

Perceptions and Adoption Intention of Using Metaverse as a Marketing Tool

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ABSTRACT

The metaverse represents a revolutionary evolution in digital engagement, merging virtual reality (VR) and augmented reality (AR) technologies to create immersive environments where human interaction and brand engagement can flourish. This study investigates Indian marketers' perceptions and adoption intentions of using the metaverse as a marketing tool, with a specific focus on the fashion and lifestyle industry. Utilizing the Technology Acceptance Model (TAM), the study analyses factors such as perceived usefulness, perceived ease of use, perceived risk, and computer anxiety to understand their impact on adoption intention. The findings underscore the current hesitation among Indian marketers due to concerns over privacy, return on investment, and limited familiarity with immersive technologies, while also highlighting significant opportunities for brands willing to engage with this emerging digital frontier.

Key Words: Metaverse, Technology Acceptance Model, Virtual Reality, Digital Marketing, Adoption Intention, India



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INTRODUCTION

In the contemporary marketing landscape, the focus has shifted from customer satisfaction to emphasizing customer experience. Industry 5.0 has ushered in the era of virtual branding, with customer engagement now extending to the metaverse. Coined by Neal Stephenson in 1992, the metaverse envisions a digital universe where human interaction occurs through avatars in a virtual reality (VR) environment. The concept gained prominence in 2020 and 2021 when Mark Zuckerberg repeatedly mentioned the metaverse, propelling it into global attention. This digital realm, powered by augmented and virtual reality, is anticipated to be a pivotal channel in the age of digitalization. Market projections indicate substantial growth, with the metaverse market set to reach \$55.0 billion in 2023, showing a 36.71% annual growth rate, reaching \$490.4 billion by 2030. The US is anticipated to project a market size of \$17.5 billion in 2023. Leading metaverse platforms include Roblox, Decentraland, Meta Horizon Worlds, Nvidia Omniverse, Sorare, and Altava Group. The user base is projected to soar, reaching 1,461.0 million users by 2030, with an increasing user penetration rate from 6.0% in 2023 to 17.9% in 2030. The average market size per user (ARPU) is estimated

at \$119.4, indicating substantial monetization potential. The metaverse, as supported by persuasive data, is rapidly evolving into a massive digital environment, poised for exponential growth, with a forecasted market value of \$800 billion by 2024.

Key players such as Nvidia's Omniverse Beta Version, Microsoft's Microsoft Mesh, and Sony's strategic investments illustrate the metaverse's momentum. Epic Games' Fortnite, with over 10.7 million users participating in online concerts, showcases the metaverse's potential. Meta (formerly Facebook) is making significant strides, investing \$10 billion and creating 10,000 metaverse-related jobs. Dhanush V's research on marketing in the metaverse underlines its versatility and potential as a game-changer for brands and businesses, addressing aspects like cryptocurrency acceptance, impact on e-commerce, and the meaningfulness of brand experiences.

Scholars, corporations, and marketers are all becoming interested in the fascinating and dynamic topic of metaverse. The quick development of augmented and virtual reality technology has made room for the Metaverse, which offers an unmatched level of immersion and marketing opportunities. The estimated value of the global metaverse market as of 2022 was \$65.5 billion USD. Forecasts suggest that by 2023, the

amount will have increased to 82 billion dollars, and by 2030, it is expected to have skyrocketed to 936.6 billion dollars. This field of study looks into a wide range of subjects, such as user behaviour and preferences in virtual environments, the creation of successful Metaverse marketing campaigns, cultural adaptation and localization of marketing campaigns, the effect of Metaverse marketing on consumer privacy and trust, and the measurement of virtual space-specific key performance indicators. Knowing how to traverse the Metaverse and take use of its marketing and communication possibilities is becoming increasingly important as more firms engage in it. Research in Metaverse marketing is vital and topical, providing insights into the future of digital marketing and brand-consumer connections as the Metaverse stands to transform how we engage and transact in the digital realm.

Scope of the Study: The study aims to gain insights into how marketers perceive and accept the metaverse, with a specific focus on understanding why India has a limited presence in this digital landscape. The research explores whether the metaverse holds the potential to become the 'new social media' in the country. By examining the perspectives of Indian marketers, the study delves into the factors influencing their acceptance or reluctance to use the metaverse as a marketing tool in India.

The primary focus area is the fashion industry, where the research aims to uncover the reasons behind India's comparatively slower adoption of the metaverse for marketing, contrasting with other countries. The study seeks to identify unique factors within the Indian market, considering cultural, technological, and economic aspects that shape marketers' views on the metaverse.

Additionally, given the ongoing growth in augmented reality (AR), virtual reality (VR), and virtual worlds, the research explores the changing landscape of these technologies. It investigates how these immersive technologies contribute to or hinder the acceptance of the metaverse as a viable marketing tool in the Indian context.

Rise of the Metaverse : Fueled by advancements in AR and VR, the metaverse facilitates real-time, immersive brand-consumer interactions. Top platforms include Meta Horizon Worlds, Decentraland, and Roblox, with global giants like Microsoft, Sony, and Nvidia actively investing in development.

Marketing Potential of the Metaverse: Metaverse marketing spans virtual events, digital product try-ons, and gamified brand experiences. Brands like Nike and Adidas are early adopters, leveraging the platform for customer engagement and loyalty building.

India's Position in Metaverse Adoption: Despite technological enthusiasm, Indian brands have lagged in metaverse integration. This can be attributed to infrastructural limitations, privacy concerns, ROI uncertainty, and cultural resistance to virtual immersion.

Major Industry Players :

Tech Titans:

- **Meta (formerly Facebook):** Heavily invested in the metaverse with its Horizon platforms and focus on virtual reality (VR) technologies.
- **Microsoft:** Their acquisition of Activision Blizzard and development of Mesh for Microsoft Teams positions them for a strong presence in the metaverse for gaming and work applications.
- **Epic Games (Fortnite):** The creators of Fortnite have a massive user base already familiar with virtual environments, making them a natural contender.
- **NVIDIA:** Their powerful graphics processing units (GPUs) are crucial for rendering the immersive visuals of the metaverse.

Gaming and Entertainment Giants:

- **Roblox:** A popular online gaming platform with a large user base accustomed to virtual experiences.
- **Tencent:** China's leading gaming company, actively exploring the metaverse with their WeChat platform.
- **Sony:** PlayStation and their VR ventures indicate a strong interest in the metaverse for entertainment.

Emerging Players:

- **Decentraland:** A decentralized virtual world platform built on blockchain technology.
- **The Sandbox:** Another blockchain-based metaverse platform where users can create and monetize virtual experiences.

Beyond Tech:

- **Fashion Brands:** Companies like Nike and Adidas are already experimenting with virtual clothing and experiences in the metaverse.
- **Financial Institutions:** JPMorgan Chase and others are exploring the potential of the metaverse for financial services.

Keep in mind: The metaverse is still evolving, and this list is not exhaustive. New players and collaborations are likely to emerge in the coming years.

Problem Statement : This research aims to understand marketers' perceptions of the Metaverse's potential to elevate customer engagement, brand awareness, and enhance overall marketing effectiveness. Additionally, it seeks to uncover the factors that deter Indian brands from integrating their marketing activities with Metaverse. The study also aims to identify the key elements shaping positive or negative perceptions surrounding Metaverse marketing. Furthermore, the research intends to assess marketers' concerns, including privacy issues, security apprehensions, and uncertainties regarding the return on investment (ROI) associated with Metaverse initiatives. By addressing these aspects, the study aims to contribute valuable insights into the dynamics influencing marketers' attitudes and decisions regarding Metaverse adoption in the Indian market.

