



LUT School of Business and Management

Bachelor's thesis, Business Administration

Financial Management

E-Commerce and its impact on Customer Behavior in B2B market

Verkkokauppa ja sen vaikutus asiakaskäyttäytymiseen B2B markkinalla

3.1.2020

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ABSTRACT

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Title: E-Commere and its impact on Customer Behavior in B2B market
School: School of Business and Management
Degree programme: Business Administration / Financial Management
Supervisor: Sanna Heinänen
Keywords: E-Commerce, Customer Behavior, B2B, Electronic Business

This bachelor's thesis has a purpose to explain and clarify how the e-commerce impacts customers behavior in B2B market. To achieve this, an investigation of e-commerce compared to traditional ways of making business will be conducted. In the process, the additional features that e-commerce offers and how those features affect daily business are highlighted, helping to get a comprehensive understanding of what are the points affecting the customers behavior.

With literature review from relevant sources, a background for the empirical analysis is built. Conducting these two, the research question can be answered. Literature review for this research is a collection of academic findings about customer behavior and e-commerce. The empirical analysis is done with qualitative data collection method, where the data is collected through semi-structured interviews. Firstly, the literature review and the empirical analysis are done separately, but afterwards are both reflected as a whole to see how the earlier literature findings correspond with the interview findings of this study.

As a result after studying the literature and the empirical findings, it can be said that e-commerce influences the customers behavior with its additional features, that can not be offered via traditional ways of doing business. In todays' world, a lot of the customers are using the internet for procurements and normal business processes. Given that, an e-commerce offers a lot to its provider in terms of new customer acquisition and making the existing customer base more satisfied.

TIIVISTELMÄ

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Tutkielman nimi:	Verkkokauppa ja sen vaikutus asiakaskäyttäytymiseen B2B markkinalla
Akateeminen yksikkö:	School of Business and Management
Koulutusohjelma:	Kauppatiede / Talousjohtaminen
Ohjaaja:	Sanna Heinänen
Hakusanat:	Verkkokauppa, asiakaskäyttäytyminen, B2B, sähköinen liiketoiminta,

Tämän kandidaatintutkielman tarkoituksena on selittää ja selvittää miten verkkokauppa vaikuttaa asiakkaiden käyttäytymiseen B2B markkinalla. Tämän selvittämiseksi suoritettiin tutkimus ja vertailu verkkokaupasta ja perinteisistä liiketoimintatavoista. Samalla korostetaan verkkokaupan tarjoamia lisäominaisuuksia ja miten ne vaikuttavat päivittäiseen liiketoimintaan, joka auttaa antamaan kattavan käsityksen asiakkaiden käyttäytymiseen vaikuttavista seikoista.

Asiaankuuluvien lähteiden kirjallisuuskatsauksella rakennettiin tutkimuksen empiirisen analyysin tausta. Kirjallisuuskatsauksen ja empiirisen analyysin avulla asetettuihin tutkimuskysymyksiin voidaan vastata. Kirjallisuuskatsaus koostuu kokoelmasta akateemisia tutkimuksia asiakaskäyttäytymisestä ja verkkokaupasta. Empiirinen analyysi tehtiin laadullisella tutkimusmenetelmällä, jossa tiedot kerättiin puolistrukturoiduilla haastatteluilla. Tässä tutkielmassa kirjallisuuskatsaus ja empiirinen analyysi tehdään aluksi erikseen, jonka jälkeen molempien löydöksiä heijastellaan yhdessä. Näin saadaan kuva siitä, kuinka kirjallisuuskatsauksen aikaisemmat havainnot vastaavat tämän tutkimuksen haastatteluhavaintoja.

Kirjallisuuskatsauksen ja empiiristen havaintojen avulla pystyttiin toteamaan verkkokaupan vaikuttavan asiakkaiden käyttäytymiseen etenkin lisäominaisuuksien avulla, joita ei voida tarjota perinteisten liiketoimintatapojen avulla. Nykymaailmassa valtaosa asiakkaista käyttää internetiä hankinnoissaan ja normaaleissa liiketoimintaprosesseissaan, jonka takia verkkokauppa tarjoaa sen omistajalle paljon mahdollisuuksia uusien asiakkaiden hankkimisessa ja nykyisen asiakaskunnan tyytyväisenä pitämisessä.

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1. Introduction

The trend of shopping online is basically growing on a daily basis and there are no signs of it slowing down. Currently about three-quarters of world's population have access to mobile phones and these users download about 30 billion apps per year (Solomon, Bamossy, Askegaars, Hogg 2016, 85). Most of these mobile phone owners typically own also a tablet or a computer, an electronic device that can be used for ordering products online. According to Solomon et.al. (2016, 85, 88) the growth of online retailing during years 2015 and 2016 in Europe was expected to be 18.7 percent. Considering that Europe is already quite developed as a marketplace, one can only imagine what the growth of e-commerce will be when the emerging markets start to rise. Given the rapid growth of internet, it is in utmost importance to conduct even more researches of the subject and its business usage, which is commonly called e-commerce.

Nowadays we as consumers can even buy our everyday groceries or place an order for a meal online, both of which will be delivered to our own front doors if willing. The demand for online grocery shopping was recognized already in the early 2000's, which was the time internet got its exploding spike in usage of normal households in addition to the small amount of corporate use (e.g. see Morganosky & Cude 2000). In just a little while after the usage spike the online shopping habit grew even more, more than most ever expected. Latter Studies have shown that in 2009 the US manufacturers and merchant wholesalers B2B transactions online had accounted for over 90 % of US online transactions, which meant a little over \$3000 billion (Sila 2013). Given that was the situation 10 years ago, it really is important to research the e-commerce in B2B as much as possible.

Shopping via e-commerce makes our everyday lives considerably easier as we don't even have to make a personal contact with a shopkeeper or a sales representative to make our purchases. This trend is also growing in the B2B market as it provides considerable amount of benefits for the companies, both the buyers and the sellers. But one must bear in mind that in the beginning it might take a while for the customers to get used to the Online ordering of

products that they are used to order via phone or email. This was the situation with the gas company AGA as it launched the e-commerce for its B2B customers in Finland.

This thesis will be addressing e-commerce and its impact on the B2B customers behavior. Online shopping in B2B market is becoming increasingly more popular every day, but there is not that much research done about the acceptance of online shopping and its affect on customer behavior in B2B markets. As a growing trend, it is in utmost importance to understand the possible changes in customers behavior that the online shopping might bring. Are there some new opportunities or does the e-commerce have an impact on the customer behavior at all? For AGA it will be beneficial to understand the customers behavior and what might affect it negatively and positively.

1.1. Former studies

Customer behavior has been one of the most researched aspects of doing business during the recent years and even during the last century. It studies the factors that influence the purchasing decision, why some products stay on the markets longer than others and why some of the products are more wanted than others (Isohookana 2007, 71). According to Isohookana (2007, 75) the customer behavior is driven by the individual needs that one has. Lately, customer behavior has been studied together with the use of e-services and quality of service model. One of the studies found out that by applying a quality of service model into e-commerce platform it could lead to more customer purchases from the website and increase the customer profitability. (Ghavamipoor, Golpayegani, Shahpasand 2017) Naturally, this is not directly applicable for the subject of this thesis, but it gives us information that a well-constructed e-commerce might have a direct impact on the B2B customers behavior. Mohapatra (2013) pointed out that the e-commerce should be tailored according to the customers that will be using it. Doing that, the customers can recognize the benefits the e-commerce offers, but it also builds trust. Studies like this indicate that by tailoring the e-commerce for certain customer group could be a groundbreaking thing to consider when launching the platform. If the customers are happy with the e-commerce, they are more likely to come back using it and thus bringing more sales than a customer that does not know how to use the site at all.

Typically, B2B customers have not made their buying decision based on the personal emotions, but because of the specific need for something. It was considered as a norm, that when doing purchasing for an organization, the only things that the buyer should have put attention on were only rationality based, but in today's world purchasing is not anymore that straightforward (Pandey & Mookerjee 2018). For example, feelings and emotions play a huge role in today's B2B procurement process. Studies of the current B2B market have even found out that use of different colors have had a same kind of effect on B2B-customers that on B2C-customers (Wiedmann, Haase, Bettels 2019). By providing the customers an e-commerce as a shopping platform, it is needless to say that it might prove to be really profitable for the company that launches it. Online shopping platform enables its provider to use marketing that benefits from the customers emotions, which according to studies seem to be working in the B2B market as well as in the B2C. The usage of e-commerce for marketing was already recognized in the early 2000's by Kothandaraman and Wilson (2001). More recent studies have proved that digital marketing is far more affordable than traditional marketing, making the e-commerce even more attractive for B2B use (Miller 2012, 28-29).

