



Virtual Reality Advertising for Education Services

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ABSTRACT

Virtual Reality (VR) is becoming increasingly prevalent in marketing and education. Due to its emotive impact on consumers, VR advertising improves brand recall and purchase intent. The Educational Services Sector (ESS) is utilizing VR to enhance learning and social abilities. However, little research exists on VR advertising in the ESS. Consequently, this study examines VR advertising in the ESS to address this gap and provide research suggestions. The article discusses research on VR advertising in the ESS and investigates its emotive impact, the potential to improve advertising performance and educational applications. The findings suggest that VR advertising may generate engaging and memorable brand experiences, enhance brand recall and recognition, and forge emotional bonds with ESS customers. The report suggests further investigation to optimize VR advertising in the ESS. These include investigating the long-term effects of VR advertising on consumer behavior, evaluating the cost-effectiveness of VR advertising campaigns, and addressing privacy concerns.

Keywords: Virtual Reality (VR), Educational Services Sector (ESS), Education, Marketing, Advertising, Consumer Behavior.

1. Introduction

Virtual Reality (VR) is a kind of computer-generated simulation that creates an immersive, three-dimensional (or 3D), environment that seems to the user to be nearly as real as the actual world (Sheldon, 2022). VR technology has been widely used in marketing and advertising like developing VR product showrooms and demonstrations to give consumers an engaging approach to learning more about their products and services (Rutgers, 2021). It has been shown that VR advertising has a considerably larger emotional effect on consumers than traditional advertising. As a consequence, customers are more likely to recollect and purchase the brand. Similarly, de-Regt et al. (2021) admit that VR advertising is much more successful than conventional advertising tactics in eliciting an emotional reaction from consumers, resulting in increased branding and buying intention. In a second research, Jayawardena et al. (2023) discovered that VR advertising increases the pleasure of the ad-viewing experience, resulting in favorable emotional (i.e., brand attitude), cognitive (i.e., brand awareness), and behavioral (i.e., buy intention) reactions.

In Educational Services Sector (ESS), VR is being used to develop simulations that enable students to rehearse for real-life events in a controlled and safe setting. VR benefits students because it helps them develop interpersonal skills such as empathy, teamwork, and social skills for future employment and personal lives (ClassVR, 2022).

Khukalenko et al. (2022) performed research on 20,876 teachers' opinions about the usage of VR for educational reasons. The researchers observed that, on average, instructors had favorable attitudes regarding the use of VR for instructional reasons. This demonstrates that there is a great deal of interest in using VR technology in educational settings. Besides, Report Linker predicts that the global market for VR applications in education is expected to develop at a compound annual growth rate of 36% between 2021 and 2022, from \$6.37 billion in 2021 to \$8.66 billion (ReportLinker, 2022). Another evidence of how VR has the potential to transform the way we teach and learn.

Thus, for ESS, VR advertising may lead to a greater emotional connection with the Specialized Establishments (SEs) (e.g., schools, colleges, universities, and training institutes) as well as enhanced brand loyalty. Businesses may accomplish this goal by creating engaging and immersive experiences for their target consumers (Jain and Panchal, 2019). Since VR allows marketers to customize their messaging to the exact interests and preferences of individual clients, this personalized method may also enhance the targeting of advertising messages for SEs. This enables for more exact ad placement (Qin and Lei, 2019).

VR technology has the potential to drastically revolutionize the education and marketing sector. This is due to the ability of technology to give consumers more personalized and immersive experiences, hence increasing the efficacy and impact of marketing initiatives in the ESS. Therefore, further study is needed to understand the long-term consequences of VR advertising on consumer behavior and to provide recommendations for the appropriate and transparent use of VR advertising.

2. Main Issue and Study Purpose

The need for additional research to understand the long-term effects of VR advertising on consumer behavior in the ESS is highlighted as the primary issue to be addressed in this study. The ESS is a sector of the economy that provides educational services. Even though VR technology has shown promise in the enhancement of marketing activities and the provision of immersive experiences, there is a dearth of extensive research on the efficacy and impact of VR advertising, particularly within the ESS. Thus, this study aims to cover this vacuum and provide recommendations on how VR advertising can be used responsibly and transparently within educational institutions. Accordingly, this study aims to provide a debate on VR advertising and suggestions for further research in ESS.