LIMITATIONS OF THE STUDY

1. This study concentrates on marketer's perception of using Metaverse for marketing, which might change in the future.
2. The findings might not reflect future advancements in metaverse technology or evolving user perception due to the specific timeframe of the study.
3. The chosen data collection method (e.g., surveys) might introduce limitations like participant bias, researcher bias, or other potential influences on the results.

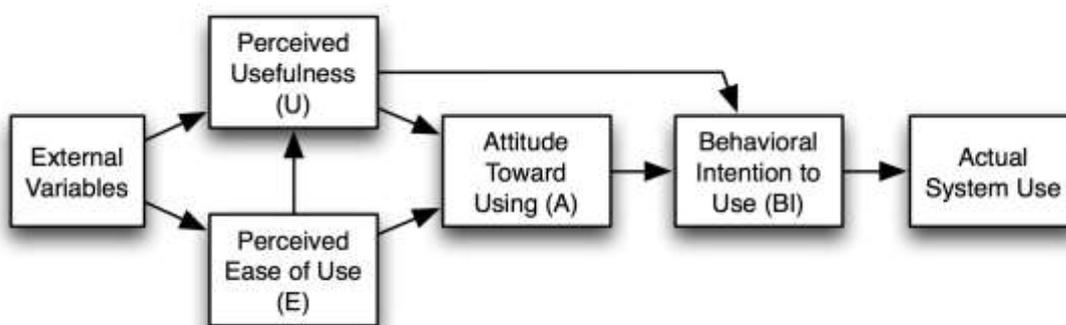
3.1 RESEARCH QUESTIONS

1. Why is metaverse still a foreign concept in India?
2. Why can't we see Indian brands in metaverse yet?
3. Will metaverse be accepted and adopted in India?

4. What are the risks, such as privacy issues, security concerns, or uncertainties about the return on investment (ROI) in the Metaverse.
5. How does the level of familiarity with virtual reality and augmented reality impact their willingness to engage with marketing content in the metaverse?
6. What is the main demographic, psychographic, and behavioural characteristics of early adopters of metaverse-based marketing platforms?
7. What are the factors that cause consumers to shy away from adopting metaverse?
8. What are the effective cultural adaptation and localization strategies for marketing campaigns within the Metaverse to address the emerging challenge of catering to diverse cultural contexts in virtual environments?

LITERATURE REVIEW

Fred Davis (1986) TAM – The Technology Acceptance Model (TAM) is grounded on the notion that human attitudes toward technology are influenced by two primary factors: perceived usefulness and perceived ease of use. Perceived usefulness involves the belief that employing a technology would enhance performance or help in achieving goals, while perceived ease of use refers to the belief that using a technology will be straightforward and uncomplicated. TAM asserts that these two criteria are crucial indicators of our intention to use a technology, ultimately predicting our actual usage behaviour.

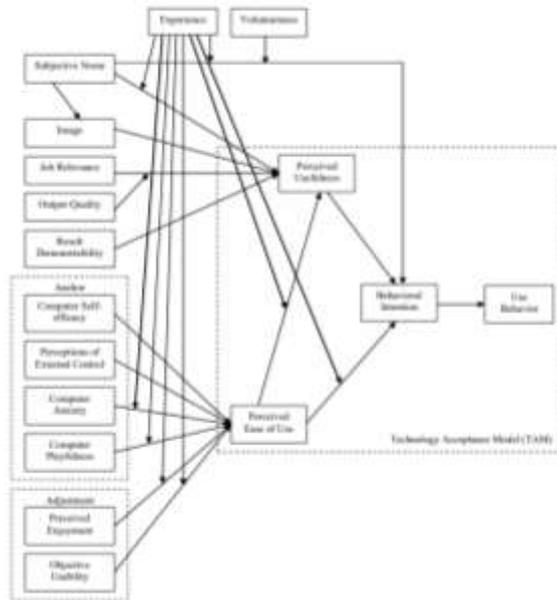


Davis, Fred & Bagozzi, Richard & Warshaw, Paul (1989) - The study reveals three crucial insights into the factors influencing computer usage by management:

- (1) People's computer use can be accurately predicted based on their objectives.
- (2) Individuals' intentions to use computers are significantly shaped by their perceived usefulness.
- (3) People's willingness to employ computers is notably affected by the perceived ease of use. The research suggests that when a system provides valuable and essential features, users are more likely to overlook usability issues. Conversely, no matter how user-friendly a system's interface may be, it cannot compensate for a lack of practical functionality. This underscores the importance of a balanced approach in design and development, where both usability and utility play pivotal roles in determining user acceptance.

encompass: the ease of use perception, subjective norm, image, job relevance, output quality, result demonstrability, computer self-efficacy, perception of external control, computer anxiety, computer enjoyment.

Venkatesh and Bala (2008) Technology acceptance model 3 - The primary focus revolves around two key aspects: the perceived usefulness and the simplicity of use. The factors influencing perceived usefulness



Yavuz Torman and Baris Batuhan GECIT (2022)¹ collaborated to study the user acceptance of metaverse, an analysis for e-commerce in the framework of technology Acceptance model. Digitalization, block chain, metaverse and NFTs were studied using the technology acceptance model. It was found that Perceived usefulness affects the intention to use Metaverse, Perceived Ease of Use affects the intention to use Metaverse, Perceived Ease of Use has an impact on Perceived usefulness, Perceived Trust does not affect Perceived Usefulness, Perceived Trust affects Perceived Ease of Use, Perceived Enjoyment does not affect Perceived Usefulness, Perceived Enjoyment does not affect Perceived Ease of Use, Perceived Compatibility affects Perceived Usefulness, Perceived Compatibility affects Perceived Ease of Use.

Bushell, Chris (2022) has studied the impact of metaverse on branding and marketing by doing a survey on businesses that already use metaverse as their brand extension. It was found that despite metaverse providing competitive advantage for businesses, they need to look out for the dangers in adoption and usage of the technology. Various Brands and celebrities have already upped their game on multiple Meta eco systems. One of the most fascinating findings from the survey is that people are more likely to buy from brands that has either physical or digital presence in metaverse.

Poongodi. B, Navaneetha Krishnan. P (2019) - The influence and expectations related to camera memory capacity vary depending on the industry of the company. The study reveals that both the expectation for the camera's life cycle and price are influenced by the sector in which the company operates. Correlation analysis indicates that the preference for power-saving features is independent of the preference for product innovativeness. However, there is a positive association between the safety factor and the crime reduction factor

– customers who feel secure believe that crime can be minimized.

Kaur R, Singh R, Gehlot A, Priyadarshi N, Twala B (2022) – ‘Marketing Strategies 4.0: Recent Trends and Technologies in Marketing’ In the contemporary business landscape, the role of marketing strategy is pivotal in elevating organizational productivity. Recognizing the current need for technological integration in marketing to align with customer and market demands, this study delves into the incorporation of Industry 4.0 enabling technologies. Focused on customer retention, satisfaction, profiling, and reward systems via loyalty points, the research explores applications such as strategic information utilization for target customer satisfaction, real-time feedback through a digital infrastructure, forecasting customer behavior for personalized interactions, leveraging business analytics for product or service quality enhancement, and deploying simulations for monitoring and planning improvements. The study concludes with valuable recommendations for future adoption, emphasizing the establishment of innovative and sustainable infrastructures.

