



Barriers to the Adoption of Social Media Technology in the domain of Social Customer Relationship Management in Travel Agencies

Fereshteh Alizadeh¹, Fatemeh Ahmadi², Zeinab Basiri³

¹ Department of Tourism, Faculty of Humanities Sciences, Islamic Azad University Science and Technology, Tehran, Iran

² Department of Management, Islamic Azad University Qeshm Branch, Qeshm, Iran

³ Department of Law, Faculty of Humanities Science, Shiraz University, Shiraz, Iran

Abstract

In today's world, social networks play a very important role in relationships among people throughout the world. The popularity of social networks has increased among Iranian users as they became a place to explore different individual desires and interests. Thus, these networks are now an integral part of the lives of many people in our society. Integrating these two categories may be considered as a key business strategy which has caught the attention of many service organizations in developed countries.

Therefore, to identify the barriers to the adoption of social networks in travel agencies for improving the adoption of networks in order to ameliorate CRM policies in organizations after deriving the effective factors mentioned in previous studies and utilizing Exploratory Factor Analysis (EFA) to explore the most common barriers in this field, three hypotheses were formulated and the population of service organizations and some of their customers in Tabriz with a 245-member sample were selected for the study and a Likert scale questionnaire was designed and distributed among the members of the study sample. The study results had a high validity and reliability and the LISREL, a structural equation modeling application, was used to carry out the Confirmatory Factor Analysis (CFA) and to discover a model from the effective factors. Results showed that legal and technological factors as barriers to the adoption of social networks for CRM had the largest impact in Iran.

Keywords: Customer Relationship Management (CRM), social networks, barriers to social CRM, travel agencies.

1. Introduction

Considering the new generation of customers need transparency, accuracy, and interaction with the organization, a deeper insight is required to affect this clever and socially offensive customer. Hence, a combination of CRM systems and social tools (the same CRM 2.0 system) can be used to create and acquire this insight [1]. Whereas, exploring the barriers to the adoption of these networks for travel agencies is both useful and important. Consequently, travel agencies can be an appropriate choice in terms of customer relationship and pursuit of their needs and desires. Addressing the issue of CRM in these organizations using social media platforms requires reviewing problems and barriers to their use and can be considered an appropriate issue for research and achieving other similar organizations' goals. In light of the fact that nowadays most people spend a lot of time to search for and get information from these emerging media, yet, unfortunately the potential of these media have not been utilized effectively towards achieving business goals and approaching customers [2].

Regarding the importance and position of social CRM in E-commerce and its significant benefits some of which were mentioned, identifying the effective factors on its successful performance and implementation in organizations is an essential and critical issue. The present research aims to identify the barriers to the adoption of social media to improve CRM in travel agencies as

well as ranking the barriers to the adoption of social media to improve CRM in these companies [3-5].

2. Theoretical Framework and Literature Review

In recent years, CRM has been regarded as an attractive title for different researches and reviews. In 2007 and specially in 2008, CRM evolved and its transactional strategy transformed into a transactional-and-interactional strategy. If deemed successful, it would be of great help to acquire the necessary information for customer insights and accordingly was renamed to social CRM2.0 or CRM. A research conducted in December 2008 revealed that the utilization rate of social networks for adults (over 18 years old) has increased from 8% in 2005 to 35% in 2008. The most important matter was that the data-sharing tools along with internet-access and data-loading tools, has become simple and inexpensive. Low price and accessibility of these tools changed the individual expectations. People would expect institutions for which they work to prepare these tools and allow for using them. Nowadays, tourism industry is a source of income and cultural exchanges between countries [6].

In a research performed in the area of Technology Acceptance Model (TAM) in healthcare industry in 2012, McGowan, Wasko, Vartabedian, Miller, Freiherr, and Abdolrasulnia described the

adoption of new technologies (social media). They examined the conformity and use of social media in a random sample of 1695 American doctors (for example, oncologists and primary care physicians) [7]. The methodology was based on the employed model, actions, and data collection methods. The indicators that were reviewed include (a) perceived barriers to social media adaptation, (b) tendency towards adaptation, (c) attitude towards social media, (d) level of understanding the use of social media, (e) understanding usefulness, and (f) tendency towards sharing knowledge with others. Results of technology acceptance model theory characteristics were within the framework of social media. The evidence shows that the frequency of social media use can be attributed to a combination of the following items: (a) a positive attitude towards social media use, (b) understanding the ease of use, and (c) understanding the usefulness of meeting human needs (McGowan and et al., 2012). Finally, Table1, represented in the literature review section, shows the identified factors and variables related to barriers to the adoption of social media technology in the social CRM domain. This table was used to do the exploratory factor analysis in order to identify the important factors in connection with available barriers which will be described later [8-10].

