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Influence of Social Networking on E-Business: A Quantitative Study

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Abstract: Decisions of purchases are normally inspired by the persons who the customers trust and familiar with. Furthermore, several shoppers who shop online inspire to read and get familiar with the thoughts of expert bloggers before finalizing their buying choice to decrease the possibility of purchasing a bad product. Internet-based social groups, dynamically nurtured by Electronic business companies, permit customers to share their individual familiarities by rating reviews, writing reviews, and talking between trusting affiliates. They drive the number of visitors to shopping sites and turn out to being opening point for Web customers. Electronic commerce companies have captured data on the social contact among customers in their websites, with the possible objective of leveraging and understanding the social effect in customers' buying decision process to increase purchaser's attention and ultimately upsurge their sales. This research proposes an understanding of the influence of social networking in electronic commerce decision making to offer right direction to companies and researchers who have concerns in such matters. This research also delivers a summary of knowledge for social network literature and recognizes the research fillings of leveraging and gauging the influence of social effect on decision making on consumers on e-commerce websites. Findings indicate that social media marketing and social networking website put strong influence on electronic business over the Internet.

Key words: Social Networking • E-business • Online shopping

INTRODUCTION

Surfing, searching and purchasing a product on Ecommerce websites is a time consuming and annoying job for consumers. Buying and selling on internet is commonly known as E-business. This is little different from the traditional business as it takes place on the platform of internet. These days, firms are investing a substantial investment to gain the potential customers through internet and online world. E-business firms are trying to provision part of their likely consumers' decision making process by presenting personalized Web-based decision support systems such as recommender systems. These recommender systems deliver consumers with modified recommendations grounded on their buying history, past ratings' interests or profile. These cooperative filtering constructed recommender systems have been functional to many E commerce websites and revealed decent performance in forecasting a list of goods

which a consumer favors. A distinctive collaborative filtering algorithm shapes a customer's area grounded on his or her likings of shared products and weighs the attention of fellow citizen with related taste to produce new recommendations [1].

Sinha and Swearingen [2], on the other hand, found that consumers are far more expected to trust recommendations from persons they know and trust, i.e., family-members and friends relatively than from computerized recommender systems in E-business websites. In truth, an individual's decision to purchase a product is over and over again powerfully inclined by his or her friends, associates and business associates, rather than outsiders. However, online groups on the Web permit consumers to express their own likings and to share their endorsements by rating others' assessments and classifying trusting members. According to research by [3], social network sites together with Facebook and MySpace are driving a growing volume of traffic to retail

sites and are therefore becoming a preliminary point for internet users who are concerned in E-business. This increase in traffic from social network sites to online retailers displays that extremely significant consumers unswervingly disturb other consumers' decision making. Consequently, E-business firms can take benefit of this social impact between consumers to care about customer relationship management and rise sales.

Literature Review: The Internet has been recognized as one of the most important marketing tools in the global market [4]. Some researchers have dedicated on the consumers networks that are designed through the direct and indirect connections (e.g., to read and rate reviews) concerning consumers to make the most of the influence of direct marketing through social influence. Several models have been proposed to classify a set of extremely important consumers to make the most of word-of-mouth effects or to discover target consumers grounded on the favorites and powerful effect from earlier consumers. A well-known researcher [5] offered a model to mine a customer's network value and enhance the choice of consumers into the market. Further another researcher [6] resolved the optimization difficulty of picking greatly significant consumers to capitalize on the spread of effect through a social network. In these struggles, a measure of social effect such as dropping effects and network value is one of the key matters. The [7] suggested network based publicizing using prevailing consumers to recognize potential consumers who are expected to purchase, based upon being inclined by preceding consumers who have subscribed a service. This was completed in the area of telecommunication services.

Even though some developing researches have happening to include social influence in E-business, it has been imperfect to data sources about social collaboration taken from E-business connections only, which is only a subsection of the information that is becoming obtainable. In this paper, we present an overview of the effect of social influence in E-commerce decision making to offer direction to researchers and E-business firms. Precisely, in this paper we examine numerous ways to seizure social influence utilizing an E-business platform and also debate how taken data about social influence can be used by E-commerce websites to support users' decision making process. This paper investigates existing technology for social network investigation which could be accepted and altered for investigation of E-business social

relations. It discusses research challenges of leveraging the impact of social influence on E-businesses. Though this paper does not offer a precise methodology or procedure, the understanding of social influence in E-business could be a preliminary point to improve policies and procedures for a social interaction based E-commerce decision making system.

