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ΔΙΠΛΩΜΑΤΙΚΗ ΕΡΓΑΣΙΑ

Holograms And Mixed Reality: A new digital era in advertising

Όνομα

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ΑΜ: 4118Μ046

Αθήνα, 2020

ΥΠΕΥΘΥΝΗ ΔΗΛΩΣΗ ΑΥΘΕΝΤΙΚΟΤΗΤΑΣ
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Η έγκριση της παρούσας διπλωματικής εργασίας από το Πάντειο Πανεπιστήμιο Κοινωνικών και Πολιτικών Επιστημών δεν δηλώνει αποδοχή των γνώμων του συγγραφέα.

Acknowledgements

I feel entitled to thank my always supportive and loving family, my unique friends, Alex who's always excited about what I do, and encourage me to do more, my supervisor professor, Betty Tsakarestou, for the insightful source she's been, and also, the professors, Giannis Skarpelos and Stavros Kaperonis, for their valuable contribution and observations. Also I thank all the interviewees that took part in this paper, and last but not least, I thank Titi for her way to get better than anybody else what it is that I'm talking about.

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Holograms have had their most enduring influence as a metaphor for the future. This longevity is unusual, if not unique. Technology fertilizes dreams and aspirations, some of which are endemic in human cultures. For various audiences, the hologram has represented mythical magic, modernist dreams (or their decline), a forthcoming mass medium or the secretive tool of a militaristic state...it has come to inhabit most of our imagined futures.

-Sean F. Johnston, Holograms Cultural History.

...remember that in advertising, we are trying to turn intelligence into magic. The intelligence is the strategy, gained from market insights, that will hopefully liberate the execution and produce magic.

-Sir John Hegarty, Hegarty on Advertising, Turning Intelligence Into Magic.

Steve Jobs said any new idea is nothing more than a new combination of old elements. He said the ability to make those new combinations depends on our ability to see relationships. That's what makes some people creative. They are better at spotting those connections, better at recognizing possible relationships. They are able to do this because they've had more experiences, or thought more about those experiences, than other people. They are better at connecting the dots because they have more dots to connect. So it's no longer predictable, now it's original and surprising. Because each connection will be a new connection with everything else we know. Our creativity is directly related to how many connections we are able to make. Which is directly related to how much new and unusual stuff we expose our minds to.

Under the old system $1 + 1 = 2$

Under the new system $1 + 1 = 3$,

-Dave Trott, One Plus One Equals Three

“Reality is what you want it to be.”

-M. Pell, Envisioning Holograms.

Abstract

This Dissertation paper by the title “Holograms and Mixed Reality: A new digital era in advertising” was elaborated within the framework of the completion of the postgraduate studies program of the department "Communication, Media and Culture" of Panteion University, in the field of "Information Society, Media and Technology". The main goal of this theoretical project is to explore and explain the definition of mixed reality and holograms, without focusing on further technological features or applications, and then I examine the definitions of advertising and marketing, their common place and their differences. In creative fields and industries (cinema, visual art, advertising), “pseudoholograms” are implemented, albeit they are called holograms. Due to the peculiarity of the term, the literature was studied in depth, in order to create a complete theoretical background for later empirical research. This dissertation paper offers analysis and information about the advent of holograms in the advertising industry, the implementation of mixed reality and the key affordances that holograms and mixed reality have to offer. More specifically, I define the terms of holograms, mixed reality, advertising, and marketing, based on the existing bibliography and then I discuss the role of holograms and mixed reality in that industry. Moreover, I examine the passage of traditional advertising to the holographic one, the reasons why holograms are used in advertising, what is that makes them so effective in a campaign strategy, the main risks of their implementation, how mixed reality affects the relationships between the consumers and the brands and how professionals see the future of the creative industry. To achieve that, I conducted qualitative research methodology, along with content analysis, and I interviewed people from creative disciplines, that are currently working in advertising, in cinema and in production companies, mostly around Europe.

It is of a great interest to me that the last years, there is an “explosion” of immersive technologies has been happening and they don’t stop to grow and therefore, surprise and inspire advertisers. They have changed the way we think about advertising, they have broadened the affordances and the possibilities of the field, in terms of the consumer’s emotional and brain engagement, the interaction, the personalization, and

how, through all these stages, advertising and marketing are “being reintroduced” to researchers, clients, and the world.

An incentive for the decision to study in depth this issue was the absence of a thorough investigation about it, the originality of the subject area, and, of course, the great interest it presents to me and to future generations of advertisers. Mixed Reality is changing the way we look, study and practice advertising, and that is, most probably, as I claim in this research, the very future of advertising.

Keywords: advertising, campaign, immersion, holograms, mixed reality, creativity, brands

Introduction/Preface

Let's imagine that a group decides to take a cruise vacation, and having never tried it, they don't know what to expect and which company to trust. They inquire on the internet looking for prices and routes, they are shown an infinity and images of the ship are also shown. Looking among the various options we see that MSC offers a virtual tour of the ship, all the user needs is to download the application and have a Google Cardboard or another Virtual Reality viewer compatible with their Smartphone. Once downloaded the application, is wearing the viewer and is catapulted to the edge of a MSC. They see the external environment of the ship, and thanks to a menu that works when they look at it for a few moments, they can access areas they want to discover.

Once set in this new space, they choose the "entertainment" item and they find themselves in the ship's theater to see the dance and acting shows, immediately after they select the "catering" item in the restaurant where they are welcomed by the starred chef Carlo Cracco, who after welcoming on board, explains the menu that he has designed specifically for MSC guests, there is also the possibility to view the room and kitchen and other rooms that are part of ship. What they experience through viewers can be cataloged as a virtual reality experience that has nothing different from what in 1999 Pine and Gilmore defined as: "*[...] Fourth form of economic offer, distinct from services [...] Organized by the company as a theater show*".

They have entered a cruise recreated with mastery virtually, they have been able to attend a piece of a show, they can enter the Yacht club area, they are greeted by one chef, they are able to see the back story (the kitchen). The company has wanted to make the user feel fully part of the universe MSC. What totally changes from what the authors intended is the realm, that is the virtual and digital one, through which the experience is enjoyed. Thanks to the revolution in technology that has brought the smartphone to enter into so pervasive in our everyday reality they are observing an evolution regarding the use of the experience; consumers want to experience them, they want to try the product or service first, trying to get informed carefully, also using methods that allow them to live experiences without being physically in that place.

In recent years, many changes have been happening in the consumption patterns of the media content. One of the most important changes is the transition of the advertising patterns from the traditional forms to 2D and 3D forms. The changes

in the media content provides consumers with engaging and exciting advertising content. Such changes could not have happened without the contribution of the immersive technologies (virtual reality technology, augmented reality technology, mixed reality and extended reality technology). With these technologies advertisers create media content that allows consumers to experience virtual reality.

Since the convergence of the media contents and these technologies, consumers can experience the virtual reality similar to the real world. Taking into consideration the changes in the contemporary media landscape, Schaefer (2009) argued that advertisers should keep pace with immersive and new technologies. The Schaefer's (2009) statement indicates that advertisers need a new kind of advertisement in order to sell their products.

Due to the revolution of the hologram advertising, the main aim of this dissertation is to explore the role of holograms and mixed reality in advertising. More specifically, this dissertation has the following research objectives:

- ✓ To identify the role of holograms and mixed reality in advertising.
- ✓ To detect the reasons why holograms are used in advertising.
- ✓ To identify the main risks of the use of holograms in advertising.
- ✓ To explain how mixed reality affects the relationships between the customers and the brands.

Accordingly, the research questions of the dissertation are the following:

RQ 1 What are the professionals' perspectives about the changes in the field of advertising, that have taken place during the last years? (questions 1, 2, 7).

RQ2 Why professionals adopt the mixed reality to their campaigns? (questions 3,4).

RQ3 What are the main risks, that an agency has to address, when adopting mixed reality campaigns (question 5).

RQ4 How mixed reality has affected the relationships between the customers and the brands (question 6).

RQ5 What is the future of advertising based on the professionals' perspectives? (question 9).

For further information on the questions and how they were finally structured, there's the Appendix A to be consulted, at the end of the dissertation.

Chapter one: Conceptual definitions

1.1 Holograms

Holography is a way to create three-dimensional images, called holograms, using laser beams. It was invented by the Hungarian scientist, Dennis Gabor, back to 1947, who in 1971 received the Nobel Prize for this invention (Vacca, 2001).

It is intriguing that the greatest impact of holograms has been in our minds. Holograms have had their most enduring influence—from their public revelation in 1964 and over the following fifty years—as a metaphor for the future. This longevity is unusual, if not unique. Technology fertilizes dreams and aspirations, some of which are endemic in human cultures. For various audiences, the hologram has represented mythical magic, modernist dreams (or their decline), a forthcoming mass medium or the secretive tool of a militaristic state. In various guises, it has come to inhabit most of our imagined futures (Galif, 2013).

As a consequence, expanded meaning has given the term “hologram” a cultural life beyond the reach of its creators. Firstly, Gabor’s intention was to refer to the unique ability of this technique to record an incoming wave of light from an object in terms of both its phase and amplitude (Vacca, 2001).

As Gabor was working in electron microscope, he observed that interference recording was a way to achieve recordings of ultra-high resolution without the difficulties introduced in optical systems by the limitations of recording materials, lenses and conventional optics (Vacca, 2001).

Holography is a way to deflect and focus light, which uses the interference of objects and reference rays to fix and reproduce multiple 2D images for 3D viewing. One of the most fascinating features of holograms is that they appear different depending on the angle and distance from which they look at them. In fact, moving slightly, they will be able to see different views, perspectives and spatial relationships, and sometimes different colors. The term hologram comes from the Greek *olos* (whole) and *gramma* (graphic reproduction); and means "whole, complete representation (image)" (Guidolin, 2005).

A hologram is a piece of film or glass covered with a photographic emulsion that has been exposed to laser light reflected by an object. Unlike ordinary photographic film, which has a flat image on the surface of the emulsion, the hologram has no image. Only when illuminated, does a three-dimensional image appear which seems to float in front of or beyond the film. The film must have the same dimensions as the reproduced object, or be a little larger, as holograms usually keep the same dimensions as the original object. Furthermore, since it must reproduce very detailed information, the film must have a very high resolution, usually 50 or more times that of a normal photographic film. It must also be exposed for a long time to continuous laser light or high intensity pulsed laser light. The development of the film is similar to the photographic process in that it is immersed in a series of chemical agents (Alvarez & Fournier, 2016).

There are basically two different types of hologram, transmission and reflection. In the former the light passes through the object to see the image, the light sources are located behind it. In the latter, the light is directed on the object, the light sources are located right in front of it. Reflective holograms can be viewed using white light as the hologram filters all but one color, which is used to form the image, they therefore appear in a single color, even if they can be created to form multiple of an image, each of a different color (usually two or three). Some holograms can be made visible only by laser, while others, called rainbow holograms (white light transmission or rainbow) are illuminated by normal bulbs and change color following the movement. Like a prism, they segment the white light into the seven colors of the spectrum and form the image in each color. Looking at the rainbow hologram from different positions, the user can see the image in a different color (Guidolin, 2005).

When Gabor initially conceived the idea of holography, he did not think of lasers. His aim was to improve the electron microscope, one then considered primitive and imperfect instrument. His approach was mathematical and the mathematics he used was a type of calculation invented by an eighteenth-century Frenchman named Jean B. J. Fourier. Roughly speaking, what Fourier had developed was a mathematical system for converting any scheme, regardless of its complexity, into a language of simple waves. He also demonstrated how these waveforms could be brought back to the original pattern. In other words, just like a camera transforms an image into electromagnetic frequencies and a television set transforms it back into the original

image. Fourier had shown how a similar process could be accomplished mathematically (Guidolin, 2005).

The equations he developed to transform images into waveforms and back to the original are known as Fourier transforms. The Fourier transforms allowed Gabor to transform the photograph of an object into the confused form of interference patterns on a portion of holographic film. They also gave him the opportunity to devise a way to transform those interference patterns back into an image of the original object. The special completeness in each part of a hologram is one of the consequences that occur when an image or pattern is translated into Fourier's waveform language (Guidolin, 2005).

Gabor's holography was limited to the use of photographic films illuminated with mercury lamps, the best coherent light source in those days. The holograms thus obtained, however, contained distortions and spurious images due to the poor coherence of the light produced by the sources then available, and therefore the holography had no significant developments until the sixties, when the laser appeared which is a highly coherent monochromatic light source, ideal for holography optics. E. Leith and J. Upatnieks, from the University of Michigan, realized that holography could be used as a tool for the reproduction of three-dimensional images. They carried out experiments in this sense, presenting eventually in 1964 the first holograms, which were of the transmission type, from which a three-dimensional image was obtained with the oblique illumination of the slab, a process which later became "classic". Meanwhile, in the Soviet Union, since 1958, the Soviet Y. Denisyuk has carried out similar experiments, publishing the results in 1962; subsequently, he developed the technique of reflection holograms with white light that could be reproduced using a normal incandescent lamp, hence the term "white light" (Vecca, 2001).