Nagarajan, G., Moorthy, V. S., Mohamed, A. K., Mohideen, A. S., Ishaq, M. M., & Lakshmi, M. R. (2023) –‘The Role Of The Metaverse In Digital Marketing’ In today's rapidly advancing era, Metaverse technology has garnered widespread attention, introducing innovations that significantly impact online user behavior. Metaverse advertising, hailed as the "brand-new advertising and marketing universe," aims to enhance, rather than replace, the internet and social media. Bridging physical reality and digital virtuality, the Metaverse holds crucial data for various industries, including technology, advertising, fashion, and gaming. This advertising frontier has the potential to create substantial value, necessitating strategic evaluation across organizational functions. Despite ongoing upgrades and challenges like indebtedness and investments, Metaverse advertising presents a futuristic scope beyond marketing. This paper explores key Metaverse elements using a SWOC analysis, including synthetic intelligence, non-fungible tokens (NFTs), and cryptocurrency. While currently descriptive, the paper hints at future empirical research and case study methodologies.

Ibrahim Halil Efendioglu (2023) has shed light on various Metaverse concepts and marketing explaining the principles, affordances and challenges of metaverse technology. With the web 3.0 technology, 2D internet environment is evolving into 3D environments which was predicted to be they extended and reprised version of social media. Users will exist and experience the metaverse through avatars. Marketers should target on Generation Y and Z as they are the quickest adopters to technologies. Users have to be constantly analysed and

those data will serve its purpose by using business analytics to frame strategies that is more relevant to the interest of users in a particular environment.

Isaac Cheah, Anwar Sadat Shimul (2023) has found that metaverse is expected to become an \$800 billion market by 2024. Several brands have already set their tents on metaverse. They have suggested to look into more factors in addition to age while strategizing marketing campaigns by using relevant metaverse platforms for relevant products and services. The authors have also advised to notch down on the unrealistic expectations of what metaverse could become. It is also found that until 2040, metaverse will not be used every single day like today's social media.

Kemal Gökhan NALBANT and Sevgi AYDIN (2022) together researched on the Development and Transformation in Digital Marketing and Branding with Artificial Intelligence and Digital Technologies Dynamics in the metaverse universe where they have designed the structure of metaverse - experience ,discovery, creator, spatial computing, decentralisation, human interface and infrastructure .The authors have also found that due to constant collection of data from human organs such as eyes, they might be subjected to Cyber motion sickness, binocular collisions and hygiene problems from using AR and VR supporting equipment. There is also a requirement of high-speed data analysis by anticipated tracking and measurement.

Yousra Bousba and Dr. Vikas Arya (2022) Yousra Bousba and Dr. Vikas Arya (2022) collaboratively conducted research, testing several hypotheses related to customer interaction with brands and their satisfaction in the metaverse. Their findings suggest that distinctive features of the metaverse, such as novelty, exert a positive and significant impact on a brand's gamification activities within the metaverse. Similarly, metaverse features like interactivity and vividness also demonstrate a positive and significant influence on a brand's gamification endeavors in the metaverse..

Amira Kadry Yassin (2022) researched on the metaverse revolution and its impact on the future of advertising industry by testing a hypothesis whether metaverse will redefine the concept of traditional advertising and reshape its form to bring new opportunities and challenges in the advertising industry. The outcome is that metaverse in the next big step in digital transformation. Despite metaverse being an infant, already existing platforms have really proved that metaverse could give the competitive advantage to anybody who understands the online culture.

Stylianos Mystakidis (2022) the goal of his research project - Metaverse, is to give a description of the metaverse and its uses. The article's foundation is metaverse education. The components of the metaverse that were covered in detail included Mixed Reality, Augmented Reality, Virtual Reality, and Extended Reality. The shortcomings of the conventional 2D learning settings are illustrated in this article, along with suggestions for improvements. The author of this article mostly discusses the difficulties that must be overcome

in order to integrate metaverse into the educational system. The author aims to draw the conclusion from the article that there is a great deal of room for metaverse expansion in marketing, education, gaming, and other industries.

Carlos Bermejo Fernandez, Pan Hui (2022) In *Life, the Metaverse and Everything: An Overview of Privacy, Ethics, and Governance in Metaverse*, the authors of this report has covered trends and potential challenges in developing a virtual environment. They focused on three key pillars: privacy, governance, and ethical design, to steer the metaverse's progress. The authors of the privacy policy has outlined the issues with privacy as well as potential future solutions for them. The author discusses decentralisation, online platforms, social good, laws and codes, and its difficulties in governance in the metaverse. The author of Ethical Design talks on the development of social metaverse. In conclusion to additional study and testing is necessary for the metaverse to be effective in the areas of privacy, ethics, and governance.

Manas Khatri (2022), gives a thorough overview of metaverse and its applications in many marketing types in his research paper, revamping the Marketing World with Metaverse - The Future of Marketing. The study aids in the analysis of the potential, risks, and difficulties associated with the metaverse as they relate to marketing. The author draws the conclusion from this essay that, given the metaverse's early phases of development, firms must plan ahead and build strategies over the long term in order to successfully utilise metaverse marketing.

Dan Zhang, Simon Chadwick, Lingling Liu (2022) researched on *Metaverse: Opportunities and Challenges of Marketing in Web3*, is to describe how the market will alter as a result of the metaverse. Three criteria are used in this research to define this- How Metaverse is helping organisations to deliver marketing strategies and activities, Metaverse will be included as a new digital marketing tactic; Metaverse marketing utilising web3 technologies, such as NFTs and virtual commerce, is on the horizon. In closing, the author added a few research questions regarding central conflicts of marketing in the Web3 context, which opens up possibilities for researchers to develop new knowledge.

Heejeong Jeong, Youkyoung Yi and Dongsoo Kim (2021), has provided an explanation of the Metaverse E-commerce platform's business model canvas. Customers face many difficulties when purchasing in the e-commerce applications of the present generation, such as a lack of engagement and insufficient product descriptions. The writers of this article have combined live commerce with the metaverse to provide innovative solutions for these issues. This business model is known as MBUS. Digital twining technology is employed in this business strategy. A technique called "digital twining" allows real-world objects to be virtual twins.

Through live broadcasts, buyers and sellers can engage on a metaverse platform created by this business model.

Sang-Min Park and Young-Gab Kim (2021), on their research, *A Metaverse: Taxonomy, Components, Applications and Open Challenges*. The ideas and methods needed to comprehend the metaverse are broken down into three sections by the author: Concepts related to the metaverse, Elements, Metaverse Methods (Interaction with Users, Application, and Implementation). The article also covers case studies, restrictions, and difficulties with metaverse technology.

Lik-Hang Lee , Tristan Braud , Pengyuan Zhou , Lin Wang , Dianlei Xu, Zijun Lin , Abhishek Kumar , Carlos Bermejo , and Pan Hui (2021) collaborated and provided a complete survey on metaverse- technological singularity, virtual eco system where they focused on 14 areas mainly dividing them into 2 key aspects - Ecosystem and technology. The framework states 8 pillars of ecosystem as – Social acceptability, security and privacy, trust and accountability, content creation, virtual economy and avatar; under technology- User interactivity, extended reality, computer vision, artificial intelligence/ block chain, IoT, Cloud, Network, Hardware infrastructure.

Nikolaos Misirlis, Harris Bin Munawar (2023) have inferred that students still lack a thorough understanding of the Metaverse technology and its potential uses in higher education. While 55.4% of students think that technology generally affects their social lives, 60.4% and 50% of students disagree that technology somehow affects their well-being and personal happiness, respectively. This final statistic, which indicates that 66.1% of students turn on digital devices to relax, is in conflict with the next result. Even though most people are still dubious about the Metaverse and MetaEducation, 76.7% of respondents think that the usage of these technologies is essential to education. The results indicate a similar distribution of people who think technology can strengthen relationships vs those who don't when it comes to the linkages between Metaverse and relationships with family and friends.

