

## How virtual reality has been implemented in mexican e-commerce in the last three years

### Cómo la realidad virtual ha sido implementada en el comercio electrónico mexicano en los últimos tres años

*Silvana Ter-Veen Montagnaro <sup>a</sup>*

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**Abstract:**

New technologies are changing the way companies approach advertising. One such technology is virtual reality. This allows for unique advertising models that engage users and inspire innovative ideas. This article examines the current state of virtual reality in Mexican society, its integration with technology and its use in advertising. The purpose of this project is to study the impact of virtual reality on e-commerce in Mexico. The study aimed to provide an overview of advertisers and agencies that have used this technology in their campaigns and will be exploratory in nature. This project uses a qualitative research design focused on explaining the social implications of communicative phenomena.

**Keywords:**

*Virtual reality, customer experience, e-commerce*

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**Resumen:**

Las nuevas tecnologías están cambiando la forma en que las empresas abordan la publicidad. Una de ellas es la realidad virtual. Esto permite modelos de publicidad únicos que atraen a los usuarios e inspiran ideas innovadoras. Este artículo examina el estado actual de la realidad virtual en la sociedad mexicana, su integración con la tecnología y su uso en publicidad. El propósito de este proyecto es estudiar el impacto de la realidad virtual en el comercio electrónico en México. El objetivo del estudio era proporcionar una visión general de los anunciantes y las agencias que han utilizado esta tecnología en sus campañas y serán de carácter exploratorio. Este proyecto utiliza un diseño de investigación cualitativa centrado en explicar las implicaciones sociales de los fenómenos comunicativos.

**Palabras Clave:**

*Realidad virtual, experiencia del cliente, comercio electrónico*

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## Introduction

New technologies are changing the way companies approach advertising. One such technology is virtual reality. This allows for unique advertising models that engage users and inspire innovative ideas. This research project examined the current state of virtual reality in Mexican society, its integration with technology and its use in advertising.

According to (Hamad & Bochen, 2022) virtual reality is a technology that superimposes digital information over the real world. This can be done through a smartphone or tablet and uses the device's camera to

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<sup>a</sup> Autor de Correspondencia, alumna de la Licenciatura en Comercio Exterior del Instituto de Ciencias Económico Administrativas, Universidad Autónoma del Estado de Hidalgo, Email: [te366587@uaeh.edu.mx](mailto:te366587@uaeh.edu.mx)

display digital content over the real world. There are many types of virtual reality. Marker-based, marker-less and projection-based.

Many companies in Mexico have started using virtual reality in their advertising campaigns. This technology provides users with a more interactive and engaging experience, which can generate greater brand awareness and customer loyalty. Using virtual reality, companies can create unique and innovative advertising campaigns that stand out from the competition.

Several articles describe virtual reality as a technology that can be used in various fields. Some say it is very good for education, architecture, medicine and tourism. However, not many consider them suitable for e-commerce or commerce in general. That said, there are not many studies on how they can help in these areas.

The purpose of this project was to study the impact of virtual reality on e-commerce in Mexico. The study aims to provide an overview of advertisers and agencies that have used this technology in their campaigns and will be exploratory in nature. This project used a qualitative research design focused on explaining the social implications of communicative phenomena.

Virtual reality (VR) is a technology that allows virtual elements to be added to reality. This is achieved through the use of technological devices and software tools that make it possible. With VR, users can interact with virtual elements in their environment.

VR is being used by different brands worldwide as an advertising strategy. This technology offers many possibilities to approach a specific consumer and/or introduce a new product or service. In advertising, VR allows the user to become a participating and integrated actor. (Hamad & Bochen, 2022)

During the first quarter of 2016, VR amounted to \$1.77 billion, according to figures from eMarketer, projected by Statista. In 2023, consumer spending on VR content/applications reached US\$16.1 billion dollars in the United States. (Fernández, 2023)

In Mexico, VR has been used to showcase different brands through BTL advertising or mobile applications, indicates (Inmersys, 2020). This allows to learn more about the brand, product or service in an innovative way. Although Mexico is still in the process of technological growth, there are interesting initiatives by the National Government with the promotion of the orange economy or creative economy.

What is the importance of this technology in the creative development of advertising?

Given the new emerging trends, it is essential in increasingly virtualized scenarios, to know, distinguish and understand in what fields and what features VR can offer as a response to the new demands of the increasingly knowledgeable customers and consumers of the digital and experiential era, of which advertising communication is of course a part.