Early B2B marketing theory was basically the same as the economic theory. The products were homogenic and the rational, lowest price with acceptable quality-based decision making in purchasing was the norm. Basically, there was no buying preferences, because all the purchasing was done with the supplier that could give the lowest pricing for the products needed. It was more important to see the immediate profits of low prices than to invest in more costly long-term or even more productive products. Slowly the B2B purchasing decisions began to move away from the solely rational purchasing into a more behavioral approach where the emotions and personality of the buyer even sometimes have more impact on the decision making than the rationality. (Hadjikhani & LaPlaca 2013) Recent studies of B2B customer behavior have mostly researched the role of emotions and personality in the purchasing process (e.g. see Pfoertsch & Scheel 2012).

Most of research done nowadays focus on the transition from the rational-based B2B purchaser to the more emotional driven, humane purchaser. Currently B2B buying process is

far from being only rational and having the lowest priced products in the market do not mean that all the buyers are immediately interested in your offering. Strong connection between the buyer and the salesperson is noticed to be a key to the organizational buying process, as the emotions have basically as much role in the B2B decision making that rationality and logic have (Mahapatra, Ramani, Kulkarni 2019). Research about the B2B have shown that the same emotions that influence the buyer's in their personal lives might have a special role on motivation and buying behavior in the organizational level as well (Kemp, Borders, Anaza, Johnston 2018).

The wide use of e-commerce started in the early 2000's with the revolution of computers and telecom technology. Basically, e-commerce means that every business transaction is done online without any need for a human interaction. (Rajaraman 2000) It was also recognized in the early 2000's that the traditional wholesalers had to adopt their way of doing business in ways that e-commerce could not match them if they wanted to stay on the market by solely doing business without online services (e.g. see Lightfoot & Harris 2003). Nowadays nearly everyone is using online to order something for themselves or to make organizational purchases. Recently conducted studies have shown that online channel for ordering reduces customers uncertainty and increases consumer decision-making ability, but also increases the purchaser's self-efficacy if the buyer is already a frequent internet user in personal life (Hernández, Jiménez, Martin 2010). It could be considered as a rarity if a business nowadays does not have a platform online for selling its products, as most of the customers, current and potential ones, are most certainly using internet at least on some level.

However, it is not broadly researched if the e-commerce platform has a significant effect on the B2B customer behavior. The e-commerce has its positive factors on the purchasers but does these influencing factors have such an impact on the purchaser that it might even, for example, end up generating more sales than normally? Could e-commerce attract completely new customers by offering something that is not yet available? This thesis approaches questions like this with a broad literature review and empirical analysis.

1.2. Theoretical framework & research questions

This study will be mostly based on articles and other literature considering E-Commerce and B2B customer behavior. First, this thesis will be dealing with the traditional B2B buying process where the purchasing was done purely based on rational and short-term decision making. After that, an overview of purchasing done in today's world and how it might have changed from the traditional process will be conducted. Finally, the thesis will be solving how the e-commerce might affect the purchasing decisions and what are its benefits for everyday business.

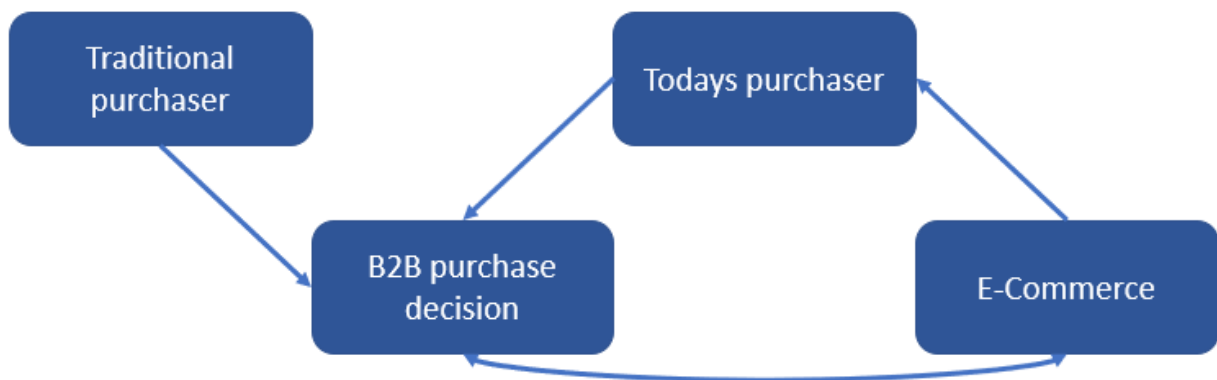


Figure 1. Theoretical Framework

The objective of this research is to clarify the affect that e-commerce has on B2B customer behavior, but also to get a broad view on the B2B customer and e-commerce on their own. To get an answer to the thesis objective, three questions were established that will be answered during this thesis. The questions are as follows:

- How e-commerce affects the B2B customer behavior?
- *How does sales representatives and managers see the e-commerce affecting the behavior of customers?*
- *What are the key factors of e-commerce that have an influence on customer behavior?*

The main research question is “How e-commerce affects the B2B customer behavior?” and the two sub questions are “How does sales representatives and managers see the e-commerce affecting the behavior of customers?” and “What are the key factors of e-commerce that have an influence on customer behavior?”. To get answers for the sub questions, interviews for sales managers and representatives at AGA were kept. It is interesting to see the results of this interview and does the e-commerce have same kind of affect to the B2B customer that it has for example to me as a B2C customer. Being able to see the product that is being ordered and to get all the needed information immediately is a huge factor for B2C purchasing decision making. Is the situation same with B2B customers?

1.3. Research methods and material

This research will include an empirical research and material, which will be collected from already existing literature considering the researched topics. With the empirical research my goal is to get information about the effect of e-commerce on Customer behavior from sales managers, sales representatives and from people working with procurements. With a broad number of interviewees, the research will get more insights and differing aspects of customer behavior. By mixing the empirical research with the existing literature this research will add some new perspectives on the topics.

To get the information from the sales representatives and managers, a series of interviews were conducted in the main office of AGA at Espoo. Conducting interviews and doing the empirical research with qualitative method was the best available option for this research because the representatives and managers are daily on contact with the customers and thus, they have the best insight on the customers opinions about newly launched the e-commerce. The interviews are done as Semi-structured interviews. Semi-structured interviews are done with already prepared, flexible questionnaires, which enables the interviewed person to provide the response in their own terms (Qu & Dumay 2011). According to Qu and Dumay (2011) the semi-structured interviews can be especially used for management and organizational issues, which is part of the reason I have chosen it for this research.

The interviews are constructed to match with case study. The idea is to provide answer for questions “How?” and “Why?”, for which, according to Rowley (2002), case study is the right method to choose. Rowley (2002) states that case study is an analytical generalization that uses previously developed theory as a background and as a comparison for the information generated through the interviews. Usually case study combines data collection methods like interviews and archives, and in addition it also can be used to generate new theory (Eisenhardt 1989). This is the reason why case study with interviews was the best decision to research the effect of e-commerce on the B2B customer behavior.

1.4. Thesis Structure & limitations

Firstly, the research will be taking a look into the literature about e-commerce, B2B and customer behavior. With already existing literature, the research will be focusing on the e-commerce, what it is and what is the process needed to launch it for commercial usage. After that the thesis will be addressing the benefits that e-commerce might bring for everyday businesses. After the literature-review of e-commerce, the research will dig into the B2B purchasing with its history and how the decision-making for purchasing has changed.

After the literature review, the chapter 3 will be presenting how the conducted interviews were executed. It also has some theory about the interviewing process, including the reasons why I chose that particular interview process for this study. Also, a short introduction of the case organization AGA is included in the chapter 3. After that, the chapter 4 will be presenting the empirical data and the findings of the interviews. Lastly, the thesis will introduce and discuss about the findings of the research and propose new ideas for future studies that should be conducted on the subject.

This study will be limited to consider only B2B customers as the purpose is to explore how their behavior will be affected by e-commerce. Thus, when speaking about customers, it will solely mean B2B customers. It must also be stated, that while interviewing managers and sales representatives for this research, they all work for AGA. All the interviewed individuals also reside in Finland. This study will also handle e-commerce as it would be built on just one

platform, so it does not take into consideration the differences e-commerce platforms might have.

2. E-Commerce and B2B Customer Behavior

It is said, that as a scientific accomplishment e-commerce and its use as a tool for business is one of the most significant ones (Qin 2009, 4). The usage of e-commerce as a term basically implies to every transaction related to online buying or selling of products and services, but it also covers all pre-sale and post-sale activities of the supply chain which are done electronically (Chaffey 2015, 14).

Nowadays a significant amount of B2B transactions are done via e-commerce as it is a convenient and quick way to handle procurements and all business-related activities. According to Kotler (2006, 21-22) B2B markets are far broader than what is typically assumed as most of consumer product manufacturers must buy their materials from other companies and sell the end-product to retailers or wholesalers. Because of this, it is important to study the dependency between e-commerce and customer behavior. Before making the e-commerce available for business use, it is important to understand if the customer behavior is affected one way or another.

