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FACTORS IMPACTING THE ADOPTION OF E-COMMERCE BY MICROFINANCE COMPANIES IN JORDAN

The present study seeks to investigate the status of e-commerce within Jordanian microfinance companies and to empirically test the factors affecting successful implementation of e-commerce. The study also investigates how Jordanian microfinance companies' benefit from generous advantages created by such applications and avoid the barriers that hinder e-commerce implementation. The study found that only 10 variables out of 12 have positive effect on e-commerce adoption. The most important influence was the ease of use and Internet access. The two unsupported variables involved employee's skills, and training and suppliers' pressure. The most important benefit encouraging e-commerce adoption is building trust with customers and the most important barrier that inhibit its adoption is the lack of electronic payment systems.

Keywords: e-commerce; microfinance; Jordan; Internet access.

Васфі Алравабде

ЧИННИКИ ВПЛИВУ НА ВПРОВАДЖЕННЯ ЕЛЕКТРОННОЇ КОМЕРЦІЇ МІКРОФІНАНСОВИМИ КОМПАНІЯМИ В ЙОРДАНІЇ

У статті досліджено стан справ щодо провадження електронної торгівлі мікрофінансовими компаніями Йорданії. Емпірично протестовано фактори, що впливають на успішне впровадження е-комерції. Також досліджено, які є переваги для йорданських мікрофінансистів від впровадження даної групи технологій та бар'єри, що перешкоджають популяризації е-комерції. Доведено, що тільки 10 змінних з 12 досліджених позитивно впливають на е-комерцію в країні. Найбільший вплив мають легкість використання та доступ до Інтернету. Два чинники негативного впливу — це навички персоналу та його навчання, а також тиск з боку постачальників. Головною перевагою від впровадження можна вважати посилення довіри з боку клієнтів, а найбільш відчутним бар'єром — недорозвиненість електронних платіжних систем у країні.

Ключові слова: електронна комерція; мікрофінанси; Йорданія; доступ до Інтернету.

Табл. 6. Літ. 43.

Васфі Алравабде

ФАКТОРЫ ВЛИЯНИЯ НА ВНЕДРЕНИЕ ЭЛЕКТРОННОЙ КОММЕРЦИИ МИКРОФИНАНСОВЫМИ КОМПАНИЯМИ В ИОРДАНИИ

В статье исследовано положение дел с ведением электронной торговли микрофинансовыми компаниями Иордании. Эмпирически протестированы факторы, влияющие на успешное внедрение э-коммерции. Также исследовано, какие есть преимущества для иорданских микрофинансистов от внедрения данной группы технологий и барьеры, препятствующие популяризации э-коммерции. Доказано, что только 10 переменных из 12 исследуемых позитивно влияют на э-коммерцию в стране. Наибольшее влияние имеют лёгкость использования и доступ к Интернету. Два фактора с негативным влиянием — это навыки персонала и его обучение, а также давление со стороны поставщиков. Главным преимуществом от внедрения можно считать укрепление доверия со стороны клиентов, а самым ощутимым барьером — недоразвитость электронных платёжных систем в стране.

Ключевые слова: электронная коммерция; микрофинансы; Иордания; доступ к Интернету.

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Introduction. E-commerce has been in existence in different forms since as early as 1960s, but for the last two decades the evolvement of e-commerce has caused companies perform their functions better, faster and in more cost effective way than previously (Chaffey and White, 2010; Thomas and Simmons, 2010; Sanabel, 2014). Today as a result of the revolution that occurred in the technology and telecommunications, e-commerce has emerged and spread rapidly in developed countries and slowly in developing countries such as Jordan (Kurnia and Peng, 2010; Grimsholm and Poblete, 2010; Al-Abdallah, 2013).

In recent years many companies and banks in Jordan have started the adoption of e-commerce and depending on it to accomplish their daily transactions and processes. That is the result of the IT revolution that affects both developed and developing countries all over the world. Jordan is affected by its revolution and it's trying to benefit from these opportunities. However, there is still a gap between Jordan and the developed world in the level of e-commerce adoption by financial institutions and microfinance organizations specifically. Many factors are found to have influence on the adoption of e-commerce. Therefore, this study will shed light on these factors and also reveal benefits and barriers that affect e-commerce implementation within Jordanian microfinance.

