

Exploring the Role of Virtual Reality in Shaping Consumer Experience for Early-Stage Entrepreneurs

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Abstract. A research study investigates how Virtual Reality technology affects early-stage entrepreneur consumer engagement. Due to the growing industrial use of VR technology, businesses now employ this innovative tool to deliver interactive experiences that deeply involve consumers. Early-stage entrepreneurs have benefited from VR technology as it enables an exceptional way to make their brand stand out while building lasting customer attachment. Research based on extensive interviews with business owners assesses both advantages and setbacks that VR technology produces when applied to consumer involvement. Thus, the research shows that the adjacent use of VR contributes to better consumer interaction in terms of perception, engagement, and memorization of the brand. Through VR technology, businesses can eliminate limitations of physical distance, thus enabling virtual product demonstrations that allow them to communicate with customers around the world. The research unveils multiple obstacles in implementing VR solutions because of their installation expense, together with the required technical know-how and consumer unease with new technological advancements. This research increases VR-related knowledge in early-stage entrepreneurship while suggesting efficient methods to use VR for consumer experience enhancement and business growth alongside small business challenge resolution.

Keywords: Consumer, Entrepreneurs, Experience, Exploring, Role, Virtual reality.

1. INTRODUCTION

Consumer industries now focus on Virtual Reality technology because it allows them to establish fully immersive interactive engagements (Brankovic, 2025). Virtual Reality was once regarded as futuristic technology but it has become more accessible leading businesses from various sectors to adopt it for better consumer relationships. Early-stage business owners face severe hurdles when they need to stand apart from competitors by creating faithful customer followings through both creative approaches and cost-efficient plans (Soni and Gupta, 2024). The modern marketplace finds a distinctive answer through VR as entrepreneurs can design exceptional virtual user experiences for market differentiation. Consumer experience has emerged as one of the competitive elements of focus for the contemporary marketing approaches (Jangid and Dixit, 2023). Modern consumers look for more than standard transactions with brands since they want meaningful relationships with their preferred brands. VR provides businesses a chance to revolutionise their methods of customer engagement. The study evaluates the ways Virtual Reality influences the consumer interactions of entrepreneurs in their early phases of business operation.

In the contemporary society, consumers' communication patterns are expanding, and businesses are in search for active seeking non-advertising techniques (Dixit and Jangid, 2024). It brings in the aspect of engagement through involvement of VR technology, where, the consumer is introduced to the actual simulation of the product or service since he or she has to interact with the environment keenly and properly (Jangid and Dixit, 2023). It not only grabs the attention of the consumers but directly gives them the feeling which is very important to turn them into loyal customers in the early stages of start-ups. Due to lack of strong financial capital, on early stage start-ups should be able to benefit from VR by coming up with distinct models that differentiate them from their counterparts in the market (Chammassian and Sabatier, 2020). Whether they are safe virtual tests of products, engaging brand narratives, or virtual consultations, VR is a novel way through which small businesses can make a memorable positive impact on their viewers.

With this effectiveness, VR is not only best suited for managing customer relations but also for satisfying those relations and helping the customers make the best decisions (Rane, Choudhary and Rane, 2023). VR is useful for consumers because it provides them with a chance to get acquainted with the features and benefits of the presented product or service in the way that cannot be provided by advertisements or in-store demonstration (Sofi et al., 2020). This paper aims at exploring the role of VR as a tool for creating consumer experience and its benefit to the early-stage entrepreneurs in their incessant fight against existing brand-name competitors. The study evaluates the benefits and challenges of VR implementation within existing business models for entrepreneurs along with their customer interaction dynamics. Extensive interviews with entrepreneurs at the early stage of business development yield systematic data about VR technology applications as well as its success in fostering brand loyalty and consumer engagement.