This chapter will present the former findings of literature related to e-commerce, its launch and affect on business, customer behavior and how the customer behavior is influenced by e-commerce. As mentioned before, these subjects are important for a full understanding of this thesis.

2.1. E-Commerce

There is a lot of different definitions for e-commerce, but the one that U.S. government has given is one of the broadest and the most used one. According to U.S. government, e-commerce is a collection of business activities that are done through internet, including payment, transactions and advertisements. (Qin, Chang, Li, Li 2014, 2) Its base lays on electronic information technology, as all the information processing, exchanging and storage is done by computers via Internet (Qin 2009, 21). Providing business online has its benefits,

that could not be obtainable as easily without it. As said by Chaffey (2015, 30), delivering services online will drive better efficiency and competitiveness.

For customers, e-commerce has been proven to deliver many advantages. A study conducted with 60 companies, including American Express and Motorola, indicated that dealing with procurement electronically cut the purchasing time in half, cutting the purchasing administrative costs by over 50 % (Hutt & Speh 2013, 47). Dealing with procurement electronically usually eliminates steps that are needed with the traditional procurement. Depending on the functions provided, e-commerce can eliminate all the paperwork between the buyer and seller that was needed with every transaction before possibility to do it online (Chaffey 2015, 301-302). These traits tend to grow the customer happiness that eventually carries out for the e-commerce provider.

Doing business online can deliver concrete benefits for its provider if the info produced by e-commerce is used for its fullest. Qin (2009, 21) mentioned that as the computer science has evolved, it has enabled the e-commerce and its users to not only store and exchange data, but also to use it for doing analyzes for decision-making and as a market information provider. With use of e-commerce, companies are enabled to fulfill complex, multichannel order cycles, predict their performance and even gain competitive advantage (Mohapatra 2013, 25).

2.1.1. The launch of e-commerce

The launch of e-commerce as a platform of doing business is often taken with quite conflicting emotions within the company that launches it and along the customers as well. To move from traditional B2B ordering via phone or email to solely online based platform where the customer on its own does the ordering process requires a lot of trust and back-end checking from the company to make sure that the order is overall acceptable. But this is just a question about habits that can be changed within time. It is studied that in the end e-commerce has a direct impact on labor productivity (e.g. see Bertschek, Fryges, Kaiser 2004). Bertschek et.al. (2004) found out that B2B companies that did not use e-commerce as a business platform,

but instead pursued the business without it did not deliver as high labor productivity when compared to the companies using it.

When developing a web site for e-commerce usage, the developing process can be outsourced from another organization or one could also use its own in-house resources if the needed know-how is available. Developing a state-of-the-art e-commerce platform usually requires experienced professional, who is recognized from the usage of latest technologies and methods. When developed, the site should be tailored with the customer that will be using it in mind. That way it will provide the customers an easily usable site to handle their businesses as usual. (Mohapatra 2013) It is crucial to tailor the site according the individual customer base so the benefits and trust can be recognized by the customers. Chaffey (2015, 34) pointed out that in addition to no perceived benefit and lack of trust, security problems, costs and lack of skills were recognized as barriers for customers e-commerce usage. A study conducted by Anckar (2003) explained that search problems and costs affected highly on the customers negative value propositions towards e-commerce. These previously mentioned factors should naturally be minimized by tailoring the site, a thing that should be done with a help of experienced professional.

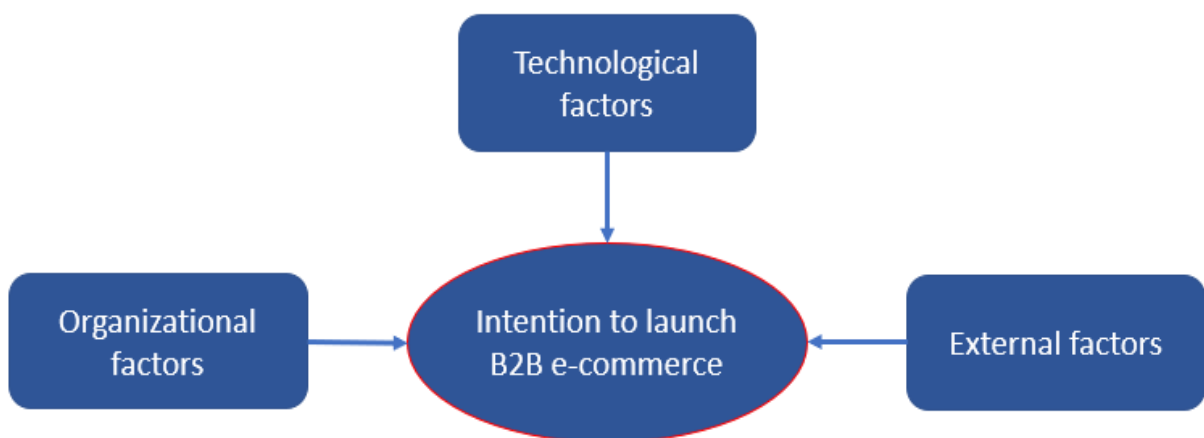


Figure 2. Factors affecting the decision-making on launching the e-commerce (Lip-Sam & Hock-Eam 2011; Sila 2013)

As stated in the figure 2, previously conducted studies have found three existing factors which have a direct impact on the decision-making of launching the e-commerce. These factors are

technological, organizational and external factors. All these factors have positive, but also some negative aspects to question the launch of e-commerce. Usually the launch of e-commerce begins within the organization, which is followed by valuation of technological factors. These factors are also known as managers' evaluation factors of the organizational readiness for adopting e-commerce, a combination called perceived organizational e-readiness (Tan, Tyler, Manica 2007). External factors, such as consultants, can help the managers in evaluating these factors.

According to Sila (2013) the level of management has a significant impact on adoption of B2B e-commerce. It was also pointed out by Lip-Sam and Hock-Eam (2011) that firms with experienced CEOs who used computers frequently and were highly educated are more likely to take the e-commerce into usage. This basically shows that support from above at organizational level has a huge impact on getting the e-commerce into everyday business use. Management must also assess the external readiness for the e-commerce, such as market force readiness and the industry's readiness in which the organization operates at (Tan et.al. 2007). Providing e-commerce for a customer base that would not have availability to use it as a tool for business would not make any sense for the provider.

There has been recognized several technological factors that affect negatively on the adoption of e-commerce, such as security concerns, the costs of adoption (software, start-up costs, system integration costs) and the organization size (Lip-Sam & Hock-Eam 2011; Zhu, Dong, Xu, Kraemer 2006). During their research Lip-Sam and Hock-Eam (2011) found out that the usage of external support, such as consultants, have an important role in the decision-making to adopt the e-commerce into business usage. By using consultants, the negative effects of e-commerce can be minimized, and it also clarifies the positive effects the e-commerce. Xu et al. (2006, 609) discovered that relative advantage, compatibility, technological competence, competitive pressure and partner readiness had a positive impact on implementing the e-commerce into business use. These aspects can also be boosted with a use of external consultants.

When deciding to create the e-commerce platform, the integration of material management and financial management should be included straight from the beginning. By that the company that launches the e-commerce can prevent any inconveniences that would be generated by seemingly working e-commerce platform. If an e-commerce like that would get too big, it would be impossible to handle, and the credibility of produced information would be lost. (Lahti & Salminen 2014, 88-89) Integrating the material management into e-commerce is extremely vital for the business and its health. Qin (2009, 51) pointed out, that logistics, as a part of material management, has been proven to be the final warranty for customers to realize the additional value e-commerce offers them.

2.1.2. Benefits for everyday business

According to Qin et.al. (2014, 4-5) the benefits of e-commerce can be summarized in three aspects by making traditional business activities better and more efficient, by breaking the constraints of time and space and by creating new business and making the earlier impossible a possibility. For customers e-commerce offers reduced costs on the purchasing process as it saves time on information searching and inventory management by offering a new convenient channel for procurement processes (Chaffey 2015, 29; Mohapatra 2013, 78). Needless to say, the additional value of time saved by customers because of e-commerce attracts already existing customers but also completely new customers, enhancing the company's competitive advantage and enabling the creation of new business.

By integrating e-commerce into use, it enables the organization to lower its transaction costs by reducing the earlier needed large organizational system. While doing so, it also makes the dealing with sales data for management faster, enabling more efficient production and distribution of products. Changes in product availability, pricing or possible ingredients is also easily available through e-commerce. Additionally, it makes a difference compared to traditional business activities that e-commerce transactions can automatically extract vital information about customers and their behavior to the company. This information can later be possibly used in decision-making, improving operational capacity etc. which could help in gaining competitive advantage. (Qin et.al. 2014, 5; Qin 2009, 43-45; Wiechetek & Pawlowski 2016) One study of The University of California's e-commerce implementation proved that by

launching e-commerce as a consolidated procurement environment, it increased the productivity of staff considerably (Cholette, Clark, Özlük 2019). The result of the research conducted by Chloette et.al. (2019) certified that by having a coherent platform for procurement and other related business activities, it improves the service and convenience of processes.

