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Impact of AI & AR on Consumer Perceptions of Various Firms: An Analysis

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ABSTRACT

The influence that Augmented Reality (AR) & Artificial Intelligence (AI) has had on the retail industry is the subject of this research. More specifically, the research focuses on how AR & AI has improved the shopping experience by including aspects of excitement and mystery. Augmented reality (AR) is a technology that enhances a user's experience of the real world by superimposing digital content on top of it. This results in interactions between customers and shops with the help of AI that are more customised and engaging. Enhanced shopping experiences for customers are being achieved by retailers through the implementation of augmented reality (AR) & AI through the utilisation of smart devices and developments in internet technology. This is accomplished through the use of features such as virtual fitting rooms and presentations of products in real time. In spite of the positive promises, there are additional problems that need to be handled. These challenges include high costs associated with technology, limited numbers of devices being used, and issues around privacy. A comprehensive literature review investigates a number of studies, such as Mussa's (2022) investigation into the connection between augmented reality (AR), consumer experience, and purchase intention during the post pandemic era, and Xue, Parker, and Hart's (2022) investigation into the application of AR & AI in the retail industry's consumer experience design. The themes that are being discussed include current developments in technology, real-world examples, and upcoming trends such as the incorporation of social media and the customisation of shopping experiences. Augmented reality (AR) & Artificial Intelligence (AI) has the potential to boost customer confidence and raise the likelihood that they will make a purchase. The successful completion of integration is contingent upon overcoming technical obstacles and achieving commercial acceptability.

KEY WORDS: Technology, Consumer Experience, Purchase Intension, Challenges, Developments.

INTRODUCTION

During this period of tremendous technological advancement, augmented reality (AR) is exerting a substantial amount of influence inside the retail industry. The retail business is undergoing a change as a result of the introduction of augmented reality technology, which enables customers to have exceptionally engaging shopping experiences. Through the process of superimposing digital information onto the user's actual environment, it accomplishes this goal. Additionally, it encourages customers and merchants to engage in a greater degree of personal engagement with one another. Not only does this degree of consumer interaction pique the interest of customers, but it also makes the shopping experience more enjoyable and interactive, which in turn increases the

probability that they will make a purchase. The proliferation of smart devices and the ongoing development of the Internet have both contributed to the rapid adoption of augmented reality (AR) technology by retail establishments. The usage of virtual fitting rooms and real-time product displays are two examples of how augmented reality (AR) might improve the shopping experience for customers. The use of these tools helps customers have a better grasp of the attributes of the product, which in turn increases their confidence in making a purchase selection. The technology known as augmented reality (AR) gives merchants the capacity to easily combine offline and online activities, which ultimately results in a unique purchase approach for customers that is not only straightforward but also individualised. This results in an increase in the variety of items that are available for purchase, which is beneficial to

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both customers and retailers. However, despite the fact that augmented reality has a lot of promise, the retail business still faces a number of challenges when it comes to using it. The broad application of augmented reality technology is plagued by several obstacles, including the expensive cost of these technologies and their limited acceptability. Furthermore, it is of the utmost importance to place a major focus on privacy and security, particularly in relation to the collection and administration of personal data pertaining to persons.

In addition, it is of the utmost importance to do extensive study on the difficulties associated with successfully integrating augmented reality (AR) & AI technology into the retail industry while simultaneously guaranteeing that it is compatible with traditional means of purchase. The purpose of this research is to conduct a thorough literature analysis in order to determine the particular ways in which augmented reality (AR) & AI technology boosts the confidence of customers and increases their propensity to make purchases. In addition to this, it investigates the possible uses of augmented reality & AI in the retail industry as well as the challenges that it presents. Our goal is to improve people's understanding of the technological improvements that have been achieved in the retail industry in the digital era and to provide direction on how to achieve these achievements. The purpose of this research is to investigate a wide range of major studies and literature that cover a wide range of topics that are associated with augmented reality (AR) technology & AI and its use in the retail sector. The first mention comes from the research conducted by Mona H. Mussa (2022), which investigates the influence of augmented reality (AR) & AI on the enhancement of online shopping experiences and the enhancement of buy intentions, with a particular emphasis on the COVID-19 epidemic. Using quantitative research methods and online surveys, the study was able to establish that there are substantial relationships between augmented reality (AR) & AI technology, customer experience, and the intention to make a purchase.