The purpose of this research was to identify the influence of VR on e-commerce shoppers. Also, to establish consumer behavior, what motivates them to buy, and if they would use or have used VR as a differentiator and influencer of their online purchases. Finally, it was intended to study the shared characteristics of the users of these stores, in order to identify the benefits that this technology would provide them, with real cases, with examples and models, so that they can understand what it is about and know if this would influence their purchase decision.

The research is qualitative and exploratory in scope, in order to have an approach to a new topic about which there is little information in Mexico, lay the groundwork for a deeper search and contribute to build an overview on this topic.

The study focuses on the application of VR in the economic sector in Mexico, seen from the perspective of the creators of this technology, of the companies that commercialize products that have used it, and, finally, it tries to investigate if VR can influence users in the purchase of such products in electronic commerce. In the same way, it seeks to enrich the state of the art for future research on this subject in the country.

The development of virtual reality, along with other technological innovations, will shape the future of e-commerce. This research studied the effectiveness of different VR formats and devices in a virtual store environment, i.e., e-commerce. This study delved into a conceptual model that analyzes the relationships between sense of presence, brand recall and purchase intention.

The results suggested differences in purchase intention according to VR format and device used. No differences in sense of presence and affect were observed according to VR format and device. This model suggests a dual pathway of influence of VR on consumers' purchase intention in virtual stores: one through emotions and sense of presence and the other through the affect evoked by the virtual environment and brand recall. Finally, some implications for management and methodological issues were considered.

### **Development**

The present project was conceived under the qualitative method. "It studies reality in its natural context, as it happens, trying to make sense of, or interpret phenomena according to the meanings they have for the people involved. Qualitative research involves the use and collection of a wide variety of materials-interviews, personal experience, life stories, observations, historical texts, images, sounds-that describe routine and problematic situations and meanings in people's lives." (Rodríguez, 1996) This means that techniques were applied according to purposes of deep description and characterization, both of Virtual Reality applied in discursive strategies of advertising, as well as its conceptualization through various visions and temporalities.

Thus, the research presents an exploratory design, due to the need to characterize what has happened with VR as an emerging phenomenon, which does not present a prolonged or extensive development. According to the object of study, it can be said that the research mainly responds to a "state of the art" exercise. "The state of the art is a central and deductive category that is approached and proposed as a methodological strategy for the critical analysis of the political, epistemological dimensions of the research production.". (Patiño, 2016)

This work incorporates techniques from the qualitative approach,

- The open and in-depth interview to an expert that gives the option to obtain key information from producers of campaigns whose communication strategy is based on virtual reality.
- Documentary review (triangulation of sources) that allows reconstructing the background of the application of ARV in the field of advertising.
- On the other hand, content analysis techniques were also implemented, defined as: "a research technique that aims to be objective, systematic and quantitative in the study of the manifest content of communication". (Berelson, 1952) to generate a comparative and contextual analysis of the factors that have characterized the case studies, from which it is possible to understand the progress of the trend in the country and its particular applications in the brands involved.

The first paragraph of the referential framework included sources such as:

Web document, specialization thesis, which aims to provide a deeper approach to the research topic where VR can be seen as a creative experiential and promotional tool capable of generating a positive impact on the marketing of services based on the same. A commercial strategy aimed at attracting audiences increasingly inclined to try certain value-added goods or services through their media.

This framework addressed theoretical definitions of the cross-cutting concepts of Virtual Reality, descriptions related to the concept of classes for the integration of real objects, application models and more. Also, the defined scope formed the basis for the application and use of the technology.




In its modern state, sources such as: Specialized literature and research focused on emerging trends in digital communications, oriented to know and understand the scope of virtualization of the service experience.

## Results obtained

The results of this study are shown in Table 1. A content analysis of Nutresa's augmented reality campaign, selected as the first large-scale augmented reality development in Latin America, has been conducted, showing all the possibilities in the field and making Nutresa an innovative company.