Table1. Factors and variables related to barriers to the use of social media technology in the social CRM domain

Benitez, 2012 [9]; Lafley, 2008 [10]; Sakkab, 2002 [11]; Swanborg, 2010 [12] Montgomery, 2012 [13] McAfee, 2009 [14] Li and Bernoff (2008) [15] Ryan Darby, Jake Herway 2010 [16] Culnan, McHugh & Zubillaga, 2010 [17] Cristene Gonzalez-Wertz (2011) [18]	<ul style="list-style-type: none"> • The impact of technological and digital illiteracy on customers' perception of the concept of the web and social networks • Only 30% of the world's population has internet access • Different communication styles (different organizations vs. different customers in different regions) • Public criticism and distrust of business organizations in the virtual world (cyberspace) <ul style="list-style-type: none"> • Inappropriate use of social networks • Inappropriate development in organizational portals • Fear of building a direct relationship with customers • Inappropriate culture-building practices for the use of social media both for organizations and customers • Lack of a logical and strategic framework for social media activities • Existence of a bureaucracy to deal with customers' needs • Changes in individuals' life limitations in social networks • There is no strategy related to social networks and its applicability • The role of human resources component in determining a strategy for creating value • Offering a strategic model to maintain the process of moving towards an objective • Offering a conceptual model for describing a forward view to the successful use of social media
Chui et al. (2009) [19] McGowan, Wasako, Vartabedian, Miller, Freiherr, and Abdolrasulnia (2012) Curran and Lennon (2011)	<ul style="list-style-type: none"> • Having a long-term vision, integrating social media tools and establishing a relationship, training and aligning employees with customers • Measuring development rather than Return On Investment (ROI) <ul style="list-style-type: none"> • Society's attitude towards social networks • Understanding social media (social networks) ease-of-use <ul style="list-style-type: none"> • Understanding the usefulness of satisfying users' needs • Enjoyment and entertainment as the most effective factors on attitude and behavior
Cristene Gonzalez-Wertz (2011) [20]	<ul style="list-style-type: none"> • The role of social media market leaders in creating an organizational memory and culture, team-working skills, inhibiting environmental turbulence, personal expertise and skills
Sergio Picazo-Vela, Isis Gutiérrez-	<ul style="list-style-type: none"> • Network reliability • Computer accessibility for social networks management and user accounts

Martínez, Luis Felipe Luna-Reyes 2012 Dadashzadeh, M. (2010) Bryer, T. A., & Zavattaro, S. M. (2011) [21]	<ul style="list-style-type: none"> • Company's website security • Changes in IT domain and user area • Companies' technological infrastructure <ul style="list-style-type: none"> • System crash and failure • Network misuse • Setting up an organizing process, data structure and distribution on the network • Contents' repetition and redundancy
---	--

3. Research Methodology

The present research is practical in terms of purpose (aim), descriptive in terms of research objective, causal in terms of nature, and library¹-questionnaire in terms of data collection methods. In this research, based on the objectives and their implementation method, the statistical population is travel agencies located in Tabriz. Simple random sampling method was used to measure research variables each of which was randomly selected. Sample size used for this research was calculated by Cochran's sample size formula with a margin of error of 5% to be 200 that was actually distributed among all travel agencies managers in Tabriz, i.e., 305 participants among which only 245 responded to the questions. 5-point Likert scale was employed for this questionnaire. The validity of the questionnaire was verified by experts' poll as well as factor analysis method. In addition, its reliability was calculated by computing Cronbach's alpha whose results are mentioned in Table 2. The alpha value for all variables is over 0.7 which is indicative of optimal reliability.

Table 2. Number of questions and Cronbach's alpha of model variables (reliability test concerning factors and items reduced from exploratory factor analysis)

Variable	No. of questions	Cronbach's alpha
First factor (technology)	1-2	0.89
Second factor (network)	3-4	0.85
Third factor (legal)	5-6	0.77
Fourth factor (confidence)	7-8-9-10	0.85
Fifth factor (organizational culture)	11-12-13	0.78
Sixth factor (individual culture)	14-15-16	0.91
Seventh factor (organizational structure)	17-18	0.89
Eighth factor (organizational policy)	19-20	0.79
Ninth factor (organizational strategy)	21-22-23	0.85
Total	1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23	0.78

3.1 Research hypothesis testing according to factor analysis (factor analytic hypothesis-testing)

- H1) In Tabriz travel agencies, there is no appropriate cultural context for the adoption of social CRM.
- H2) In Tabriz travel agencies, there is no appropriate legal context for the adoption of social CRM.
- H3) In Tabriz travel agencies, there is no appropriate technological context for the adoption of social CRM.

