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## Digital disruption; experiences of Finnish eCommerce companies' development

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**Abstract:** The aim of this paper was to contribute to the expansion of the eCommerce (eCom) operations of small and medium sized companies (SMEs) in Finland to global markets. We also wanted to investigate and reflect on our experiences of working with several eCom companies and consulting firms to boost their global sales. In addition, one important goal was to acquire knowledge and boost participants' learning of fast growing online and digital business models. Digital disruption and digitalization in more general, were defined as a driving force behind eCommerce growth. The conclusions of this study underlined the importance of targeted marketing activities and knowledge and capability building for global eCom operations.

**Keywords:** Digital disruption, eCommerce, internationalization, University cooperation

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### 1 Introduction

Digital transformation is facing all areas of businesses and challenging the ways businesses are operating. Companies have to learn to use new digital tools and technologies in order to create value to customers in global markets. McKinsey's survey clearly indicates that developing talent and skills throughout the organization is one of the most important factors for success in digital change. (McKinsey 2018). Today, competition in many fields of business is global in nature. This trend has been accelerated by the rapid digitalization of markets and channels. In the global arena, companies compete in an environment that deals with diverse online channel formats, including eCom, m-Commerce, and social media (Bilgihan, Kandampully, Tingting, & Zhang 2016). The expansion of eCom and digital channels has influenced not only companies but also other parts of the society. In some product categories, over 60% of purchases are made through the eCom sites of foreign companies. Moreover, traditional bricks-and-mortar businesses are in transition

Some shops are facing diminishing demand due to customers moving to online channels, while in some cases, the purpose of physical stores has shifted more towards a showroom format. In particular, the challenge for many businesses has been to create a seamless connection between their physical store locations and their online storefront (Bolos, Idemudia, Mai, Raisinghani, & Smith 2016).

Digitalization offers companies interesting strategic opportunities (Abaidi, & Vernetta 2018). For the first time, almost any company can reach global markets with relatively easy to use digital eCommerce technology platforms. This Direct to Consumer (DTC) business model mean that a company sells its products directly to consumer without any intermediaries (see CBinsighths 2019). This market disruption, mainly based on both consumers' digital competence development and digital tools and cloud services development offered to companies, provides many opportunities. These opportunities may be global in nature (see Grönroos 2016). Digitalization continues to expand and market disruption presents a fundamental change in operating environment of a company. Digitalization has influence to both companies and customers by modifying things, processes and value chains to digital format. ECommerce in global arena can be defined as business model operating in global markets, typically with DTC format. In general, term "business model" describes how company does its business. In other words, business model is a punch of company activities (Zott & Amit 2017). However, e-commerce may have also more narrow meaning, it can be defined is a channel alternative to deliver goods or services to customers.

New disruptive channel developments, like developments in digital and mobile channels, have gained attention. Customers may experience different channels differently. From a customer's perspective, some channels may have a higher level of perceived risk and uncertainty than others (see Youn 2009). For example, customers who believe that online shopping is unsafe, difficult, or inefficient may have negative attitudes towards online shopping, preferring to rely on traditional channels offering face-to-face service (see Chiou, Chou, & Shen 2017 p. 4). In general, multichannel customers may be more likely to experience higher levels of perceived risk and uncertainty, especially in the case of online channels (see Fernández-Sabiote & Román 2016, p. 424). Consumers also seem to express more negative reactions related to information collection processes relating to services than in the case of physical products (see Aguirre et al. 2016).

The growth of online sales has been rapid in recent years. Today's customers are seeking fast, easy, and convenient shopping experiences, which eCom can offer. Currently, eCom represents a significant amount of retail sales and is expected to continue to grow (Lee, Young, & Johnson 2017). In multi-dimensional environment with disruptive channels and ever-changing customer needs and wants, companies face many challenges. Multi-channel systems integration and management is a topic

that requires attention. The growth of m-commerce and mobile payment requires interfaces and solutions. Impatient customers have a need for an accelerated speed of delivery, and “last-mile” delivery needs perfect execution. Moreover, markets are global in principle, hence in all actions, global issues must be considered.

In September 2017, Haaga-Helia started a European Union (EU) funded project to help Finnish eCom SMEs internationalize their eCom operations. The aim of the project was to:

- help businesses expand their eCom operations to global markets in a multi-channel context-
- study the development needs and aims of small Finnish eCom companies who wanted to expand and globalize their operations.
- acquire knowledge and boost companies’ and professionals’ learning of fast growing online and digital business models.

