

Investigation of the Relationship between Social Support, Relationship Quality and Social Commerce

Sahar Kamangarpoor¹ and Behrooz Shahmoradi²

ABSTRACT

The emergence of social network sites and increasing popularity of social network sites have risen to a new electronic commerce stream, called social commerce. In social commerce individuals share their information and experiences about products and services, creating a friendly and supporting online environment. This study based on social support and relationship quality theories considered as a model to investigate the relationship between social support, relationship quality and social commerce intention. In this regard after reviewing the relevant literature, a research model introduced by Hajli in 2014 with some modifications selected as the research model. A questionnaire of 22 items adopted from previous literature applied to data collection. The research conducted on two popular social network users in Iran, Facebook and Telegram. A sample consists of 384 volunteers filled out the questionnaires. Pearson correlation analysis method and partial least square applied to test the model. The results indicated that social commerce intention is directly related to both social support and relationship quality. The research findings emphasize on technological changes in electronic commerce and provide new strategies to firms and sellers to adopt innovation and serve social networks in their business.

Keywords: Social support, relationship quality, social commerce, social networks, online communities.

1. INTRODUCTION

Business world has been faced with many alterations, including electronic commerce (e-commerce). In fact e-commerce is defined as a way to facilitate financial transactions (Hajli, 2014). Web2 and social networks have influenced the development of a new generation of e-commerce, called social commerce. This term was introduced by Yahoo in December 2005. Social commerce as a new phenomenon is growing quickly than other new emerging technologies (Nicknezhad, Jalali, Dastgheibifard, & Akbarian, 2010).

Social network users employ these sites as a tool to share their online shopping experiences as well as products and services information (Kim & Park, 2013).

_

¹ Department of Management, Islamic Azad University, Sanandaj Branch, Iran

² Faculty member of Research Institute for Science Policy, Tehran Iran

Social networks such as Facebook and YouTube influence considerably on how users communicate and share information. People join these sites, create their profiles and communicate with their friends. Strengthening online marketplaces by social networks characteristics should improve trust between two sides of transactions as well as users satisfaction (Swamynathan, Wilson, Boe, Almeroth, & Zhao, 2008). There is no doubt that social networks influence on shopping decisions, so that these sites stimulate people needs and wishes (Pirmohamadiani, Mohamadi, & Hoseini, 2013). Social networks provide customers platform to communicate searching, furthermore, they have remarkable role in providing offers to customers. Since social networks can increase trust, the user's intention to e-commerce would increase too (Khoshnood & Mahdavi, 2011). Social commerce has some beneficial for both customers and firms. Customers based on information provided by other customers or by firms, make conscious purchase decisions, and firms attract new customers via positive advices of their current customers and gain more benefits (Curty & Zhang, 2011). A concept behind social commerce is that social media through developing closer communicate between e-vendor and customers, enrich relationship quality, increase selling and encourage customer's loyalty to the business (Hajli, 2014).

On the other hand, social support is known as a social value which can be obtained from online communities by internet users. Since social support can bring warmth and understanding to individuals, it can also satisfies their psychological needs (Liang, Ho, Li & Turban, 2011). According to web and media news: users of social networks like Facebook, Instagram, Telegram and so on grow increasingly in Iran. One of the virtual world experts declared that almost 85% of internet users in Iran are the members of social network sites such as Facebook and Google plus (Tehrani, 2016, September 11). Telegram is the most popular social network in Iran. It has more than 20 million members in Iran up to now (Virtual world group, 2016, December 7). Some stores and small businesses utilize social networks to introduce and advertise their products and services. Marketing via social media increases sale, improve customer services and develops marketing campaign, therefore it's a crucial activity to business success and survival of it (Marzangou, Ghorbani, & Ranjbarvandi, 2014).

