Social Networks Interactions in Developing Countries' E-Commerce

Hamid Safarpour¹ (M.S. Student), Mehrdad Zaker Shahrak ²(M.S. Student), Emmanuel S. Eneyo¹ (Ph.D.), and Kevin M. Hubbard³ (Ph.D.)

> ¹Department of Mechanical and Industrial Engineering Southern Illinois University of Edwardsville Edwardsville, Illinois, USA

> > ²Department of Industrial Engineering K.N.Toosi University of Technology Tehran, Iran

³Department of Technology and Construction Management Missouri State University Springfield, Missouri, USA

Abstract - With the advent of web2.0 several possibilities in online environment came to availabilities. The intentions of connectivity among users resulted in growth of online social networks (OSN). Meanwhile E-Commerce began to play its role as a new concept in developing countries. Consequently, E-Trust as one of the most fundamental factors of E-Commerce took into account. Considering increasing rates of Internet users in developing countries, puts new technologies of E-commerce situation at the top of this issue between developing countries of the world. Consequently, it propel customers to use the new technology and gain its pros such as cost and time reduction has become one of the most critical success factors of e-business.

This study based on the details of online firms with OSN activity to investigate the effects of social networks on obtaining e-trust and measures the ability of use OSN as a substitution to Internet literacy in developing countries.

Keywords-- Social Network, netnography, Brand Community, e-trust, Internet Literacy

1. INTRODUCTION

Social structure plays an important fundamental role in modern and civilized societies. Online Social Networks (OSNs, for short) represent one of the main factors of the Web 2.0 and have been showing an enormous growth in the last years.[1]

Virtual online community nowadays plays inseparable role in people's life. An important aspect to consider is that nowadays users tend to spread their activities among more OSNs [1]. The recent development and success of online communities, especially in virtual environments, show that "this form of online organization is creating a large impact in the business community" [1, 2]. Also, with growth of Facebook and its popularity among users, companies, found its importance and potential influences on their customers.

Brand communities are a special form of consumer communities [3] and this becomes one of the main concerns in social networks. The existing online relationship between customer and the firm could be assessed into main categories. First the companies could gain the tastes of the customers and their interests, and next they could evaluate the potential channels which the firm could connect specific groups of their customers. Additionally, consumers sharing their interest for a brand, exchange information and knowledge, or they simply express their affection for this specific brand. [3]

"Along with other forms of computer mediated communication, they [social networking sites] have transformed consumers from silent, isolated and invisible individuals, into a noisy, public, and even more unmanageable than usual, collective".[4] Consequently, successful contemporary brand strategies also entail exploring and seizing social network environments.[5]

In their previous work [6] concluded that search engine Optimization, Security, Web content, Social awareness and Perceived risk have the most essential effect on building costumer trust in online environment in developing countries. According to [6] research Internet literacy and Brand equity have not any tangible influence on implementing online trust relationship between costumer and Ecommerce vendor.

Internet penetration among young proportions of developing countries is about 68 percent [7], also most of them are users of social networks like Facebook, Google+, Twitter, etc. For instance, Facebook reaches about 1.11 billion monthly active users as of March 2013 [8]. Google+ has over 500 million users with just 17 months since launched as beta in June 2011 [9]; and Twitter are now averaging 200 million Tweets per day [10].

With analysis of member's activity in embedded brand communities in social networks alongside with resolution to firm's success in gaining trust and reputation in virtual online communities, this study tries to determine the social network's effect on gaining e-trust and building effective longtime relationship with customer. Also, this study examines the effects of social network on brand reputation and building effective E-trust relationship among developing countries.

First, this paper provides an overview of the literature on e-trust and social networks research, on which this study based upon, next research methodology of the survey- netnography approach- explained, and then the empirical results and implications highlights the contribution to the ecommerce theory. Finally, results and suggestions of future researches come in the end.

2. LITERATURE REVIEW

2.1. Social Network

The consumers' trusting beliefs affect their attitudes to the vendors and their risk perception. [6]

Trust is a social lubricant that allows consumers to transact with merchants who are not part of their immediate network. [11]. There seems little assurance that the customer will get what he or she sees on the computer screen [12]. When rules and customs are not sufficient, people rely on trust and familiarity as primary mechanisms to reduce social uncertainty [13]. Many dot.com failures have been attributed to the vendor's inability to create a strong trusting relationship with its customers [14].

