HOW USING VIRTUAL REALITY CAN IMPROVE B2B MARKETING

ABSTRACT
The possibilities of virtual reality in B2B marketing are increasingly recognized in scientific discussions as well as articles on interesting examples of early adopters such as IKEA and Airbus. However, while there is a growing recognition of its potential, the specific impact of virtual reality on B2B marketing remains part of the unexplored research area. From a business point of view, virtual reality technologies are already largely attracting investments that encourage research in the field hoping to discover the full potential of this technological innovation in optimizing business operations and processes. The great interest in virtual reality in marketing is not limited to the needs of the market but also comes from the gap in academic research and literature. Therefore, this research aims to bridge the gap between managerial and academic understanding and to improve knowledge of the influence of immersive reality technologies, namely virtual reality, on B2B sales and marketing. The basic method of work in this article is desk research. This paper draws upon reliable sources such as academic journals, published books, and case studies. Following an exploratory approach, the theoretical background provides a starting point for future empirical studies. This paper gives a realistic theoretical consideration of the topic by developing a framework and providing suggestions describing the impact of virtual reality on the perception of B2B customers, also providing B2B marketers and experts with several directions for future research and provides recommendations for B2B marketers who are interested in using the vast array of opportunities offered by virtual reality.

Keywords: Marketing, immersive technologies, virtual reality, B2B Marketing

JEL: M30, M31
1. VIRTUAL REALITY IN THE B2B SECTOR

B2B customers have altered rapidly in recent years. According to academic studies, the usage of digital technology by B2B customers has transformed how they shop (Steward et al., 2019). Before reaching the supplier's representative, 57% of the procurement process is conducted online, and 67% of the procurement activities are completed online (Kelly et al., 2017). Furthermore, research from Gartner (Bryan, 2018) reveals that more than 80% of B2B clients use internet channels even after purchasing to gather additional information. As a result, B2B businesses should understand that the sales industry is changing, and to keep up and fulfill customers new demands and expectations in the best way possible, they must use digital technologies.

Virtual reality is one such digital technology. Leaders in the adoption of virtual reality technology in the B2B segment include Siemens, Airbus, and many others (Boyd and Koles, 2019). Many businesses across industries have recognized the possible advantages of virtual reality and are working to pinpoint the processes of using virtual reality and incorporate it into their business processes (Pahnke, 2018). Assume an engineering firm that is capable of providing medical practitioners the chance to tour through a future clinic before it is even constructed. Alternatively, as a developer of medical equipment, the company could provide physicians virtual trials with access to an accurate recreation of the human body system within it at any desired level in prep work into using the product. For example, a hazardous equipment manufacturer may have a method of showing potential customers how a drill or crane works. Virtual reality allows faster, safer, and simpler presentations. Virtual reality also enables practicing to use, repair, or work with almost any machine in any scenario - troubleshooting, replacing a worn component, or customizing equipment settings to generate a specific output.

Although the examples presented above rely on companies that can be recognized as early adopters, leading the way in terms of utilizing virtual reality technology, forecasts on the impact of virtual reality on the B2B sector are quite optimistic. For example, according to a report commissioned by The Goldman Sachs Group (2016), the cumulative virtual and augmented reality market will be worth between $80B and $182B by the year 2025, with sales dispersed among both B2C and B2B sectors. Indeed, according to a study endorsed by the global network ABI Research to investigate the virtual reality technology penetration in a group of US-based companies, 85% of firms were looking to adopt virtual reality (Deans, 2017).

The emergence of the COVID-19 pandemic has raised corporate investments in virtual reality to new heights. According to estimates, the virtual reality market will continue to grow at a rate of 30% per year (MarketLine, 2021). While most marketing experts have high hopes and expectations for the next 10 years of virtual
reality evolution, there are no specific guidelines on how enterprises can successfully integrate virtual reality into their marketing mix, nor is there a mutual vision of how virtual reality technology can help B2B companies deliver value to their customers. One substantial reason for the lack of B2B insight is that available studies on virtual reality in marketing have primarily focused on B2C rather than B2B (Yoo, S.-C., Peña, J. F., Drumwright, M. E., 2015).