Microfinance organizations in Jordan. There are 13 microfinance companies in Jordan that are playing an ever-growing role in the financial sector with more than 200 thousand clients as of 2013 (Sanabel, 2014). Microfinance companies in Jordan are divided into 5 categories (not-for-profit company, for profit company, commercial banks, donor agency and governmental agencies). The not-for-profit microfinance companies in Jordan consist of 4 registered organizations (Al Watani National Microfinance Bank (NMB), Middle East Microcredit Company (MEMCC), Micro Fund for Women (MFW) and Tamweelcom). Commercial companies that are labeled as microfinance institutions whose sole activity is microcrediting include 3 companies: Ahli Microfinance Company (AMC), AlAmin, and The Foundation for International Community Assistance (FINCA) Jordan. There is one commercial bank called Cairo Amman bank; one donor United National Relief and Works Agency for Palestine Refugees in the Near East (UNWRA) and one governmental agency that disburse micro and small loans.

Factors influencing e-commerce adoption. Many studies have discussed the factors that affect the adoption of e-commerce technology in different parts of the world. However, it's difficult to discuss these studies in detail in this paper. Therefore, Table 1 shows a summary for these studies focusing on the important factors that influence e-commerce adoption in different countries.

From all the studies shown above, factors affecting e-commerce adoption can be grouped into 3 categories. These include **technological** factors that involve (security and privacy, ease of use and Internet access, information system, and relative advantage), **organizational** factors that involve (organization size, top management support, organization structure, and employees' skills and training), and **environmental** factors that involve (suppliers' pressure, competition intensity, government pressure, regulatory issues) (Molla and Licker, 2009). These factors are discussed in details in the following sections.

Table 1. Summary of the studies that focus on the important factors that influence e-commerce adoption in various countries

Author (Year)	Country
Bedman (2012)	Ghana
Philippe et al. (2013)	New Zealand
Al-Abdullah et al. (2013)	Malaysian SMEs
Nash et al. (2012)	10 countries
Al-Qirim (2013)	New Zealand
Apulu and Latham (2011)	Nigeria
Hinson (2011)	UAE, Egypt, Lebanon
Houghton and Winklhofer (2004)	Australia
Sajuyigbe (2012)	Saudi Arabia
Chain (2010)	UK
Tian et al. (2013)	Malaysia
Nasah, et al. (2012)	10 countries
Iddris (2012)	Jordan
Abbad et al. (2011)	Jordan
Al-Weshah (2012)	Jordan
Al-Hudhaif (2012)	Jordan

1. Technological factors. Technical factors were described in (Humphreys, McIvor and Huang, 2003) as the issues related to acquiring appropriate technologies to meet business requirements. These factors could prohibit firms especially smaller businesses from adopting e-commerce such as online banking. Indeed, a number of studies indicated that technical issues especially those related to information security and information technology risks were restraining the adoption of e-commerce (Sulaiman, 2000; Lawson et al., 2013). Technological factors involve security and privacy, ease of use and Internet access, information system and relative advantage as explained next. Thus, the following hypothesis can be derived:

H1. Technological factors have positive impact on e-commerce adoption by microfinance companies in Jordan:

1) *security and privacy.* E-commerce consumers' taking security and privacy into consideration as one of the most critical factors in their e-commerce decisions (Selz and Schubert, 1997). G. Lohse and P. Spiller (1998) looked at it in two different ways: on one hand, protection of transactional details of customers, on the other – privacy of personal information of the respondents. According to (Lawson et al., 2013) "trust" is a term used to tackle the issues of security, which is an attribute embraced by e-commerce and considered critical it. Thus, the following hypothesis can be derived:

H1-1. Security and privacy have positive impact on e-commerce adoption by microfinance companies in Jordan.

