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Original Research Paper

Commerce

VIRTUAL AND AUGMENTED REALITY: FURTHERING CONSUMER MARKETING RESEARCH

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ABSTRACT

The use of virtual reality (VR) technology and augmented reality (AR) technology in network marketing practices is on the rise. Online shopping also represented the fourth retail revolution. AR technology is one of three major technologies identified to be likely to change the future of shopping (the others are QR codes and mobile payment). However, studies based on the technology were less relevant with psychological phenomena. Under the condition of VR and AR, this study aims to investigate the difference of mental workload. We all know that customer satisfaction is the main objective of marketing.Every company is targeting to meet their customers expectations and enhance their experience in purchasing the products. With the advancement of technologies, now most of the companies are using Artificial Intelligence technologies such as Virtual try-on technology, an Augmented Reality (AR) technology to enhance their customer experience in online shopping.The purpose of this study is to analyse the perceptions of customers about the features of 3D try-on (AR) technology implemented by the firms like IKEA, Lens kart, Nike, ASOS and Amazon Online Shopping that attracts online customers and examine their experience and satisfaction level.

KEYWORDS : Online shopping, IKEA, Lens kart, Nike, ASOS and Amazon, Artificial Intelligence, Augmented Reality, Virtual Reality, Virtual try-on, 3D try-on , Customer perception and Customer Satisfaction.

INTRODUCTION

Artificial Intelligence (AI) technology is a wider concept used all over the world in a person's day to day life. Everyone is using the AI technology in their life with or without the knowledge of using it. Defining AI is a challenging task because of its nature. It has its applications in various fields like Civil security, Transportation, Manufacturing, Finance, Health care, Education, Marketing.

Virtual Reality(VR) and Augmented Reality(AR) technologies are part of them. These AI Technology's are the trends of our digital marketing platforms which helps in immersive and attractive user experience and enable consumers to get up close and personal with your product or service. It also helps to improve buyer awareness, offer better personalization and speed up the purchasing process.

Augmented reality integrates virtual elements into real-world environments to create alternate perceptions of reality. Using sensors and object recognition capabilities from input devices such as cameras, AR technology scans the physical environment, identifies features in the environment, and superimposes virtual objects (e.g., two- or three-dimensional images or animations, text, sounds) on top of a live view of the real world. By blending virtual elements into physical environments in real time, AR enriches users' visual and auditory perceptions of reality.

SCOPE OF THE STUDY:

Technology is on the and has now intercepted in each & every sector, segment, and industry. AR and VR and other Artificial Intelligence technologies have started influencing human lives at its utmost potential. Covid-19 pandemic has significantly contributed towards the AR and VR technology market growth since more and more businesses adopted to do work on remote. And increase in the usage of smart phones, people prefer to online shopping which made the need for these AR technologies to enhance customer experience and satisfaction. Augmented Reality is absolutely, undeniably coming for the future of digital marketing. Thus, the study of these technologies are inevitable for businesses to survive in the modern technology world.

OBJECTIVES OF THE STUDY:

- To Analyse the awareness of 3D Try-on technology in Lens kart online shopping.
- To Analyse the customers perception towards the features of 3D Try-on technology in Lens kart online shopping.
- To Analyze the Level of Satisfaction of consumers towards 3D TRY ON (AI/AR Technology) Technology used in Lens kart online shopping.

RESEARCH DESIGN AND DATA COLLECTION:

Research Design: Since the nature of the topic is in its emergent stage in India, the research constituted an exploratory study and the primary data were collected through Google forms for the study.

Sampling Technique: Convenience sampling method, a non-probability sampling technique which is used for collection of data for the study.

Sample size: The Questionnaire was carefully designed to meet requirements of the research and the sample data were collected from a total of 100 respondents.

LITERATURE REVIEW:

Vijay Rathee and Sarita Kumari, (2022) "Impact of Virtual Try-On Technology on Customers Mental Imagery During COVID-19" this study provides an insight about the mental imagery of customers towards the new developing technology Virtual try-on and also provides empirical evidence that virtual try-on technology influences the customers mental imagery towards the product presented on an online platform.Mean, standard deviation and one sample t-test were used to study the significance of different dimensions on mental imagery towards virtual try-on technology. Three dimensions of mental imagery have been studied, namely "vividness, quantity, and elaboration". The finding of this study show that virtual try-on technology positively influences all the dimensions of mental imagery.

Weisha Wang, et al., (2022) "Customer Satisfaction of Augmented Reality in Retail: A Human Value Orientation and Consumption Value Perspective" the researcher says, while

customer perceived augmented reality (AR) values have generally enhanced customer experience, AR value would be appreciated the most by a consumer segment that remains unexplored and subsequently the effects on customer satisfaction. He collected the sample of 253 AR technology users data for analyzing using partial least square and structured equation modelling. The results reveal that each human value orientation is associated with its unique perceived.

