SOCIAL MEDIA, TECHNOLOGY ACCEPTANCE AND TRUST

George Cristian NISTOR
Faculty of Economics and Business Administration „Alexandru Ioan Cuza" Univesity
Iași, Romania
nistorcristian@gmail.com

Abstract: *The purpose of the study is to test a model adapted from the Technology Acceptance Model (Adoption of Social Media Technology) in the context of market oriented organizations in Romania. The current study therefore intends to examine the effect of social influences and market orientation on Social Media adoption by organizations with the managers. In this way we open the road to a broader research in trying to identify the role of technology acceptance among campaign managers and the successful electoral campaign of actual Romanian president.*
Keywords: *Social media, Marketing, Technology acceptance*

INTRODUCTION

Social Media Phenomenon sent managers, marketers or political candidates around the world in a whirlwind, trying to keep up with changes in consumer behavior and the difficulty of recovery potential of this new online channel. With the rapid development and adoption of mobile technologies, social media is now accessible anywhere and at any time.

For marketers, social media has the power to achieve great results with minimum cost and in less time, but to do this, it creates incalculable risks because many organizations are not yet ready to face. Such risk refers to the problem of how engagement with consumers could affect their subsequent behavior through Social Media. Created real value in social media strategy is the creation of relationships. Online relationships are based on mutual interest and gain which, in turn, leads to customer loyalty and also by internal loyalty and trust. So, understanding the true value of Social Media seems to be a prerequisite for organizations to open the path to new business and social benefits of new operations and behaviors but also to electoral success.

The research is focused on the impact of social media applications on corporate processes [Yakel, 2006], the importance of online communities for corporations [Du and Wagner, 2006] or the effects of new technologies on business [Boll, 2007]. A growing number of studies suggest that corporate interest in the Social Media is growing and more organizations are incorporating various forms of Social Media in business routine [Cymfony, 2006].

Understanding the nature, operation and effects of Web 2.0 applications seem to be imperative for marketers [Stroud, 2006]. Marketers, in business organizations or political ones, need to recognize that engaging in social media is the best way to communicate with the growing number of consumers who spend a considerable part of their time online. The public is difficult to achieve with traditional marketing methods and tools.

The link between Politics and Marketing has come about because of the need for political parties to satisfy the wants and needs of their target voter markets through the strategic marketing of their values [Baines, Harris and Lewis, 2002].

RESEARCH METHODOLOGY

This study finds originality on two levels: first, testing technology adoption model under Social Media based on a sample of managers in Romania. This may allow further generalization TAM model. Second, compared with previous research on technology adoption, this study uses a non-student sample. This is especially important when studying innovation adoption because students are perceived to be likely to adopt new habits.

Goals, objectives and research hypotheses:

The aim of the study is to test a model adapted from the Technology Acceptance Model (Social Media Technology Adoption) in the context of market oriented organizations in Romania.

Research problem is to identify factors associated with the adoption and use of social media by organizations and are market oriented.

The research method:

Studies aimed at testing different models adapted from the Technology Acceptance Model using inquiry as a research method.

The quantitative research in this paper does not follow a particular study, because we found a suitable model to test the managers.

The research method used is based on questionnaire survey.

Sampling

Planned sample is one of convenience, non-probability. It is composed of persons who have responsibilities as a manager that is part the management team they belong to. The managers in the sample are in Iasi, Bucharest, Suceava, Cluj Napoca and Craiova counties in Romania.

RESEARCH MODEL AND HYPOTHESIS

General hypothesis 1: Subjective norm influence of social media adoption by organizations that are market-oriented. Adoption is composed of: 1). Attitude towards use, 2). Behavioral Intention of Use and 3). Actual use.

If hypothesis 1 is true, then the model is verified following statistical assumptions:

H1a: Subjective norm positively influences perceived usefulness.

H1B: Subjective norm positively influences Intention to Use Social Media Behavior.

H1C: Subjective norm positively influences the development of a market-oriented strategies.

General hypothesis 2: perceived control influence Behavioral Intention of Use. Perceived control consists of Perceived Internal Control (Computer self-efficacy) and Perceived External Control (Facility Conditions).

If hypothesis 2 is true, then the model is verified following statistical assumptions:

H2a: Computer self-efficacy positively influences perceived usefulness.

H2b: Computer self-efficacy positively influences Perceived Ease of Use.

H2C: Conditions facilities positively influence perceived usefulness.