2) *ease of use and access to Internet.* A.S. Sajuyigbe (2012) and D.C. Michael (2012) found that usability and Internet accessibility has affected the behavioral intentions in Internet banking positively. Usability and accessibility in other words, mean the state of believing that using the Internet is effortless when an innovation is easily used and understood (Loukis et al., 2012). All over the world, consumers are more likely to choose and accept usable and acceptable systems over more complicated ones. Thus, the following hypothesis can be derived:

H1-2. Ease of use and Internet access have positive impact on e-commerce adoption by microfinance companies in Jordan.

3) *information system (IT)* is the application of computers and telecommunications equipment to store, retrieve, transmits and manipulate data, often in the context of a business or other enterprise. There are 5 dimensions of IT capability. These are IT infrastructure, IT human resources, IT-related intangible resources, IT coordination, and IT governance (Wang et al., 2010). Thus, the following hypothesis can be derived:

H1-3. Information system has positive impact on e-commerce adoption by microfinance companies in Jordan.

4) *relative advantage*. Prajogo and J. Olhager (2012) define relative advantages as the level of innovation perceived as being better than the superseding idea. Organizations must recognize that the adoption of innovation will either offer solutions to current issues or present new production opportunities, such as increased profits, market share and improved operational performance. Organizations adopt a technology when they see the need for that technology, believing it will either take advantage of a business opportunity or close a suspected performance gap (Banerjee and Ma, 2012). Thus, the following hypothesis can be derived:

H1-4. Relative advantage has positive impact on e-commerce adoption by microfinance companies in Jordan.

2. Organizational factors. According to (Williams et al., 2010; Zhang et al., 2011), organizational factors are the elements and descriptors that define organization's character and functions. These include organizational size, top management support, organizational structure and employees' skills and training as explained in the following sections. Thus, the following hypothesis can be derived:

H2. Organizational factors have positive impact on e-commerce adoption by microfinance companies in Jordan:

1) *organizational size*. Previous research on e-commerce adoption found organizational size to be an important factor for e-commerce adoption (Banerjee and Ma, 2012). A number of studies have found that large firms are more likely to adopt due to greater resources and knowledge as to implementing technologies and economies of scale (Zhang et al., 2011). The size of organization also plays a very important role in determining whether an enterprise utilizes commerce or not. According to (Ripolles, Blea and Roig, 2010), enterprise size can influence the decision to adopt or not e-commerce. M. Ripolles et al. (2010) found that firm size has a significant impact on the type of technologies employed. Thus, the following hypothesis can be derived:

H2-1. Organizational size has positive impact on e-commerce adoption by microfinance companies in Jordan.

2) *top management support*. The primary role of top management is to ensure the understanding of good opportunities about new technology development and implementation for firms long-term strategy (Williams et al., 2010). Top management support has been identified as a crucial element in acquisition and diffusion of e-commerce. Therefore, top management support and commitment positively affects e-commerce adoption (Leonard, 2012). Thus, the following hypothesis can be derived:

H2-2. Top management support has positive impact on e-commerce adoption by microfinance companies in Jordan.

3) *organizational structure*. According to (Pedro and Aleda, 2012; Tyler and Manica, 2007), organizational structure represent the people who are in the same department and doing the same functions in a stable environment. According to geographical locations, organizational structure is the formal system of task and reporting relationships that controls, coordinate and motivates employees so that they cooperate and work together to achieve organizational goals. Thus, the following hypothesis can be derived:

H2-3. Organizational structure has positive impact on e-commerce adoption by microfinance companies in Jordan.

4) *employee's skills and training*. Research studies have found that one of the primary components for successful e-commerce adoption is employees' skills and training (Williams et al., 2010; Zhang et al., 2011). Basic level of education such as communication skills and using IT system is critical as it allows easy communication and appreciation of business terms in global business (Thong, 1999). Most organizations owner/managers, especially in developing countries, are unable to communicate in international languages that give access to global markets. The general acceptable level of education would be a high school ordinary level certification, although higher business qualifications are better (Sarosa and Zowghi, 2003). Thus, the following hypothesis can be derived:

H2-4. Employees' skills and training have positive impact on e-commerce adoption by microfinance companies in Jordan.