In [8] and [7] work, viral marketing and network based marketing have recognized to be more profitable than traditional direct marketing, which gives the customer as a free decision maker and disregards the consequence of the surrounding network. The ground of viral marketing is that directing a small number of persuasive consumers primarily can activate a flow of inspiration through a social network in which friends will willingly share their experiences or recommend the product to other friends [8]. Therefore, a corporation can avoid selling directly to consumers who is mainly motivated by networks and is not very expected to purchase a product without suggested by families. Some online societies such as Epinions.com inspire users to make available trust data, where users clearly express their trust of other participants, leading to the creation of modified net of trust. Various E-business websites such as Amazon.com permit consumers to purchase a product as a gift for friends and to praise it to friends. Consumers write product reviews and also express how valuable the reviews written by other clients are.

Social Media Marketing and E-business Performance:

According to Markines (2009), Social media marketing refers to the process of gaining website traffic or product sales through social media sites. Social media marketing programs usually center on efforts to create content that attracts attention and encourages readers to share it with their social networks. The second generation of Internet-based marketing (i.e., Social Media Marketing), in which users control communication, holds promise to significantly enhance promotional efforts within social marketing campaigns. Because of the novelty and potential effectiveness, social marketers may be enticed to prematurely incorporate related applications into promotional plans and ultimately increase the domestic or global sales [9].

The emergence of Internet-based social media has made it possible for one person to communicate with hundreds or even thousands of other people about products and services of the firms that provide them.

Independent Variable Social Networking Social Networking Websites Social Media Marketing E-business of Goods and Services

Fig. 1: Theoretical Framework Adapted from (Hill [7]) and (Rosemary [9])

Thus, the impact of consumers-to-consumers and consumers-to-business communications has been greatly magnified in the marketplace, which ultimately increases the sales of the firms. Methods by which this can be accomplished are defined here. They include providing consumers with networking platforms and using blogs, social media tools and promotional tools to engage consumers [10].

By reviewing the literature it has been found that without any doubt social media marketing is becoming another impressive tool as a dimension of selling products and services on internet. Therefore there is a need to study the impact of this variable on E-business of organizations.

Theoretical Framework: The Theoretical Framework of this study is represented in the Fig. 1. This study suggested two main hypotheses which are:

H01: Social Networking Websites have impact on Ebusiness of goods and services

H02: Social Media Marketing has impact on E-business of goods and services.

Methodology: This is the most crucial part of the study and by this all of the findings and results are concluded. Methodology of this research will be quantitative. The research philosophy for this study is "Positivist". This is because the concepts which are used in this study are first operationalized which enables the facts to be measured quantitatively. The generalization process in this study is done through sufficient sample size and this leads to better explanation and understandings of the phenomenon. The research paradigm adapted for this study is "Deductive" because in this study the hypotheses are formulated and then selected the strategy to test these hypotheses. In this approach the theoretical framework is constructed which is tested by the empirical data.

Simple random sampling is used for gathering and collecting the data, because each sample will have equal chances to be chosen. The sample is collected from around 120 different organizations from different sectors such as IT, banks, food, shopping which are doing Ebusiness activities and are using internet to market their products and services. This study is targeting those firms only, which are using internet and doing E-Business and are using internet specifically to market their products and services. Samples are collected from several cities in Jordan, the place where this study is conducted.

Five point Likert scale questionnaire ranging from Strongly Agree to Strongly Disagree is used to collect data. Questionnaire tool was used in order to conduct the studies effectively. The questionnaire was spread through Email, Online Survey tools and By Hand in order to achieve the better results.

Data Analysis and Results: After collecting the data, it is analyzed by using SPSS 17. All the data was first record in MS-Excel then arrange the data in SPSS and had applied different tests. Descriptive test was applied for the analysis of properties of data. To empirically determine the relationship among Independent variables and Dependent variable, the study has uses various statistical techniques, including OLS regression analysis. Table 1 shows the Cronbach alpha test for the three research variable. The reliability test proves that all variables are accepted and will be included in the tested framework. Moreover, This study sample accepted 111 questionnaire out of 120 and 9 samples were excluded due to different reason (Table 2). Furthermore, Table 3 shows that 62.3% of the respondents are Services based firms and 37.7% of the respondents are manufacturing based firms.

