International Journal of Business and Management; Vol. 8, No. 7; 2013
ISSN 1833-3850 E-ISSN 1833-8119
Published by Canadian Center of Science and Education

The Impact of Social Media-Focused Information & Communication Technologies on Business Performance via Mediating Mechanisms: An Exploratory Study on Communication and Advertising Agencies in Turkey

Fatih Geçti[1] & İkram Daştan[1]

[1] Faculty of Economics and Administrative Sciences, Yalova University, Turkey

Correspondence: Fatih Geçti, Department of Management, Faculty of Economics and Administrative Sciences, Yalova University, Safran Campus, 77100, Yalova, Turkey. E-mail: fgecti@yalova.edu.tr

Received: February 12, 2013 Accepted: March 12, 2013 Online Published: March 18, 2013

doi:10.5539/ijbm.v8n7p106 URL: http://dx.doi.org/10.5539/ijbm.v8n7p106

Abstract

The purpose of this study is to investigate the effects of social media-focused information & communication technologies on business performance via some mediating variables. These mediating variables are marketing-based outputs and costs. In this context, a survey was conducted on 152 communication & advertising agencies operating in Turkey that were selected through convenience sampling method. A research model was developed and the proposed relationships were tested using structural equation modeling via AMOS. The empirical findings indicate that social media-focused information & communication technologies positively affect the business performance via the mediation of marketing-based outputs and costs.

Keywords: social media, information & communication technologies, marketing, costs, business performance

1. Introduction

Businesses have to use technology effectively to achieve their goals. Due to globalization, businesses have to compete with competitors not only from their own country but also from other countries. This situation forces businesses to make global level plans and changes. Rapidly changing and developing technologies and their adaptation to the businesses bring along a new process. Businesses need to choose the right technology and adapt to their operations.

One of the primary purposes of investment in information and communication technology systems by businesses is to add real economic value to their businesses. It is assumed that all the expenditures made for information technology will bring a return on investment in economic terms. Every organization that wants to achieve success with information systems must carefully design and manage their information technology infrastructure (Laudon & Laudon, 2011). Digital technologies quickly change our communication style, purchasing behavior, business interactions, and many more areas. It is possible to talk about a complete transformation over time. Based on these developments, compared to older technologies, new technologies have been adopted and implemented more quickly by individuals and businesses. For example, mass production and use of central computers took nearly two decades, mobile devices in seven years, and social media in three years (Kare-Silver 2011).

Businesses making use of this situation are quickly engaging with these technologies and using them in their business structures and processes such as manufacturing, management, marketing, and more. In today's conditions, social media phenomenon, which came along with the changing and developing new technologies, affects both individuals and businesses. Businesses that use social media platforms are able to reach their customers quickly and easily and receive rapid feedback. Use of social media platforms reduces costs, strengthen communication, and make advertising easier. Even though it is a popular topic in recent years, there are not many comprehensive studies on the effects of social media applications and investments on business performance.

This study aims to explore the relationship between information & communication technologies specialized in social media and business performance with marketing-oriented outputs and costs as mediating factors. The field research of the study was conducted on communication and advertising agencies because of their intensive use of social media platforms and new digital technologies and their customer service on these technologies.

Even though it is a popular topic in recent years, there is a limited number of researches studying the effect of social media-focused information & communication technologies on business performance. Additionally, any large-scale study has not yet been made on Turkish communication & advertising industry. In this context, current study is an exploratory research study. Besides, this study is expected to offer a different perspective for practitioners in the industry in addition to provide conceptual contribution to the literature.

2. Theoretical Framework

Implementation of digital technologies has become a primary and upward transformational power that supports productivity, innovation, and job creation in every field of economy but especially in the service industry. Digital technologies, in myriad of ways, fortify sustainable growth, innovation, employment, and productivity in national economies. The 'new economy' that the new technologies lead to bring a new perspective, with both positive and negative aspects, for national economies and businesses and evokes the emergence of new applications. The consequences of this situation influences not only the industrialized societies but all countries and companies. Increasingly important global markets bring along global competition thanks to the Internet.