3. Methodology and Study Structure

In the following section (i.e., debate), a review and synthesis of previous research on the topic of advertising using VR within the context of the ESS will serve as the methodology. The primary objective (to conduct this debate) is to demonstrate knowledge of the pertinent literature and to highlight the potential of VR advertising to improve advertising performance characteristics and consumer behavior in the ESS.

The debate then centers on the emotive impact of VR advertising on consumers, highlighting the increased recall and purchase intent associated with VR experiences. Numerous studies, including those on engagement, emotional intensity, brand memory, and brand loyalty in VR advertising, are provided as evidence to support the claim.

Throughout this debate, the application of VR technology in educational contexts is examined in greater depth. This technology's potential to enhance students' interpersonal skills, empathy, collaboration, and social skills is of particular interest. Surveys and market reports demonstrate the interest in VR applications for educational purposes, as well as the expansion of the market for such applications.

In the debate, the prospective benefits of using VR advertising in the ESS are discussed. The debate provides additional support for the claim by presenting studies that demonstrate the effectiveness of VR advertising in fostering the development of affective connections and enhancing key advertising performance parameters.

Understanding the long-term effects of VR advertising on consumer behavior in the ESS requires additional research. This is done to address the central issue that the study seeks to resolve. The debate is then determined to be to provide a discussion on VR advertising and make suggestions for future research in the ESS.

Afterward, in the section titled "Future Research Perspectives," strategies for overcoming obstacles and maximizing the potential of VR advertising for SEs are presented. It emphasizes the need for additional research on the long-term effects of VR advertising, the effectiveness of different channels and forms of VR advertising, the cost-effectiveness of linked VR advertising, and the privacy issues associated with VR advertising.

The study concludes with a summary of the potential for VR technology to transform both the marketing and education industries. It accentuates the personalized and immersive nature of VR advertising as well as its ability to improve many aspects of advertising effectiveness. The necessity of conducting additional research in the ESS and making ethical use of VR advertising is emphasized.

4. Debate

In ESS, SEs may use VR technology to present consumers with unique ways of advertising. Moreover, SEs may use VR to create more engaging and memorable brand experiences for their consumers than ever before. For ESS, advertising that is memorable and significant to the target audience is more likely to be successful and efficient. With virtual worlds, SE marketers may provide their consumers with a one-of-a-kind brand experience. ESS may build VR demonstrations for potential buyers to obtain a sense of the SE's interior and performance. Immersive experiences may boost both brand recognition and client loyalty (Jayathilaka and Park, 2022).

Through VR, a digital demonstration may help consumers understand the worth and use of a service provided by the SEs. Service demos that are interactive enhance product knowledge and sales (Mnyakin, 2020). Consequently, ESS may employ VR to show consumers how a classroom environment might appear to them. Silversea Media Group, a marketing research firm for higher education, discovered that 77% of applicants want a virtual campus tour (Silversea-Media-Group., 2018).

In virtual settings, the narrative behind a SE may be communicated with and pique the curiosity of consumers. In ESS, the educators using VR can provide visual and audio immersion into their excursion. After witnessing an engaging story, consumers are more engaged and loyal to a firm (Scott, 2011). Consequently, SE marketers

may increase the effectiveness and efficiency of their advertising by providing branded experiences, service demonstrations, virtual showrooms, and interactive storytelling that connect consumers on a more personal and memorable level.

In ESS, the use of VR in advertising may enhance key criteria used to quantify ad performance. Mileva (2022) observed that VR advertising had much higher levels of engagement and emotional intensity than traditional television advertising. Another study by Wang et al. (2020) found that VR commercials were more effective than traditional video ads in increasing brand recall, brand identity, and purchase intent.

Moreover, according to Barnes (2016), viewers of VR advertising develop stronger brand loyalty and a higher affinity for the promoted commodities (or services). According to Suh and Lee (2005), VR advertising significantly boosts consumers' commercial memory and purchase intent. Consequently, for ESS, VR commercials can more considerably be effective than traditional advertisements at developing an emotional connection with consumers.

