Media discourse: The Impact of Augmented Reality Applications on Conscious Fashion Consumers

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ABSTRACT: Living in a world where objects can be manipulated in real time and create interactive experience which is digitally driven has become a new market strategy for brands in fashion. Wearing an outfit that doesn't exist and reducing the excessive ready-to-wear consumption. The development in fashion technology has led to the idea of Augmented Reality. This paper contains knowledge about what augmented reality is and how it can be implemented in the fashion industry hence helping the polluting and competitive industry to reduce the waste by customers, make the experience fun and develop customer relations and interaction. Furthermore, it contains research about the changes in shopping behavior of people due to media discourse, which further results in wastage and fast fashion and how augmented reality can help overcome the concept of fast fashion. Moreover, the AR tech can create experiences and memories which can help brands and marketers reach out to their customers creatively and digitally. The study also underwrites to an additional speculative indulgent of the fashion conscious sector, impact of social media, and shopping behavior. Finally, it will study how AR tech can benefit concepts like sustainability in fashion.

Keywords*: Fashion, Media, Augmented Reality, Fashion technology, 3D world, Digital environment, Clothing, Fast fashion*

1. **Introduction:**

The impact of media with regard to the acceptance of fashion trends and purchase intent. The study examines the association amid positive and negative impacts via media discourse, on fashion conscious consumers and rise of reduction of purchase objective. Shopping experience used to be a seasonal event- something that happened occasionally when the seasons changed. Recently, this concept has changed. Trends started to change at very faster rate and shopping became a leisure activity hence entered the concept of Fast Fashion. Fast fashion not only has a negative global environmental impact but also produces cheap, low quality garments that degrades after a few wears and get thrown away. To tackle such issues new technology in the fashion industry keeps evolving every now and then. [Gupta, R., 2019.]

Recently, there have been several debates concerning the virtual world and the real world. There are many definitions of augmented reality, "Most of us equate these terms with the technological

possibility to concentrate on a completely systematic, computer-generated world—sometimes referred to as a virtual environment. In a virtual environment our senses, such as vision, hearing, haptics, smell, etc. are directed by a computer while our actions affect the generated stimuli." [O. Bimber and R. Raskar. 2004]. Augmented reality (AR) is an interactive, true and reality-based presentation situation that uses the computer-generated show, text, effects and sound, to escalate the user's experience in real-world. Augmented reality mergers real and computer-based images to deliver an amalgamated but refined the view of the world. The whole purpose of AR is to provide a rich audiovisual experience. This implies that 3D virtual objects are unified into a 3D environment in real-time.

"IT has become the foundation for a new fashion industry model, featuring consumer-centered service and production methods based on the application of systems applying 3D (three-dimensional) technology, as well as virtual and augmented reality techniques" [3]. With the increasing wages and production cost and the harmful effects that it has on the environment and nature, it has become crucial to introduce new cognition and advanced technology for the fashion industry. The growth of computer-generated clothing simulation software plays a significant role in the fashion industry's IT-based digitalization, which has led to constant high-tech advancements to virtually embrace the 2D design to 3D design work. Such development has greatly affected the fashion industry by accumulative profits. Globally, studies have been conducted to help the evolution of consumer-centered, high value-added apparel and fashion merchandises by adapting digital technology.

People usually confuse virtual reality and augmented reality but they are two different entities. Virtual reality requires one to be put in an environment to experience it hence it requires VR goggles. Augmented reality doesn't require goggles as the augmented images come alive in your environment. One experiences it with their own eyes in their natural environment (Gardetti, M. A., & Torres, A. L., 2017).

The working of AR technology in fashion can be vast. Several ideas especially for tech-savvy customers, this experience can be very exciting and interactive for them. Creating AR looks for their customers, 3D view for outfits to get an up close look on designer's design, choosing digital colours for garments without manipulating the actual garment, visualizing shoes and clothes in real time, beauty looks created by visualizing faces with makeup in real time, Scanning looks to make online purchases and shopping.

This paper contains research about AR as a novel technology and how it has been implemented and benefits a glamorous yet polluting field like Fashion.

2. Literature Review:

Media today has become one of the major marketing channels for the establishments. Because of the nature of social media, the fashion industry has evolved over time. There have been several changes in the apparel industry. From seasonal clothing to weekly trends, has brought negative

impact on the environment. The fast fashion concept simply means production of clothes at an extremely higher rate because of high consumer demand resulting in cheaper and low quality a product which wears off easily. Trends run at lightning speed, with today's styles becoming yesterday's swiftly, they are already consigned to the trash bin. Fashion industry became the second most polluting industry in the world. Hence, the concept of sustainability has come into being. (Van Krevelen, D., & Poelman, R. 2007).