Another type of hologram, developed in 1968 by SA Benton at the Massachusetts Institute of Technology (MIT), is the iridescent transmission hologram that can be viewed in white light and is nowadays widely used for security seals. Despite appearances, it is a hologram of the transmission type, since the reference beam is generated by reflecting, through an aluminum film, the light entering the transparent support and passes through the hologram to reach the observer (Vecca, 2001).

Holography is not restricted to the optical field alone, its principles have indeed been successfully applied to other applications based on coherent wave phenomena. In the ultrasonic acoustic field, for example in some types of sonar, and electromagnetic microwaves, for example CW radars (Continuous Wave) and SAR (Synthetic Aperture Radar) 12, there are applications developed on the basis of physical concepts and mathematical methods completely different from holography which have had significant developments thanks to the interpretation of phenomena according to the principles of optical holography, in particular, considering the signals to be treated, generally produced by beatings and overlapping of coherent signals, such as holograms resulting from interference. Besides acoustic holography and holography in the microwave, it also indicates the electron holography, where one can exploit the electron waves rather than light. Electronic holography was invented by Gabor himself to increase the resolution and abolish the aberrations of the transmission electron microscope. Nowadays it is also used to study magnetic fields in thin films and can be applied to holographic lithography (Zaitsev, Lazarets & Barabash, 2009).

For the purpose of this dissertation and also because of its very subject, it's essential to underline that in advertising, when we talk about holograms we are referring to holographic 3D projections that have been composed from creative media industries around Europe, the only type of holograms that interests us are the non-holograms, the pseudoholograms, also known as Fauxlograms (Faux Holograms).

This is basically the category that entertainers, advertisers, entrepreneurs and creative media agencies of the world are implementing almost constantly and the examples of faux hologram's usage vary. From the California Music Festival, Coachella, that brought to life the dead singer Tupac, to the election's night in 2008 in New York that CNN duplicated the political correspondent Jessica Yellin to the OOH advertising campaign in Spain, No Somos Delito (We Are Not A Crime), performed by DDB and many other creative collaborators, the faux holograms are not holograms per se in a scientific way. Nevertheless in the advertising field is almost the dominant technique that is used in order to run campaigns. What's the trick that looks like a hologram and it really is a holographic projection? It's the illusion technique named Pepper's Ghost.

...holograms themselves are so varied in their visual effects, other optical technologies can masquerade or be misidentified as holograms. Despite

the plethora of claims by companies, promoters and bloggers, most of these pseudo-holographic techniques combine elements available long before holograms were invented, albeit combined in innovative ways in new contexts and for new audiences.

The display of three-dimensionality is one of the most widely recognized characteristics of holograms, although not all holograms do so. To confuse matters further, other technologies can produce some of the optical effects characteristic of three-dimensional images (Johnston, 2016, p.215).

In the 1860s, the inventor Henry Dircks made an older Italian optical illusion that manipulated visual effects using glass and light. This process was called “the Dircksian Phantasmagoria”. Although his effect never gained popularity because it was way complicated and expensive, requiring theaters to be completely rebuilt to incorporate the trick, proved itself really helpful in the long run. The same period of time, the English scientist John H. Pepper, was a lecturer at the Royal Polytechnic Institute in London. He came up with an easy way to implement Dirck’s effect in existing theaters using only a sheet of glass. The illusion became popular by the name Pepper’s Ghost.

The first Pepper’s Ghost optical illusion involves placing a large piece of glass at an angle between a brightly lit “stage” room, which viewers look straight ahead, and a hidden room. The glass reflects the hidden room, kept dark, that holds a “ghostly” scene. While the lights in the hidden room are slightly raised to illuminate the scene, the lights in the stage room are slightly dimmed, and the apparition becomes apparent to the audience.

An actor, that was hidden from the audience, dressed in a ghostly costume would stand facing an angled plate of glass. The audience then, would be able to see the glass, but not the actor directly.

The visual trick is often misidentified with the real holograms is Pepper’s Ghost, a spectacular stage effect first seen in Victorian theatre stages. During the optical illusion on stage, an off-stage actor, illuminated by a bright lamp, would be visible to the audience via his reflection in an unseen pane of glass on stage.

Nowadays, a type of extremely high-quality video projection technology can be implemented. This projection technology combines motion capture technology with 3D computer-generated imaging (CGI), “digital doubles” mostly of celebrities and political world leaders can be virtually projected to large crowds by displaying the graphics through a large-scale Pepper’s Ghost contraption (Brienne, 2016).

In addition to Pepper's Ghost there is also the Holographic Optical Element (HOE).

A holographic optical element is an optical device which has a similar effect to a conventional optic, but takes the form of a thin film. We refer to a "holographic" element simply because we use the materials and techniques of conventional image holography to create the product. For example, a dispersive grating as used in a spectrophotometer to divide light from a white source into its separate color components can be made by a mechanical ruling device. It is convenient and very cheap to produce a highly efficient linear grating by laser imaging on a photosensitive material and the manufacturer then also has the opportunity to incorporate the hi-tech "holography" buzz-word in the specification.

Whereas the above-mentioned techniques, when applied to plane mirror optics, do not appear to fall in line closely with Gabor's original concept of the word "hologram", they are all important technical developments which have basically arisen because technologists have exploited his invention and, of course, they all have the common theme that their mode of operation can be defined as "diffraction".

However, there are techniques for 3D imaging which are far more difficult to classify as holograms. But the word "hologram" has captured the imagination of the public to such an extent that "we have" to accept that the following techniques are all frequently labelled as such (Elmorshidy, 2009).

In our century, 3D holographic projection is a fast-growing technology. Especially in creative fields like cinematography, and advertising, 3D hologram and promotion is fast becoming an eye-catching success. Thanks to the latest in HD projection and CGI technology, 3D holographic projection has transformed itself from its basic Victorian origins into a futuristic audio-visual display used by the likes of important brands like Nike, Coco-Cola and BMW. With almost limitless holographic possibilities, from humanlike special effects to projections that are implemented by creative agencies, in combination with the continual advances in technology, 3D holographic projection has a bright future ahead (Elmorshidy, 2009).

The holographic projection technology, is the technique that mostly is implemented in the Out Of Home (OOH) form of advertising¹.

¹ Out-of-home (OOH) advertising or outdoor advertising, also known as out-of-home media or outdoor media, is advertising that reaches the consumers while they are outside their homes. Out-of-home media advertising is focused on marketing to consumers when they are "on the go" in public places, in

According to Mike Pell (2017), advertisers are craving for three-dimensional video for half a century and marketing pundits have been predicting its coming for years. The applications for this technology are virtually limitless. Holographic technology captures the attention of those that see it. 360BrandVision introduces the only systems in the world that can display suspended holograms that can be seen 360 degrees and in any lighting environment for live events and entertainment (Pell, 2017).

1.2 Mixed reality

For *Mixed Reality* (Reality Mixed, *Hybrid Reality*, *MR*), it is intended that type of hybrid reality, where the Reality Augmented and the Reality Alerts are combined in order to create an environment and displays where the digital content co-exist with the physical environment and they can interact with each other in real time. This type of technology is considered as the subsequent evolution of the interaction between man, computer and the external environment, giving possibilities of use that previously were only conceivable in our imagination (Sekjar, 2018).

Reality is defined as set of all that is real and has existence unlike imaginary. Immersive Reality is a path breaking technology which bridges the gap between imagination and reality (Sekjar, 2018).

Virtual Reality (VR), Augmented Reality (AR) and the latest Mixed Reality (MR) together are called as Immersive reality. Immersion in Immersive Reality is a feeling where the person is present physically in a non-physical world (Sekjar, 2018).

As the professor for Image Science, Oliver Grau, suggests, reality will contribute in developing the current businesses and taking the human interaction with content to the next level. There is also an umbrella category that covers all the various forms of computer-altered reality, including: Augmented Reality (AR), Mixed Reality (MR), and Virtual Reality (VR) and is called Extended Reality (XR).

The term “Extended Reality” refers to all real-and-virtual environments generated by computer graphics and wearables.

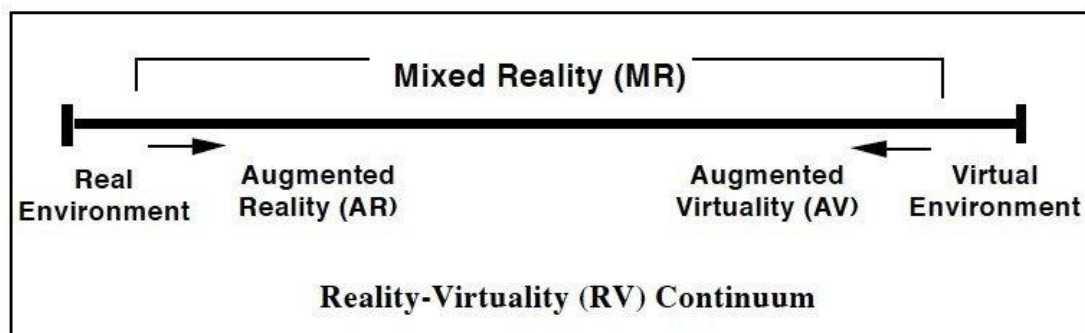
The development of Mixed Reality, has been possible thanks to the expansion and progress in computer visualization, an improvement in the graphic quality of the

transit, waiting, and/or in specific commercial locations, using billboards, stunts, transit advertising, wraps etc.

images, in the display technology, in the input systems, of the *internet of things* and artificial intelligence. It is therefore a new convergence, the last one dates back to 2007 when the convergence of capacitive screens, an improvement of the User Interface and an improvement in internet connections led to the development and creation of the first Smartphone. There are still many doubts about the technology of Mixed Reality. In fact, for many is considered an interactive variant of Augmented Reality, but unlike before, this is not limited to prepend images on a screen or on lens. It has the ability to recognize, read and understand the space where it is used, understand where and what the user is looking at and project digital information or objects that once positioned remain fixed in the chosen point (Rhody, 1998).

The art historian, Oliver Grau was the first to speak, in a theoretical base, of virtual reality, interaction, the art of immersion, and the potential of the combination between creativity and images. Therefore, he practically cleared the path for other researchers to that end. In 1994 in a research conducted by Paul Milgram and Fumio Kishino, "*A Taxonomy of Mixed Reality Visual Display*". In this *paper* are introduced for the first time the mixed reality concepts of *continuum Virtual*. Since 1994 the technology had made steps and the one that is shown in the study to date seems somewhat outdated, but it is a good theoretical basis for understanding this kind of technology. The *Mixed Reality* is presented as the union between the physical world and the virtual, digital one, which constitutes the end poles of the spectrum referred to as *virtuality continuum* (Rhody, 1998).

Image 1. Virtuality Continuum



Interaction between reality and virtuality (1994)

As can be seen from the above image, physical reality is found on the left, while the virtual environment is found on the right. Moving from left to right, immediately after physical reality, we find Augmented Reality, that is all those experiences that superimpose graphics, virtual objects and digital data on the physical world, while continuing to the right, we find virtual reality; that is, the set of experiences that occludes the present, developing another alternative, the digital one. AR is basically a system that fulfills three basic features: a combination of real and virtual worlds, real-time interaction, and accurate 3D registration of virtual and real objects. AR alters one's ongoing perception of a real-world environment, whereas VR replaces entirely the user's real-world environment with a simulated one. As can be seen from the image, the experiences that are positioned between these two poles are identified as mixed realities. Some examples of their use can be, for example, insert a digital object, such as a hologram, in the real world, as if it were really there and interact with it:

- Experiences that represent collaborations between asynchronous colleagues at different times of time;
- Insert in the virtual environment physical limits that are found in the real one. For example, the impossibility of crossing a virtual wall, while having a mixed reality experience.
- Bring the physical world into the virtual world, i.e. the device knows where the user is in space.

There are some devices on the market that allow the user to take advantage of this type of technology. They are divided into, holographic devices and immersive devices. As for the former, these offer the possibility of inserting digital content into the real world and interacting with them just as if they were there. The most striking example is that of *Microsoft HoloLens*, which is characterized by a display that allows the user to see the physical environment that surrounds him while wearing it, has no cable, so who uses it has full freedom of movement (Sartal, Carou, Davim, 2020).

Another device that works through holograms is the *Magic Leap* of the Google house which is still in the prototype phase. As for the second types of devices, that is the immersive ones, we can find, *Project Tango + VR Head Mounted Device*, the Lenovo device, initially scans the space in which it interacts, then inserted inside of a viewer. The user will therefore be immersed in a virtual space, which re-presents the

same limits as the real space that surrounds it, therefore even if completely isolated from reality, the user has the opportunity to move freely in a specific environment (Sartal, Carou, Davim, 2020).

Acer Mixed Reality, unlike the first does not need to insert a mobile device inside. The only limitation is that it needs to be connected to a PC. The device has two front cameras that capture the elements of reality and insert them into the virtual experience (Sartal, Carou, Davim, 2020).

Also, the institution *Research Technavio's Market Research Analyst* in its report, *Global Mixed Reality Market 2017 - 2021*, sees a growing interest in this type of technology and the applications associated, considering the latter as a primary factor in the reality of the market growth mixed together with hardware technology for the creation of it, such as, mixed reality helmets, sensors, detectors' movement, etc. The two together, in 2016, dominated the mixed reality market. As for the regions interested in this type of technology, the United States dominates the global mixed reality market in 2016.