In a globalizing world, developments in information technologies for enterprises and social and business life are taking place at a rapid pace. Digital technologies quickly change the way we and enterprises communicate, interact, purchase, and many other behaviors. Personal computers that very few people owned twenty years ago are now everywhere and carry a guiding role in many areas of interaction (Kare-Silver, 2011). Enterprises that first used digital transformations to improve their work schemes later spread these transformations across all areas of the business for more efficiency. Additionally, increased business performance with the use of new technology attracted enterprises into technological innovation. Individuals and groups began to express themselves through digital platforms and the increase in this field has accelerated the transformational power of digital technologies.

Social media, which is generally conceptualized as a group of internet-based applications built on the foundations of Web 2.0 technology where users can create and modify content (Kaplan& Haenlein, 2009), has become a heavily used domains by both individuals and businesses in recent years. Social media constitute an interactional structure for users and organizations to create content and connections.

It is clear that social media offers a variety of opportunities for companies (Erdoğmuş & Çiçek, 2012). Social media is especially very influential in viral marketing and in the promotion of new products. Awareness of the companies to the effectiveness of social media has created a new line of work for information technology businesses and produced the comprehensive solutions in these areas.

New fields are added every day into social networks and the existing social structures are under continuous development. With the integration of social media elements into platforms such as CRM (Customer Relationship Management) and ERP (Enterprise Resource Planning), a variety of deals and offers for customers are produced by the combination of data from social networks and businesses and instant feedback on customer loyalty and new customer generation is garnered. Comments, news, or shares about products or companies in social networks, blogs, news sites so on are constantly monitored through specially developed software to collect information and to provide instant response. In this way, businesses have a chance to store and manage the unstructured information (Kietzman et al, 2011).

As there is not a generally accepted guiding theory in the development, use, and evaluation of information technologies or information systems, investments in information technology or information systems are often made use of work and theory from different disciplines (Molina, 2003). Researchers stated that it is a difficult and complex task to study the effects of information technologies on business performance because of the large number of surprising and external variables (Bakos, 1987).

When the relationship between information technology and performance is examined, the vast majority of the models assumes a direct link between certain performance criteria. A lot of other models were developed by adding various factors between these two structures (Molina, 2003). In this study, while maintaining this structure, costs and marketing-oriented variables are used as mediating factors on the influence of social media-based information &communication technologies on performance.

In this context, the proposed model of the present study is shown in Figure 1.

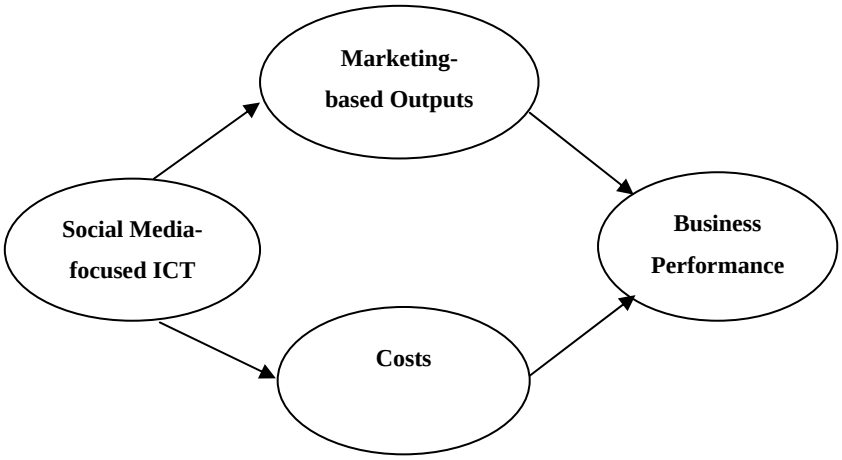

Figure 1. Proposed model

More powerful relationships between information &communication technologies and business performance has been founded with the use of new information technologies. Studies have identified a strong relationship between business characteristics, performance, and use of new information technology (Agarwal, 1997; Gray et al, 2000). Lee & Bose (2002), Shin (1999), and Kraemer & Dedrick (1996) stated that information and communication technology-based investments have boosted productivity and performance.