2. LITERATURE REVIEW

Virtual reality can be described as an environment that is artificially created in a computer that simulates the real world sensation where a person is able to interact fully with such environment (Riva, 2023). In contrast with

traditional media, the users have a chance to get immersed in the environment since they stay fully aware of the existence of the media. The first applications of VR technology can be traced back to the field of entertainment and games, but now it is possible to observe their application in the sphere of education, healthcare, real estate, as well as in the sphere of marketing (Połap et al., 2020). This characteristic on its own has made VR appealing to any business that requires to introduce innovations in the way consumer interaction is involved (Akinola, Agbonifo and Sarumi, 2020). In business purposes, VR plays the role of providing demonstration, experience, or simulation of some visions or events in business ventures. For example, VR has been employed by automobile industries that enable the customers to feel the features of cars before buying them as highlighted by El Beheiry et al. (2019). This assures the consumers get a better picture with the various products, thus helping them in their decision making process. Customer experience is a social process that involves all the activities that a customer experiences from when he becomes aware of a brand to when he makes his/her decision to patronise that brand. With the emergence of customer-oriented economy, there is need for insight on the execution of quality experiential marketing for firms (Jaziri, 2019). It has been proved that positive consumer attitude results to increased consumer branding loyalty, customer satisfaction, and strong positive brand attitude (Wibowo, 2022).

Thus, the idea of experiential marketing underlines the idea of the use of interesting, memorable experiences within the limited-term advertising process (Kandampully et al., 2023). It pertains to the need to appeal to the five human senses, the feelings, the knowledge, and the action of the consumer in relation to the brand. This is in line with the approach that VR is entire body involvement that directly elicits all five senses, which in turn creates more potent emotional appeal and potential for later recall (Kandampully et al., 2023). There is therefore literature research conducted on the use of VR in the management of consumer experience that draws the attention of this research. For instance, VR has been used to address the issue of product trials by providing the consumers a way of interacting with an imitation of the product that cannot be imitated naturally in the physical world (Mishra and Anning-Dorson, 2022). Such interaction leads to a stronger link between the product and the consumer and may have impacts on the possible buying behaviour. In addition, it is well-known that VR can offer a variety of possibilities for the travel agency, like the travel tours, which can be more important with organisations that work with customers all over the world (Mishra and Anning-Dorson, 2022). Nevertheless, the use of VR in customer experience is relatively limited and is considered as a new trend mainly for small scale business and start-ups. This has made most of the research investigations on VR to be centred on large organisations with ample capital to implement it. There are currently few guides that have been developed and made freely available on how the small businesses can utilise the technology from the current platforms in this area on limited resources.

The early-stage entrepreneurs experience challenges like requirement of limited capital, inadequate brand image, and customer acceptability (Panarina, 2023). In such conditions, to stand out from the competitors, the concept of innovation is a decisive key to success. This is especially the case in business where individuals seek means to separate themselves from the competition; VR presents such an advantage (Panarina, 2023). Opportunities to impress consumers, make them loyal, and provide exceptional experiences will take the attention of a business to new levels and help it grow. Although there is a lot of literature on entrepreneurship today, there is limited research on how such new technologies as VR contribute to small enterprises. This research seeks to make some contribution in this area by assessing how early-stage entrepreneurs apply VR to enrich consumer experience and spurring innovation.

3. METHODOLOGY

The current research employs a qualitative, exploratory research design so as to gain deeper insights into the ways adopted by early-stage entrepreneurs in using VR for creating and managing Consumer Experience. Qualitative approach is more suitable since they will be enabling the researcher get deeper understanding of experiences of the participants (Karani et al., 2019). The sample includes individuals from 10 to 15 businesses at the early stage, who have already incorporated VR technology into their value propositions. Participants were purposively chosen based on the criteria that they should have first-hand experience in adopting VR in their foray with consumers. All the enterprises cover the fields of retail, real estate, education, and entertainment, therefore the results can be considered as diverse. Samples were consulted using semi structured questionnaires which made the exercise quite flexible while at the same time ensuring that appropriate sets questions that addressed certain issues were asked. Open interview sessions were more conversational recordings through video calls with duration of 45 minutes to an hour. They were then posed comprehensive questions about their experience in the use of the virtual reality application, the difficulties that the participants encountered when using it, the perceived customer response towards the application, and the reaction that the customers gave to them. In all the interviews, participants were asked permission for the interview to be tape-recorded. The interviews were used in this study and the data collected was analysed thematically. The tapes were transcribed literally and the themes were evaluated using a process of categorisation. This made it possible to extract generic ideas and knowledge relating to consumer experience concerning VR. To be able to categorise the information and data that had been gathered, thematic analysis was useful in the study. It is noteworthy that ethical approval was sought and