H2D: Conditions facilities positively influences Perceived Ease of Use

General hypothesis 3: Experience with Social Media influence perceived usefulness and ease of use perceived.

If hypothesis 3 is true, then the model is verified following statistical assumptions:
H3A: Experience with Social Media positively influences perceived usefulness.
H3b: Experience with Social Media positively influences Perceived Ease of Use.
General hypothesis 4: perceived usefulness is a strong factor for Behavioral Intention to Use Social Media organizations with market-oriented strategies.
If hypothesis 4 is true, then the model is verified following statistical assumptions:
H4a: Perceived usefulness positively influences the attitude towards the use of Social Media.
H4b: Perceived usefulness positively influences Perceived Ease of Use.
H4c: Perceived ease of use positively influence attitudes towards the use of Social Media.
The test also links to TAM:
H5: Attitude toward Using Social Media positively influence Behavioral Intention of Use Social Media
H6: Behavioral Intention to Use Social Media positively influence the effective use of Social Media
General hypothesis 7: Organization of market orientation influences technology adoption and use of Social Media.
7 If the hypothesis is true, then the model is verified following statistical assumptions:
H7a: Strategic Perspective positively influence attitudes towards the use of Social Media.
H7b: Implementing a market-oriented strategy positively influences Intention to Use of Social Media
H7c: Implementing a market-oriented strategies positively influence the effective use of Social Media
H7d: Developing a strategic perspective positively influence market-oriented strategies.
H7e: Developing a market-oriented strategies positively influence the implementation of market-oriented strategies.

RESULTS

The proposed research is a model adapted from the Technology Acceptance Model (TAM). The proposed model is shown in Figure 1. We verified that the proposed model is valid and adequate sample data. We used analysis of SEM (structural equation modeling), available through the software package AMOS 16.0. We developed a procedure for specifying the measurement model and the structural. Another step was ascertaining trust and validity model using confirmatory factor analysis. The internal consistency of the scales was measured by Cronbach-alpha.

Chosen indicators to check the adequacy of the model confirms that the model is a good one, according to the data below

Confirmatory analysis results for the structural model:

Indicator obtained	Reference values
Absolute indicators	
Hi square = 6029.15	(sig> 0.05)
Degrees of freedom = 1313	

Sig = 0.00
CMIN = 940 ≥ 0.05
CMIN / DF = 4.592 < 5
RMSEA = 0.06 < 0.08
GFI = 0.928 >0.9
RMR = 0.303 A low value of this indicator (closer to 0) and accepting the null hypothesis (sig> 0.05) means that the model reproduces the samples covariance enough, and therefore a good model [Brown, 2006].

Although Hi square test has several limitations (large samples, the value increases, rejecting good models) reporting is required, together with the number of degrees of freedom.
≤ 0.05 [Arbuckle, 2007; Garson, 2009]
Hi squared coefficient ratio (Minimum Sample discrepancy)
<5 [Arbuckle, 2007; Schumacher and Lomax, 2009]
Root Mean Square Error of Approximation (square root of the average errors)
≤ 0.05 [Hu and Bentler, 2009]
Goodness of Fit (correlation test)
≤ 0.08 acceptable model [Hooper et al, 2008].
Root Mean Square Residual (root mean square residual values)
The value is closer to 0 the more we have a suitable model [Arbuckle, 2007].

Relative indicators
CFI = 0.943
TLI = 0.92 Comparative Fit Index (Index of relative correspondence)
≤ 0.09 [Brown, 2006]
Tucker-Lewis index (Tucker-Lewis index)
≤ 0.09 [Brown Bonnet, 1980]
Indicators that penalizes model complexity
PNFI = 0.562 Parsimonious Normed Fit Index (Index normalized correlation model economy)
≤ 0.5 [Hooper et al, 2008]

Confirmation / denial assumptions
H1a: Subjective norm positively influences perceived usefulness.
Subjective norm ($\beta = 0.62$, $p = 0.05$) positively influences perceived usefulness.
Hypothesis H1a is confirmed.
H1B: Subjective norm positively influences Intention to Use Social Media Behaviour. Subjective norm ($\beta = -0.34$, $p = 0.05$) positively influence behavior use Social Media.
H1B hypothesis is not confirmed.
H1C: Subjective norm positively influences the development of a market-oriented strategies. Subjective norm ($\beta = 0.28$, $p = 0.05$) positively influences the development of a market-oriented strategies.
H1C hypothesis is confirmed.
H2a: Computer self-efficacy positively influences perceived usefulness. Computer self-efficacy ($\beta = 0.15$, $p = 0.05$) positively influences perceived usefulness.