As one of the mediating factors in this study, costs have been studied in terms of their relationship with information and communication technologies and their influence on performance. Reduction in the costs and improvements in productivity are stated as fields strategically affected by the information technology (İraz, 2004). In another study, it was revealed that the purchasing and inventory costs of German companies have reduced after they started operating over the internet (Koening et al, 2004). A research on businesses conducted by the IDC (International Data Cooperation) shows that the customer relations and cost savings are among the top reasons for their internet use. Among the firms that participated in the research, 42.8% of the manufacturing firms, 32.2% of the retail firms, and 34.3% banking and insurance companies reported cost reductions as the underlying cause of their internet technology use (Turan, 2007: 105).

In their research, Porter & Millar (1985) showed that information technology changed the processes and reduced the costs. Çetinkaya (2007) investigated the effects of information and communication technologies (ICT) on lodging businesses and found that there is a positive relationship between the use of ICT and costs and a negative relationship between the ICT costs and business performance.

Based on the above discussion, the hypotheses are proposed as follows:

H1: Social media-focused information & communication technologies will positively influence costs.

H2: Costs will positively influence business performance.

Marketing-based outputs are another important factor for businesses operating in the communication and advertising sector. While information and communication technologies affect marketing-based outputs (brand loyalty, brand recognition, difference), there is a close relationship between intensive market-oriented innovative structures and marketing performance (improved brand awareness, customer satisfaction and loyalty) in service sector firms (Gray et al., 2000). Many researchers have demonstrated this relationship in their studies over time. Research on the relationship between business performance and marketing orientation presented strong evidence on the relationship between these two concepts (Avlonitis & Gounaris, 1999). In some studies, there was an inconsistent (Kohli & Jaworski, 1990) and a weak positive relationship between business performance and market orientation. Yet another study revealed no relationship between marketing-based outputs and performance (Sullivan et al, 2011).

In light of the preceding findings and discussion, the hypotheses are developed as follows:

H3: Social media-focused information & communication technologies will positively influence marketing-based outputs.

H4: Marketing-based outputs will positively influence business performance.

3. Research Methodology

3.1 Purpose of the Study

The main purpose of this exploratory study is to expose the role of social media-focused information & communication technologies, marketing-based outputs, and costs on the performance outcomes of communication & advertising agencies. In this context, the current study investigates to what extent social media-focused information&communication technologies in communication and advertising agencies affect business performance through mediating factors such as marketing-based outputs and costs.

3.2 Sample and Data Collection

Research population is composed of all the businesses (agencies) working in communication and advertising sector in Turkey. According to 2010 data from the Social Security Institution (Sosyal Güvenlik Kurumu-SGK), there is total of 4762 firms that do advertising and market research in Turkey. 4746 of these firms are in small and medium-sized enterprise (SME) category (Social Security Institute, 2010). Based on preliminary investigation, it was found that some firms that have a small size, 1-9 employees, and do printing, design, and organization classify themselves as advertising agencies, but in terms of activity field and produced output, they do not have characteristics of communications and advertising agencies. In this context, this study took into account and surveyed small and medium-sized businesses with 10-250 employees in order to make a more effective assessment. According to 2010 SGK data, there are 706 businesses with 10-250 employees. For this research, 240 communications and advertising agencies were contacted, but 152 provided a response.

3.3 Measures

The questionnaire of the study consists of two parts. In the first part, there is demographic information on the sample. In the second part, there are scales used to test the research model. 5-point Likert-type scale is used in the survey. Scales used in the study (Social Media-focused Information&Communication Technologies-ICT, Marketing-based Outputs, Costs and Business Performance) were adapted from Daştan's (2012) study. Statements in the scales are in Appendix 1.

3.4 Analysis Method

Relationships between the variables in the research model were analyzed and hypotheses were tested through structural equation modeling. Data were analyzed with AMOS.