Descriptive Analysis: Descriptive analysis is done by using Mean, Variance, Standard Deviation (S.D), Regression Analysis, Correlation Analysis and t-statistics. Table 4 gives a complete picture of overall case.

Table 1: Reliability Statistics

Dependent Variable

E-Business

		Reli	ability Test		
Variables					Cronbach Alpha
Online Sale through e-business					.71
Social Media Marketing					.69
Social Networking websites					.73
Table 2: Sampl	le Summary				
				N	%
Cases		Valid	111		85.5
		Excluded	9		14.5
		Total	120		100.0
Table 3: Type of	of Industry				
		Freq.	Percent	Valid Percent	Cumulative Percent
Valid	Manufacturing	20	32.3	37.7	37.7
	Service	33	53.2	62.3	100.0
	Total	53	85.5	100.0	
Missing	System	9	14.5		
Total	62	100.0			
Table 4: Scale	Statistics				
Mean		Variance	Std. Deviation		N of Items
5.2642 1.69		1.698	1.30312		120
Table 5: Correl	lation Analysis				
Variables		Online Sales through E-business	Social Media Marketing		Social Networking websites
Online Sales through E-business		1.0	0.71		0.65
Social Media Marketing		.84	1.0		.63
Social Networking websites		.59	.68		1.0
Table 6: Regres	ssion Analysis				

S.E

.3424

R

.538

R square

290

Here, mean values are showing positive trend. Moreover, Variance is showing that values are not deviating from the mean and standard deviation is showing that all values are related to each other. There is no such deviation occurs from the mean which is acceptable.

Independent Variables

Social Media Marketing

Social Networking websites

Correlation analysis is actually tells the strength of relationship and the degree of relationship between the variables. In Table 5, results shows that variables are positively correlated with each other. The correlation result between Online Sales through E-business and Social Media Marketing is 0.71 which shows that if social media marketing increases, then online sales through E-business also increases. Likewise, the correlation Social Media Marketing and Online Sales through E-business is 0.84 which is very strong relationship which means that if

effective marketing techniques will be implemented, then business on internet will also be very effective and sales will increase.

Adj R Square

.195

В

.296

.343

t-stats

2.119

2.464

Regression Analysis is done and results and in Table 6. T-stats are also given in the last column. Dependent variable is E-business of goods and services whereas independent variables are social media marketing and social networking websites. These all results are consistent and as the t-stats of each variable are more than 2 which means major relationship and forecasting qualities of the coefficients. Furthermore the R square is given but as the Independent Variables are more than one that is why Adjusted R square is given which is more reliable for this case. The standard error is also very less and acceptable. The beta coefficients are also given which are consistent with the results.

RESULTS AND DISCUSSIONS

The analysis of question items which were comprised on various sections such as Online Sales through Ebusiness, Social Media Marketing and Social Networking websites suggest that these variables are positively depend on the E-Business industry. The respondents were asked that to what extent the social networking put impact on E-business of goods and services. Majority of the respondents said that these social media marketing and social networking websites put strong impact in Ebusiness. "Informational social influence is a learning process through which people observe the experience of early adopters in their social network and decide whether to buy the new product. Thus, informational social influence can have a moderating role between consumers' attitudes toward a product and their intention to buy it, by enhancing consumers' confidence in their preferences and beliefs toward the product" [11].

The Social networking websites includes all micro blogging websites, Facebook. Professional social networking such as LInkedin, twitter, MySpace and other major websites which are high in traffic and people are using them extensively. This Social Media Marketing put impact in a way that people got a platform where they can share their experiences regarding any commercial product and services and so they tend to buy that product or service. When we talk about Social Media Marketing then it is actually when organizations start marketing their products and services on social media websites, just because the fact they possess huge human traffic which is discussing the products and services with each other. So without any doubt, it is a wonderful platform for such firms. 62.2% respondents says yes they are having more than 80% of social media marketing practices. 48.8% respondents said that if they follow social media tactics then it will increase their brand image.

Discussion on Hypothesis Testing: This section presents the discussion on each hypothesis which we propose on the basis of substantive literature. Empirical reflection on each hypothesis will be analyzed to decide whether hypothesis projected have a significant or insignificant relationship. On the basis of regression and correlation results we will accept or reject the hypothesis. As in Table 6, when we see the T-stats vale we found that almost all the value of T-stats the results are more than 2 which is a good indication. The Social Media Marketing t-value is 2.119 which is slightly greater than 2 so on the

basis of this empirical finding we will accept the H1. Same in the case of Social Networking websites practices the t-value is 2.464 which is also greater than 2, so on the basis of this empirical findings we will accept the H2.