Normal business done in a physical retail shop require the company to have personnel on duty to make the transaction possible. These kind of business transactions are naturally limited by time because nobody is available for work all the time and usually it is not rational for the company to have a 24/7 opening hours in a physical shop. Using e-commerce breaks these constraints by making shopping possible on any given hour no matter where the customer is, as long as he has a connection to the internet. Thus, it enables business to be done worldwide. (Qin et.al. 2014, 5) For the organization offering e-commerce this generates cost savings in staff costs and reduces material costs, such as paper marketing expenses significantly (Chaffey 2015, 30).

According to Qin (2009, 51), e-commerce facilitates the consumers considerably by giving them an opportunity to search and check the product on internet. As information search and search engine optimization is becoming even more and more momentous part of customer acquiring, it is safe to say that e-commerce has an impact on that (Qin et.al. 2014, 5). Search engine optimization is a method to generate more traffic into websites by defining structured techniques to streamline websites structures, languages and site interaction mechanisms that are vital to land the website at the top of search engine listings (Lee, Jang, Lee, Oh 2016). Naturally with more traffic comes eventually more sales, which is supported by a marketing survey conducted for business buyers found out that 71 % of B2B purchases were started with a web search (Miller 2012, 7). Miller (2012, 7, 11-12) pointed out that buyers appreciate highly the ease of finding information, which can be boosted with search engine optimization; getting the e-commerce page to the first page of search engines will generate more traffic to the site, leading to growth in sales.

It should not come as a surprise that by providing e-commerce comes also an improved possibility for digital marketing. Miller (2012, 25) mentions that digital marketing is much more affordable than traditional marketing and enables the company to use more precisely targeted marketing. Using precise marketing for a certain customer segment enables the marketer to provide each customer with more relevant messaging which directly affects the purchasing decisions (Miller 2012, 28-29). Actions like these generate new sales but also improve the corporate image and brand. As said already in the early 2000's by Kothandaraman and Wilson (2001), people working with business-to-business marketing should be the ones using the internet as a marketing tool because their customer base has or will be having access to the internet.

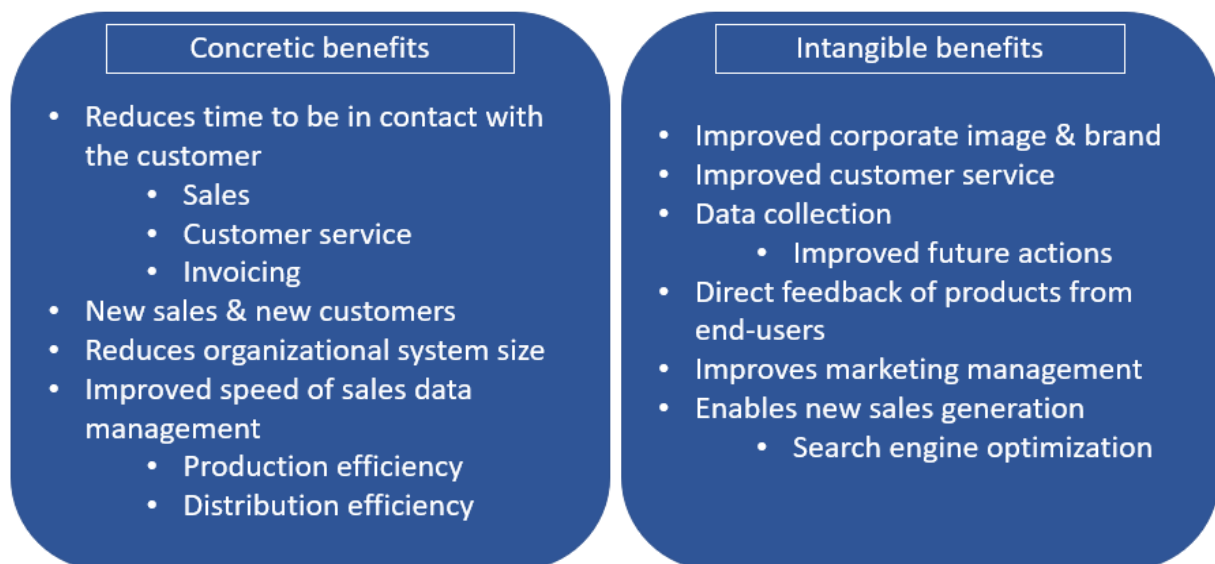


Figure 3. Benefits of e-commerce (Chaffey 2015, 28-31; Miller 2012, 25-30; Qin 2009; Qin et.al. 2014)

2.2. B2B Customer – purchasing done now and then

As personal preferences and assumptions drive our daily consumption-decisions, it has become nonsense to think that a procurement specialist could make B2B purchasing solely on rational terms. One of the most known professors of marketing Kotler (2006, 30) pointed out that in today's world even professional buyers have interpersonal factors that have an affect on the decision making, making it non-rational purchasing from a B2B standpoint. In the early 1900's B2B purchasing was totally different. As mentioned by Pandey & Mookerjee (2017),

traditional purchasing was driven by rationality with the main criteria being on short-term profits. Currently purchasing is done with long-term goals in mind, focusing on the relationship between the buyer and the seller (Van Weele 2014, 24-25).

As mentioned, most of the business done back in the early 1900's had just one goal; to maximize the gained profits. Back then it was not an interest at all to satisfy the customers and reliability and full fairness were usually not delivered (Hadjikhani & LaPlaca 2013). This has changed a lot in today's business. As stated by Pfoertsch and Scheel (2012), current B2B purchasing is driven by functional and economical features, but also by trustworthiness and expertise of the seller. Currently satisfying the customers is one of the most important aspect for continuous, profit maximizing business. The value of satisfied customers was really recognized in the 1990's, when couple of suppliers started to knowledge the things that their customers value, which eventually led them to gain marketplace advantages when comparing to their competition (Anderson & Narus 1998). Current B2B customers are seeking for solutions rather than products, solutions that could help them to gain advantages over the competition. Van Weele (2014, 204-205) said that, for example, getting a best possible supply chain solution from best supplier available will lead to better results. With e-commerce the supply chain will become more visible for the customer and the ease-of-use aspect of it makes it competitive when discussing about supply chain solutions for the customers.

According to Sharma (2012) B2B market is currently experiencing three dramatic transformations, which are the change in marketplace; from exchange of goods toward providing services, transition from regional to global markets and transformation of business process from traditional to business done by e-commerce. To be a successful in the B2B market in the future, it will become essential to implement e-commerce as a part of everyday business. By at least combining normal way of doing business with an online business model, it will provide extra value for customers by delivering new solutions, which will attract new customers and at the same time keep the current ones (Solomon et.al. 2016, 90-93).

2.3. B2B buying process and customer behavior

Normal buying process begins by recognition of a need for a specific product or solution, which can be triggered by internal or external forces. After the recognition of something begins the describing of the need, which eventually leads the buying process to a point where all needed product specifications are known (Hutt & Speh 2013, 34-35). After all the required information is available, the purchasing process ends up in a situation where a supplier must be selected. This usually includes requests of quotations from the potential suppliers that made through the pre-qualification of available suppliers (Van Weele 2014, 28). According to Hutt & Speh (2013, 35) the suppliers usually will be reduced to just two, so the selection of final supplier would be more efficient. When the supplier is chosen, the process is in a point of ordering and performance evaluating according to own expectations (Hutt & Speh 2013, 35; Van Weele 2014, 28)

On a B2B level, customer behavior is strongly modified by habits, that have been learnt during the years of operation. These habits grow within organization to a level so strong, that each person of the organization is able to communicate them to all others if needed (Foxall 2014, 143). To transform something new into a normal habit in an organization requires a lot of work, but if the transformation is worth the effort then it should be done. Hutt & Speh (2013, 34) said the same about winning the support of buying influential and it is also applicable for making something into a habit in an organization; to modify organizational behavior one should enhance their customer experience. Usually, it is hard to modify organizational behavior as the loyalty, mentioned by Söderlund (1998), plays a really big role within B2B purchasing. When one supplier is recognized as a reliable source, the threshold of changing the supplier gets high.