Yogesh K. Dwivedi, Laurie Hughes, Abdullah M. et al (2022), In the article- *Metaverse beyond the hype: Multidisciplinary Perspectives on Emerging challenges, Opportunities and Agenda Research, Practice and policy* tries to clarify the opportunities and challenges associated with the metaverse, including how many users it can support without requiring interaction and how users will use it. The way that people live will be drastically different, and this will affect social media platforms, marketing, shopping, education, and job styles. This study provides insightful information on the advantages and difficulties associated with the wider adoption of the metaverse from a variety of angles and impacted commercial and societal domains.

Jooyoung Kim (2021) In his study titled- *Advertising in the Metaverse: Research Agenda*, has developed a

research agenda for researchers to conduct research on the topic "Interactive advertising in the metaverse." The paper provides an introduction to the metaverse and describes advertising, its role, and its vast impacts. According to the author, not only will qualitative observations and 23 ideas be required, but also empirical data (both human and machine) to test and construct theories that can explain and forecast how advertising works in the metaverse. The author also suggests prospective study areas for future researchers to focus on.

M. Montserrat Acosta González, Belén San Nicolás Santosb, Adrián Rodríguez Vargasb, Jorge Martín-Gutiérrez, Alberto Rodríguez Orihuela (2013) in their research have stated that the advantages and disadvantages of using virtual worlds in the education sector are covered in length in their research study. The article provides a thorough explanation of the many applications and advantages of adopting virtual environments for instruction and training. The authors have found that there are numerous benefits to learning in the virtual world over traditional classroom settings, including increased interactivity, lower costs, fewer geographic restrictions, etc. The article also discusses the experiences that instructors and students had thanks to a cutting-edge initiative called "Online Teaching using Virtual World: Opportunities and Challenges" that was held at La Laguna University. The project's goal is to establish an online learning environment for students in a virtual setting. Following the project's completion, student feedback was gathered.

Arya, V., Sambyal, R., Sharma, A., & Dwivedi, Y. K. (2023) – 'Brands are calling your AVATAR in Metaverse– This study examines the impact of XR-based gamification marketing in the Metaverse on consumer-based brand equity, with a focus on luxury brands. It identifies gamification as a key factor affecting brand equity and explores the roles of luxury brand engagement, brand love, and their influence on purchasing intentions in the Metaverse. The research delves into factors like entertainment, interaction, trendiness, intimacy, and novelty shaping gamification. Additionally, it highlights the connection between brand equity and the intent to purchase virtual products, emphasizing immersive experiences and brand authenticity. This knowledge enhances i-commerce strategies, adding value to consumers' cognitive processes in the Metaverse.

RakGun Hwang, MinKyung Lee (2022) - *The Influence of Music Content Marketing on User Satisfaction and Intention to Use in the Metaverse: A Focus on the SPICE Model*, the purpose of this research article is to provide marketers and content producers with a framework for assessing the effectiveness of metaverse marketing. The model's fit and the underlying assumptions of the SPICE (seamlessness, presence, interoperability, concurrence, and economic flow) model's components were examined in connection to customer happiness and purchase intention. In the test,

nine of the eleven hypotheses were accepted. It was determined by the conclusion that, when customers consume music content in the metaverse, the SPICE model-based music content marketing positively affects their satisfaction and intention to purchase. The results showed that the metaverse's SPICE model elements are a marketing tool that can be used for music content as well as a wider range of industries.

Khalil ISRAFILZADE (2022) - In his research paper "Marketing in the Metaverse: A Sceptical Viewpoint of Opportunities and Future Research Directions," begins by explaining the metaverse and its relevance to marketing. The author discusses the scepticism of four critical categories in the article: customer experience, customer trust, customer engagement, and advertising. This article serves as a guide for metaverse marketing managers and developers in terms of tactics and strategies for increasing marketing activities through a future research agenda. Beyond marketing, the author adds, the metaverse has other prospects in critical domains such as R&D, Manufacturing, Human Resources, and so on, and organisations must conduct extensive trial and learning prior to deployment.

AlsharifHasan Mohamad Aburbeian, Amani Yousef Owda and Majdi Owda (2022) In the paper "A Technology Acceptance Model Survey of the Metaverse Prospects" The study delves into the factors influencing the acceptance of Metaverse technology, employing an extended technology acceptance model to gauge various aspects impacting user behavior. The findings reveal a generally positive inclination among participants towards Metaverse use, with males expressing a greater curiosity to explore the technology. Notably, a significant negative correlation is identified between price and behavioral intention, while positive relationships are observed for other variables such as social norm, self-efficacy, perceived pleasure, perceived curiosity, perceived usefulness, perceived ease of use, attitude towards Metaverse technology use, and behavioral intention. Interestingly, the study indicates that the link between price and attitude towards Metaverse technology use is not significant, and the relationship between self-efficacy and perceived usefulness is deemed insignificant, leading to the rejection of hypotheses 5 and 11. The research adopts a comprehensive approach, employing both quantitative and qualitative methods alongside hologram simulation to enhance the understanding of the research context. Data collection is carried out through a 5-point Likert-scale survey.

Petra PATRUTI, Alexandra ZBUCHEA, Florina PÎNZARU (2023) - In this study Fashion Joining Online Gaming and the Metaverse, participants perceive the Metaverse as a digital realm providing a space for self-expression without judgment. Notably, a positive impression was observed regarding fashion marketing communication by real brands within the Metaverse. Participants are aware of these communications and appreciate the freedom to create unique avatars, serving

as "alter egos" or entirely distinct characters. Avatar customization is highlighted as a key element, contributing to a sense of exclusivity and uniqueness, particularly through exclusive in-game items. Respondent 4 emphasizes the appeal of experimentation with avatars, deviating from reality. The link between fashion items and the gaming world is associated with the distinctiveness it imparts to players. However, concerns arise about the potential inundation of marketing communication, particularly its impact on the younger audience spending considerable time in the Metaverse. Respondent 5 expresses hope for more stringent restrictions on advertising, especially concerning volume and intensity, particularly for children. Despite recognizing the Metaverse as a marketing channel, there is a desire for responsible and limited advertising practices, acknowledging regulatory actions observed in certain games, such as the banning of loot boxes for children in Australia.

Faqih, K. M., & Jaradat, M. I. R. M. (2015) - This research investigates the adoption of mobile commerce technology in Jordan, utilizing the TAM3 framework. It assesses individual adoption intentions by examining perceived usefulness and perceived ease of use. Additionally, the study explores the impact of gender differences and individualism-collectivism at the individual level on mobile commerce adoption. Data was collected from 14 private Jordanian universities through paper-based questionnaires, resulting in 425 valid datasets for analysis. The empirical findings highlight the significance of perceived usefulness and perceived ease of use as crucial factors influencing individuals' intentions to adopt mobile commerce.

RESEARCH GAP

After a thorough review of literature, a significant research gap in the limited investigation of marketer's user acceptance of the metaverse as a marketing tool, particularly in the context of Indian market was identified. Despite the increased global interest in using the metaverse for commercial objectives including marketing, branding and other business activities, the review revealed a scarcity of research articles addressing the dynamics of user acceptance among Indian marketers. This disparity is especially important given the unique hurdles provided by India's digital landscape and other factors, which may be impacting slower adoption of the metaverse in India. Research on acceptance, adoption and perception of metaverse marketing in Indian context can fill this gap.