A QUICK OVERVIEW OF AR & AI

The technology known as augmented reality (AR) & Artificial Intelligence (AI) improves the user's experience of reality by superimposing digital images, movies, or data on top of the user's actual surroundings. The fundamental concept is to make use of computer-generated perceptual improvements in order to make it easier for users to grasp and interact with the real environment. Augmented reality &

Artificial Intelligence technology may be utilised by a variety of devices, including mobile phones, tablets, and augmented reality goggles. According to Mussa (2022), augmented reality (AR) & Artificial Intelligence (AI) is an essential component in enhancing the effectiveness of the online shopping experience and boosting the desire to make a purchase. According to the findings of the study, the implementation of augmented reality (AR) & Artificial Intelligence (AI) in the shopping process contributes to an increase in the likelihood that customers would make purchases by producing an atmosphere that is more fascinating and lively. The results of this study indicate that augmented reality holds tremendous potential as a tool for retail establishments to increase sales and increase customer engagement. The decade of the 1960s marked the beginning of the development of augmented reality technology, which was marked by the introduction of the idea of augmented reality (AR) & Artificial Intelligence. The introduction of smartphones and high-speed internet in recent years, on the other hand, marked the beginning of the widespread use of Augmented Reality & Artificial Intelligence technologies. This quick rise and broad usage of Augmented Reality & Artificial Intelligence technology may be attributed to recent breakthroughs in processing power and image recognition technology. Augmented reality & Artificial Intelligence technology has found applications in a variety of areas, including retail, gaming, education, and healthcare, among others. When it comes to providing customers with a more engaging and dynamic shopping experience, retailers frequently make use of Augmented Reality & Artificial Intelligence applications. It is now possible for customers to utilise Augmented Reality (AR) & Artificial Intelligence applications to digitally arrange furniture in their homes. Additionally, customers may use AR & AI technology to visually test out items, which completely eliminates the need for customer fittings to take place in person. An investigation that was carried out by Xue, Parker, and Hart (2022) found that the use of Augmented Reality & Artificial Intelligence technology results in an improvement in the shopping experience for customers, as well as an increase in customer engagement and income for businesses. The influence of Augmented Reality (AR) & Artificial Intelligence (AI) marketing on customer engagement, brand experience, and purchase decisions was the subject of a separate research that was carried out by Thakkar, Joshi, and Kachhela (2023). According to the findings of the study, Augmented Reality (AR) & Artificial Intelligence (AI) technology was able to effectively engage customers and influence their purchase decisions by creating a marketing experience that was more fascinating and immersive.

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Through the creation of exciting brand interactions, this highlights how Augmented Reality (AR) & Artificial Intelligence (AI) has the potential to improve the efficiency of marketing operations.

LITERATURE REVIEW

A new transition that has been referred to as the Fourth Industrial transformation has been confronting humanity throughout the course of the last several decades (Faruk et al., 2021). Researchers have demonstrated a significant level of interest in technological advancements in a variety of disciplines and the utilisation of social media and influencers for promotional reasons. A variety of issues, including marketing methods, customer behaviour, and the influence of technology on business operations, have been investigated in this research. Notable researchers in these fields include Abhishek & Srivastava, Chintalapati & Pandey, Jarek & Mazurek, Randhawa et al., Vlạcic et al., Chen et al., Han et al., Jiang, Kim & Moon, Saura et al., Cheng & Jiang, Varsha et al., Duong et al., Haefner et al., Dwivedi et al., Voorveld et al., and Ye & Zahay. Individuals, businesses, and educational institutions are all quite interested in Augmented Reality (AR) & Artificial Intelligence (AI), which is a field that is rapidly increasing. According to So et al. (2021), Hentzen et al. (2022), and Hollebeek et al. (2022), the urgency to improve consumer perceptions through technical advancements like as Augmented Reality (AR) & Artificial Intelligence (AI) has grown more acute in the aftermath of the COVID-19 epidemic. This notion was brought to light by the authors of the aforementioned studies. Additionally, as Dwivedi et al. (2021) underlined, it is essential to investigate advertising and other associated aspects such as Augmented Reality (AR) & Artificial Intelligence (AI) in order to determine the extent to which these factors have an impact on the viewpoints of customers. According to the findings of Gavilanes et al. (2018), consumer perceptions come in terms of audience participation. The purpose of this study is to analyse the impact of AI & AR on consumer perceptions that exist between the distinct areas, namely Augmented Reality (AR) & Artificial Intelligence (AI). A summary of all the subjects that were covered can be found above. As a result of clients giving computers the ability to make decisions with little to no assistance from people, Augmented Reality (AR) & Artificial Intelligence (AI) drastically transforms the interaction between machines and humans (Garg et al., 2022; Overgoor et al., 2019; Paschen et al., 2019). According to Chintalapati & Pandey (2021), Augmented Reality (AR) & Artificial Intelligence (AI) are a