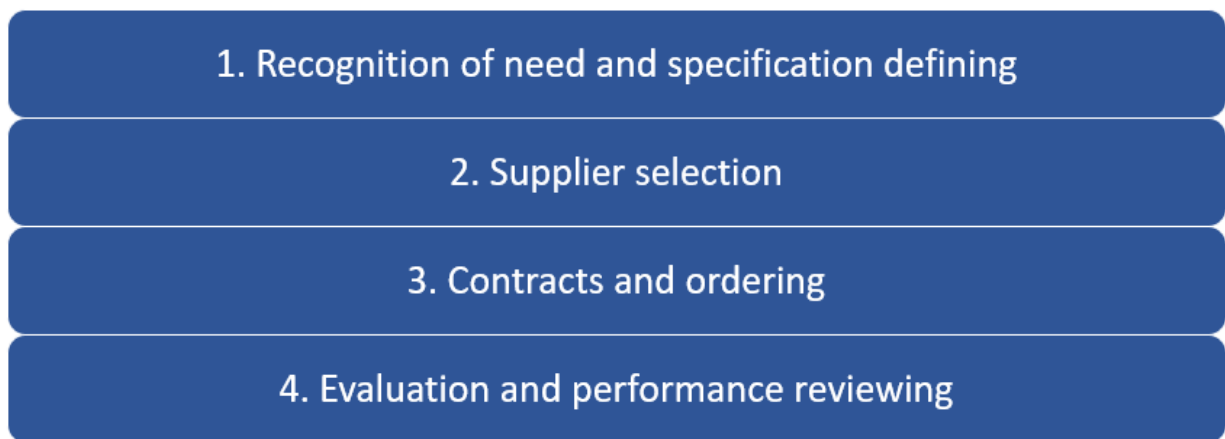


Figure 4. B2B purchasing process (Hutt & Speh 2013, 34-36; Van Weele 2014, 28-29)

As this research has already stated before, the B2B buying is done by a human so the emotions will influence the decision making. A study of emotions influencing the B2B decision making discovered that fear and trust were two of the most important emotions affecting the customer behavior. Fear of making a mistake and being able to trust the brand are two of the most crucial factors controlling the B2B buying behavior. Knowledge of these emotions can be used to make the buying process more positive by, for example, eliminating the fears and highlighting the trust factors. Eventually, these kinds of actions will lead to an enhanced customer behavior. (Kemp et.al. 2018)

2.4. Online customer behavior and the impact of e-commerce on B2B buying

In the case of online customer behavior, it can be examined through clicks and by recognizing the transactions and browsing behavior. With correct use of data, it is possible to meet the customers' needs by recommending certain products or services that could be needed. This could lead the practitioner to enhanced sales because the customers' shopping behavior is improved. (Alfian, Ijaz, Syafrudin, Syaekhoni, Fitriyani, Rhee 2018) It is even possible to build algorithms that follow online users' behavior according to their clicks on the site, which later can be used to make recommendations according to their browsing history (Bo, Feiyue, Jialu 2018). For this reason, a newly launched e-commerce opens a brand-new portal for marketing. By combining certain products and services according to the data gathered from customers' browsing behavior, it might lead to growth in sales.

Purchasing done in the B2B markets has changed dramatically with the launch of online based markets. Internet giants, such as Amazon, have really had an impact on our consumption habits which eventually are carried out to the professional world also. This is supported by a study of 100 B2B organizations where the online sellers had associated their offers according to the demand of the buyers, which led to a 10 % increase in new customers buying for the first time (Pawłowski & Pastuszak 2016).

Pawłowski & Pastuszak (2016) also pointed out that the change of generations handling the buying is strengthening the use of e-commerce as it gives the purchaser an ease of use platform where they can see everything needed by themselves. To speak of e-commerce as an ease of use platform requires some of the most typical online shop features to be available for the users. As an example, the possibility for rebuying the products that are frequently ordered is playing a really big role in molding the customers behavior into the use of e-commerce. A possibility for simple rebuy makes the online shop reliable and allows the purchasing managers to give control of ordering to individual employees, who basically only needs to click the catalog couple times (Hutt & Speh 2013, 38; Van Weele 2014, 31-32; Wiechetek & Pawlowski 2016). According to Van Weele (2014, 31), the rebuy option benefits both the buyer and the supplier by making the transaction faster and more efficient. Applications like these make the ordering process for the customer more efficient, which could eventually lead to increase in transactions.

3. Research methods

This research is done as a case study. The decision to choose case study as a research method came mainly from its ability to provide answers for questions “How?” and “Why?” (Rowley 2002). According to Rowley (2002) case study is an analytical generalization that uses previously developed theory as a background to which the generated empirical study will be compared. Usually case study combines data collection methods like interviews and archives, and in addition it also can be used to generate new theory (Eisenhardt 1989). This is the reason why case study with interviews was the best decision to research the effect of e-commerce on the B2B customer behavior.

3.1. Material for research

All the materials for the empirical analysis have been gathered through semi-structured interviews which were kept during October and November 2019. The interviews were kept in Finnish, but were later translated to English, making the citation process in empirical research chapter possible. Semi-structured interviews are done with already prepared, flexible questionnaires, which enables the interviewed person to provide the response in their own terms (Qu & Dumay 2011). According to Qu and Dumay (2011) the semi-structured interviews can be especially used for management and organizational issues, which is part of the reason I have chosen it for this research. The questions for the interviews were not sent for the interviewees in advance so the answers were more truthful according to the personal feelings the interviewees had.

For this research I interviewed two sales managers, three sales representatives and two individuals with B2B procurement experience to get a broad perspective and understanding of the effect e-commerce might have on B2B customer behavior. Every of the interviewed managers and sales representatives had some kind of educational background in the field of business, varying from vocational degrees to MBA in business. Interviewed managers had their individual responsibilities within different customer groups, and the representatives were all responsible of their own customer portfolio within different regions in Finland. All the interviewed had also their own experiences of shopping online.

Table 1. Interviewees

Title	Educational background
Sales Manager (1)	Bachelor of Business Administration
Sales Manager (2)	Master of Science in Engineering, MBA
Sales Representative (1)	Bachelor of Business Administration
Sales Representative (2)	Vocational Business Degree
Sales Representative (3)	Vocational Business Degree
Site management trainee	Vocational Degree
Partner of technical specialty shop	Vocational Degree

To simplify the reading process of empirical analysis, all the interviewed within same group are given an individual number. By doing so, it is easier to highlight individual points brought up by different interviewees.

3.2. Introducing the case company AGA

AGA is a well-known Swedish gas company that was founded in 1904 and currently it is one of the Swedish “genius companies” -companies that grew to become worldwide thanks to its unique technological inventions. AGA’s roots are mainly based on one inventive genius, Gustaf Dalén’s ideas and inventions, for example the lighthouses flashing beacons. In 1909 Dalén was promoted as a president of the company and in that position, he stayed for 25 years, piloting AGA to its upcoming success. In the 1960s AGA positioned itself to mainly concentrate on the gas sector, and in 2000 AGA was merged into the Linde Group, one of the biggest gas companies in the world. (AGA 2019c)

Currently AGA, which will be rebranded to Linde in the early 2020, has over 1600 employees in Northern Europe. With its 90 production plants it serves over 400 000 customers in just the Northern Europe region. AGA offers a huge range of products and services for its customers and helps them to develop new solutions that enables them to increase their profitability and

quality. (AGA 2019a) Environment plays a foundational principle for AGA in its business as it copes with ISO standards dealing with both environment and energy management (AGA 2019b).

Lately AGA has launched its e-commerce platform in the Finnish market for B2B customers. There were several reasons for launching e-commerce as a business platform, for example making online invoice checking available for customers, which eventually decreases the amount of phone calls received by sales and customer service. These improvements enable sales to concentrate more on the selling of products, directing the company for more efficient sales. The e-commerce was already launched in many other countries, so the knowhow was already there, but nobody had really had a time to research the effect of e-commerce on the customers behavior, which is partly the reason for this study.

4. Empirical Analysis

This chapter of the research introduces the empirical findings that were noted during the conducted interviews with AGA sales representatives, sales managers and with people dealing with procurements during their daily work. Bear in mind that most of the interviewed have had similar experiences from other companies, which makes the findings more applicable for a general use. The questionnaires used to guide the interviews can be found from the appendices.

4.1. Business done via e-commerce

During the interviews one could have noticed a lot of similarities between the literature and the opinions of people interviewed. To put it bluntly, every interviewed individual at AGA said that it is important for business to have a platform for doing shopping online, if not for the sales then at least for the visibility that e-commerce offers. If put in a nutshell, a reason for opening an online shopping platform could be that in today's world having an online platform for doing business is becoming mandatory given the growth of internet as a whole.

“Having an online shop is a must-have in a business where one sells services and products reasonably, as it makes the customers acquisition process much faster. Basically, it belongs to an overall strategy, for which belongs all of the channels, one being the e-commerce. In my opinion, every self-respecting company needs a well-functioning online shopping platform.” (Sales representative 1)

Same kind of phrases were recognizable within all the rest interviews kept with sales organization. As said by sales representative 2, in the state of current market and the trends around it, it is a must to have an e-commerce within every company that does business by selling products of any kind. With a well thought out, state-of-art e-commerce a company can boost its sales and make its customer base more committed to their offerings. Manager 1 also

pointed out shortly, that a well-constructed e-commerce according the customers is really important to make the user experience the best possible, thus leading to more usage. It makes the ordering process easier and offers a lot valid information for customers in need, which is naturally a driving force for more sales. This goes almost hand in hand with the already done studies of website tailoring. Like Mohapatra (2013) mentioned, the developing of the site should be done with the customers in mind, providing them an ease of use platform to handle their daily business tasks.