4. Results

4.1 Participant Profile

Since the SME communication and advertising agencies were investigated in the study, businesses with 10-49 employees constitute the majority of the sample. Number of businesses with 10-49 employees is 108 (71.5%). The percentage of businesses with 50-99 employees is 17.2%, 100-149 employees 4.6%, 150-199 employees 4%, and businesses with 200-250 employees is 2.6%. In terms of years of business operation, sector average was 14.7. 17 of the businesses has been established in the last 5 years. 44 businesses in the sector with a percentage of 29.5% are in operation 6-10 years. 39 businesses (% 26.2) are in operation 11-15 years, 16 businesses (10.7%) are 16-20 years, and 14 businesses (9.4%) are in operation 21-25 years. 19 businesses operate in the sector for over 25 years. When the sectors that request service from the communication and advertising agencies were investigated, it was seen that the top five sectors were transportation and logistics services sector (64.5%), information and communication sector (63.2%), construction sector (60.5%), education sector (% 53.3) and media sector (% 51.3). The least served sectors were energy (3.9%), fuel oil (7.2%), retail (10.5%), and entertainment (17.1%).

4.2 Measurement Model

The study tested the measurement model before the structural equation modeling. Latent variables in the measurement model were, respectively, Social Media-focused ICT (Information and Communications Technologies), Marketing-based Outputs, Costs (decrease in the costs), and Business Performance. Measurement model provided acceptable fit statistics (Chi Square/Degree of freedom = 1.51; GFI =. 90; AGFI =. 86; TLI =. 93; CFI =. 94; RMSEA =. 05). Within the confirmatory factor analysis, convergent validity and discriminant validity analyses were carried out.

Measurement items and reliability results are displayed in Table 1.

Table 1. Measurement items & reliability

Construct	Standard Loadings	Composite Reliability (CR)	Average Variance Extracted (AVE)	Cronbach Alfa
Social Media-Focused ICT		.81	.56	.76
INF1	.46			
INF2	.96			
INF3	.96			
INF4	.40			
Marketing-Based Outputs		.66	.41	.63
MAR1	.42			
MAR2	.83			
MAR3	.60			
Costs		.75	.44	.75
COS1	.71			
COS2	.78			
COS3	.58			
COS4	.55			
Business Performance		.63	.39	.60
PRF1	.44			
PRF2	.86			
PRF3	.48			
C.R. = Composite Reliability = (Σ λ2) 2 / (Σ λ2) 2 + Σe				
A.V.E. = Average Variance Extracted = Σ (λ) 2 / Σ (λ) 2 + Σe				

Confirmatory factor analysis loadings of the social media-focused ICT variable ranged from .46 to .96. Composite reliability (CR) value related with the factor was .81, average variance extracted (AVE) value was .56, and Cronbach alpha value was .76. Confirmatory factor analysis loads of the marketing-based outputs variable ranged from .42 to .83. CR value of the factor was .66, AVE value .41, and Cronbach alpha value was .63. Confirmatory factor analysis loadings the costs variable ranged from .55 to .71. CR value of the factor was .75, AVE value .44, and Cronbach alpha value was .75. Confirmatory factor analysis loadings of the business performance variable ranged from .44 to .86. CR value of the factor was .63, AVE value .39, and Cronbach alpha value was .60.

As seen in the Table 1, AVE values of the marketing-based outputs, costs, and business performance factors were less than the critical value of 0.50. AVE coefficient is accepted to be a strict measure to test validity and reliability. However, it is expressed that when other reliability analyses are within the acceptable limits, AVE value can be tolerated (Berthon et al., 2005). Additionally, many researchers have stated that the reliability coefficient of .60 and above is acceptable in exploratory studies (Clark & Watson, 1995; Muller, 2009; Chaichi, 2012). In this regard, since both the fit indices and the item factor weights are at the acceptable levels for this preliminary exploratory study, it can be said that the convergent validity is achieved for the dimensions in the measurement model.

Discriminant validity was used in order to test whether the dimensions in the measurement model were really different from each other. Discriminant validity was tested with the Chi-square difference between the Model 1, where correlations between dimensions were uncontrolled, and the Model 2, where there were correlations between the dimensions (Zait & Bertea, 2011).

Results of discriminant validity are shown in Table 2.

