

THE IMPACT OF THE KNOWLEDGE ACQUIRED FROM SOCIAL MEDIA ON MARKET ORIENTATION AND ORGANIZATIONAL INNOVATION

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Abstract: *This study aimed to investigate the effect of the knowledge acquired from social media on the market orientation and organizational innovation by using structural equation. For this purpose, 204 employees of companies operating in the field of Information Technology participated in the research. They responded to questionnaires of obtained knowledge from social media, active market orientation, and reactive market orientation and organizational innovation. To analyze the data, structural equation modelling was used with LISREL software. Structural equation modelling results indicated that the direct impact of the knowledge acquired from social media on the market orientation, reactive market orientation and organizational innovation is positive and significant. Direct effect of active market orientation on innovation is positive and significant. The direct impact of reactive market orientation on innovation is positive and significant, too. Indirect impact of the knowledge acquired from social media on innovation through active market orientation is positive and significant. In general, the role of the acquired knowledge from social media to market orientation and innovation are confirmed.*

Keywords: *knowledge obtained from social media, active market orientation active, reactive market orientation, organizational innovation;*

INTRODUCTION

Today, social media is becoming the most important channel for trade and communication with customers. The adoption of social media for business communications is due to the fact that the use of mobile and Internet is growing rapidly (Nguyen et al., 2015). Social media is defined as the applications, platforms and online media (the internet) that their aim is to facilitate interaction, collaboration and content sharing (Angella et al., 2012, Richter et al., 2007). This kind of media has various forms including blogs, social blogs, micro-blocks, wikis, podcasts, video, photos, ratings and collection of URLs and websites.

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Combined with their increased stunning use, not only the current individual users of social networks but also businesses and government organizations are joining the wave to use these facilities as their own communication tools. Social networks such as Facebook, Twitter, web chat and... are expanding rapidly for providing direct interaction and experiences for users (Heggestuen, 2013).

In the area of trade, the ability to collect information from social networking and information dissemination to a wider audience and the ability to integrate different channels as part of successful marketing strategies for the branding development through social media are very important (Kim & Ko, 2012; Rapp et al., 2013). This article examines the impact of the acquired knowledge from social media on branding innovation and market orientation.

(و در محیط پویا و پیچیده امروزی برای سازمان ها ضروری است که به طور مداوم دانش جدید را به شکل ایجاد، اعتبار بخشی و کاربرد در محصولات و خدمات خود به کار گیرند (هولسپل،

According to the most successful managers in the world, organizational knowledge is the most important capital of the enterprise in the twenty-first century. The survey carried out among 200 leading companies showed that more than 88% of the large and successful companies managers in the world have mentioned knowledge management as the second major priority of their work (Shafiaa شهبهش et al., 2007).)

This study focuses on the acquired knowledge from social media channels. These channels are always expanding and growing and include all sorts of information about customers, suppliers, market volatility, and anything beyond of the information contained in the discussion and exchange of ideas, social networks, websites rankings, blogs or other online resources (Nguyen et al., 2015). Studies show that the acquisition of knowledge and company orientation in the market is considered as important activity participation levels and stimulator of economic development (Augusto et al., 2009; Li et al., 2010).

One of the organizational variables that influence knowledge acquired from social media is the innovation of the company. Organizations and companies are forced to be creative and innovative to the extent that prepare themselves to manage the rapid changes and profound transformations of the world to survive and to have a competitive advantage. Accordingly, industrialized countries have a lot of emphasis on innovation and special attention for selection of creative and innovative individuals to propose creative, innovative and forward-thinking approach to complex issues (Nayer et al., 2012). In this age, innovation helps organizations to overcome the confusion and uncertainty of the external environment so that one of the key drivers of long-term success of organizations

in today's business arena (especially in dynamic and competitive markets) is the innovation

Today, the main issue in organizations to gain competitive advantage in the market is the innovation in services and products. Companies that fail to keep up with market changes will be deleted. Innovation is the development or acceptance of an idea or the conduct of business which has recently applied to the whole organization. Its aim is the value creation of new technology or new business activities in new products or processes (Wang, 2007). The innovation is derived from market needs or it is originated from the advances in technology (Stock et al., 2013). Both of these strategies may have an important role in the success of innovation (Cai et al., 2015). Studies show that the innovation creates power of entry to existing markets, creation of new markets and change by introduction of new technologies and new functional routes (Nguyen et al., 2015; Abetti, 2000). Nguyen et al (2015) in their study showed that the knowledge acquired from social media will lead to innovation. So one of the main objectives of the present study is the emphasis on the role of knowledge acquired from social media on the company innovation.

