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Factors Affecting the B2B eCommerce Purchasing in Scandinavia

– Buyer's Perspective

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Factors Affecting the B2B eCommerce Purchasing n Scandinavia - Buyers Perspective

B2B eCommerce evolves rapid pace as new technology emerges and the B2B buyers are getting more demanding with higher customer experience requirements. The industry is getting recover from the extreme interruption caused by COVID19. Recent studies call for B2B buyer's interests in self-services and virtual buying experiences.

The objective of this research was to study from the buyer’s perspective what factors affects to the B2B eCommerce in the Scandinavian area. Study finds answers into two research questions. First, what are the digital traits of the B2B eCommerce. And secondly, how does the B2B customer experience affect various B2B buyers.

The methodology used for this project is a mix of qualitative and quantitative methods. The results highlight two main phenomena. First, businesses embrace automation extensively, and digitally advanced companies operate without limitations. Second, shifting in age generations drive more requirements for digital customer experience.

Keywords:

B2B Buyer, Customer Experience, Data, Digital, Automation, ERP.

Appendices

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List of abbreviations (or) symbols

API	Artificial Programming Interface
B2B	Business to Business
B2C	Business to Customers
CAP	Common Augmented Reality Platform
CPQ	Configure-Price-Quote
ERP	Entertainment Resource Program
EDI	Electronic Data Interchange
VR	Virtual Reality
AR	Augmented Reality

1 Introduction

1.1 Introduction

The difference between the digital customer experience in B2C and B2B businesses was recognized over a decade ago, and today it is a standard requirement in any eCommerce field. For example, in internet retailing, the industry leader Amazon.com, Inc., has led the global eCommerce for past years (Cuppola, 2021). With its best prices, endless catalog, and fast delivery time with proven customer satisfaction rates, Amazon has led the B2C eCommerce into a phenomenon where consumers continuously expect an excellent experience (Smith, Rupp and Offodile, 2017). Whether the eCommerce seller is a marketplace or individual store, the eCommerce site must fulfill customer's expectations as invisible service requirement; the customer is the one who decides was the experience excited, satisfied, or failed. Furthermore, COVID19 has strengthened eCommerce due to restrictions and curfews, especially for marketplaces (Vitale et al., 2020).

B2B eCommerce has not yet matured for a similar customer experience bar as Amazon has set to B2C eCommerce. Although, B2B buyers are roused the curiosity for better customer experience due to Amazon. According to a Salesforce report (2018), 69 % of B2B buyers expect similar buying experiences that Amazon offers to consumers, calling B2B sellers to satisfy buyers requirements. According to Copperberg (2021), businesses have strong ambitions to progress towards digital commerce and detach from the habits of the industrial era. In 2018, approximately 80 % of manufacturing decision-makers commonly admitted that if their business does not digitalize their sales and service processes, they will see an end in five years. Still, in 2021, over 72% of businesses gain only ≤ 25 % of annual turnover from digital channels (Hellqvist et al., 2021). The businesses acknowledge the evolving trends, but the development pace seems slower than expected in 2018. The asymmetric gap between future beliefs and realized digital revenue recalls the stress of increasing competition during Industry 4.0.

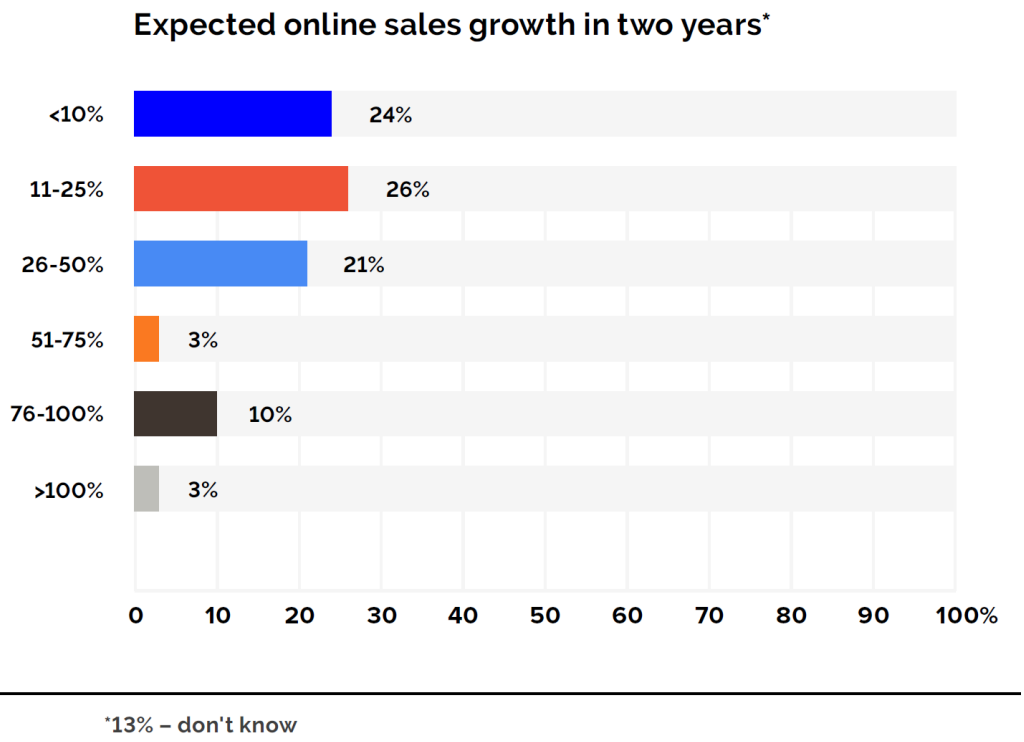


Figure 1. Survey Of Expected Digital Online Sales Growth (Copperberg, 2021).

1.2 Author's Source of Motivation

The author worked in a multinational B2C eCommerce team during the thesis process. Operations and consulting in a global eCommerce marketing helped collect multiple separate nuances from various parts of the online business. For example, the team sold physical products abroad through online stores and Amazon marketplaces. The business model was driven by digital multichannel eCommerce philosophy: the online stores were connected to an external marketplace through an application programming interface (API). Every order was synchronized between the eCommerce store and Amazon marketplaces, and inventory levels followed the sales flow. After recognizing the benefits of the business model, the author's focus turned into B2B eCommerce area: curiosity for the Thesis study area was found.

1.3 The Research Questions and Objective

The research objective and questions were designed to support the author to mature into the study area and gain understanding to build connections between chapters in the literature and analysis.

Objective

- The objective was to study what digital factors affect B2B eCommerce purchasing in the Scandinavian area – from the buyers perspective

Research questions

- What are the digital traits of the B2B eCommerce?
- How does the B2B customer experience affect various B2B buyers?

2 The Digital Traits of The B2B eCommerce Purchasing

2.1 Introduction

The second chapter considers digital aspects of the buyer-supplier relationship. In order to answer the first research question, what are the digital traits of the B2B eCommerce supplier, the author identified the following sections to be covered: eCommerce platforms and data, ERP and other IT systems, automation and EDI, and the digital maturity.

2.2 Digital Commerce Platforms and Data

When B2B buyer searches for a new product online, the B2B seller has an opportunity to attract the buyer into a digital commerce platform. One of the digital B2B commerce model's superior qualities is utilizing innovative technology to adjust buyers purchasing behavior (Copperberg, 2021). Like in B2C eCommerce stores, the B2B eCommerce stores, or online portals, are where sellers capability to fulfill buyers needs is measured with buyers customer satisfaction. B2B models are in the quest to create a unique buying experience by investing primarily in technology (Copperberg, 2021). The digital B2B commerce models are distinguished from other business models due to their technology-rich features. B2B eCommerce entails all transactions involved in business-to-business electronic commerce activities; it is a broad area involving various online transactions among businesses. B2B models are currently shifting from legacy systems towards using online platforms where buyers and sellers from all over the world trade freely (Thitimajshima, Esichaikul, and Krairit, 2017). The digital commerce platform operates as an intermediary by matching supply to demand and guiding transactions towards order. It offers a value-creation mechanism for transactions that help buyers and sellers interact and exchange value in a mutually beneficial manner (Hein et al., 2019).

Digital commerce platforms are utilized for numerous online transactions between B2B parties, buyers, and sellers (Jewell and Naujoks, 2020). The digital commerce platform is strongly connected to B2B eCommerce through its data collection capabilities. Online transactions produce a large volume of data to be analyzed and utilized to enhance customer relationships. The extracted data from online transactions form a transparent and valuable background for performing data analytics to gather useful information in predicting customer purchasing patterns. Digital technology has a positive impact on the

relative power of buyers in purchasing; it has become the primary communication, and B2B models are taking advantage of it (Kauffman and Pointer, 2021). The B2B eCommerce area combines the obtained data from transactions and formulates conclusions into reliable decision-making forms (Hallikainen, Savimäki, and Laukkanen, 2020). The performance of data analytics enables organizations to reveal underlying gaps in ensuring customer satisfaction. Continuous data analysis is central in the digital B2B eCommerce area.

The most advanced digital platforms support constantly implementing new and evolving business models along the business journey and ease strategic designing with ambitious objectives such as platform economy (Hein et al., 2019). Homegrown platforms correlate with self-build commerce, and their capabilities vary among the organizational resources and investments. Thus, they are partly limited compared to cloud-operated platforms made by external service providers, but that is not always the case (Jewell and Naujoks, 2020).

International Data Corporation has compared 18 digital platform vendors and identified a comprehensive set of digital features for the modern digital B2B platform. Jewell and Naujoks (2020) illustrate a comprehensive set of commercial platform features in figure 2. They are divided into four primary layers forming the platform's core: customer experience, commerce, payments, ERP/back-office, and infrastructure (figure 2). The digital platforms support the modular architecture by creating a solid core and surrounded by flexible edges (Hein et al., 2019).

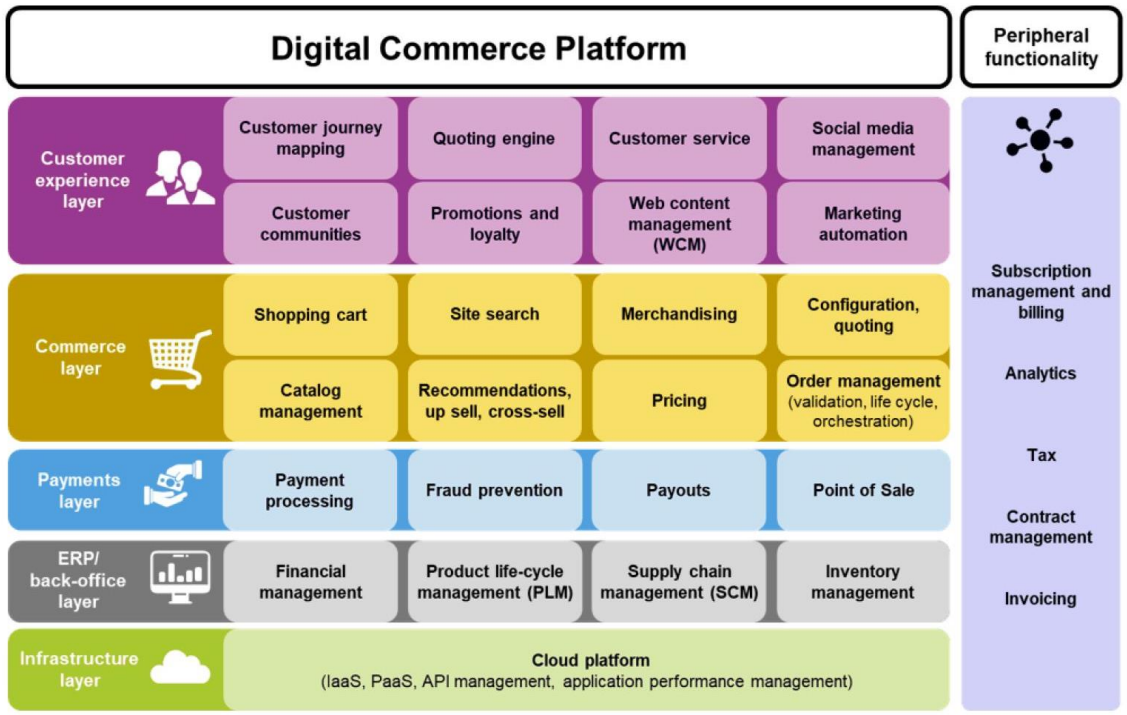


Figure 2. IDC's Vision of a Comprehensive Digital Commerce Platform (Jewell and Naujoks, 2020)

2.3 ERP and Other IT Systems

ERP is software integrated for all business aspects, and it is driven by a business management system (Adiasih, Elsye Hatane and Christyanto, 2020). Considering ERP from the buyer's perspective, it is an essential tool for easing data exchange between the systems in the organization and suppliers. Depending on the needs of the business, there are multiple other IT systems to be considered for connecting to ERP. For instance, product information management (PIM), order management systems (OMS), customer relationships management (CRM) are IT systems, with each one having its purpose (Pimcore, 2021). As we see, the ERP with other IT systems forms a significant entity of various software that businesses need to integrate together. According to Copperberg (2021), the biggest challenge in digital commerce is the struggle with integrations. For instance, if currently used software, the ERP or other IT systems, are homegrown and the objective is to form a connection to suppliers ERP, stiff coding work is likely higher than in cloud-based software. This is because the service provider updates commercially developed software more often, and it might require less coding work (OroCommerce,

2021). Therefore, businesses must consider ERP and other IT systems as significant digital assets from the future digital requirements and adaptability perspective.

2.4 Automation and EDI

One significant part of the B2B buyer's work is controlling a number of reorders and replenishments. Automation and data exchange between systems can significantly ease buyer’s duties and reduce errors. The Electronic Data Interchange, EDI, is an essential part of the supply chain to send electronic documents standardized and timely. It considers objects like purchase orders, invoices, and shipping notifications (IBM, 2021). When ERP and other IT systems are a part of the electronic data interchange, it gathers data. This is essential in managing the business and setting specific key point indicators (KPI’s). Automation is a significant trait of the digital B2B commerce area, where a set of complementary technology can integrate functional and process silos to automate and develop a business process (Blum, 2020). Automating services and operations is a conspicuous feature of digital B2B business models. Also, it should be noted that numerous automation processes characterize the digital B2B commerce area to improve the delivery of services to clients. Automations in B2B models have enabled buyers to access the self-service platforms in the websites and made transactions easy. This has been possible since automation of services greatly minimizes cost and saves time in transactions. Therefore, the business can execute many transactions within the shortest duration possible.