obtained before the actual data collection was made. The sun asked the participants about the purpose of the study, their rights and more importantly, assured them of the anonymity of their responses. All the interviews held were done voluntarily and at the same time the identity of the participants was kept concealed.

4. RESULTS

Altogether, the findings presented in this paper were derived from the data obtained from interviews with the early-stage entrepreneurs who have already adapted Virtual Reality technologies to their business models. Based on these interviews, the following strands identified the various ways in which consumers are experiencing VR in their society. All these themes are categorised as shown below:

1. Theme 1: Enhancement of Consumer Engagement
2. Theme 2: Overcoming Geographical Limitations
3. Theme 3: Challenges in VR Implementation
4. Theme 4: Impact on Consumer Decision-Making

The following table outlines the process of theme derivation from the interview data.

Table 1: Thematic Analysis of Interview Responses.

Theme	Source of Theme	Key Quotes
Enhancement of Consumer Engagement	Increased use of VR to create interactive experiences Immersive VR experiences fostering deeper brand connection	"We noticed that when customers interact with the product in VR, they are more engaged and likely to ask questions." "Customers seem more emotionally connected to the brand after using VR; they remember us."
Overcoming Geographical Limitations	Use of VR to reach a global audience Overcoming the physical limitations of traditional marketing	"Virtual tours allow us to connect with clients overseas who would not have visited our physical location." "We can showcase our products virtually to anyone, anywhere, at any time."
Challenges in VR Implementation	High costs and technical expertise required Difficulty in persuading customers to embrace new technology	"Setting up VR was expensive and time-consuming. It's a big investment for a small business." "Some customers are hesitant to use VR; they find it overwhelming or unnecessary."
Impact on Consumer Decision-Making	Influence of VR on purchase intentions Emotional connection and product understanding	"The VR experience made me feel more confident in my choice. I was able to try things out virtually before buying." "Once they try the product in VR, they seem to make quicker decisions and are more satisfied with their purchases."

Theme 1: Enhancement of Consumer Engagement

Entrepreneurs highlighted that VR played a key role in increasing consumer engagement by offering interactive and immersive experiences. For example, one entrepreneur from the retail industry stated: *"We noticed that when customers interact with the product in VR, they are more engaged and likely to ask questions."* Another entrepreneur from the real estate sector mentioned: *"Customers seem more emotionally connected to the brand after using VR; they remember us."*

The data suggests that VR enhances consumer engagement by allowing customers to interact with products or services in a way that traditional marketing methods cannot achieve. The immersive nature of VR draws consumers in, creating a more active and emotionally involved experience. This supports the theory of experiential marketing, which argues that immersive experiences foster deeper emotional connections (Ferguson, 2025; Panarina, 2023). Entrepreneurs reported that customers who engaged with VR-based experiences often spent more time interacting with their brand, which increased brand recall and consumer interest.

Theme 2: Overcoming Geographical Limitations

Several entrepreneurs noted the ability of VR to bridge geographical gaps, allowing businesses to reach global audiences. One entrepreneur in the tourism sector shared: *"Virtual tours allow us to connect with clients overseas who would not have visited our physical location."* Another entrepreneur from a home decor business mentioned: *"We can showcase our products virtually to anyone, anywhere, at any time."*

This theme underscores VR's power to transcend physical limitations. By offering virtual tours or product demonstrations, businesses can engage consumers who might otherwise not have access to the product or service. For early-stage entrepreneurs, this feature is particularly advantageous as it expands their market reach without the need for significant capital investment in physical infrastructure (Leveau and Camus, 2023). Additionally, VR technology allows businesses to showcase their offerings in an engaging way, providing a more tangible representation of their products to potential customers, regardless of location.