2. RESEARCH METHODOLOGY

Desk research is the primary method of work. The deductive approach was utilized to define the research's subject and purpose. The induction approach will be used to validate the objectives. The synthesis approach will be applied in the discussion of research findings, as well as in the formation of conclusions and suggestions. The investigation will make use of secondary data sources. Secondary sources will be available literature related to the subject of research such as marketing academic journals, published books in the field of marketing, and case studies. When using secondary sources, the principles of reference and recentness of the literature were respected, among other things.

Research interest was fueled by both industrial hype and aggressive expenditures in such technologies, particularly in recent years. The evident potential of these technologies, which is yet untapped as innovation takes hold, motivates me to investigate:

1. How using virtual reality can improve B2B Marketing?
2. Can virtual reality technologies immerse and assist the whole customer purchasing process?

Therefore, the goal of the research is to systematize the existing knowledge about using virtual reality technologies in B2B marketing and to critically analyze the previous findings of researchers and practitioners. The goal of this article is to fill a gap in the literature by improving marketing researcher's and manager's understanding of the potential of virtual reality in B2B marketing, as well as to offer scientists with additional guidance for future research and to assist B2B marketers in their efforts to adopt this innovative technology as fully as possible.

3. VIRTUAL REALITY IN THE PURCHASING JOURNEY

The digital marketing customer journey and related terminology have their roots in decades of B2B purchasing process research. Steward et al. (2019) identified seven main themes in the B2B purchasing process. These themes are Transactions, Situations, Impacts, Responses, Relationships, Networks, and Travel. The "customer journey," which was stated in the "Travel" topic, focuses on the influence of technology on the purchase process and employs digital technologies to design and
describe the customer's trip at touch points. They also concluded that each theme introduces new concepts that lead to the development of various models of the B2B purchasing process.

The customer experience is a continuous and repeatable process that may be divided into three main stages: pre-purchase, purchase, and post-purchase. The pre-purchase phase is described in traditional marketing literature as identifying a need or problem, collecting relevant information, and finally choosing the appropriate supplier. All aspects of the customer's interaction with the brand, group, and environment before the purchase transaction are covered by the pre-purchase phase. The second phase is known as the purchase phase. This stage includes all interactions with the brand by the customer during the purchase. Behaviors such as selecting a product, ordering it, and paying for it determine the buying stage. The customer's interaction with the brand following the purchase is referred to as the post-purchase stage. This stage includes behaviors like product use, post-purchase involvement, and service requests (Lemon and Verhoef, 2016). The image below illustrates the example of functions of virtual reality immersion at each stage of the B2B customer journey.

Figure 1: B2B customer travel steps

A customer journey map, in its most basic form, is a schematic that displays the path and stages that the customer takes during the purchase and engagement process with the firm (Richardson, 2010), and is often made from the company's viewpoint by the marketing unit (Toman et al., 2017).

3.1. PRE-PURCHASE PHASE

Case studies from various corporations and industries in the B2B sector will be presented in this article. The examples presented will demonstrate how virtual reality is used in the purchase journey's stages.

According to Lorentschk (2018), Philips Healthcare began using virtual reality in its marketing and sales departments in 2017 to help both the pre-purchase and post-purchase processes. Instead of showing the room in 2D and 3D models, the goal was
to create it virtually. As a result of the deployment of this immersive technology, planning expenses, and possible mistakes were reduced.

The use of virtual reality in B2B marketing in the example of Siemens can be used as an interesting and current illustration. It was used by the mentioned company multiple times a few years back. According to Boyd and Koles (2019), Siemens created and successfully deployed a prototype power plant for a Libyan customer using virtual reality technologies without traveling to Libya. As a result, Siemens is having great success with virtual reality in the pre-purchase phase. This enables the company to focus on establishing customer demands and product specifications, avoid expensive flaws in the physical idea of the product for the buyer, and resolve any problems before they exist (Siemens, 2018).

The next example is when DIRTT environmental solutions construction company presented a virtual reality application to its client during the pre-purchase process (Ghafel and Mohammad, 2020). The company created a whole hospital that was displayed on a virtual reality platform. Because of virtual reality capabilities, stakeholders, physicians, nurses, and the entire medical staff were able to roam into the hospital and explore every single room. As a result, the customer was able to not only envision but also experience the hospital model as it is being built. Furthermore, pre-purchase virtual reality apps enable both customers and companies to save large amounts of resources in terms of time gains and economic expenditures (Boyd and Koles, 2019).