As social commerce is a new phenomenon in Iran, further studies in this area need to be done. Although some researches has been studied social media and social commerce era in Iran, but none of them investigate the role of social support and information quality in social commerce. In order to find an explanation for correlation between social support, relationship quality and social commerce, in this paper we proposed a model to investigate customer's social interactions in virtual world from the point of social commerce. In order to investigate this correlation, the below objectives are persuded:1- Understanding the relationship between social support and social commerce intention 2-Understanding the relationship between relationship quality and social commerce intention 3- Understanding the relationship between social support and

relationship quality. Accordingly this paper addressed three questions: 1- To what extent there is relationship between social support in social networks and social commerce intention? 2-To what extent there is relationship between relationship quality in social networks and social commerce intention? 3-To what extent there is relationship between social support in a social network and relationship quality of its users? In order to answer these questions a survey conducted on Facebook and Telegram users in Iran.

2. THEORETICAL BACKGROUND AND LITERATURE REVIEW

2.1 Social Commerce

Innovation enables a business to aware of customer needs to develop new products and services accordingly. Customer loyalty is an useful tool for ecommerce success. Since loyal customers make repetitive purchases which leads to improve financial performance of the firm, therefore, innovation is so important for success of a firm in today's competitive markets (Ergun & Kuska, 2013). Increasing popularity of social networks such as Facebook and Tweeter lead to the development of a new platform in ecommerce called social commerce. Social network users are encouraged to share product information with their friends or sell product and services via social media (Liang et al, 2011). Social commerce is the integration of e-commerce with e-marketing using web2 and social media applications. This integration is supported by theories such as social capital, social psychology, consumer behavior and online collaboration, resulting in a set of useful applications to drive social commerce (Turban, King, Lee, Liang, Turban, 2015). Innovation in social commerce is similar to other innovation activities. It is the key to improving performance and may determine the success of social commerce projects as well as the success of the entire organization and its survival. Social media provide managers with new resources for idea generation, listening to customer's suggestions and complaints, using their ideas for product design or redesign and improving the methods of business (Turban, Strauss, Lai 2016).

Sharing customer product information leads to popularity and growth of social commerce in recent years. This development in social commerce is due to two main influential factors, consumer bargaining power and rapid progress in information technologies (Ng, 2013). According to Kim (2013), the emergence of social commerce reflects the power of collective bargaining as internet has shifted the bargaining power from sellers to consumers.

2.2 Social Support and Social Commerce

"Social support theory has been proposed to explain the social relationships influence the cognitions, emotions and behaviours. This theory emphasizes that

supportive behaviour can contribute to health by protecting people from the adverse effects of stress and promoting self-steam and self-regulation" (Wang & Hajli, 2014).

Social support is a multi-dimensional concept and is defined as individual perception of being responded and helped by people in social group. Social support consists of emotional, instrumental, informational and appraisal support. Since content and social relationships are the characteristics of social commerce, social support in social commerce consists of informational and emotional support (Zhang, Gupta & Zhao, 2014). Online social support influences considerably on performance of virtual groups, because it is an innovation social interaction. Internet groups have been developed to facilitate individual's interactions and increase social support via information sharing (Hajli & Sims, 2015). Since shopping is a social activity, customers tend to be affected by social interactions with their friends when making purchase decisions. Online buyers can get access to social knowledge and experiences which support them in making more informed and accurate purchase decisions (Lu, Fan, & Zhou, 2016).

According to social interaction theory individuals reciprocate with others, when derive benefits from them. Therefore social commerce environment with high perceived interactivity provides a proper site for self-presenting, content creation and support exchange among customers so creates a sense of social support (Zhang et al, 2014). Zhang et al (2014) emphasized on the effects of social support on relationship quality and stated that greater information sharing creates a supportive environment in which it would be common to share shopping information, product knowledge and purchase experiences with others; hence it could be said that social commerce intention positively related to social support.

