

E-MARKETING ACTIVITIES AND PERCEIVED COMPETITIVE ADVANTAGE IN THE CONTEXT OF GLOBALIZATION – STUDY OF LUBLIN REGION FIRMS

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Abstract:

ICT usage for communication and marketing activities can play important role in facilitating internationalization of firms, as well as being a source of competitive advantage of the enterprise in comparison to firms less advanced in ICT deployment. Main goal of the paper is to explore to what extent e-marketing activities performed by a firms located in one of less developed and peripheral regions of European Union – Lublin Voivodeship (Lublin Region) are connected with perceived competitive advantage on international and domestic markets. Paper describes differences between 3 groups of firms: exporters, potential exporters, and firms not interested in international presence, as well as the model of influence of e-marketing activities on perceived competitive advantage. Data are coming from large scale survey of 1680 firms from Lublin Region. Mentioned groups are differing in ICT usage – on general level and also for using particular technologies and e-marketing tools. Generally the higher level of internationalization the higher usage of Internet communication and e-marketing activities. Particularly exporters are more aware of the importance of several e-marketing activities, and perceive them as more efficient comparing to other groups analyzed.

Keywords: globalization, e-marketing, competitive advantage, SME.

1. INTRODUCTION

ICT usage for communication and marketing activities can play important role in facilitating internationalization of firms, as well as being a source of competitive advantage of the enterprise in comparison to firms less advanced in ICT deployment. Main goal of the paper is to explore to what extent e-marketing activities performed by a firms located in one of less developed and peripheral regions of European Union – Lublin Voivodeship (Lublin Region) are connected with perceived competitive advantage on international and domestic markets. Descriptive analysis of data, with direct comparisons of three groups of firms investigated, as well as structural equations modeling will be used answer this questions.

2. THE UPPSALA MODEL OF INTERNATIONALIZATION

One of the most popular (and often criticized) approach to internationalization is the Uppsala model, created by the researchers from the Uppsala University (Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1977). The Uppsala model describes the internationalization of a firm as a process of experiential learning and increasing commitment leading to an evolutionary development in a foreign market. According that model firms conducting international expansion can be characterized by three circumstances: the expansion is preceded by the success in the internal market and this is a consequence of many decisions; the expansion usually starts in the closest markets and then includes more distant ones (Johanson & Vahlne, 1992); entering into foreign markets most firms start with export activities and only after some time decide to take more demanding actions. The research allowed to put the thesis that process of internationalization is sequential, phased, consecutive, and evolutionary (Gorynia & Jankowska, 2007).

The basic Uppsala model identifies four phases of internationalization process: an occasional export – irregular export activity, export via independent brokers/dealers (agents), establishment of a trading subsidiary (branch) and establishment of a manufacturing subsidiary (branch) (Gorynia & Jankowska, 2007). Wiedersheim-Paul et al. (1978) proposed also including pre-export activity as a “zero-phase” of internationalization, called also “domestic internationalization” and including three sub-steps: lack of will for exporting, weak will to start exporting, and strong will to do this.

The Uppsala approach supplemented by Wiedersheim-Paul et al. (1978) extension has been chosen by authors to measure level (stage) of internationalization, as suitable for SMEs and other firms without significant knowledge resources, what is common in investigated region.

3. E-MARKETING ROLE IN FIRMS INTERNATIONALIZATION

Since early 90s of 20th century it was suggested that ICT usage can provide strategic competitive advantage on international markets (Jarvenpaa & Ives, 1993), and facilitate globalization (Palvia, 1997).

By the use of ICT has many companies expanded their international presence and international trading capabilities. Any form of internationalization: export, licensing or foreign direct investment decisions, involve acquiring information about foreign markets, assessing and understanding consumer needs in different cultures, evaluating alternative entry strategies, and coordinating activities across all elements of the value chain and across markets (De la Torre & Moxon, 2001). Wide use of the Internet expands the geographic

market, bringing many more companies into competition with one another, to this time not perceived as competitors (Porter, 2003). The Internet also enables potential customers and organizations to communicate easily and with low costs in different modes – starting from “one to one” up to “many to many” (Hoffman & Novak, 1996), in effect particular firm can use the Internet as an tool for advertising, booking orders, promoting its identity, and communicating with their customers all over the world (Bicak, 2005). Web marketing usage can in some extent to decrease differences between large and small firms (Samii, 2004, p. 18).