Several theoretical models have been applied to the adoption of e-commerce in SMEs. These models reflect of internal-, external- and technological factors influence on adaptation of eCommerce (see Sanchez-Torres & Juarez-Acosta, 2019). One eCommerce benefit for companies is the possibility to internationalise sales. However, B2C e-commerce is much more complex at the international level than at the national level (Macchion, Moretto, Caniato, Caridi, Danese, & Vinelli, 2017). Our aim is to expand the pragmatic knowledge of eCommerce operation possibilities and challenges in global arena. This paper reflects our experiences of the project. In particular, this paper highlights the need of new competencies and use of digital tools to successfully operate in global ecommerce markets.

Providing customers with quality services has a clear financial impact for companies (see Halvorsrud, Kvale, & Følstad 2016). Service or goods delivery takes place in channels designed by a company. These channels have changed radically in recent years. Numerous traditional service providers have created multi-channel systems by introducing, for example, technology-based self-service channels in a digital environment. These solutions enable customers to produce a service independent of direct service employee involvement. The term ‘omni-channel’ is used to describe channels within the same company that offer the same customer experience, regardless of the channel chosen by customers. Nowadays, the simultaneous use of different service channels is increasingly important, so companies must develop multichannel contact strategies through which to engage their clients (Gene 2007). With a multichannel strategy, clients can choose from several alternative ways of interacting with a business. Each channel has differential strengths but may, at the same time, have certain limitations and complications (Gene 2007).

In general, customers are seeking fast, easy, and convenient shopping experiences, which eCom can offer. The growth of online sales has been rapid in recent years. Currently, eCom represents a significant amount of retail sales and is expected to continue to grow (Lee, Young, & Johnson 2017). In Nordic countries, its development has been rapid—about 60% of people in Finland, Sweden, Norway, and Denmark bought items online in 2017 in sales amounting to over 21 billion euros (Verkkokauppa Pohjoismaissa 2018/eCom in Nordic countries, 2018). Recent figures have indicated the accelerated development of online shopping. For example, in 2018 the eCom Index showed a +27% growth rate, and growth value increased unpredictably by 43%. This growth is expected to continue in future. (Vilkas 2019).

In this multi-dimensional environment with disruptive channels and ever-changing customer needs and wants, companies face many challenges. As discussed earlier, multi-channel systems integration and management is a topic that requires attention. The growth of m-commerce and mobile payment requires interfaces and solutions. Impatient customers have a need for an accelerated speed of delivery, and “last-mile” delivery needs perfect execution. Moreover, markets are global in principle, hence in all actions, global issues must be considered.

## **2 Global eCom markets**

Extended market reach is an advantage of the eCom business format (see Rahayu & Day 2017); however, eCom adaptation has attributes that reduce its expansion among businesses. A lack of support, internal constraints, security issues, internal resistance, and a lack of human and IT resources have been mentioned as factors that discourage eCom adaptation (ibid 2017). However, eCom is a huge tool that aids the leapfrog development of SMEs, and it is an engine that puts SMEs into a global marketplace (see Saeed, Tuomisto, & Salluzzi 2017).

There are various ways for companies to enter global markets with eCom. Companies can build localized language versions of their domestic eCom shop and conduct market specific activities in order to drive traffic to them. Another option, which can be used simultaneously or as a separate strategy, is to use marketplaces like Amazon or Rakuten. A hybrid mode of international operations with bricks-and-mortar retailers together with online sales has gained popularity. Managing operations in diverse markets has become a critical task (Schu, Morschett, & Swoboda 2016).

Marketplaces facilitate the exchange of products and services, the transfer of information and payments, and the creation of economic value for parties such as buyers, sellers, and market intermediaries` (Ghazawneh & Henfridsson 2015). Different global markets are dominated by different marketplaces. For example, if you are entering Russian markets, one option is to use Yandex Markets, which has a

strong position in Russia. Rakuten has over 87 million active customers in Japan, and many international brands sell their products there. Amazon dominates the U.S. and is strong in some other countries. Development in online marketplaces has been rapid. One example of this development is customers' changing search behavior, which is important, because eCom companies get traffic to their sites through customer internet searches. This source of traffic is valuable for companies, because customers typically need something when they search for items online. Customer search behavior is in transition, and in the U.S., almost 40% of searches start on Amazon, not on search engines like Google (IRCE 2018). This creates pressure for eCom business global operations planning.

#### 4. Methodology

In September 2017, Haaga-Helia started an EU funded project to help Finnish eCom SMEs internationalize their eCom operations. Our aim was to start with a small group of companies and to increase this number at a later stage by a few more. However, when we marketed the opportunity for companies to participate in our research, we immediately received enquiries from over 20 companies wishing to expand their online operations to global markets.

In our study, we applied qualitative approach and used mixed methods to gather and analyze data. Our study was done following action research principles where companies, researchers and students collaborate closely during the research process (Reason & Bradbury 2009). Moreover, we underline practical knowledge, results and actions throughout of the research project. Action research, in general, requires researchers to work with practitioners in a way that research and practice is aimed to create results together (see Lim, Min-Jun, Ki-Hun., Kwang-Jae, & Maglio 2018).

