

FACTORS AFFECTING THE ACCEPTANCE OF USING SCRM TECHNOLOGY SYSTEM IN AUTOMOTIVE COMPANIES

Maryam Ghaffari

Yazd University, MA Student in Business Management, Department of Management, Yazd, Iran

Abstract. Today, increasingly enhanced competition in the world has encountered companies with an important issue, which is how to use IT to improve the quality of services. SCRM technology system is an innovative technology, which facilitates the process of access to develop and maintain customer relationships more efficiently and effectively. The research has been study the factors affecting the acceptance of using SCRM technology system in automotive companies. The research was descriptive-survey research. The statistical population included all employees of Pars Khodro Automobile Company. In total, 240 employees were selected as the sample by simple sampling method to participate in the research. Descriptive statistics and inferential statistics (structural equation modeling) have been used to analyze data. According to the research results, it can be said that technical, organizational, environmental, and management characteristics have a positive and significant effect on the acceptance of using social customer relationship management.

Keywords: Social Networks, Customer Relationship Management (CRM), Social Customer Relationship Management (SCRM).

Introduction. In recent years, Internet advances have created new systems for businesses. Public access to the Internet has created an online community and even meetings can be held without physical presence in this space. The social environment of social networks has established a space for interaction and communication (Hajli, 2014). On the other hand, the world is becoming a global village with economical, social, and political comprehensive borders. Media convergence in widespread use of the Internet has led to the creation of social media. The term "social media" has been used in various fields related to the various technologies that they can do. Social media may be defined as production, use, and exchange on all operating systems because social media has captured all of the web space (Patil, 2014). In addition, it should be mentioned that customers obviously tend to be in the social networks. Social media has a lot of potential for companies to approach customers. This may cause to increase incomes, lower costs, and increase efficiency (Heller Baird & Parsns, 2011). Given that creating and keeping customer is considered a key indicator for competing with other competitors in order to the business success of companies, it is essential to provide good service to customers (Charoensukmongkol & Sasatanun, 2017).

Customer is the only source of company that creates current profits and future growth. CRM can be expressed as a marketing approach based on customer information. The relationship between a company and a customer involves a continuous and interactive link that CRM along with managing this relationship leads to make it profitable (Patil, 2014). The term "customer relationship management" addressed at the Society for Information Technology and Society of Physicians in the mid-1990s. The terms "relationship marketing or CRM" is commonly used in the academic community. However, CRM is used in technology solutions (Payne & Frow, 2005).

According to the dramatic enhancement and development of social software and social sites in social media such as Telegram, WhatsApp, Instagram, etc. and wide use of social sites such as Facebook and Twitter, the research is required to provide an accurate and helpful strategy along with customer satisfaction and optimal use of these facilities by scientifically and accurately studying factors affecting customer relationship management in social network. The research in which the experts' opinions and their experiences in this field from previous research have been used. Therefore, the purpose of the research is to study the factors affecting the use of CRM systems in social networks.

Social Networks: In recent years, the number of social network studies in business filed has dramatically increased. The concept of social network defines organizations as a system, which includes objects such as individuals, groups, and other interconnected organizations. The social network analysis focuses on the structure of these relationships to identify their characteristics (Askool & Nakata, 2010).

Customer relationship management (CRM): Němeček & Vaňková (2012) argue that there is no same definition for customer relationship management according to the exiting literature. According to Scott Fletcher, they know CRM as a set of corporate business ideas and processes, which have a direct impact on customer address, contact, and retention in the areas of marketing, sales, and service. According to Schneiderman, CRM is not only technology and information system, but also a business strategy focusing on understanding and estimating current and future customer needs. According to Österle, they define CRM as an alternative to increasing corporate turnover

and profit using coordination of all business relationships with suppliers, partners, and customers. According to Storbacka, CRM is an interactive process, whose aim is to achieve a good balance between corporate investments and meeting customer needs. According to Dohnal, CRM includes employees, business processes, and IS/ICT technology to obtain maximum customer loyalty and thereby profitability. This is part of the company's strategy and, as such, forms part of the organizational culture. CRM systems technologically use more potential and facilities of the Internet.

Social customer relationship management (SCRM): Grinberg has provided two excellent definitions for social customer relationship management. SCRM is a business strategy for attracting customers through social media aiming to create trust and loyalty toward brand. Since social media relates to the customers, the following definitions are also expressed:

- SCRM helps you communicate with company, whenever you need, wherever you are, in the way that is right for you.
- SCRM makes you busy, aware, engaged, and even entertaining.
- SCRM leads you to valuably collaborate with each other or through a third party and to become familiar with each other over time to get things done with the right understanding.