The *MR* has the potential to become an applicable technology in various fields, posing as more comprehensive than the technologies of Reality Augmented and Virtual (Sartal, Carou, Davim, 2020).

The immersion that is caused through the implementation of Virtual and Mixed Reality is undoubtedly a key to any understanding of the development of the media, even though the concept appears somewhat opaque and contradictory. Immersion can be an intellectually stimulating process; however, in the present as in the past, in most cases immersion is mentally absorbing and a process, a change, a passage from one mental state to another. It is characterized by diminishing critical distance to what is shown and increasing emotional involvement in what is happening (Sartal, Carou, Davim, 2020).

So, according to the so-called entrepreneurs and creative's notion that Virtual and Augmented Reality could change the world of marketing and advertising in general through full immersion now more than ever, it doesn't seem realistic, it is actually real. Users and consumers can be part of stories, be transported to an exotic place without leaving their house and interact with products as if they were viewing them in actual reality. This technology contains the sense of full immersion, escapism and, above all, personal experience (Sartal, Carou, Davim, 2020).

Therefore the audience has a good reason to assume that in the next 20 years probably the products themselves “disguised” as holographic projections or located to a 3D screen could talk to the consumers about their own content, purposes and services. We can just imagine how the near future can look like if we reach to the point where ads would actually can speak out explaining why the worth our time, our attention, our money, underline their their selling points, in what they are good for, which is their value, for what reason can be practical or good-to-buy or simply the best customer’s choice. Both the medium and the message of advertising could become actually one in the real time outside of our home or, more futuristically, having them in our own apartment (Sartal, Carou, Davim, 2020).

So many years, in media and communication literature there are many references that underline new technologies, and paradigms that lead us to a “new world”, or to a different, alternative one. In this current world of digital means and immersive technologies, the district lines between the physical and the immersive digital world are becoming more and more vague and generous and the same is applied in the relationship between the consumers and the brands. In a world where the application of mixed reality is something common and mainstream and used by boutique creative agencies on behalf of highly rated clients (at least in the beginning), one could argue that a brand could speak to its audience directly and live without using the channels of TV, radio, social media, or any digital form of persuasion. We could have for example Coca Cola talking to us in the super market as a hologram, as we are shopping or HBO’s series’ characters/protagonists, in flesh and blood, addressing to the viewers in their own living room, outside of the screen.

What twenty or thirty years ago seemed like a science fiction novel or movie, right now is becoming reality. As Kevin Kelly noticed in his book, *What Technology Wants* (2011), *technelogos* is nominally Greek and used to be conceived as art, skill, craft, or craftiness. In the advent of technology, everything that was relevant to it, was considered invisible, hidden and nameless.

Gradually, large systems of technology started behaving like a very primitive organism. Networks, especially electronic networks, exhibited near-biological behavior. Holograms can be considered as a subsequent and yet an extraordinary tech outcome.

1.3 Advertising

In 2002, Richards and Curran defined advertising as a paid, mediated form of communication from an identifiable source, designed to persuade the receiver to take some action, now or in the future. Based on this definition there are five criteria for determining whether a message can be considered as advertising.

First, some person or company has to have paid for the advertising—paid to have the message created and paid for the media time or space into which it is channeled to reach people. Second, advertising is carried via media (mediated) such as iPads, cell phones, television, newspapers, magazines, emails, even social networks such as Facebook and MySpace. Although when someone is talking about the “great new athletic shoes” he just bought or the performance he just saw or the energy service he is using, emphasizing on the benefits of the purchase he did and recommending them to his peers, he is not advertising. He is communicating interpersonally, an activity that the industry calls word-of-mouth or viral advertising (Richards & Curran, 2002).

Advertising travels from a source (i.e., the advertiser) through a medium (e.g., television) to people. And usually that mediation is “mass”; that is, the messages are delivered to a large group of people. Also, computers and the World Wide Web (Internet) have made it possible to send out “mass” messages that mimic individual messages. But because they are “mass,” it is considered to be advertising. Third, a general concept of communication is meanings that pass from source to receiver through the use of mutually understood signs, symbols, and semiotic rules. Advertising communications are way more complex, cross disciplined and advanced than that. They are usually carefully designed to have desired specific impacts on receivers. The complexity of these communications is endless. There’s always a new way to communicate a brand or idea (Richards & Curran, 2002).

Fourth, there is the source. Almost all advertising tells the receiver where the message came from, although the source identification is not always as clear as might be desired. Advertising is persuasive in its roots. The exact persuasive intent may vary, but the reason the source paid to have that advertisement reach the consumer is to inform them about something, raising awareness, to persuade them to act (using

calls to action) or to change their behavior and finally, to make them experience emotions that lead the audience to feel good about a brand or an idea and want to acquire it, learn more about it, identify themselves through it.

As far as holograms concerned, the majority of their application in advertising is being executed, using outdoor displays. Outdoor displays or Out of Home advertising is the oldest form of advertising; such signs have been found in the ruins of Pompeii and in medieval towns throughout Europe. The term ‘outdoor advertising’ covers a number of different types of advertising: billboards, posters, advertising on street furniture such as litter bins and bus shelters, posters on the sides of buses and taxis, posters inside buses and trains, and even airships, blimps and hot-air balloons (Kotler & Keller, 2009).

A relatively recent development in outdoor advertising is ambient advertising, in which the medium becomes the message. Ambient adverts become part of the environment, creating an impact much greater than that of a simple poster or billboard. They become one with the elements they want to use to transmit their “message”. They are lateral forms of outdoor advertising, as the public passes by them, sometimes without noticing the ads. They can be found in metro stairs, in the facades of buildings, in pedestrian’s crossings etc. Billboards, on the contrary, are the most ubiquitous and obtrusive of outdoor advertising media. Billboards can be found in front of cities, on the sides of buildings, by the sides of main roads, and even mounted on trailers and towed through the streets (Kotler & Keller, 2009).

What is called “ambient advertising” is referred to the placement of ads on unusual places where someone wouldn’t expect to find them. Such places are roads, avenues, bus shelters, tunnels, metro, train stations, airports. Apart from the objectives of an integrated campaign, the relationship between the ambient medium being used, the advertised product or service, and the proximity to the point of sale are very important points to be considered when an ad agency is preparing ambient advertising (Kotler & Keller, 2009).

Ambient advertising makes the message become part of the surrounding environment in which the consumer operates. In ambient advertising, the medium becomes the message. Therefore, ambient advertising works best when it is either close to the point of purchase or close to the location of the problem (Foxall & Goldsmith, 1994).

Environmental stimuli is an important factor in consumers' decision-making processes right up to the point of purchase. Being nudged by appropriately placed advertising stimuli close to the point of sale can enhance the probability of purchase. Consumers tend to exhibit little pre-purchase decision making for low involvement products (Foxall & Goldsmith, 1994).

Billboard advertising is widely used during political campaigns because the posters can be changed quickly as different political issues come to the forefront of the debate. OOH advertising has the advantage of high visibility and permanence, so that a commuter would be able to note down an interesting web address, or would be sensitised to a print advert in a magazine or newspaper (Foxall & Goldsmith, 1994).

Billboards often work best as reminders of campaigns run in other media, and therefore they have a strong role in an integrated communications strategy (Foxall & Goldsmith, 1994).

1.4 Marketing

Marketing is the term given to those activities that occur at the interface between the organisation and its customers (Kotler & Keller, 2009). Marketing derives from the original concept of a marketplace, where buyers and sellers would come together to conduct transactions (or exchanges) for their mutual benefit. The aim of marketing as a discipline is to ensure that customers will conduct exchanges with the marketer's organization, rather than with the other 'stallholders'. To do this effectively, marketers must provide those customers with what they want to buy, at prices which represent value for money (Kotler & Keller, 2009). The two most widely used definitions of marketing are the above:

According to the UK Chartered Institute of Marketing (CIM), marketing is the management process which identifies, anticipates, and supplies customer requirements efficiently and profitably.

On the other hand, the American Marketing Association (AMA) argues that marketing is the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchange and satisfy individual and organizational objectives (Grönroos, 1994).

Both the CIM and the AMA definitions of marketing, despite their popular usage, are increasingly being criticised as failing to reflect the role and the reality of the marketing occurring in the 21st century. Some criticism concerns the increasing importance of the globalization of business and the focus on customer retention, relationship building and maintenance that characterizes many markets (Grönroos, 1994).

A definition that includes the important elements of both the AMA and CIM definitions, but still embraces the evolving relationship orientation, is offered by Grönroos (1994):

Marketing as a process and sector intends to establish, maintain and enhance relationships with customers and other partners, at a profit, so that the objectives of the parties involved are met. This is achieved by mutual exchange and fulfillment of promises (Grönroos, 1994, p.138).

Nonetheless, marketing is often and more simply defined by the commonly used “marketing mix”, which is made up of four components, called the “4 Ps”. The “4 Ps” are the Product, the Price, the Place, and the Promotion (Barry, 2016).

This definition’s clarification was important for this Dissertation paper, in order to distinguish not only the different terms but also the different meanings among advertising and marketing, as they are usually being confused.

An interesting “genre” of marketing for this paper, is experiential marketing. Experiential marketing is the process of identifying and satisfying customer needs and aspirations in a profitable way, by engaging them through a two-way communication that brings brand personalities to life and add value to the target audience.

In experiential marketing an integrated methodology is used. The engagement of target audiences at their will is required, through brand-relevant experiences that add value. An experiential marketing campaign involves a two-way communication between the brand and the target audience in real time. Also this is called a live brand experience that is usually found at the core of an experiential campaign (Smilansky, 2009).

Live brand experiences are apparent in the form of live events that give the consumer the opportunity to experience the brand through interactive sensory connections and activities. The activities are designed to add value to target audiences in their own environments, during their natural existence. There are two main approaches a marketer can take when promoting a brand. They can either advertise the products in a mass-market without any kind of targeting, or they can focus their marketing campaign towards a certain population, target group, demographic (Smith, K. & Hanover, 2016).

A very commonly used acronym in marketing, is AIDA. It describes a process that marketers aim to take the consumer through when promoting a product or a service.

The AIDA stand for: Awareness, which means the attention or awareness of the customer, Interest, in terms of the increase of consumer’s interest, Desire: a lateral way to convince customers that they do want or need the product or service and that will eventually satisfy their needs, and Action which refers to the ultimate important marketing stage that actually leads customers towards a purchase (Smilansky, 2009).

Live brand experiences, especially when integrated into a broader experiential marketing campaign, can be effective for achieving each of the AIDA stages:

Live brand experiences can be used in the I stage of AIDA, to create Interest by engaging consumers, not only demonstrating features, advantages and benefits of a product, but more importantly interacting with the target audience through brand-relevant engagement. In fact, what better way to stimulate interest and convey a brand personality or message than to allow consumers to immerse themselves in the essence of the brand as well as to try the product, play around with it, eat it, drink it, touch it or press it? It does not matter what the product is; If you can get its core brand values into the everyday lives of your target audience through pleasant interaction, and at the same time engage them and let them try it, then you can truly demonstrate your brand positioning, and your USPs, converting a customer into an advocate. Likewise, you can also use live brand experiences at the D stage in AIDA, to provoke Desire by creating experiences that communicate (Smilansky, 2009, p.15-16).

Advertising and marketing activities can be broadly classified into two categories, the ATL, which means Above the Line (mass market) and the BTL that stands for Below the Line (targeted market). The line was originally used to separate marketing activities which had mass penetration (above the line) to those which had specific penetration (below the line) (Smith, K. & Hanover, 2016).

ATL can be considered as a form of traditional marketing in which the advertisers use print advertising (newspapers, magazines), radio, TV, outdoor advertising. In BTL products and services are promoted through direct mails, tailor-made messages and also targeted search engine marketing (use off demographics). This process is executed by sponsorships, events, trade shows and presentations, in-store marketing and generally brand activation (Smith, K. & Hanover, 2016).

On the other hand, Through the Line (TTL) advertising requires the use of both ATL & BTL marketing strategies. In this case, a more integrated approach is implemented. The advertisers create 360-degree campaigns² as part of brand building and generate conversions (Smith, K. & Hanover, 2016).

² A 360-marketing campaign is an integrated holistic campaign with focused messaging spread across multiple channels of customer contact. These are tv, radio, social media, email, digital form, print form, internet, PR planning, and events (Barry, 2016).

Chapter two: Holograms and advertising

2.1 The role of holograms in advertising

The unsuspecting consumer could walk the streets of Copenhagen and suddenly see a guy come out in front of him, illustrating the benefits of the last fizzy drink on the market. Just enough time to grab the can to realize that it is actually a hologram and while the can continues to floating suspended in the air but the thirst remains. The technology already mentioned is the Free Format developed by the Danish creators of the ViZoo. At this point the impatient customer walks in a hurry to take the metro but come on escalators turns out that there is no peace even there: advertising that walks is a reality since the Mirage Motion has patented the "pedestrian motion panel". He stays still and the spot as well, he moves and it follows him, it is the advertisement that walks with him. It is a spot composed of 3 adjacent posters that exploit the effect of the persistence of vision: what are 3 distinct images are perceived as an uninterrupted spot of 5 seconds, due to the fact that they are observed in motion, it exploits the optical phenomenon the persistence of vision. As he passes by, he can perceive the three images without interruption, as if it were a commercial, but in reality, the images are still and he is the one who moves.