3.2 Data analysis and findings

The possibility of performing an exploratory factor analysis on data was determined using Bartlett's test. According to the results

¹ Desk research

of KMO-Bartlett's test, the value <0.5 of this statistics indicates sampling adequacy and the confidence level of >0.5 indicates the cited factor model appropriateness. According to KMO test results, i.e., 0.782, the research questionnaire data can be reduced to some underlying and basic factors [22].

Upon conducting the exploratory factor analysis, items related to each factor were identified and were categorized as factors which demonstrate the allocation of questionnaire items in the order shown in Table 2 for each of the nine identified factors.

3.3 Confirmatory factor analysis of research variables

In this section, the results of exploratory factor analysis for all the research variables are separately represented by LISREL for each variable. To reduce the number of variables and regard them as a latent variable, the factor loading obtained should be more than 0.3 (23).

The research model was evaluated based on the determined optimum values of fit indices. The respective results are provided in Table 3.

Table 3. Research model fit indices

Fit index	X^2/df	RMSEA	AGFI	NNFI	CFI
Acceptable domain	<3	<0.1	>0.9	>0.9	>0.9
Result	2.37	0.07	0.82	0.94	0.95

Therefore, the results of all hypotheses were confirmed. These results are summarized in the next table.

Table 4. Results of all confirmed research hypotheses

N	Path	β coefficients	Calculated <i>t</i> values	Hypothesis status
	From all factors mentioned below to barriers to the adoption of social media technology in the social CRM domain			
1	Technological factors	0.193	0.33	Confirmed
2	Network-related factors	2.85	0.26	Confirmed
3	Limitations due to government rules	9.11	0.92	Confirmed
4	Reliability	0.55	0.897	Confirmed
5	Organizational culture	0.42	5.95	Confirmed
6	Organizational structure	0.20	2.91	Confirmed
7	Organizational policy	0.56	3.95	Confirmed
8	Organizational strategy	0.37	4.72	Confirmed

3.4 Friedman test to compare means ranks

Another purpose of this research is to rank the obtained barriers. The results are obvious according to Friedman test in Table 5.

Table 5. Friedman test results

Test statistics	
N	238
Chi-square	954.865
Df	22
Asymp. Sig.	0.000
a. Friedman Test	

Variables related to each of the nine factors can be interpreted according to the significance level of each factor in Table 4 as well as means level in Table 5.

Table 6. Mean value of the items according to Friedman test

High to low priority	Mean value of the items according to Friedman test	Questionnaire items
1	15.84	Limitations imposed by the government (filtering)
2	15.43	Traditional view towards ROI by investing in social media rather than measuring performance improvement
3	14.61	Technological ignorance of the community members towards internet applications
4	14.49	Employees' level of acceptance and learning for new technologies and making use of social networks
5	13.94	Cultural poverty about making use of social networks and society's attitude towards it
6	13.81	Decentralization and delegation of discretionary powers to the members to solve customers' problems quickly.
7	13.48	Obvious and explicit absence of a social networking-related strategy and its applicability at the beginning of the project
8	13.3	Ignorance towards functions of social networks
9	12.94	Reliability of information published by organizations
10	12.32	Fear of building a direct relationship between the organization and customers
11	11.82	Company's freedom of information policy development
12	10.53	Public criticism and distrust of business organizations in the virtual world (cyberspace)
13	10.35	Absence of a customer treatment training course to have a higher level of customer orientation and their appropriate relationship in social networks
14	9.82	Lack of an organizational structure affecting the use of social networks
15	8.64	Changes in individuals' life limitations in social networks
16	8.49	Existence of a bureaucratic process in organizations to deal with customers' needs
17	8.29	The potential violation of international or national regulations in information security frameworks
18	7.36	Integrity and accuracy of the information published in social networks
19	5.12	Computer accessibility to manage social networks and user accounts for organizations
20	5	How open or closed are business organization or company in terms of providing information to customers (performance transparency, trust building, etc.)
21	4.4	Freedom of action (discretion) against government information regulations
22	4.1	Community members' ignorance of the proper use of social networks
23	3.5	Intellectual Property (IP) compliance for electronic products and copyright infringement by people or other organizations
24	3.4	Information or brand (corporate) identity theft or forgery by competitors
25	2.7	Customer treatment procedures and standards, determining specific procedures and methods for treating customers in social networks.
26	2.6	Lack of a logical and strategic framework for social networking-related activities
27	2.5	Lack of management and leadership support