OBJECTIVES OF THE STUDY

1. To examine how marketers perceive the ability of Metaverse in terms of Perceived Ease of use, perceived usefulness, perceived risk, computer anxiety and adoption intention.
2. To Identify how Perceived ease of use influences Perceived usefulness
3. To assess factors such as privacy issues, security concerns, or uncertainties about the return on investment (ROI) in the Metaverse

RESEARCH DESIGN

This section elaborates on the different methodologies employed for data collection, information gathering, and the subsequent analysis of the collected data. These methodologies encompass aspects such as research design, sampling design, the geographical area under consideration for sampling, the size of the population, determination of the sample size, selection of the sampling technique, identification of the sampling unit, the chosen method for data collection, the research instruments utilized, assessment of reliability through reliability tests, the timeframe of the study, and the statistical tools employed for the analysis. This research is conducted within the framework of quantitative research methodologies, emphasizing the systematic collection, analysis, and interpretation of numerical data to draw meaningful conclusions and insights.

SAMPLING DESIGN:

SAMPLING TECHNIQUE

The study employs a non-probability sampling method, specifically utilizing snowball and reference sampling. In this approach, individuals are selected based on predetermined criteria which is Marketers within the industry of Fashion and lifestyle. This method allows for a targeted and deliberate selection of participants who possess characteristics relevant to the research objectives.

SAMPLING AREA:

The sampling area for data collection, analysis, and interpretation encompasses the entirety of India. The focus of the study is on marketers within Fashion and Lifestyle industry who are familiar with the concept of the metaverse but have not yet utilized it for marketing activities in their respective fields. This nationwide scope ensures a diverse and comprehensive representation of perspectives within the specified industry.

POPULATION

The population size encompasses marketers in South India, working in the fashion and lifestyle industry.

Though it is a definite population size, it becomes a limitation to draft the population. There are approximately 17,000 Fashion and lifestyle brands in India. There are approximately 3000 brands in South India

SAMPLING FRAME

Marketers in Fashion and lifestyle industry in South India is the sampling frame of this research

SAMPLING TECHNIQUE

Samples will be collected through snowball and reference sampling technique.

SAMPLE SIZE

The sample size for this research will be 65, as there is a time limitation.

SAMPLING UNIT

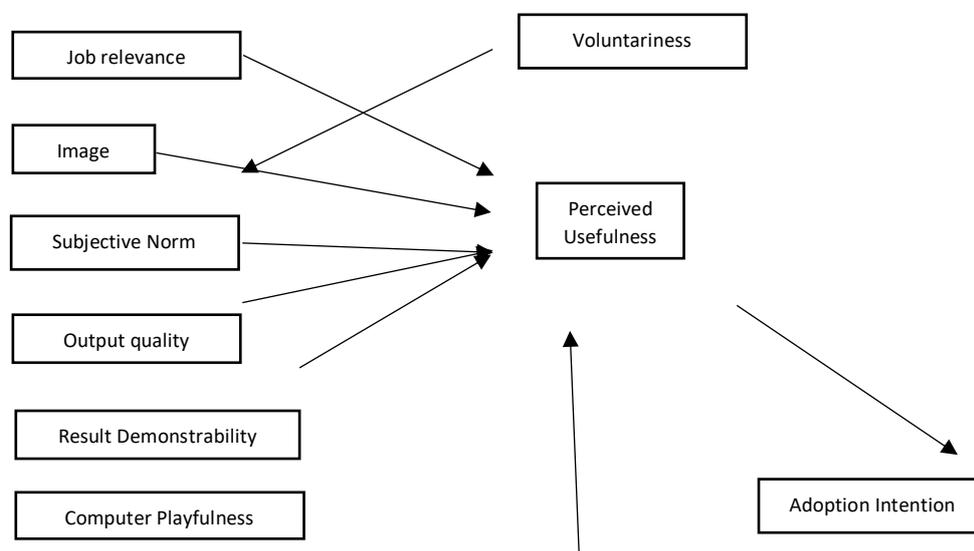
The sample unit is the professional who is handling marketing activities for any Fashion or Lifestyle Brand in South India.

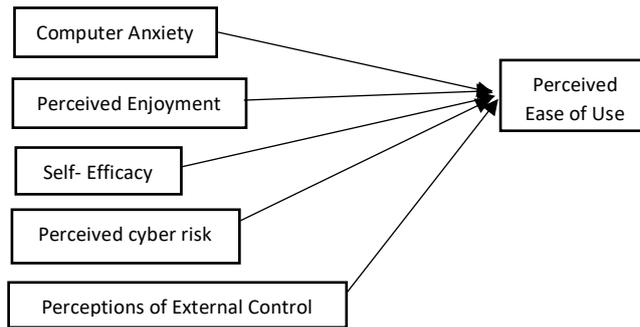
METHOD OF DATA COLLECTION

This research depends upon primary data in order to understand the perception of professionals regarding Metaverse marketing in the current condition of technological Landscape and need for marketing advancements. The survey questions are structured thereby measuring each and every construct required to measure the adoption intention and perception of professionals handling marketing activities of brands in the Fashion and Lifestyle Industry.

THEORETICAL FRAMEWORK

This research is conducted using the TAM model which allows us to understand the acceptance and perception of any new technology. This relates the attitudes and behaviours there by providing insights on the intention to adopt. Here the technology involved will be Metaverse.





REASEARCH HYPOTHESIS

Objective 1

H0: Ease of use, perceived use, perceives risk, computer anxiety does not significantly influence the Intention to adopt.

Ha: Ease of use, perceived use, perceives risk, computer anxiety significantly influences the Intention to adopt.

Objective 2

H0: Model is not fit

Ha: Model is fit

Objective 3

H0: Perceived ease of use does not influence Perceived usefulness

Ha: Perceived ease of use influences Perceived usefulness

REASEARCH INSTRUMENT

The research instrument used here is an online Questionnaire which will be easy to share through LinkedIn and share it through snowball and reference sampling method of research. The questions are clearly drafted as an online google form.

PERIOD OF STUDY

The study was cross sectional and conducted for a period of 4 months.

TESTS OF RELIABILITY AND VALIDITY

RELIABILITY:

The pilot study has been conducted where 20 respondents have given their response. The data was then analysed for Reliability test where the Cronbach's alpha value is 0.918.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I think the incorporation of metaverse into my marketing strategies for my brand would be useful	125.2500	190.618	.578	.915
I think the metaverse could enhance the effectiveness of my brand's marketing efforts compared to traditional methods	125.5000	193.947	.441	.917
I think the metaverse could be valuable in reaching and engaging with my target audience	125.5000	186.368	.653	.914
I think it would be easy for me to integrate metaverse into my brand's marketing activities	125.6500	190.029	.550	.915
I think there might be some challenges or complexities in navigating and utilizing metaverse for marketing purposes	125.5500	193.524	.378	.917
I think the metaverse is user friendly for marketers in the industry	125.6000	191.516	.424	.917
I am confident in my ability to effectively use the metaverse for marketing purposes, even without hands on experience	125.8000	188.274	.442	.917
I think I possess the necessary skills and knowledge to adopt the metaverse into my brand's marketing strategies	125.9500	190.366	.394	.917