Hypothesis H2a is confirmed.
H2b: Computer self-efficacy positively influences Perceived Ease of Use. Computer self-efficacy ($\beta = 0.16$, $p = 0.05$) positively influences Perceived Ease of Use.
Hypothesis H2b is confirmed.
H2C: Conditions facilities positively influence perceived usefulness. Conditions facilities ($\beta = -0.45$, $p = 0.05$) positively influences Perceived Ease of Use.
H2C hypothesis is not confirmed.
H2D: Conditions facilities positively influence user perceived. Conditions facilities ($\beta = 0.41$, $p = 0.05$) positively influences Perceived Ease of Use.
H2D hypothesis is confirmed.
H3A: Experience with Social Media positively influences perceived usefulness. Experience with Social Media ($\beta = 0.76$, $p = 0.05$) positively influences perceived usefulness.
H3A hypothesis is confirmed.
H3b: Experience with Social Media positively influences Perceived Ease of Use. Experience with Social Media ($\beta = -0.40$, $p = 0.05$) positively influences Perceived Ease of Use.
Hypothesis H3b is not supported.
H4a: Perceived usefulness positively influences the attitude towards the use of Social Media. Perceived usefulness ($\beta = 0.85$, $p = 0.05$) positively influence attitudes towards the use of Social Media
Hypothesis H4a is supported.
H4b: Perceived usefulness positively influences Perceived Ease of Use. Perceived usefulness ($\beta = 0.96$, $p = 0.05$) positively influences Perceived Ease of Use.
H4b hypothesis is confirmed.
H4c: Perceived ease of use positively influence attitudes towards the use of Social Media. Perceived ease of use ($\beta = -0.16$, $p = 0.05$) positively influence attitudes towards the use of Social Media.
H4c hypothesis is not confirmed.
H5: Attitude toward Using Social Media positively influence Behavioural Intention to Use Social Media Use Social Media attitude ($\beta = 1.61$, $p = 0.05$) positively influence Behavioural Intention of Use Social Media
Hypothesis H5 is confirmed.
H6: Behavioural Intention to Use Social Media positively influence effective use of Social Media. Attitude to Use Social Media ($\beta = 0.8$, $p = 0.05$) positively influence the effective use of Social Media.
Hypothesis H6 is confirmed.
H7a: Strategic Perspective positively influence attitudes towards the use of Social Media. Strategic perspective ($\beta = 0.13$, $p = 0.05$) positively affects attitude toward use of Social Media.
H7a hypothesis is confirmed.
H7b: Implementing a market-oriented strategy positively influences Intention to Use Social Media to implementing a market-oriented ($\beta = -0.49$, $p = 0.05$) positively influences Intention to Use of Social Media.
H7b hypothesis is not confirmed.

H7c: Implementing a market-oriented strategies positively influence the effective use of Social Media. Implementing a market-oriented strategies (β = -0.01, p = 0.05) positively influence the effective use of Social Media.
H7c hypothesis is not confirmed.
H7d: Developing a strategic perspective positively influence market-oriented strategies. Strategic perspective (β = 0.57, p = 0.05) positively influences the development of a market-oriented strategies.
H8d hypothesis is confirmed.
H7e: Developing a market-oriented strategies positively influence the implementation of market-oriented strategies. Developing a market-oriented strategies (β = 1.23, p = 0.05) positively influences the implementation of market-oriented strategies.
H8e hypothesis is confirmed.

CONCLUSIONS

Theoretical

A theoretical contribution is an attempt to develop and test a structural model, a procedure frequently used in research studies in Romania, but widely used internationally, especially in social sciences [Hooper, et. al, 2008]. The main purpose of this paper is testing a model adapted from the Technology Acceptance Model (Adopt Social Media Technologies) in the context of market oriented organizations in Romania.
We found this link as Subjective Norm concepts and market orientation as social norms and interpersonal plays a significant role in decisions that affect the organization [Yi et al., 2006].
In general, this paper presents a theoretical understanding of social media and their influence on technology acceptance decisions in order a better understand the factors behind the effective use and acceptance of technology by organizations like Social Media and Marketing Strategy.

Research limits

The small size of the study sample did not allow statistical analysis deeper. A larger sample would allow testing the model separately in each market. Also, the study focused only on the most important use of social media technologies. Further study could be applied directly and individually model each technology Social Media (Facebook, Twitter, YouTube, etc.).
Conclusions of the study are valid only for managers in Romania. Existence of scales with three items can alter the results.