Table 2. Results of discriminant validity

Model 1	Model 2
Chi-square: 161.233	Chi-square: 107.801
Degree of Freedom: 77	Degree of Freedom: 71
Probability Level: .00	Probability Level: .00
Δ Chi Square: 53.432	
Δ Degree of Freedom: 6	

Discriminant validity was calculated via the chi-square difference test. According to the test result, the difference was significant (p=0 < 0.05). Therefore, the four constructs provide discriminant validity.

Correlations among the constructs are shown in Table 3.

Table 3. Correlations among constructs

Constructs	1	2	3	4
1- Social Media-focused ICT	1.00			
2- Marketing-based Outputs	.46	1.00		
3- Costs	.23	.32	1.00	
4- Business Performance	.37	.35	.43	1.00

According to the Table 3, correlation values between the structures in the model ranged from .23 and .46.

4.3 Test of the Hypotheses

Structural equation modeling was used to test the hypotheses of the study. Structural model is shown in Figure 2.

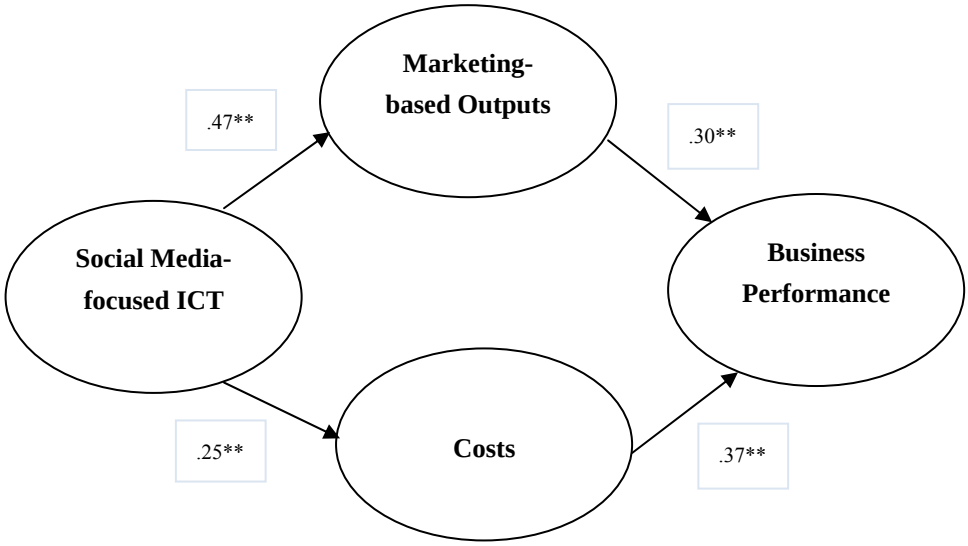

Figure 2. Structural model

Note. ** p< .001

Fit statistics of the structural model are indicated in Table 4.

Table 4. Structural model fit statistics

Structural Model	Fit Index					
	Chi-square/df	GFI	AGFI	TLI	CFI	RMSEA
	1.59	.90	.86	.92	.94	.06
R^2 (Costs) = .06 R^2 (Marketing-based Outputs) = .22 R^2 (Business Performance) = .25						

As seen in the Table 4, the all of the fit indices for the structural model were within acceptable limits. Additionally, Business Performance factor in the model explained .25 of the variance, Marketing-based Outputs factor .22 and Costs factor .06.

Results of hypothesis test were presented in Table 5.

Table 5. Results of hypothesis test

Hypothesized Path		Standardized Coefficents	T-Value	Sig.	Result
H1:Social Media-focused ICT →	Costs	.25	2.374	.018	Supported
H2: Costs →	Business Performance	.37	2.692	.007	Supported
H3: Social Media-focused ICT →	Marketing-based Outputs	.47	3.714	***	Supported
H4: Marketing-based Outputs →	Business Performance	.30	2.249	.025	Supported

Note *** p< .001

According to Table 5, hypothesis H1, which states that social media-focused information & communication technologies will positively influence costs, was accepted (β =. 25; t = 2.374; p < .05). Similarly, the costs had a meaningful and positive effect on business performance and hypothesis H2 was supported (β =. 37; t = 2.692; p < .05). Hypothesis H3, which states that social media-focused information & communication technologies will positively influence marketing-based outputs, was accepted (β = .47; t = 3.714; p < .001). The last hypothesis (H4) of the study states that marketing-based outputs will positively influence businesses performance. This hypothesis (β= .30; t = 2.249; p < .05) was also supported.