In the first phase, we asked the companies to fill in an online survey, in which they self-evaluated their current eCom status, their knowledge of and experience in global business, and their aims and resources in terms of global eCom operations. Based on this information, we ended up working with 14 companies. In 2017, we started with a pilot group of four companies, and during 2018, 10 more companies joined us. In addition, we recruited three eCom consulting companies and three foreign universities. Around 30 Finnish and 40 foreign students took part in different phases of the project.

Table 1. Qualitative and quantitative data collection during the eComLab project

Study type	Method	Sample
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<b>Baseline analysis</b>	Web-based questionnaire	21 companies responded/14 companies chosen
<b>One-to-one consulting process</b>	Participation in growth hacking activities in selected countries and digital marketing campaigns	14 companies
<b>Target market analysis</b>	Mixed student teams, including local and native students from new target markets	Three companies chosen for the Russian market and two for the Japanese market St. Petersburg State University of Economics (Russia) Toyo University (Japan)
<b>Artificial Intelligence (AI) in eCom</b>	Hackathon/designathon involving teams of business and engineering students  Three teams worked for two days and came up with new ideas and concrete solutions	Business partner Elisa Ltd, a Finnish telecom company
<b>Workshops</b>	Sharing experiences and learning	All teachers, consultants, companies, and university staff

In this paper, our aim was to contribute to the expansion of businesses' eCom operations to global markets in a multi-channel management context. We also wanted to study the development needs and aims of Finnish eCom SMEs who wanted to expand and globalize their operations. In addition, one important goal was to acquire knowledge and boost companies' and professionals' learning of fast growing online and digital business models. In order to study these questions, we used data from 10 companies who started the project in 2017 and participated in the consulting process in spring 2018. Altogether, 16 companies took part. Thus, our findings and conclusions were based on starting point analysis, one-to-one consulting, and common workshops. We have been part of the process since the planning phase. During this time, we have had many discussions with CEOs and other company representatives to understand their experiences and challenges.

## 5. Results and conclusions

The project started with baseline analysis to map participating companies' wishes and wants related to their global eCom development needs. In the following table, we have summarized basic information on the companies.

### 5.1. Summary of baseline analysis

**Table 2.** Summary of key company facts and starting point analysis

Company	Industry	Number of language options in online shop	Experience in global business Y/N	Online shop established	<b>Where are your customers at the moment?</b>	Self-evaluated eCom competence
Company 1	Consumer electronics	3-4	Yes	2011	Europe	Basic, lots to learn
Company 2	Production and selling of children's clothes	3-4	Yes	4.5 years	Europe, Asia, and Russia	Advanced
Company 3	Style and fashion	3-4	No	2 years	Finland	Basic
Company 4	Design	1	Yes	3 years	Europe	Basic
Company 5	Design	1	Yes	5 years	Europe, Asia, and the U.S.	Basic
Company 6	Shoe production	2	Yes	2014	Europe, Russian, USA, and Asia	Basic
Company 7	Industrial design	2	No	2 years	Europe	Basic



Company 8	Mattress production	2	Yes	2018	Worldwide	Beginner
Company 9	Design/fashion	1	Yes	2017	Europe	Basic
Company 10	Interior design	1	Yes	2015	Worldwide	Basic

In the web-questionnaire, in addition to basic facts, we assessed companies' level of internationalization, their technological eCom solutions, and their preferred target markets. All companies were interested in international eCom, and all companies noticed that their markets were global, not local. The outcome was good for our project, because in Finland, over 80% of eCom companies operate in only one language, Finnish, meaning that they can only reach local markets. Technological eCom solutions varied, ranging from international cloud-based platforms, like e-Pages of Shopify to smaller domestic solutions, like MyCashFlow. Only a few used open-source solutions, like WordPress WooCommerce. According to our analysis and discussions in the development process, all solutions had pros and cons, but all platforms enabled companies to launch in global markets successfully.

We also asked participating companies about their most desired global target markets. Countries who belong to the EU, like Germany, were mentioned. We believe that the reason for the popularity of EU markets was the ability of companies to quickly and easily access them without entry barriers or tariffs. Moreover, Russia and Japan were mentioned as target markets for global entry. In spite of sanctions and a relatively small growth rate, Russia has a large population in many customer segments. For example, St. Petersburg has the same population as the whole of Finland, around 5.5 million. With its close proximity to Finland, this was an attractive market for many Finnish eCom companies. Japan, on the other hand, has a large population, and Finnish natural food companies have gained popularity there.