These definitions address: how is SCRM? And/or what is its benefits (Woodcock, 2011)?

1. Literature review

Kwon and Wen (2010) have been conducted a research entitled "an empirical study of the factors affecting social network service use." First, how individual features affect the actual user acceptance of social network services has been empirically studied in the research. To study these individual features, we apply a TAM technology acceptance model to build a modified model, which addresses three individual differences (social identity, philanthropy, television) and a perceived structure (perceived encouragement, which has been imported from psychology-based researches). Second, the research has been studied whether users can monitor a purposeful social service provider as a centralized service for humans. As a result, it has been discovered that perceived motives and perceived orientation are important structures that affect the actual use of social network services.

Askool and Nakata (2010) has been studied the status of CRM in the Saudi banking industry in a research entitled "scoping study to identify factors influencing the acceptance of social CRM." The objective of research is to identify the factors affecting social CRM or SCRM. The banking industry also utilizes social networks to communicate more easily and better with customers. The research suggests that technology acceptance models (ATMs) are emphasized using a number of factors used in the literature of business relationships.

Woodcock (2011) has been studied the role of CRM system through the virtual networks business in a research entitled "social CRM as a business strategy." In the research, the author states that SCRM can provide information, which can help customer about real-based innovation. In addition, engaging with changes in customer attitude and perspective in the form of virtual environments and donation leads to, for example, a variety of store promotions. In the research, problems of the industry pioneers have been addressed; and three barriers (including organizational readiness, extreme and excessive stimulation of inclination, and project management failures) have been considered as the industry problems.

Heller Baird and Parasnis (2011) have been studied a research entitled "from social media to social customer relationship management." In the research, they address the huge volume of customers on social networks such as Facebook and Twitter, which creates a big market for businesses. Findings show that social media initiatives rapidly develop across organizations. However, the use of social media for the interaction with customer creates interesting challenges for the CRM system.

Němeček & Vaňková (2012) have been conducted a research entitled "connections among CRM, cloud computing and trading income of selected companies." The research has been conducted before and during economic crisis in Czech focusing on 2007-2010 the period. In the research, readers can find how to use information technology and business strategy for customer relationship management and how it affects business revenue. The question raised in the research is whether companies use the full CRM solution as a software purchase and installation, or whether they use the CRM system only as part of the services provided through cloud computing technology. Accordingly, companies having CRM system state that support, cost reduction, easy communication, and flexibility in transferring to super computers are the main factors of using CRM.

Malthouse et al. (2013) have been studied how to be a relationship between CRM and the enhancement of social network in a research entitled "managing customer relationships in the social media era: introducing the social CRM house." They used the idea of a social CRM home to study how to acquire, keep, and terminate communication and support business areas. In addition, they have been studied some of the challenges and problems of this industry.

Patil (2014) has been argued the importance of CRM in social networks in a research entitled "social media

and customer relationship management." Given that business opportunities are already dynamic, he states that CRM makes it possible to identify customer needs and establish an appropriate relationship with customers. The research shows the integration of social media with CRM strategies and defines the benefits of this integration for business. Charoensukmongkol and Sasatanun (2017) have conducted a research in Thailand entitled "media use for CRM and business performance satisfaction: the moderating roles of social skills and social media sales intensity." Data has been collected from 217 small shops in Thailand market. The results of the least squares subscale analysis showed that entrepreneurs who strongly used social networks for CRM were more satisfied with their business performance. Moreover, the results of modified effect analysis showed that the positive relationship between social media and the severity of using CRM leads to business performance satisfaction for lower level entrepreneurs. Main findings show the scientific concepts for small entrepreneurs. Given that involvement between individuals in social networks is less than face-to-face contact, the use of social networks with CRM activities may be necessary for small entrepreneurs who are active in communicating with customer and improving customer satisfaction.

Technological characteristic constructs:

Technological characteristic play a crucial role in the adoption of any new technologies (San-Martina et al., 2016). Many studies have reported the importance of technological orientation in the adoption of eCRM and mCRM (Verma & Verma, 2013) technologies. The perceived advantages of a technology by potential adopters, its compatibility with existing business practices, the observability of the technology, and trialability of the new product or service have each been reported as important factors affecting the adoption of new technologies Ghobakhloo et al., (2014), and therefore are included as constructs in the technological characteristics element of this study)Hasani & et al.,2016).

Hypothesis 1: Technical characteristics have a positive and significant effect on the acceptance of using social customer relationship management.

Organizational characteristic constructs:

Organizational characteristics refer to an organization's demographic features, such as its size, financial revenue, technological expertise, and location (Jeon et al., 2006). The organizational characteristics of start-up companies may include their decision to adopt new technologies, including SCRM solutions. There are two key constructs of organizational characteristics discussed in this section: internal financial resources and business incubation)Hasani & et al.,2016).