Theme 3: Challenges in VR Implementation

While the benefits of VR were acknowledged, entrepreneurs also expressed several challenges in its implementation. One interviewee mentioned: *"Setting up VR was expensive and time-consuming. It's a big investment for a small business."* Another entrepreneur shared: *"Some customers are hesitant to use VR; they find it overwhelming or unnecessary."*

The challenges identified in this theme are largely related to the financial and technical barriers to VR adoption. Entrepreneurs pointed out that the initial cost of acquiring VR hardware and developing content can be

prohibitive, especially for small businesses with limited resources. Furthermore, the need for specialised technical expertise to set up and maintain VR systems adds another layer of complexity. The hesitance from some consumers, as mentioned by several entrepreneurs, also reflects the potential resistance to adopting new technology. This aligns with the Technology Acceptance Model (TAM), which suggests that perceived ease of use and perceived usefulness are key determinants of technology adoption (Alduaij, 2019).

Theme 4: Impact on Consumer Decision-Making

Many entrepreneurs emphasised that VR had a significant impact on consumer decision-making by providing a more confident and informed purchasing process. One entrepreneur remarked: *"The VR experience made me feel more confident in my choice. I was able to try things out virtually before buying."* Another entrepreneur mentioned: *"Once they try the product in VR, they seem to make quicker decisions and are more satisfied with their purchases."*

This theme highlights the persuasive power of VR in influencing consumer behavior. By offering an interactive and immersive way to explore products, VR helps consumers gain a better understanding of the product's features and benefits, which in turn can increase confidence in their purchase decisions. The ability to visualise or "try out" products virtually before committing to a purchase helps reduce uncertainty and can lead to quicker decision-making. This finding aligns with research by Makmor et al. (2019), which demonstrated that VR can enhance product trials and reduce perceived risk, leading to greater purchase intentions.

5. SUMMARY OF RESULTS

The thematic analysis of interview data revealed that VR holds significant potential for enhancing consumer engagement, overcoming geographical barriers, and positively impacting decision-making. However, its implementation presents challenges, particularly for early-stage entrepreneurs who face financial and technical constraints. The results highlight the importance of careful consideration of the costs and benefits of adopting VR, as well as the need for educating consumers to overcome resistance to new technology.

Discussion

The findings of the study have shown that Virtual Reality (VR) influences consumers for new venture firms at an early stage. For the purpose of the current research, VR was found to be an effective element of consumer engagement, bringing value to small businesses that work on delivering unique proposition to the market. This section relates the current research to the existing knowledge base concerning consumers' apprehensions toward VR, its ability to improve consumers' experiences, the uniqueness of VR as an offering, and the issues that these entrepreneurs face in the process. This particular research also identifies a major outcome which is the improvement of consumers' participation through VR. Each of the entrepreneurs explained that VR helped make the consumers engage with the products or services in an even more profound manner by allowing them to feel as if they were part of the brand, which in a way increases the time the consumers spend on the brand as well as the identification with the brand. This is in concordance with the Experiential Marketing Theory by Schmitt (1999) that customers go for more than just value of a product; they want to be encouraged to feel, smell, think and touch the product. Specifically, the immersive and multisensory form of interaction experienced in VR has the potential to promote this kind of immersion. For instance, with VR consumers are able to 'try' a product through wearing a pair of clothes or viewing an actual property in three dimensions which as mentioned by the participants establish endowment assurance with the brand. This is in concordance with the argument that made in the theoretical framework that through the implementation of experiential marketing the levels of marketing communication often tend to be higher when supported through Virtual Reality (Schmitt, 1999).