I am confident in my capacity to learn and adapt to new technologies, such as the metaverse, for marketing purposes	125.4000	188.989	.466	.916
I think external factors (industry trends, competitor actions) might influence my decision to adopt the metaverse for marketing	125.5000	194.579	.287	.918
I think I would be interested and excited about using the metaverse as a marketing platform for my brand	125.2500	188.934	.533	.915
I think the metaverse is a novel and enjoyable tool that could bring creativity and innovation to my marketing efforts	125.4000	195.305	.275	.918
I have some concerns about using the metaverse for marketing	125.6000	188.463	.579	.915
I might feel a bit uneasy about incorporating metaverse technologies into my marketing strategies	125.9500	193.629	.205	.921
I might feel anxious about the prospect of using the metaverse for marketing purposes	126.1500	187.924	.498	.916
I think using the metaverse for marketing would be an enjoyable and engaging experience for me	125.5500	188.787	.520	.916
I believe it would derive pleasure or satisfaction from exploring the creative possibilities offered by the metaverse for my brand's marketing	125.6000	195.200	.240	.919
I expect to enjoy using the metaverse for marketing purposes	125.3000	183.379	.773	.912
I think there are potential risks regarding the use of the metaverse in my brand's marketing activities	125.2500	183.250	.818	.912
I am concerned about potential cybersecurity issues or risks associated with adopting the metaverse	125.4000	188.358	.597	.915
I am concerned about the return of investments on metaverse	125.3000	191.905	.408	.917
I think using metaverse for marketing will be too costly	125.6000	187.832	.611	.914
I am concerned about data privacy in metaverse	125.3500	187.818	.657	.914
I feel some social pressure from industry colleagues, peers, or other stakeholders to adopt the metaverse for marketing in the sector	125.9000	191.253	.287	.920
I would place some importance on the opinions of others when deciding whether to use the metaverse for my brand's marketing	125.6000	188.779	.510	.916
I feel that my decision to adopt the metaverse for marketing will be a voluntary choice rather than an obligation	125.9000	192.411	.366	.917
I perceive a level of freedom and autonomy in deciding whether or not to use the metaverse for my brand's marketing efforts	125.5000	188.579	.606	.915
I believe that the adoption to metaverse would impact the image and perception of my brand in the industry	125.5500	196.787	.230	.919

I think that the integration of the metaverse is relevant to my role in the company	125.9500	197.839	.083	.922
I think that the integration of the metaverse is relevant to my industry	125.6500	184.345	.654	.914
I anticipate that the quality of marketing outputs produced through the metaverse would be high compared to traditional marketing methods	125.6500	190.134	.404	.917
I believe the metaverse could contribute to higher quality marketing for my brand	125.7500	188.197	.479	.916
I think positive results can be demonstrated easily from using the metaverse for marketing	125.8000	189.221	.578	.915
I believe the outcomes of metaverse marketing efforts can be communicated and showcased effectively	125.6000	184.358	.719	.913
I am likely to adopt the metaverse for marketing my brand in the near future	125.9500	181.945	.628	.914

Reliability Statistics

Cronbach's Alpha	N of Items
.918	35

The cronbach’s alpha value 0.918 proves that the items are reliable.

DISCRIMINANT VALIDITY:

Very low multi collinearity is an indication of good discriminant validity. So, Variance influence factor is analysed .

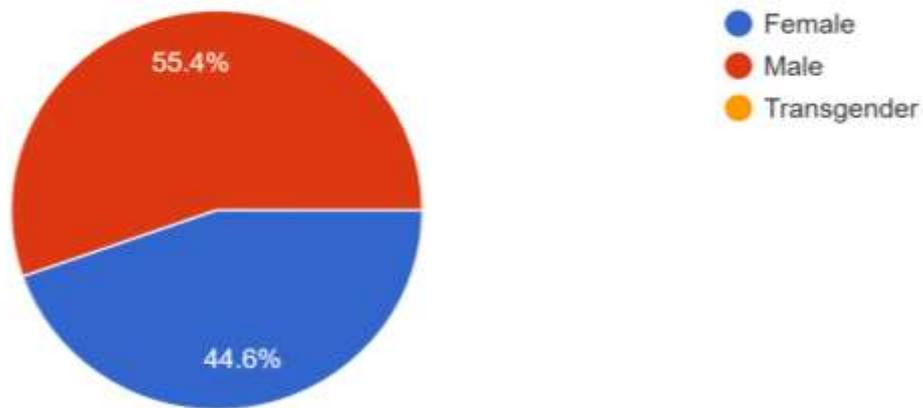
Coefficients^a

Model	Collinearity Statistics	
	Tolerance	VIF
1 REGR factor score for analysis 4	1.000	1.000
2 REGR factor score for analysis 4	1.000	1.000
3 REGR factor score for analysis 4	1.000	1.000
4 REGR factor score for analysis 4	1.000	1.000

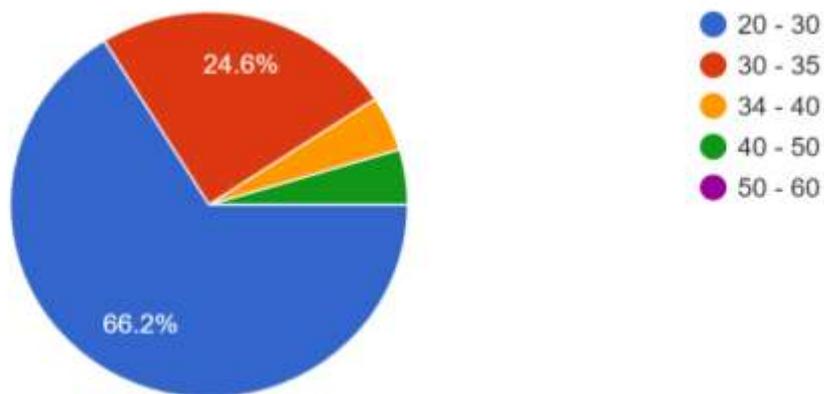
a. Dependent Variable: REGR factor score 5 for analysis 4

The VIF is less than 5 means negligible multi collinearity and this confirms the discriminant validity among the five factors.

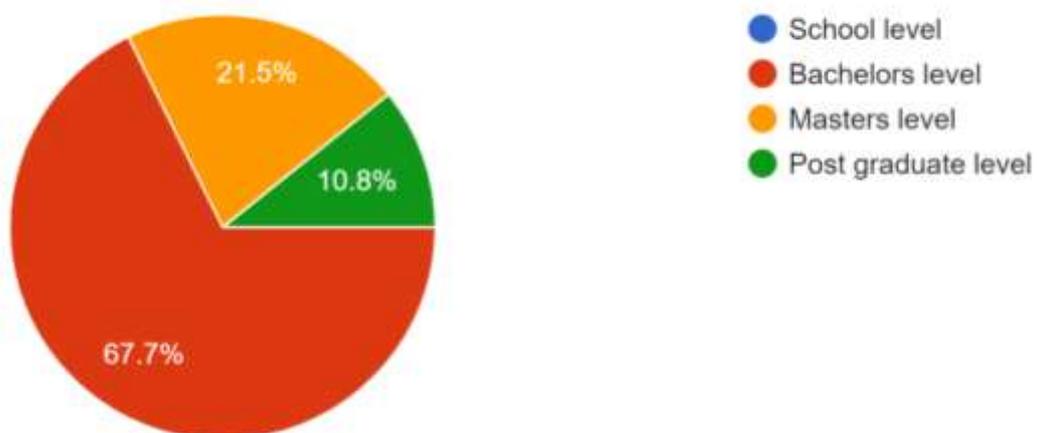
**ANALYSIS AND INTERPRETATION
DEMOGRAPHICS**



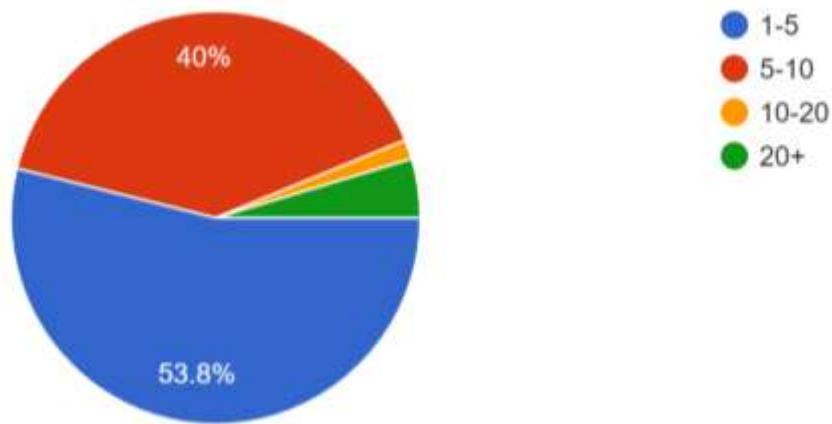
This pie chart depicts the gender of respondents. 44.6% are female whilst 55.6% are male.