2.5 The Digital Maturity of The Organization

As business relationships are more digital today, more differences in how businesses and related organizations operate have emerged. This has led buyers to consider supplier's digital assets or competencies for future collaboration. For instance, when buyers consider suppliers' competencies, the website might give a preliminary idea of API’s or other technical attributes. One aspect of measuring how digital organizations are is the level of digital maturity. Intershop's report (2019) states there are three levels of organizational differentiators of digital maturity: digital newcomers, digital professionals, and digital masters. No matter the level of maturity, 100 % of over 400 industrial decision-maker respondents have experienced benefits due to digitizing. Thus, the organization's digital

maturity is one of the key characteristics – or, more precisely, a primary requirement – to drive the evolving digital B2B commerce models (Rossman, 2019). Also, Pimcore (2021) determines digital maturity into three traits: agility, interoperability, and cross-channel harmonization. The digital maturity models make an object of interest progress towards the target state. Businesses can use modeling to measure how the status quo differs from the strategies along with the digital transformation. The idea of maturity refers to the degree of speed and perfection (Rossmann, 2019). Digital maturity improves B2B commerce model's opportunities to remain prepared in case of technological innovation changes in the market. Also, it is an intellectual property to guide businesses to scale the value of digital commerce during digital growth (figure 3). Buyer-seller relationships mature over time, and the success of B2B firms depends on the businesses ability to respond to evolving customer's needs in various business models (Hallikainen, Savimäki, and Laukkanen, 2020).). Also, B2B models seek customer loyalty, a concept that combines both behavioral and attitudinal loyalty (Thitimajshima, Esichaikul, and Krairit, 2017).

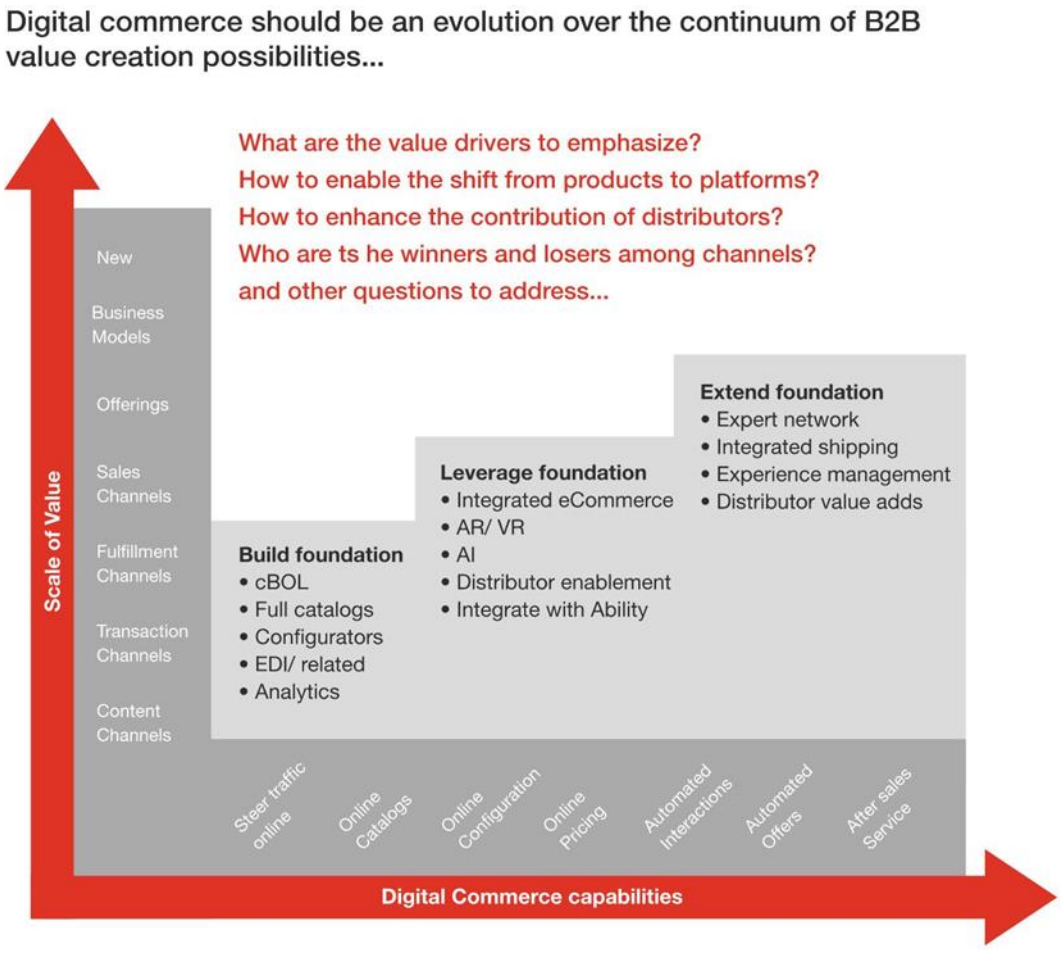


Figure 3. PwC’s conception of industrial eCommerce development (Khurana, Andreescu and Bono, 2021)

3 Factors Affecting the Digital B2B Customer Experience

3.1 Introduction

The third chapter considers customer experience-based factors for the B2B eCommerce. The second research question is: how does the B2B eCommerce experience affect various B2B buyers? The author identified the following themes to be studied with related statistics and insights: B2B customer experience, customer journey, shifting in age groups, and the digital features of eCommerce for supporting online and virtual purchasing.

3.2 The Customer Experience

The B2B commerce, especially in manufacturing environments, has adapted to digital transformation due to the rising demand for commerce technology (Copperberg, 2021). However, the real significance lies in enhancing the customer experience which is what B2B buyers want. According to the report of Salesforce (2018), 74 % of B2B buyers are willing to pay more for the excellent customer experience, and 72 % advocate successful experiences. Similarly, 62 % of B2B buyers claim to share bad experiences when things are not going as expected, and 50 % have stopped buying when receiving a better customer experience from a competitive supplier (Salesforce, 2018).

Furthermore, B2B buyers are expecting similar customer experiences they experience when dealing in the role of a consumer in the world of B2C eCommerce. B2B buyers are in a key position to compare their customer experiences when dealing either B2B or B2C transactions. In Nordic countries, 83 % of B2B buyers want similar buying experiences to purchase themselves, as shown in figure 4.

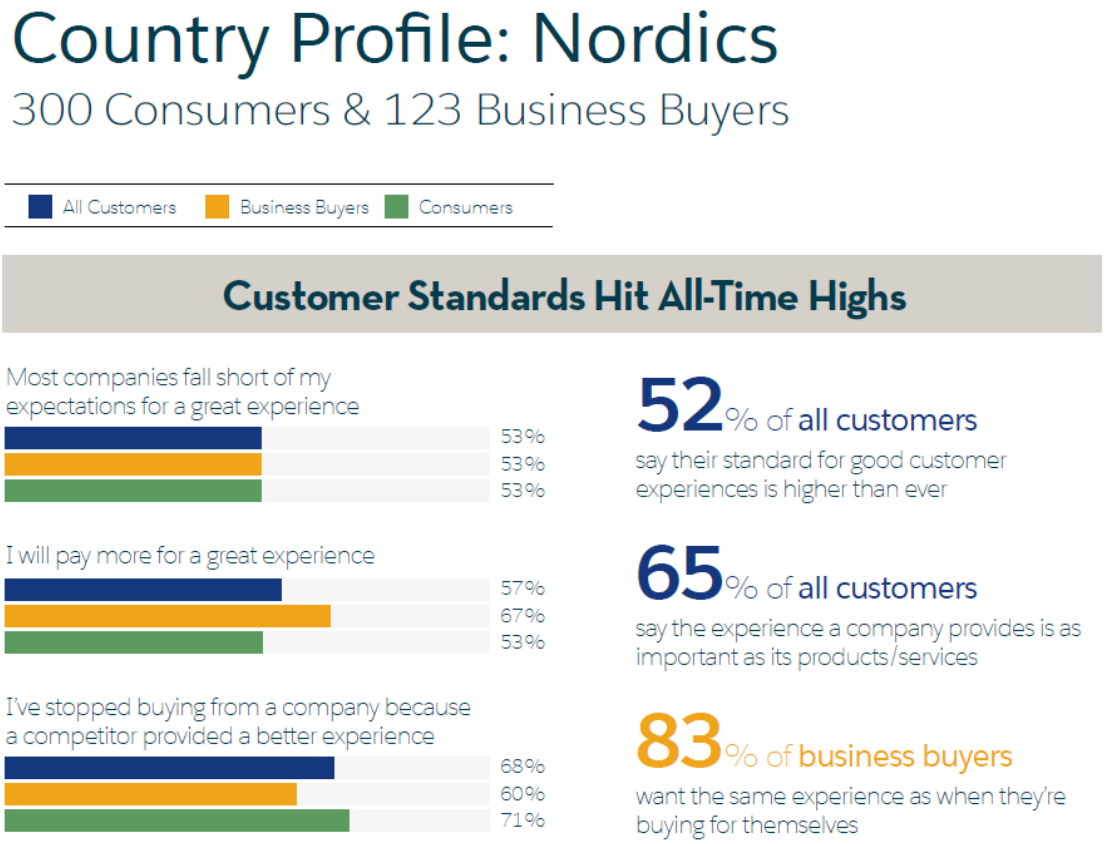


Figure 4 Customer standards hit all-time highs (Salesforce, 2018).

Customer experience is a central factor for competitive advantage in marketing management, especially for service-oriented and B2B firms (Kushwaha, Kumar, and Kar, 2021). A strong customer experience is a successful event where business clients are respected and acknowledged. Their requirements are satisfied irrespectively by the medium or platform they communicate with the company. Customer experience is usually measured from the customer's perspective. Furthermore, one of the most impactful factors of the customer experience is visual feeling (Kushwaha, Kumar and Kar, 2021). A company that provides a better experience for its clients earns vast profits and revenue. The intrinsic value of buyers is tough to quantify, but it is evident that customer experience plays a pivotal role in digital B2B commerce. Improving customer experience gives high profitability chances, not in B2C but also B2B commerce (Lecoeuvre, Turner and Kuppelwieser, 2021).

3.3 The B2B Customer Journey

Customer journey is a crucial factor affecting to customer experience, but streamlining the B2B customer journey is the art of science. It is way more complex than an elemental B2C customer journey as B2B buying often involves multiple stakeholders. For instance, Toman (2017) claims in HBR's article that 6,8 stakeholders are involved to B2B purchasing process, whereas Adamson and Toman (2020) states in Gartners report that the number is even more significant: varying between 11 to 20 stakeholders. As a result, the likelihood increases to purchasing process slowdown. For example, some stakeholders will often find aspects of an alternative more appealing (Toman, 2017). Also, the final purchase decision is generally a larger organizational initiative, out of initial buyer's control. Therefore, the nature of B2B purchasing itself differs foundationally from the B2C, and the customer journey should be designed to ease buyer's work.

The process of a complex B2B buyer journey needs to simplify and cut into smaller parts. The author identified two frameworks to describe the phenomena. According to Marvasti et al. (2021), the B2B buying process could be modeled statistically to four separate stages: 1) no funnel, 2) early-funnel, 3) middle-funnel, and 4) late-funnel. The benefit of this framework is the connectivity to data and digital marketing. Thus, buyers can be traced based on their online behavior and served with a more accurate sales or marketing funnel. Also, the framework supports understanding when the buyer moves forward, remains the same stage, or goes back to the first stage. The second framework is more illustrative to gather a birds-eye view about the overall customer journey (figure 5). The framework includes four key stages: 1) problem identification, 2) solution exploration, 3) requirements building and 4) supplier selection. Although it might not be applicable to every industry, it gives an understanding of the possible stages the buyer needs to go through before the purchase decision (Adamson and Toman, 2020). Understanding when, why, and how the buyer moves in various customer journey stages increases the seller's likehood to buyer being served better and accurately.

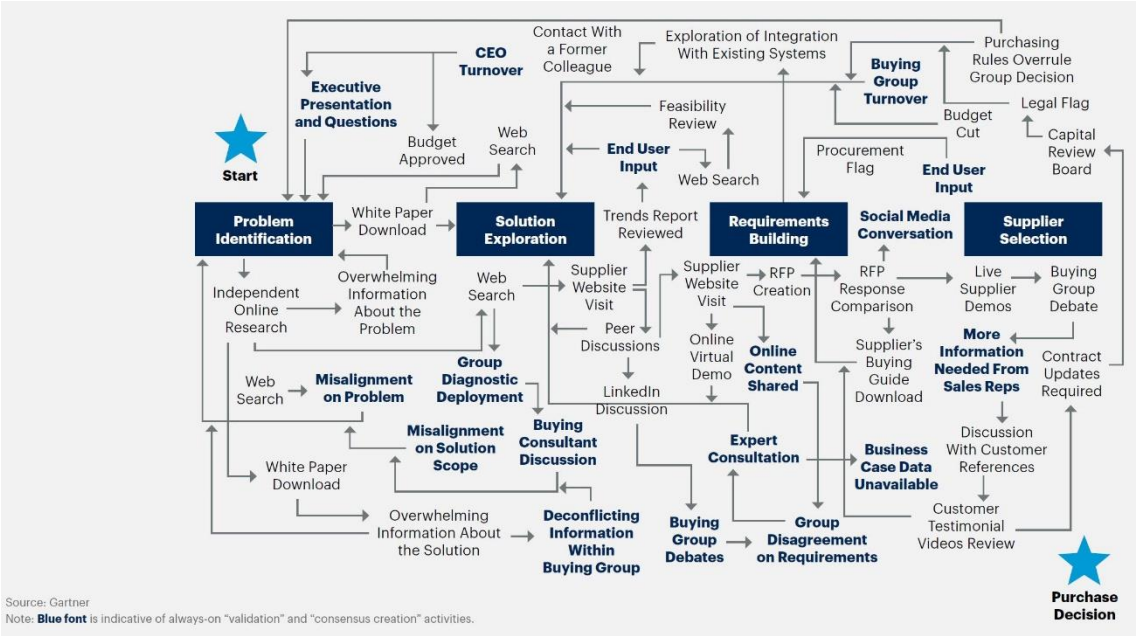


Figure 5. Gartners Illustration of B2B buyer Journey (Adamson and Toman, 2021).