28	2.4	The saturation of communication channels
29	2.3	Wrong customers targeting
30	2.3	Lack of technology infrastructure in companies such as network facilities (equipment) in organizations

More important variables are specified in rows 1-5 according to the table above. These indicate the most important factors in terms of statistical population concerning more important barriers to the adoption of social media technology in the social CRM domain in travel and recreation agencies. The top priority in this table is the legal subject of filtering.

4. Findings Analysis

According to the first research hypothesis, there is no appropriate cultural context to use social media towards CRM. According to the results of exploratory factor analysis for which a total of 13 variables were assigned and a subsequent confirmation of factors which was shown by confirmatory factor analysis, as well as the significance level and the parallelism of upper and lower bounds of the assigned variables for these factors, it can be considered as an important barrier to the adoption of social networks towards CRM. Therefore, technological and digital illiteracy factors affecting customers' perception of the concept of the web and social networks, inappropriate development of organizational portals, fear of building a direct relationship with customers, inappropriate culture-building practices towards the adoption of social media both for organizations and customers, lack of a logical and strategic framework for social networking-related activities, a bureaucracy for dealing with customers' needs, and changes in life's limitations in social networks are some factors which were referred to in the studies of Picazo et al. in 2012 and Dadashzadeh in 2010 [23-26]. In addition, factors such as the lack of a social networking-related strategy and its applicability, the role of human resources component towards determining the value creation strategy, existence of a strategic model to maintain the process of moving towards an objective, offering a conceptual model for describing a forward view to the successful use of social media, having a long-term vision, integrating social media tools and establishing a relationship, training and aligning employees with customers, and not measuring development to ROI ratio are included in the studies of Benitez (2012); Lafley (2000); Skab (2002); Swanborg (2010); Montgomery (2012); McAfee (2009); Lee and Bernov (2008); Derby and Harvey (2010); Culnan et al. (2010); and Wurtz (2011) [18-17].

In other studies, including McGoman et al. in 2012 and Curran & Lennon in 2011, society's attitude towards social networks, understanding social media ease-of-use, understanding the usefulness of meeting human needs, enjoyment and entertainment were mentioned as the most effective factors on individuals' attitudes and behaviors for the adoption of social networks.

In addition, the role of social media market leaders in creating an organizational memory and culture, team-working skills, inhibiting environmental turbulence are factors which were stated in the study of Wurtz. Hence, this hypothesis will be confirmed by considering the components of organizational and individual culture effectiveness, organizational structure, policies and strategies.

Second hypothesis: In travel agencies, there is no appropriate legal context for the adoption of social media towards CRM.

According to the results obtained, this factor which consists of the factors achieved from exploratory factor analysis for which a total of five variables were assigned, legal factors banning the use of social networks by the government as well as distrust of materials published in social networks, concerning the significance level and parallelism of upper and lower bounds of variables, has a significant effect as a barrier to the adoption of social networks towards CRM. Moreover, in the studies of Sergio et al., Dadashzadeh & Bayer & Zavattaro in 2011, factors such as blocking

social networks by the government (filtering), freedom of action against government information regulations, company's freedom of information policy development, IP compliance for electronic products and copyright, potential violation of international or national regulations in information security frameworks, and information or identity theft were presented. Thus, this hypothesis is confirmed as well [28].

Third hypothesis: In service and travel agencies, there is no appropriate technological context for the adoption of social media towards CRM.

According to the factor analyses conducted for the impact of this hypothesis with a total of four variables, indicating a technological ignorance and lack of a network infrastructure in organizations, parallelism of upper and lower bounds of the variables demonstrate the effectiveness of these factors as another barrier to the adoption of social networks towards CRM.

According to the researches mentioned in the second hypothesis, factors such as network reliability, computer accessibility for social networks management and user accounts, company's website security, companies' technology infrastructure, system crash and failure, internet access for only 31% of the world's population, inappropriate use of social networks, contents' repetition and redundancy are some effective factors in this hypothesis.