Many researchers (Bayon et al., 2003, Ryu & Lee, 2016, Thange et al., 2016) have highlighted the role of holograms in advertising. For example, Ramlie et al. (2016), who conducted a survey in 100 advertisers in Malaysia about the role of 2D and 3D holograms in advertising, concluded that advertisers use holograms because they are impressive and as a result they increase the effectiveness of an advertisement. For instance, in Ramlie et al. (2016) research the majority of the advertisers agreed that holograms make consumers memorize the advertising messages and recall the products in their memories.

In addition, holograms have the power to create a memorable and unique user experience. This is because individuals tend to feel immersed by the mixed reality and they lose the time and space. Thus, researchers (Byon et al., 2003, Ryu & Lee, 2016) argue that holograms in advertising constitute an innovative way that help advertisers to develop eye-catching display ads.

Elmorshidy (2010), who explored the role of 3D holographic projection in advertising, concluded that this type of technology gives to advertisers the opportunity to stand out from the competition. In addition, in his article the researcher predicts that the 3D holographic projection technology is the future of advertising. More and more companies are going to use holographic projection technology in their future advertisements due to its' benefits such as the authenticity, believability, and apparency in advertising and marketing of products (Byon et al., 2003).

The fact that more and more companies are going to use hologram advertising in the future is also supported by the Global Holographic Display Market Research report. Based on the report's data the holographic display market is projected to grow to USD 7.601 billion by 2023.

We should not be surprised, not even, if we see Bill Gates appear before our eyes, offering us his latest operating system; as has happened to the participants at the World Congress on Information Technology in Kuala Lumpur, Malaysia, they were able to enjoy the appearance of William H. Gates III: Microsoft founder and chairman outgoing company has visited them in the form of hologram. A hologram, the chronicles tell, appeared in the middle of the stage of the event thanks to a technology now quite known, which combines a high definition projection with the installation on site of a sheet of polymers and guarantees the appearance. Gates' image had been pre-recorded in Redmond, where Microsoft is based, and was then deployed locally by a company specializing in entertainment technologies.

2.2 Why advertisers use holograms?

Holographic advertising is a modern form of advertising, which utilizes holographic pictures, and provides marketers with augmented reality solutions as they give them the opportunity to create a new medium of message delivery to consumers. Holographic images are the evolution of traditional TV images and 2D posters as they are three-dimensional objects which have the power to enhance the consumers' vision of the products. As a result, holographic advertisements intensify the way that consumers connected with the branded content (Khairulnizam et al., 2016).

This is why holographic ads are widely used in many industries. For example, when holographic ads are used by the automotive industry give to the client the opportunity to interact with the ads. Augmented automobile industry websites allow consumers not only to see the cars but also to view the cars from many different angles. Customers can inspect the inside spaces of the cars and explore the inner cabin from the comfort of their houses (Khairulnizam et al., 2016). Thus researchers (Khairulnizam et al., 2016, Elmorshidy, 2010) claim that holographic advertising is a completely new approach of advertising which gives birth to the objects and deliver effective and enriched messages.

Advertisers use holograms due to their benefits. For example, Elmorshidy (2010) explains that holograms due to the high-resolution images provoke excitement and enthusiasm to the consumers. This is because holography can provide human cues of stereopsis, motion parallax and ocular accommodation. As a result, holograms have the power to improve not only the realistic production but also the efficiency of the 3D advertising (Elmorshidy, 2010).

In addition, Ryan (2009) argued that due to the autostereoscopy, holograms can be viewed without the use of equipment. This is a revolution that holograms brought to life in comparison to 3D advertising. Unlike to holograms, the 3D advertising can be experienced only with the use of the adequate equipment. Thus, Ryan (2009) supported the view that holograms is a revolutionary type of advertising that allow people to experience the objects without disruptive constraints such as the 3D equipment. As a result, holograms give birth to interactive objects and make the advertisements more entertaining and realistic.

Another benefit of the hologram advertising is that it has the capacity to provide data storage. As a result, holograms can record and generate multiple images

by utilizing the light. This is the difference between hologram and linear advertising. Other researchers (Jung et al., 2016, Tange et al., 2016) have highlighted other benefits of holograms. For example, hologram advertising can show the features of the products better compared to other traditional forms of advertising. For instance, the customer can observe the object from different perspectives with the aim of the lighting. In addition, holograms have the power to create a luxury image of the products and thus many global luxury brands (luxury jewelry's, luxury cars) use holograms in advertising to boost their products' image (Jung et al., 2016).

Furthermore, holograms are entertaining. Thus, retailers use holograms in order to attract more people in the malls and shops. Due to the fact that holograms create unique and unforgettable experiences to the customers have been associated with the field of the experience marketing. The advent of new technologies has been instrumental in changing market logic and in meeting consumer needs. In fact, as new types of technologies are invented, the demand for experiences from consumers also changes, which, now, can live them both physically and virtually thanks to the advent of virtual, augmented and mixed reality (Cai et al., 2013).

Another great possibility, that holograms give to advertisers, is the holopresence. Advertisers are able to create holographic images of famous persons and they can use them as projections in their advertisements. When advertisers use such images the only thing that they have to do is to digitalize the reactions of the famous persons (how he behaves, interacts or speak). This can help advertisers to reduce the costs of the campaigns where famous persons participate. For example, advertisers, do not need to spend money on endless TV shootings as with the aim of holograms they have the perfect cut. Other researchers and field experts argue that holograms are very useful when an advertisement aims at raising awareness of a product. In addition, holograms are used in many marketing and advertising events due to the fact that they attract the peoples' attention (Hall, 2011).

Researchers also discussed on holograms in the light of holographic meta-marketing theory. They use holograms to explain the way that they have changed the customers' behavior and how consumers stay loyal to a brand. Holograms increase brand loyalty. With the use of holograms is much easier for companies to persuade consumers to stay loyal to a brand due to the opportunities that they offer to them. For example, mixed reality websites of shoes retailers give to the consumers the

opportunity to try as many shoes as they want without leaving the comfort of their homes (Hall, 2011).

In addition, such websites allow consumers to create their own personalized pair of shoes in the holosphere. Such a practice, decrease the time, that consumers spend when they look for products, which match perfect to their needs. As a result, websites which use such practices, have the opportunity to reap the innovative benefits of holographic advertising earlier from their competitors and to stand out in the competitive market.

Furthermore, holographic advertising urges consumers to switch from the competitors' brands to other brands. When consumers come in touch with an innovative holographic advertising is easy for them to switch from a brand to another more alluring one (Hall, 2011).

Last but not least, holograms increase the interaction between the consumers and the brand. This is particular important when a consumer seek information for a brand. Holograms do not provide consumers with traditional information (e.g. linear texts and images). On the contrary holograms are alluring and interactive objects which influence the consumers' feelings. This make consumers to change their perceptions towards a brand. Also, research findings have shown that holograms urge consumers to stay loyal to a brand even if they have to pay higher costs due to the emotional attachment that they develop with the holograms. Emotional risks are higher compared to economic risks when consumers have to decide whether to stay loyal to a brand (Thange et al., 2011).

Fashion industry is among the industries that use hologram technology in advertising due to the benefits. For example, fashion industry use holograms to the fashion shows and also to the fashion stores by using windows and screens. Such practices make advertisements more alluring and eye-catching. In addition, fashion industry uses holograms because they enhance the image of the fashion products. In addition, fashion industry uses holograms when there is a need for new product development as holograms assist advertisers to create strong brand names (Jeong, 2016). Jeong (2016) also argued that foreign fashion brands combine hologram technology with the mobile technology to create 2D and 3D branding content. Such a practice helps fashion marketers to create strong online content of their brands and to satisfy consumers by using their five senses.

In their book, called “Digital Advertising: Theory And Research”, Shelly Rodgers and Esther Thorson, claim that we have entered a new age in which advertising is getting more and more interactive and personalized to consumers. Due to advances in technology, users tend to engage differently in their media environment. This is where advertisers find their opportunities and challenges at the same time in developing the relationships between brands and consumers.

The Internet and other interactive technologies, make it possible to create interactive ads, which are more targeted than those in the past, and more personal. The advertising as a creative and multimedia field has become an experience in which the consumer, the audience participates and is engaged (Rodgers & Thorson, 2017).

Furthermore, based on the insightful case study called “Holograms: The Future of Experiential Marketing” made by Yondr, an immersive media agency in Antwerp, Belgium, “we are living in the age of experience and nothing has a wow factor quite like holographic technology”. Yondr argues that brands are becoming aware of the power of immersive 3D holograms in reaching out and forming stronger relationships with their customers like never before. Also, they underline five reasons that explain why brands need to include holograms in their marketing strategy (Dosselaer, 2019).

First reason is that holographic technology has come of age. Secondly they argue that tomorrow’s consumers respond best to immersive, interactive experiences. Generation Z (those born between the mid-1990s and the mid-2000s) has a keen interest in interactive narratives and are highly receptive to immersive experiences such as holograms.

Third reason is the fact that today’s holographic tech is endlessly adaptable, fourth is that holograms have a mass market appeal. According to Yondr, holograms help agencies and brands capture and extend consumer attention.

Finally, as a fifth reason they claim that holographic technology has the ability to help agencies and brands attract consumer’s attention and communicate their message more effectively, offering an immersive “brand” new experience.

2.3 The effects of mixed reality on the relationships developed between the customers and the brands

New technologies have changed the way that consumers interact with the brands. In the era of mixed reality ads are more personalized in order to fit to consumers' needs. In this context, holograms have influenced the consumers and the brands' relationships in a positive way (Brown, Jones & Wang, 2016).

Mixed reality and holograms created new opportunities of consumers' engagement. This is because holograms have the power to provoke strong emotions to the consumers. According to researchers (Alvarez & Fournier, 2016, da Motta et al., 2018) emotions play a pivotal role to consumers' emotional attachment to a brand. In addition, consumers, who are attached to a brand are more loyal, and they make repetitive purchases. Holograms allow advertisers to create strong brands through an unforgettable emotional experience (Brown, Jones & Wang, 2016).

Furthermore, many researchers (Alvarer & Fournier, 2016, Trump, 2014) have concluded that the most basic elements, that define the consumers emotions, are: the connection and the loyalty. Holograms can offer both elements to the consumers due to the fact that they promote a strong brand personality. Many researchers have highlighted that a strong brand personality influences how the consumers feel about the brands. High resolution images of holograms are the most representative example of ads that can provoke strong feelings to the consumers (Trump, 2014).

The paradigm of Kit Kat, which is being analyzed in the next chapter of the Dissertation, is a key example of how brands strengthen their relationships with the consumers by using holograms. As analyzed in the next chapter, global brand Kit Kat used hologram ads in order to strengthen its' relationships with the young audience. With the aim of the ad Kit Kat managed to remind to the young consumers the basic brand philosophy which is the positive way of thinking and acting (Khairulnizam et al., 2016).

Advertisers, who use hologram ads, need to be capable of generated strong brand stories except from strong brand images. Brand stories tell the story of a brand in a meaningful and creative way. A good brand story has a great impact on consumers' experiences. Thus, hologram ads should be accompanied by strong stories. Hologram stories can fascinate consumers and as a result make them to remember the brand. This is particular important when a brand is new to the market

and it aspires to create awareness. But this is also important to the brands which aim at increasing the recall rate of the brands in the consumers' mind. Positive brand stories create positive consumers attitudes towards the brands. In addition, positive brand stories increase the positive relationships between the brands and the consumers. Consumers feel more positive towards brands which tell valuable stories (Patwardhan & Balasubramanian, 2013).

A theory that can explain the relationships, that holograms create between the brands and the consumers, is the brand attachment theory. According to this theory the two key factors that can provoke strong brand attachment is familiarity and responsiveness. These two factors can be integrated into the hologram ads. Hologram ads can create a sense of familiarity to the consumers as they allow them to observe the objects from different angles. In addition, hologram ads look like real objects and this increases the consumers' familiarity with the brands. Furthermore, hologram ads fulfil the excitement and stimulation needs of the consumers (Patwardhan & Balasubramanian, 2013).

According to brand attachment theory positive brand attachment, which can be cultivated by strong brands, can provoke positive consumers' attitudes towards the brand. As a result, based on the brand attachment theory the emotional attachment to an object can predict the nature of the consumers' interaction with the object. Many holograms give to the object human characteristics and thus sounds reasonable that they can create strong consumers' attachment to brands that they represent. This is more clear, if someone take into consideration that the brand attachment theory has its' roots in the interpersonal relationships theories. As happens in the interpersonal relationships (when a human has positive personality characteristics tend to be sympathized by the other human beings) the same happen with the brands. The brands' positive characteristics make them likeable to the consumers (Levy & Hino, 2016).