Despite the complexity or length of the B2B customer journey, the advanced B2B sellers with digital platforms should embrace data to recognize patterns of what buyers want and need during the process (see chapter 2.2 Digital Platforms and Data). In order to ease buyer's work, the sellers should gain insights about buyer's information search, browsing behavior, content-related needs or interest (Marvasti et al., 2021). However, according to Gartner (2021), 60 % of B2B sellers will shift from experience and intuition-based selling to data-driven selling. In addition, this would include merging sales processes, applications, data, and analytics to a single operational practice. Furthermore, it has been argued that B2B sellers can strategically manage different B2B stages by the activities or sequence of activities (Marvasti et al., 2021). Also, in the study (Customer experience in the B2B area: The impact of age-related impressions), researchers claimed the customer journey must be managed; hence customer experience has become a priority of many organizations (Lecoeuvre, Turner and Kuppelwieser, 2021).

The recent transition from seller-directed to buyer-directed approach has forced B2B sellers to consider how to align sales and marketing to match better to the customer journey(Marvasti et al., 2021). The transition should be designed to align with the rising trend that causes new issues for the B2B sellers. B2B buyers discount sales representatives' perceived value, especially the younger generation of buyers, where 44 % of Millennial B2B buyers hope to get purchasing done without contacting the seller (Gartner, 2021). Chapter 3.4. considers more Millenials and other age groups.

The younger generation lead trend is causing a shift from in-person sales interactions towards digital channels, for instance, supplier or third-party websites and social media. Another trend is B2B buyers felt stressed due to the amount of information related to suppliers and products. The high-quality supplier information was still a must differentiation a few years ago, but 50 % of buyers consider it is now overwhelming (Adamson and Toman, 2020). Also, Toman (2017) claims in HBR's article that B2B buyers are more paralyzed by the information rather than empowered. Instead of increasing buyer's workload, sellers should pay attention to digital channels and create options for self-service and virtual buying experiences. (Adamson and Toman, 2020). See chapter 3.5.3 Virtual Reality (VR).

3.4 The Shifting Age Groups

The ongoing shifting in age generations significantly affects various aspects of how different buyers perceive and receive experiences during the eCommerce customer journey. Therefore, this subchapter is relevant to the study's point of view. As digital natives, the younger generations have different requirements for business than the older generations (UPS, 2019). When digital natives take control of the decision-making, it is evident that B2B sector is encountering another drastic change (UPS, 2019). One of the most critical concerns is the difference in how the younger generations want to make the business compared to older generations: younger generations prefer and require digital channels to excel in the purchasing process (Salesforce, 2018).

B2B buyers, and people in general, forms identifiable groups based on their demographics. The author finds multiple frameworks considering categorizing and designating people into different generations. Due to the research question's purpose, the author respects the literature around the eCommerce theme. According to Salesforce (2018), UPS (2019), and Pimcore (2021) reports, buyers can be categorized by certain age groups based on birth years. Still, the challenge is how to clearly interpret the age generations and how to organize humans to separate groups by evident birth year to understand the phenomena. UPS has categorized buyers into three groups (Baby Boomers, Generation X, and Millennials). Similarly, Salesforce and Pimcore use the same categories but have included the latest Generation Z to the framework. Only Pimcore (2021) has categorized age groups per estimated birth years, but not unreasonably uses overlapping birth years: Baby Boomers birth between 1940 and 1964, Generation X birth

mid-1960's to early 1980s, Millennials birth the early 1980s to early 2000s, and Generation Z birth mid-1990s to mid-2000s. The first two groups have born before the digital era, including part of the Millennials. All people in generation Z are born in the digital age. To clarify when the digital era started, Malter and Rindfleisch (2019) claim the digital revolution took place in the mid-1990s. Therefore, this study considers Generation Z as digital natives.

As part of the B2B buyers are born before, and after the digital era, desires and requirements for pleasing B2B buyers vary. For instance, there is an apparent dichotomy when considering what communication channels Baby Boomers and Generation Z prefer in the first place: 52 % of Generation Z buyers prefer social media, whereas only 14 % of Baby Boomers prefer social media. Not surprisingly, the smallest gap is in the use of SMS services: 44 % Generation Z and 35 % Baby Boomers. Generally, the younger the B2B buyer is, the more requirements are in the digital services (Salesforce, 2018). Furthermore, when considering the actual work of the buyers, younger generations are more impatient with bad customer experiences, whereas older generations tend to solve issues with the current supplier (Pimcore, 2021).

3.5 The Digital Features of The eCommerce

The last subchapter of the literature considers digital features used in B2B eCommerce.The objective was to study what digital features are currently in the market and how B2B buyers experience them. Due to the scope of the study, the author limited the literature to four digital features but added three more features into the analysis section (chapter 5.4.1) with a brief introduction. Features are 360 product images, 3D modeling, product videos, and an advanced chatbot.

3.5.1 Pricing Features and Tools

One form of a value-added feature in digital commerce is flexible pricing mechanisms. For instance, sellers can adjust pricing individually by the customer, product, or location. This could be beneficial for B2B buyers. For example, Copperberg's (2021) report postulates that B2B e-commerce models are attractive since they leverage discount campaigns to potential customers. This practice has been a way of retaining clients and attracting prospective clients. Beyond basics and standards, businesses are creating more and more

21st century futuristic technologies to fuel customer engagement and create unique purchasing experiences.

CPQ and dynamic pricing tools are a few examples of digital pricing technologies. CPQ tools are modernly used to boost sales team's productivity and enhance business outcomes by speeding up the lead time of the quotes as CPQ tool can calculate diverse quotes faster. For instance, with the right CPQ tools in place, the lead time of a quote can reduce from 21 days to only three days (Gill and Mathur, 2021). In addition, Dynamic pricing is a modern tool that utilizes technologies, such as big data and algorithms, to forecast an actual demand and supply accurately in changing market conditions. When businesses connect their internal knowledge to former technologies in B2B context, they can produce quotes based more accurately on real profits and tailor offers to customer or product level. This increases the competitive advantage significantly, and again, paces up the lead time. Dynamic pricing has already been utilized successfully in the consumer business. Amazon and Uber are the few players to be named, but multiple other industries are involved, such as the ticket industry, hospitality, and more. Furthermore, dynamic pricing is already used in the manufacturing industry, but it is still a new feature in B2B context. Therefore, many leaders have a vague conception of the actual benefits of dynamic pricing in B2B (Bages-Amat, Baker, Magnette, and Winkler, 2021). This is aligned with the study findings, referring to the analysis in chapter 5.4.1.1.

3.5.2 Augmented Reality (AR)

The extensive use of innovative technologies distinguishes part of digital masters and other digital forerunners, for instance, augmented reality (AR). Augmented reality is a technology component that produces computer graphics and images to provide the customer with an accurate and composite view of the actual product (Chen et al., 2019). Augmented reality performs this task by conveying information to the buyer about the product. This type of innovative technology aims to give the buyer a glimpse of the product before purchasing it. Real benefits might still be even more significant in the manufacturing industry. For instance, AR service supplier and automotive company established a common augmented reality platform (CAP) to help users with maintenance. Considering technical issues and ways to recover from downtime quickly, two former parties can collaborate remotely and solve critical problems at a fast pace (Benefits of Using AR in

Manufacturing Industry, 2018). A Seller who could seduce buyers with significant after-sales services like this should make the difference for long-term digital rich supplier relationships. In addition, 38 % of B2B buyers seek AR features from B2B websites (Digital Commerce 360, 2021).

3.5.3 Virtual Reality (VR)

Virtual reality as a multi-sensory interaction tool with clients is also a feature of futuristic digital commerce. The gear for virtual reality continues to improve, advance, and become more available to the general public. Certain qualities of virtual reality applications are common from B2B marketing perspective: immersion, interactivity, and the option to real-time engagements (Boyd and Koles, 2019). Furthermore, the fundamental function of virtual realism in prospective digital B2B e-commerce businesses is to improve the purchase trends of products and services. Implementing virtual reality in the prospective B2B e-commerce organization model can revolutionize the relationship between sellers and buyers by assisting buyers in understanding and differentiating the worth of various items. The integration of buyer and seller information aims to encourage future transactions and more significant information flow to the buyer (Kauffman & Pointer, 2021). Gartners strategic virtual selling framework (2021) describes attractive benefits tor investing in virtual technology. Firstly, building virtual salesrooms and serving B2B buyers through virtual (and augmented) reality services could significantly enhance customer experience. Secondly, B2B buyers could have an opportunity to conduct purchases in a virtual self-service environment and have answers on-demand. This would support B2B sellers to achieve especially the younger generation's digital requirements. Also, referring to chapter 3.3: it could decrease the supplier's unnecessary information flow.

4 Research Methods

According to Saunders, Lewis and Thornhill (2016), research can be defined as a process to take in a systematic way in order to find out things, thereby increasing the knowledge. The research project was designed to complete with mixed methods utilizing quantitative and qualitative methods in a sequential approach. The mixed-methods study is a collection of research methods that combines the usage of quantitative and qualitative data collection techniques and analytical practices. The sequential explanatory research design involves the quantitative research methods to be practiced before qualitative research methods. Considering this particular study, quantitative research has been practiced during literature review to build knowledge in the study area and in the form of a questionnaire. Qualitative research is conducted by obtaining findings to research objectives and questions during the analytics phase.

4.1 Interviews

Interviews were held during November and December 2021 in a semi-structured form. The total number of respondents was ten. All the respondents and their employing companies were in the Scandinavian territory. Most of the businesses (50 %) operated across the manufacturing industries. Distribution and retail companies were both represented with one respondent. The last group (other) forms a mix of businesses operating in specific industries such as construction services, fashion, and teleoperator functions. In addition, interviews were conducted as follows: seven interviews in distance meetings using Microsoft Teams, two interviews in mobile phone, and one interview in the respondent's office. One respondent wanted questions to see beforehand with email. See chapter 5.2. to gain more understanding from the respondents and their backgrounds.

4.2 Questionnaire

The questionnaire was designed to give more insights from the interviewed respondents. Also, the author selected Google Forms, a questionnaire tool, for its simple interface. The questionnaire was sent to the same respondents that the author interviewed. In total, nine respondents submitted answers to the questionnaire before the Thesis was returned. Also, only one answer per respondent was allowed The questionnaire was closed soon after the

author received the submitted results. The total number of questions was 14, and ten questions were analyzed in chapter 5.4. The author utilized hashtags to connect the respondents to figure 1 in chapter 5.2.1. This was necessary to understand the background of the respondent. The results of the questionnaire and Thesis were agreed to be sent to respondents no later than the 15th of January 2022. The full questionnaire is in the appendices.

4.3 Secondary Data

The secondary data from the literature was gathered to design the research objective and questions. Contrary to primary data, secondary data refers to data that has already been identified by other researchers (Formplus, 2021). In addition, the author used journals, reports, articles, and webinar to mature in the study area. In addition, the author tried to limit the publishing year of the literature to no older than the year 2017.

4.4 Limitations

The author was able to complete the Thesis in a short time frame, which caused limitations to the research. The author studied the literature in summer 2021 but was able to progress most of the study during November and December during the same year. Therefore, the author needed to find respondents to interviews in a few days of a time period. Also, the study results do not consider Generation Z age group as there was no respondent involved in the research. In addition, chapter 3.5. was needed to narrow only to three digital features due to the scope and timeframe of the study. Therefore, the chapters 5.4.1. – 5.4.8 includes certain digital features that were not involved in the literature, and are explained only in a brief level before analysis.

5 Empirical Findings of The Study

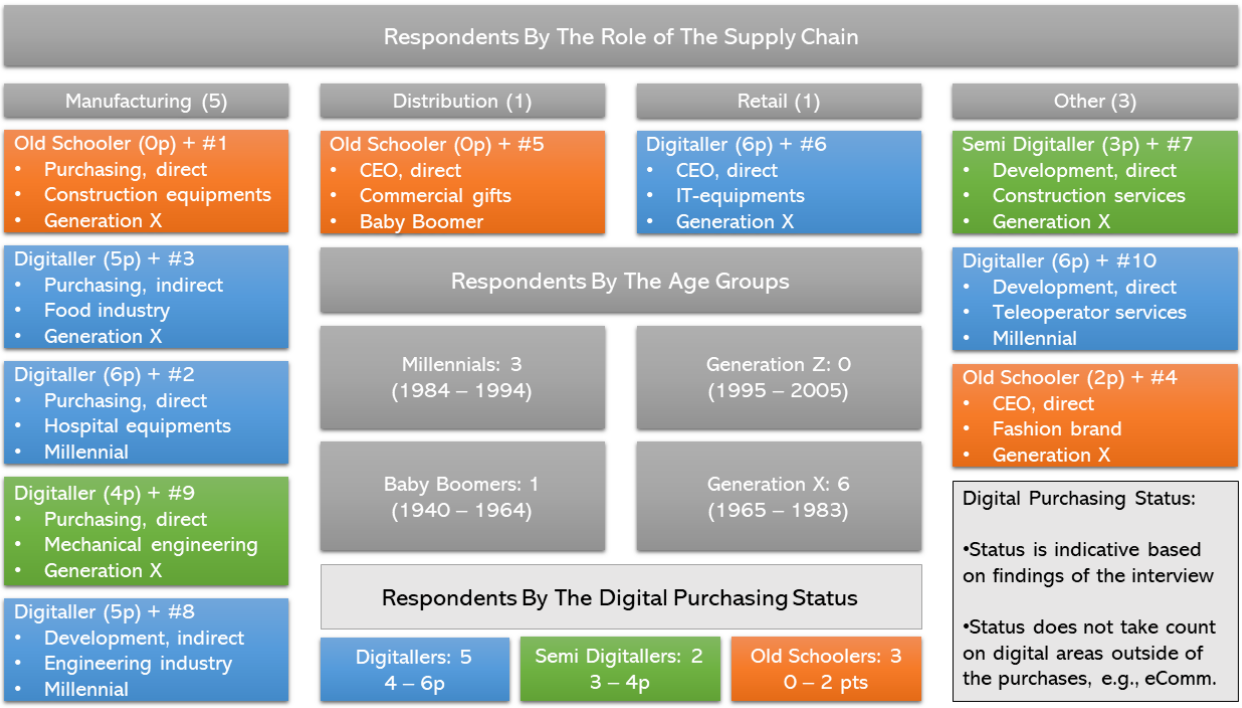
5.1 Introduction

The author shows the study results in three sections: 1) respondent's background with classification, 2) analysis of interviews at a group level, and 3) results of the questionnaire at an individual level. In addition, the study respects the respondent's anonymity. Therefore, the author has limited certain results and respondent's backgrounds.