Hypothesis 2: Organizational characteristics have a positive and significant effect on the acceptance of using social customer relationship management.

Environmental characteristic constructs:

Environmental characteristics largely refer to the external factors that may limit or support a company's activities (Voges & Pulakanam, 2011). Many researchers have demonstrated the effects that environmental variables can have on the adoption of new technologies in different businesses and sectors (Abou-Shouk et al., 2016). In this study, the effects of four environmental constructs on the adoption of SCRM technologies are investigated: external pressure, governmental support, business angels' support, venture capitalist support and crowd funding support)Hasani & et al.,2016).

Hypothesis 3: Environmental characteristics have a positive and significant effect on the acceptance of using social customer relationship management.

Managerial characteristic construct:

Most business decisions are made by company managers or senior executives operating at different levels of the firm. The quality of managers, their personal attitudes and interests may affect the performance of the company and influence decisions about adopting new technologies (Hameed et al., 2012). This study seeks to investigate the effects of two managerial characteristic constructs on companies' decisions to adopt SCRM applications:Manager Attitude and Manager Innovativeness)Hasani & et al.,2016).

Hypothesis 4: Managerial characteristics have a positive and significant effect on the acceptance of using social customer relationship management.

Conceptual framework of research

A standard questionnaire will be used to measure the variables. The variables in the form of a conceptual model, adapted from the Hasani et al. (2016) model, are as follows:

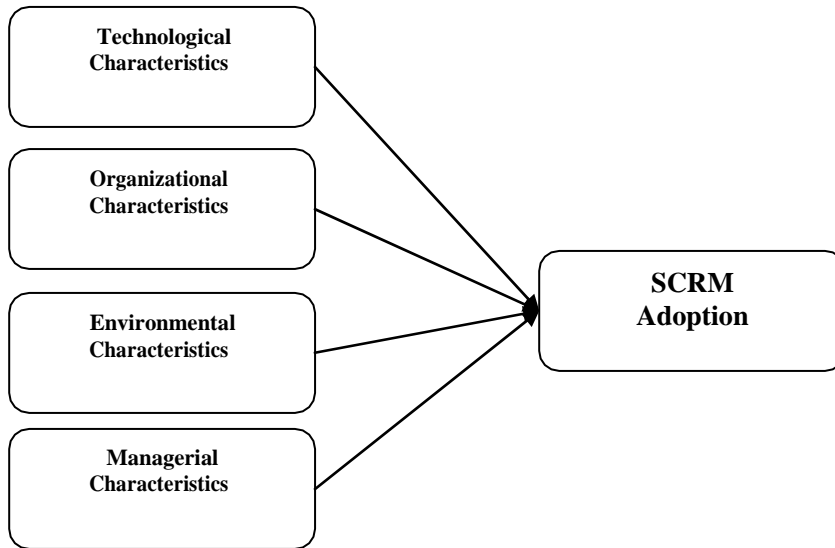


Figure 1: Conceptual framework of research
Ref.: Hasani et al. (2016)

Methodology. The research is applied research in terms of objective, field work in terms of the type of data collection, and descriptive-survey and correlation research in terms of research type. Hasani et al. (2016) questionnaire was used to collect data. Validity of the questionnaire was verified using face validity and confirmatory factor analysis. Cronbach's alpha was used to determine the reliability of the questionnaire. The Cronbach's alpha coefficient for each of the variables was higher than 0.7. Therefore, the reliability of the questionnaire was confirmed. The statistical population included all employees of Pars Khodro Company, which is about 650 people. The sample size was obtained 242 people using the Cochran formula. In the research, a simple random sampling method was used.

2. Findings

AMOS25 software was used to test hypotheses. Figure 2 shows the final framework of the research with standard coefficients, in which indicators in table 1 was used for the validity and fitting of the model.

Table 1: Total model fitting indicators

Index	Description	Standard level	Model fitting	Result
NFI	Bontler-Bonnet normal fit index	0.90<	0.926	Desirable
RFI	Relative fit index	0.90<	0.906	Desirable
IFI	Incremental fit index	0.90<	0.952	Desirable
TLI	Tucker-Lewis fit index	0.90<	0.956	Desirable
CFI	Comparative fit index	0.90<	0.989	Desirable
GFI	Good fit index	0.90<	0.970	Desirable
RMSEA	Root mean squares estimated error	0.8>	0.062	Desirable

As shown in Table 1, all comparative fit indexes of the developed model are higher than 0.9, indicating the acceptability of the model. The RMSEA index is less than 0.8, which indicates the optimal fit of the proposed model. In general, the model has a suitable and desirable fit according to all indices.