In the fashion sector, studies are showed to advance in consumer-centered, high-value added fashion products, comprising MTM (made-to-measure) type clothes, with the help of digital technology. (Feiner, S., MacIntyre, B., Haupt, M., & Solomon, E. 1993, December). 3D scanners and 3D virtual clothing simulation programs have been developed, hence, digitalizing the fashion industry. Many companies have initiated automated technology to enhance work efficiency and reduce cost, especially in technical areas. The fashion industry still is contingent on 2D images for garment designs. I-Fashion developed a system to show the result of avatar fitting simulation program, formed on a 3D whole-body scan. Microsoft also developed kinect technology, inlay 3D dresses over a user's image. With the concept of virtual simulation systems has expanded, many online digital shopping malls have begun to adopt it. Recently, many virtual clothing simulations have improved efficiency, marketability and accuracy. The aim of augmented reality is to let users to realistically experience numerous types of digital interface (Kim, M., & Cheeyong, K. 2015). Such AR technology can be applied to several real-time based environments, for instance, location and organism recognition, artificial intelligence, mobile technology and materialistic use of our five senses. (Kim, J. E. 2007).

In 2002, the consumer in fashion industry spent US$1 trillion on clothing-split from Western Europe, North America and Asia. 7% of the sum exports are in clothing and textiles. According to Allwood and Gardetti and Torres the developing countries now reckon for half of world textile market overseas and almost three-quarters of world clothing market overseas. Moreover, summer fashion shows are held in autumn to allow six months to mass produce. Clothing sector has now grown to "full package" companies that are capable of supplying quick time delivery orders to big retailers. Examining this situation, there is no doubt that the textiles industry is salient for our economy. However, in terms of sustainability, this industry mostly employs to the cause harm and deterioration of environmental and social factors. (Bhardwaj, V., & Fairhurst, A. 2010).

Development in fashion technology has become a crucial element for sustainability and fast fashion. This applies to reduce waste at any step of production, supply chain and retailing. There have been several developments and innovations in technology in the fashion industry. One such development is Augmented Reality. (Joy, A., Sherry Jr, J. F., Venkatesh, A., Wang, J., & Chan, R. 2012).

Digital clothing simulations have the potential to enhance electronic innovation in fashion. Systems such as avatar-fitting simulation programs are used where a full CG of a user's body is

displayed with a 3D dress drape simulation (Milgram, P., Takemura, H., Utsumi, A., & Kishino, F. 1995, December).AR is recognized by MIT as one of the 10 emerging technologies of 2007 creating a new kind of human interaction (Starner, T., Mann, S., Rhodes, B., Levine, J., Healey, J., Kirsch, D., ... & Pentland, A. 1997).

New technologies in fashion also contribute to experiential marketing. Traditionally, customers were treated as people who were good decision makers who look for functional benefits while purchasing something. But recently that idea has changed to treating consumers as rational and emotional human beings. The goal of experiential marketing is to create a holistic experience that includes individual experiences into a holistic (Azuma, R. T., 1997). This simply means that it immerses consumers in live experiences.

From a marketing point of view, AR technology is used for experiential marketing. It can humanize a brand and create lasting, positive brand impressions. This is done by creating touch points to engage consumers in unexpected ways. Moreover, it generates higher revenues for the brands. Especially, since e-commerce has developed, mobile based augmented reality can generate high revenues. (Cipolla-Ficarra, F. V. (Ed.). 2013). In this research paper, we continue to see the implications of AR technology in marketing and fashion sustainability by using qualitative methods. (Barreira, J., Bessa, M., Barbosa, L., & Magalhães, L., 2017).

3. Research Methodology

Being a new concept, AR technology has several implications in terms of environmental and new marketing approaches. This research mainly focused on the qualitative methods of gaining in-depth insight into the study with quantitative analysis. The aim of the research is to produce contextual real world knowledge about the behaviors and social and shared beliefs of consumers using AR technology. The method of data collection was observation and existing data with quantitative analysis (Azuma, R.,1993).