5.2 Background of the Respondents

5.2.1 Summary

Ten respondents and related characteristics are described in chapters 5.2.2 – 5.2.5 (figure 1). In addition, the annual turnover and monthly level of transactions give a practical overview of the respondents regarding purchases. The annual turnover is generally recognized as one of the key identifiers to measure and provide a perspective of the business. Respondents employers annual turnover varies significantly: three large enterprises revenues over 1 billion euros, two more significant middle-size businesses with revenue 300 to 500 million euros, two smaller middle-size businesses with revenue 60 to 80 million euros, and three smaller businesses with revenue 1 to 2 million euros. Monthly transactions are used in this study to recognize the volume from the purchasing perspective. The indicative number of buying transactions was asked from the respondents to evaluate the significance of purchasing. The total number of monthly orders varied substantially. In the low end, monthly orders can be zero, and in the high end, monthly orders can be over 20 000 separate purchases. In addition, the most significant transactions, one order could include 50 000 items or units. Also, in terms of the spent, one order considering a manufacturing productization system is worth over millions of euros.



Picture 1. Summary Of Respondents

5.2.2 Age Groups

The age groups categorized respondents as in literature chapter 3.4. More detailed information from age groups is in chapter 4.1. Respondents included one Baby Boomer (10 % of overall respondents), six Generation X's (60 %), and three Millennials (30 %). Age group Generation Z was not part of the research, as there was no respondent born in 1995 or after. The youngest respondents were born in 1990-1991.

5.2.3 Professions

Respondent's real professions were divided into three main groups to ease reading and categorization. Label purchasing includes all purchasing-related professions, for instance, purchaser, department lead, and procurement director. Label, development, consists of developers or related professions in a supportive role for purchasing. Label, CEO, also includes entrepreneurs and chairmans. Four of the respondents were purchasers (40 %), three were developers (30 %), and three were CEO's (30 %).

5.2.4 Purchasing types

Respondents were also labeled by the purchasing type: direct purchases and indirect purchases. Eight of the respondents (80 %) worked with direct purchases. Direct purchases are, for instance, raw materials that are needed in manufacturing. Two respondents (20 %) worked with indirect purchases. Indirect purchases are, for instance, electricity or fuel that are required in operations.

5.2.5 Classification – Digital Purchasing Status

Due to the variety in the interview results, the author needed to classify the respondents based on their purchasing manners. The classification, “digital purchasing status,” reflects the author's findings from the literature standpoint (chapters 2.2, 2.3, 2.4, and 2.5).

The digital purchasing status is a classification to differentiate which of the respondents were more advanced in terms of digital purchasing. For instance, how respondents utilize eCommerce and data, ERP, or other IT systems and pursue the automation state (chapter 2.4). Also, what were respondent’s ambitions or disinterests towards digital purchasing in general, and what possible limitations respondents were encountering. Furthermore, the results from the questionnaire did not count on the digital purchasing status, and it should not be mixed together with digital maturity (chapter 2.5). In addition, digital purchasing status does not count respondent's sales operations on eCommerce or other digital channels.

The interviews highlighted three separate groups with similar results. In order to conduct the classification, a scoring system was needed. Measurable attributes were: 1) reorders, 2) new orders, 3) ambitions, and 4) limitations. Each attribute was scored with either two points (2 p), one point (1 p), or zero point (0 p) based on the interview results. Next, the scoring system needed to be applied with the attributes. Reorders are done automatically: mostly (2 p), partly (1 p), less, or unknown (0). New orders are done digitally: mostly (2 p), partly (1 p), less, or unknown (0). Respondent is ambitious for digital development: mostly (2 p), partly (1 p), less or unknown (0). Current industry, supplier, or product-based restrictions for digitalization: high (-2 p), medium (-1 p), less or unknown (0).

After applying the results to the scoring system and attributes, the author labeled respondents into three groups: Digitallers 5-6 p, Semi Digitallers 3-4 p, and Old Schoolers 0-2 p.

Respondent	Reoders	New Orders	Ambitions	Limitations	Score
#1 Old Schooler (Generation X)	0,00	0,00	0,00	0,00	0,00
#2 Digitaller (Millennial)	2,00	1,00	2,00	0,00	5,00
#3 Digitaller (Generation X)	1,00	2,00	2,00	0,00	5,00
#4 Old Schooler (Generation X)	0,00	2,00	2,00	-2,00	2,00
#5 Old Schooler (Baby Boomer)	0,00	0,00	1,00	-1,00	0,00
#6 Digitaller (Generation X)	2,00	2,00	2,00	0,00	6,00
#7 Semi Digitaller (Generation X)	1,00	1,00	2,00	-1,00	3,00
#8 Digitaller (Millennial)	2,00	1,00	2,00	0,00	5,00
#9 Semi Digitaller (Generation X)	2,00	1,00	2,00	-1,00	4,00
#10 Digitaller (Millennial)	2,00	2,00	2,00	0,00	6,00
Averages	**1,20**	**1,20**	**1,70**	**-0,50**	**3,60**

Table 1. Respondents Digital Purchasing Status

5.3 Interview analysis

Interviews were held during November and December 2021 in a semi-structured form. The total number of respondents was ten. In addition, interviews were conducted as follows: seven interviews in distance meetings using Microsoft Teams, two interviews in mobile phone, and one interview in the respondent's office. One respondent wanted questions to see beforehand. The author presents the results of the most relevant questions that every respondent answered to ensure the consistency and reliability of the study. Also, results are presented in a group level (referring to digital purchasing status) and in a random order for two reasons: 1) Some of the respondents were concerned about how the given information looks in the Thesis due to privacy concerns, and 2) the results followed similar patterns between the respondents.

Answers in chapter 5.3, considering ERP and other IT systems, are combined into single IT systems. Also, an eCommerce marketplace is counted eCommerce store in results.

Question 1: How is your organization arranged the purchases for reorders and replenishments?

The question's objective was to understand and gather insights into how respondents utilize digital purchases when the order is recurring (refer to chapters 2.2.-2.4). Therefore, the first interview question relates to research question one. Reorders and replenishments are combined into a single entity, reorders.

Digitallers (5): Three Digitallers states reorders are mostly automated through IT systems connected to suppliers' IT systems due to automation and data purposes. One Digitaller stated that reorders come as an assignment from other departments, and orders will be conducted on various sellers eCommerce stores. One Digitaller also considered the question from the service purchasing perspective: end users make reorders on the internal commerce portal after the service or product (page) is established. Compared results into literature, results are aligned as follows: three Digitallers utilize IT systems for reorders in automation and data perspective (chapters 2.3 and 2.4). One Digitaller utilizes eCommerce stores for reorders (chapter 2.2). One Digitaller states employees are using an internal commerce portal for reorders. (chapter 2.2).

Semi Digitallers (2): Both Semi Digitaller states part of the reorders are coming through IT systems. Other Semi Digitaller claims for automation utilizing various inventory and warehouse system-based triggers. In addition, both Semi Digitallers claim limitations to fully automated reorders (see chapter 5.3., question three). However, compared results into literature, results are aligned as follows: both Semi Digitallers utilize IT systems for reorders in automation and data perspective (chapters 2.3 and 2.4).

Old Schoolers (3): First Old Schooler advocated easy reordering from current suppliers by continuing the previous email chain. The IT systems exist, but the respondent didn’t know much more about it. Second Old Schooler sends a new email to the supplier every time and advocates the medium due to easy documentation for accounting and further purposes. Also, the respondent states they have IT systems to track inventory levels but not for purchasing (see chapter 5.3., question three). Third Old Schooler claims to make purchases only a few times a year in the global eCommerce marketplaces. Furthermore, the third Old Schooler recalls the value of the marketplace’s contract as more beneficial than automated digital purchasing: when ordering products overseas, the possible issues with cultural differences and quality are backed by the marketplace’s terms of the contract. The result of the third Old Schooler is aligned with literature (chapter 2.2).

Question 2: Where do you start buying process when purchasing a new product from a new supplier?

The question's objective was to gather understanding and insights into how respondents utilize digital purchases when products and suppliers are new (refer to chapters 2.2.-2.3). Therefore, the second interview question relates to research question one.

Digitallers (5): Three Digitallers claims for finding information from Google to locate websites (eCommerce stores and commerce portals) for prospective new suppliers for further investigations. Two Digitaller claims to head to internal IT systems and find the information from databases. Also, when a prospective supplier occurs, they head to the possible eCommerce store or portal for further investigations. Compared to literature, results are aligned as follows: three Digitallers uses external sources to find more information when searching prospective suppliers (eCommerce stores or commerce portals, chapter 2.2). Also, two Digitallers use internal sources to find more information when searching prospective suppliers (IT systems, chapter 2.3).

Semi Digitallers (2): One Semi Digitaller stated that encountering new suppliers is a rare event as they already know nearly every supplier in the market – at least the bigger ones. They try to utilize eCommerce and IT systems, but the workforce often goes to the retail store. One Semi Digitaller also states that it uses digital services such as eCommerce stores or store portals. In addition, the respondent advocated integrations to supplier's IT systems whenever possible. Also, the respondent supported yearly exhibitions and related catalogs with good experiences (before COVID-19). Results are aligned with chapters 2.2 and 2.3.

Old Schoolers (3): All Old Schoolers would start their journey from Google and find an eCommerce store or commerce portal. In addition, One Old Schooler praises for exhibitions, one Old Schooler would call to the sales rep, and one Old Schooler would go to the global eCommerce marketplaces. Results are aligned with chapter 2.2.

Question 3: Have your organization set any digital requirements for suppliers?

The question's objective was to gather understanding and insights into how respondents have determined suppliers' digital traits for a business relationship. The third interview question relates to research question one, but the results are not compared to a literature.

Digitallers (5): None of Digitallers had set any digital requirements for the supplier. Also, none of Digitallers did see the topic as problematic because the number of non-digitally working suppliers is minimal. Although, three Digitallers recalled benefits for integrations, and two claimed to support suppliers in establishing API's. One Digitaller stated briefly: "API would be nice." One Digitaller reasoned the ideology that most of purchasing happens digitally already without any digital requirements as it is a sort of standard." Also, one Digitaller stated: "In service purchasing, it is not as relevant as in physical products." The last Digitaller put it simply: "There is no corporation determined rules for suppliers digital requirements, but certain digital traits guide curiosity. When you deal with eCommerce stores in a daily manner, it takes about a few seconds to determine whether or not I should continue on the supplier's store or move on to the next one."

Semi Digitallers (2): One Semi Digitaller stated: "No requirements for the suppliers as the labor work traditions in the industry and slowed down the digital business. There should happen revolutionary changes in the industry if we could set digital requirements for the suppliers". Other Semi Digitaller stated: "Even we have approached purchasing thorough a holistic digital manner, we cannot set digital requirements for the suppliers if they are not ready to it. It could trigger a risk to the number of supplier relationships". Both Semi Digitallers have encountered limitations that affect at least partly digital purchasing. Therefore, they lose some benefits of digital purchasing.

Old Schooler (3): None of the Old Schoolers stated digital requirements for suppliers. One Old Schooler was confused by the question and asked: "What do you mean?" One Old Schooler laughed at first but then recalled a recent inquiry from a supplier: "Actually, we have received an inquiry from one of our suppliers to connect our IT systems together. Although the question was interesting, our IT systems are too old and stiff, so we were not able to connect the systems." One Old Schooler stated: "We would be curious into a digital collaboration with suppliers, but unfortunately, it is not possible with our suppliers overseas. In our case, we are more like a victim of our industry than pointing commands".

5.4 Questionnaire analysis

The questionnaire was sent to respondents of the interviews in December 2021. Nine of ten respondents submitted the questionnaire, which included 14 questions. In addition, the questionnaire was built with Google Forms. Questions were designed during the literature and interviews. The hashtag in the results correlates with the respondent in figure 1 (chapter 5.2.1). The questionnaire analysis considers ten questions. The complete questionnaire is in the appendices.