Direct, indirect, and total effects on the dependent variables of the research model were presented in the Table 6.

Table 6. Direct and indirect effects

	Social Media-focused ICT	Costs	Marketing-based Outputs
TOTAL EFFECT			
Costs	.25	-	-
Marketing-based Outputs	.47	-	-
Business Performance	.23	.37	.25
DIRECT EFFECT			
Costs	.25	-	-
Marketing-based Outputs	.47	-	-
Business Performance	-	.37	.30
INDIRECT EFFECT			
Costs	-	-	-
Marketing-based Outputs	-	-	-
Business Performance	.23	-	-

According to Table 6, the variable that directly affects business performance the most is costs (β = .37). There was a .30 direct effects of marketing-based outputs on business performance. In terms of indirect effects, there was .23 effects of social media-focused ICT on business performance through costs and marketing-based outputs. In terms of total effects, social media-focused ICT affects marketing-based outputs the most (β =. 47).

5. Conclusions and Discussion

The objective of this study was to show how social media-focused information & communication technologies influenced business performance in communication and advertising agencies with marketing-based outputs and costs as mediating factors. When the influence of social media-focused information & communication technologies on the costs was analyzed, it was revealed that these technologies reduce administrative costs, supplier/partner costs, internal communication costs, and customer management costs, which in turn positively influences the business performance. Marketing, sales, and promotional activities done in social media environments provided businesses an opportunity to act independently of their physical environments. The cost and administration of these activities were much fewer and much easier. The spread of e-commerce and administration of many business activities such as sales, marketing, and promotion in social media environments eliminated or reduced lots of business costs such as rent, lighting, heating, cooling, decorating, stationery, and etc.

This also significantly influenced the performance.

Additionally, social media platforms have provided significant benefits to businesses in terms of employees' communication with their colleagues in the same organization and with their customers. Researchers reported similar findings in their studies in the literature. Research on SMEs identified that the use of information and communication technologies reduced the production and sales costs and communication costs (Güleş et al., 2003). Research studies have indicated that one of the main reasons for the use of the internet and related technologies is the reduction in costs (Turan, 2007). Research findings of the present study established that social media-focused information and communication technologies reduced many cost items of the businesses, which in turn positively influenced their performance.

When the influence of social media-focused information and communication technologies on marketing-oriented outcomes are analyzed, it was revealed that these technologies positively affect brand recognition of the company and customer loyalty to products and services. Businesses try to create a link between their customers and products or services especially through promotion, advertising, customer satisfaction, and many different activities. When quick transfer of information, instant feedback, and broad areas of influence are considered especially in social media environments, businesses execute marketing-focused activities in these environments. Studies in the literature identified low-level positive relationship between being market-focused and performance (Kohli & Jaworski, 1990). The findings of this study also show that social media-focused information and communication technologies influence marketing-oriented outputs, which in turn positively influences the performance.

6. Limitations

It was a challenge to access reliable data on the number of companies and employees in the advertising industry in Turkey. This difficulty is related to the country-level data collection and compilation methods used for the indicators in the accessible primary data sources. Indicators such as the number of businesses, number of employees, and turnover in the databases of the Turkish Statistical Institute, Istanbul Chamber of Commerce, and the Social Security Institution provide a general picture of the advertising industry and the growth rates. However, there is not a clear distinction between the communication and advertising agencies and the detailed data on the number of employees, agencies, and turnover in these establishments is unavailable. This constitutes a limitation of the study.

The perceptual conclusions were used in the evaluation of business performance. More accurate conclusions can be drawn with evaluations based on the quantitative information (decreases in the costs, turnover increases, etc.). The perceptual expressions used in the study caused another limitation.