As mentioned earlier social support is a multi-dimensional concept, but in this paper we have only considered two dimensions: informational and emotional support. Social media facilitates social support creation which leads to better purchase decision making and provides a supportive climate. In the other words, greater and better social support may leads to higher intention to social commerce and influences on customer's social behavior (Hajli & Sims, 2015). In social commerce environment, the customers have access to social experiences and knowledge for supporting them to have better perception of purchase goals and to make more conscious purchase decisions (Huang & Benyoucef, 2013). When social support exists in a social community, its members would have a closer relationship with each other and share their valuable information to their friends. The frequent sharing of supportive information can enhance friendship and trust among members which may increase social commerce intention (Liang et al, 2011). Thus we hypothesize:

H1: Social commerce intention is positively related to perceived social support in a social commerce site.

H1a: Social commerce intention is positively related to perceived informational support.

H1b: Social commerce intention is positively related to perceived emotional support.

2.3 Relationship quality and social commerce

Relationship marketing theory shows the effects of network and cooperation with customers by explaining the role of commitment and trust. The core of this theory is focused on relationship quality dimensions including trust, commitment and satisfaction (Wang & Hajli, 2014). Relationship quality is usually defined as a multidimensional construct. Three main dimensions of relationship quality are trust, commitment and satisfaction. Trust refers to believing of the honesty and benevolence of the service provider. Commitment shows a psychological state which is important in an on-going relationship with the service provider and satisfaction refers to an emotional state which is evoked by the overall evaluation of interactions with the service provider (Liang et al. 2011). Relationship quality is a fundamental element in e-commerce which refers to relevance, accuracy and usefulness of the information on e-commerce website, this element is a key characteristic influences on the customer's loyalty and satisfaction in e-commerce (Huang & Benyucef, 2013). Relationship quality is one of factors in success of a relationship. Greater customer's trust in the service provider leads to a stronger communication between them. Trust is so important for both sides of relationship. Satisfaction is an important aspect in continuing relationship between customers and sellers; Commitment refers to consumer willingness and tendency to maintain the relationship (Rahimnia, Harandi & Fatemi, 2011).

Major emphasis of social commerce is marketing orientation. As the web developed, the marketers use internet to facilitate e-commerce transactions. With the emergence of social media, marketing communication changed to a dialogue with internet users (Turban et al, 2015). Social commerce sites such as Facebook and Tweeter use viral marketing to promote products and services. Viral marketing refers to word of mouth by which the customers by advising a service or product promote it to other customers (Linda, 2010). Word of mouth influences significantly on consumers purchase behaviour. Social networks are new media for word of mouth marketing (Amiri, 2012). Relationship quality in an online context is categorized in vendor behaviour. In an online context, the evendor develops relationship quality in several manners including investment in communicate with the customers, customer relationship management, social support and so on (Hajli, 2014).

Social commerce constructs including rating, reviews, referrals and recommendations relates to social communicating. In the communication channels the customers reassuring each other through information and experiences exchange thereby their trust increase and consequently their

willingness to purchase increase too (Wang & Hajli, 2014). Greater closeness between information sender and receiver leads to more intention for buying the product advised by the information sender. Purchase intention is motivated by social interactions in social networks directly (Ng, 2013). As Kim and Park in 2013 suggested: relationship quality refers to the last, the most accurate and complete information provided by websites for the users. Customers tend to trust on the websites which provide them with accurate timely information. Relationship quality has a direct effect on customer's trust in social commerce firms; hence we hypothesize that:

H2: Social commerce intention is positively related to relationship quality between social network users and e-vendor

H2a: Social commerce intention is positively related to trust on relationship between social network users and e-vendor

H2b: Social commerce intention is positively related to satisfaction of relationship between social network users and e-vendor

H2c: Social commerce intention is positively related to commitment of relationship between social network users and e-vendor

2.4 Social support and relationship quality

Through social networks people receive informational and emotional support; these supports can increase trust and consequently increase the probability of product purchase (Hajli, 2014). A social network in which social support exists, it would be common for community members to share their information and recommendations to their friends. When a user perceives that other members provide useful information, then acquiring or sharing valuable shopping information with others would be obligatory (Liang et al, 2011). According to Wang & Hajli (2014) social support perceive in communities, influences on the consumer's behaviour, so that their willingness to communication with others increase which leads to improving relationship quality. In their study the positive effect of social support on relationship quality is supported. They suggested that greater social support facilitates understanding and closeness in the relationship. Higher interaction and supportive information exchange between members leads to more warmth and satisfactory relationship so social support promotes relationship quality, thus we hypothesize:

H3: Relationship quality between the users and e-vendor in a social network is positively related to social support perceive

H3a: Relationship quality between the users and e-vendor in a social network is positively related to informational support perceive

H3b: Relationship quality between the users and e-vendor in a social network is positively related to emotional support perceive

2.5 The Research Model

Conceptual model indicates the relationship between the variables of research. Since in this research three concepts (social support, relationship quality and social commerce) are investigated, after reviewing relevant literature, the model offered by Hajli (2014) with some modifications was selected to investigate the relations between variables.

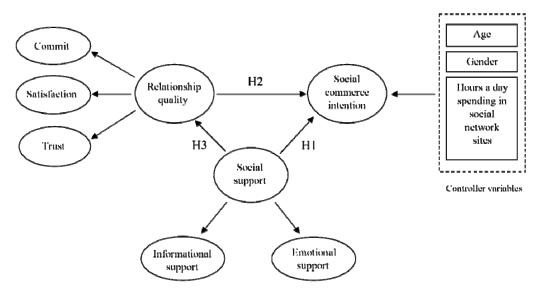


Figure 1: The research model adopted from Hajli (2014) with some modifications

3. THE RESEARCH FRAMEWORK

In this paper via field studies the relation between three concepts of social support, relationship quality and social commerce among the users of two popular social networks in Iran; Facebook and Telegram is investigated. In the following, the research methodology, sampling and data collecting tools are discussed.

4. METHODOLOGY

4.1 The studied population and sampling

The study conducted on the students of Kurdistan University and Islamic Azad university of Sanandaj, who used Facebook and Telegram for internet shopping. Since the number of these users was not a specific number, in the other words the studied population was unknown, therefore, 384 questionnaire is distributed

among the students randomly, but in order to select members of Facebook and Telegram before offering the questionnaire to any participant the author asked two filtering questions: whether he or she is the member of Facebook or Telegram and whether had internet shopping experience or not.

4.2 Data Collecting Method

In order to collect the required data we used a questionnaire included 22 items. 7 items for social support adopted from Liang et al (2011). For relationship quality 10 items adopted from Liang et al (2011) and Ng (2013) and 5 items for social commerce intention adopted from Liang et al (2011) and Hajli (2014). A 5-point Likert scale was used to measure the constructs.

3.4 Validity and Reliability of Measurement Instrument

To test the validity of the instrument, although questionnaire items have been adopted from the literature which is a support for validity of the instrument, it has been assessed by convergent validity too. Average variance extracted (AVE) should be at least 0.50, as shown in table 2 AVE of all constructs are greater than 0.50. In order to test reliability of the instrument Chronbach's alpha is used. The value of Chronbach's alpha must be more than 0.70, as shown in table 2 Chronbach's alpha value of all constructs exceed 0.70, which is a support for reliability of the instrument.

5. DATA ANALYSIS APPROACH

5.1 Pearson correlation analysis approach

Via Kolmogorov Smirnov test, the normality of data distribution is tested. The significance level of all the research constructs exceed of the 0.05 level of the significance shows that research data is normally distributed, so Pearson correlation data analysis method is used to test the research hypothesizes. The results of Kolmogorov Smirnov and Pearson correlation method are shown in table 1.