According to a Stanford University study, the participants recalled VR-delivered knowledge better than the information given on a computer screen (Shashkevich, 2018). During that study, the participant's ability to recall pictures was analyzed in three different ways, i.e., on a traditional computer monitor, as part of a 360-degree panorama, and in a fully immersive VR scenario. Their results showed that compared to the other two conditions, the VR environment provided the most precise and vivid memory recall.

Another study found that VR advertising campaigns increase consumers' purchase intent owing to the emotional connection they formed with the firm throughout the experience (Jayawardena et al., 2023). Based on the results of that study, it can be predicted that viewers of a VR commercial for a SE brand can be more emotionally invested and more likely to purchase viewers of the same SE's television campaign.

Moreover, a recent study found that VR videos may increase brand recall and identification (Wang and Chen, 2019). Participants in the study showed considerably higher levels of brand memory and recognition after seeing the company's VR videos. Consequently, for ESS, VR advertising might outperform more conventional forms of advertising in terms of eliciting an emotional response from consumers. When VR technology is used to provide an immersive and engaging experience, consumers are more likely to recall and identify a brand and feel prompted to make a purchase (Wang and Chen, 2019).

To summarize, for SEs, compared to traditional advertising, VR advertising has more potential to boost a range of advertising performance characteristics such as brand memory, brand identity, emotional involvement, and buying intent. This highlights future researches on how VR technology can transform ESS by providing consumers with more engaging and dramatic experiences.

4.1. Support of Theory of Knowledge

Kant's (known as the founder of the modern theory of knowledge) Theory of Knowledge, focused on comprehending what it means to "know", supports the debate on VR advertising in the ESS in several ways: First, the debate recognizes that VR advertising has a greater emotive impact on consumers than traditional forms of advertising, resulting in increased brand recognition and recall. This is in line with the Theory of Knowledge's recognition of the role emotions play in the formation of knowledge and memory.

Second, according to the debate, the ESS uses VR to promote learning and social skills. This is achieved by providing simulations for students to practice real-world situations, resulting in enhanced learning and social skills. This is consistent with the Theory of Knowledge, which places a heavy emphasis on the role that experiences and sensory perception play in the processes of learning and comprehension.

Third, the debate demonstrates the increasing interest in VR applications in the educational sector, as well as the commercial potential of such applications. It contains studies and business projections indicating that the global market for VR in education is likely to increase over the next few years. This lends credence to the Theory of Knowledge's recognition of the expansion of knowledge that results from the study of new technological developments and enhancements.

Fourth, the debate looks into how VR technology facilitates tailored messaging and immersive experiences, thereby enhancing the targeting of advertising messages toward SEs in ESS. This is consistent with the Theory of Knowledge's conception of the significance of subjective experiences and the role they play in the formation of knowledge and comprehension.

Last, the debate concludes with a recommendation for additional research to enhance the efficacy of VR advertising in the ESS. It suggests investigating the long-term effects of VR advertising on consumer behavior, determining whether or not it is cost-effective, and addressing privacy concerns. This is a direct consequence of the Theory of Knowledge's emphasis on the importance of ongoing research, ethical concerns, and the deductive analysis of knowledge claims.

Overall, the debate on VR advertising in the ESS combines aspects of the Theory of Knowledge by considering the influence of emotions, the value of experiential learning, the growth of knowledge, the significance of customized experiences, as well as the need for ongoing research based on the future perspectives discussed in the following section.