Furthermore, it was also seen that that VR makes it possible for the early-stage entrepreneurs to engage a global market no matter the location of the firm. Some of the advantages identified by the entrepreneurs included the following; through VR one can give product demonstrations and other tour of the products to potential consumers regardless of the geographical location and this can be very important for new business that may be having limited resources. This is in agreement with previous studies that suggest that VR is effective in crossing geographical barriers to offer services physically without the virtual means (Pimentel et al., 2021; Creed et al., 2024). For instance, the business people in the property sector were in a position to organise virtual home tours to people who could not have visited physically from the foreign nations. VR allows for tremendous access in those sectors where Establishments do not have the capital to extend to various regions or outlets, which is usually common among youthful business firms. This capability of providing remote, realistic experiences democratises complex strategies of marketing and opens international markets to businesses which accredits authors of the work done by Badamasi et al. (2022) that advocated that VR optimises the decision-making among consumers since they are offered with deeper insight of the product.

However, some of the issues that were surfaced that early-stage entrants struggle to implement VR included the following. Some challenges that were provided by the participants included high costs in terms of purchasing VR hardware and more so in the creation of VR content. There were also issues of technicality, as those pointed out the need to have expert personnel who would be able to manage the systems, and this can be deemed expensive and out of the reach keyboard small scale entrepreneurs. These are in congruency with Technology Acceptance Model (TAM) where perceived usefulness and ease of use are conducive to adoption of the technology (Davis, 1989). This can act as a disadvantage due to the fact that it may be deemed expensive by entrepreneurs

who are not so technically inclined or those who do not have much expertise as well as funding to invest into VR with ease, which may slow the progress of its insertion into more small businesses. This is also connected to earlier work that pointed out that higher costs at the start of the project as well as the need for highly skilled workers are barriers to entry for small businesses (Lofstrom, Bates. and Parker, 2014). While, there are numerous long-term advantages of adopting VR in the marketplace such as increasing consumer involvement and brand commitment, high initial cost associated with system integration and technical difficulties that make it unaffordable and challenging for young entrepreneurs to incorporate this disruptive technology into their business.

Furthermore, it was also revealed in the study that although consumers had excellent value in using VR in engaging them, there were some who were reluctant when it came to embracing the technology. Some of the entrepreneurs reported that some of the customers either deemed VR as unnecessary or overwhelming as most users had a sceptical attitude towards emerging technologies. This reluctance is well supported by the Technology Acceptance Model (TAM) for it has pointed out that consumers will prefer to use any product or technology that is easy to master and that is useful to them (Davis, 1989). For entrepreneurs, this is a problem: to make VR liberated and, at the same time, wanted by consumers. To overcome this barrier, user experience and the explanation of the advantages of VR need to be taken into account. According to Chong et al. (2021), the second essential element is the simplification, meaning that, besides introducing new technology into the business process, it needs to improve the customer experience rather than worsen it.

Therefore, the results of this study extend the knowledge of consumers' engagement through VR in other domains, but specifically in the domain of early-stage entrepreneurship. Despite the fact that use of VR has many advantages regarding, consumer involvement, breaking geographic barriers and offering ways to distinguish oneself in a highly saturated market which sell's similar products, there are certain issues which are associated with cost, technical know-how and consumer behaviour. For early stage entrepreneurs, it is noteworthy that most of these challenges can be offset by investing in the right areas, availing the technology to the consumers, enhancing the interaction process and making the VR value-driven. Future qualitative research could possibly extend the research on the longevity of increased customer loyalty resulting from VR adoption alongside its prospects for sustainable development of small businesses.

6. CONCLUSION

The study indicates that small businesses encounter three main obstacles to using VR solutions because of high cost investments and technical complexity requirements and reluctance from some consumers to accept new technology platforms. Businesses that want to implement VR must perform comprehensive strategic assessment before and after integration due to existing hurdles. To determine VR adoption feasibility entrepreneurs need to evaluate their resources and confirm that their clients find VR beneficial and accessible in usage. Virtual reality presents long-term opportunities that exceed its initial obstacles and proves to be a beneficial investment strategy for early-stage entrepreneurs. Additional investigation is needed to understand VR's prolonged effects on consumer actions while developing solutions to help clients embrace this technology system. Smaller businesses can leverage Virtual Reality as a strong tool for innovation that brings growth potential to transform start-up engagement with digital consumers.

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