The use of the Internet reduces uncertainty of doing business on foreign markets and thus can accelerates the internationalization process as well as improves perceived competitive advantage. Traditionally, the main sources of initial contact for many firms were costly trade shows, now they establish contacts via web pages and search engines (Samii, 2004, p. 17). Internet-mediated communication makes easier access to international market information and helps to overcome communication barriers. Moving to e-marketing tools instead of physical marketing activities reduces the costs of marketing communication, allows also for easier assess efficiency of performed actions (Brodie et al., 2007). The Internet enables firms to identify new market opportunities leading to business expansion, also for SMEs. Due to access to information about markets, a firm finds itself in a better position to meet the segment needs of specific clients and to tailor its products and services to conform those needs. Similarly, the Internet reduces the entry barriers to international markets, which in turn encourages the firm’s international expansion and minimizes the importance of the local market (Nieto & Fernández, 2006).

3.1 Hypotheses

This study is focused on exploring how using e-marketing activities are influencing firm international competitiveness. As long as using information technology is not a sole factor explaining this explanatory variable, archived level (stage) of internationalization (in terms of extended Uppsala internationalization model) should be also considered as important factor in that case.

Therefore, for this study the set of three main hypotheses has been formulated on the base of literature review. The hypotheses are as follows:

- H1: ICT usage in marketing and communication (both domestically and internationally) is positively connected with international competitiveness*
- H2: Archived internationalization stage is positively connected with international competitiveness*
- H3: Implementation of innovations moderates influence of mentioned variables on international competitiveness*
 - H3a: Implementation of innovations is positively connected with ICT usage in marketing and communication*
 - H3b: Implementation of innovations is positively connected with archived internationalization stage*

4. METHOD

4.1. Sample

In the article are analyzed data collected during field research of firms from Lublin Voivodeship coming from the research phase of the project under the name ‘Research and analysis of demand for jobs in the context of supporting the export potential of the Lublin Voivodeship’, funded by Regional Operational Programme of Lublin Voivodeship for the years 2007–2013. First and second author were served the Office of the Marshal of the Lublin Voivodeship in Lublin as methodological advisers during this project.

Data were collected using Computer Assisted Personal Interviews (CAPI). Field research has been ended in December 2011. Topics of ICT usage and e-marketing activities as well as perceived by firms management competitive advantage were a part of long interview lasting in average about 45 minutes. In project reports mentioned topics are not covered with reasonable depth, despite having necessary data collected.

Total sample size is 1680 firms in 3 groups: 761 exporters (all exporters in region identifiable and not refused to answer), 809 firms with identifiable export potential, and 110 firms not interested in exporting - as reference group. Among variables controlled in those samples are enterprise size (from large to small – micro firms are included only in exporters group), and sector of main activity of the firm.

4.2. Measures

Questionnaire used in CAPI was a large instrument consisting of about 130 questions in longest answer path (circa 1200 coded variables). Questions regarding internationalization stage (in terms of extended Uppsala model), ICT usage for communication and (e)marketing activities as well as innovation implementation were only a small part of the instrument.

Since some of questions in this group has been scaled nominally with answers “yes” or “no”, there were aggregate variables introduced, measuring for instance declared usage of selected e-marketing tools by counting number of “yes” answers from original questions. Other measures were measured on at least interval scales (e.g. perceived competitiveness, share of export sales ect.). For non-exporters zero response values were substituted when it was necessary. Table 1 includes description of variables used in estimated path model

Table 1: Description of variables used in model

Label	Name	Description
INT_ACT	International activity	Aggregate (number and highest stage of international activity)
FCAP	Foreign capital share	Percentage
INT_E	e-Marketing activity for external markets	Aggregate (from 8 activities)
INT_I	e-Marketing activity for internal markets	Aggregate (from 8 activities)
INT_COM	Internet communication activity	Aggregate (from 7 activities)
COMPET	Self-reported competitiveness	5-point scale
EXP_SAL	Share of export in total sales	Percentage
EXP_CO	Number of countries exported	Number of countries
INNOV	Innovation activity	Aggregate (from 5 activities)

5. RESULTS

5.1. Firms' internationalization in Lublin region – current state

Lublin Voivodeship is one of the least developed regions of the European Union. In 2007 the Lublin took the 261. place among all the EU regions achieving GDP per capita of about 9200 EUR, being more than 2,6 times lower than the average for EU. The low levels of GDP of the Lublin region as well as whole eastern part of the EU are derivatives of peripherality and low transport accessibility of that regions (Jóźwik et al., 2011, p. 18).

Previous studies identified that, because of the low absorptivity of the regional market, good development strategy for firms operating in is to internationalize their business, i.e. by expanding into foreign markets – in Lublin region case mainly on the EU market or eastern markets. The most significant export value in 2008 relates to the export activity to Germany (21,2 %), Ukraine (10,3 %), France (7,4 %), Italy (7,3 %) and Netherlands (5,6 %). (Gawlikowska-Hueckel & Umiński, 2011, pp. 166–168).