5.4.1 The Digital Features of the eCommerce

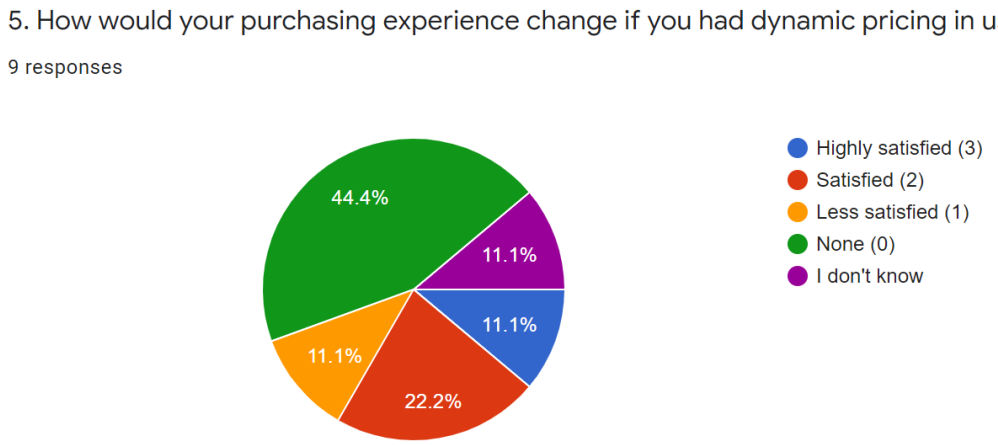
The objective of the question series was to gather understanding and insights into how respondents are utilizing digital features with digital purchasing. Also, how younger age groups (Millennials) value digital features compared to older age groups (Generation X and Baby Boomers). Therefore, all the questions in 5.4.1 – 5.4.8 relate to research question two.

The questionnaire included the following digital features of the eCommerce: 1) dynamic pricing, 2) 360 product images, 3) 3D modeling, 4) product videos, 5) virtual reality (VR), 6) augmented reality (AR), and 7) advanced chatbot. Dynamic pricing, virtual reality (VR), augmented reality (AR), and videos were involved in the literature. Respondents were given five alternatives to answer with a corresponding number to describe the scale of the answer: highly satisfied (3 p), satisfied (2 p), less satisfied (1 p), none (0 p). Also, respondent was allowed to answer “I don’t know” which are marketed as a black box and removed from the average results.

5.4.1.1 Digital feature: Dynamic pricing

As an overall result, dynamic pricing was the least wanted digital feature with an experience score of 0,78 and an actual usage score of 0,67. Four of the respondents reject dynamic pricing benefits with zero points, including one Millennial from the manufacturing industry. On the other hand, two Millennials consider it as satisfied. Referring to chapter 5.4.2, respondents 4, 5, and 6 have never used dynamic pricing but still have a clear opinion about it. Respondent 1 has not never used it, and admits does not know. Nonetheless, experience score results are aligned with chapter 3.5.1 as most B2B decision-makers do not understand the feature itself or its related benefits.

Picture 2. Questionnaire: Dynamic Pricing

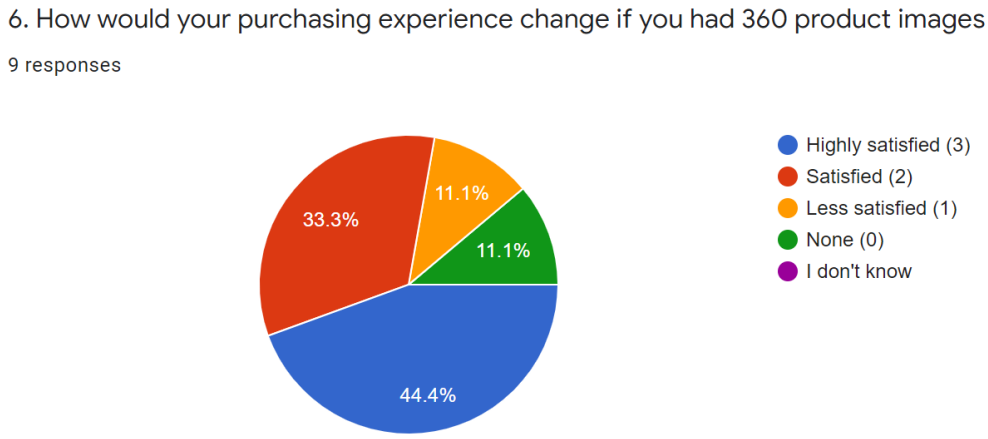


Scorecard: Dynamic Pricing	Dynamic Pricing		All Digital Features	
Respondent	Purch. Exp.	Use Exp.	Avg. Purch. Exp. Rate	Avg. Use Exp. Rate
#1 Old Schooler (Generation X)		0	2,33	0,29
#2 Digitaller (Millennial)	2	2	2,57	1,86
#3 Digitaller (Generation X)	2	1	2,00	0,57
#4 Old Schooler (Generation X)	0	0	2,14	0,14
#5 Old Schooler (Baby Boomer)	0	0	0,67	0,29
#6 Digitaller (Generation X)	0	0	1,14	0,29
#7 Semi Digitaller (Generation X)	0	2	1,14	0,71
#8 Digitaller (Millennial)	1	1	0,57	0,43
#9 Semi Digitaller (Generation X)	-	-	-	-
#10 Digitaller (Millennial)	2	0	1,29	0,71
Average Score	0,88	0,67	1,54	0,59

Table 2. Scorecard: Dynamic Pricing

5.4.1.2 Digital Feature: 360 Product Images

360 product images were not involved in the literature. It enables one to look at an image in vertically at every angle, and in some cases, as 720-degree view. Overall, 360 product images were the best voted digital feature with an experience score of 2,11 and an actual usage score of 0,89. Four of the respondents would be highly satisfied with using 360 product images, including two millennials. On the other hand, one Millennial considers it as non useful.



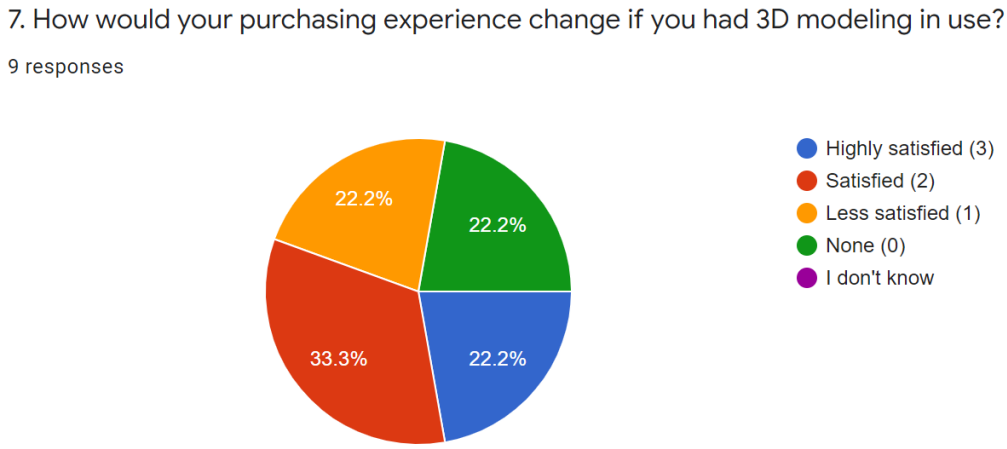
Picture 3: Questionnaire: 360 Product Images

Scorecard: 360 Product Images	**360 Product Images**		**All Digital Features**	
Respondent	Purch. Exp.	Use Exp.	Avg. Purch. Exp. Rate	Avg. Use Exp. Rate
#1 Old Schooler (Generation X)	2	1	2,33	0,29
#2 Digitaller (Millennial)	3	2	2,57	1,86
#3 Digitaller (Generation X)	3	0	2,00	0,57
#4 Old Schooler (Generation X)	3	0	2,14	0,14
#5 Old Schooler (Baby Boomer)	2	1	0,67	0,29
#6 Digitaller (Generation X)	1	1	1,14	0,29
#7 Semi Digitaller (Generation X)	2	1	1,14	0,71
#8 Digitaller (Millennial)	0	0	0,57	0,43
#9 Semi Digitaller (Generation X)	-	-	-	-
#10 Digitaller (Millennial)	3	2	1,29	0,71
Average Score	2,11	0,89	1,54	0,59

Table 2. Scorecard: 360 product images

5.4.1.3 Digital feature: 3D modeling

3D modeling was not involved in the literature. It produces a 3D digital representation of any object or surface. As an overall result, dynamic pricing was the least wanted digital feature with an experience score of 1,56 and an actual usage score of 0,22. Two respondents would be highly satisfied with using 3D modeling, including one millennial. On the other hand, one Millennial considers it as non-useful, and one millennial only less satisfying.



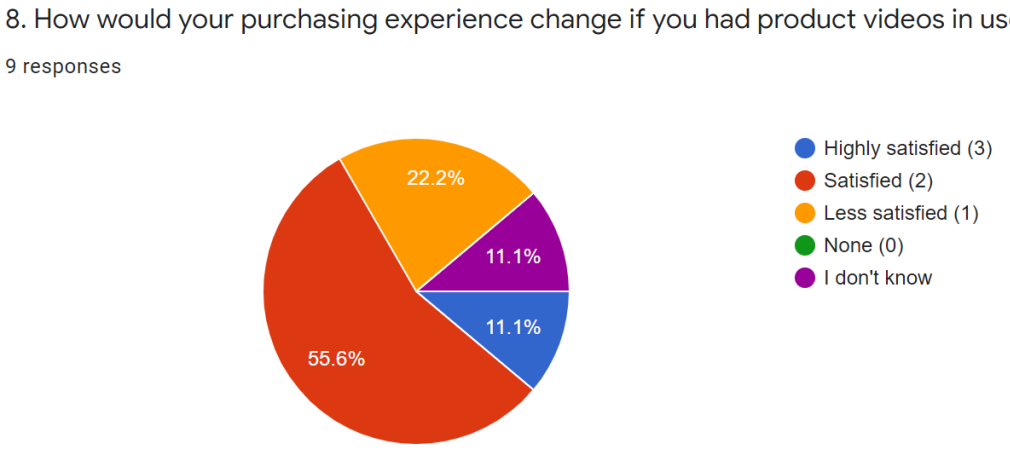
Picture 3. Questionnaire: 3D modeling

Scorecard: 3D Modeling	**3D Modeling**		**All Digital Features**	
Respondent	Purch. Exp.	Use Exp.	Avg. Purch. Exp. Rate	Avg. Use Exp. Rate
#1 Old Schooler (Generation X)	2	0	2,33	0,29
#2 Digitaller (Millennial)	3	2	2,57	1,86
#3 Digitaller (Generation X)	3	0	2,00	0,57
#4 Old Schooler (Generation X)	2	0	2,14	0,14
#5 Old Schooler (Baby Boomer)	0	0	0,67	0,29
#6 Digitaller (Generation X)	1	0	1,14	0,29
#7 Semi Digitaller (Generation X)	2	0	1,14	0,71
#8 Digitaller (Millennial)	0	0	0,57	0,43
#9 Semi Digitaller (Generation X)	-	-	-	-
#10 Digitaller (Millennial)	1	0	1,29	0,71
Average Score	1,56	0,22	1,54	0,59

Table 3. Scorecard: 3D modeling

5.4.1.4 Digital Feature: Product Videos

Product videos were not involved in the literature. Product videos are the traditional feature known from television. As an overall result, product videos were in second place of digital feature with an experience score of 1,88 and actual usage score of 1,33. The latter score makes it the most used feature on the list. One respondent considers it as highly satisfying, but five consider it as satisfying, including one Millennial. On the other hand, two Millennials consider it as only less satisfying, and one Old Schooler doesn't know.



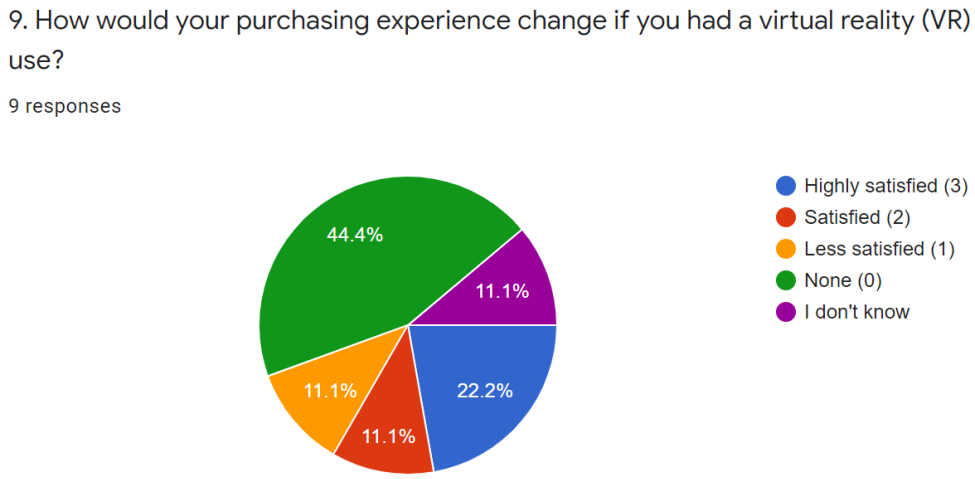
Picture 4. Questionnaire: Product videos

Scorecard: Product Videos	**Product Videos**		**All Digital Features**	
Respondent	Purch. Exp.	Use Exp.	Avg. Purch. Exp. Rate	Avg. Use Exp. Rate
#1 Old Schooler (Generation X)		1	2,33	0,29
#2 Digitaller (Millennial)	2	2	2,57	1,86
#3 Digitaller (Generation X)	2	2	2,00	0,57
#4 Old Schooler (Generation X)	3	1	2,14	0,14
#5 Old Schooler (Baby Boomer)	2	1	0,67	0,29
#6 Digitaller (Generation X)	2	1	1,14	0,29
#7 Semi Digitaller (Generation X)	2	2	1,14	0,71
#8 Digitaller (Millennial)	1	1	0,57	0,43
#9 Semi Digitaller (Generation X)	-	-	-	-
#10 Digitaller (Millennial)	1	1	1,29	0,71
Average Score	1,88	1,33	1,54	0,59

Table 4. Scorecard: Product videos

5.4.1.5 Digital Feature: Virtual Reality (VR)

As an overall result, VR was one of the less wanted digital features with an experience score of 1,13 and an actual usage score of 0,22. The latter score makes it the least used feature on the list, tied with 3D modeling and AR. Two respondents consider it highly satisfying, including one Millennial. On the other hand, two Millennials reject its benefits, and one Old Schooler doesn't know.



