

Internet and its Consequences for the Internationalization of SMEs

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Abstract

Based on theory four propositions are developed. Nonmonotonic relationships were confirmed to exist in all four propositions. Overall the results showed that SMEs to a high extent use the Internet to enhance their internationalization activities and that they perceived that the Internet leads to a more efficient and quicker internationalization. Moreover, that companies that use the Internet for internationalization, are present on many markets and also that they display a high degree of proactive “new markets” search behaviour. The management’s perception of the employees’ personal and professional competencies was also related to usage of the Internet. That is, the Internet is used more for internationalization when the management believes that the employees have a sufficient level of competencies’ and less when management believes the opposite to be true, i.e. furthermore that the companies with low use of the Internet also to a low extent qualified their employees in internationalization competences. Companies that had many years of export experience used the Internet more than companies with fevers years of experience. Finally, it was confirmed that Internet usage leads to increased perceived profitability.

Introduction

The Internet has for a number of years continued its markedly increasing growth, strengthening its pervasive virtual presence. It is thus estimated that trade on the Internet accounted for 8.6% of the global sale of products and services in 2004, corresponding to USD 6,789.3bn (Chaffey, 2002: 13). Moreover, there has been an increase in broadband access from 2001 when 3.3% of Europe’s households had broadband access until 2005 when 24.2% of European households had broadband access. The corresponding figures for the same period for the United States, which is leading within broadband access penetration and in relation to the volume of e-trade etc., were 14.1% and 53.1% (McGann et al., 2005: 14).

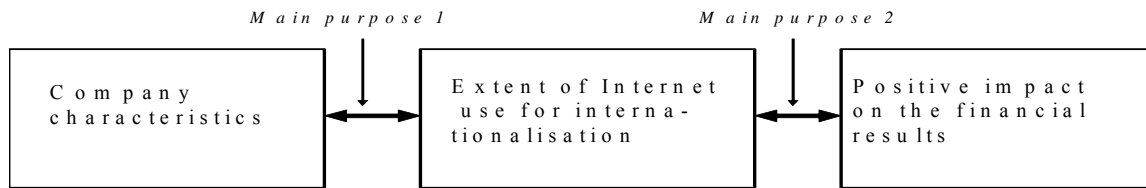
Knowing this, it would be interesting to pinpoint the relationship between various company characteristics, Internet use (in connection with internationalization) and profitability. The main purpose of the article is to account for:

- 1. Which characteristics apply to companies that use the Internet for their internationalization activities**
- 2. Whether there is a relationship between Internet usage and profitability**

Framework of Understanding and Sub Purpose

Derived from the two main purposes above, the a priori framework of understanding, are presented in this section.

Figure 1: Framework of understanding (a priori model)



Development of the Propositions of the Research

Four propositions are developed in this section and tested using chi-square analysis. Depending on the results our intention is to test them as hypotheses in a subsequent study. The Internet offers companies the opportunity for online access to a global customer base, which means that SMEs today have a better chance of internationalizing far more quickly than they did a mere 10 years ago. This will mean that the Internet can offer companies the chance of quicker market diversification and entry into new markets. As Ivang et al. (2002) point out, this will, however, above all be true for digital products. Evans and Wuster (2000) argue that the traditional trade-off between ‘richness’ (the value and depth of information) and ‘reach’ (the number of potential customers that you can make contact with) has vanished. The Internet has made it possible for a company to make contact with a large global customer group (a high degree of ‘reach’) very quickly while, at the same time, the ‘value’ of the information offered is high (high degree of ‘richness’). Simultaneously, this also lays the ground for the new so-called “Born Globals” (Chetty and Campbell-Hunt, 2004; Moen and Servais, 2002; Madsen and Servais, 1997).

Hence proposition one. There is a relationship between market diversification and proactive market search and use of the Internet for internationalization.

With the right combination of employee competences and technology development, the Internet also enables products and services to be adapted to individual customer requirements – even at long distance. After a purchase on the Internet and with the right technological web solutions, global customers can also be serviced around the clock – something which was not possible in the traditional bricks-and-mortar world (Javalgi et al., 2005).

Hence proposition two. There is a relationship between the employees’ personal and professional competences and use of the Internet for internationalization.

Luo et al. (2005) argue that the number of years companies have been engaged in exporting activities (international experience) is also a determining factor in the extent to which they use the Internet for internationalization. In many small companies, the personal commitment of the entrepreneur and the personal sales work are the drivers in the internationalization process. At a later stage, when the company is better organised, obtains a higher export share and has attracted more traditional management figures, it will become more common to involve the Internet (e-mailing and online sales) in the day-to-day international sales work.