**Table 1.**

### Virtual Reality Nutresa

Type of source	Source	Photographic evidence and links	Search keywords and phrases	Feedback
Company news and literature	(Caracol Radio Magazine, 2016)	 <p><a href="https://caracol.com.co/radio/2013/09/12/tecnologia/1378971480_969310.htm">https://caracol.com.co/radio/2013/09/12/tecnologia/1378971480_969310.htm</a></p>	<ul style="list-style-type: none"> <li>Virtual reality campaign in Latin America</li> <li>Virtual reality in advertising</li> <li>Sales and virtual reality</li> </ul>	Virtual reality is used as a way to stick to "trends". Nutresa calls itself a pioneer of this advertising technique.
	(Nutresa, 2016)	 <p><a href="https://gruponutresa.com/resultados-primer-semestre-2016/6127/">https://gruponutresa.com/resultados-primer-semestre-2016/6127/</a></p>	<ul style="list-style-type: none"> <li>Grupo Nutresa 2016 Report</li> <li>Nutresa virtual reality</li> <li>Layar Application</li> </ul>	An annual report talks about the sustainable development that has taken place thanks to the use of the LAYAR application for consulting nutritional information on products.
Excerpts from the advertising campaign	(Nutresa Youtube, 2016)	 <p><a href="https://www.youtube.com/watch?v=KKjLSAPNg_0">https://www.youtube.com/watch?v=KKjLSAPNg_0</a></p>	<ul style="list-style-type: none"> <li>Nutresa</li> <li>Nutresa virtual reality advertising campaign</li> <li>Nutresa Layar application</li> </ul>	An example is shown of how anyone (in this case a young couple) can consult data about a product using a virtual reality application with a camera device.

(Nutresa  
Youtube,  
2016)



<https://www.youtube.com/watch?v=7xcLhhR7fbl>

- Nutresa
- Nutresa virtual reality advertising campaign
- Nutresa Layar application

This video is a tutorial for Nutresa users to learn how to navigate the Layar application interface and use the virtual reality function.

(Grupo  
Nutresa,  
2016)



<https://www.pinterest.es/pin/605523112369093561/>

- Virtual reality Nutresa
- How to use Layar application
- Virtual reality
- Information Nutresa virtual reality.

This infographic explains what virtual reality is and how the Layar application works in relation to Nutresa products, attracting customers to try it.

Source: Own elaboration based on different sources.

With elements of the world and virtual worlds merging, people realize that the packaging of branded products can say a lot in new and innovative ways. It also includes branded content and Nutresa's commitment to consumers in the concept of sustainability, healthy living and balanced nutrition are top priorities. The purpose of the information gathered in the table is to understand how innovation models improve the mechanisms for identifying ideas that are likely to deepen their understanding of customers, buyers and consumers, and how the use of technological tools facilitates the creation of new business models to promote. Several sources of campaign content are used to create the table, including: Magazines, blogs, videos, commercials, infographics. I detailed the most relevant aspects of each source examined in a particular analysis.

The development of Table 1 was influenced by the "Nutresa Virtual Reality" Campaign, an innovative campaign in Mexico that used VR as a heuristic technology to promote sustainability.

It targeted at people between 26 and 35 years old, who are hyper-informed and connected through their mobile devices, the campaign is aimed at young adults. The augmented reality project, which uses wireless media through LAYAR and product packaging, provides users with personalized information on nutritional content, including healthy eating habits and lifestyle improvements.

They launched two ads, the first featured a young couple discussing how to use the app from begging to post-purchase. The second ad featured witty imagery and described each step to download the app and the viewer followed their instructions.

The campaign received a positive response from its consumers, demonstrating that branding and consumer relations can foster greater transparency and value.

## Conclusions

Virtual reality is a technology that allows the integration of other media and increases the accessibility of the population. The level of exploration provided by virtual reality is greater, leading to a deeper connection with the consumer. In addition, virtual reality can create an authentic experience for the customer during the first interaction that was only achieved through traditional advertising methods such as BTL and activation events.

The use of virtual reality, based on interactivity with the consumer, provides us with additional information that generates new loyalty and brand identity strategies. The future presents opportunities to discover new application scenarios beyond the mere promotion of products and services.

The growing number of virtual reality applications requires us to stop and consider the requirements for this technology. Today, the need to improve and develop more devices is paramount. In the future, spaces will open up that will require a higher level of There is a need to address brand loyalty, regardless of economic sector. The evolution of the customer experience will depend heavily on technology.

Recommendations:

To enter the industry, I recommend working with agencies that have been in the field for years, as well as testing new applications and experimenting while maintaining a direct line of sight.

As with all new technologies, there will be an increase in agencies and service developers followed by an exponential decrease in the world of app development or social brand management. As such, we recommend requesting and reviewing case studies done by these firms to be wary of small startups lacking expertise in marketing tactics and communications agencies entering the virtual reality market with the goal of making money.

I recommend researching and developing projects that are advantageous for the company, that have a quantifiable return and avoid the element of surprise, which until recently was effective but now shows its most prominent limitations, as people already know the subject well.

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