	Relationship quality	Social commerce	Significance level	Average	Kolmogorove Smirnov
Social support	0.521	0.590	0.088	3.1673	2.623
Emotional support	0.540	0.553	0.100	2.9128	2.659
Informational support	0.696	0.667	0.705	3.4219	4.433

Table 1: Correlation coefficient between the research variables

Relationship quality	0.662	0.120	3.9504	1.516
Commitment	0.556	0.064	2.7700	3.074
Satisfaction	0.869	0.088	3.4323	3.816
Trust	0.662	0.115	2.6491	1.562
Social commerce		0093	3.2594	2.099

Note: The test conducted at the 0.05 level of significance

5.2 Partial least square

Partial least square is a comprehensive approach to test and analysis hypothesizes, latent variables can be investigated by this approach as well as the other variables. This method is one of the most strong analysis methods which is appropriate for the researches of social sciences, management and information system. The results of partial least square method as well as the results of Pearson correlation analysis supported the hypothesizes of the research. Table 2 shows correlation between latent variables, standard deviation, average variance extracted ,and Chronbach's alpha values. Average variance extracted for every variables and constructs should be at least 0.05, as shown in table 2 all constructs reach this criteria and have a value above 0.05, hence we can conclude fitness of the variables measurement by these constructs. The values of standard deviation of variables and constructs are below 1 indicates low dispersion of research data. Square of correlation between variables as shown in table 2 indicate that all variables and constructs positively correlated with each other.

Table 2: Square correlation between latent variables

	Social support	Emotional support	Informational support	Relationship quality	Commitment	Trust	Satisfaction	Social commerce intention
Social								
support	0.016							
Emotional								
support	0.44	0.013						
Informational								
support	0.88	0.77	0.013					
Relationship								
quality	0.54	0.54	0.69	0.014				
Commitment	0.59	0.55	0.64	0.87	0.018			
Trust	0.38	0.77	0.43	0.79	0.69	0.014		
Satisfaction	0.27	0.42	0.33	0.73	0.67	0.52	0.018	
Social								
commerce intention	0.49	0.55	0.66	0.67	0.55	0.66	0.86	0.015
AVE	0.82	0.90	0.83	0.64	0.76	0.85	0.66	0.52
Chronbach's								
Alpha	0.82	0.88	0.90	0.74	0.84	0.70	0.85	0.82

Notes: Numbers on the diagonal (in boldface) are the standard deviation. Other numbers are the square of correlation. Two bottom rows are average Variance extracted and Chronbach's alpha values respectively.

6. FINDINGS

6.1 Descriptive statistics

The demographic characteristics of respondents indicated that the majority of the participants 60.7% were female. The participants were between 18 to 45 years old, of them the majority were in the range of 18 to 25 years old. The major of respondents had Bachelor's degree, 56% were single, and 58.5% of respondents at least 1 to 5 hours a day visit Facebook and Telegram. As indicated in the research model it's supposed that age, gender and hours a day spend in social networks influence on social commerce intention. Table 3 shows demographic characteristics of the respondents.

Table 3: Demographic characteristics of respondents

D	emographic	Ran	Range		Frequency		Percentage	
	Age	18-2	25	219		57%		
		26-3	35		84	21.9%		
		36-4	15	:	81	21.	1%	
	Gei	nder	Female	233	60.7%			
			Male	151	39.3%			
	Education	al level	Diplor	na	106	27.6%		
			Bachelor's	degree	205	53.4%		
			Master's d	_	73	19%		
				C				
	Marita	l status	Single	252	65.6%			
			Married	132	34.4%			
Hour	Hours a day spend in social		Lower than			120	31.2%	
	networks			1hour			58.3%	
			1-5 hours More than 5 hours			40	10.4%	
	Total ro	esponses			0%			

6.2 Analytic Findings

Based on the results of Pearson correlation analysis, coefficient correlation between social support and social commerce intention is 0.590, coefficient correlation between social support and relationship quality is 0.521, and coefficient correlation between relationship quality and social commerce intention is 0.662. These results indicate that social commerce intention is positively related to both social support and relationship quality, however the correlation between relationship quality and social commerce intention is slightly stronger than the correlation between social support and social commerce intention. The findings indicate a positive significant relationship between social support and relationship quality too. Based on these results three main hypothesizes are supported. Coefficient correlation between the constructs of social support (emotional and informational support) and social commerce intention are 0.553 and 0.667 respectively. Coefficient correlation between constructs of relationship quality (commitment, satisfaction and trust) and social commerce intention are 0.556, 0.869 and 0.662 respectively. Coefficient correlation between emotional support and relationship quality is 0.540, between informational support and relationship quality is 0.696. These results indicated that all secondary hypothesizes of this research are supported like main ones. Among two constructs of social support, informational support has closer relationship with social commerce intention and relationship quality, among three constructs of relationship quality, satisfaction has closest relationship with social commerce intention.