The last limitation is that the returns of the investments made in information and communication technologies can better be seen in the long run. For example, while investment in these technologies negatively influence the performance by initially increasing the costs, positively influence the performance in the long term as the investment pays itself off. Especially, the use of new digital technologies and social media, which can be a new field for businesses, in the study can be decisive for the performance values in the short term.

7. Implications and Suggestions

Conditions of the research period can be stated as an important factor in the researchers' discussions on the efficiency paradox in the literature. Research conducted during the periods of very limited and expensive technologies find that the technology adds cost to businesses and do not affect business performance and efficiency. When expressing this point today, on top of the fact that the information and communication technologies increase business efficiency, they are an indispensable element for businesses. Especially, the spread of e-commerce, mobile technologies, and the use of social media platforms in various areas of business made businesses completely dependent on technology and transformed them into structures without physical environments. Widespread usage needs to affect businesses more so in Turkey where the use of mobile technologies and social media is above the average of the European Union. In this respect, communication and advertising agencies need to suggest these structures for their customers and use in their own organizations. Communication and advertising agencies that focus on this field will make important benefits over their competitors in the upcoming future. Additionally, in order for businesses to increase their performance and to achieve success, they need to use information and communication technologies, social media platforms, and mobile technologies.

One of the most important criteria for businesses in choosing a communication and advertising agency is the agency's recognition, reputation, skill, ability, and creativity in marketing. Working with a well-known

communication and advertising agency increases the credibility of the business and makes a positive impact on the customers. This is possible with an efficient promotion and effective use of social media.

References

Agarwal, D. (1997). *An empirical investigation of the impact of advanced manufacturing technology on business performance*. Unpublished Ph.D. Thesis, City University of New York, New York.

Avlonitis, G. J., & Gounaris, S. P. (1999). Marketing orientation and its determinants: an empirical analysis. *European Journal of Marketing*, *33*(11/12), 1003-1037. http://dx.doi.org/10.1108/03090569910285896

Bakos, J. Y. (1987). *Dependent variables for the study of firm and industry-level impacts of information technology.* Proceedings of the Eighth International Conference on Information Systems, pp. 10-23. Retrieved from http://dspace.mit.edu/bitstream/handle/1721.1/47212/dependentvariabl00bako.pdf?sequence=1

Berthon, P., Ewing, M., & Hah, L. L. (2005). Captivating company: dimensions of attractiveness in employer branding. *International Journal of Advertising*, *24*(2), 151-172.

Çetinkaya, A. Ş. (2007). Bilişim teknolojilerinin konaklama işletmeleri performansına etkileri: beş yıldızlı otellere yönelik bir araştırma. Yayınlanmamış Doktora Tezi. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.

Chaichi, K. (2012). Impact of staff training on customer satisfaction in travel agencies in klang valley Malaysia. *European Journal of Social Sciences, 29*(2), 270-282.

Clark, L. A., & Watson, D. (1995). Constructing validity: basic issues in objective scale development. *Psychological Assessment, 7*(3), 309-319. http://dx.doi.org/10.1037/1040-3590.7.3.309

Daştan, İ. (2012). Sosyal medya odaklı bilgi ve iletişim teknolojilerinin işletme performansına etkisi: reklamcılık sektöründe ampirik bir çalışma. Yayınlanmamış Doktora Tezi, Atatürk Üniversitesi Sosyal Bilimler Enstitüsü, Erzurum.

Erdoğmuş, İ., & Çiçek, M. (2012). The impact of social media marketing on brand loyalty. *Procedia-Social and Behavioral Sciences, 58*, 1353-1360. http://dx.doi.org/10.1016/j.sbspro.2012.09.1119

Gray, J. B., Matear, S. M., & Matheson, P. K. (2000). Improving the performance of hospitality firms. *International Journal of Contemporary Hospitality Management, 12*(3), 149-155. http://dx.doi.org/10.1108/09596110010320643

Güleş, H. K., Bülbül, H., & Çelebi, A. (2003). Küçük ve orta ölçekli sanayi işletmelerinde elektronik ticaret uygulamaları. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 9*, 463-482.

İraz, R. (2004). Organizasyonlarda karar verme ve iletişim sürecinin etkinliği bakımından bilgi teknolojilerinin rolü. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *11*, 407-422.

