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The Influence of Augmented Reality on Purchase and Repurchase Intention in the Fashion Industry

Melika AZIM ZADEGAN[1*], Siavash FARAHBAKHSH[2], Francesco BELLINI[3]

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Abstract

Augmented Reality allows for the real-time application of simulated computer-generated visual elements to the physical world. The exponential development of businesses and emerging technology is combining to create a scenario in which marketing must adapt to changes on a regular basis. The major purpose of the current research is to investigate how AR technology could be used as a sales and marketing strategy for businesses. With an experimental methodology, this study objectively addresses the research gap in the Fashion Industry by measuring the influence of AR on consumer purchase and repurchase intention in the Fashion Industry. In this study, we adopted a quantitative approach, including an online questionnaire with a Likert scale. Generation Y, as the digital natives, was chosen as a good target population for the experimental investigation of the effects of AR apps on purchase and repurchase intention. To carry out the statistical analysis SPSS 17.1 was used to assess the correlation between the defined variables. Finally, the findings of this study are crucial in understanding if shopping-oriented Augmented Reality applications are more enjoyable and useful to purchase than their Internet equivalents.

Keywords: Augmented Reality, Virtual Reality, Interactive Technology, Customer Perception, Purchase Intention.

JEL Classification: M31.

Introduction

The exponential growth of businesses, along with emerging technology, is resulting in a scenario in which marketing must adapt to changes on a regular basis.

While marketing campaigns have been thoroughly examined and are directly targeted to traditional tactics, the addition of various methods focused on technical

[1] Sapienza University, Rome, Italy, azimzadegan.1914675@studenti.uniroma1.it.
[2] Sapienza University, Rome, Italy, farahbakhsh.1919642@studenti.uniroma1.it.
[3] Sapienza University, Rome, Italy, francesco.bellini@uniroma1.it.
* Corresponding author.

innovations makes it possible to sell new goods more interactively (Tardan et. al,, 2017). New advancements and ideas focused on virtual reality – VR – have been created at the technical level, allowing users to immerse themselves in virtual real-time environments with the help of computer systems (Klempous et al., 2017). Furthermore, technological advancements in digital displays, motion sensors, computer vision, and computation have fueled the exponential growth of VR technologies in marketing. These advances have made VR even more immersive and appealing to consumers. Although the gaming industry has seen the most comprehensive innovations to date, medicine, education, travel, entertainment, and marketing are all significant fields of application. Additionally, With the growth of smart device applications, augmented reality (AR) has been created as an interactive tool in the marketing context, with a growing variety of uses in business. The potential of augmented reality to cover the physical environment with virtual features, such as images and information that may interact with the physical environment in real-time, opens up new possibilities for content delivery to users. As a result, augmented reality has the potential to alter consumer activities such as product and information searches (Javornik, 2016). With the increased use of augmented reality in recent years, there is a need to better understand its application in consumer psychology.

Thus, encouraging marketing in accordance with virtual reality in an application that will provide the user with convenience and ease when trying to order, with personalized and interactive focus, in the desired virtual context; making it much easier to adjust and change the desired features using a Smartphone or tablet (Yaoyuneyong et al., 2016; Zhang et al., 2000). As a result, the fashion industry is considered to be a case study where the use of the mentioned application for marketing growth becomes important.

2. Problem Statement

Despite previous AR analyses, the majority of the studies focused on perceptions, motives, or responses to the AR app rather than broad brand-related outcome variables (Javornik, 2016). Scholz and Smith (2016) created a strategic technique for managers to use when developing AR campaigns. They discovered that building effective AR networks required a comprehensive understanding of how people interact with AR technologies (BCG, 2018). While few studies have looked into the fundamental mechanisms of AR (e.g., Huang, Hsu Liu, 2014), Scholz and Duffy (2018) have shown that consumers integrate AR apps into their personal space and self-awareness, and Hilken et al. (2017) have shown that AR apps can influence purchasing and word-of-mouth actions by increasing decision comfort and both hedonic and utilitarian incentives.