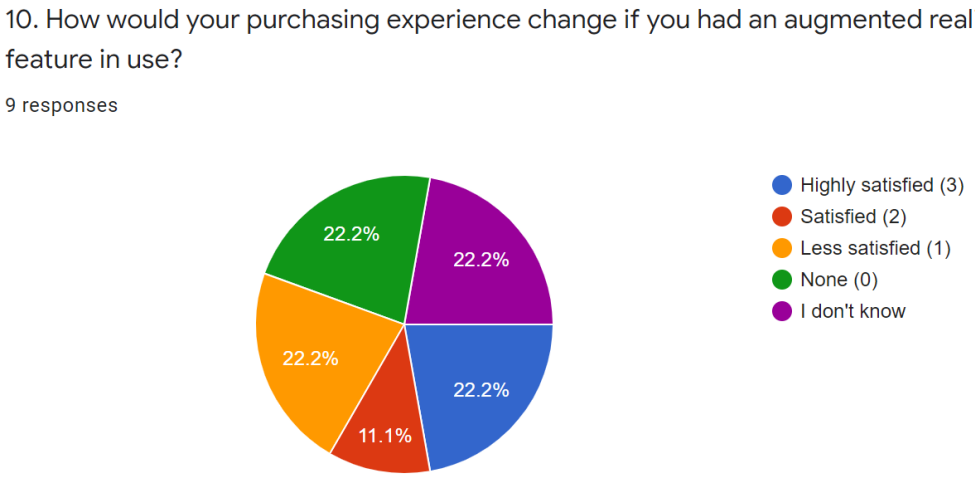
Picture 5. Questionnaire: Virtual Reality (VR)

Scorecard: Virtual Reality (VR)	Virtual Reality (VR)		All Digital Features	
Respondent	Purch. Exp.	Use Exp.	Avg. Purch. Exp. Rate	Avg. Use Exp. Rate
#1 Old Schooler (Generation X)		0	2,33	0,29
#2 Digitaller (Millennial)	3	2	2,57	1,86
#3 Digitaller (Generation X)	2	0	2,00	0,57
#4 Old Schooler (Generation X)	3	0	2,14	0,14
#5 Old Schooler (Baby Boomer)	0	0	0,67	0,29
#6 Digitaller (Generation X)	1	0	1,14	0,29
#7 Semi Digitaller (Generation X)	0	0	1,14	0,71
#8 Digitaller (Millennial)	0	0	0,57	0,43
#9 Semi Digitaller (Generation X)	-	-	-	-
#10 Digitaller (Millennial)	0	0	1,29	0,71
Average Score	1,13	0,22	1,54	0,59

Table 5. Scorecard: Virtual Reality (VR)

5.4.1.6 Digital Feature: Augmented Reality (AR)

As an overall result, AR was one of the less wanted digital features with an experience score of 1,43 and an actual usage score of 0,22. The latter score makes it the least used feature on the list, tied with 3D modeling and VR. Two respondents consider it highly satisfying, including one millennial. On the other hand, one Millennial considers it as non-useful, and one Millennial only less satisfying. Also, two Old Schoolers doesn't know.



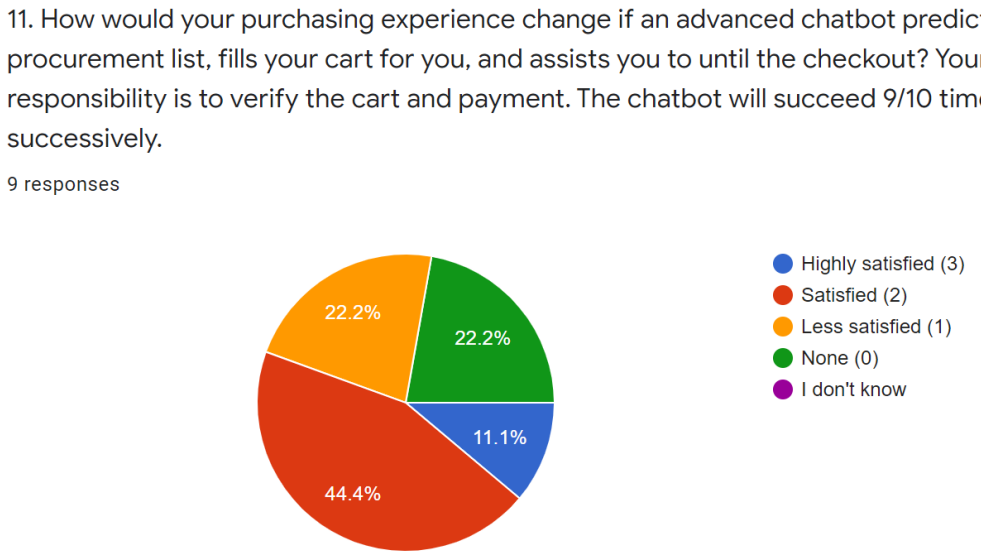
Picture 6. Questionnaire: Augmented Reality (AR)

Scorecard: Augmented Reality (AR)	Augmented Reality (AR)		All Digital Features	
Respondent	Purch. Exp.	Use Exp.	Avg. Purch. Exp. Rate	Avg. Use Exp. Rate
#1 Old Schooler (Generation X)		0	2,33	0,29
#2 Digitaller (Millennial)	3	2	2,57	1,86
#3 Digitaller (Generation X)	2	0	2,00	0,57
#4 Old Schooler (Generation X)	3	0	2,14	0,14
#5 Old Schooler (Baby Boomer)		0	0,67	0,29
#6 Digitaller (Generation X)	1	0	1,14	0,29
#7 Semi Digitaller (Generation X)	0	0	1,14	0,71
#8 Digitaller (Millennial)	0	0	0,57	0,43
#9 Semi Digitaller (Generation X)	-	-	-	-
#10 Digitaller (Millennial)	1	0	1,29	0,71
Average Score	1,43	0,22	1,54	0,59

Table 6. Scorecard: Augmented Reality (AR)

5.4.1.7 Digital Feature: Advanced Chatbot

Advanced chatbot where not involved in the literature. Chatbots are computer programs designed to simulate conversation with human users or deliver advanced tasks utilizing AI and other advanced technologies. Overall, the advanced chatbot was one of the most wanted digital features with an experience score of 1,86 and actual usage score of 0,56. One respondent considers it as highly satisfying, and four respondents consider it as satisfying, including two Millennials. On the other hand, one Millennial considers it as non-useful, and one Millennial only less satisfying. Also, two Old Schoolers doesn't know.



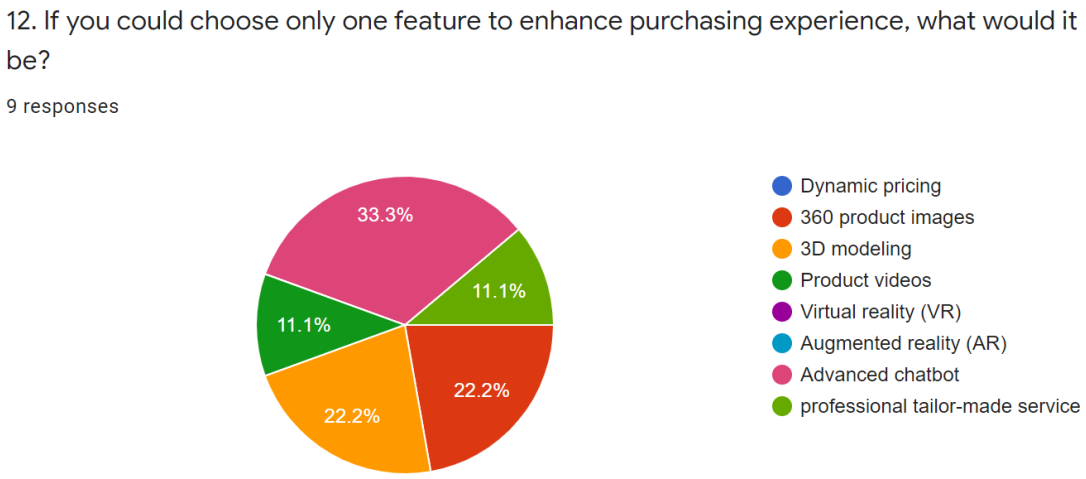
Picture 7. Questionnaire: Advanced chatbot

Scorecard: Advanced Chatbot	Advanced Chatbot		All Digital Features	
Respondent	Purch. Exp.	Use Exp.	Avg. Purch. Exp. Rate	Avg. Use Exp. Rate
#1 Old Schooler (Generation X)	3	0	2,33	0,29
#2 Digitaller (Millennial)	2	1	2,57	1,86
#3 Digitaller (Generation X)	0	1	2,00	0,57
#4 Old Schooler (Generation X)	1	0	2,14	0,14
#5 Old Schooler (Baby Boomer)	0	0	0,67	0,29
#6 Digitaller (Generation X)	2	0	1,14	0,29
#7 Semi Digitaller (Generation X)	2	0	1,14	0,71
#8 Digitaller (Millennial)	2	1	0,57	0,43
#9 Semi Digitaller (Generation X)	-	-	-	-
#10 Digitaller (Millennial)	1	2	1,29	0,71
Average Score	1,86	0,56	1,54	0,59

Table 7. Scorecard: Advanced chatbot

5.4.2 The Most Wanted Digital Feature

As a final result, advanced chatbot was selected to the most wanted digital feature of the eCommerce with four votes. When compared results to the questions 5.4.1. – 5.4.7, the nine respondents voted the best purchasing experience score to the 360 product images, but still, it is in position three in the chart. Also, one Old Schooler voted the option “Other” and recalls a professional tailor-made service as the most wanted digital feature.



Picture 8. Most Wanted Digital Feature

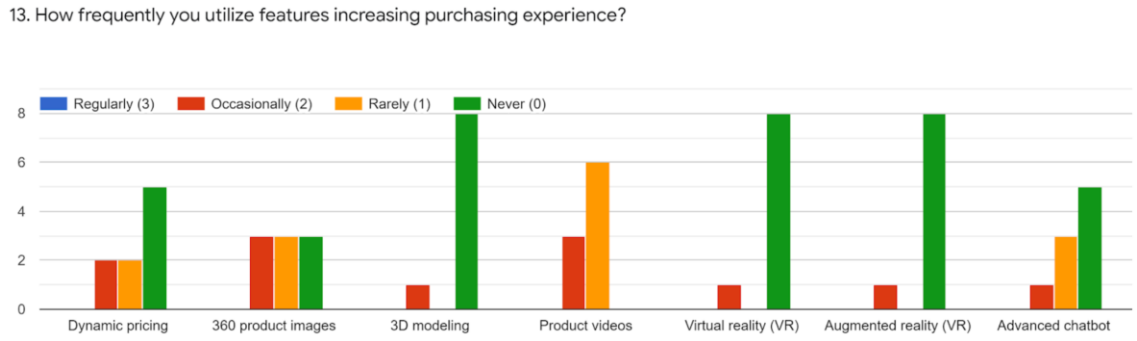
Scorecard: Most Wanted Digital Feature	**Most Wanted Digital Feature**	**Purch. Exp. Rate**	
Respondent	Feature	Feature	Avg.
#1 Old Schooler (Generation X)	3D Modeling	360 Product Images	2,11
#2 Digitaller (Millennial)	3D Modeling	Product Videos	1,88
#3 Digitaller (Generation X)	Advanced Chatbot	Advanced Chatbot	1,86
#4 Old Schooler (Generation X)	Other: professional tailor-made service	3D Modeling	1,56
#5 Old Schooler (Baby Boomer)	360 Product Images	Augmented Reality (AR)	1,43
#6 Digitaller (Generation X)	Product Videos	Virtual Reality (VR)	1,13
#7 Semi Digitaller (Generation X)	Advanced Chatbot	Dynamic Pricing	0,88
#8 Digitaller (Millennial)	Advanced Chatbot		
#9 Semi Digitaller (Generation X)	-		
#10 Digitaller (Millennial)	Advanced Chatbot		
Average Score			1,55

Table 8. Most Wanted Digital Feature

5.4.3 The Frequency of Using the Digital Features

The question's objective was to ensure how much respondents are actually experienced with the digital features in the questionnaire to support analysis of their votes in chapters 5.4.1 – 5.4.7. Therefore, the question relates to research question two.

Most of the digital features in the questionnaire were rarely or never used. However, the recent findings in the literature (chapter 3.3,) Adamson and Toman (2020) and (chapter 3.5.3.) Gartner (2021), states B2B sellers should pay attention to self-service and virtual buying experiences. Findings in questionnaire analysis are contradictory compared to the literature as most respondents lack an actual experience, for instance, virtual features such as AR and VR, that could enrich the buying experience. Millennial Digitaller #2 from the manufacturing industry is clearly ahead of other respondents when measuring the actual usage experience of the digital features.