developing technology in the field of marketing that enables the collecting and utilisation of data in real time in order to satisfy the preferences and wants of customers. The ultimate goal of these interactions is to foster customer loyalty and, eventually, to develop an emotional connection. It is possible to use digital measures such as clicks, likes, comments, and shares to determine the degree of synergy that exists between the parties involved.

RESEARCH QUESTIONS

R.Q.1. Is there a way to employ AR & AI to impact on consumer perceptions more interactive?

R.Q.2. After consumers are seen to have engaged with a company, what kind of feedback do they want to receive?

R.Q.3. Does the use of Augmented Reality (AR) & Artificial Intelligence (AI) influencers increase consumer perception?

RESEARCH OBJECTIVE

To identify to degree the Indian firms contemplate the utilisation of AR & AI in addressing issues relating to the consumer perceptions.

METHODOLOGY

As stated by Carmo & Ferreira (1998), this study adopts a pragmatic or inductive approach and utilises a convenience sample that is not dependent on probability. The sample comprises individuals with diverse degrees of expertise in management and decision-making, as well as customers. Indian companies were questioned by email and the professional networking platform LinkedIn, while the general population was surveyed through email and social media. A total of 154 firms and 333 people completed the questionnaires. This setting had both practical and exploratory aspects in relation to its objectives. This study aims to investigate the use of Augmented Reality (AR) & Artificial Intelligence (AI) by Indian companies in response to the challenges presented by the COVID-19 pandemic. It builds upon previous research by Yin (1994) and employs an exploratory approach to address gaps in our understanding of this modern phenomenon in a real-world context. Our objectives encompass enhancing the theoretical comprehension of the subject matter, gathering novel data for future examinations of AI as a reaction to the pandemic, and lastly, uncovering the desired solutions by pinpointing the fundamental reasons behind the observed impacts

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(internal validity). This study is based on a combination of primary and secondary sources. The primary sources include a survey of Indian businesses and an online survey of consumers. The secondary sources consist of bibliographic research and information obtained from books, journals, and scientific articles. These sources form the foundation of the study. The chosen research technique involved the use of a quantitative strategy out of the three available options, either qualitative, quantitative, or a combination approach. This facilitated the systematic gathering and examination of facts, which were subsequently utilised to substantiate or challenge ideas that were centred on academia (Williams, 2007). The two approaches of quantitative analysis utilised were analytical statistics and descriptive statistics. Data dispersion is an essential aspect of descriptive statistics. It involves analysing and presenting information in the form of frequencies, percentages, means, modes, medians, variances, standard deviations, and counts. This is done by employing procedures and principles to process and display the findings through charts and tables (Vilelas, 2009). Statistical analysis utilised structural equation modelling (SEM) to assess a theoretical model. The study utilised a statistical modelling

technique called partial least squares (PLS), which is based on variance. The analysis was conducted using the SmartPLS 3 software developed by Ringle et al. (2015).