5. Future Research Perspectives

Grounded on the earlier mentioned debate, VR might be seen as a potential advertising technology, especially for the SEs seeking to differentiate themselves and give consumers a memorable experience. However, bugs, delays, and motion sickness may potentially impede VR experiences, severely impacting the user experience and public opinion of the educational institute. Additionally, VR marketing poses worries about privacy, data collection, and unanticipated negative effects on consumer behavior. Consequently, for ESS, we propose the following future research prospects that may help to overcome obstacles and seize new opportunities in the field of VR advertising. Because consumer requirements and expectations are always evolving, SEs might benefit from implementing successful and moral advertising efforts through these future research implications. First, although for ESS, there is mounting evidence that VR advertising improves brand identification, purchase intent, and emotional connection, still, more research is needed to understand the long-term effects of VR advertising on consumer behavior. Similarly, for ESS, further research might look at the effectiveness of different VR advertising channels and forms. SEs will have more opportunities to provide immersive and engaging experiences to consumers as VR technology advances. Among these choices are brand experiences, service presentations, online showrooms, and interactive stories. Accordingly, for ESS, future research might look at how successful certain formats and channels are at achieving specific advertising goals, such as increasing brand awareness, increasing sales, or promoting consumer interaction. Moreover, studies might look at how display quality, range of view, and haptic feedback impact the success of VR advertising. Likewise, future studies might look at the cost-effectiveness of VR advertising campaigns for SEs, such as service costs, distribution methods, and audience demographics, as well as the return on investment of VR advertising campaigns and possible cost reductions when compared to conventional advertising. Last, further research is needed on the privacy issues and data-gathering obstacles associated with VR advertising, such as the usage of tracking technologies, data storage, and sharing, and the likelihood of user abuse. Moreover, for ESS, the study may result in the development of standards and criteria for the ethical and transparent use of VR marketing. These norms and standards may address subjects such as informed consent, privacy protection, and advertising honesty.

6. Conclusion

VR technology has developed rapidly in recent years and is increasingly used for purposes other than entertainment. VR has shown significant promise in the advertising and marketing sector, particularly in the ESS. This kind of advertising stands out because it is both personalized and immersive. It helps organizations to present their customers with bright and engaging brand experiences.

One of the most significant benefits of VR advertising is that it increases people's knowledge through immersive stimulation and engaging experiences for both soft and hard sciences. Similarly, it has greater potential to give students an immersive team-building experience in which they may collaborate to tackle difficult tasks. It also helps in improving interpersonal communication and interaction.

To summarize, there is a strong likelihood that VR technology will revolutionize marketing and education. VR advertising can provide one-of-a-kind personalized and immersive experiences that inspire learning, engagement, and an emotional connection with SEs. When VR technology is employed in advertising, key measures such as engagement, attention, emotional intensity, brand recall, brand recognition, and purchase intent may increase. Further research is needed to analyze the long-term effects of VR advertising on customer behavior and to give recommendations on how to use VR advertising in ESS ethically. It's interesting to speculate about what VR technology may mean for the future of marketing and advertising as it advances.

6.1. Theoretical Contributions

The following is a synopsis of the theoretical contributions made by the discussed study on VR advertising in the ESS: First, this study contributes to the existing corpus of knowledge by highlighting the potential of VR advertising in ESS. It acknowledges the positive impact that VR technology has had in providing immersive and engaging experiences for consumers, which has led to an increase in brand recognition, emotive connection, and the desire to purchase. This contributes to the expansion of the knowledge base on the use of VR in advertising within an educational setting.

Second, this study's findings suggest that VR advertising may be able to enhance some aspects of advertising performance pertinent to ESS. In terms of engagement, emotive intensity, brand recall, and brand loyalty, it outperforms traditional advertising methods such as television commercials by a significant margin. By providing customers with one-of-a-kind and unforgettable brand experiences, VR advertising has the potential to effectively attract customers' attention and foster a stronger connection to the products or services being marketed.

Third, this study demonstrates the pedagogical benefits that VR technology may offer in ESS, to enhance learning experiences. It emphasizes the fact that VR can be used to construct simulations that help students prepare for real-world situations in a regulated and secure environment. VR enables the development of interpersonal skills, such as empathy, collaboration, and social skills, which are essential for future career and

personal growth. This article explores the potential of VR technology to enhance educational experiences and better prepare students for real-world challenges.

Last, this study identifies several research voids and makes suggestions for the direction of future research. This emphasizes the need for additional research to gain a deeper comprehension of the long-term effects of VR advertising on consumer behavior in ESS. In addition, it proposes investigating the effectiveness of various channels and types of VR advertising, considering the cost-effectiveness of VR advertising campaigns, and addressing privacy and ethical issues associated with VR marketing. These prospective future research avenues will determine the direction of future research on the topic.

Overall, this study contributes to the theoretical comprehension of VR advertising in the ESS by highlighting the potential of this medium to enhance advertising performance as well as educational experiences. In addition, it illuminates the areas that require further research, thereby paving the way for future studies and developments in the field of VR advertising in ESS.

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