3. **Environmental factors**. Environmental factors are a set of factors that affect the life and development of organization and its work (Kshetri, 2007; Olatokun and Kebonye, 2010). These factors include government pressure, competition intensity, supplier's pressure and regulatory issues as explained in the following sections. Thus, the following hypothesis can be derived:

H3. Environmental factors have positive impact on e-commerce adoption by microfinance companies in Jordan:

1) *government pressure*. E. Daniel and H. Wilson (2002) found that governments played critical roles in creating a favorable and consistent commercial e-environment. They thus recommend that governments should facilitate and assist in the provision of information for the development and adaptation of e-commerce. N. Kshetri (2007) attributed rapid Chinese B2B e-commerce growth to the commitment of Chinese government to building up necessary infrastructure and working towards framing laws on cross-border trade taxation in e-commerce. Chinese government not only facilitates e-environment, but also takes a series of steps to help SMEs boost their exports. Thus, the following hypothesis can be derived:

H3-1. Government pressure have positive impact on e-commerce adoption by microfinance companies in Jordan.

2) *competition intensity*. With the emergence of Internet-based products and services, there are emerging opportunities especially in the area of e-commerce to regain competitive advantage (Kshetri, 2007). Therefore, it can be suggested that competition intensity will increase the probability for SMEs adopting advanced Internet-based services and products for their competitive advantage (Olatokun and Kebonye, 2010). From another perspective, high degree of competition can be a threat to the

firm in entering the market through e-commerce, because it will have to compete with the existing online firms. Thus, the following hypothesis can be derived:

H3-2. Competition intensity has positive impact on e-commerce adoption by microfinance companies in Jordan.

3) *suppliers pressure*. Another factor that influences e-commerce adoption is business partners who may be suppliers or customers. Business partner relationships are usually depicted from the suppliers or customer's perspectives (Daniel and Wilson, 2002). SMEs will usually want to develop and deepen business relationship with the aim to establish long-lasting business partnership (Parker and Castleman, 2009). This idea works well if business partner recognizes strategic value and competitive advantage for both organizations (Daniel and Wilson, 2002). Thus, the following hypothesis can be derived:

H3-3. Suppliers' pressure has positive impact on e-commerce adoption by microfinance companies in Jordan.

4) *regulatory issues*. J. Humphrey et al. (2003) noted that the lack of regulatory policies in developing countries have delayed many organizations, in particular SMEs from participating in e-commerce. Developing countries leadership have found themselves working on policies for poverty alleviation, health, education, hunger and other humanitarian causes. Thus, governments in developing countries found themselves unable to keep pace with ICT developments that frequently change (Magembe and Shemi, 2002). Thus, the following hypothesis can be derived:

H3-4. Regulatory issues have positive impact on e-commerce adoption by microfinance companies in Jordan.

E-commerce evaluation measurement. According to (Magembe and Shemi, 2002; Andriessen, 2004), performance measurement is a critical part of evaluation especially in current changing business environment. In this study, financial indicators of (Kaplan and Norton, 1996) are adopted to measure the microfinance performance in e-commerce adoption. These indicators include sales, market share, profit margin, orders and time savings, retention rate, speed of completion of internal and external processes (Kaplan and Norton, 1996). Several questions were giving to the respondents covering Kaplan and Norton indicators on e-commerce performance.

Methodology. The population of this study consists of all microfinance companies in Jordan. There are 13 microfinance companies that will be examined through their departments. These departments include the IT department, operation, marketing, financial, HR, and auditing. Managers of these departments will be the units of analysis. Due to time and cost limitations a sample that represents the population will be chosen. The researcher intended to use the non-probability sampling, choosing the convenience sampling approach because of its accessibility and proximity to the researcher (Bryman and Bell, 2007; Huberman and Miles, 2002; Malhotra, 2004).