DISCUSSION & ANALYSIS

Shift in corporate attitudes towards the utilisation of Augmented Reality (AR) & Artificial Intelligence (AI) and its role in achieving a competitive edge. We initially attempted to establish the extent to which firms view the usage of AR & AI relevant through table 1, and then we checked to see if their perspective of these technologies changed. In terms of descriptive statistics, the following variables are relevant: Variable 1 (V1) - AI stands for the future, and that future will be brought about by its widespread use; Variable 2 (V2) - AR & AI play a significant role in predicting actual demand and analysing data in emerging company dynamics; Variable 3 (V3) - AR & AI can perform multiple tasks with little to no human involvement; and Variable 4 (V4) - AR and AI enable less face-to-face interaction.

Table 1: Perspective of AR & AI technologies' Utilization with the Industry Viewpoint

Particular	V1	V2	V3	V4
N	156	156	156	156
Mean	4.56	4.33	3.79	4.31
Median	5.00	4.30	4.20	4.10
Mode	5.0	4.0	5.0	5.0
Standard Deviation	.678	.849	.823	.841

Initially, we examined the potential future applications of augmented reality (AR) & artificial intelligence (AI), their importance in predicting and comprehending data pertaining to emerging corporate dynamics, and their ability to minimise human participation and interpersonal communication. The survey results from the companies suggest a significant degree of contentment with the claims, with an average and middle score of about 4.2, as well as a most often occurring score of around 5.1. It is evident that contemporary corporations highly prioritise the use of augmented and artificial intelligence. We investigated the potential impact of a pandemic on enterprises' views of Augmented Reality (AR) and Artificial Intelligence (AI), and how this may influence their competitive advantage, assuming that these technologies are

beneficial. More than 50% of the surveyed organisations said that their perspectives on the possible uses of augmented and virtual reality had changed over time. Additionally, almost 80% of the businesses expressed their belief that these technologies would continue to be important in the future and provide them with a competitive advantage in the contemporary marketplace. We conducted an investigation to see if the changing perception of businesses differed according on the industry they operate in, with the goal of gaining a deeper grasp of this subject. Table 2 displays the outcomes of the analysis of variance (ANOVA), which determines if there are variations in means across different industries and identifies probable factors contributing to these variances.

Table 2: Analyzed change in companies' attitudes by industry using an ANOVA test

Particulars	Sum of Squares	df	Mean Square	Z	Sig.
Among Groups	7.621	8	.852	.807	.622
Within Groups	161.409	147	1.063		
Total	159.961	158			

Given that the ANOVA test resulted in a significance level higher than 0.05, we can conclude that there is no significant difference in the means of the "change in perception" variable across sectors. Based on the data, there was no discernible relationship between the activity sector and the change in perception of the enterprises across all sectors. Given that a significant number of the surveyed businesses have altered their perspectives on AR & AI, we conducted a test utilising Spearman's correlation coefficient to determine the potential relationship between the parameters we were examining and the shift in perception. The changing era led to a significant impact on social isolation and reduced contact. Research has demonstrated that intelligent systems has the ability to comprehend data in emerging corporate environments, reduce the need for human intervention, and accurately predict real-time demand. This fact demonstrates a little positive correlation with companies' stance on AR & AI transformation, which might perhaps explain the observed behaviours. Nevertheless, there are other factors that may possibly play a role in this growth, as seen by the modest correlation between the variables. The literature covers several subjects including enhancements in performance, efficiency, cost reduction, minimisation of human error, and process optimisation. Upon analysing the data, it is evident that a significant proportion of firms believe that AR & AI will have a transformative impact in the future. Consistent with the findings of Patvardhan & Ramachandran (2020) and Priem et al. (2013), it is recommended that organisations adopt AR & AI tactics to simulate the market. Coombs (2020) suggests that the changing era and consumer perception has capacity to stimulate extensive use of AR & AI. This is in line with the objectives of the corporations, as they both acknowledge that AR & AI allows us to decrease the requirement for human connection, which is a crucial component that will be influenced by the advancement of the epidemic, and thus will expedite the adoption of AR & AI.