The Coca Cola paradigm, which is analyzed in the next chapter, proves the aforementioned statement. More specifically, Coca Cola with the Artic Home campaign managed not only to raise awareness about the major matter of polar bears but also to raise funds for WWF. Coca Cola made more favorable to the consumers both its' brand and the WWF brand. As a result, Coca Cola increased its' sales and WWF raised more than 2 million dollars from consumers' funds.

To conclude, mixed relation has changed the consumers and brands interactions. The alluring and fascinating hologram objects allow consumers to experience a unique reality. Thus, consumers develop strong bonds with the holograms' brands. This bonds lead to brand attachment. Brand attachment on its' turn lead to positive attitudes towards the brand and as a result to high brand recall rate and increased sales.

2.4 Case studies of brands which use holograms

In this section of the dissertation are presented some case studies of brands which implemented holograms in their strategy.

2.4.1 Nike holographic ads

Nike is one brand, which since 2013 have been used holograms in advertising. More specifically, the global brand in 2013 launched holographic display ads in Amsterdam. Nike used this type of ads in order to advertise its' footwear products by exploiting the benefits of the 3D modeling. According to Nike advertising specialists' hologram ads are the perfect solution for their products as they allow them to grasp the consumers' attention. The holographic advertising of the global brand, which promoted the sneakers of the company, is consisted of a holocube³ which show a hologram of the sneakers free moving. With this ad the advertising specialists aim at leading the consumers' attention on the flexibility of the Nike shoes. This is the key feature of the company's shoe products. The holographic display ad allows consumers to see the sneaker models from different angles and sides.

The way, that Nike chose to use holograms in its' advertising efforts, is successful based on the literature review. More specifically, as it was preferred according to Elmorshidy (2010) global companies tend to use holograms in their ads in order to provoke excitement and enthusiasm to the consumers. Specifically, holograms high resolution images, such as the Nike's hologram images, provide human cues of stereopsis, motion parallax and ocular accommodation (Elmorshidy, 2010).

Furthermore, the paradigm of Nike has been studied in the international literature by Jeong (2016). The researcher concluded that fashion brands use holograms to enrich the image of their products.

³ The company's holocube constitutes a 3D projection platform. This platform presents a virtual model of Nike sneakers from different angles and make consumers believe that this a real object. The advertising is really alluring with the aim of the holocube. This is because the Nike's holocube has high resolution (1080i resolution) which make the sneakers seem like being enormous and real objects (Genuth, 2020).

Image 2. Nike holographic ad



Published at digitalsignagetoday.com, (2013)

2.4.2 Burberry's holographic show

Burberry used holograms as part of a show that took place in Beijing. According to Jeong (2016) revolutionary fashion brands tend to use holograms in their catwalks and shows in order to promote to the audience an enriched brand image. As commented above, holograms have the power to create a luxury image of the products and thus many global luxury brands (luxury jewelry's, cars) use holograms in order to boost their products' image.

Image 3. Burberry catwalk



Published at Concrete Playground, (2010)

By taking into consideration the aforementioned benefits of the holograms Burberry's specialists made a show for the opening of its' new store in Beijing. The show broadcasting through television. The global fashion brands used real models and holograms of models which parade together into the catwalk.

By doing this the global brand managed to create an unforgettable experience to its audience. Burberry is an iconic British brand which is associated in the consumers' mind with the authenticity. Based on the literature review, holograms can promote authenticity, believability, and appearance when used in advertising or shows (Elmorshidy, 2010). Thus, Burberry, chose the holograms of its' models in order to enrich the brand image and value by promoting its' authentic side.

2.4.3Coca Cola and WWF collaboration on “Artic Home campaign”

In 2013, Coca Cola cooperated with WWF in order to produce a holographic ad for the protection of the polar bears. The two organizations aimed at creating a campaign which will raise the public awareness of the issue of the polar bears. The name of the campaign is known as “Artic Home campaign”. The two global brands managed to deliver holographic images of their campaign to several locations of the Helsinki. The campaign run to the television and the social media.

In addition, the holographic ad was placed in many shopping centers after the cooperation with the store managers. The results of the campaign reveal its success. More specifically, after four weeks of the launch of the “Artic Home campaign” the Coca Cola’s sales increased by 20%. More than 300 people who visited the stores came closer to observe the holographic objects from a distance of 50 cm. The average watching time of the animation was 3,1 seconds. Finally, the campaign managed to create 2 million dollars in donations to WWF. The campaign was a great opportunity for Coca Cola in order to promote its positive philosophy about the life. In addition, through this particular campaign, Coca Cola promoted its brand image as a sustainable brand (WWF, 2013).

Image 4. Coca Cola in store holographic campaign



Published at WWF, (2013)

Taking into consideration the Coca Cola paradigm, it can be concluded that hologram campaign has many benefits for the global brands included economic benefits and benefits related to their brand image and value. In addition, the Coca Cola campaign indicates that global brands can take advantage of the power of the holograms in order to promote effective and impactful messages about global sustainability issues such as the protection of the polar bears. This is why Khairulnizam et al. (2016) highlighted that holographic advertising intensifies the way that consumers connected with the branded content (Khairulnizam et al., 2016). Furthermore, this is why Elmorshidy (2010) concluded that 3D holographic projection technology is the future of advertising. More and more companies are going to use holographic projection technology in their future advertisements due to its' benefits (Elmorshidy, 2010).

2.4.4 Kit Kat holographic ads

In 2015, Kit Kat launched a hologram ad in Japan. The aim of the campaign was to increase online engagement offline sales. Kit Kat is an innovative brand and the hologram campaign proves this innovation which results in long-lasting relationships with its consumers. The global brand design the ad in order to be compatible with smart phone devices. The target market of the ad was the young audience of the brand and especially students. The students, who bought a kit Kat product, had the opportunity to scan the QR code and to move to the Youtube video channel. There, they could watch of a famous Japanese band. The global brand collaborated with the famous Japanese band, called DISH, and created a unique song called “Believe in yourself”. At this point, it is important to say that in the Japanese market Kit Kat is a brand, which is associated with the success and the good luck. In Japanese, Kit Kat sounds like “kitto katsu”, which means “you are sure to succeed” or more literally translated as “surely win”. As such, the chocolate snack has long been considered a good luck charm in Japan and the brand has taken full advantage of this cultural connection with great success. Thus, with the hologram campaign the global brand aimed at strengthen its’ brand image online (Mba-group.com., 2016).

Image 5. Kit Kat holographic ad in Japan



Published at Mba-group.com., (2016)

The “Kit Mail” campaign in Japan proves what international researchers claim about the role of holograms in advertising. More specifically, Thange et al. (2016) argued that holograms increase the interaction between the consumers and the brand.

Kit Kat successful paradigm of hologram advertising proves that consumers create an interactive relationship with the consumers. This make consumers to stay loyal to the brand. In addition, Kit Kat hologram ad in Japan managed to provoke strong feelings of enthusiasm to the young consumers.

2.4.5Porsche's holographic ads

In 2016, Porsche created a hologram ad for the car model 911. Porsche is a global car manufacturer which invests in innovative ads. The company's high-tech philosophy is the following "print isn't dead, only needing a technological CPR". Based on its' innovative philosophy the global car maker created a hologram ad which consisted of a prism that allow users to witness the automobile as a hologram when placed on a mobile device. Porsche in collaboration with C-K managed to create more 150,000 prisms including 100,000 glass versions which distributed to consumers via mail (Carscoops, 2020).

Image 6. Porsche holographic ad



Published at Carscoops, (2016)

In addition, the global car manufacturer uses hologram objects in its' global website. The way, that Porsche uses holograms has been discussed in the international literature. For example, Kaist (2017) argued that augmented automobile industry websites allow consumers not only to see the cars but also to view the cars from many different angles. This practice allows global automotive companies to create strong

emotions to their clients and to gain their loyalty. For example, as Kaist (2017) argues, today the customers of the automotive industry are able to inspect the inside spaces of the cars and explore the inner cabin from the comfort of their houses (Kaist, 2017).

2.4.6 Human Monuments in Brussels

The Human Monuments campaign was originally inspired by the insight that Brussels is only the 12th most popular European city among tourists. This was due to strong competition from the increasing touristic interest on Paris, Amsterdam and London, and the terror attacks of 2016 and 2017.

In order to encourage and empower city's tourism, the train company Thalys and the creative ad French agency Rosapark sought to promote the city by putting its residents on a pedestal.

Thalys and Rosapark collaborated and set up a "Holobooth" on the Mont des Arts in the heart of Brussels, a futuristic photo booth that captured a full, 360-degree likeness of a person and rendered them in holographic form in two minutes to create the five-meter high silhouettes.

Image 7: Human Monuments



Published at Thedrum (2018)

During the three-day installation, the agency rendered over 500 statues. The Thalys brand created an immersive and engaging experience for the tourists, insinuating that they had to visit Brussels to truly understand the city. The concept

that the citizens of Brussels are or can be its living statues, although of ephemeral and participatory nature, encouraged physical visitation. According to Pine and Gilmore (1999), companies need to create an experience that first gains potential customers' attention, then gets them to spend time experiencing their offerings and finally causes them to spend their money by buying (literally or laterally) those offerings. They claimed that the experience is the marketing, so companies must stage marketing experiences, experiences that do the job of marketing by generating demand for their core offerings. And this is what the train company accomplished in this case.

2.4.7 Holograms For Freedom or “We Are Not A Crime”

In this particular case study of this successful, immersive and jaw dropping campaign one could argue that the medium sometimes can be the message in advertising.

In March of 2015, the Spanish Government approved the Gag Law (also known in Spanish as La Ley Mordaza), despite criticism from the UN and the rejection by over 80% of the population. The new law violated the right of freedom of speech and expression, prohibiting unauthorized protests and demonstrations in front of the Congress in Madrid, as well as the holding of assemblies in public places, and the participation in a protest without previous notice. The fines back then were up to 600.000 euros.

Image 8: Holograms for Freedom



Published at NewYorker (2015).

Faced with this reality, the NGO, No Somos Delito (We Are Not A Crime) assigned its brief to the creative advertising agency, DDB Spain, which with the collaboration with many production companies (Garlic.Tv, Antiloop Studio, 20 Hungaros, Paraddax, La Livingston etc) decided to protest in front of Congress in the only way the law allowed them to: by turning into holograms.

The main object was to get the Gang Law repealed. In that notion, the citizens' platform, No Somos Delito, aimed to show the entire world what the Spanish people of the future face if this law finally was to be applied in the summer of 2015. To do so, they orchestrated the first hologram protest in the history. During the two weeks prior to the protest, people from all around the world became part of a ground breaking first time ever political protest.

The protesters/ participants had to upload their shouts, their proclamations and their faces on the hologramsfreedom.org website. They could also sign out petition on Avaaz.org, the nonprofit petition platform where they ask for the respect of the law. Finally, on April 2015, 17.857 holograms protested in front of the Spanish Congress.

This event gave a stand and a voice for public protest when physical demonstrations were prohibited; in evoking the proscribed physical protests. Also, questions like who has the right to occupy and use space socially and politically, emerged thanks to this protest campaign.

It was the first protest in the history reached out to the millions, the international media too took an interest in it and it became a matter of conversation all over the world. It was argued that even the holograms have more right than the living beings.

Finally, the movement reached the Congress, and the Gag Law was subsequently removed. It was an advertising campaign that had not only democratically political effects but it formed almost a way of new way of thinking about creativeness in advertising and experiential marketing.

Finally, the movement “No Somos Delito” against the Gag Law, made up of over 100 social justice, political opposition, and human rights groups, sought to raise awareness of the new restrictions and repeal the bill.

Holograms for Freedom in 2015 was a memorable, experiential OOH campaign and was orchestrated in detail. It also won all the prestigious ad awards there are, Clio, D&AD, Cannes Lions, Bill Bernbach, CdeC, etc. For the advertisers was a total success and a great solution to a problem, but it was really a turning point not only for the industry, but for the social studies too. If someone can substitute real persons, real protestants, people with identities, who exist, and have names, with holograms in a real time and place, then this is what feels like to “be” in the future.

In Experience Economy, Pine and Gilmore refer to Rolf Jensen of The Copenhagen Institute for Future Studies who published *The Dream Society* in 1999). Jensen had asked, “What comes after the Information Society?” and he himself answered “the Dream Society”. He said, “It’s a new society in which businesses, communities, and people as individuals will thrive on the basis of their stories, not just on data and information”.

2.4.8 Carlsberg’s Founder TEDx Talk

On August 23d, 2017 Jacobsen, the founder of the Carlsberg Group, took the stage at the TEDx Copenhagen event at the New Carlsberg Glyptotek in Copenhagen, under the theme of ‘Trust Uncertainty’. He made a speech, sharing his life philosophy and personal culture. It seems usual for an entrepreneur to deliver this kind of speech in a public appearance like that but the truth is that Jacobsen is dead.