Another objective of the present study is the examination of market orientation impact on innovation. Research literature indicates that companies react to market opportunities discovery in two ways, including active and reactive orientation (Marvel & Lumpkin, 2007). Reactive orientation refers the company's focus on understanding customers' preferences to satisfy their needs in the existing market structure (Samuelsson, 2001). The active orientation refers to company's focus on addressing the customers' needs i.e. the large and unexpressed needs of customers (Narver et al., 2004). Studies have shown that these orientations have different effects on innovation (Narver et al., 2004; Nguyen et al., 2015). In any case, the effect of this orientations on innovation in the context of social media has not been studied and there is the need to do more research in this field.

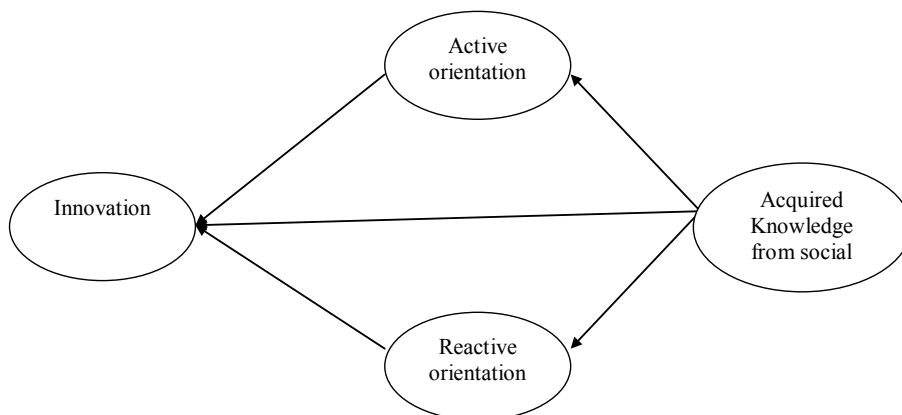
A total review of the empirical literature suggests that the evidence from the research show companies use social media including social networking sites to form direct relationships with customers, increasing traffic to their web sites, identifying new business opportunities, communication creation, information content distribution, gathering feedback from customers and in general in order to support their brands (Breslauer & Smith, 2009, e-Marketer, 2010). But despite the importance of social media, little research have explained the impact of the knowledge acquired from social media on market orientation and innovation. So the main issue of this study is that whether the knowledge acquired from social media influences market orientation and innovation or not?

Research Conceptual Model

According to research literature, research conceptual model is shown in Figure 1. As it can be seen, in this model, knowledge management is considered as independent variables, strategic orientation and organizational innovation are considered as intermediate variables while new product development is considered as dependent variables. The hypothesis of the present study are as follows:

- Hypothesis no. 1: knowledge acquired from social media has direct impact on active orientation.
- Hypothesis no. 2: knowledge acquired from social media has a direct impact on the reactive orientation.
- Hypothesis no. 3: knowledge acquired from social media has a direct impact on organizational innovation.
- Hypothesis no. 4: active orientation has direct impact on organizational innovation.
- Hypothesis no. 5: reactive orientation has a direct impact on organizational innovation.
- Hypothesis no. 6: active market orientation in the relationship between the knowledge acquired from social media and innovation plays an intermediary role.
- Hypothesis no. 7: reactive market orientation in the relationship between the knowledge acquired from social media and innovation plays an intermediary role.

Figure 1: Research conceptual model



Method

Research method is descriptive (non-experimental) and since in this study causal relationships between variables in the model is studied, the study is correlational (structural equation type).

Participants

Participants in this study were employees of companies operating in the field of IT services. 215 questionnaires were distributed among the employees and from these questionnaires, 211 questionnaires were answered in which 7 questionnaire were excluded from the analysis because many of their questions had not been responded. Finally, 204 questionnaires were analyzed.

The Data Collection Tool

Knowledge acquired from social media: to measure Knowledge acquired from social media the questionnaire developed by Nguyen et al. (2015) were used. The questionnaire consists of 5 questions scored based on five-scaled Likert scale (strongly disagree=1 to strongly agree = 5). The internal consistency coefficient of the questionnaire was obtained 0.83 using Cronbach's alpha. The indicators of confirmatory factor analysis GFI =0.93, AGFI =0.91, and RMSEA = 0.041 show that the model has a good fit with the data.

Active market orientation: for the measurement of the active market orientation, the questionnaire developed by Narver (2004) was used. The questionnaire consists of 4 items that range from strongly disagree to strongly agree based on five-point Likert questions. The internal consistency coefficient of the questionnaire was obtained 0.89 using Cronbach's alpha. The indicators of confirmatory factor analysis GFI =0.97, AGFI =0.97, and RMSEA = 0.035 show that the model has a good fit with the data.