CONSUMER PERCEPTIONS AND ACTIONS TOWARDS EVOLVING AR & AI

The poll asked the respondents about their position on the usage of AI given the current circumstances. Based on the findings shown in table 3, it is evident that the group of consumers indeed observed a change in their perception of augmented and artificial intelligence. They not only embraced the concept of utilising AI, but also expressed that implementing AI to combat the modern era instils a sense of reassurance and increased confidence in their organisation. Moreover, given the current circumstances, respondents have increasingly preferred a fully automated experience. The majority of respondents rated their degree of agreement on these subjects as 3.5 on a scale of 1 to 5, with 4 being the midpoint. The variables were – V1 - I began to incline more towards an automated system. V2 - By leveraging AR & AI, I was able to reduce the necessity for in-person communication, which made me feel more comfortable. V3 - Being aware that the institution possessed Augmented Reality (AR) and Artificial Intelligence (AI) instilled in me a sense of assurance and tranquilly. V4 - While completing a purchase, I started to value the utilisation of Augmented Reality (AR) and Artificial Intelligence (AI). Gradually, I became receptive to the notion of employing augmented reality (AR) and artificial intelligence (AI).

Table 3: Perspective of AR & AI technologies' Utilization with the Consumer Viewpoint

Particular	V1	V2	V3	V4
N	**331**	**331**	**331**	**331**
Mean	3.56	3.33	3.69	3.30

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Median	4.30	4.00	4.10	4.10
Mode	5.0	4.0	4.80	5.60
Standard Deviation	1.268	1.148	1.223	1.231

After realising that the surveyed consumers gradually accepted the use of augmented reality (AR) & artificial intelligence (AI) in the post-pandemic era, we conducted an investigation to see if there were any differences among the different sample groups, utilises the ANOVA test to see if there are disparities in means depending on gender, age, and degree of education. Based on the ANOVA test results, it can be concluded that there were no significant differences in support for the use of AR & AI based on age and gender. This inference is supported by the fact that both tests had a Sig. value greater than 0.05. There was no link seen between the age and gender of the respondents and their degree of support for AR & AI in the sample. However, significant variations in educational attainment were seen with a p-value of less than 0.05. Respondents' evaluations of the evidence supporting the use of AR & AI were influenced by their academic qualifications in the sample. To evaluate the cognitive abilities of each group and determine the source of the differences, a Scheffe's multiple comparisons test was employed (see to table 4). It may be inferred that the respondents' support for the use of AR and AI differs based on their educational background, namely whether they attended high school or college. These findings indicate that the educational qualifications of a certain group have an impact on their degree of endorsement for the use of Augmented Reality (AR) and Artificial Intelligence (AI).

Table 4: Scheffe's Multiple Comparisons Test

Education (A)	Education (B)	Difference Mean (A – B)	Standard Error	Sig.	Confidence (95%) Intervals	
					Lowest Limit	Highest Limit
Primary	Secondary	.241	.269	.710	-.39	.98
	Graduate	-.176	.167	.802	-.92	.53
Secondary	Primary	-.241	.269	.710	-.98	-.39
	Graduate	-.426	.119	.005	-.83	-.09
Graduate	Primary	-.176	.167	.802	-.53	.92
	Secondary	-.426	.119	.005	.09	.83

Significant level = 0.05 for mean difference.

We want to investigate the occurrence and significance of this phenomenon, as responders have increasingly embraced the utilization of AR & AI as the perceptions has progressed. The data analysis indicates a significant increase in the popularity of online shopping, offering a viable alternative to traditional in-store purchases. Approximately 50% of customers have a preference for online shopping as opposed to shopping in a local store, while just 25% of them still have a preference for the latter option. A majority of over 54 percent of customers find Amazon & Meesho beneficial for their online purchases due to the advantages they provide. Given that a majority of respondents find the advice provided by intelligent systems valuable, it is not surprising that an increasing number of individuals are choosing to utilize these systems while making purchases. We aimed to determine the consistency of this phenomenon across all age groups by confirming that a significant proportion of the participants chose online shopping over completing in-person purchases. The ANOVA test yielded a statistically significant result with a p-value of less than 0.05. Hence, there was no discernible association between the ages of the respondents and their inclination towards online shopping; instead, this inclination was unanimously reinforced across all age brackets. Following the realization that customers started embracing the use of intelligent systems due to the post-pandemic