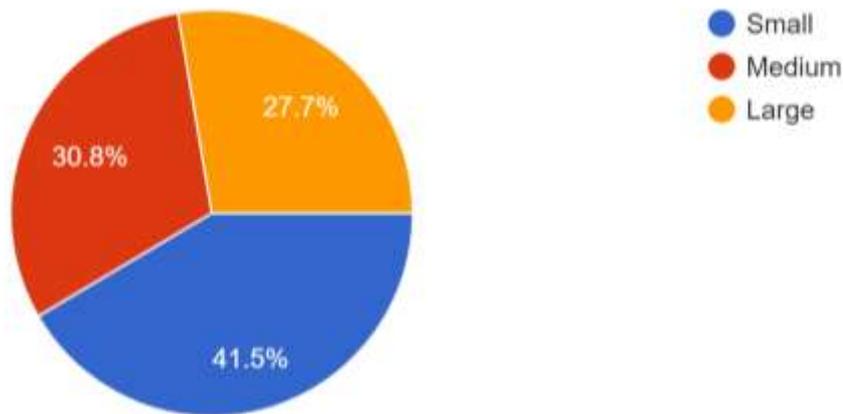
This pie chart represents the age of respondents. 66.2% falls under the age group 20 - 30 years, 24.6% falls under 30 - 40 years, 4.6% under 34 - 40 and 4.6% under 40 - 50.



This pie chart represents the educational level of respondents. 67.7% have done their Bachelors, 21.5% have done their masters education, and 10.8% have done their Post graduate.



This pie chart displays the data of the experience level of respondents. 53.3% have 1 - 5 years of experience, 40% have 5 - 10 years of experience, 4.6% have 20+ years of experience, and 1.5% have 10 – 20 years of experience as Marketers.



This pie chart depicts the size of the company. 41.5% are from small companies, 30.8% are from Medium size companies and 27.7% are from Large companies.

FACTOR ANALYSIS

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.792
Approx. Chi-Square	1981.257
Bartlett's Test of Sphericity	df
	595
	Sig.
	.000

KMO = 0.792 and is above 0.5 which means sample size is adequate for further analysis. Bartlette's Test P value is 0.000 which is less than 0.05. $P < 0.05$ means there is significant correlation among the variables. Significant correlation among variables in an indicator for successful factor analysis.

Communalities

	Initial	Extraction
would be useful	1.000	.839
enhance the effectiveness	1.000	.781
engaging with my target audience	1.000	.717
easy to integrate	1.000	.817
complexities in utilizing	1.000	.652
user friendly	1.000	.623
confident in my ability	1.000	.741
possess the skills	1.000	.654
capacity to learn and adapt	1.000	.655

external factors influence	1.000	.500
excited	1.000	.757
enjoyable	1.000	.690
concerns	1.000	.704
uneasy	1.000	.781
anxiety	1.000	.544
engaging experience	1.000	.751
derive pleasure	1.000	.617
enjoy using the metaverse	1.000	.710
risks	1.000	.714
cybersecurity	1.000	.722
return of investment	1.000	.403
too costly	1.000	.626
data privacy	1.000	.721
social pressure	1.000	.584
opinions of others	1.000	.423
voluntary choice	1.000	.719
freedom in deciding	1.000	.777
impact the image	1.000	.620
relevant to my role	1.000	.709
relevant to my industry	1.000	.717
output quality	1.000	.792
higher quality	1.000	.855
positive results	1.000	.788
deployable	1.000	.774
likely to adopt	1.000	.564

Extraction Method: Principal Component Analysis.

The communalities table reveals that the variance explained is above 60% which is accounted by the extracted factors by all the variables except ‘Opinions of others’, ‘Return on Investment’ and ‘external variables’ influence’.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.097	40.276	40.276	14.097	40.276	40.276	6.592	18.836	18.836
2	4.494	12.840	53.116	4.494	12.840	53.116	5.927	16.935	35.771
3	2.049	5.856	58.972	2.049	5.856	58.972	4.451	12.718	48.489
4	1.918	5.479	64.451	1.918	5.479	64.451	4.035	11.528	60.018
5	1.483	4.238	68.690	1.483	4.238	68.690	3.035	8.672	68.690
6	1.301	3.717	72.407						
7	1.095	3.128	75.534						
8	.885	2.529	78.063						
9	.806	2.303	80.366						
10	.710	2.030	82.395						
11	.625	1.787	84.183						
12	.604	1.725	85.908						
13	.551	1.573	87.481						
14	.518	1.480	88.961						
15	.452	1.290	90.251						
16	.371	1.061	91.313						
17	.350	1.001	92.314						
18	.336	.959	93.273						

19	.311	.889	94.162					
20	.266	.760	94.922					
21	.252	.720	95.642					
22	.239	.681	96.324					
23	.212	.605	96.928					
24	.172	.493	97.421					
25	.171	.488	97.909					
26	.132	.378	98.287					
27	.112	.319	98.607					
28	.106	.302	98.909					
29	.084	.239	99.148					
30	.071	.204	99.351					
31	.070	.199	99.551					
32	.059	.168	99.719					
33	.045	.129	99.848					
34	.035	.099	99.947					
35	.019	.053	100.000					

Extraction Method: Principal Component Analysis.

There are 5 factors formed with Eigenvalues more than 1.45 the cumulative% of total variables explained is 68.690% The principal component method extraction method was used and angle rotated with Equamax Kaiser Normalization has revealed the following factors with its latent variables.

Rotated Component Matrix^a

	Component				
	1	2	3	4	5
derive pleasure	.713	.278	.110	.092	.107
confident in my ability	.692	.179	.434	-.118	.170
would be useful	.691	.397	.366	.144	-.225
enjoy using the metaverse	.680	.319	.245	.287	.052
engaging experience	.673	.275	.290	.357	-.104
capacity to learn and adapt	.655	.223	.384	.140	-.098
excited	.652	.329	.320	.324	-.130
possess the skills	.644	.408	.242	-.124	.006
complexities in utilizing	.601	.152	-.242	.407	.207
enjoyable	.574	.281	.415	.202	-.261
engaging with my target audience	.568	.450	.408	.156	.034
enhance the effectiveness	.556	.551	.396	.068	-.079
likely to adopt	.507	.443	.219	.242	-.071
higher quality	.279	.796	.334	.129	-.128
output quality	.202	.768	.391	.001	-.088
easy to integrate	.339	.706	.386	-.007	.233
relevant to my industry	.119	.681	-.155	.439	.153
deployable	.420	.615	.468	.018	.007
positive results	.566	.600	.289	.054	-.145
impact the image	.228	.561	.205	.316	-.334
user friendly	.318	.542	.448	-.011	.164
freedom in deciding	.311	.336	.748	.038	-.078
relevant to my role	.169	.386	-.660	.078	.299
social pressure	-.037	.139	.660	.077	.349
opinions of others	.192	.173	.503	.320	-.024
voluntary choice	.354	.451	.501	-.046	-.370
data privacy	.019	.047	.084	.818	.204
cybersecurity	.056	-.092	.212	.788	.210
too costly	-.025	.181	-.070	.765	.049

risks	-.013	.043	.203	.612	.544
return of investment	.036	-.276	.010	.531	.210
external factors influence	.319	.350	-.065	.519	.052
uneasy	.001	-.161	.104	.085	.859
concerns	.248	.195	-.178	.265	.709
anxiety	-.100	.019	-.001	.196	.704

Extraction Method: Principal Component Analysis.