The study sample constitutes of senior employees and employees who carry managerial positions at all departments. The population for this study is estimated to be around (1700) and since it is too large to be surveyed, a sample is taken to represent the population. In order to determine the sample size from a known population size, the researcher used the formulas given in (Krejcie and Morgan, 1970).

According to them the required sample size is set to be 313. The questionnaires were sent to subjects mostly online. In addition, the researcher used other methods to send the questionnaires such as post, fax and in person. From the 500 questionnaires sent to the participants only 283 were returned. 8 questionnaires were considered invalid and only 275 questionnaires were used for further analysis.

Testing research hypotheses. In this study, the researcher used the stepwise regression analysis since it is a semi-automated process of building a model by successively adding or removing variables based solely on the t-statistics of their estimated coefficients (Hair et al., 1998). Based on literature, 12 hypotheses that represent 12 variables were raised as discussed above. The variables (independent) will be tested against the e-commerce implementation success (dependent variable). Several rounds of the stepwise multiple linear regressions will be applied to test the hypotheses until the loading of the whole variable becomes significant and the p-value < .05.

1. Stepwise multiple linear regressions. The results of the stepwise regressions for 12 independent variables that make up the original model identified 10 variables that have significant effect in predicting e-commerce implementation success with the p-values < 0.05 as summarized in Table 2. These variables are security and privacy, ease of use and access to Internet, information system, relative advantage, organization size, top management support, organization structure, competition intensity, government pressure and regulatory issues.

Table 2. Results of the stepwise regression that shows the significant variables of the research model-first round, authors'

Model	Unstandardized		Standardize coefficients beta	t	Sig.
	B	Std. Error			
security and privacy	.064	.020	.098	3.183	.002
ease of use and access to internet	.069	.014	.133	4.771	.000
information system	.092	.021	.104	4.329	.000
relative advantage	.052	.014	.102	3.640	.000
organization size	.058	.018	.075	3.182	.002
top management support	.030	.011	.071	2.811	.006
organization structure	.054	.013	.099	4.024	.000
competition intensity	.064	.020	.075	4.764	.002
government pressure	.062	.017	.102	4.677	.000
regulatory issues	.034	.023	.104	4.788	.002

a. Dependent variable: (e-commerce success).

The non-significant variables excluded from the original model with the p-values > 0.05 are 2 as shown in Table 3. These variables are employee's skills and training and suppliers pressure. They were excluded and a second round of stepwise multiple linear regression was applied to the remaining independent variables.

The second round of stepwise multiple linear regression analysis tests were applied to 10 independent variables generated from Round one. The result shows that all 10 independent variables from Round one have p-values of < 0.05, indicating that all the variables are important in predicting the dependent variable and confirm that no more rounds are needed.

2. Discussion of the hypotheses testing. According to the results of the stepwise multiple linear regression, the detailed interpretation of the outputs of the final round

are discussed in two sections. These include evaluating the model and assessing the importance of the independent variables. These sections will answer the research questions and elaborate on the hypotheses.

Table 3. Results of the stepwise regression that shows the excluded variables from the model-first round, authors'

Excluded variables				Partial correlation
Model	Beta In	t	Sig.	
employee's skills and training	-.014	-.536	.594	-.056
suppliers pressure	.078	1.669	.099	.172

a. Dependent variable: (e-commerce success).

1) *evaluating the model.* The model summary in Table 4 includes the value of R square showing how much the variance in the dependent variable (e-commerce adoption) is explained by the 10 independent variables (security and privacy, ease of use and access to Internet, information system, relative advantage, organization size, top management support, organization structure, competition intensity, government pressure and regulatory issues). The R square value is 0.964, which means that the research model (which includes all the independent variables) explains 96.4% of the variance in e-commerce implementation success.

Table 4. Model summary, authors'

Model	R	R square	Adjusted R square	Std. Error of the estimate
	.982	.964	.958	.13199

a. Dependent variable: (e-commerce success).

2) *assessing the importance of independent variables.* Evaluating the importance of each independent variable on predicting e-commerce implementation success within Jordanian microfinance companies can be examined by the coefficient table obtained from the analysis. The coefficient table revealed two important results. First, beta values (standardized coefficients) can be used to compare the importance of each predictor in the model by examining each individual t-test. Second, B values (unstandardized coefficients) can be used to construct the regression equation.