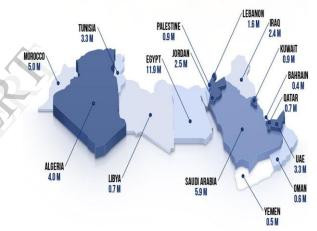
Consumers and companies connect in distinct and extended ways. Brand aficionados perceive social identities with small-group friendships groups, with virtual brand communities, with the brand, and with the company, all in a system of interconnected relationships. [15]

Literature offers a range of researches in the fields of social networks (e.g., [16]. Few related studies investigates the importance of consumer participation in brand communities [17] and emphasis of embedded brand communities within social networks. [5] but they are not focus on gaining trust as one of the most important side effects of social networks. By this date, the impacts of social network on gaining e-trust and building customer loyalty through embedded brand communities in social networks have not been investigated as a main alternative function to internet literacy in developing countries.

In the past decade, business-to-business (B2B) companies have invested heavily in Information Technology systems; such as Customer Relationship Management (CRM) systems, to manage customer data and turn it into customer information [18-21]. So in developing countries B2B and specifically Business to customer (B2C) commercial companies and organizations must invest heavily to grasp the edge of compete. In this regard they must use all media channels like TV, radio, internet, and phone to culture building, generalizing E-Commerce phenomenon and attract large portion of the people. [6].

It appears that many consumers have not accepted ecommerce as a purchasing channel specifically in developing countries. [6] Research has shown that insufficient trust represents a key reason for consumers to avoid purchasing products over the Internet [22, 23]. Embedded brand communities allow their members to perceive multiple social identities: with the brand community, the brand, the company, and with the social network. [5]. Unlike the physical market, consumers may be dealing with remote vendors they have never met and products that cannot be touched and felt [6]. As [24] stated, Online social networks are virtual places that cater for a specific population; on such platforms people with similar interests gather to communicate, exchange contact details, build relations, and share and

NUMBER OF ACTIVE USERS BY NOVEMBER 2012



discuss ideas. So, it is visible that the social network can influence on consumers trust by getting aware of friends and people they know experiences and comments about the products and services e-commerce vendor provides.

Figure 1: Number of Active Facebook Users Source: (wamda.com, 2012),[7]

From the perspective of information technology, online social networks are "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" [25].

2.2. Brand Community

Brand communities are specialized consumer communities;[5] each of these communities contains three common markers: consciousness of kind, shared rituals and tradition, and moral responsibility [3]. Members feel connected with other members, and separate themselves from outsiders [15].

Since the information of the customer can be used as advertisement issues and can be sold for another purpose in cyberspace, it offers users to be more concern about their privacy. [6] Hence, social networks are more likely to protect the user space and consumer's information and it could be the main reason users try to share their experiences on those communities.

[26] demonstrates that social networks influence their member's behavior. With this background, firms can lead their members through a framework to build trusted and long lasting relationship which could be viewed as a high switching cost for the customer to find another channel or firm for satisfying his/her needs.

Following our last work [6], integration of an online shop with a brick and mortar shop triggers the customer's intention to trust to the vendor, because user feels in the same way that he/she would felt in the physical shop, Also consumer trust in an e-Vendor's integrity increases intentions to purchase online from that e-Vendor [13]. In virtual teams, integrity consistently had the strongest effect on trusting intentions while the importance of ability decreased over time [13]. Integrity somehow consequents the user satisfaction from the vendor to implement a usable environment in which the customer reaching his goals without any difference from the brick and mortar shop. So integration can results in high trust rate for the customer

For this purpose, the authors considered food corporations and their related supply chain pages on the Facebook. We chose one of the most active food companies among Iran, to investigate the effects of social networks and embedded brand communities which led to constructing long lasting relations for obtaining trust. The Chipotle Company started in 2012 and with the help of new services through internet it became one of the most popular brands among the country. To assess netnographic effects of social networks on the e-commerce communities this study focuses on the groups and sub-groups created to advertise the company services online. Following this approach, we found the company page on Facebook company-hosted, which is common for firms who have marketing plans to socialize with their customer. We found that Chipotle fan page has special offers and plans only for online customers who are fans of their page, so by joining their online page, one can acquire discount on ordering food and this strategy makes 65% of last season's benefit of the company alone.