Additionally, fashion retail companies are combining Virtual Reality with digital marketing technologies to reach customers in an immersive and unique way that digital marketing lacks before adoption. Digital marketing, by its very nature, was not very successful in building interaction. However, the convergence of the two marketing strategies has improved digital engagement and the way consumers view

apparel items. Traditional marketing practices, along with digital marketing, have made a magnificent contribution to building brand recognition among consumers.

Thus, the integration of digital marketing technologies with AR likely changed traditional ways of marketing by allowing consumers to try goods using tools such as virtual testing rooms and AR shopping applications before purchasing fashion items. In line with this, Kim and Cheeyong (2015) emphasized the importance of creativity in the marketing industry and how it benefits the fashion retail industry. For a long time, the fashion retail business has been looking for changes in the realm of fashion marketing. It will help customers to observe models in the display of fashion products on their smartphones because of the combination of digital marketing and virtual reality technologies and will have a completely new shopping experience.

3. Research Questions / Aims of the Research

The key research questions that we set out to answer are:

RQ_1) What is the current condition of AR awareness and practical application in the marketing world and among people?

RQ_2) In the fashion industry, does the quality of AR applications affect customers' purchase and repurchase intentions?

RQ_3) In the fashion industry, does customer satisfaction influence purchase and repurchase intentions?

To answer these questions, we propose a customer-centered methodological structure, to give insights into consumer marketing applications and trends in academic AR research. As a result, the goal of this research is to assess the impact of augmented reality on customer purchasing and repurchasing behavior in the fashion industry, as well as how businesses utilize this feature in online sales.

4. Research Methods

The current study is a deductive-quantitative study in which the hypotheses regarding the impact of the application of AR apps on the purchase and repurchase intention of customers in the fashion industry have been tested. Moreover, the collected data were analyzed quantitatively to determine the associations between the study variables. The selected research framework was a survey, within which the research questions were addressed, and the hypotheses were tested.

The target population in this study was Generation Y in Italy and the responses were gathered from October to December year 2020. A simple random sampling has been chosen for the current study. Because the participants and cultural context of this study differed from those of previous studies, the researcher designed a questionnaire to collect the information needed for the study rather than using existing instruments. An extensive review of the literature and scales used in different educational backgrounds guided the development of the questionnaire (Gressard, Loyd, 1986). We then decided to see if augmented reality apps could replace the role of in-store shopping. The respondents indicated their preferences on

a 5-point Likert scale (Strongly disagree to Strongly agree). A panel of experts evaluated the questionnaire's validity. Three specialists (Professors of Digital Technology and Innovation Management, as well as Marketing) and four survey design professionals made up the panel. Cronbach's alpha was used to verify the scales' reliability. Cronbach's reliability coefficients (alpha values) for the scales were more than 0.744, indicating a stable scale (Nunnally, 1978). The questionnaire was translated into Italian and then back into English to ensure its suitability for the participants. The questionnaire was accompanied by a letter of recruitment and a letter of informed consent, as per Dillman's (1978) instructions. From the 27th to the 29th of October, 2020, an online questionnaire was distributed. A total of 119 questionnaire responses had been gathered from the participants by the 17th of November. The response rate was high enough to prevent the survey from being distributed again. Because there was a lack of research to answer our research questions, primary data had to be acquired (Ghauri, Grnhaug, 2005). It reflects the original data gathered by researchers in order to obtain the information required for the analysis (Saunders et al., 2007).

The goal of this study is to see how well our independent variables, such as Innovation, AR Quality, and Consumer Satisfaction, correlate with our dependent variables, Purchasing and Purchase Intention. We use the SPSS 17.1 software to create a bivariate model to investigate the relationship between them. In order to determine statistical significance, a level of 0.01 was chosen. After data gathering, the impact on dependent variables should be evaluated. The variables of each group were tested for normality distribution and, as can be seen, the results show that the distribution of data is not normal because the significance level is less than 0.01.