When asking from the sales managers how they think that e-commerce manages as a platform for ordering against the traditional calling or email ordering, they both had quite similar answers. Sales manager 2 pointed out that by adopting the e-commerce well into the business, there will be no going back to the traditional ways ordering. Sales manager 1 said that the e-commerce is way more convenient platform for placing orders with the possibility to see the product and its description when placing an order, which is also a crucial point for new customers that might not be familiar with the offered products.

“As long as e-commerce is adopted well to the business model it will do fine and after that there will be no going back.” (Sales manager 2)

“I think that currently ordering from online might work really well. I believe that as long as the e-commerce works well, like I think it does already, but as long as it grows and develops it will be a really convenient way to order gases and other products as well.” (Sales manager 1)

Asking about the negative aspects of e-commerce from the sales managers, they had quite different, but both important answers. Sales manager 2 wanted to point out that as AGA is doing business in a conservative field, it will be a struggle in the beginning to get the customers to use online as a main ordering platform. Then again sales manager 1 mentioned the issues that functionality might bring up, like IT-security and interruptions with the transactions.

“The only negative thing is really the functionality, if it doesn’t work well, then it turns against itself. For example, it enrages everyone if the payment transaction is interrupted and you don’t know what has happened. That is the most infuriating thing in online shops. All in all, if it doesn’t function well then it turns against itself... ..Then again there is some IT-security problems also always existing, but those are there always. The environment must be stripped from the major IT-security risks.” (Sales manager 1)

During the interviews the managers and the sales representatives were also asked if they believe that e-commerce would have an impact on their daily work. The question for the managers was more comprehensive, as it discussed about their opinions on how the e-commerce would affect the work tasks of sales representatives and customer service. Both managers had a strong belief that when the usage of e-commerce grows, it will have a direct impact on salespersons, relieving their time from helping the customer. By relieving time servicing the customer from salespersons, it enables them to concentrate more on the selling side of business. Currently many customers of AGA contact the salespersons directly to get information for example of their invoicing, but now all this additional information can be gathered from the newly launched e-commerce. This way the customer can get the needed information whenever and wherever they need it without contacting the sales, or other AGA department, which generates customer satisfaction and saves valuable work hours at AGA. Every of the interviewed sales representatives had similar feelings when asked if the e-commerce would affect their daily work.

As said by Qin et.al. (2014, 4-5) e-commerce offers many benefits for business by breaking the constrains of time and space and by making the traditional business processes more efficient. The benefits of e-commerce seem to be noticeable even from the beginning of its launch, as more and more customers start using it. It really makes a difference compared to others if one can make its everyday business processes more effective, thus leading to more happy customers and making them more committed to the company. In the next section the

research will be discussing about the interview findings of benefits that e-commerce grants for its users.

4.2. E-Commerce and customers

As said by sales manager 2, AGA operates with quite conservative customer base, so it might take some time for the current customers to start using the e-commerce as a main ordering tool. This was also recognized by the sales representative 1 who brought up the fact that, for example, to middle-aged and older people the usage of internet for doing business might not be that familiar. This can prove the usage of e-commerce quite tricky sometimes. Sales manager 1 said that because of this, it is important to offer customers the traditional ways of ordering in addition to the online. Naturally, the threshold of using online can be lowered by offering help and guidance on how to use and order the needed products online, but when the customer base is broad enough, the amount of work it could require could be huge.

For the younger customers it will not be a big issue to implement the online ordering into their daily habits. This was recognized by sales manager 1 and sales representative 1 who both said that by making ordering online a possibility, it might even have a positive influence on the younger people doing the ordering. Sales manager 2 and other sales representatives pointed out the impact that the size of the ordering firm might have on implementing the e-commerce on their business usage. According to them, the small and medium sized (SME) firms will implement the e-commerce much easier than the large ones. As the company grows within time, it will need to implement some systems of their own to keep their business under control. For that reason, it might prove to be a problem for large corporations to start using the e-commerce.

“Especially the smaller firms will get advantages from the online shop as it makes their processes easier by saving their recent doings in the shop, and of course by making the order process easy... ... For bigger companies it will be a bit harder as

they have their own order systems from which the orders have to be placed.”
(Sales representative 2)

Asking if the e-commerce could attract totally new customers, the answers were mostly all the same. Every of the sales representatives believed that by providing e-commerce, it will attract completely new customers. The reason for this was mainly the ease of use, which is considered important in new and small businesses. For some, the ability to use online for ordering is a gamechanger. For example, AGA has many customers that do not speak Finnish as their native language and for those the possibility to change the language to English might prove to be a decisive point when figuring out a needed supplier of gases. Of course, having a site online can provide the customer with much more valid and needed information as the product descriptions can be written by a professional, increasing the credibility for the customer.

Search engines and the visibility granted by those was also pointed out in two of the interviews. By making the e-commerce more visible on search engines, such as Google and Yahoo, it will generate more customer flow and possibly attract new customers. Visibility in social media was also brought up, as many of the smaller companies tend to use social media for their own purposes also, presenting an excellent way for overall marketing. The importance of search engine optimization was discussed earlier within this research, as Miller (2012, 7, 11-12) pointed out the buyers' appreciation towards information that is easily findable.

“...Making us visible on search engines like Google etc. and at social media, I do believe with certainty that through that some new customers will find us.” (Sales representative 2)

“...If the customer stumbles upon our e-commerce somewhere, for example on some of our existing websites, customer or an individual could go and see what it is all about... ...But it will have to be really visible, because not many new and

upcoming customers firstly think that AGA has an e-commerce.” (Sales representative 3)

4.3. Benefits of e-commerce for the customers

When asking about the benefits that e-commerce provides for the customers, both managers had quite similar answers. The answers revolved significantly around the accessibility factor of e-commerce as it is accessible whenever and wherever, but also with its ability to prevent errors. The possibility for the customer to see the order before sending it was something that the managers kept really valuable. It also reduces the possibility of human errors done by the customer service when placing the order with traditional ordering methods.

“If we think about the customer, the ordering process is really fast. The customer can order whenever they want and they can see what they order, which eliminates the amount of errors for us and for the customers. Also, the customer can go and see their order before placing it and see if everything is OK... .. It has a lot of possibilities that, for example, are not possible to be done within a phone conversation.” (Sales manager 1)

The sales representatives were asked if they keep the e-commerce as a useful tool for the customers as they know what the customers really need and want. It was delightful to hear that every interviewed representative had a positive response for the question. The ease-of-use aspect and the ability to provide information for the customers was valued highly within the representatives. Information that the e-commerce offers for customers could be everything from their invoices to cylinder balances, but also about the products they use. This was also regarded as an important part of the e-commerce by sales manager 1.

“All in all, an online shop is a tool to ease many of the customers processes. Luckily our e-commerce is also built with our customer base in mind so that the customer can see their cylinder balances, invoices, delivery notes and they can by

themselves define some factors that help their business with us.” (Sales representative 1)

“As long as the online shop is tailored well, it will be a useful tool for the customer. For the customer it is important to have a channel of information in addition to the ability to order the needed products. Information about our products and services, but also about their own things, like cylinder balances, rental agreements and prices naturally.” (Sales representative 2)

Asking from the site management trainee and the partner of technical specialty shop about the features that make e-commerce stand out from the traditional ordering, the thing that was brought up was information. When doing procurements online, the customer is served with more information when compared to ordering via phone. Things like product pictures and additional information was considered as valuable additional features of e-commerce according to the site management trainee. According to the partner in technical specialty shop it is important to have a lot of information available, but the information must be under something specific so it can be found if really needed. The information should not be available directly when entering the e-commerce. Also, the additional tools of e-commerce were discussed, such as availability and pricing information, and they proved to be valuable.

“Additional tools of e-commerce are really good as they make the workflow much easier and, in the end, reduce the amount of needed work hours.” (Site management trainee)

E-Commerce usually facilitates the customer in some way, for example by eliminating the must for calling the order. Asking from the site management trainee and the partner of technical specialty shop if additional features of e-commerce could play a decisive role when choosing the way to place the order, a question to which both answered quite positively. Partner of technical specialty shop said that it has already been a decisive factor and according

to the site management trainee if the one doing the procurement knows what is needed to be ordered, then it sure is a decisive factor in favor of e-commerce.

4.4. Impact of e-commerce on customer behavior

In brief, every of the interviewed AGA employee believed that e-commerce would have a positive impact on customer behavior if it covers certain points. As long as the e-commerce is built with the customer in mind and is made reliable, there should not be any major issues with increasing the customers satisfaction. As said by sales manager 1, if the e-commerce proves to be good and useful for the customers, it will provide a positive image on itself and lead to more satisfied customers, increasing the customers loyalty at the same time. During that interview it was also mentioned that for SME's the e-commerce is a welcome update, as sometimes the focus of serving the customers via phone might shift to the bigger customers. Also, sales manager 2 mentioned that as long the e-commerce is simple to operate, it will grow the customers loyalty and make the returning to the shop more likely.