5. Conclusion

According to research objectives which include identifying barriers to the adoption of social media to improve CRM in Iran's service organizations with service and travel agencies as a case study, strategic, cultural, structural, leadership, and legal barriers can be introduced as the identified barriers.

Furthermore, regarding all the assumptions were confirmed, research objectives including the identification of legal, technological, cultural, and structural barriers to the use of social media for CRM in Iran's service organizations were realized as well. In fact, nowadays distinguishing between social media management and CRM is difficult. Therefore, organizations should think about increasing the number of social CRM services. However, proposing a mere social CRM implementation plan in organization is not enough. Similar to all other new technologies, organizations should initially choose a customer-interaction solution and its management such that a strategy and its implementation instructions could be extracted.

6. Research Limitations

Considering that social networks is an emerging phenomenon in Iranian society and young people have a limited access to these networks due to the limitations imposed by the government and organizations, the majority of the referred people and organizations of the statistical sample filled the questionnaires with a slight delay and distrust. Furthermore, there are some beliefs like the following among people in organizations and the target population which cause some limitations.

- Customers and audiences do not use social media in business organizations.
- Social media is not mainstream.

In the USA, there are 170 million Facebook users – almost half of its population. Only a few media are pervasive to this extent (except for TV, radio, and newspapers. The pervasiveness of the latter has decreased over time). 96% of the whole population in this country is somehow involved in these social networks. As a matter of fact, many of them can avoid advertisements in mainstream advertising such as recording TV shows and removing commercials. However, people can establish an access through social media marketing techniques such as Facebook ads.

In addition, social media marketing experts are especially capable of creating targeted ads for Facebook audiences and users based

on age, gender, relationship, occupational status, and even geographical location.

- Social media marketing results are immeasurable.

Actually, social media marketing has more advantages compared to the mainstream marketing which can easily be measured by different social media analytics tools. Not only can these analytics tools check what has been said about your company but also can receive the message sentiment whether it is positive, negative or neutral. Website analytics tools can track website traffic, from the first step to a certain part of your website, the pages seen upon entering, and if a shopping has occurred or not? This means that not only can examining and monitoring the advantages of social media marketing track the specific website traffic but also can determine which online media will be able to have a greater effect on sales. Advertising will no longer be capable of doing this.

7. Suggestions

In today's hyper-social world, customers are likely to criticize, complaint or define a product, service or business on different social networks such as Twitter or Facebook. The organization has to handle these complaints and discussions about its products, otherwise it would turn out to be a potential threat.

According to the results obtained, organizations should at first build an appropriate culture for the use of social networks both in employees and customers by employing different approaches such as providing training or better services for your customers. To eliminate technological barriers in an organization, it has to be made sure that an appropriate context has been selected to run the social CRM.

A comprehensive social media management platform which is capable of rich following, monitoring, and interaction should be selected. On the other hand, organizational social platforms should be incorporated into other key organizational applications such as sales, marketing, services, and business, thereby function with a comprehensive approach which includes all customer contact points.

To promote customer culture in social media, the organization may reward loyal customers.

Use team and class characteristics as strategies to take advantage of social networks.

The three big companies, i.e., Facebook, Twitter, and LinkedIn have made this process very easy.

For example, make a private list on Twitter with these classifications: customers, people predicted to join the organization, positive feedback from existing, prospective, and influential customers. Then, spread the list on this basis and create social campaigns to promote all sections and develop a policy for social networks. Customers should know how and when the organization is accessible.

By creating a manifesto about website goals and activities including hours during which the organization user page is being controlled online or hours during which customers can ask their questions online, the possibility of meeting customer service expectations will be guaranteed.

If for some reason, some customers would require additional services or want to blame the organization, they can benefit from direct support with an offline conversation by providing an email address and a phone number.