Mathew Chylinski, et al., (2020) "Augmented reality marketing: A technology enabled approach to situated customer experience" this article is about how augmented reality marketing delivers experiences that are valuable to customers in a way that is different from other marketing approaches. The purpose is to create a better insights that augmented reality marketing as a interface for the application of digital marketing technologies in physical settings.The finding indicates how the various types of augmented reality marketing experiences can be valuable to customers in a way that are different from other marketing approaches.

McLean and Wilson, (2019) "Shopping in the digital world: Examining customer engagement through augmented reality mobile applications" this paper furthers our understanding of customer brand engagement through augmented reality (AR) features on retailers mobile applications. The researcher introduces a new set of augmented reality attributes, namely, AR novelty, AR interactivity and AR vividness and establishes their influence on technology acceptance attributes of perceived ease of use, usefulness, enjoyment and subjective norms. Positive perceptions of the AR attributes and technology acceptance attributes positively influence brand engagement through the retailers AR mobile application.

DATA ANALYSIS AND INTERPRETATION:

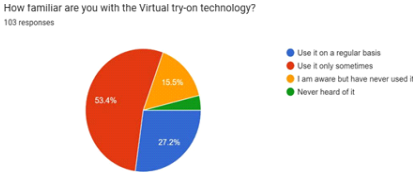
Descriptive statistics: Percentage Analysis:

a) Familiarity of Virtual try - on technology

Familiarity of Virtual try-on technology	No of Respondents
Use it on a regular basis	28
Use it only sometimes	55
I am aware but have never used it	16
Never heard of it	4

Interpretation:

It is found that 27.2% of respondents virtual try-on technology on regular basis, 53.4% of respondents use it only sometimes, 15.5% of respondents were aware but never used it and the rest 3.9% of respondents never heard about it.

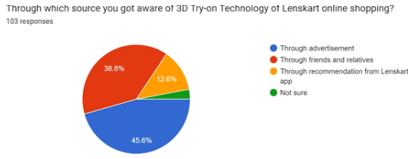


b) Source of Awareness

Source of Awareness	No of Respondents
Through advertisement	47
Through friends and relatives	40
Through recommendation from Lens kart app	13
Not sure	0

Interpretation:

In the survey, 45.6% of respondents were aware of 3D Try-on technology through advertisements, 38.8% of respondents were aware of 3D Try-on technology through friends and relatives, 12.65 of respondents were aware of 3D Try-on technology through through recommendation from lens kart app and the rest were not sure about it.

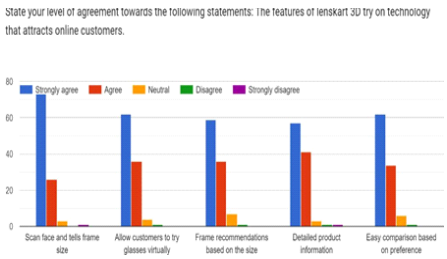


C) Perceptions of Customers about features of 3D Try-on technology

Factors	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Scan face and tells frame size	73	26	3	0	1	100
Allow customers to try glasses virtually	62	36	4	1	0	
Frame recommendations based on the size	59	36	7	1	0	
Detailed product information	57	41	3	1	1	
Easy comparison based on preference	62	34	6	1	0	

Interpretation:

Most of the respondents were strongly agreed and agreed towards the features of lens kart 3D try-on technology.

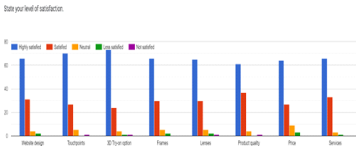


g.Overall satisfaction level

		Highly satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied	Total
Level of satisfaction	Website design	68	31	4	2	0	100
	Touch points	70	27	5	0	1	
	3D Try-on option	73	24	4	1	1	
	Frames	66	30	5	2	0	
	Lenses	65	30	5	2	1	
	Product quality	61	37	4	0	1	
	Price	64	27	9	3	0	
	Services	66	33	3	1	0	

Interpretation:

It is found that the overall level of satisfaction of respondents of lens kart customers towards online shopping using 3D try-on were more than 61%.



FINDINGS

- Most of the respondents were female.
- The majority of the respondents belong to the age group of 20 to 29 years.
- A large amount of the respondents were students.
- Majority of the respondents only use virtual try-on technology sometimes.
- Majority of the respondents were aware and tried 3D try-on technology.
- Most of the respondents were aware of 3D try-on technology through advertisements.
- The majority of the respondents were strongly agreed towards the features of lens kart 3D try-on technology.
- The maximum number of respondents were strongly agreed towards the benefits of 3D try-on.
- The majority of the respondents were highly satisfied with the lens kart online shopping using 3D try-on technology.

CONCLUSION:

From the above analysis, it is concluded that the 3D Try-on technology (AI/AR technology) increases the level of customer satisfaction and enhance the customer engagement with the product and the brand. One of the major advantage to companies by providing 3D Try-on technology to their customers is, it minimizes the rate of return of products. In order to gain competitive advantage in digital marketing, Artificial Intelligence technologies like AR are essential. Thus, AR will be the future of marketing.

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