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situation, we aimed to ascertain the duration of this attitude after the outbreak had abated. Analysis of customer responses suggests that following the post- pandemic, customers' sentiments will remain the same and they will support the implementation of intelligent technology. Additionally, a significant number of individuals want to continue making online purchases. However, they assert that they would actively pursue in-person purchasing experiences if the situation returns to its usual state. The data analysis validates the existing knowledge from the literature, indicating that consumption is prevalent but also dependent on specific circumstances. Furthermore, it reveals significant recent changes in consumption patterns due to the ongoing crisis. Pantano et al. (2020) & Sheth (2020)

observe that the rapid growth of e-commerce may be attributed to the increasing ease and dependence on digital technology, which in turn influences consumers' preference for purchasing through online channels. This study supports the authors' conclusions, since perception has influenced consumers to adopt AR & AI. Furthermore, there is a noticeable change in the purchasing channel. A significant proportion, namely half, of the sample from all age groups now favours online buying over in-person shopping. This clearly highlights the importance of the internet in contemporary society. Table 5 demonstrates that both Cronbach's Alpha and CR (composite reliability) values regularly above 0.7, indicating a trustworthy level of internal consistency.

Table 5: Conducts analysis to assess the distinctiveness of variables, the relationships between them, the average variance extracted (AVE), and the composite reliability (CR). The acronyms CR and AVE represent the concept of "average variance extracted" and similar terms. The square roots of the AVE are shown by the bold numbers. The process of identifying the relationships between the constructions is performed on the items located below the diagonal. The HTMT values are visible above the diagonal elements.

Particulars	Cronbach's Alpha	AVE	CR	3	2	1
Advantages of using AR & AI	0.812	0.867	0.848	0.298	0.309	0.926
Assessment of potential applications of AR & AI	1.000	1.000	1.000	0.487	1.000	0.312
Objectives related to augmented reality & artificial intelligence	0.936	0.916	0.496	0.698	0.437	0.306

Regarding convergent validity, the analysis in table 5 confirmed its presence, as all items exhibited positive and statistically significant relationships with their respective factors. Furthermore, these items possessed composite reliability (CR) values greater than 0.70 and average variance extracted (AVE) values greater than 0.50, in accordance with the criteria established by Bagozzi & Yi (1988). We employed two methodologies to assess discriminant validity. Fornell and Larcker (1981) proposed a criterion for Average Variance Extracted (AVE), stating that the square root of the AVE value on the diagonal of Table 5 should exceed its highest correlation with any other variable. All the variables satisfy the stipulated condition, as seen in table 5. Subsequently, the HTMT ratio criteria were utilised, as outlined by Hair et al. (2017) and Henseler et al. (2015). The table above demonstrates that all HTMT results are < 0.85, which indicates that the test possesses discriminant

validity. To evaluate the structural model, we considered the direction, strength, and significance of the structural path coefficients. We also examined the magnitude of the R^2 value for each endogenous variable to determine the model's predictive accuracy. Additionally, we assessed the predictive relevance of the model using Stone-Geisser's Q^2 values (Hair et al., 2017). Before evaluating the structural model, the researchers analysed collinearity. Collinearity is absent as indicated by the consistently low VIF values, ranging from 1 to 2.668, all of which were below the threshold of 5. The two dependent variables, perception of AR & AI and the practicality of utilising AR & AI, had coefficients of determination of 7% and 20%, respectively. The model's predictive relevance is evidenced by the fact that both endogenous variables' Q^2 values (0.028 and 0.167, respectively) are more than zero (Hair et al., 2017). Table 6 displays all of the model's direct links.