Reactive market orientation: to measure reactive market orientation, the questionnaire developed by Narver (2004) was used. The questionnaire consists of 3 items that were scored based on five-point Likert questions from strongly disagree to strongly agree. The internal consistency coefficient of the questionnaire was obtained 0.83 using Cronbach's alpha. The indicators of confirmatory factor analysis GFI =0.93, AGFI =0.91, and RMSEA = 0.048 show that the model has a good fit with the data.

Organizational Innovation: to measure innovation a questionnaire developed by Nguyen et al. (2015) were used. The questionnaire consists of 4 questions that were scored based on 5-scaled Likert (strongly disagree = 1 to fully agree = 5). The internal consistency coefficient of the questionnaire was obtained 0.91 using

Cronbach's alpha. The indicators of confirmatory factor analysis GFI =0.95, AGFI =0.93, and RMSEA = 0.037 show that the model has a good fit with the data.

Data Analysis Method

To analyze the data, after the calculation of descriptive variables, structural equation model was used to examine the relationships between variables. To analyze the data, SPSS and LISREL software were used.

Results

Since the analysis of causal patterns is based on correlation matrix, the correlation matrix, mean and standard deviation of variables are presented in Table 1.

Table 1
Correlation matrix and descriptive indicators of research variables

<i>Variables</i>	<i>Social media</i>	<i>Active orientation</i>	<i>Reactive orientation</i>	<i>Innovation</i>
Social media	1			
Active orientation	**0.48	1		
Reactive orientation	**0.36	**0.34	1	
Innovation	**0.46	**0.58	**0.41	1
Mean	31.35	13.64	25.17	16.45
SD	10.59	3.29	5.40	5.61

0.01>**P

As seen in Table 1, the correlation coefficient of knowledge acquired from social media with active market orientation ($r = 0.48$), reactive market orientation ($r = 0.36$) and innovation ($r = 0.46$) is positive and significant at 0.01. The correlation coefficients for active market orientation with reactive market orientation ($r = 0.34$) and innovation ($r = 0.58$) is positive and significant at 0.01. The correlation coefficient of reactive market orientation with innovation ($r = 0.41$) is positive and significant at 0.01.

Figure 2 shows the research fitted model. The numbers on the paths are the standardized parameters. According to Figure 2, the entire path are significant at ($P < 0.01$). Among the variables included in the model, the active market orientation has the most direct effect on innovation (0.45).

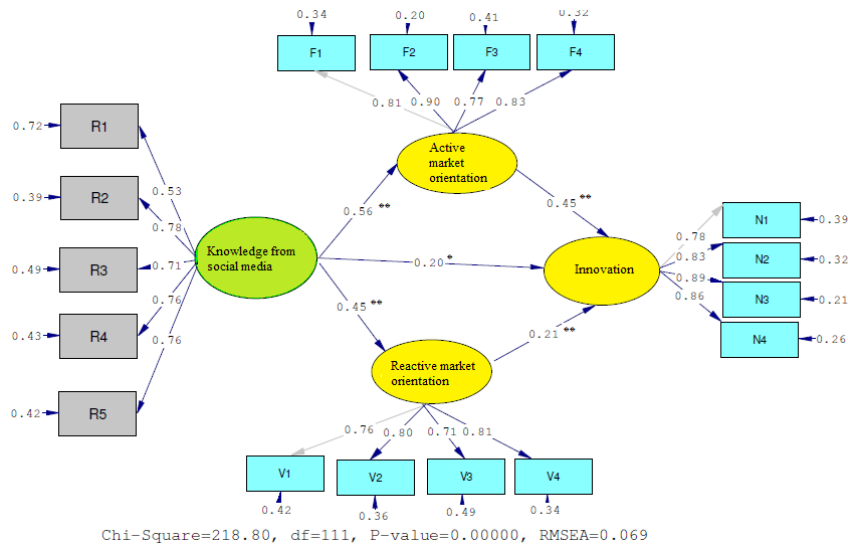


Figure 2: Research fitted model

Because in this study, the mediator role of market orientation in the relationship between the knowledge acquired from social media and innovation is examined, the coefficients of direct effects, indirect effects, total effects, the explained variance and significance level between the variables is listed in Table 2.

Table 2
Standardized coefficients of direct effects, indirect effect, total effect, and explained variance of the model

Path	Direct effect	Indirect effect	Total effect	Explained variance
On innovation from				48%
Knowledge acquisition from social media	**0.20	**0.34	**0.54	
Active market orientation	**0.45	–	**0.45	
Reactive market orientation	**0.21	–	**0.21	
On active market orientation from				32%
Knowledge acquisition from social media	**0.56	–	**0.56	
On reactive market orientation from				20%
Knowledge acquisition from social media	**0.45	–	**0.45	

01 * P< 0.050> **P

As can be seen in Table 2, the direct effect of the knowledge acquired from social media on the active market orientation ($\beta=0.56$) and reactive market orientation ($\beta=0.45$) at ($P < 0.01$) and on innovation ($\beta=0.20$) at ($P<0.05$) is positive and significant. Direct effect of active market orientation on innovation ($\beta=0.45$) at ($P<0.01$) is positive and significant. Direct effect of reactive market orientation on innovation ($\beta=0.21$) at ($P<0.01$) is positive and significant. Indirect effect of knowledge acquired from social media on innovation ($\beta=0.34$) at ($P<0.01$) is positive and significant. In total, 48% of the variance of innovation, 32% of the variance of the market orientation, and 20% of the variance of reactive market orientation are explained by the model.