Future research

Based on the above limitations, there are many possibilities to validate the model and its application. This model can be used as a model as a backbone for empirical research by, for example, investigating the degree of variance explained by the model Subjective norm. This can be achieved through a specific study of a single social media technologies where data will be collected through a combination of social network analysis and specific methodology TAM. A comparable methodology, but with a different object in a context online, was applied by Wasko and Faraj (2005). Another possibility would be to implement longitudinal studies in order to examine trends over time even social influence at two different times. Future research may

consider additional features of social media and social pressures investigation, such as exposure to these technologies or intensity of use [Valente, 1996]. We will also project a broader research in trying to identify the role of technology acceptance among campaign managers and the successful electoral campaign of actual Romanian president. As the prime-minister of Romania for the past two and a half years, Mr.. Victor Ponta has had a Facebook page long before (September 2010) Mr. Iohannis (May 2014). Ponta's followers have been increasing steadily from the beginning (including two potentially suspicious step changes in 2013 and 2014) and in May 2014, when Iohannis started his official Facebook page, Ponta already had around 400,000 followers. Iohannis didn't have any mentionable amount until a few weeks before the elections (Csala, 2014) And he reached, in the second round Election Day, 1 million likes. How did that happen? Is there a link between those numbers and the amazing Iohannis`s victory? And more, did the technology acceptance among his campaign managers counted? These are going to be our next step in exploring Social Media, Technology acceptance and Customer loyalty (here Voting Behavior).

References

1. Baines, Paul, Harris, Phil and Lewis, Barbara (2002). The Political Marketing Planning Process: improving image and message in strategic target areas. *Marketing Intelligence and Planning* 20(1): 6:14. doi: 10.1108/02634500210414710

2. Boll S., (2007), MultiTube—Where Web 2.0 and Multimedia Could Meet, *IEEE Multimedia*, Vol 14, issue 1, pp. 9-13

3. Csala, Dénes, "*How Social Media Won the 2014 Romanian Presidential Elections for Klaus Iohannis*?", 2014, https://csaladenes.wordpress.com

4. Cymfony. (2006), *Making the case for a Social media Strategy*, White paper, www.cymfony.com, accesat pe 1.07. 2011.

5. Du H., Wagner C., (2006). Weblog success: Exploring the role of Technology, *Int. Journal Human – Computer studies*, nr 64, pp 789 – 798 Ross, C. O., Sisic, M., Arseneault, J., Simmering, M. G., şi Orr, R. R. (2009). Personality and motivations associated with Facebook use. Computers in Human Behavior, 25, pp. 578-586.

6. Nistor, G.C. (2010), The Key Of Influence In Social media, *Revista Economică* Sibiu, ISSN 1582-6260, pp. 112-117

7. Nistor, G.C. (2011), *A Conceptual Model for the Use of Social median Companies*, SSRN http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1898670

8. Rouziès, D., Anderson, E., Kohli, A. K., Michaels, R. E., Weitz, B. A., şi Zoltners, A. A. (2005). Sales and marketing integration: A proposed framework. *Journal of Personal Selling and Sales Management*, 25(2), pp.113–122.

9. Stroud D., (2008), Social networking: An age-neutral commodity – Social networking becomes a mature web application, *Journal of Direct, Data and Digital Marketing Practice*, vol 9, nr. 3, pp. 287-292

10. Szajna, B. (1994). Software evaluation and choice: Predictive validation of the technology acceptance instrument. *MIS Quarterly*, Vol. 18, No. 3, pp. 319 – 324.

11. Szajna B.(1996). Empirical evaluation of the revised technology acceptance model, *Management Science* 42 (1), 1996, pp. 85–92.

12. Yakel E., (2006).Inviting the user into the virtual archives, *OCLC Systems and Services*, vol 22, nr 3, pp 159 - 163

13. Venkatesh, V. (1999). Creation of Favorable User Perceptions: Exploring the Role of Intrinsic Motivation. *MIS Quarterly*, Vol. 23, No. 2, pp. 239 – 260.

14. Venkatesh, V. (2000). Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation, and Emotion into the Technology Acceptance Model. *Information Systems Research*, Vol. 11, No. 4, pp. 342 – 365.

15. Watts, D.J. The "New" Science of Networks. (2004) *Annual Review of Sociology*, 30 pp. 243-270.