The coefficient table (Table 3) shows that the largest beta coefficient is 0.133 which is for the ease of use and access to Internet. This means that this variable makes the strongest contribution to predicting and explaining e-commerce implementation success within Jordanian microfinance. The second beta coefficient is for information system and regulatory issues with the beta coefficient of 0.104 followed by government pressure and relative advantage with the beta coefficient of 0.102. Table 3 also shows that p-values for all the independent variables are less than 0.05, indicating that these variables significantly contribute to the equation.

Benefits of e-commerce implementation. Managers who participated in the questionnaire were given a list of 7 potential e-commerce benefits and were asked to rank them according to their own experiences. Building trust with customers was the most benefit of e-commerce that may encourage microfinance companies in Jordan to implement e-commerce and it was ranked first with the mean of (4.07) as shown in Table 5. This was followed by reducing operational costs with the mean value of 4.06

followed by reducing the workforce with the mean value of 4.05 followed by building trust with suppliers with the mean value of 4.02 followed by providing a more reliable service to customers with the mean value of 3.95 followed by improving the image of the company with the mean value of 3.98 and finally – improving the competitive position of the company was ranked at the bottom with the mean value of 3.93.

Table 5. Major benefits of e-commerce implementation, authors'

Benefits	N	Ranking	Mean	Std. deviation
a. Providing more reliable service to customers	1	5	3.95	.847
b. Improving the competitive position of the company	2	7	3.93	1.01
c. Improving company's image	3	6	3.98	.686
d. Building trust with customers	4	1	4.07	.790
e. Building trust with suppliers	5	4	4.02	.752
f. Reducing operational costs	6	2	4.06	.777
g. Reducing workforce	7	3	4.05	.678

Barriers to e-commerce implementation. Managers who participated in the questionnaire were also given the list of 7 potential barriers questions and were asked to rank them according to their own experiences. Table 6 shows that the lack of electronic payment systems was the most significant barrier e-commerce implementation and it was ranked the first with the mean of 4.2 followed by them difficulty of maintaining the website with the mean value of 4.1. This was followed by ineffective and inefficient storage and delivery system with the mean value of 4 followed by the speed of Internet services with the mean value of 3.9 followed by Internet infrastructure in the country with the mean value of 3.8 followed by the percentage of customers with Internet access with the mean value of 3.7. Finally, cost of maintaining the website was ranked the lowest with the mean value of 3.6.

Table 6. Major barriers to e-commerce implementation, authors'

Barriers	N	Ranking	Mean	Std. deviation
Percentage of customers with Internet access	1	6	3.7	.95
Speed of Internet services	2	4	3.9	1.01
Internet infrastructure in the country	3	5	3.8	.73
Cost of maintaining the website	4	7	3.6	.79
Difficulty of maintaining the website	5	2	4.1	.71
Lack of electronic payment systems	6	1	4.2	.60
Ineffective and inefficient storage and delivery system	7	3	4.0	.71

Major findings. The results of the analysis of the questionnaire survey revealed the following major findings.

First, from the research analysis conducted in this study, only 10 factors out of 12 are found to be supported and affect the successful implementation of e-commerce within Jordanian microfinance companies.

Second, the two unsupported variables are employee's skills and training and suppliers' pressure.

Third, ease of use and Internet access variables make the strongest contribution to predicting and explaining e-commerce implementation success of Jordanian microfinance companies.

Fourth, there is no benefit of allocating resources for training employees since the analysis showed that this variable is not important for decision-makers in microfinance companies of Jordan.

Fifth, the research revealed an unexpected result of having no pressure from other companies and/or suppliers to force microfinance companies to adopt e-commerce.

Sixth, building trust with customers was the greatest benefit of e-commerce that may encourage microfinance companies in Jordan to implement e-commerce.

Seventh, managers in microfinance companies in Jordan stated that the lack of electronic payment systems is the most barrier that inhibit e-commerce implementation.