Structural equation model fit characteristics are shown in Table 3.

Table 3
Indicators of structural equation model fit

$df^2\chi$	RMSEA	GFI	AGFI	CFI	NFI
1.97	0.069	0.94	0.92	0.97	0.95

Based on table 3, the ratio of chi square to its degrees of freedom ($c2/df = 1.97$), goodness of fit index ($GFI=0.94$), goodness of fit index ($AGFI=0.92$) and root mean square error of approximation ($RMSEA=0.069$) are at an appropriate level. Therefore, the fitting of the research model is at good level).

RESULT AND DISCUSSION

This study examines the impact of knowledge acquired from social media on the market orientation and innovation in the market by using structural equation. Path analysis results showed that the proposed model is fitted to the data and can explain 48% of the innovation variance.

Structural equation modeling results indicated that the knowledge acquired from social media effect on the active market orientation is positive and significant. So when the company acts to gather information about the customer, competitor activity, and providers through social media influences on the orientation of the company's market. In fact, great values and information are exchanged through social media interactions occur between individuals and companies and this can lead to the emergence of information between individuals, groups and the companies. Therefore it can be concluded that the relationship between individuals, groups, products and company through social media and information will lead to active market orientation i.e. the company will focus on the hidden and unexpressed needs of customers.

Structural equation modeling results indicated that the knowledge acquired from social media has direct positive effect on the reactive market orientation. Therefore, corporate use of social media has led to direct relationships formation with customers, traffic increase to their websites, identification of new opportunities of business, communication creation, content distribution and gathering feedback from customers and it leads the companies have reactive orientation based on understanding customers' preferences and needs.

Another finding is that the knowledge acquired from social media has a positive and significant direct effect on innovation. This finding is consistent with results of Nguyen et al. (2015), Piller et al. (2012). Therefore, social media will lead to an innovation increase in the company through increased awareness about the needs of customers and competitors activities to meet the needs and sustain competitive advantage. Thus, social media will lead to innovation in the company through sharing and dissemination of information, the information conflict and uncertainty decrease, and the ability increase. In addition, the sharing of knowledge through social media could lead to the creation of added value for the organization and the customer. Obtained knowledge will provide the tools, processes and databases for sharing knowledge to customers and employees that enables organizations to realize the value of customer knowledge integration, and ultimately leads to innovation and delivering new and superior products to customers.

Another finding of the structural equation is that the active orientation has a positive and significant impact on innovation. This finding is consistent with results of Hurley et al. (1998), Baker et al. (1999), Nasution et al. (2011), Ramirez et al. (2014), Nguyen et al. (2015), and Newman et al. (2015). So when companies are addressing the hidden needs of customers' i.e. their large and unexpressed needs and try to meet the need, innovation of the company will increase. In other words, meeting great and unexpressed customer needs acquires to provide new products and services that lead to innovation.

Another results of structural equation is that the reactive market orientation has a positive and significant impact on innovation. This finding is consistent with results of Hurley et al. (1998), Baker et al. (1999), Nasution et al. (2011), Ramirez et al. (2014), Nguyen et al. (2015), and Newman et al. (2015). Therefore, company's focus on understanding the preferences and satisfaction of the needs of customers in the market structure will lead to innovation. Therefore, reactive market orientation causes the company try to provide new products and services and in this regard take action to meet the needs and preferences of customers.

Results also showed that market orientation in relation to the knowledge acquired from social media and innovation plays an intermediary role. So

awareness through social media leads to understanding customer preferences and satisfying the great hidden and unexpressed needs of customers and thereby lead to innovation in order to meet those needs.

In overall, the results showed that the knowledge acquired from social media will lead to increased innovation in order to assess the needs by understanding the needs and preferences of customers and also their hidden and unexpressed needs. Thus, the results of the study emphasizes on the role of social media to raise awareness of the needs and preferences of customers and influence the direction of the market by the company and thus organizational innovation to meet these needs. In this research only a sample of companies operating in the field of IT was examined, so generalization to other companies are limited. The findings are based on self-report data. Therefore, it is suggested that in the future studies, the qualitative and combined research methods should be used to gain a deeper understanding about the role of social media in the enterprise market orientation and innovation.

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