It is impossible not to mention the early adopter of virtual reality technology, the company Airbus. Airbus used virtual reality for B2B marketing communication. According to Marcellin (2016), they exploited virtual reality to create the airplane interior for their respective clientele. Each customer has unique desires and specifications. As a result, to ensure customer satisfaction, Airbus must satisfy each client's expectations. Airbus customizes each cabin design for its clients using virtual reality (Marcellin, 2016). Prior designs were created using 2D design, which is less clear and vibrant than virtual reality. This innovative technology allows customers to preview the interior design and make adjustments before Airbus begins production of its cabins. As can be witnessed, Airbus is effectively utilizing virtual reality in the pre-purchase phases of design and prototype for new product development.

IKEA is one of the top firms in using virtual reality in marketing and sales. The IKEA VR software is specifically designed to aid in the pre-purchase process (Boletsis and Karahasanović, 2018). Thus, by creating an immersive experience to market its items, IKEA uniquely engages its customers. Customers may interact with IKEA's kitchen using a virtual reality headset. The consumer may interact with the kitchen and adjust its appearance, and position and try the product he desires to purchase in his home to see how it appears.
So, from the examples shown, it is evident that virtual reality can greatly improve marketing communication in the pre-purchase phase. In the pre-purchase stage, the potential customer wants to acquire as much information as possible about the product and see if it meets his needs. According to Bryan (2018), the Gartner study shows that customers who see information from suppliers as a useful tool to facilitate the activities of the buying process are 2.8 times more likely to purchase the product and close the deal. Nikooseseft (2023) says that virtual reality can provide an opportunity for companies to present their products without the need for physical presence while immersing the customer in a unique and unforgettable experience. Likewise, virtual reality can be used in the early and conceptual stages of product design. In general, the use of virtual reality minimizes risk, by identifying potential errors or even design changes, at an early stage (Nikooseseft, 2023).

### 3.2 PURCHASE PHASE

The virtual reality immersion capability supports clients in making purchase decisions. This feature improves cognitive stimulation and immerses the consumer in immersive experiences of the product and its characteristics. This boosts the customer's trust while lowering his risk. This enables better informed and quicker decision-making inside and across teams and stakeholders, resulting in quicker deal completion (Hariharan et.al., 2020). Thus, virtual reality allows customers to make an informed decision at the purchase stage.

**Figure 2: VR immersion feature at the purchase stage**

![VR immersion feature at the purchase stage](source)

**Source:** Author

### 3.3. POST-PURCHASE PHASE

The German company Siemens can be considered an early adopter of virtual reality technologies. The mentioned German corporation realized the value of virtual reality in a circumstance where the COVID-19 pandemic compelled enterprises to adjust
their operations and businesses. According to Ghafel and Mohammad (2020), Siemens has developed a virtual laboratory that enables scientists to resume their research while facing quarantine. Siemens claimed that the virtual reality laboratory will allow clients to track the progress of their projects. As a result, Siemens prioritizes client business while protecting its personnel in the event of a pandemic. The utilization of virtual reality glasses with home controllers, according to Barnard (2020), maintained consumer and staff satisfaction. At a time when the company's business was under threat, the use of virtual reality enabled Siemens personnel to deliver services to their clients without interruption on exceptional occasions. Virtual reality has made it possible to establish an interactive engagement based on context (Boyd and Koles, 2019), in this example, amongst diverse stakeholders, through virtual communication and monitoring. This company very quickly saw the benefits of using virtual reality, and they continued to use it in the post-purchase phase as well. It continued to provide a maintenance solution for its clients (Boyd and Koles, 2019). The solution strives to satisfy its clients after the sale. It can only happen with a virtual reality system that speeds up the process of resolving technical issues and keeps work activities on track. According to Boyd and Koles (2019), the technical specialist traveling from Germany will address the technical problem in two to three days. On the contrary, by utilizing virtual reality technology, the problem will be handled in real-time in around 45 minutes, without including the engineers' travel charges and the financial losses related to delayed operations.