References:

- Abbad M., Abbad, R., Saleh, M. (2011). Limitations of E-commerce in Developing Countries: Business and Society. Contemporary Middle Eastern, Vol. 4, Issue 4.
- Adair, A. (1999). Codes of conduct are good for non-governmental organization. Institute of Public Affairs, Vol. 4, Issue 7.
- Al Sukkar, A., Hasan, H. (2005). Toward a Model for the Acceptance of Internet Banking in Developing Countries. Information Technology for Development, Vol. 4, Issue 6.
- Al-Abdallah, G.M. (2013). The Effect of Customer-Company Relationship on Internet Adoption in Jordanian Small and Medium Enterprises. Journal of Economics and Behavioral Studies, Vol. 5, Issue 4.
- Aljafri, A., Pons, A., Collins, D. (2013). Global E-commerce: a framework for understanding and overcoming the trust barrier. Information management and Computer security, Vol. 1, Issue 3.
- Al-Qirim, N.A.Y. (2013). E-Commerce in the Aerial Mapping Industry: A New Zealand case study. Journal of Systems and Information Technology, Vol. 7, Issue 5.
- Al-Weshah, G.A., Al-Zubi, K. (2012). E-business enablers and barriers: empirical study of SMEs in Jordanian communication sector. Global Journal of Business Research, Vol. 6, Issue 3.
- Apulu, I., Latham, A. (2011). Drivers for Information and communication technology adoption: case study of Nigerian small and medium sized enterprises. International Journal of Business and Management, Vol. 6, Issue 5.
- Bedman, N. (2012). Challenges of marketing E-Banking services in a developing country: The case of Ghana. Internet Banking and Customer, Vol. 17, Issue 2.
- Bryman, A., Bell, E. (2007). Business research methods. 2nd ed. Oxford University Press.
- Chaffey, D., White, G.R.T. (2010). Business information management: improving performance using information systems. 2nd ed. Pearson Education, UK.
- Daniel, E., Wilson, H. (2002). Adoption intentions and benefits realized: a study of ecommerce in UK SMEs. Journal of Small Businesses and Enterprise Development, Vol. 9, Issue 4.
- Grimsholm, E., Poblete, L. (2010). Internal and external factors hampering SME growth. International Journal of Electronic Business, Vol. 4, Issue 3.
- Hinson, R. (2011). Export and the internet in Ghana: a small and medium enterprise exporter benefit model. LBS Management Review, Issue 9.
- Houghton, K.A., Winklhofer, H. (2004). The Effect of Website and E-Commerce Adoption on the Relationship between SMEs and Their Export Intermediaries. International Small Business Journal, Vol. 22, Issue 369.
- Huberman, A.M., Miles, M.B. (2002). The Qualitative Researcher's Companion. London: Sage Publications. International Small Business Journal, Vol. 20, Issue 200.
- Humphrey, J., Mansell, R., Pare, D., Schmitz, H. (2003). The Reality of E-commerce with Developing Countries. Journal of Technology Education, Vol. 6, Issue 3.
- Humphreys, P., Huang, G., McIvor, R. (2003). Electronic Commerce: re-engineering the buyer-supplier interface. Business Process Management Journal, Vol. 6, Issue 2.
- Iddris, F. (2012). Adoption of E-commerce solutions in small and medium-sized enterprises in Jordan. European Journal of Business and Management, Vol. 4, Issue 10.
- Javalgi, R., Ramsey, R. (2001). Strategic issues of e-commerce as an alternative global distributions system. International Marketing Review, Vol. 18, Issue 4.
- Krejcie, R., Morgan, D. (1970). Determining sample size for research activities. Educational and Psychological Measurement, Vol. 30, Issue 3.