Nevertheless, the level of the internationalization of the firms located in Lublin Voivodeship is relatively low and this is also a result of the small value and the small number of the foreign direct investments in the region. In the recent years such investors, came mainly from Italy, the United States, Germany, Luxembourg, the South Korea and Switzerland (Opala & Osieka, 2011). This is caused by low investment attractiveness of the region classified on 15th (last but one) place in Poland. Symptomatically, the last five places in this classification took Polish eastern regions (Nowicki, 2011).

Another important barrier to internationalization of the Lublin Voivodeship firms' business activities is their low competitiveness. Firms surveyed in 2009 declared mainly usage of free or public sources of technology transfer (publications, Internet, free of charge conferences) and the main source of technology and knowledge transfer was the Internet (72,3 % of respondents). Only industrial sector benefited, to a large extent relatively, from knowledge transfer and innovation from universities, parallel implementing ideas and projects arising from its own research and development (Sagan et al., 2011).

5.2. Internet usage for communication and marketing activities in sample - background

Exporters, potential exporters, and firms not interested in exporting are differing in ICT usage – on general level and also for using particular technologies and e-marketing tools. Table 1 presents general comparison of this groups in terms of frequencies of firms using ICT in their activities (there should be noted that about 96% of enterprises located in Lublin Voivodeship has access to the Internet).

More detailed look on the internationalization level as reveals even more differences. Generally the higher level of internationalization the higher usage of Internet communication and e-marketing activities. Particularly exporters are more aware of the importance of several e-marketing activities, and perceive them as more efficient comparing to other groups analyzed.

Table 2: Main Internet usage indicators for analyzed groups of firms

Indicator	Groups [%]			Chi-square test	
	Exporters (n=761)	Potential exporters (n=809)	Not interested in exporting (n=110)	Chi- square statistic	p
Firms declaring business usage of the Internet	60,7	58,1	45,5	21,6	0,000
Firms possessing website	39,8	31,1	30,0	14,6	0,001
Firms possessing corporate blog	5,0	4,0	4,5	0,99	0,601
Firms using e-mail	44,7	35,8	30,9	16,4	0,000
Firms using internet communicators (text, voice, video)	17,5	5,7	6,4	58,0	0,000
Firms possessing own Internet forum	3,5	1,6	1,8	6,3	0,043
Firms engaged in social media	4,7	3,1	1,8	4,1	0,126

Source: own elaboration of CAPI data.

5.3. Influence of e-marketing usage and internationalization stage on international competitiveness

To assess the influence of internet usage for communication and selected electronic marketing activities on international competitiveness path model including also internationalization stage and innovativeness has been built and tested (picture 1).

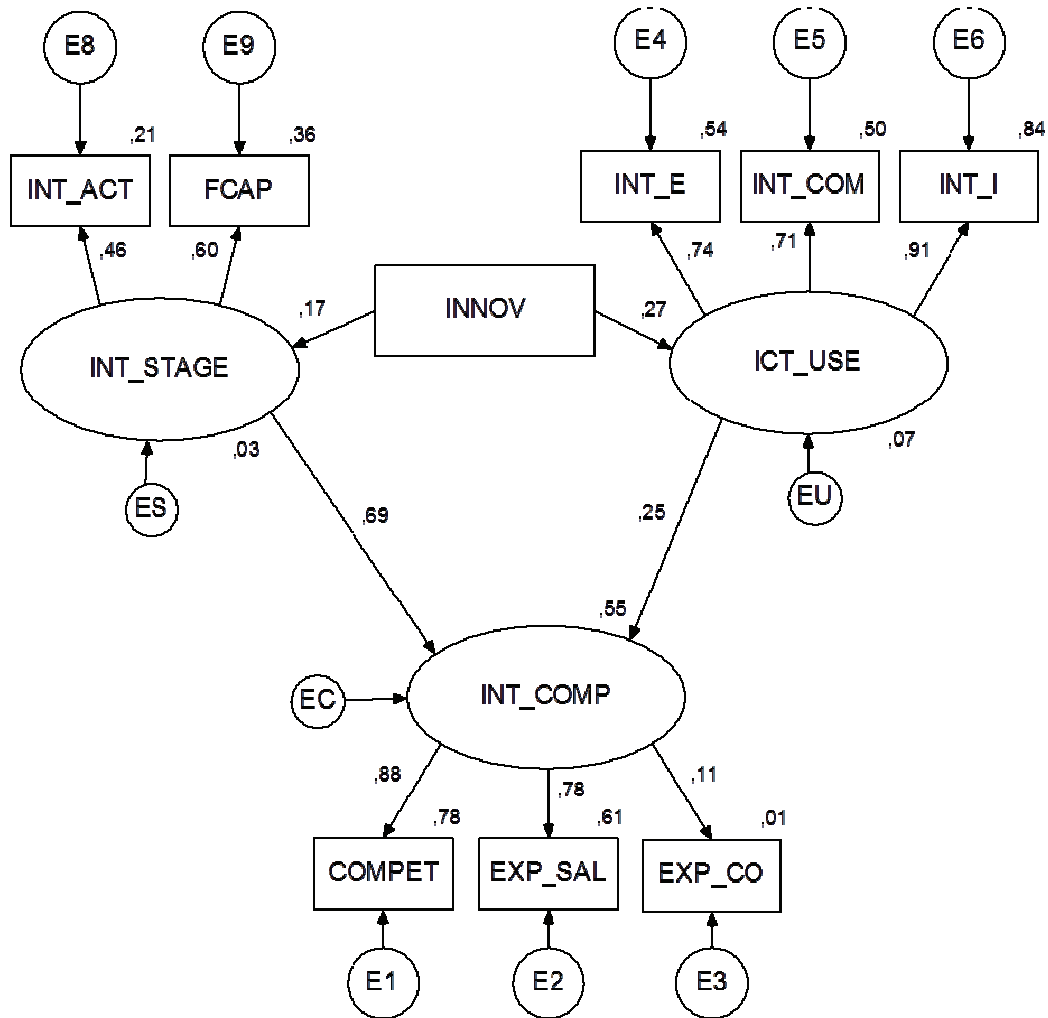
Model has three unobserved (latent) variables: International competitiveness (INT_COMP), Internationalization stage (INT_STAGE), and ICT usage in marketing and communication (ICT_USE). First one is dependent variable explained by two others, including moderating effect of innovation implementation on both explanatory variables – as was hypothesized in *H1* to *H3*.