Picture 9. Respondent's Actual Usage of The Digital Features

RESPONDENT'S ACTUAL USAGE OF THE THE DIGITAL FEATURES

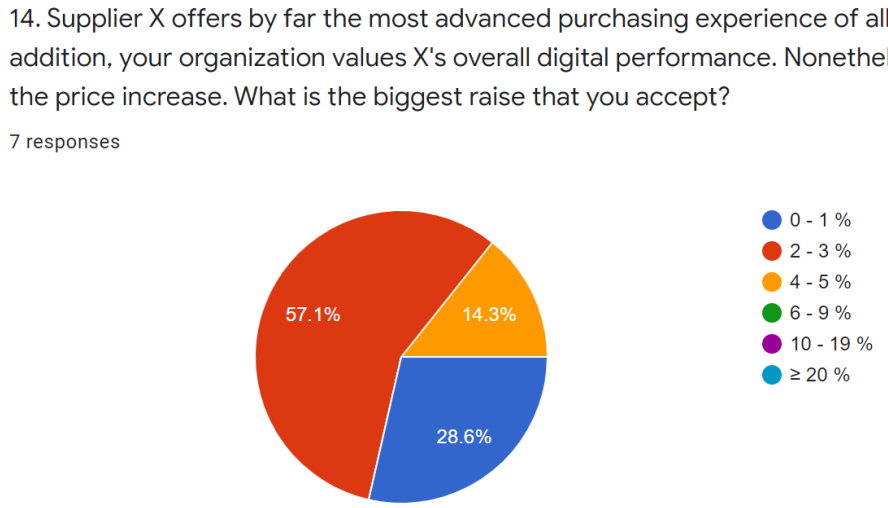
Scale: Regularly (3), Occasionally (2), Rare (1), Never (0)	Dynamic Pricing	360 product images	3D modeling	Product videos	Virtual reality (VR)	Augmented reality (AR)	Advanced Chatbot
#1 Old Schooler (Generation X)	Never	Rare	Never	Rare	Never	Never	Never
#2 Digitaller (Millennial)	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Rare
#3 Digitaller (Generation X)	Rare	Never	Never	Occasionally	Never	Never	Rare
#4 Old Schooler (Generation X)	Never	Never	Never	Rare	Never	Never	Never
#5 Old Schooler (Baby Boomer)	Never	Rare	Never	Rare	Never	Never	Never
#6 Digitaller (Generation X)	Never	Rare	Never	Rare	Never	Never	Never
#7 Semi Digitaller (Generation X)	Occasionally	Rare	Never	Occasionally	Never	Never	Never
#8 Digitaller (Millennial)	Rare	Never	Never	Rare	Never	Never	Rare
#9 Semi Digitaller (Generation X)	-	-	-	-	-	-	-
#10 Digitaller (Millennial)	Never	Occasionally	Never	Rare	Never	Never	Occasionally
Average usage	0,67	0,89	0,22	1,33	0,22	0,22	0,56

Table 9. Respondent's Actual Usage of The Digital Features

5.4.4 The Maximum Price Increase

The question's objective was to find out how much respondents financially value advanced suppliers with proven excellence in customer experience. Also, how younger age groups (Millennials) consider price increase compared to older age groups (Generation X and Baby Boomers). Therefore, the question relates to research questions one and two.

Five respondents voted prince increase of 2 – 3 %, including all three Millennials. Three respondents voted 0 – 1 %, and one voted 4 – 5 %.



Picture 10. Maximum Price Increase.

Scorecard: Maximum Price Increase	**Maximum Price Increase**
Respondent	Increase
#1 Old Schooler (Generation X)	0 - 1 %
#2 Digitaller (Millennial)	2 - 3 %
#3 Digitaller (Generation X)	2 - 3 %
#4 Old Schooler (Generation X)	4 - 5 %
#5 Old Schooler (Baby Boomer)	0 - 1 %
#6 Digitaller (Generation X)	0 - 1 %
#7 Semi Digitaller (Generation X)	2 - 3 %
#8 Digitaller (Millennial)	2 - 3 %
#9 Semi Digitaller (Generation X)	-
#10 Digitaller (Millennial)	2 - 3 %
Average Score	

Table 10. Picture 10. Maximum Price Increase.

6 Conclusion

The objective was to study from the buyer's perspective what digital factors affect to B2B eCommerce purchasing in the Scandinavian area.

Research question 1: What are the digital traits of the B2B eCommerce purchasing?

Digitallers, the respondents with most of the automation and data preferences in place, embraces ERP, other IT systems, and digital commerce platforms in most B2B eCommerce purchasing. Findings support chapters 2.2, 2.3, 2.4. Also, Digitallers organizations are ambitious for digital development. Practically, their organizations are digitally mature and capable of utilizing technology to support supplier relationships, for instance, with integrations (chapter 2.5). However, due to the scope of the study, insights of organizational digital maturity in this study are superficial. Other respondents, Semi Digitallers and Old Schoolers, where steps behind Digitallers due to limitations such as, industry-based traditions, stiff IT systems, lack of ambitions or knowledge for digital development.

Research question 2: How does the B2B customer experience affect various B2B buyers?

B2B buyers expect a better customer experience and based on to report of Salesforce (2018), 83 % of Nordic B2B buyers require a similar customer experience as buying for themselves. Younger generations in B2B purchases, Millennials, and Generation Z, are more eager for digital communication methods and features than older generations, Baby Boomers and Generation X (UPS, 2019). Three Millennials were involved in the study, and two of them were most experienced with digital features. Also, all Millennials were considered as an Digitallers by a digital purchasing status (highest level of classification in this particular study). They were very ambitious with digital development and convinced with their output during the interview. Furthermore, as there were no Generation Z group respondents, the comparable results are limited to Millennials. Most purchasers agreed that a highly advanced chatbot is the most valuable digital feature with purchasing. Recent findings in the literature (chapter 3.3,) Adamson and Toman (2020), and (chapter 3.5.3.) Gartner (2021), considering virtual buying experiences, were contradictory with the results of the questionnaire. As most respondents were not familiar with virtual (VR) or augmented reality (AR), further research is needed.

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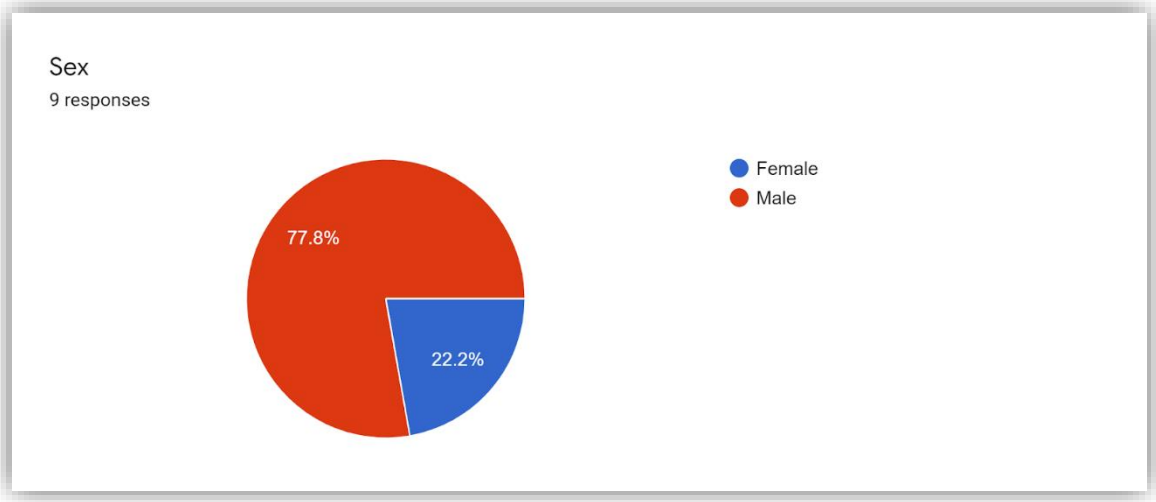
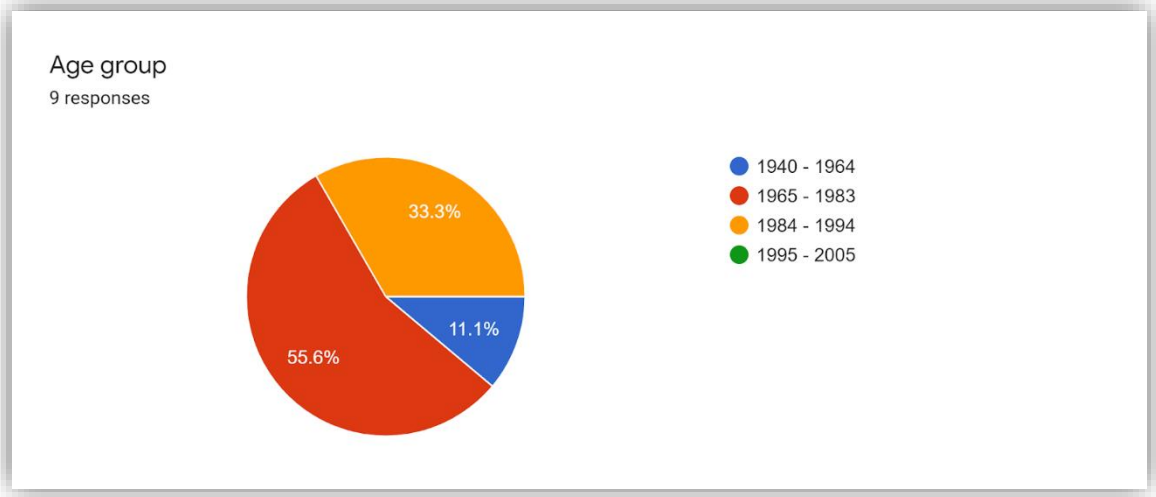
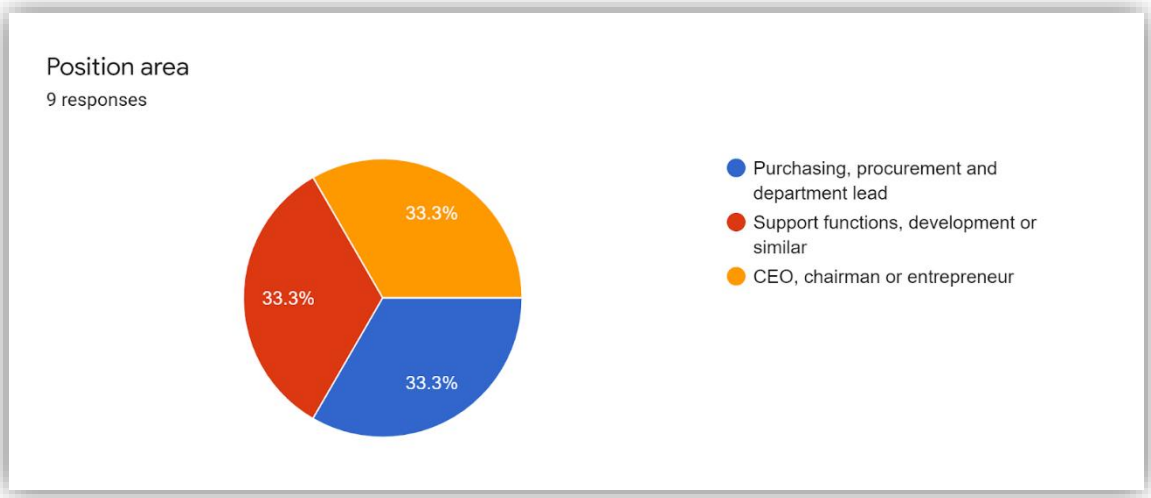
Thesis Questionnaire – B2B eCommerce Purchasing