CONCLUSION

Even though social impact has an influence on Electronic business decision creation, limited readings have analyzed social effect in an Electronic business decision provision structure, for the reason that till newly documents about the social contact has not been adequately reserved in Electronic business. Currently, though, the Electronic business firms are at a revolving opinion from a society based on transaction to a society based on relationship. As internet-grounded social systems have turned out to be more widespread, customers who might not have broad material about a particular service or product frequently making usage of earlier consumers' views. It has turned out to be deceptive that the consumer's decision procedure is inclined by material from reliable persons, not from product builders or endorsement methods. The social effect from high class evaluation by previous customers could have a traditional, confident result of likely consumers' decision creation, and this result can spread by a social system. Electronic business companies are better placed to get the benefit of the social effect among customers as a decision provision instrument by permitting consumers to assess the suitability of endorsements and assessments. Electronic business firms may eventually escalation transactions with fewer promotion prices. Therefore, have faith in that social impact turn out to be a natural enhancement that may be favorably utilized by companies in the Electronic business decision creation procedure.

In this paper, we present asynopsis of the impact of social influence in E-business to point researchers and such firms in the right way. The foremost matters we should emphasis on are how to capture social interactions in websites, how to syndicate social influence data into user likings and how to work out social influence on consumers' purchase decision making, in order to presume the utmost impact of social networking in E-business strategies.

REFERENCES

 Carroll, J., 2001. Beyond Recommender Systems, Helping People Help Each Other. Human-Computer Interaction in the New Millennium.

- Sinha, R.A., 2001. Comparing Recommendations Made by Online Systems and Friends. In Proceedings of the DELOS-NSF Workshop on Personalization and Recommender Systems in Digital Libraries.
- 3. Walsh, M., December 7, 2006. Social Networking Sites Fuel E-Commerce Traffic. Retrieved from http://publications.mediapost.com/index.cfm?fusea ction=Articles.san and s=52207.
- 4. Rodgers, S.A., 2005. An improved way to characterize Internet users. Journal of Advertising Research, 42(5): 85-94.
- Domingos, P.A., 2001. Mining the Network Value of Customers. In Proceedings of the Seventh ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, SIGKDD'01: 57-66.
- 6. Sarkar, P.A., 2005. Dynamic Social Network Analysis Using Latent Space Models. ACM SIGKDD Explorations Newsletter, 7(2): 31-40.
- 7. Hill, S.P., 2006. Network-Based Marketing, Identifying Likely Adopters via Consumer Networks. Statistical Science, 21(2): 256-276.
- 8. Kempe, D.K., 2003. Maximizing the Spread of Influence through a Social Network. In Proceedings of the Ninth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, pp: 137-146.
- Rosemary, T.B., 2008. Enhancing Promotional Strategies Within Social Marketing Programs. Use of Web Social Media. Sage Journals, 9(4): 338-343.

- 10. Glynn Mangold, W.D.J., 2009. Social media, The new hybrid element of the promotion mix. Business Horizons, 52(4): 357-365.
- 11. Lee, M.K., 2006. How Positive Informational Social Influence Affects Consumer's Decision of Internet Shopping? In Proceedings of the 39th Hawaii International Conference on System Sciences, HICSS'06, pp. 115-124.
- Organisation for Economic and Cooperation Development, O., 2001. The Economic and Social Impact of Electronic Commerce. Preliminary Findings and Research Agenda. http://www.oecd.org/ dataoecd/3/12/1944883.pdf.
- Abou-Deif, M.H., M.A. Rashed, M.A.A. Sallam, E.A.H. Mostafa and W.A. Ramadan, 2013. Characterization of Twenty Wheat Varieties by ISSR Markers, Middle-East Journal of Scientific Research, 15(2): 168-175.
- 14. Kabiru Jinjiri Ringim, 2013. Understanding of Account Holder in Conventional Bank Toward Islamic Banking Products, Middle-East Journal of Scientific Research, 15(2): 176-183.
- 15. Muhammad Azam, Sallahuddin Hassan and Khairuzzaman, 2013. Corruption, Workers Remittances, Fdi and Economic Growth in Five South and South East Asian Countries: A Panel Data Approach Middle-East Journal of Scientific Research, 15(2): 184-190.