In the starting point analysis, companies evaluated the strongest elements of their online shop, where they most needed help, and what they wanted to develop. Below, we have provided a summary of the most commonly stated strengths and weaknesses. The main reason for applying to our project was a lack of resources and competence in online sales and marketing. All participating companies had a strong motivation to internationalize and increase their global online sales.

**Table 3.** Companies’ perceived strengths and weaknesses for global eCom entry.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Good brand and products</li> <li>• Customer support in English</li> <li>• Motivation to grow and develop</li> <li>• Finnish design and good quality products</li> </ul>	<ul style="list-style-type: none"> <li>• To get more visitors and increase sales</li> <li>• Effective online marketing at target market</li> <li>• Lack of language options in online shop</li> <li>• More knowledge of customer journey in online store needed</li> <li>• Knowledge of customer buying behavior in target market</li> <li>• Poor mobile optimization of online shop</li> <li>• Lack of using analytic tools and retargeting leads</li> </ul>

Three consulting companies took part in the eComLab project. Of these, two consultancies specialized in eCom business, with expertise in marketing, general competitiveness, and user interface development. The third consulting company was an expert in eCom entry and the management of global marketplaces, like Rakuten (Japan), Amazon (Germany), Yandex Market (Russia), and WeChat (China).

Marketplace consulting concentrated first on Rakuten and Yandex Market. Later, one company wanted to enter Amazon, and in our ongoing project, five participating companies are in the process of opening a WeChat account. All participating companies took part in general eCom consulting sessions that aimed to boost sales in international markets. Companies took part in two consulting sessions. The first session focused on a general evaluation of the strengths and weaknesses of each company’s online shop. The second session focused on marketing activities in defined markets and was carried out using growth hacking principles.

In the evaluation session, the following topics and development areas were evaluated and discussed: site speed, customer journey, ease of shopping, product card content, level of marketing activities, and user experience in offering products and services via mobile/desktop channels. The main areas identified for development were related to mobile/desktop user experience. In many cases, online shops seemed to work well

either on desktops or mobile devices but not on both. In addition, there was an inadequate level of global marketing activities. Consultants recommended that companies increase their marketing activity, especially via Facebook, Instagram, and Google ads. Remarketing or retargeting was not used much, though it constituted one development phase.

The second consulting session was carried using growth hacking principles. This meant that rapid marketing activities were carried out, typically using Facebook, Instagram, and Google Ads in a couple of foreign markets. In general, results were achieved, and participating companies had an opportunity to sell their product to new markets. The results of this latter growth hacking phase have been summarized in Table 4.

**Table 4.** Growth hacking results.

Key results from growth hacking sessions
<ul style="list-style-type: none"><li>• <b>Over 300 000 potential clients reached</b></li><li>• <b>Store visitors via paid traffic from Europe, Asia, and America</b></li><li>• <b>Visitors from more than 10 countries, such as Sweden, Belgium, Germany, Switzerland, Singapore, the U.S., and the Netherlands</b></li><li>• <b>Purchases from five to seven different countries</b></li><li>• <b>Single purchases from 6 euros to 500+ euros each</b></li><li>• <b>Average order value was a key variable; it is important to sell more expensive goods or larger orders when selling globally</b></li></ul>

The importance of customer journey analysis was also underlined in the consulting sessions. None of the participating companies had experience with or were using analytic tools like Lucky Orange or Hotjar to acquire knowledge of how customers navigated their online shops. The use of customer journey analytics was recommended.

## 6. Conclusions

This study identified new insights in expanding eCom SMEs' international

operations. This topic is important, as online sales are growing, and domestic companies are facing high levels of global competition. All companies, whether they operate in hybrid channels or pure eCom formats, must build their capabilities to operate in a digital and global environment.

E-commerce as a business model has many advantages. In general, the adoption of e-commerce could allow companies to get access to new customer segments, develop new markets and improve company's profitability (see Macchion et al. 2017). Moreover, capabilities in information technology and IT in more general has a positive effect to internationalization of a company (Lecerf & Omrani, 2019). By adopting E-commerce business model, companies place themselves to digital learning process, especially if companies adopt growth hacking principles in marketing and business development.

According to recent article (Kaushik, Khare, Boardum and Cano, 2020) the main challenges faced by online retailers today are providing of a superior customer service experience, reducing the perceived risks of online shopping in the mind of consumers, providing an effective website design and reducing the number of returns. Our findings strengthen the argument that running an e-commerce business requires solid business, digital marketing and international business competences.

While eCom basics, like a smooth mobile device customer experience, must be delivered, companies must also pay special attention to marketing activities. This concerns companies operating in global marketplaces and those whose aim is to drive traffic directly to their localized online shop. Moreover, in many cases, we were confronted with a lack of company resources to concentrate on the global dimension of eCom. Without the necessary time, knowledge, and capabilities, global market-related aims are difficult to achieve.

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