Kaplan, A. M., & Haenlein, M. (2009). Users of the world, unite! the challenges and opportunities of social media. *Business Horizons*, *53*(1), 59-68. http://dx.doi.org/10.1016/j.bushor.2009.09.003

Kare-Silver, M. (2011). e-shock 2020: how the digital technology revolution is changing business and all our lives. Palgrave Macmillan, New York.

Kietzman, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? get serious! understanding the functional building blocks of social media. *Business Horizons, 54*(3), 241-251. http://dx.doi.org/10.1016/j.bushor.2011.01.005

Koening, W., Wigand, R. T. & Backs, R. (2004). *Globalization and e-commerce: diffusion and impact of the internet and e-commerce in Germany.* Center for Research on Information Technology and Organizations, University of California, July 2004, pp. 1-65. Retrieved from http://www.escholarship.org/uc/item/1nm4f459#page-1

Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *Journal of Marketing, 54*(2), 1-18. http://dx.doi.org/10.2307/1251866

Kraemer, K., & Dedrick, J. (1996). IT and economic development: international competitiveness. In Dutton, W. H. & Peltu M. (Eds.), *Information and communication technologies: visions and realities.* Oxford University Press, USA.

Laudon, K. C., & Laudon, P. J. (2011). *Management information systems: managing the digital firm*. Prentice Hall, New Jersey.

Lee, J., & Bose, U. (2002). Operational linkage between diverse dimensions of Information Technology investments and multifaceted aspects of a firm's economic performance. *Journal of Information Technology, 17*, 119-131. http://dx.doi.org/10.1080/02683960210161249

Molina, E. S. (2003). *Evaluating IT investments: a business process simulation approach*. Stockholm: Royal Institute of Technology.

Muller, R. S. (2009). The impact of employee engagement on the business success of johnson controls uitenhage. Unpublished Dissertation, NMMU Business School, Republic of South Africa.

Porter, M. E., & Millar, V. E. (1985). How information gives you competitive advantage. *Harvard Business Review, 63*(4), 149-160.

Shin, N. (1999). Does information technology improve co-ordination? an empirical analysis. *Logistics Information Management, 12*(1/2), 138-144. http://dx.doi.org/10.1108/09576059910256592

Social Security Institute. (2010). SGK 2010 İstatistik Yıllığı. Retrieved from http://www.ssk.gov.tr/

Sullivan, G., Fitzgerald, J. & Djokic, B. (2011). Market orientation and business performance: the point of diminishing returns in community banks. *Singidunum Rejiva, 8*(2), 1-4.

Turan, A. H. (2007). Kaynak temelli yaklaşım bağlamında bilişim sistemlerinin KOBİ'lerin performansına etkileri: Denizli ilinde ampirik bir çalışma. Yayınlanmamış Doktora Tezi. Adnan Menderes Üniversitesi Sosyal Bilimler Enstitüsü, Aydın.

Zait, A., & Bertea, P. E. (2011). Methods for testing discriminant validity. *Management & Marketing, 9*(2), 217-224.

Appendix

Appendix 1. Statements in the scales

Constructs/Items	Operationalization
SOCIAL MEDIA -FOCUSED ICT	
INF1: Marketing activities via e-mail	1-Much Decreased ...
INF2: Facebook account activities	5-Much Increased
INF3: Ads on Facebook pages (banner, adwords , etc.)	
INF4: Twitter account activities	
MARKETING-BASED OUTPUTS	
MAR1: Company's brand is more recognized than rivals.	1-Strongly Disagree ...
MAR2: Customers are much loyal to our products/services.	5-Strongly Agree
MAR3: We have skills in digital technologies to differentiate us from others.	
COSTS	
COS1: Decrease in administrative costs	1-Strongly Disagree ...
COS2: Decrease in internal communication costs	5-Strongly Agree
COS3: Decrease in customer management costs	
COS4: Decrease in costs related to suppliers/partners.	
BUSINESS PERFORMANCE	
PRF1: Turnover	1-Much Decreased ...
PRF2: Standardization level of company activities	5-Much Increased
PRF3: Number of company's counseling activities	