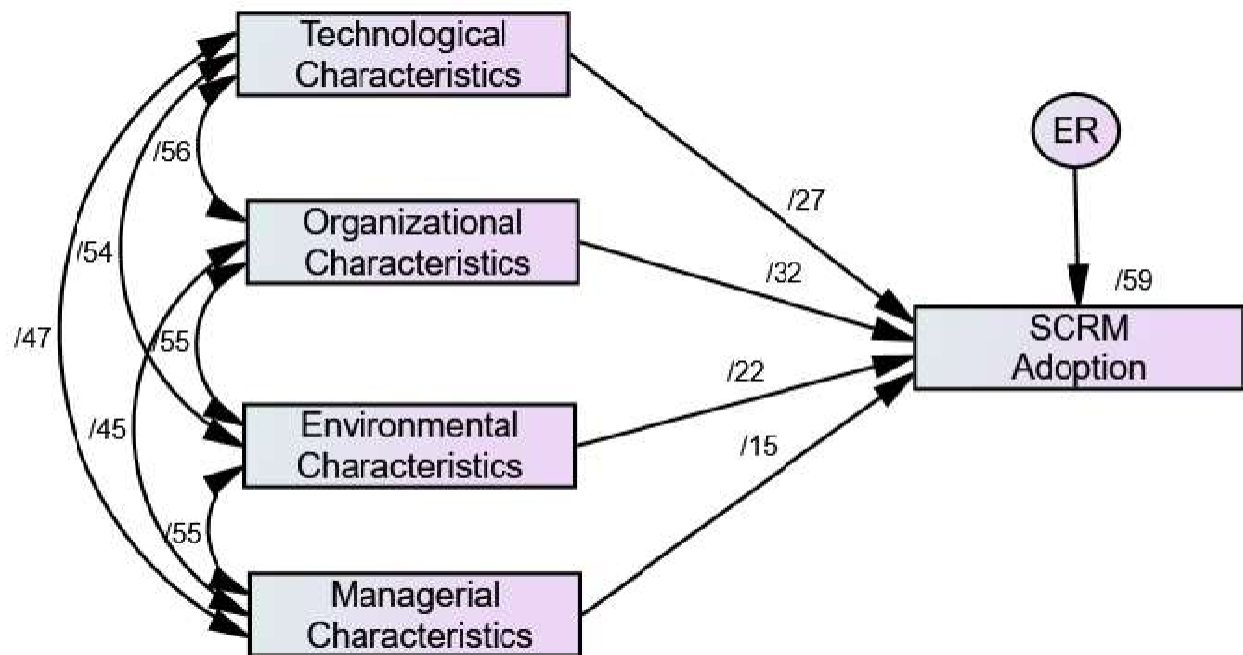


Figure 2: Finalized model of research with standardized coefficients

Table 2: Impact factors of the final model

Standard coefficient	Significant level	Significant number (t)	Standard error	Non-standard coefficient		
0.267	***	11.467	0.108	1.235	Technological Characteristics	→ SCR M Adoption
0.319	***	11.467	0.103	1.176	Organizational Characteristics	→ SCR M Adoption
0.216	***	11.467	0.112	1.285	Environmental Characteristics	→ SCR M Adoption
0.149	***	11.467	0.095	1.091	Managerial Characteristics	→ SCR M Adoption

As shown in Table 2, since $P = 0.000 < 0.1$ and t value is higher than the critical value of 54.2 in all the hypotheses, all null hypotheses are rejected and all research hypotheses are confirmed. Therefore, it can be said with a 99% probability that technical, organizational, environmental, and managerial characteristics have a positive and significant effect on the acceptance of using social customer relationship management.

3. Discussion and Conclusion

Increasing the use of social networks around the world and the presence of different tastes, different needs, and different goals in using social networks has led the social network environment to respond to a set of its customer needs. In order to manage and regularly communicate with customers and segment and categorize them in terms of the need and purpose of using the virtual media environment, companies providing the virtual environment use the technology of customer relationship management. The purpose of the research was to study the factors affecting acceptance of using SCR M technology system in automotive companies. Results of testing hypotheses showed that all the research hypotheses are confirmed with 99% probability. Findings indicated that technical, organizational, environmental, and managerial characteristics have a positive and significant effect on the acceptance of using social customer relationship management. In addition, results showed that organizational characteristics have the greatest impact on the acceptance of using social customer relationship management. Therefore, the managers of Pars Khodro

Automotive Company should consider organizational factors more than other factors in order to increase the use of social customer relationship management among their employees.

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