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Table 6: Relationships between direct models

Particulars	Coefficient Path	T-Statistics	P-Values	Standard Errors
Advantages of using AR & AI ☞ Assessment of potential applications of AR & AI	0.168	2.014	0.052	0.079
Advantages of using AR & AI ☞ Objectives related to augmented reality & artificial intelligence	0.271	2.632	0.028	0.123
Assessment of potential applications of AR & AI ☞ Objectives related to augmented reality & artificial intelligence	0.382	5.002	0.000	0.087

The findings that are presented in table 6 offer evidence that intelligent systems, along with the benefits of augmented reality (AR) and artificial intelligence (AI), have a positive influence on the likelihood of companies adopting these technologies (ß = 0.168, p < 0.05). Additionally, the findings indicate that the company's perspective on AR and AI is positively influenced by intelligent systems (ß = 0.271, p < 0.05). These results support hypotheses H3 and H1, respectively. The adoption of artificial intelligence by businesses is significantly influenced by their vision for augmented reality and artificial intelligence (ß = 0.382, p < 0.001), which provides support for hypothesis H2.When examining hypothesis H4, which emphasises on indirect effects through a mediator variable; a bootstrapping approach was utilised (Preacher & Hayes, 2008). This technique was taken into consideration. This is the outcome of the mediation effect, which is seen in Figure 7.

Table 7: Linkages between certain indirect models

Particulars	Coefficient Path	T-Statistics	P-Values	Standard Errors
Advantages of using AR & AI ☞ Assessment of potential applications of AR & AI ☞ Objectives related to augmented reality & artificial intelligence	0.108	2.316	0.032	0.051

The evaluation of table 7 data confirms the mediation hypothesis H4, showing a significant indirect impact of AR & AI benefits on the probability of AR & AI adoption. This is evidenced by the strategic objectives of the mediator enterprises towards AR & AI, with a ß coefficient of 0.108 and a p-value of less than 0.05. With the help of the model that was described in the chapter before this one, two essential components were recognised (Patvardhan & Ramachandran, 2020; Coombs, 2020; Ehiorobo, 2020), and the advantages of AR & AI (Sreeharsha, 2020) were explored. Through the use of a questionnaire, the research was able to effectively validate the relevance of all of the variables by assessing independent indicators that were connected to each variable. The reliability of the variables was confirmed by the fact that all of them had scores that were more than 0.6 and were considered significant when the p-value was less than 0.001 (Hair et al., 2017). The findings are consistent with the authors' thoughts on the AR & AI tactics employed by businesses. The objectives of the businesses are backed by a number of factors, such as their emphasis on the future environment, their goal of reducing the amount of touch they experience, the relevance of robotics, and the possible competitive advantage they may get. Sreeharsha (2020) stresses the fact that one of the most important advantages of AR & AI. After determining the two primary factors that might have an effect on the adoption of AR & AI by businesses during the current era, the assumptions that were established in this research were investigated to determine whether or not they were accurate. In light of the findings, it was revealed that the advantages

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that are linked with AR & AI and the use of intelligent systems have a significant influence on the chance that organisations would embrace AR & AI. This provides support for hypothesis H3 in accordance with the model that was provided, with a particular emphasis on the direct impacts. In other words, the authors claim that given the existing requirements and limits, businesses are motivated to adopt AR & AI technologies that can encourage disengagement and, to some extent, facilitate the running of operations. This is supported by the fact that these technologies can help businesses function more efficiently. Further evidence that supports hypothesis H1 is provided by the favourable effects that artificial intelligence and intelligent technologies have had on the viewpoints of organisations towards these issues. The perspectives that businesses hold on these issues are influenced by the potential benefits that may be derived from the use of AR & AI systems & technology, which are in turn influenced by the value that these particular firms may obtain. The vision that businesses have for AR & AI is the most important factor in determining whether or not they will use AR & AI during the post epidemic era. This discovery lends support to the theory H2 by providing evidence in its favour. We ran a test on hypothesis H4, which evaluated the influence of the advantages of AR & AI on the probability of AR & AI implementation through the mediation of a favourable impression of AR & AI. This test was done in regard to the indirect effects that the model has. Based on our findings, it was determined that this perspective had the effect that was desired.