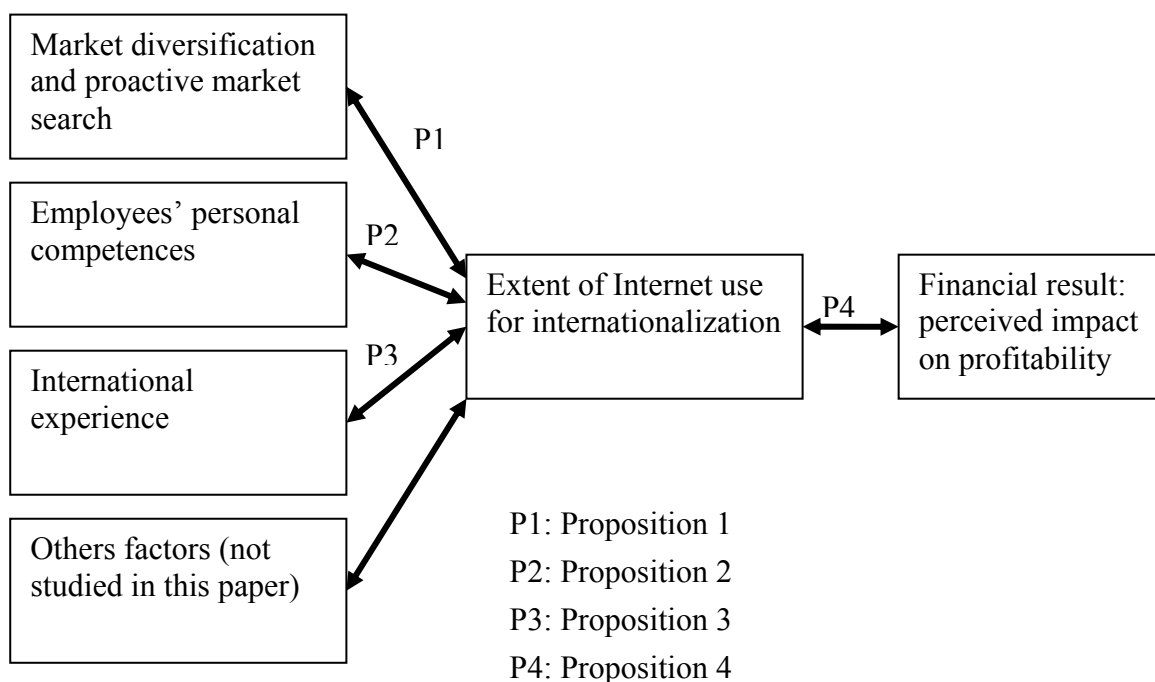
Hence proposition three. There is a relationship between the international experience of the company (i.e. number of years in the export market) and the use of the Internet for internationalization.

In connection with the preparation of a model for development of the international competitiveness in Internet companies, Javalgi et al. (2005) link the international competitiveness with the company's profitability. Even though it must be acknowledged that positive financial results can be caused by many other factors than the use of the Internet (one such factor could, for example, be innovation skills), the use of the Internet at a global level will, according to Javalgi et al. (2005), lead to improved financial results. The part of the Internet that immediately shows the strongest connection between Internet use and financial results is direct e-trade where the potential buyer visits the company's website and ends up buying a product online. In the following (i.e. proposition four), focus will therefore primarily be on companies offering direct online sales of their products and services.

Hence proposition four. There is a relationship between the company's use of the Internet for internationalization and the company's profitability.

The postulated relationships between the four propositions are illustrated in figure 2 below.

Figure 2: Expanded framework of understanding



According to the questionnaire used in this study (cf. the section on methodological considerations below for clarification), it is possible to focus on the following characteristics:

- Export profile (here, focus is on how long the relevant company has been exporting its products/services as well as on the number of countries to which the company exports)
- Size (here, size means the volume of turnover)
- Competences (here, focus was on the employees' personal and professional competences)

In addition, we were interested in assessing the consequences of high Internet usage in relationship with the internationalization activities. More specific it was studied whether a relationship between Internet use and profitability could be established enabling the authors to put forth practical guidelines to enhance profitability, if that was the case.