6.3 Structural Model

The results of partial least square by smart PLS software contribute an additional support to the research hypothesizes. Graph 2 shows the results of partial least square. As shown on graph, R2s suggest that almost 47% of variance in social commerce intention is related to social support and relationship quality and 29% of variance in relationship quality refers to social support. These results indicate an acceptable level of explanatory power of model. Regarding path coefficients, social support 0.187 and relationship quality 0.565 both has positive significant relationship with social commerce intention. Furthermore, social support has a significant relationship, path coefficient (0.541) with relationship quality too.

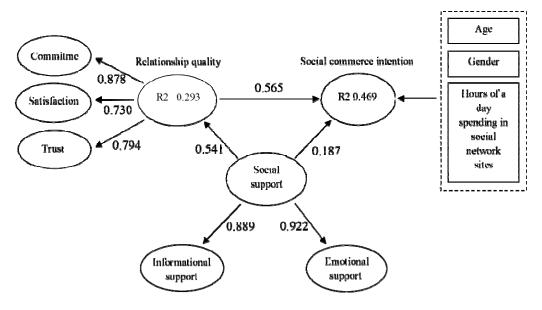


Figure 2: The results of PLS analysis

7. DISCUSSION AND CONCLUSION

Considering this fact that technological advancements influence significantly on every aspects of today's life including business and commerce world, so the businesses should adopt these technological advancements to remaining in competitive world. Internet and social networks are suitable places for marketing activities. Firms and sellers can utilize social networks to introduce and advertise their products and services.

The research findings emphasize on the importance of social networks in developing friendly and supportive online environment for customers. Improving the relationship quality via commitment, satisfaction and trust can leads to increase social commerce intention. A contribution of this paper is some key points to internet marketing, including the importance of accurate and helpful information about products and services supplied by e-vendors for customers, and importance of social interactions of customers. The research findings encourage individuals to participate in online activities especially social commerce.

Generally this research objective is to perform investigation the social interactions of individuals in social networks which develop social support leads to promote relationship quality and consequently intention to social commerce. Applying social support theory and emerge it with relationship quality in marketing has caused to better perception of social commerce and advantages of

social media for marketing. In fact the research model has a potential power to identify the role of social factors in e-commerce and marketing strategies. Significant role of social interactions in social platforms developed by web2 in social commerce era is the main aim of this research. Social interactions develop many advantages and values for firms and encourage them to apply social media in their marketing strategies.

As individuals join social networks to receive information and to gain social support, firms and sellers should offer the opportunity for individuals in their groups or pages to state their suggestions about products and services and share their knowledge with friends. It's evident that more friendly and supportive environment cause to increase trust between consumers and e-vendors which in turn leads to more intention to social commerce. Higher satisfaction of the relationship between online seller and customers may contribute the customers to more participation in social commerce.

The findings suggest that businesses, especially small and medium ones, to develop their online communities and create friendly and supportive environment. The businesses by developing more friendly communication with customers and some innovatory activities in their commercial groups in virtual world could have a proper place for introduce and advertise their products and services. Meanwhile social commerce strategies help the businesses to attract more customers.

This research results is similar to the results of some previous papers including Hajli research (2014), Zhang et al research (2014) and Wang & Hajli (2014) at confirmation of correlation between social support and social commerce intention, these results also correspond to the results of Ng (2013) as well as Hajli (2014) at confirmation of correlation between relationship quality and social commerce intention.

This paper as any other papers has some limitations, Firstly lack of adequate literature about online social support. Second maybe the respondents filled out questionnaires carelessly. Third limitation of this paper is related to the sample used, Facebook and Telegram users, the results might be vary from these results in study on the other social network users. Forth the model was tested only with the data from Iranian culture; the results might be different in other cultural context.