3.2. Data Collection and Analysis

Applying the netnography approach, this study following the steps suggested by [27] Therefore, participantobservation characterizes the data collection, which included a high knowledge of and getting familiar with the brand and the product, joining the community, and observing, as well as actively participating in the accordant group and fan page. [5] To check for and verify the different types of brand (related) communities embedded in the social network under study, the authors conducted an additional deand social networks could be the desired channel to integrate the traditional brick and Mortar Company with online commerce channel.

In conclusion, this paper investigates the empirical social networks effect on building and maintaining a commercial relationship between the customer and business firms in online space of developing countries, who's new in the E-Commerce market.

3. RESEARCH METHODOLOGY

To investigate the research questions a netnographic research approach seems to be most appropriate because of its unobtrusive and naturalistic attributes [5, 27].

3.1 Sample

The Facebook social network is very suitable for evaluating the empirical effects of brand communities on constructing long lasting relations, because it is very popular and well-known in developing countries and provided numerous brand-related communities in the form of fan pages and Facebook groups.

In order to choose the right brand community to connect to this study, the authors decide to narrow the selection to the developing countries brands that exist on the Facebook and have active fan pages or groups.

scriptive analysis of their characteristics, including number of members, as well as number and nature of applications. The analysis shows that online activities on internet social networks such as Instagram, Facebook, and Foursquare have direct impact on the profit of the company, having in mind that with experiencing disorder in Iran's internet connection the company witnessed a huge change in its profit.

Almost all of embedded brand community in developing societies specially Iran, used a chain marketing strategy, which allows them to expect the customer to use their services again and concurrently with their brick and mortar services; for instance, Chipotle leads to more than 200% constant customer increase in 6 months. Also the company has a training team ready in all of its branches to promote consumers to use their online services and embedded network over the social networking sites. This approach helps the company to increase the trust and loyalty of the customers about 30% solitary with help in growth of the firm's brand value.

As a result because consumers perceive themselves as members of brand community [5] they influence their friends to be fans and new customers of the organization by encourage them to use the discounts which is offered by the company exclusively for the Twitter followers and Facebook members. The firm also, reads every comment and answers them carefully in order to be aware of its customer tastes and opinions about the quality of services. This behavior increases the effect of channel integration between online and offline environments as studied in previous work [6] Chipotle experiences more than 50% customer return with the help of its online social chain. They manage the data in order to gain more profit by evaluating the most ordered food in the last month, week, and surprisingly the organization let the customers to customize their food and reorder their customized food and encourages them to share their customization with friends in Face book, Instagram and Twitter for instance. The organization uses environmental advertisement to guide the users to their online chain and help the consumers to know each other by sharing their memories during the time they are in the Chipotle site with uploading video, photo, and comment about their products and services.

4. RESULTS

Referring to the characteristics of brand communities, all three community markers [3] are present in the group and on the fan page. Participants consider themselves the foundation components of brand community starting with consciousness of kind, and use notions like "we" or "us" which indicates the feeling of belonging and also the existence of the cognitive component of social identity.[5].

Public events reflect in the fan page help to unite social networks members in stores for gathering. An example is a thread which invites members to celebrate Iran's volleyballs win in the stores along with discounts and there's a lot of "feel like" involved there. Thereby members begin to feel a conceivable margin between in-group and out-group. [28]

Traditional events exist in the context of social networks and consequently there is in the brand communities within them influence the threads and discussions among the users.

Lastly, ethical obligation [3] considered as an important factor in all kinds of online social networks.

Following the previous work social networks in developing countries can be concluded as a right substitute for internet literacy for obtaining electronic trust which its effect lingers on in both online and physical environment and could positively affect any business model for distributing online channel. As the users of social network trust their friends and other user's choices and trust to new online channels and become beneficiary of its new abilities.