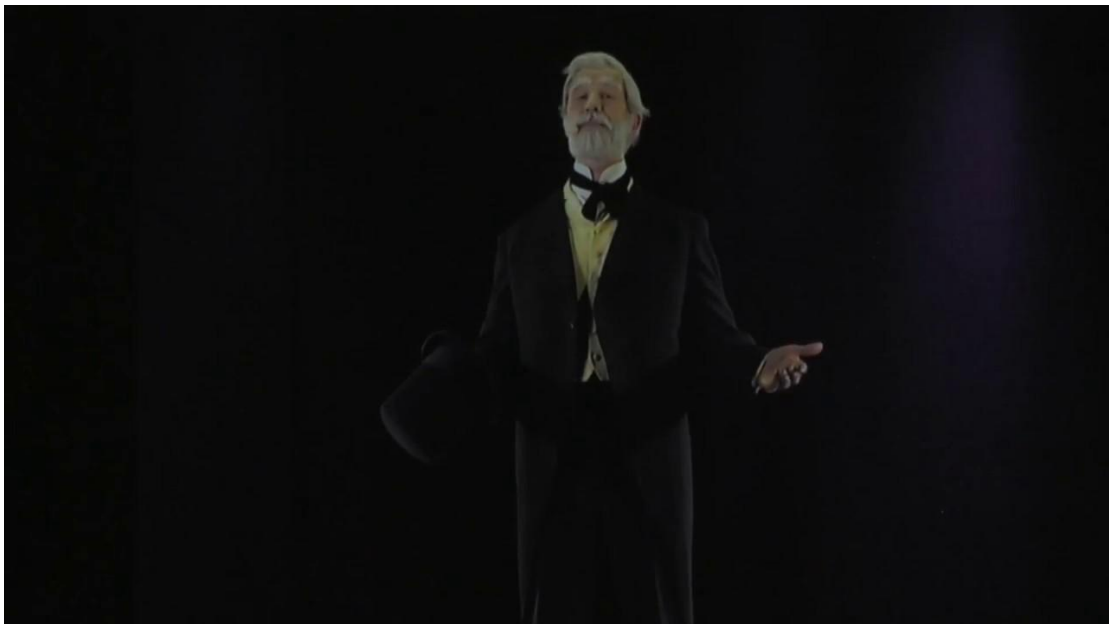
In order to celebrate its 170th anniversary, Carlsberg Group revived their founder, and let him share his view on life.

The ‘Probably TEDx’ campaign, from strategy, planning, the original insight to the film and the event over the speech, the holographic time travelling and the connectivity content plan that goes with it, was conceived and orchestrated by the Belgian creative agency, Happiness, an FCB Alliance.

According to Happiness, consumers increasingly prefer authentic brands over the glitter and glamour of big international brands. This phenomenon has led to a lot of brands returning to their roots and to the revelation of heritage campaigns. Most of those campaigns however are filled with nostalgia. It leaves people looking back. And that is the reason why, according to Drum, Carlsberg decided not to run a nostalgic heritage campaign (Prezly, 2010).

The brand of Carlsberg intended to reflect the spirit and the culture of its founder in order to create a form of nostalgia, to make them look forward to values and a style of life that is still relevant, albeit originated from the past.

Image 9: Carlsberg’s Founder back from the dead speech



Published at: happiness-brussels.prezly, (2017)

“In collaboration with MDH Hologram, the original and leading company within the live hologram technology, Happiness brought J. C. Jacobsen to life,

allowing him to interact live with the audience”, mentions the advertising agency, Happiness.

Events like this, resonate with Abraham Maslow’s hierarchy of needs, which begins with the physiological needs of food, shelter, and then of safety, social connection, the esteem, and finally, the self-actualization. Dave Trott, a known ad man, assures that brand advertising creates reputation.

If we claim our brand is a certain way, then people will see it that way. If we claim trust, they will trust it. If we claim reliability, they will believe it’s reliable. If we claim modernity, they’ll believe it’s modern. If we claim innovation, they’ll believe it’s innovative. They’ll join up the dots, but in the wrong order. Brand is another word for reputation or image. And you don’t get a reputation just by claiming something. Of course not, first you must *be* something. Then you get a reputation. Then you can claim it. (Dave Trott, 2016, p.147)

Chapter three: Methodology

This chapter presents the methodology of the research. For this purpose, it is used the research “onion” (Saunders, Lewis & Thornhill, 2007). The research onion includes all the stages of a research and thus it is usually used by the researchers in order to provide a detailed framework of their research methodology.

3.1 Research philosophy

Research philosophy is a stage of the research methodology which reflects the researcher’s beliefs and set of values. In essence, the research philosophy explains the way that the researcher considers the world and as a result the way that he approaches the world. There are four main research philosophies: the pragmatism, the positivism, the interpretivism and the realism (Bryman, 2012).

The research philosophy of the current research reflects the interpretivism paradigm. This is because the nature of the research is qualitative and the sample of the research is small. Interpretivism uses the constructivism research approach in order to interpret the phenomena and to give to them a meaning. As a result, this research, which explores the role of holograms and mixed reality in advertising, aims at giving a meaning to the participants’ discourse by interpreting it. This is why, interviews were used in order to collect data from the sample (Kothari, 2004).

The main assumption of interpretivism research philosophy is that the reality is a socially constructed concept that can be interpreted through shared meanings and experiences. Thus, in this research the interviews conducted to experts, assist the researcher to interpret the physical reality associated with the role of holograms and mixed reality in advertising. Due to the fact that advertising is a social phenomenon, the interpretivism approach is the most suitable philosophy to explore the issue under investigation. Thus, the phenomenology of the interpretivism research philosophy is to understand the social phenomenon of advertising through directly experiencing the phenomenon by using the sample’s discourse (Kothari, 2004).

One of the main disadvantages of the interpretivism research philosophy is that the data collected through the interpretivism studies cannot be generalized due to the small sample. Nevertheless, interpretivism research philosophy gives to the

researcher the opportunity to understand in depth a social phenomenon. ⁴Thus, this research by using the interpretivism research philosophy aims at understanding in depth the social phenomenon of advertising and shed light on the role of holograms and mixed reality in the modern advertising landscape.

3.2 Approach

There are two main research approaches: the deductive and the inductive. The deductive research approach uses pre-existing theories to develop the research questions and hypothesis. Then, the researcher uses a statistical program to accept or reject the research hypothesis. This kind of research approach fits to the positivism research philosophy. On the contrary, the inductive research approach aims at creating a theory and thus this type of approach begins from general assumptions to reach to specific conclusions. This kind of approach fits to the interpretivism research philosophy.

The research approach of this research is the inductive approach. The main reason that I, as a researcher, chose the inductive research approach is the lack of studies on the field of hologram and mixed reality in the contemporary advertising landscape. The inductive research approach offers the opportunity to explore the under research phenomenon and to generate new knowledge (May, 2011).

⁴ May, T. (2011). *Social research: Issues, methods and research*. London: McGraw-Hill International.

3.3 Choices

Choices refers to the choices that a researcher should made as concerning the method that he will use. Actually, there are two basic choices. The mono methods studies and the mixed method studies. This research is a mono method study as it uses only one method to explore the under-investigation phenomenon. This method is the qualitative research. Qualitative research is the most adequate method for the current research if taking into consideration the exploratory nature of the research questions (Flick, 2011).

RQ 1 What are the professionals' perspectives about the changes in the field of advertising, that had taken place during the last years? (questions 1, 2, 7).

RQ2 Why professionals adopt the mixed reality to their campaigns? (questions 3,4).

RQ3 What are the main risks, that an agency has to address, when adopting mixed reality campaigns (question 5).

RQ4 How mixed reality has affected the relationships between the customers and the brands (question 6).

RQ5 What is the future of advertising based on the professionals' perspectives? (question 9).

3.4 Time horizons

There are two types of studies based on the time horizons: the cross sectional and the longitudinal studies (Saunders, Lewis & Thornhill, 2007). Both the cross-sectional and the longitudinal studies are observational studies. This means that researchers record information about their subjects without manipulating the study environment This study is cross-sectional as it is conducted in a specific time period. Data were gathered just once, over a period of days or weeks or months, in order to answer a research question.

3.5 Data collection and analysis

For the economy of time and most importantly, the space, I conducted structured e-mail interviews with open-ended questions for my thesis, as the people I wanted to communicate with were situated far from Greece and it was more flexible for them to send them over the interview questions, (Saunders, Lewis & Thornhill, 2007). Although, I followed the structured questions, I added 2-3 questions to some of the interviewees, as I wanted to learn more about their role in a campaign or in a creative project they had carried out.

A structured interview is sometimes called a standardized interview. The same questions are asked to all respondents. Corbetta (2003, p.269) states structured interviews are “... interviews in which all respondents are asked the same questions with the same wording and in the same sequence.” It would be ideal if questions can be read out in the same tone of voice so that the respondents would not be influenced by the tone of the interviewer. Bryman (2012) claims that structured interview entails the administration of an interview schedule by an interviewer. The aim is for all interviewees to be given exactly the same context of questioning. This means that each respondent receives exactly the same interview stimulus as any other. The goal of this style of interview is to ensure that interviewees’ replies can be aggregated.

In E-mail interviews, the cost that is required is next to nothing in relation to the telephone or face-to-face interviews. The researchers can invite participation of large or geographically dispersed samples of people by sending them e-mail messages individually or through listservs, message boards, or discussion groups, rather than making long-distance telephone calls, using regular mail, or traveling to the location of participants. The use of e-mail in research also decreases the cost of transcribing. Moreover, the data retrieved from e-mail interviews are generated in electronic format and require little editing or formatting before they are processed for analysis. Also, in implementing e-mail interviews there’s no need for synchronous interview. The researchers are allowed to interview more than 1 participant at a time, due to the fact that a standard interview schedule or list of questions can be sent individually to several participants at once, irrespective of their geographical location or time zone.

In addition to that, in the context of a qualitative research, when interviews are conducted via email there's a democratization and internalization factor in which all the participants can equally and openly respond to the questions, no matter their residence location, their education, their economical or/and their social status, etc.

Although e-mail interviewing limits the research only to those people with access to the Internet, the method, democratizes and internationalizes research.

The interviews are consisted of ten main questions (available in Appendix A). Table 1 depicts the questions of the interviews in accordance to the research questions.

Table 1. Interview questions and research questions

Interview questions	Research questions
In which ways, the advertising and marketing have changed over the last few years as far as the implementation of new immersive technologies concerned (like augmented reality, mixed reality, virtual reality)?	Research question 1
How did the passage from traditional advertising to digital and then to The Holograms in Advertising happened?	Research question 1
Why advertising agencies are choosing more and more the implementation of mixed reality to campaigns with the collaboration of creative production studios?	Research question 2
How do you explain this “immersive” phenomenon?	Research question 2
What are the risks that a brand or agency has to face when they decide to do a campaign like this?	Research question 3
To your professional experience, does the use of mixed reality has changed the relationship of the	Research question 4
Mixed Reality, Advertising and Experiential Marketing. How those industries (can) work together?	Research question 1
Which are the cases of client’s work that are more memorable to you?	Personalized
If you could see the “future of advertising”, what would that be?	Research question 5
What would be the ideal project/ advertising campaign, that you would like to participate?	Personalized

In order to analyze the data collected by the interviews the content analysis was used as a technique. During the content analysis, the researchers construct codes and categories based on the answers of the sample. Content analysis is the most common type of analysis in qualitative research and it gives to the researcher the

opportunity to organize their qualitative data. The researcher by using codes and categories they identify, analyze and interpret common patterns in the themes. As a result, by using the content analysis the researcher identified, analyzed and interpreted the discourse of the sample (Morgan, 2014).

The approach I applied for the content analysis of the participants' interviews, was the summative approach. A study or a research that is applying a summative approach to qualitative content analysis starts with identifying and quantifying certain words or content in text with the purpose of understanding the contextual use of the words or content. Analyzing for the appearance of a particular word or content in textual material is referred to as manifest content analysis (Potter & Levine-Donnerstein, 1999). In the summative approach the text is often approached as single words or in relation to particular content. An analysis of the patterns leads to an interpretation of the contextual meaning of specific terms or content. For this Dissertation paper I recorded the frequency of reference of certain key words, phrases and meanings from the interviewees' answers, and then I used a basic coding process in order to organize large quantities of text into much fewer content categories (Weber, 1990). Categories are patterns or themes that are directly expressed in the text or are derived from them through analysis. The categories I made act like themes based on the research questions.

3.6 Sampling technique

The sampling choice in qualitative research gives to the researcher the opportunity to access a sample in order to obtain a deep understanding of the under-examination phenomenon. There are two type of sampling strategies in qualitative research. These are the probability sampling methods and the nonprobability sampling methods. In this Dissertation paper was selected the purposive sampling methodology which belongs to the nonprobability sampling methods. Purposive sampling allows the researcher to gather the data they need. The purposive sampling, also known as judgment sampling, is practically a deliberate choice of participants due to the qualities of the participant processes.

It is a nonrandom technique, in which the researcher decides what needs to be known and sets out to find people who can, and are willing to provide the information

by virtue of knowledge or experience. The selection criterion in this Dissertation paper was the participants' specialization in advertising, digital marketing, cinema and the creative field in general. Only participants who have work experience in the field of marketing, advertising or, and creative productions were selected to take part in the research. The sample size, here, is eight participants from the advertising and creative industry in Europe.