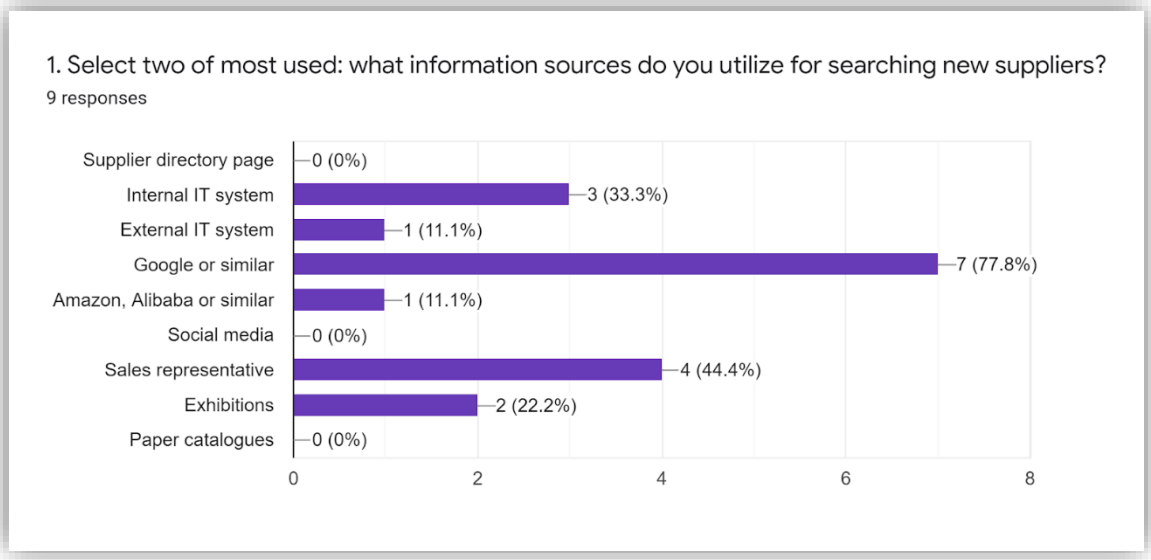
Background

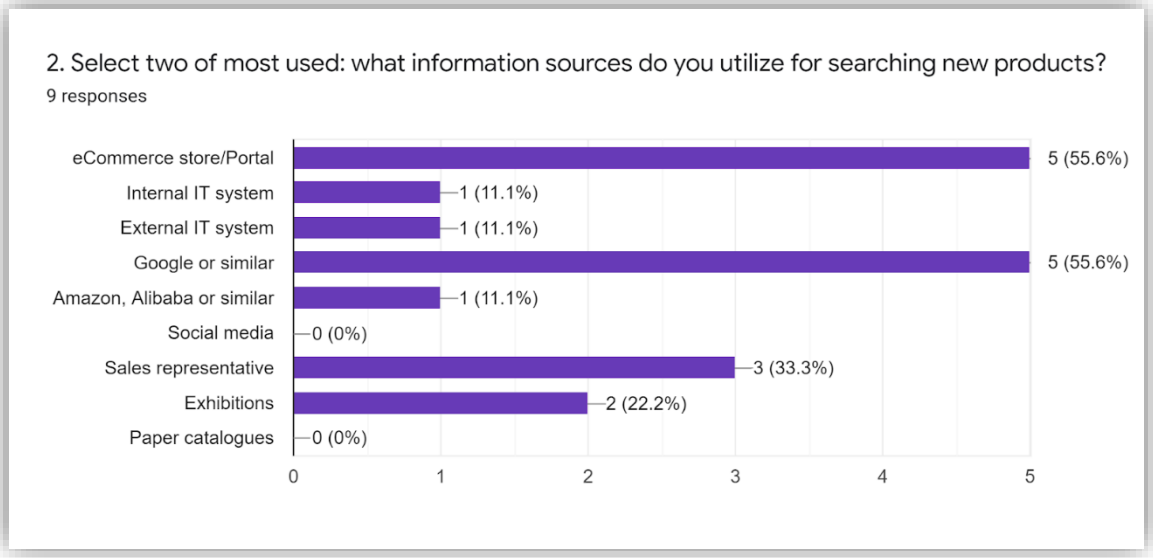




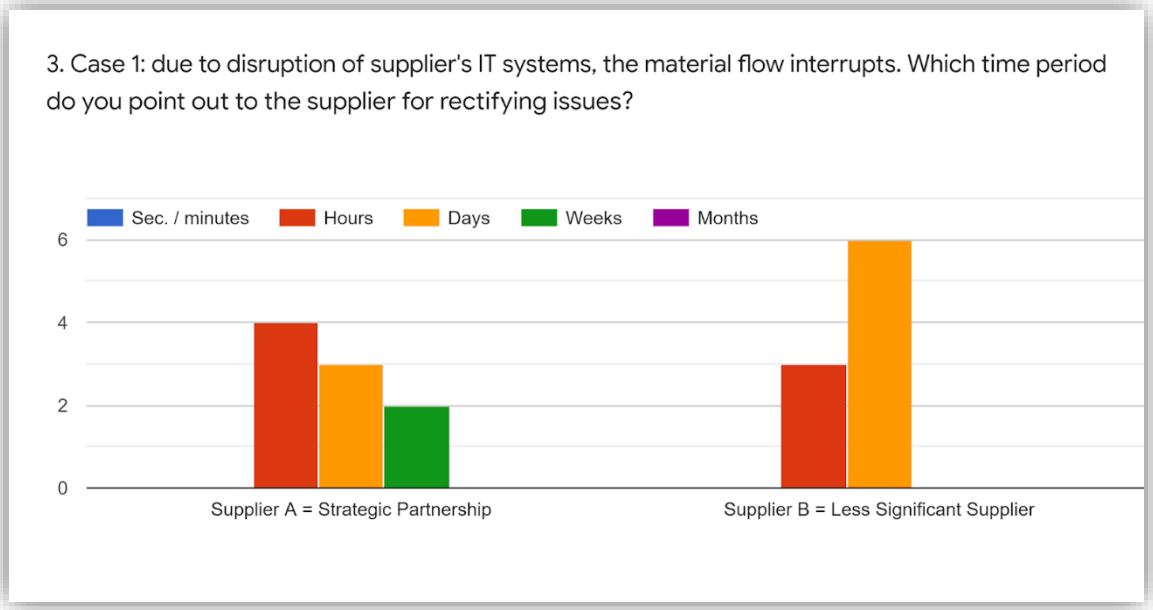


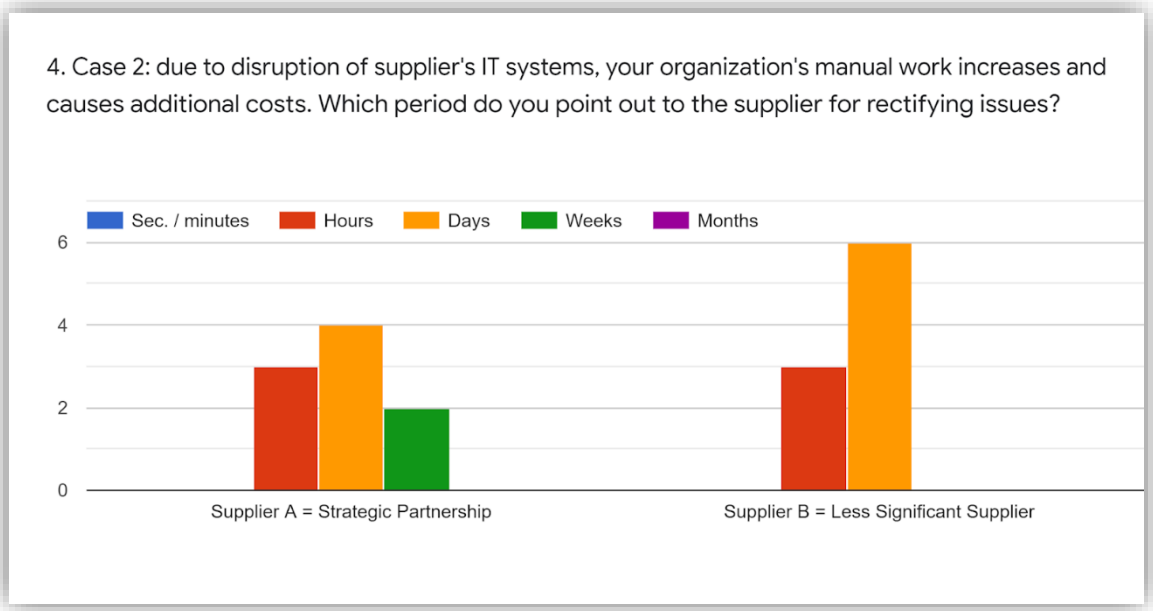
Information sources



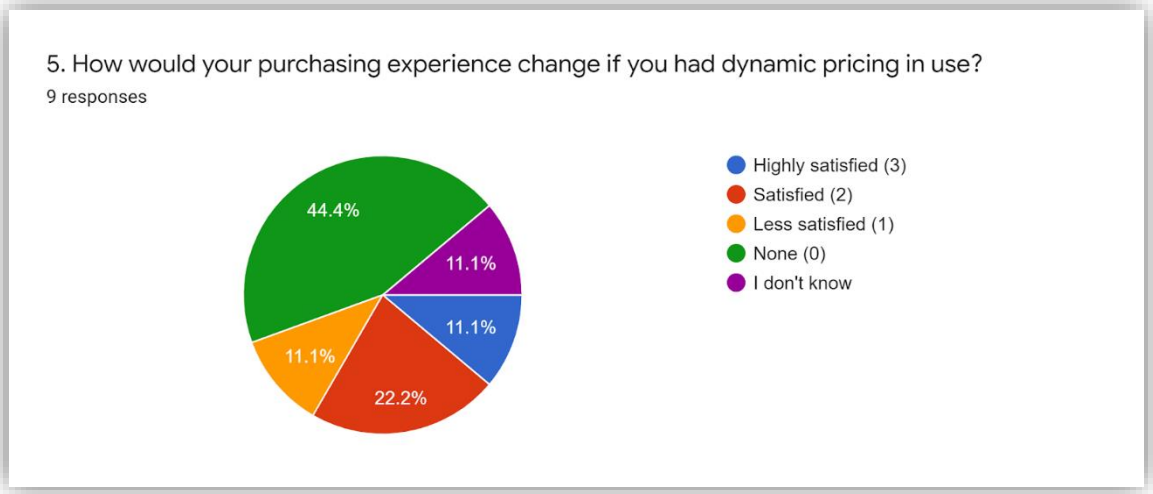


Response To The Suppliers IT Challenges



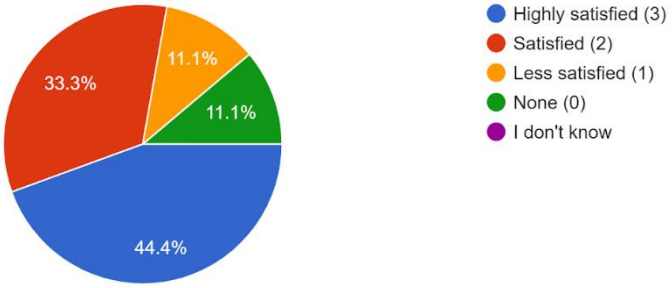


Measuring buying experience in advanced B2B commerce stores.



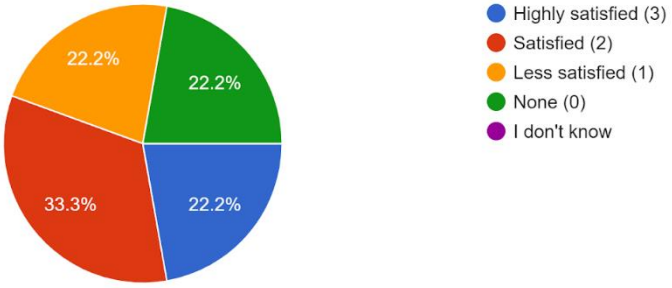
6. How would your purchasing experience change if you had 360 product images in use?

9 responses



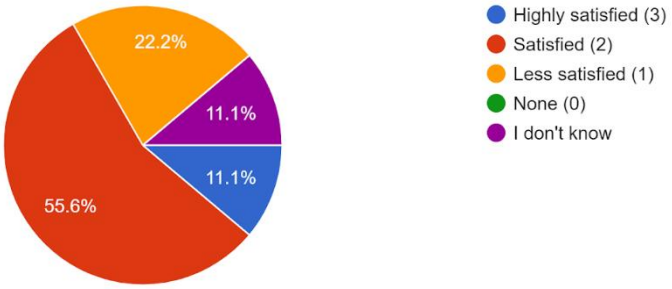
7. How would your purchasing experience change if you had 3D modeling in use?

9 responses



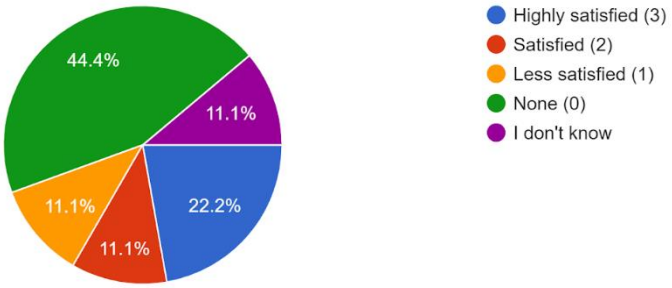
8. How would your purchasing experience change if you had product videos in use?

9 responses



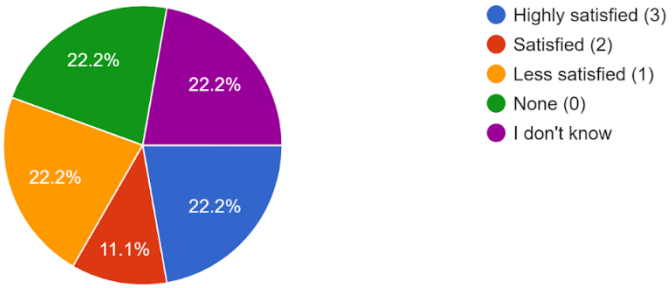
9. How would your purchasing experience change if you had a virtual reality (VR) feature in use?

9 responses



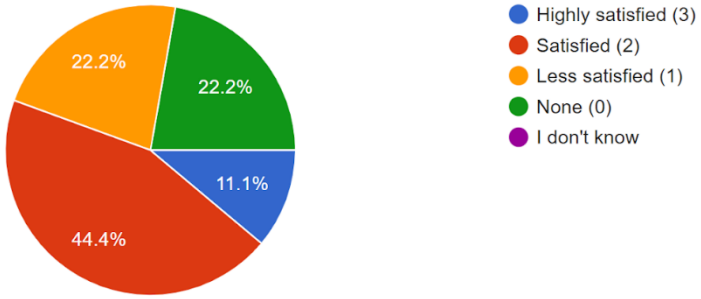
10. How would your purchasing experience change if you had an augmented reality (AR) feature in use?

9 responses



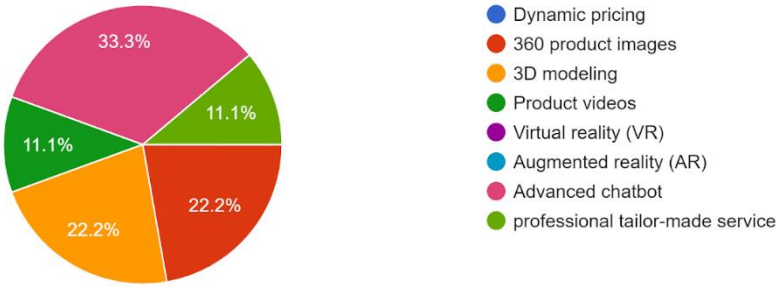
11. How would your purchasing experience change if an advanced chatbot predicts your procurement list, fills your cart for you, and assists you to until the checkout? Your responsibility is to verify the cart and payment. The chatbot will succeed 9/10 times successively.

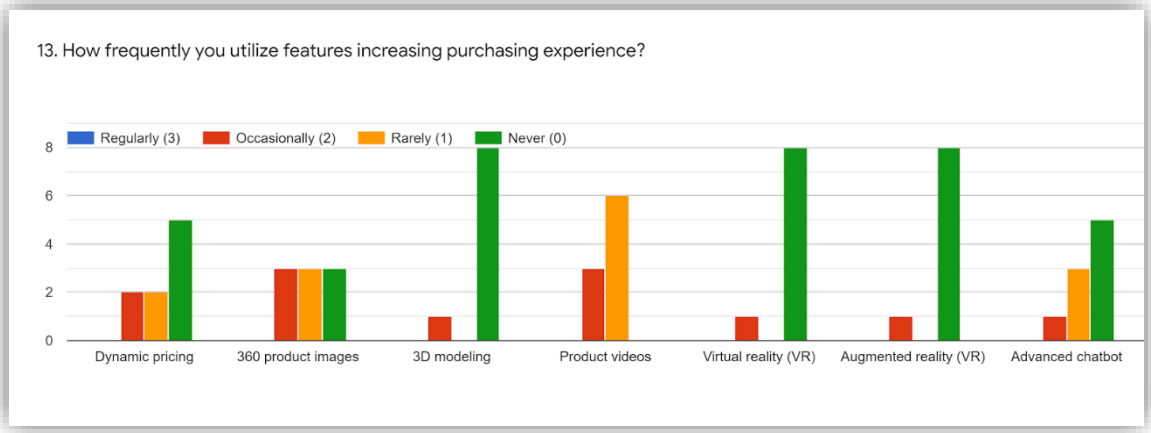
9 responses



12. If you could choose only one feature to enhance purchasing experience, what would it be?

9 responses





How much more would you pay or the better purchasing experience?