- Kshetri, N.* (2007). Barriers to e-commerce and competitive business models in developing countries: A case study. *Electronic Commerce Research and Applications*, Vol. 6, Issue 4.
- Kurnia, S., Peng, F.* (2010). Electronic Commerce Readiness in Developing Countries: The case of the Chinese Grocery Industry. *International Journal of Electronic Business*, Vol. 4, Issue 3.
- Leonard, L.* (2012). Attitude Influencers in C2C E-commerce: Buying and Selling. *Journal of Computer Information Systems*, Vol. 52, Issue 3.
- Lohse, G., Spiller, P.* (1998). Quantifying the effect of user interface design features on cyber store track and sales. *Proceedings of the Human Factors in Computing Systems*, Vol. 211, Issue 218.
- Loukis, E., Pazalos, K., Salagara, A.* (2012). Transforming e-services evaluation data into business analytics using value models. *Electronic Commerce Research and Applications*, Vol. 11, Issue 2.
- Malhotra, N.* (2004). *Marketing research: An applied orientation*. 4th ed. Prentice-Hall International, London.
- Michael, D.C.* (2012). The factors impacting on customer decisions to adopt internet banking. *Banks of bank system*, Vol. 7, Issue 3.
- Molla, A., Licker, P.S.* (2009). Perceived-Readiness Factors in E-Commerce Adoption: An Empirical Investigation in developing Country. *International Journal of Electronic Commerce*, Vol. 83, Issue 110.
- Nasah, C.R.J., Japang, M., Leng, G.S.* (2012). Perception on e-commerce drivers and export marketing strategy: A case study on small and medium enterprises in Labuan federal territory (F.T.). *International Journal of business and government Studies*, Vol. 4, Issue 2.
- Parker, C.M., Castleman, T.* (2009). Small firm-business adoption: a critical analysis of theory. *Journal of Enterprise Information Management*, Vol. 22, Issue 1.
- Pedro, Aleda, R.* (2012). The Influence of Service Orientation on B2B e-Service Capabilities: An Empirical Investigation. *Production and Operations Management*, Vol. 21, Issue 3.
- Philippe, I., Jean, A., Pierre-Yves, L.* (2013). Influence of entry modes and relationship modes on business services internationalization. *The Service Industries Journal*, Vol. 31, Issue 4.
- Prajogo, Olhager, J.* (2012). Supply chain integration and performance: The effects of long-term relationships, information technology and sharing, and logistic integration. *International Journal of Production Economics*, Vol. 135, Issue 1.
- Ripolles, M., Blesa, P., Roing, D.* (2010). The Influence of innovation orientation on the internationalization of SMEs in the service sector. *The Services Industries Journal*, Vol. 30, Issue 5.
- Sajuyigbe, A.S.* (2012). Adoption of e-commerce to business operations: A key to achieving. *Nigeria Vision*, Vol. 20, Issue 20.
- Sarosa, S., Zowghi, D.* (2003). Strategy for Adopting Information Technology for SMEs: Experience in Adopting Email within an Indonesian Furniture Company. *Electronic Journal of Information Systems Evaluation*, Vol. 6, Issue 2.
- Taylor, C.* (2002). Microcredit as model: A critique of station-governmental organization relations. *Syracuse Journal of International Law and Commerce*, Vol. 29, Issue 2.
- Thong, J.Y.L.* (1999). An Integrated Model of Information Systems Adoption in Small Businesses. *Journal of Management Information Systems*, Vol. 15, Issue 4.
- Tyler, K., Manica, A.* (2007) Business to business adoption of e-commerce in China. *Information and Management*, Vol. 4, Issue 44.
- Williams, R., Van der Wiele, T., Van Iwaarden, J.D., Eldridge, S.* (2010). The Importance of User-generated Content: the Case of Hotels. *The Total quality management journal*, Vol. 22, Issue 2.
- Zhang, Z., Tian, Z., Guan, X.* (2011). A New Evolution Mechanism Model for B2B E-Commerce Network. *Journal of Electronic Commerce in Organizations (JECO)*, Vol. 11, Issue 2.
- Zilber, S.N., Braz de Araujo, J.* (2012). Small Companies Innovations in Emerging Countries: E Business Adoption and its Business Model. *Journal of Technology Management & Innovation*, Vol. 7, Issue 4.

Стаття надійшла до редакції 10.11.2015.