For some it can be refreshing to order products without having the must to place a call for it. Sales manager 1 said that sometimes it could even annoy the customer when they have to do business with someone who might not have the know-how in something specific. Possibility for this is neutralized with e-commerce. It could also have a strong impact on customer loyalty and prevent most of the negative word-of-mouth behavior. Same goes for the phone queues, which form during the rush-hours of customer service. Using online shop, the customer will not need to wait in queue to place their orders, and by that they can improve their working.

If the opening hours are not considered, the biggest difference between ordering via phone or from e-commerce must be the ability to provide the customer photos and information that are not available through phone calls. Sales manager 1 said that combining these two might lead the customer to order more products than normally, because they might not have stumbled upon them before. Then again it was stated in many interviews that the provider of e-commerce can do product recommendations under certain product. For example, AGA can

now offer flow meters and needed sealants for cylinder gas customers without difficulty by placing them under the correct cylinder gas product. Actions like this show the customer needed products that can be ordered easily if needed with the main product, leading to more sales than before.

With correct marketing done in the e-commerce, the customer behavior can actually be driven to produce more sales. Like mentioned, it is possible to recommend relevant extra products when customer is ordering something, but it also enables so much more. Site owner has a possibility to market premium products and products that need to be boosted as much as they like, but also do individual marketing for example according the customers order history. This is not at all possible with traditional ordering, so it is a positive bonus for e-commerce as a sales driver and in a best-case scenario it can even boost the customers loyalty.

“...When customer goes to online shop, we are the ones to define the outlook what the customer sees, enabling us to choose a moment or a situation to present some information, which can be called marketing.” (Sales manager 2)

4.5. Applications and features driving the customer behavior

For customers e-commerce provides many features and applications that are not available without it. These are all the additional possibilities that e-commerce has, for example the already mentioned possibility for rebuying the frequently purchased products (Hutt & Speh 2013, 38; Van Weele 2014, 31-32). For those who want to keep track on their product balances and invoicing, the e-commerce can be a truly welcome update as it can enable this kind of tracking. These kinds of actions reduce customers valuable time which normally would be spent maybe even waiting on the phone queue. By letting the customer do that on their own, it increases the customers loyalty but also reduces manual work done by the e-commerce provider.

During the interview with sales representative 1, the possibility for rebuy was brought up as a factor affecting the customers returning to the online shop. Most of AGA's customers order only a few different products, making the possibility of rebuying previous products a valuable feature. As said by the interviewee, this feature will increase the customers loyalty by making their procurements easier. There is even a possibility for positive word-of-mouth behavior, attracting new customers and driving the possibility for new sales. Also, the customers threshold of changing the provider of needed products gets higher if others do not have a possibility for rebuying.

Asking about features like ability to see own invoices and product balances, the answers were quite one-sided during every interview. These features were seen as the most important additional features the e-commerce could offer to the customer. By providing an ability to download own invoices, the customer will not have to call for invoice copies and same goes for the product balances. Naturally this enables the customer service and invoicing team to serve the customers better, leading to increase in customer happiness, but it also makes the customers processes more straight-forward. According to sales representative 3, these features can even attract new customers, because there are currently not any other gas companies in Finland that have a possibility for this.

“Especially for those customers who have been asking a lot about their invoices or product balances in the past it will be a valuable tool” (Sales representative 3)

Additional features have also an impact on sales representatives and customer service representatives work tasks. It is usual, that many of the incoming calls from customers are completely something else than to what the call receiver can give an answer to. For example, if a customer calls to a sales representative and asks for their invoicing, the representative will have to call around the organization to get an answer the customer seeks. By making these features available for the customer, sales and customer service can focus mainly on more valuable tasks, such as price negotiating and help the customer if needed.

5. Discussion and summary

The main objective of this research was to find an answer for question: *“How e-commerce affects the B2B customer behavior?”*. To get an answer for this question, two sub-questions were generated: *“How does Sales Representatives and managers see the e-commerce affecting the behavior of customers?”* and *“What are the key factors of e-commerce that have an influence on Customer Behavior?”*. Discussion and findings of each question is presented below by reflecting on theoretical and empirical findings.

5.1. How does Sales Representatives and managers see the e-commerce affecting the behavior of customers?

Literature used for this research and the conducted interviews both had many similarities on what comes to e-commerce and how it might affect the behavior of customers. For instance, it is important to assess the technological readiness of the customers when launching the e-commerce. It was brought up during the empirical analysis, that AGA does business in a fairly conservative field of customers where many might not be ready to use e-commerce as their only platform of doing procurements. This was also pointed out by Tan et.al. (2007), who pointed out that the management must assess the industry’s readiness for e-commerce implementation. For example, if the e-commerce would have been launched as the only platform to place orders, many customers might feel unsatisfied and even scared, resulting in a decrease of customer happiness and even loss of customers. Because of this, it is important to keep the traditional ways of ordering also available and let the ones that want to use the e-commerce as an ordering tool utilize it as much as they want, eventually increasing the customers behavior.

As e-commerce makes many of the traditional business processes easier and quicker for customer and for the provider, it releases customers valuable time for other work-related tasks leading to an increase in their efficiency. As mentioned by Chaffey (2015) and Mohapatra (2013), e-commerce offers a convenient way for dealing with procurements while reducing

the customers purchasing process costs. Also, as Qin et.al. (2014, 4-5) pointed out, e-commerce breaks the constraints of time by making the ordering available during any hour of the day.

It was also evidenced within the empirical findings that making ordering process available whenever the customer needs it will eventually increase the customers satisfaction. As the empirical findings indicate, the advantages that the e-commerce offers especially for the smaller customers are considerable as many times smaller customers might fall in the shadow of bigger ones. In addition, the amount that e-commerce facilitates the customers in terms of ordering is seen as a factor increasing the customers satisfaction.

Some customers might not feel ordering via phone comfortable but are almost in a must if the e-commerce is not available. As pointed out during the empirical part of this thesis, it might even annoy customer if someone answering the call do not have the knowledge needed to answer the customers question. The customer might also like to see everything needed in one place without calling the provider, which was pointed out by Pawłowski & Pastuszek (2016) when discussing about the change of generations handling the procurements.

One quite surprising factor that were seen having a possibility to increase the customers satisfaction was search engine optimization. The ease for information finding was considered as a really valuable additional feature, which comes along the e-commerce if just done right. This was also brought up during the empirical analysis. As the empirical findings indicate, making the e-commerce visible has a positive affect also on new customer obtaining. Like said by Miller (2012, 7, 11-12), the ease of finding information is highly valued within the customers, leading to increased customer satisfaction.

Some risks were also discussed during the empirical research which were also pointed out in the literature. The security risks and technological risk factors pointed out by Lip-Sam & Hock-Eam (2011) and Zhu et.al. (2006) were also recognized during the empirical analysis. The neutralization of major IT-security risks seems to be an important thing to do before letting

the customers use the e-commerce and also making sure that everything works well with the ordering and payment processes. By preventing these risks, the possibility for decrease of customer behavior is minimized.

Eventually, e-commerce saves the workhours of its provider, enabling its workforce to focus on more important things like new sales or solving momentous customer problems. As mentioned by Qin (2009, 43-45), e-commerce reduces the earlier needed large organizational system, leading the company in gaining competitive advantage. During the empirical analysis, the interviewed were asked if they think that e-commerce would have an effect on work tasks, a question on which everyone answered positively. This has a direct impact on customers happiness which will be delivered also into the customers behavior.

5.2. What are the key factors of e-commerce that have an influence on Customer Behavior?

Most of the e-commerce literature speak about its ease of use and the possibilities it grants in terms of timesaving and as a new channel for marketing. With e-commerce, the provider has a possibility to do affordable and precise digital marketing, for example according the customer group. Precise marketing will be possible with usage of data that can be gathered through customers clicks and browsing behavior in the online shop (Alfian et.al. 2018). As mentioned by Miller (2012, 28-29), precise marketing enables to provide relevant messaging and information to a customer that most likely appreciates it, driving the customers purchasing decision and customer behavior. The empirical findings of this thesis also pointed that the owner of the online shop can define everything that the customer sees and make the marketing possible on any level.

Research done by Kemp et.al. (2018) proved that B2B decision making is nowadays highly affected by human emotions, such as fear and trust. Considering the point indicated during the empirical analysis, that a company such as AGA, that operates in a fairly conservative business field must really concentrate on these two aforementioned emotions. The factor of fear must be minimized, and trust must be highlighted. This can be obtained with proper

instructions, but also by tailoring the platform according to the customers. Tailoring the site was also recognized by Mohapatra (2013) who mentioned that the e-commerce should be made as easy as possible for the end-user right from the beginning. With an easy-to-use environment, the customer will gain trust in the e-commerce provider. This enhances the customer's experience of doing business online, which has a positive impact on the customer's behavior. But after all, the most important factors influencing the customer behavior must be the additional features that come with it.