According to Egan (2017), General Electric is employing virtual reality to educate engineers about support duties to keep customers pleased and maintain long-term relations. In this scenario, General Electric is employing virtual reality to support the hardware and other items provided to customers indicating a post-purchase use and maintaining relationships with its clients, workers, and stakeholders.

Airbus is yet another company that uses virtual reality in the post-purchase stage. With its new cockpit, the company is giving a virtual reality simulator. With the new cockpits, the firm anticipated a future lack of trained and licensed pilots. As a result, beginning in 2020, Airbus includes extensive virtual reality training with every cockpit it sells. Moreover, Airbus offers its clients a remote virtual reality maintenance solution to save money and time (Ghafel and Mohammad, 2020).

The pharmaceutical industry also benefits from the use of virtual reality technology in B2B marketing. Pacira, a pharmaceutical manufacturer, is utilizing virtual reality to educate and train its clients. Pacira developed its virtual reality teaching program for clients to qualify them to utilize the new products, according to Kavanagh et al., (2017). They excelled in assisting stakeholders in the post-purchase process by developing virtual reality software that doctors could use via their tablets or cell
phones. Pacira is an illustration of a corporation that effectively incorporated virtual reality technology for pre- and post-purchase marketing communication.

4. HOW VIRTUAL REALITY CAN IMPROVE SALES

It is important to discuss how virtual reality can improve sales performance in the aim of this article is to unveil and explain the benefits of virtual reality in B2B marketing. According to Hunter (2019), technology utilization is important in today's sales environment, especially with a more severe competitive market and unforeseen economic changes.

Immersive reality (virtual reality) technologies influence not just data accessibility but also communication. Interactivity shows two-way communication between a sender and a receiver. These developments, as one of the main characteristics inherent in virtual reality technology (Kerrebroeck et al., 2017), enable a new immersive and engaging approach to explaining and selling a product to clients. According to Cheng et al. (2014), marketing communication is significantly more efficient when there is a high level of picture richness, which is reflected in the high vividness aspect provided by virtual reality. Customers may then view the object as vividly as possible, intensifying their feeling of presence. Virtual reality technology, with immersive product demos, virtual exhibits, and 360 virtual reality tours, may supplement traditional marketing, or perhaps totally replace it (Regt et al., 2019).

Furthermore, virtual reality technologies are being evolved to fundamentally change marketing communication by introducing a new way of showcasing products that reshape the try before you buy concept through so-called "virtual storytelling" experiences (Boletsis and Karahasanovic, 2018; Regt et al., 2019). This new type of storytelling enables marketers to efficiently establish the company's brand image and connect it to displayed experiences, fostering engaging customer interactions (Boletsis and Karahasanovic, 2018).

In the context of B2B sales, it is now clear how existing literature justifies the benefits of creating strong connections and varying engagement levels associated with the interactive-immersive experience.

Yet, outcome-based advantages include operational efficiency and improved task performance (Hunter, 2019). According to the findings of Hunter's (2019) study, using technology to acquire and transmit specific information can lead to significant improvements in organizational efficiency. Moreover, the deliberate implementation of virtual reality can create new business models that operate as selling points for a company, allowing it to distinguish itself from competitors (Regt et al., 2019). And this differentiation is especially important in the case of B2B sales.
Customer acquisition is obviously, a vital component in the B2B sales process (Trubow, 2011). From a basic standpoint, a customer has a problem or desire to benefit from an opportunity. Virtual reality will aid potential customers in their hunt for solutions by assuring them that a product or service is the perfect option. Virtual reality technology can help in the sales process by being very compelling and persuasive in communication (McCarthy, 2017). Through the powerful feeling of presence that is experienced, virtual reality technologies enable combining the impacts of a site visit, a trade fair, and a marketing presentation into a single tool. Virtual reality may be used for a wide range of purposes ranging from problem discovery to exploring the functionality of a new product or establishing its performance and advantages (Trubow, 2011).