3.7 Limitations of the research

All the researches have limitations related to their research design. One basic limitation of the current research is the sampling method selected. Following a purposive sampling means that the research findings cannot be generalized. The purposive method is not applied to large population groups (Etikan, 2016). Also, the researcher forms the topics or the interview questions based on their judgment and their interpretation of the data. That is why, I specifically approached eight applicants, but I formed structured interviews in order to cover the research questions I established from the beginning. At the same time, structured interviews follow other limitations. It is probable that they offer inaccurate or merely valid findings, and also, the researcher has no way to evaluate the reliability of the expert, professional or authority.

Also, another limitation is that the questions can't be altered afterwards, the scope is limited, and there is the possibility that the interviewees may change their responses because of social desirability bias. In addition, one more limitation of the current study is its' subjectivism. All the qualitative researches have a degree of bias due to the fact that the researcher has a key role in data analysis and interpretation. Specifically, bias is quite high during the coding procedure. Finally, another disadvantage of the current research is the small sample size. Usually, the qualitative researches require minimum 10-12 participants. The participants of this research were eight (8) in total.

Chapter four: Data analysis

In this chapter of the Dissertation, I analyze the data I retrieved from the participants' interviews, recording the frequency of reference of certain sentences, phrases and meanings. Then I summed them up to key words, in order to create a code system, as explained in pages 55-56.

The interviews took place within the period from October 2019 to April 2020. I initially approached the participants via LinkedIn, after I had thoroughly searched their profile, their profession and its relevance to the subject of my Dissertation. All the participants are creatives, CEOs, and managers from the advertising, the production industry, and the arts.

Before presenting the data analysis it is important to give information about the professionals' job profile (table 4.1).

Table 4.1 Professionals' profile

Participant 1	Mexican-German artist who mostly works and lives in Mexico City. Her artwork focuses on human-computer interactions, AR, VR, electronics and currently works on Artificial Intelligence.
Participant 2	Studio Manger of Holotronica, a 3D Holograms and Effects production company in Bristol, United Kingdom.
Participant 3	SVP Executive Creative Director in McCann, New York, America. An award winner ad creative with more than a decade working experience. She was the Creative Director of the integrated campaign, Holograms for Freedom.
Participant 4	CEO of Antiloop Studio, a creative-tech studio in Barcelona, Spain, one of the production companies behind the campaign, "Holograms for Freedom".
Participant 5	Founder and CEO of the Holofiction, a multimedia service company specialized in 3D technologies, multimedia, animation and complex state-of-the-art hardware & software solutions in Zagreb, Croatia.
Participant 6	AV Producer, Visual Artist, Electronic Musician, entrepreneur, inventor of the large scale hologram effect screen, Hologauze, and the founder of the production company, Holotronica.
Participant 7	Marketing Manger in Yondr, an immersive media agency, specialized in VR/AR high-end 360 videos in Antwerp, Belgium. He is also the Growth & community Lead in VRTL, a virtual reality online courses platform on VR.
Participant 8	Creative Copywriter in the full service advertising agency, Happiness, in Brussels, Belgium. Concept provider of Carlsberg's Probably TEDx Speech.

This part aims at answering the following research question:

RQ 1 What are the professionals’ perspectives about the changes in the field of advertising, that had taken place during the last years? (questions 1, 2, 7).

Research question 1 was answered by analyzing the interview questions 1,2 and 7. The thematic category, which constructed by the codes of the questions 1,2 and 7 is the following: “*professionals’ perspectives about changes in the field of marketing during the past years (holograms, traditional advertising)*” (table 4.2).

Table 4.2 Professional perspectives about changes in the field of advertising during the past years (from traditional advertising to digital)

Professional Perspectives	Total References
Interaction	4
Lack of knowledge	4
Evolution	3
Collaboration	4
Technology	11
Engagement	1
Innovation	1

The professionals believe that “*marketing nowadays focusing on creating interactive experiences between the customers and the brands*” (4 references). In addition, the professionals believe that “*Holograms have changed the advertising landscape (interactive practices)*” (3 references). Furthermore, the professionals declared that “*Many specialists work together to offer hologram advertising solutions and consistent experiences*” (4 references).

In the following paragraphs are quoted some excerpts from the participants’ interviews which confirm the aforementioned codes.

Participant 1: “*I believe advertising and marketing have been much more driven to create interactive experiences that people may associate to the brand*”.

Participant 2: *“It’s more experiential based”*.

Participant 3: *“The use of new immersive technologies is on the rise. Brands are always looking for new ways to engage with their customers and potential customers”*.

Participant 4: *“These technologies have immerged almost recently and they have offered to the brands new opportunities to connect with their audience and to engage them”*.

Participant 6: *“Companies are always looking for the latest ‘thing’ they want new ways of selling their products to give a wow factor to draw in new customers”*.

Participant 7: *“Every company wants to tell a cool story and as a customer you want to be part of it”*.

Participant 8: *“More than ever, advertising agencies are exploring new technologies to capture the attention of consumers. As advertising evolves towards, offers people ‘experiences’”*.

Emotions can be cultivated with experimental marketing and thus, the professionals of the sample declared that *“marketing nowadays focusing on creating interactive experiences between the customers and the brands”* (4 references). Also, the analysis of the questions 1,2 and 7 resulted in the creation of the following codes: *“Technology drives the passage from traditional to holograms advertising”* (6 references), *“Technology assists mixed reality, augmented reality and experimental marketing to work together”* (5 references) and *“Hologram advertising is in experimental stage”* (6 references).

In the following paragraphs are quoted some excerpts from the participants’ interviews which confirm the aforementioned codes.

Participant 1: *“I think the best answer is making multidisciplinary teams that involve game designers, UX experts, programmers, interactive designers, marketers and sometimes even pedagogues to design more consistent experiences”*.

Participant 2: *“They do – it just takes one of the three to have an idea to make it happen”*.

Participant 3: *“I think mixed reality is still a pretty new element of this equation. But there is a lot of potential ...imaginable”*.

Participant 4: *“You can implement it in advertising, you can use it to do experiential marketing or brand entertainment”*.

Participant 5: *“Perfectly. When you join the forces, you can have more than a campaign. The people will wow, and you will have a result. Imagine you can have a real time”*.

Participant 6: *“We have worked on some interesting campaigns crossing all of these subjects, combining real time CGI with motion tracking and Video Mapping, Mixed reality and human actors”*.

Participant 7: *“Every marketing campaign with MR is considered to be experiential marketing at the moment”*.

Participant 8: *“Agencies have been building and investing in AR and VR departments. Mixed reality production companies have been doing quite well. They are more and more becoming a genuine production partner”*.

This part aims at answering the following research question:

RQ2 Why professionals adopt the mixed reality to their campaigns? (questions 3,4). Research question 2 answered by analyzing the interview questions 3 and 4. The thematic category, which constructed by the codes of the questions 3 and 4 is the following: “*reasons that make professionals to use mixed reality to their campaigns*” (table 4.3).

Table 4.3 Reasons that make professionals to use mixed reality

Reasons	Total References
Experience	2
Innovation	9
Quality	1
Intrigue	1
Interaction	5
Measurability	2

The professionals use mixed reality because “*it is innovative*” (4 references) and because “*customers need digital interaction*” (4 references). In addition, the professionals use mixed reality because “*it's a fresh approach which captures customers attention*” (4 references). Furthermore, professionals use mixed reality because “*the visual and auditory system of mixed reality tricks the brain*”, because “*it entails high costs but measurable results*” and because “*it's the natural evolution of traditional marketing*”. Also, they claimed that they use mixed reality because “*it's a fresh approach which captures customers' attention*” (4 references).

In the following paragraphs are quoted some excerpts from the participants' interviews which confirm the aforementioned codes.

Participant 1: “*Since VR devices for example are still expensive, people are attracted when they have the possibility of having new technological experiences for free*” and “*immersion occurs as a great stimulus to the visual and auditory system in such a way that it "tricks" the brain*”.

Participant 2: “*Agencies need to find a fresh approach to still engage their audience*” and “*As people spend more time in a digital space, they crave more physical interaction and a heightened ability for a digital experience*”.

Participant 3: *“Consumers want to experience things and not being told about those things”*.

Participant 4: *“They are new, attractive, that’s why they capture the attention of everyone in the room) and outside”*.

Participant 5: *“The costs are much more than standard, but the result is not measurable and that is the main reason why agencies go with mixed reality”*.

Participant 6: *“This is because the advertising agencies feel the traditional formats seem old fashioned and not appealing to a younger audience. Keeping up with the times is crucial to any advertising agency”*.

Participant 7: *“Immersive is being part of the story. Every company wants to tell a cool story and as a customer you want to be part of it”*.

Participant 8: *“Advertising is all about exploring new ways to touch people. Mixed reality offers a new playground to do this with”*.

This part aims at answering the following research question:

RQ3 What are the main risks, that an agency has to address, when adopting mixed reality campaigns (question 5). Research question 3 answered by analyzing the interview question 5. The thematic category, which constructed by the codes of the question 5 is the following: *“the main risks, that an agency has to address, when adopting mixed reality campaigns”* (table 4.4).

Table 4.4 The main risks, that an agency has to address, when adopting mixed reality campaigns

Risks	Total References
Focus On Visual	1
Dedication	1
Unpredictability	2
Technology	1
Economy	1
Lack of knowledge	1

The professionals believe that the main risks related to the adoption of mixed reality are the following: *“if the experience is not related to the brand the customers forget the product”*, *“companies should be dedicated to overcome the risks”*, *“no predictable customers reactions”*, *“the customers characteristics may affect the effectiveness”*, *“risks related to technologies”*, *“economic risks”* and *“risks related to lack of knowledge”*.

In the following paragraphs are quoted some excerpts from the participants’ interviews which confirm the aforementioned codes.

Participant 1: *“but if the type of experience offered is not related enough to the product or service of the brand, the public is left only with the playful experience and completely forgets the brand or product publicized”*.

Participant 2: *“When you try something new there is no way of knowing how an audience will react”*.

Participant 3: *“This depends a lot on the brand. For some of them the use of this is natural to them, is somehow connected to their roots and their customers won’t have any problem engaging with this type of communication. But for others, with a*

more “traditional” consumer base go from a tv commercial to an immersive activation will probably be too extreme for them”.

Participant 4: “The main characteristics have to do with the lack of knowledge and the minimum implication that follows that”.

Participant 5: “I see no risks. If you already made a deal with us and must stop it, only that way, in another way not. The technology which we use is 99% tested in the environment and the risk in that way cannot be. You only can win”.

Participant 6: “There are risks with using new technology. There is also a big financial risk that can cause companies being sued and put out of business”.

Participant 7: “Hardware is too difficult to use as it’s evolving really quickly. Hard to measure the outcome”.

Participant 8: “The technology is very expensive, so it does need investment to do it well”.

This part aims at answering the following research question:

RQ4 How mixed reality has affected the relationships between the customers and the brands (question 6). Research question 4 answered by analyzing the interview question 6. The thematic category, which constructed by the codes of the question 6 is the following: “*the effect of mixed reality on the relationships developed between the customers and the brand*” (table 4.5).

Table 4.5 The effect of mixed reality on the relationships developed between the customers and the brand

Effect Between Brands - Consumers	Total References
Different expectations	3
Familiarity	3
Interaction	4
Experience	1
Personalization	1

The professionals believe that mixed reality influences the customers-brands relationship in the following manner: ‘*change of the expectations of the audience*’ (2 references), “*customers develop closer relationships with the brand*” (3 references), “*customers develop more interactive relationships with the brands*” (4 references), “*mixed reality changed customers perceptions towards the brands*” (1 reference), “*mixed reality creates extraordinary customers experiences*” (1 reference) and “*mixed reality creates personalized advertising*” (1 reference).

In the following paragraphs are quoted some excerpts from the participants’ interviews which confirm the aforementioned codes.

Participant 1: “*but it has definitely changed the expectations of the audience related to technological experiences*”.

Participant 2: “*By interacting with the brand directly they have a deeper relationship with it*”.

Participant 3: “*Mixed reality will have a massive impact on customers’ interactions with the brands. Thanks to this technology, they’ll be able to interact and communicate with their brands and get an answer from them*”.

Participant 4: *“They manage to interfere, intervene and change the anti advertising/commercial perception that caused saturation and indifference at the first place”*.

Participant 5: *“Today the consumers have different behavior and the market constantly changes, so it is very hard for me to tell do the people change or, the goal of perfection pushes us forward to develop new technologies”*.

Participant 6: *“One of the ways you can use Hologauze is to transport somebody in real time to another country. this saves money and people can interact in new ways across continents. Also, the illusion of having a person in the room bring the human out from would normally be a flat screen”*.

Participant 7: *“It’s hard to measure but we see at conferences that this type of technology leaves a bigger impression since the person has experienced something. Something you’ve experienced is going to last longer than anything else”*.

Participant 8: *“Thanks to mixed reality, we can offer people ‘experiences’. Events they can truly live and interact with. Instead of just sending them a message”*.

This part aims at answering the following research question:

RQ5 What is the future of advertising based on the professionals' perspectives? (question 9). Research question 5 answered by analyzing the interview question 9. The thematic category, which constructed by the codes of the question 6 is the following: "*the future of advertising*" (table 4.6).

Table 4.6 The future of advertising

Future	Total References
Gamification	1
Interaction	2
Immersion	5

The future of advertising based on the professional perspectives is: "*gamification*" (1 reference), "*more interactive ads*" (2 references), "*mixed reality*" (4 references) and "*immersive technologies and creative ideas*" (1 reference).