Results are suggesting that ICT usage in marketing and communication (both on domestic and international markets) significantly improves international competitiveness, thus hypothesis *H1* is supported. From descriptors of this latent variable, the main role plays e-Marketing activity for internal markets – firms are learning and testing e-Marketing activities on domestic market first, and then they are applying proven tools and strategies on external markets.

It is important to note that much stronger positive effect on international competitiveness has archived internationalization stage (in terms of extended Uppsala model and including influence of foreign capital investment) – hypothesis *H2* is also supported.

As it was expected implementation of innovations is positively connected with ICT usage in marketing and communication (*H3a* supported) and with archived internationalization stage (*H3b* supported). Moderating effect of innovativeness is stronger on ICT usage in marketing and communication, than on internationalization level.

Picture 1: Estimated path model



Note: all path coefficients are significant at $p < 0,001$
 Source: own elaboration of CAPI data.

Table 3: Estimated model fit measures

Measures		Value
Variance explained	International competitiveness (INT_COMP)	0,549
	Internationalization stage (INT_STAGE)	0,028
	ICT usage in marketing and communication (ICT_USE)	0,075
Measures of fit	<i>Chi-square/df</i> (below 2 or 3 better) ^a	10,049
	<i>p</i> (not significant better) ^b	0,000
	GFI (above 0,9 is good fit)	0,959
	AGFI (above 0,8 is good fit)	0,923
	NFI (above 0,9 good fit)	0,919
	RMSEA (0,05 or less better)	0,061

Notes:

^a “rules of the thumb” suggested by Carmines and McIver (1981, p. 80) or Byrne (1989, p. 55).

^b for larger samples it is often unreasonable to have significant *p* value (Jöreskog, 1969, p. 200).

Source: own elaboration of CAPI data.

From international competitiveness descriptors main role are playing 2 variables: self-reported competitiveness and share of export in total sales. Number of countries to which firm is exporting is more loosely connected with international competitiveness.

Table 3 contains fit measures for estimated model. The model explained quite well international competitiveness in terms of variance explained – allowing to explain about 55% of variance of this construct. Also in terms of fit measures model is at least acceptable: GFI, AGFI and NFI fit indices are indicating good fit, *Chi-square/df* ratio and p of *Chi-square* are not meeting standard because of large sample usage, also RMSEA value is slightly too large, exceeding 0,05 but being below 0,07.

6. CONCLUSION

This study, finds a support to hypothesis that ICT usage in marketing and communication improves firm international competitiveness. Also implementation of innovations has positive (indirect) effect on this dependent variable.

This suggest some practical implications of the paper. Firstly this results are providing directions for promoting e-marketing tools usage, in industrial policy making as a way to improve firms (not only) international competitiveness. This seems to be important for SMEs. Relatively low ICT/e-marketing usage level in Lubelskie region and connection between them and exporting capabilities allow to think about public help programs including sharing knowledge, providing training programs and promoting ICT connected investments as a way to improve exporting capabilities.

Main study limitation is only one (less developed) region firms being investigated (despite large sample size). Interesting it will be to replicate results creating comparative study of different regions in terms of geographical localization and general economic development.

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