Users benefit from experienced individuals' advice to use the services and products, thus they abate their perceived risk before they buy product or use any services. [29] another motivation for users to join as discussed earlier is discounts and traditional gatherings which exclusively available for members of online social networks. Additionally, social network environments initiate new ways of communication between firm and customers by letting them to upload their experiences, photos, and videos about using the organization's products or services. [5]

Finally, individuals help each other to be more active in the group, pointing to a higher moral responsibility of organization.[5]

In contrast, an increasing amount of consumers experience their beloved brands and products by using them with a group of brand community members who share close friendships and engage in regular social interactions. An independent data collection indicates the degree of user activation in the firm's online social network chain.

5. COMPARISON

5.1. Motives for Participation

Comparing the impetus of joining fan pages in developing countries and developed one, it is obvious that the main reason to join the embedded brand communities in modern countries is to get help and information from other users [5], while it is receiving discount or other payment benefits that drives the developing countries' users to join the fan pages embedded in social networks. Also, there are special discount networks operating in these countries and they have much more fans than fan pages of embedded brands itself, which in turn may negatively affect brand loyalty and could be a contribution to lack of internet literacy as resulted in the [6] model.

Regarding the motivational drivers for embedded community association, minor differences exist.[5] Individuals, who join the community to seek information, find posts of remarkably higher value in the group. In contrast, a lot of threads take place on the wall of the fan page, where suggestions easily get lost without being properly answered. Social enhancement, however, is more important to fan page members, as they find more possibilities to serve their needs on fan pages; for example, a special event photo competition.

5.2. Heterogeneity of Embedded Communities

While members of embedded brand networks in developed countries show brand community characteristics [5], developing countries members show no major relation sign, joining the fan pages more than brand communities for some sort of gesture. As [5] suggests, the individuals help each other too much which results to a higher moral responsibility, but in developing countries the main reason of embedded brand communities lost and they are eliminated by the heavy effect of fan pages and their humorous nature. The users in Mega countries mostly join the communities because their friends of social networks suggest them, resulting to non-active brand community which has more than 30K members.

6. DISCUSSION

This study is designed to investigate the effect of social network on the integrated model of trust which was presented before on the user behavior in the developing countries. This study examines the effect of social networks as a very powerful factor in gaining user trust to maintain his loyalty on two activities in developing countries: e-trust and online shopping.

Additionally this survey is done using netnographic approach which leading to a better understanding of embedded brand communities and yields strong evidence of existence of ties between social networks and E-Trust. Due to the advantages of social networks, brand management is now able to implement brand communities with less time and financial effort, causing cultivating consumers' interaction, and staying tuned to their taste are critical factors to gain anticipated brand outcomes in E-Commerce environment.

The results show that almost all of embedded brands within social networks make more benefit by obtaining user