To let the additional features do their work on enhancing the customer's behavior, it requires a solid and trustworthy site for the e-commerce, a factor that was previously discussed. During the literature review it became clear that additional features that help with information searching and customer's own inventory management will be some of the driving forces of customer behavior in the e-commerce (Chaffey 2015; Mohapatra 2013). Also, as studied by Chloette et al. (2019), a coherent platform to deal with all business-related activities in addition to procurements improved the service and convenience of the customer that will be using it. Features like these were also indicated during the empirical analysis and a completely new, but one of the most important tools for customers was brought up, a tool that enables the customer to see their own invoices. To let the customer check their own invoices is sometimes considered as a sign of trust and makes the invoicing process really easy for the customer. Also, a possibility for reordering the same products that were bought before was pointed out during the empirical analysis as a useful tool for customers. This was even recognized by Wiechetek and Pawlowski (2016).

Additional features of e-commerce can even prove to reduce the number of work hours spent making the procurements. This was indicated within the empirical part of this thesis couple times by those that are dealing with procurements as a part of their daily work. Electronic procurement dealing was proven also by Hutt & Speh (2013) to reduce the purchasing administrative costs even by over 50% by cutting the time needed for procurements in half. Making the pricing and availability visible for the customer makes the procurement process easier and neutralizes the need to call for that specific information. Also, during the empirical analysis, the point about providing needed information was indicated as one of the priorities.

According to literature, information is a vital part of the normal buying process as it plays a huge role in supplier selection (Hutt & Speh 2013, 34-35). The information should be available for customer when needed, for example, in the product descriptions, but it should not be visible immediately. That way the site also keeps its ease of use characteristics, but at the same time is informative when needed.

5.3. How e-commerce affects the B2B customer behavior?

As stated in the literature and during the empirical analysis, it must be clarified is the customer base ready to implement the e-commerce into usage. Depending on the customer and their likings, the e-commerce might be a welcome update in addition to the traditional way of making procurements. For some, ordering online might not feel secure as the human interaction is missing completely. But even if the customer does not use the e-commerce for ordering, it can be used for other business-related tasks, like invoice checking or product balance tracking. By doing this, the e-commerce provider satisfies both customer types, those who would like to keep ordering via phone or emails and the ones that want to use it as a tool for ordering. All in all, providing e-commerce in both cases will affect the customer behavior most likely positively, as it makes their workflow more efficient one way or another.

The provider of e-commerce can gain many staff advantages with the implementation of e-commerce, mainly related to the time-consuming tasks that will then be handled by the customer on their own. The time saved on the traditional tasks like order placing or helping with invoices can then be used for focusing more solution-based serving of customers, which is a way to boost customers satisfaction. Satisfied customers naturally tend to come back to the supplier that has been proved as trustworthy and decent to work with. Also, as a platform for marketing, the e-commerce has been proved to be a good tool. When supplier relies fully on the traditional ways of ordering, there is almost no possibility at all for digital marketing, but in the e-commerce, it almost comes by itself. For example, making product propositions for customers according their historical activity is an effective way to drive the customer for smore purchases.

According to the empirical findings and the literature used for this research, it can be said that if done right, the e-commerce will have a positive impact on customers behavior. The possibilities of e-commerce are really extensive reaching from the marketing to the functionalities facilitating the customers. With today's competitive markets, it is vital for companies to find all the best solutions that can help them gaining competitive advantage. As a result of this study, it can be said that e-commerce is definitely one of these solutions.

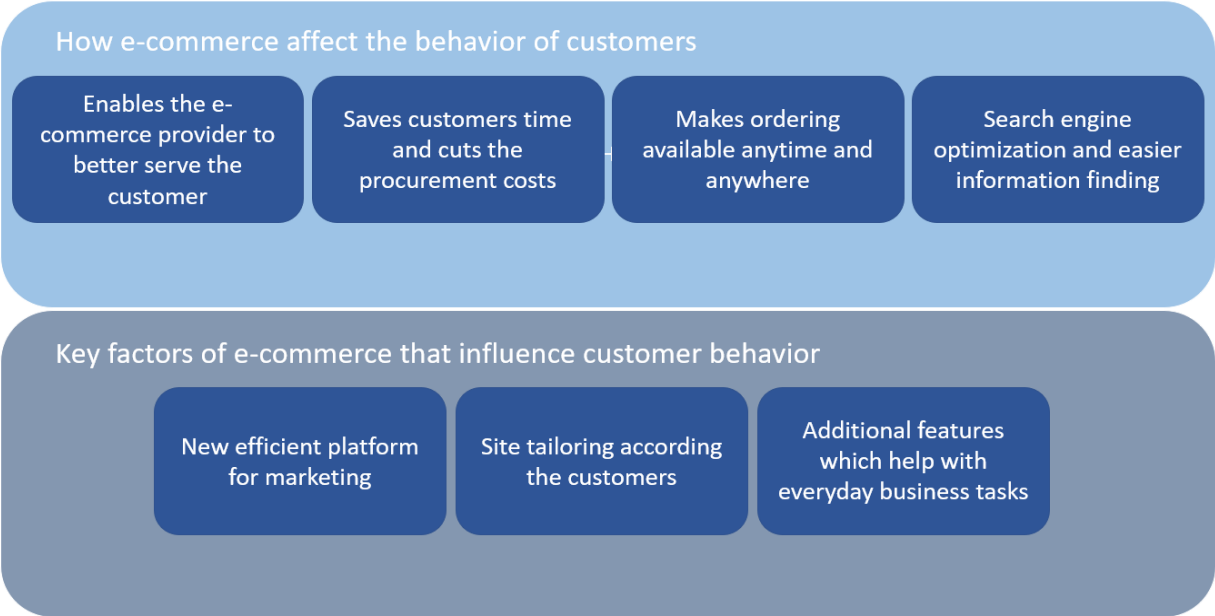


Figure 5. E-commerce and its impact on customer behavior

5.4. Further suggestions for research

A few potential ideas for further research were identified during the making of this research. One of the most interesting point to research would be of the additional features offered via e-commerce. To get a more broad knowledge and understanding about the customers appreciation of different additional features could be helpful for making e-commerce's better and more useful for customers, adding to a value that the customer gets by using e-commerce. It would be also interesting to know what are the biggest factors that affect the customers e-commerce implementation positively, but also negatively. With this knowledge, the beginning of e-commerce usage could be made more customer friendly, making the implementation more likely.

Also, considering that this thesis was done for a gas company operating in Finland, the customer behavior might differ in other fields of business. For example, one could imagine that if a business operating in the industrial apparel industry makes an e-commerce available for its B2B customers, the factors driving the customer behavior might differ a lot from the results of this study. For that reason, it would be interesting to study the e-commerce and its impact on customer behavior even on a broader scale of industries. It is also important to realize that in the Finnish gas industry operates just a few companies, so conducting a study from a more competitive business field could give interesting results about e-commerce and its impact on customer behavior.

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Appendices

Appendix 1. Interview questions for Management

Job title:

Responsibilities:

Educational background:

1. E-Commerce

- What do you think about e-commerce?
- How ordering via e-commerce compares to the traditional ordering (phone, email etc.)?
- What benefits e-commerce offers for everyday business?
- Is there anything negative considering e-commerce? If yes, please describe.
- Do you think e-commerce would shape existing roles of workforce? How?
- Do you consider tailoring the e-commerce according the customer base to be important?
- Can the e-commerce be used as a tool for marketing?

2. E-Commerce and Customer Behavior

- What is your opinion on customers adopting to the newly launched e-commerce?
- Do you think that existing customers start using e-commerce as their main ordering tool?
- How you see the e-commerce affecting the order quantities or is there any affect at all?
- What is your idea on Customer Behavior and does e-commerce have an impact on it?

Appendix 2. Interview questions for Sales reps

Job title:

Responsibilities:

Educational background:

1. E-Commerce

- What do you think about e-commerce? If it is good or bad, please describe why?
- Do you think that customers like to use e-commerce? Describe what led to your answer.
- Do you think that e-commerce could even attract new customers? If so, tell how?
- Do you see e-commerce as a helpful tool for customers? Describe what led to your answer.
- Does e-commerce influence your work tasks?

2. E-Commerce and Customer Behavior

- What is your idea of Customer Behavior and does e-commerce have an impact on it?
- If you feel that e-commerce is a helpful tool for customers, do you think that it influences the return rate of customers or even the ordering quantities?
- Do the additional functions for customers, e.g. possibility to see invoices or track product balances, have an influence on the customer behavior?
- What functions should e-commerce include to offer the best possible customer experience?

Appendix 3. Interview questions for B2B procurement handlers

Job title:

Responsibilities:

Educational background:

1. E-Commerce

- How do you like ordering online?
- Do you think you could handle all the procurements online?
- How do you value additional functions, e.g. rebuy tool, possibility to see invoices or track product balance through an online channel?
- Could these additional functions be the decisive factors to use e-commerce or not for ordering?
- What functions should e-commerce include to offer the best possible user experience?