Methodological Considerations

From a general point of view, our interest in this study has centred on obtaining better insight into the internationalization process of small and medium-sized Danish companies. As our research goal has mainly been to create specific measurable insight that is open to broad generalization, our point of departure has been an objective rational perception of reality (Patton, 2003). A survey was drawn up in continuation of this. According to Gil and Johnson (1991: 76-77), a distinction can be made between analytical surveys and descriptive surveys where, in the latter case, you want to identify characteristics of the phenomenon studied, which indeed is the case in this study. Specifically, a questionnaire was distributed via the Internet. The questionnaire was tested through a number of focus groups composed of primarily CEOs based on this pre-test some modifications were made. The questionnaire was distributed in 2003 and the results were processed in 2003 and 2004. The target group consisted of 630 selected companies, some of them from the Confederation of Danish Industries' members list and some from KOB (*Købmandsstandens oplysningsbureau*) based on the following criteria:

- Export activities (actual exports of products/services are a condition)
- Company objective (only profit-maximising companies are included)
- Ownership (three types, i.e. a. Danish-owned parent company (53%), b. Danish-owned subsidiary (31%), and c. foreign-owned subsidiary (16%))
- Employee appointment (the company must have employees abroad)

Following written reminders and follow-up phone calls, the final response rate was 27%. With a random sample of 170 and a wish for a 95% confidence level ($z = 1.96$) as well as a p - and a q -value of 50%, the statistical uncertainty (sampling error) can be calculated at $\pm 7.5\%$, which has been found acceptable (Bush and Burns, 2006: 367). Cross tabulations and Chi-square test (χ^2) were undertaken based on the SPSS.

Findings

The results of the survey reported in this paper show that 70% of the participating companies, corresponding to 119 out of 170, to varying degrees ranging from some extent to a very high extent, used the Internet for internationalization. In addition, these 70% also believed that the Internet ensured a quicker and smoother internationalization process. In other words, we have established that SMEs use the Internet in connection with their internationalization activities and that this is widespread. Nonmonotonic relationships were confirmed to exist in all four propositions. See table 1 below.

Table 1 Chi-square values for the four propositions

	Chi-square	Degrees of freedom	<i>P</i> is less than or equal to ..	Significant (yes/no)
Proposition one	12.453 / 15.967	4 4	0.025 0.01	Yes Yes
Proposition two	14.736	4	0.01	Yes
Proposition three	13.409	4	0.01	Yes
Proposition four	20.219	4	0.001	Yes

Proposition one - There is a relationship between market diversification and proactive market search and use of the Internet for internationalization.

There is a significant nonmonotonic relationship between the number of export markets (i.e. market diversification) and degree of use of the Internet to achieve quicker and easier internationalization. This is also the case regarding proactive market search and usage of the Internet for internationalization. This indicates that companies that are proactive concerning finding new markets actually are present on more markets than companies that are less proactive and further that the proactive behaviour is facilitated by usage of the Internet.

Proposition two - There is a relationship between the employees' personal competences and use of the Internet for internationalization.

There is a significant nonmonotonic relationship between employees' personal competences and use of the Internet for internationalization. This means that the companies which believe that their employees to a lesser extent have the necessary personal and professional competences have a tendency to use the Internet less in their internationalization activities. This could indicate that a company engages in fewer export activities than it might because it is the management's experience that the employees do not possess the right competences to a sufficient extent. Personal and professional competences therefore constitute bottlenecks rather than, for example, the competitive situation, which one might otherwise be prone to assume. The results further showed that the companies with rather low use of the Internet also to a low extent qualified (trained) their employees in internationalization competences.

Proposition three - There is a relationship between the international experience of the company (i.e. number of years in the export market) and the use of the Internet for internationalization.

The proposition was confirmed. More specifically, the relationship probably constitutes the fact that the longer a company has been exporting, the more it uses the Internet to achieve a more (i.e. perceived) efficient internationalization. A possible explanation could be that these companies possess the most extensive experience, both positive and negative, with regard to various methods of carrying out their internationalization activities and, furthermore, that their experience tells them that the Internet is the best tool for obtaining a good decision-making basis for their internationalization activities.

Proposition four - There is a relationship between the company's use of the Internet for internationalization and the company's financial results (i.e. perceived profitability).

As mentioned above this proposition was also confirmed. This indicates that Internet use for internationalization activities leads to perceived increased profitability, perhaps due to better relationships with various stakeholders (for example employees, suppliers' and customers) as a consequence of more efficient and quick communication.

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