REFERENCES

- 1. F. Buccafurri, V. D. Foti, G. Lax, A. Nocera, and D. Ursino, "Bridge analysis in a Social Internetworking Scenario," *Information Sciences*, vol. 224, pp. 1-18, 2013.
- D. Ganley and C. Lampe, "The ties that bind: Social network principles in online communities," *Decision Support Systems*, vol. 47, pp. 266-274, 2009.
- 3. A. M. Muniz Jr and T. C. O'guinn, "Brand community," *Journal of consumer research*, vol. 27, pp. 412-432, 2001.
- A. Patterson, "Social-networkers of the world, unite and take over: A meta-introspective perspective on the Facebook brand," *Journal of Business Research*, vol. 65, pp. 527-534, 2012.
- 5. M. E. Zaglia, "Brand communities embedded in social networks," *J Bus Res*, vol. 66, pp. 216-223, Feb 2013.
- Mehrdad Zaker Shahrak, Hamid Safarpour, Emmanuel S. Eneyo, Behrooz Abbasi, "Presenting an Integrated Model For Studying The Key Factors of Customer Trust In Developing E-Commerce Environment," *International Journal of Research in the Academic Disciplines in Higher Education*, vol. 1, No.2, pp. 37-52, 2013.
- wamda.com. (2012). Available: http://www.wamda.com/application/rapyd/assets/mfm_012/upload/a uthors_uploads/6213/mena_2012_final.jpg
- facebook.com. (2013). Available: https://newsroom.fb.com/Key-Facts
- google+. (2013). Available: http://google-plus.com/8430/googlecrosses-500-million-total-users-with-over-135-million-active-users/
- 10. marketinggum.com. (2011). Available: http://www.marketinggum.com/twitter-statistics-2011-updated-stats/
- 11. G. R. Dowling and R. Staelin, "A model of perceived risk and intended risk-handling activity," *Journal of consumer research*, pp. 119-134, 1994.
- 12. N. Kumar, "The power of trust in manufacturer-retailer relationships," *Harvard business review*, vol. 74, pp. 92-110, 1996.
- 13. D. Gefen and D. W. Straub, "Consumer trust in B2C e-Commerce and the importance of social presence: experiments in e-Products and e-Services," *Omega*, vol. 32, pp. 407-424, 2004.
- 14. J. DiSabatino, "Boo. com failure raises questions about online boutiques," *Computerworld*, vol. 34, p. 48, 2000.
- R. P. Bagozzi, M. Bergami, G. Luca Marzocchi, and G. Morandin, "Customer-organization relationships: development and test of a theory of extended identities," *Journal of Applied Psychology*, vol. 97, p. 63, 2012.
- C. M. Cheung and M. K. Lee, "A theoretical model of intentional social action in online social networks," *Decision Support Systems*, vol. 49, pp. 24-30, 2010.
- Y. Sung, Y. Kim, O. Kwon, and J. Moon, "An explorative study of Korean consumer participation in virtual brand communities in social network sites," *Journal of Global Marketing*, vol. 23, pp. 430-445, 2010.
- D. M. Lambert, "Customer relationship management as a business process," *Journal of Business & Industrial Marketing*, vol. 25, pp. 4-17, 2009.
- D. K. Rigby, F. F. Reichheld, and P. Schefter, "Avoid the four perils of CRM," *Harvard business review*, vol. 80, pp. 101-109, 2002.
- M. Rollins, D. N. Bellenger, and W. J. Johnston, "Does customer information usage improve a firm's performance in business-tobusiness markets?," *Industrial Marketing Management*, vol. 41, pp. 984-994, 2012.
- H. Van der Heijden, T. Verhagen, and M. Creemers, "Understanding online purchase intentions: contributions from technology and trust

trust. The results indicate that online social networks can be a crucial factor in the e-commerce framework of developing countries, where social awareness has a limited effect or no such effect. One goal of this paper is to provide frameworks and recommendations and policies for the promotion of integrated model for growth of e-trust in developing countries.

perspectives," *European Journal of Information Systems*, vol. 12, pp. 41-48, 2003.

- S. E. Kaplan and R. J. Nieschwietz, "A Web assurance services model of trust for B2C e-commerce," *International Journal of Accounting Information Systems*, vol. 4, pp. 95-114, 2003.
- G. L. Urban, F. Sultan, and W. J. Qualls, "Placing trust at the center of your Internet strategy," *Sloan Management Review*, vol. 42, pp. 39-48, 2000.
- J. Raacke and J. Bonds-Raacke, "MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites," *CyberPsychology & Behavior*, vol. 11, pp. 169-174, 2008.
- N. B. Ellison, "Social network sites: Definition, history, and scholarship," *Journal of Computer-Mediated Communication*, vol. 13, pp. 210-230, 2007.
- K. De Valck, G. H. Van Bruggen, and B. Wierenga, "Virtual communities: A marketing perspective," *Decision Support Systems*, vol. 47, pp. 185-203, 2009.
- 27. R. V. Kozinets, "The field behind the screen: using netnography for marketing research in online communities," *Journal of marketing research*, pp. 61-72, 2002.
- 28. B. D. Carlson, T. A. Suter, and T. J. Brown, "Social versus psychological brand community: The role of psychological sense of brand community," *Journal of Business Research*, vol. 61, pp. 284-291, 2008.
- R. E. Goldsmith and D. Horowitz, "Measuring motivations for online opinion seeking," *Journal of interactive advertising*, vol. 6, pp. 1-16, 2006.