FINDINGS & CONCLUSION

Companies are experiencing mounting pressure due to the market situation, which has underscored the need for proactive measures from the business community. A multitude of restrictions were implemented, which proved to be onerous for all parties involved and thus had a significant impact on enterprises. The objective of this research was to determine the impact of individuals seeking AR & AI based solutions on the consumer & commercial sectors. After conducting two surveys with a total of 489 responses and doing a literature review, a set of findings was obtained about the specified subject. A majority of the participants in the sample, from various industries, changed their perspective due to the present circumstances, believing that they may gain a competitive edge by utilising artificial intelligence. This pertained to the first study query, which sought to comprehend how organisations see AR & AI and its connection to gaining a competitive edge in the context

of the post pandemic era. Regarding the second research question, which sought to ascertain if consumer behaviour was affected by the post pandemic era, our findings indicate that the participants in the study exhibited a noticeable change in their attitude towards AR & AI. They became more receptive to its use and even preferred a fully automated experience in utilising AR & AI to combat the market situation. This support from purchasers was not biased according to the age or gender of the sample. However, we observed differences in educational attainment between those with a high school diploma and those with a bachelor's degree. The analysis also determined that around 50% of the participants favoured online buying over in-store purchasing, and that respondents' ages did not influence this preference. The accompanying data provides evidence supporting the idea that the consumers' attitude will remain unchanged.

Regarding the third research question, which sought to ascertain the impact of AR & AI on businesses during the post pandemic era, two distinct areas were identified: an external domain focused on customer concerns and sales, and an internal domain focused on enhancing efficiency, reducing errors, optimising processes, and utilising AR & AI to promote detachment, enforce mask usage, and disinfect and clean spaces. Despite the absence of noticeable alterations, it was concluded that firms placed a higher importance on satisfying consumers rather than focussing on internal benefits. The prioritisation of the client sphere can be attributed to the significant sales challenges faced by many organisations as a result of the post pandemic era.

The fourth and last study question aimed to determine the impact of organisations' perceptions of AR & AI and its benefits on their probability of adopting the technology. The key factors that may impact the adoption of AR & AI by businesses are their perspective on these difficulties and the perceived advantages of using AR & AI. Just as the benefits influence organisations' perspective on these matters, they also positively affect the possibility of corporations adopting AR & AI. Interestingly, however, the primary and significant factor that influenced the probability of utilisation was the companies' vision for AR & AI.

According to this research, the business sector must adopt new strategies and adapt to the changing circumstances caused by the post pandemic era in order to endure the current crisis. Thus, the research seeks to enhance management by exploring innovative AR & AI techniques and intelligent system applications, examining

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their principles and prospective impacts on enterprises, and putting these concepts into practice. This work is a valuable contribution to the scientific literature as it addresses the gap in knowledge on the disparity between company management during the post pandemic era and the utilisation of intelligent systems and novel AR & AI methods. More precisely, considering the post pandemic era, the study sought to understand the impact of AR & AI on consumers & companies, as well as the motivations behind organisations adopting AR & AI and intelligent technologies. Given the rapid expansion the scientific knowledge in combating post pandemic era, it is imperative to further progress study and comprehension in this field.

LIMITATIONS

Regarding the research limitations, it is important to bear in mind that the study's findings should be approached with caution due to the small sample size, which may not adequately represent the Indian environment. The primary constraint of the study lies in its inability to be extrapolated. Another disadvantage is that the coefficient of determination (R^2) of the developed model is only 20%. This suggests that the benefits of AR & AI and the goals that organisations have for this matter only contribute to 20% of the likelihood of corporations adopting AR & AI. However, given the exploratory and unique nature of the study, this element is not a cause for alarm. It proposes avenues for future study to uncover other attributes that may impact how companies see the possibility of AR & AI use during the post pandemic era. Although these limitations are inevitable, they do not in any manner reduce the importance or accuracy of the study's results.

FUTURE SCOPE

It is proposed to do research on new variables and other factors that may explain and influence the appraisal of businesses in the context of AR & AI adoption during the post pandemic era. This should be done in addition to the previously mentioned restriction. In order to gain a deeper understanding of whether consumer and corporate attitudes and behaviours differ between countries and cultures, it would be intriguing to broaden the study to include additional geographical regions, including other nations.

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