5. Findings

According to the descriptive statistics, 43.7 % of the respondents are male and 48.7 % are females. Also, 29.4 % of the respondents belong to groups aged 18-24 years old and 38% of the respondents have a Bachelor's degree. Also, the correlations between the variables were looked at to gain first insights into the relationships of the variables. As the variables are normally distributed, the correlations were assessed with Spearman's correlation. The correlation between variables indicates both the direction and the strength of the relationship (Pallant, 2005).

To investigate if and how the AR shopping experience can affect customers' purchase and repurchase intention, a set of research questions was developed and must now be addressed.

RQ1: What is the actual state of awareness and realistic application of AR in marketing academies?

Generation Y is viewed as a significant category by marketers since it is broad and has significant purchasing power (Parment, 2013). Digital natives are members of this generation, and 71% of them own mobile devices such as smartphones or tablets (Rowinski, 2012). Furthermore, according to Barkley (2011), much of this

group is early adopters and hence more likely to accept Virtual Reality. Furthermore, the findings of our study were consistent with his research. As a result, the new generation Y is more enthusiastic about using them in the fashion sector.

RQ2: Does the quality of augmented reality applications affect customers' purchase intention in the Fashion Industry?

Yes, the results of our research suggest that the ease of use of AR applications in the fashion industry has a positive impact on customers' purchase and repurchase intentions. As a result, the findings suggest that an engaging AR application can impact users' purchasing intentions and potentially turn them into buying consumers, rather than just being a fun novelty.

RQ3: Does customer satisfaction after using AR affect the purchase and repurchase intention in the fashion industry?

Yes, the significance of correlation shows that there is an important correlation between these two factors which must not be underestimated.

6. Conclusions

The current study highlighted the significance of augmented reality in shaping online consumers' perceptions of purchase and repurchase intention as acceptable items. To this end, the current study used innovation, AR app quality, and customer satisfaction as independent variables, as well as purchase and repurchase intention as dependent variables, to see if these two factors can influence the relationship between AR and purchasing intention in the fashion industry. Consumer purchase and repurchase intentions have been found to be influenced by augmented reality. According to the findings, AR can influence consumer purchasing behavior and increase purchasing intentions since customers can acquire a full picture of a product a brand offers, including full details, sizes, attractions, use, and drawbacks. The customer must be technologically knowledgeable in order to use smartphones and applications. Because smart devices and applications are user-friendly and compatible, familiarity is not difficult to achieve.

Currently, there is much discussion in organizations regarding the importance of utilizing technology and promoting organizational offerings in the marketing campaign (Laroche et al., 2013) and how social technology influences customer buying intention towards a specific brand (Wang et al., 2015). In this specific situation, there is a desperate need to investigate the different means of technological innovation that can impact purchasing decisions (Saboo et al., 2016). In addition, Javornik (2016) emphasized the importance of technology innovation, such as augmented reality, in understanding brand development. The current study's purpose is to fill these gaps in the literature through an experimental approach (Carmigniani et al., 2011; Javornik, 2014; Javornik, 2016). Customers' purchasing intentions are influenced by augmented reality, especially those who are literate and interested in employing cutting-edge technology (Song, Zinkhan, 2008). The study has proven and suggested a strategic step for firms that are repositioning themselves through

technological advancements and are experiencing decreased sales because of strong competition. Repositioning brands can assist businesses in gaining a fair market share and a lump sum profit. Such activities can affect not just online purchase habits, but also develop a word-of-mouth marketing strategy. Previous research has found that augmented reality has a beneficial impact on purchasing intent (Rese et al., 2014; Jung et al., 2016). In order to gain a profitable market share, marketing managers need to develop strategies that allow them to readily attract customers for their businesses.

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