References

- [1] Nezafati, N.; Khosheykal, M.; Davoodi, M. (2012). "Social CRM and offering a conceptual framework to apply CRM2.00 systems in banking". *Fourth International Conference on the Marketing of Banking Services*. Tehran, Center for Financial Services Marketing.
- [2] Brian Wright, Michael Smith, Richard Little (2007). "World Policy Issues". Translated by: Seyed Mohammad Kamal Sarvarian. Tehran, *Strategic Studies Institute*.
- [3] Ziaei Parvar, H. (2007). "Soft War (media warfare, special ed.)". Tehran, *Abrare Moaser cultural institute for international studies and researches*.
- [4] Trainor, K. J. (2012). "Relating social media technologies to performance: A capabilities-based perspective". *Journal of Personal Selling and Sales Management*, 32(3), 317–331.
- [5] Jim Jacoby, (2007). "CRM and Social Media: Maximizing Deeper Customer Relationships". http://www.pdf-repo.com/pdf_1a/528g2o40m951ec8b93.html
- [6] Hanna, R., Rohm, A., & Crittenden, V. L. (2011). "We're all connected: The power of the social media ecosystem". *Business Horizons*, 54(3), 265–273.
- [7] Synthesi- "Social CRM made it easy taking customer engagement to a whole new level"- 2010
- [8] Greenberg, P. (2010). "The impact of CRM 2.0 on customer insight". *Journal of Business and Industrial Marketing*, 25(6), 410–419.
- [9] Melville, N., Kraemer, K., & Gurbaxani, V. (2004). "Review: Information technology and organizational performance: An integrative model of IT business value". *MIS Quarterly*, 28(2), 283–322.
- [10] Mithas, S., Ramasubbu, N., & Sambamurthy, V. (2011). "How information management capability influences firm performance". *MIS Quarterly*, 35(1), 237–256.
- [11] Nath, P., Nachiappan, S., & Ramanathan, R. (2010). "The impact of marketing capability, operations capability and diversification strategy on performance: A resource-based view". *Industrial Marketing Management*, 39(2), 317–329.
- [12] Rainie, L., Purcell, K., & Smith, A. (2011). "The social side of the internet". Washington, DC: Pew Internet & American Life Project (Retrieved from <http://pewinternet.org/Reports/2011/The-SocialSide-of-the-Internet.aspx>).
- [13] McLuhan, M. (1964). "Understanding the media: The extension of man [Book]". Retrieved from <http://beforebefore.net/80f/s11/media/mcluhan.pdf>
- [14] Eysenbach, G. Medicin 2.0: "Social Networking, Collaboration, Participation, Apomediation, and Openness". *Journal of Medical Internet Research* 2008; 10(3): e22.
- [15] Bob Mathew Design Science, Inc. 140 Pine Avenue 4th floor www.dessci.com
- [16] McDonald, M., & Mouncey, P. (2009). "Marketing accountability: How to measure marketing effectiveness". London: Kogan.
- [17] Ambler, T. (2003). "Marketing and the bottom line: Creating the measures of success (2nd ed.)". London: Financial Times/Prentice Hall.
- [18] Hoffman, D. L., & Novak, T. P. (1996). "Marketing in hypermedia computer mediated environments: Conceptual foundations". *Journal of Marketing*, 60(3), 50–68.
- [19] Borders, A. L., Johnston, W. J., & Rigdon, E. E. (2001). "Beyond the dyad: Electronic commerce and network perspectives in industrial marketing management". 30, 199–205.
- [20] Hallahan, K. (2008). "Organizational-public relationships in cyberspace". In T. L. Hansen-Horn, & B. D. Neff (Eds.), *Public relations: From theory to practice* (pp. 46–73). Boston, MA: Pearson.
- [21] Kanter, B. (2009, May). "4 ways social media is changing the non-profit world". Accessed 15.08.09. <http://mashable.com/2009/05/22/nonprofit-social-media/>
- [22] Kent, M. L. (2008). "Critical analysis of blogging in public relations". *Public Relations Review*, 34(1), 32–40.
- [23] Madden, M. (2010). "Older adults and social media". Washington, DC: *Pew Internet and American Life Project*. Available from: <http://www.pewinternet.org>
- [24] Nielsen. (2009, March). "Global faces and networked places". Accessed 10.10.09. <http://blog.nielsen.com/nielsenwire/wpcontent/uploads/2009/09/nielsen-global-faces-mar09.pdf>
- [25] Taylor, M., Kent, M. L., & White, W. J. (2001). "How activist groups are using the Internet to build relationships". *Public Relations Review*, 27(3), 263–284.
- [26] Universal McCann. (2008, March). "Power to the people—Wave 3 study on social media trends". Accessed 10.10.09. www.universalmccann.com/Assets/wave320080403093750.pdf
- [27] Bruque, S., Moyano, J., & Eisenberg, J. (2008). "Individual adaptation to IT-induced change: The role of social networks". *Journal of Management Information Systems*, 25, 177–206.
- [28] Bryer, T. A., & Zavattaro, S. M. (2011). "Social media and public administration. *Administrative Theory & P*".