A positive relationship with a possible new customer is critical when developing an interesting proposal, especially in the B2B market. Bringing products to life using virtual reality allows marketers to give a much better approach than, say, a PowerPoint presentation. When a representative is not available to provide a specific answer, as is frequently the case with the face-to-face approach, virtual reality is genuinely exceptional. Virtual reality enables managers to differentiate themselves by presenting a genuine response to the prospective customer. In a summary, employing immersive reality technology like virtual reality to enhance the sales process guarantees that customers' attention is kept throughout the journey, from the initial introduction phases through pitching and propositioning (Trubow, 2011). Moreover, immersive virtual reality settings that induce a strong feeling of presence result in stronger purchase intentions and reduced-price sensitivity (Meißner et al., 2020; Wen and Leung, 2021).

Empirical research conducted by Ghafel and Mohammad (2020) showed that virtual reality technologies can have an impact on B2B marketing. The survey was conducted on eleven augmented and virtual reality providers in developed countries, including Finland, Sweden, the US, and the UK. According to the findings of the empirical study, immersive virtual reality technology can have an impact on both marketing activities and sales performance in the B2B sector. Starting with the pre-purchase stage, virtual reality technologies can augment and assist the whole client purchasing process. Virtual reality technologies provide personalization, resource optimization, mistake reduction, and client incentivization and commitment. Consumers can also attend product demonstrations through virtual meetings, tradeshows, or exhibits. These advancements have the least influence on the purchasing stage, where they are employed to allow clients to test equipment and machines in a safer setting. The post-purchase stage has the second highest impact, and the results are consistent with current research, demonstrating the significance of these technologies primarily in post-purchase assistance.
According to empirical findings conducted by Ghafel and Mohammad (2020), adopting immersive reality technology as a sales support tool can result in favorable efficiency returns such as increased task performance and lower sales expenses. Furthermore, adopting virtual reality technology in B2B sales can result in increased consumer and social involvement as well as greater collaborative corporate connections. Immersive reality technology also improves proactive and reactive sales habits, increasing sales efficiency.

5. CONCLUSIONS AND SUGGESTIONS FOR FURTHER STUDIES

The goal of this paper was to bridge the gap between companies and researchers to improve knowledge of the influence of immersive reality technologies, namely virtual reality, on B2B sales and marketing. Virtual reality marketing may be a great tool for companies to achieve their marketing and communication goals (Cowan and Ketron, 2019). Because of the slow adoption of virtual reality marketing, particularly by small and medium-sized enterprises, the usefulness of virtual reality for attaining strategic objectives remains to be determined (Capers, 2020). Virtual reality can positively affect B2B marketing by improving customization, communication, training, and experiential marketing, as well as producing unique experiences that customers remember. Furthermore, virtual reality technologies can immerse and assist the whole customer purchasing process, beginning with the pre-purchase stage. In this regard, the findings confirm that virtual reality allows customization, optimization, and mistake reduction. Customers also may attend product demonstrations in virtual meetings, virtual tradeshows, or virtual exhibits, and they can test out equipment and machinery in a safe environment (safety improvement), which leads to increased customer loyalty and satisfaction. On the other side, according to Ghafel and Mohammad (2020) the employment of immersive reality technologies at the corporate level as sales support tools can offer favorable efficiency returns as proven by greater task performance and lower sales expenses associated with logistics and transportation, design, prototyping, and manufacturing. Additionally, the use of immersive reality technology in B2B sales can demonstrate excellent returns on effectiveness for a firm, as seen by increased levels of customer and social involvement. Considering the topic's novelty in the literature, particularly in virtual reality, this article can be used as a foundation or hypothesis for future study in the field. Future studies, for example, may look more into the particular function of virtual reality or augmented reality in B2B sales and marketing. Moreover, additional frameworks are required to build appropriate control and assessment standards for virtual reality marketing operations (Swani et al., 2020). This article can serve as a foundation for future research that will explain strategic guidelines for developing virtual reality apps, taking into consideration the growing interest in virtual reality marketing in the B2B sector.
LITERATURE


KAKO KORIŠTENJE VIRTUALNE STVARNOSTI MOŽE POBOLJŠATI B2B MARKETING

SAŽETAK


Ključne riječi: Marketing, imerzivne tehnologije, virtualna stvarnost, B2B marketing

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