers, Technological Forecasting and Social Change, 94, 350-358.
14. Ferry, M. M. (2003). Advertising, consumerism and nostalgia for the new woman in contemporary China. Continuum: Journal of Media & Cultural Studies, 17(3), 277-290.