In the following paragraphs are quoted some excerpts from the participants' interviews which confirm the aforementioned codes.

Participant 1: "*Gamification would play a key role in providing information in an intuitive way but without pushing the audience too much. Engaging would come in a more natural way for the focus audience*".

Participant 2: "*People's identities logged through facial recognition and targeted advertising everywhere they go*".

Participant 3: "*It's hard to imagine it. But I guess advertising will become more and more interactive until the point that will stop being "advertising" to become content that consumers will be looking for and not the other way around (or at least that's the hope)*".

Participant 4: "*We believed so much in the initiative, that's why it had a great impact on people not only from Spain, but globally. And finally, through this we can see where mixed reality can get us*".

Participant 5: "*I think in 5 years, normal advertising (print) became digital and what is now digital or experiential will become something even more*".

Participant 6: *“I like the idea of drones being used in the sky to create fireworks displays and logos. we will see a lot more of this, but as i mentioned earlier this can go wrong”*.

Participant 7: *“Personalized advertisements on the street”*.

Participant 8: *“Purpose driven work. Work that is either useful, fundamentally behavior changing, or very entertaining. You still need an insight and a creative idea. A great idea can be executed in TVC’s, but in more experimental immersive technologies as well”*.

This part aims at categorizing the interview questions 8 and 10. The analysis of these questions helped us to understand better the professionals’ aspirations and background (tables 4.7, 4.8).

Table 4.7 Answers to the interview question 8

Cases of client’s work that are more memorable
Center of Digital Culture in Mexico City
Es Devlin’s work projects
“Meet Graham” - “The next Rembrandt”
Audi Electron Car
Fujitsu - Digital Transformations
Barry Callebaut, Exellys, Nike, Port of Antwerp
Timeless, universal campaigns like ‘You’re not you when you’re hungry’ from Snickers

Table 4.8Answers to the interview question 10

Ideal project
One that'll involve creativity, challenges, equality and experience
Collaboration with Es Devlin
A project where the brand is willing to take risks
Something totally groundbreaking that hasn't been done yet or conceived before
Premium production of POS displays and creation of showrooms
Project onto the moon to welcome the new guests stopping off on their journey to Mars
Innovative ideas challenging the status quo
The conversion of a great problem to a great campaign idea

Discussion

The research questions that the Dissertation answered are the following:

RQ 1 What are the professionals' perspectives about the changes in the field of advertising, that had taken place during the last years?

RQ2 Why professionals adopt the mixed reality to their campaigns?

RQ3 What are the main risks, that an agency has to address, when adopting mixed reality campaigns?

RQ4 How mixed reality has affected the relationships between the customers and the brands?

RQ5 What is the future of advertising based on the professionals' perspectives?

In the above section of Data Analysis, the research results concerning the professional perspectives over changes in the field of marketing during the past years, were expected based on the literature review. For example, Schaefer (2009) argued that advertisers should keep pace with such technologies and especially with the hologram advertising. Other researchers⁵ have also highlighted the changing face of the contemporary marketing landscape. For example, Brow, Jones & Wang (2016) argued that new technologies have changed the way that consumers interact with the brands. The same results are supported by the research results of the primary research of current Dissertation. In the era of mixed reality ads are more personalized, interactive and experiential in order to fit to consumers' needs. In addition, the professionals' perspectives can be justified based on the Alvarez & Fournier (2016) research results, who found that emotions play a pivotal role to consumers' emotional attachment to a brand.

⁵ Alvarez, C., & Fournier, S. (2016). Consumers' relationships with brands. *Current Opinion In Psychology*, 10, 129-135. <https://doi.org/10.1016/j.copsyc.2015.12.017>

Elmorshidy, A. (2010). Holographic Projection Technology: The World is Changing. *Journal of Telecommunications*, 2(2).

Jeong, H. (2016). *The Application Methods of Hologram Technology in Fashion Business*. *Fashion Business*, 20(2), 16-31. <https://doi.org/10.12940/jfb.2016.20.2.16>

John R. Vacca (2001). *Holograms & Holography: Design, Techniques, & Commercial Applications* (Science and Computing Series) - Charles River Media.

Also, the research findings, in relation to the reasons that make professionals to use mixed reality to their campaigns, were expected based on the literature review. For example, literature review revealed the customer centric approach of mixed reality.

In addition, the literature review revealed that mixed reality ads are more personalized in order to fit to consumers' needs and thus mixed reality and holograms created new opportunities of consumers' engagement. The same results are supported by the research results of the primary research of the current Dissertation. More specifically, the professionals declared that they use mixed reality because "*it's a fresh approach which captures customers attention*" (4 references). Literature review (Brow, Jones & Wang, 2016, Fetscherin & Heinrich, 2015, Trump, 2016) can explain the research results of the primary research as researchers (Brow, Jones & Wang, 2016, Fetscherin & Heinrich, 2015, Trump, 2016) argue that holograms have the power to provoke strong emotions to the consumers and as a result holograms allow advertisers to create strong brands through an unforgettable emotional experience.

Moreover, professionals of the sample said that they use holograms because "*the visual and auditory system of mixed reality tricks the brain*". The literature review (Brow, Jones & Wang, 2016, Fetscherin & Heinrich, 2015, Trump, 2016) elaborated more on the matter. Specifically, researchers⁶ concluded that the professionals who use hologram ads, need to be capable of generating strong brand stories except from strong brand images. Brand stories tell the story of a brand in a meaningful and creative way. A good brand story has a great impact on consumers' experiences.

Also, the research results concerning the main risks, that an agency has to address, when adopting mixed reality campaigns and the effect of mixed reality on the relationships among the customers and the brand were expected based on the literature review. Brow, Jones & Wang (2016) argued that new technologies have changed the way that consumers' perception towards the brands, as now not only they can see, hear or read about them, but they can also make a whole experience out of it. In this context, holograms have influenced the consumers and the brands'

⁶ Trump, R. K. (2014). Connected consumers' responses to negative brand actions: The roles of transgression self-relevance and domain. *Journal of Business Research*, 67(9), 1824-1830. doi:10.1016/j.jbusres.2013.12.007

relationships in a positive way (Brown, Jones & Wang, 2013). The aforementioned research results confirmed by the primary research of the Dissertation as professional believe that mixed reality on the one hand influences positively the interaction between the brands and the customers and on the other hand it offers personalized ads. In addition, the literature review revealed that mixed reality and holograms created new opportunities of consumers' engagement. This is due to the fact that holograms have the power to provoke strong emotions to the consumers. The strong emotions that holograms evoke to the customers can explain the research results of the primary research. In the same manner, previous researchers argued that a strong brand personality influences how the consumers feel about the brands. Holograms allow advertisers to create strong brands through an unforgettable emotional experience. This is why the professionals of the sample believe that mixed reality allows customers to develop close, interactive, and unique relationships with the brands.

A theory, which is used in the literature review section, and that it can explain the relationships, that holograms create between the brands and the consumers, is the brand attachment theory. According to this theory the two key factors that can provoke strong brand attachment is familiarity and responsiveness. These two factors can be integrated into the hologram ads. Hologram ads can create a sense of familiarity to the consumers as they allow them to observe the objects from different angles (Patwardhan & Balasubramanian, 2013). Nevertheless, the issues of familiarity and responsiveness are not covered by the professionals of the sample.

A limitation, that was identified in the primary research, is that the results did not reveal the power of the brand stories. On the contrary, literature review revealed that advertisers, who use hologram ads, need to be capable of generated strong brand stories except from strong brand images. Brand stories tell the story of a brand in a meaningful and creative way.

Also, the research findings concerning the future of advertising was expected based on the literature review (Thange et al., 2016, Ryu & Lee, 2016, Alvarez & Fournier, 2016) which revealed the role of mixed reality in the future of advertising. Many advertisers will use holograms in the future due to their benefits, as they constitute an innovative way for the advertisers to develop eye-catching ads. For example, as highlighted in the previous section, holograms have the power to create a

memorable and unique user experience. This is because individuals tend to feel immersed by the mixed reality and they lose the time and space.

Conclusions

The Dissertation concluded that advertising nowadays is focusing on creating interactive experiences between the customers and the brands. In addition, holograms have changed the advertising landscape. Since the convergence of the media contents and hologram technologies, consumers can experience the virtual reality similar to the real world. Taking into consideration the changes in the contemporary media landscape advertisers should keep pace with such technologies and especially with the hologram advertising.

In addition, the Dissertation concluded that the professionals use mixed reality because it is innovative and because customers need digital interaction. Furthermore, the professionals use mixed reality because it's a fresh approach which captures customers' attention. Lastly, professionals use mixed reality because the visual and auditory system of mixed reality tricks the brain, because it entails high costs but measurable results and because it's the natural evolution of traditional marketing. From the analysis, it is concluded that the use of holograms and mixed reality have many benefits for the advertisers. For example, holographic advertising provides marketers with augmented reality solutions as they give them the opportunity to create a new medium of message delivery to consumers. Holographic images have the power to enhance the consumers' vision of the products. This is why holographic ads are widely used in many industries. In the Dissertation, I analyzed some examples of holographic ads used by global companies and I concluded that global companies use holographic ads to catch the customers' attention, to create strong relationships with the customers and to create customer-brand engagement.

An important finding of the Dissertation was the risks related to the adoption of mixed reality. It is concluded that the risks as far as the adoption of mixed reality concerned, based on the professionals' perspectives are the following: *“if the experience is not related to the brand the customers forget the product”*, *“companies should be dedicated to overcome the risks”*, *“no predictable customers reactions”*,

“the customers characteristics many affect the effectiveness”, “risks related to technologies”, “economic risks” and “risks related to lack of knowledge”.

Another important finding of the Dissertation was that the mixed reality influences the customers-brands relationship in the following manner: *“customers develop closer relationships with the brand”, “customers develop more interactive relationships with the brands, “mixed reality changed customers perceptions towards the brands”, “mixed reality creates extraordinary customers experiences”, and “mixed reality creates personalized advertising”.*

The important role of the hologram ads to customers’ – brands relationships indicates that the future of advertising is the hologram ads. More and more companies in the near future, internationally and eventually in Greece, will invest in the hologram advertising.

The Dissertation unravels the role of holograms in advertising. It is important for the companies to begin to use the hologram advertising if they want to create stronger relationships with their customers. Holograms are alluring, they make customers feel extraordinary. In addition, holograms offer personalization, which is an important aspect of digital advertising. Based on the research results of the Dissertation, the most important advantage of the holograms is the strong emotions that they provoke to the customers. Thus, it is argued that holograms have the power to influence customers’ behavior and perceptions. Holograms allow advertisers to create strong brands through an unforgettable emotional experience.

The paradigm of Kit Kat, previously analyzed, is a key example of how brands strengthen their relationships with the consumers by using holograms. Furthermore, the paradigm of holograms for freedom, by the title, “We Are Not A Crime” is a successful paradigm of immersive, jaw dropping and engaging advertising and marketing campaign, which years ago would be considered way ambitious or-and at least impossible.

Upon the conclusion of the Dissertation, it is important to make some recommendations for further research. Firstly, it is recommended that the researchers should investigate further the role of the holograms in ads by using different methodologies. Furthermore, it would be interesting if the researchers could study the role of holograms in ads by using mixed research (qualitative and quantitative research), and on-site case studies as a research method. Mixed research would give in depth insights on the role of holograms in advertising. Finally, a cross-sectional

quantitative research would also generate interesting findings on the role of holograms in the ads of different countries. The international literature is in need of this kind of researches because there are only a few, for the time being, which examine the MR and the holograms in terms of the advertising landscape. Of course, this can be explained due to the early stages of this promising technology, not only for advertisers and brands, but also for disciplines like medicine, education, automotive, transmedia storytelling and arts. Thus, the international literature needs to be enriched with researches that focus on the benefits and the affordances of the holograms and the mixed reality in general and on the ways that the advertisers can use holograms, not only to promote a cause or sell products and services, in a groundbreaking way, but also to reexamine, reevaluate, facilitate and improve a variety of life's aspects and values. After all, the point in implementing a "technology of the future", like mixed reality, isn't it to enable its users to see the future through its unique lens and make the best out of it?

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Appendix A: Interview

1. In which ways the advertising and marketing have changed over the last years as far as the implementation of new immersive technologies concerned (like augmented reality, mixed reality, virtual reality)?
2. How did the passage from traditional advertising to digital and then to The Holograms in Advertising happened?
3. Why the advertising agencies are choosing more and more the implementation of mixed reality to campaigns with the collaboration of creative production studios?
4. How do you explain this “immersive” phenomenon?
5. Which are the risks that a brand or agency has to face when they decide to do a campaign like this?
6. To your professional experience, does the use of mixed reality has changed the relationship of the consumers towards the brands (interaction, engagement, awareness)? If yes, in which way?
7. Mixed Reality, Advertising and Experiential Marketing. How those industries (can) work together?
8. Which are the cases of client’s work that are more memorable to you?
9. If you could see the “future of advertising”, what would that be?
10. What would be the ideal project or advertising campaign, that you would like to participate?