REFERENCES

Amiri, V. (2012). The effects of characteristics of social commerce on customers trust, Bank of marketing articles, Retrieved 2016, March 20 from http://marketingarticles.ir

- Curty, R. G., & Zhang, P. (2011). Social Commerce: Looking Back and Forward, ASIST 2011.
- Ergun H S, & Kuska Z K. (2013). Innovation orientation, market orientation and e-loyalty, Procedia Social and Behavioral Sciences, 99 (2013), 509-516.
- Hajli, M. N. (2014). The role of social support on relationship quality and social commerce. Technological Forecasting and Social Change, 87, 17-27.
- Hajli, N., & Sims, J. (2015). Social commerce: The transfer of power from sellers to buyers. Technological Forecasting and Social Change, 94, 350-358.
- Huang, Z., & Benyoucef, M. (2013). From e-commerce to social commerce: A close look at design features. Electronic Commerce Research and Applications, 12(4), 246-259.
- Khoshnood, F., & Mahdavi, M. (2011). Advantages of social networks in electronic commerce promotion, 1st national conference on computer and information technology, Tabriz, Iran.
- Kim, D. (2013). Under what conditions will social commrtce business model survive? Electronic Commerce Research and Applications, 12 (2013), 69–77
- 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.
- 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*, 16(2), 69-90.
- Linda, S. L. A. I. (2010). Social commerce—e-commerce in social media context. World Academy of Science. Engineering and Technology, 72, 39-44.
- Lu, B., Fan, W., & Zhou, M. (2016). Social presence, trust, and social commerce purchase intention: an empirical research. Computers in Human Behavior, 56, 225-237.
- Marzangou, A. A., Ghorbani, M., & Ranjbarvandi, S. (2014). Small business marketing by social networks, National conference on computer and information technology, Iran.
- Nicknezhad, M., Jalali, A., Dastgheibifard, Gh., & Akbarian, R. (2010). Designing a social commerce model in Iran, Conference on information technology and economic jihad 2010, Kazeroon, Iran (pp.389-399)
- Pirmohamadiani, R., Mohamadi, Sh., & Hosseini, M. (2013). The role of social commerce on customers behavior and purchase decision making, The conference on social networks dimensions, Information technology institute, Tehran, Iran, (pp. 579-587)
- Ng, C. S. P. (2013). Intention to purchase on social commerce websites across cultures: A cross-regional study. Information & management, 50(8), 609-620.
- Rahimnia, F., Harandi, A., & Fatemi, Z. (2011). Effects of relationship quality with customers on perceived quality and customers loyalty, General management researches, (17), 83-101.
- Swamynathan, G., Wilson, C., Boe, B., Almeroth, K., & Zhao, B. Y. (2008). Do Social Networks Improve eCommerce? A Study on Social Marketplaces.

- Tehrani. (2016, September 11). The number of social network users in Iran [News]. Retrieved 2016, September 24, from http://www.momtaznews.com
- Turban, E., King, D., Lee, J. K., Liang, T. P., & Turban, D. C. (2015). Social commerce:Foundations, social marketing and advertising, Springer Texts in Business and Economics, 309-364
- Turban, E., Strauss, J., Lai, L. (2016). Strategy and performance management in social commerce, Springer Texts in Business and Economics, 233-263
- Virtual world group. (2016, December 7). A report on the most popular social networks in Iran [website comment]. Retrieved 2016, September 24, from http://www.ana.ir
- Wang, Y., & Hajli, M. N. (2014). Co-creation in branding through social commerce: The role of social support, relationship quality and privacy concerns. In Proceedings of twentieth Americas conference on information systems, Savannah, Georgia.
- Zhang, H., Lu, Y., Gupta, S., & Zhao, L. (2014). What motivates customers to participate in social commerce? The impact of technological environments and virtual customer experiences. Information & Management, 51(8), 1017-1030.