3.1. Methods used

3.1.1. Observation

The study was conducted in an office. The target group was the clients of an events based company. The data was recorded via note taking. The study was done to describe the amount of AR technology chosen by the clients, in an event based marketing company, to market their products or brand. Clients were pitched in several ideas including AR technology and were observed accordingly in terms of their choice for the technology.
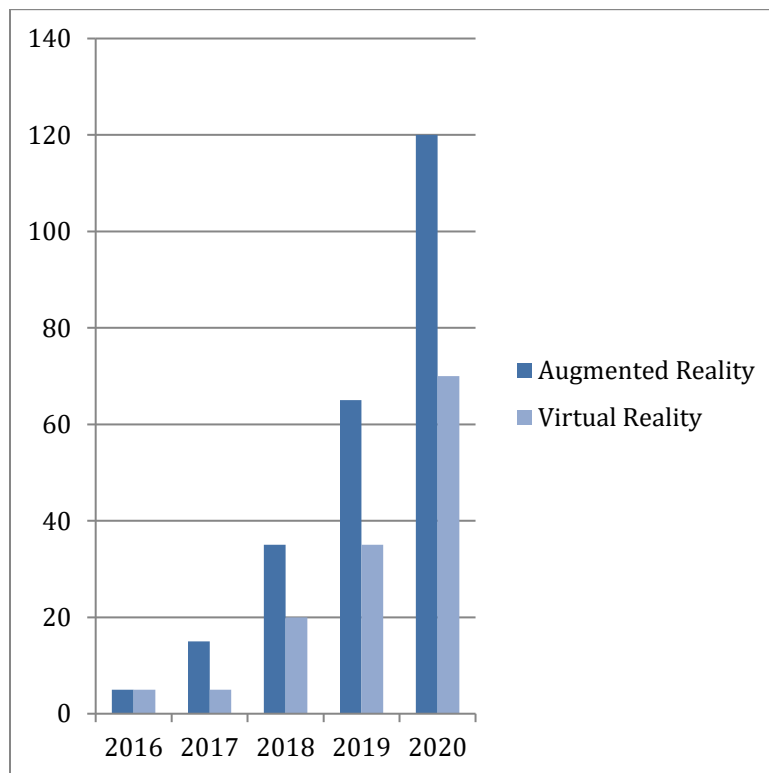
3.1.2. Existing Data

Various previous held researches on AR technology benefiting Fast fashion and sustainability were used. Materials such as Journals, Articles from newspapers and Research papers were used for this study. Required intensive research online and finding books and academic papers. This was used to get better insight into the environmental implications of augmented reality in Fashion industry. References for the same and given at the end. (Azuma, R T., 1995).

3.2. Data Analysis

3.2.1. Observation

The study resulted in 5 out of 20 clients choosing augmented reality for the marketing of their product or brand. Clients who aimed to make their marketing approach more interactive and experience based chose other forms of marketing tools provided to them mostly VR gaming over augmented reality. Also includes the revenue generated in use of AR and VR technology. (Wang, H., 2008).

Graph: 1 The increase in popularity of AI & VR due to media discourse.

3.2.2. Existing Data

The various previous researches done showcased that augmented reality does contribute to fast fashion. This new technology in the fashion industry can bring in new techniques and processes for brands and consumers to produce less waste. Therefore, it does contribute to fashion sustainability.

The AR technology targets to launch technology necessary for planning, designing, producing and marketing clothes by combining textile and fashion content with technology. The purpose is to not only merge IT with fashion but create new clothing marketing system. Such technology can enhance and grow production by usage of human body models and drape simulation over the web. This technology can aid in reducing time for producing clothes and detect physical characteristics and defect of clothes that could not previously be detected. (Park, Y., & Choi, Y., 2013). Moreover, Augmented Reality brings in new developments in marketing tools. Giving an interactive experience to consumers to leave a long-lasting effect. Experiential marketing techniques have brought in new methods to reach out to the customers. AR tech can help establish a customer relationship and can benefit customers in several ways. At the same time, generate higher revenue for the brands (Kim, J. R., Joung, S. T., & Jung, S. T., 2009). It is believed that in less than 5-10 years, *"augmented reality will have a more intense and extreme effect on the way in which we develop and interact with future computers."*

Media plays a very important role as industry leaders, to build admirable aesthetic values to innovate new businesses. To endure the recent unexpected challenges of exciting competition, the fashion industry is very much bent on "Media discourse" towards communicating via social media. Social media is a two-way communication platform that allows user to interact with each other on an online platform to share opinions and information. (Mohr, I. 2013). Almost every fashion brand depends on social media and been appraised as industry take-off tools. With the amplified use of social media as a means of publicizing and communication for luxury brands, it has become essential to experiential analyze the effect of social-media marketing (SMM). Thus, the study offered here has explored the effects of this (SMM) on consumer relationships, trust, intimacy and purchase intention. (Kim, A. J., & Ko, E. 2010).

4. Conclusion

Social media today facilitates the sharing of thoughts, ideas, and information through the building of virtual networks and communities. By design, social media is Internet-based and gives users quick electronic communication of content. Augmented reality is an emerging technology that is introduced in the fashion industry but is still making its way towards creating a mark in the industry. Even though, it is relatively a new field, several research efforts have taken place. Introducing a technology like the AR tech will help in lesser consumer waste and production waste.

Augmented Reality has been approved as a next generation display technology. It is the clothes themselves that transcend the laws of physics. Giving the rise of AR tech, these pieces of clothing that you cannot touch can only be worn virtually. A wardrobe that can be renewed endlessly, without falling into excessive ready-to-wear consumption. This can contribute to the concept of fast fashion and sustainability.

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