Rotation Method: Equamax with Kaiser Normalization.

a. Rotation converged in 16 iterations.

		Rotated Component Matrix ^a				
New Factor		Component				
		1	2	3	4	5
Perceived ease of use	derive pleasure	0.713				
	confident in my ability	0.692				
	would be useful	0.691				
	enjoy using the metaverse	0.68				
	engaging experience	0.673				
	capacity to learn and adapt	0.655				
	excited	0.652				
	possess the skills	0.644				
	complexities in utilizing	0.601				
	enjoyable	0.574				
	engaging with my target audience	0.568				
	enhance the effectiveness	0.556				
	likely to adopt	0.507				
	Perceived usefulness	higher quality		0.796		
output quality			0.768			
easy to integrate			0.706			
relevant to my industry			0.681			
deployable			0.615			
positive results			0.6			
impact the image			0.561			
user friendly			0.542			
Intention to adopt	freedom in deciding		0.386			
	relevant to my role			0.748		
	social pressure			0.66		
	opinions of others			0.503		
Perceived risk	voluntary choice			0.501		
	data privacy				0.818	
	cybersecurity				0.788	
	Expensive				0.765	
	risks				0.612	
return of investment				0.531		

	external factors influence				0.519	
Computer Anxiety	uneasy					0.859
	concerns					0.709
	anxiety					0.704

OBJECTIVE 1 To examine how marketers perceive the ability of Metaverse in terms of Perceived Ease of use, perceived usefulness, perceived risk, computer anxiety and adoption intention.

Statistics

	Average_Factor1	Average_Factor2	Average_Factor3	Average_Factor4	Average_Factor5
N Valid	65	65	65	65	65
Mean	3.4994	3.3769	3.3769	3.7590	3.4103
Median	3.6154	3.5000	3.5000	3.6667	3.6667
Mode	3.92	3.50	3.50	3.67	4.00
Std. Deviation	.71116	.49632	.49632	.54089	.72593
Variance	.506	.246	.246	.293	.527
Skewness	-.296	-.036	-.036	-.279	-.090
Std. Error of Skewness	.297	.297	.297	.297	.297
Kurtosis	-.148	1.249	1.249	1.278	-.446
Std. Error of Kurtosis	.586	.586	.586	.586	.586
Range	3.15	3.00	3.00	3.00	3.00

Discussion

Out of the five factors formed, the mean value of the perceived risk is the highest when compared perceived ease of use, perceived usefulness, intention to adopt, Computer anxiety and Perceived risk. However, the variance for the perceived risk factor is lesser than the ease of use factor and computer anxiety factors. Among

the mode value the perceived ease of use has the highest occurrence of 3.92. The Kurtosis value of 1.2 in perceived usefulness, intention to adopt and perceived risk indicates that the distribution is highly peaked (lepto kurtic); whereas Ease of use and computer anxiety with the kurtic value -.148 and -.4 respectively depicts lower peak, still closer to normal distribution.



The Interquartile range which consists of 50% of the distribution is largest for computer anxiety factor and smallest for Perceived Risk factor. Perceived Risk factor also has less number of outliers than ease of use and computer anxiety.

H0: Ease of use, perceived use, perceives risk, computer anxiety does not significantly influence the Intention to adopt.

Ha: Ease of use, perceived use, perceives risk, computer anxiety significantly influences the Intention to adopt.

Correlations

		Average_Factor1	Average_Factor2	Average_Factor3	Average_Factor4	Average_Factor5
Average_Factor1 EOU	Pearson Correlation	1	.677**	.677**	.305*	.046
	Sig. (2-tailed)		.000	.000	.013	.714
	N	65	65	65	65	65
Average_Factor2 PU	Pearson Correlation	.677**	1	1.000**	.249*	.085
	Sig. (2-tailed)	.000		.000	.045	.503
	N	65	65	65	65	65
Average_Factor3 IntAdopt	Pearson Correlation	.677**	1.000**	1	.249*	.085
	Sig. (2-tailed)	.000	.000		.045	.503
	N	65	65	65	65	65
Average_Factor4 PR	Pearson Correlation	.305*	.249*	.249*	1	.468**
	Sig. (2-tailed)	.013	.045	.045		.000
	N	65	65	65	65	65
Average_Factor5 CompAnx	Pearson Correlation	.046	.085	.085	.468**	1
	Sig. (2-tailed)	.714	.503	.503	.000	
	N	65	65	65	65	65

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

INTERPRETATION

EOU and PU: The correlation coefficient is 0.677, which is significant at the 0.01 level. This indicates a strong positive relationship between these two factors.

EOU and IntAdopt: The correlation coefficient is 0.305, which is significant at the 0.05 level. This indicates a moderate positive relationship between these two factors.

EOU and PR: The correlation coefficient is 0.048, which is not significant. This indicates that there is no relationship between these two factors.

PU and IntAdopt: The correlation coefficient is 0.249, which is significant at the 0.05 level. This indicates a weak positive relationship between these two factors.

PU and PR: The correlation coefficient is 0.085, which is not significant. This indicates that there is no relationship between these two factors.

IntAdopt and PR: The correlation coefficient is 1.000, which is significant at the 0.01 level. This indicates a perfect positive relationship between these two factors.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.678 ^a	.460	.442	.37064

a. Predictors: (Constant), Average_Factor4_PR, Average_Factor1_EOU

b. Dependent Variable: Average_Factor3_IntAdopt

Interpretation

The multiple correlation between PR, EOU, IntAdopt is significant, strong, positive correlation. The magnitude of correlation is close to .7. 46% of the variance is

explained by the model. The difference between R square and adjusted R square is also minimal.

H0: Model is not fit

Ha: Model is fit

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.248	2	3.624	26.381	.000 ^b
	Residual	8.517	62	.137		
	Total	15.765	64			

a. Dependent Variable: Average_Factor3

b. Predictors: (Constant), Average_Factor4_PR, Average_Factor1_EOU

As p is less than 0.05, the model is fit to predict the value of dependent variable (Intent to adopt)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.598	.353		4.531	.000
	Average Factor1 EOU	.462	.068	.662	6.756	.000
	Average Factor4 PR	.043	.090	.047	.479	.634

a. Dependent Variable: Average_Factor3_IntAdopt

Intent to Adopt = (0.662) Ease of Use

INTERPRETATION

H0 is rejected. The dependent variable intent to adopt is significantly influenced by the Ease of use Independent variable. A unit increase in the Ease of Use factor positively impacts the Intent to adopt by .66 time.

OBJECTIVE 2 To identify how perceived ease of use

influences Perceived usefulness

H0: Perceived ease of use does not influence Perceived usefulness

Ha: Perceived ease of use influences Perceived usefulness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.677 ^a	.458	.449	.36837	.458	53.184	1	63	.000

a. Predictors: (Constant), Average_Factor1

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.217	1	7.217	53.184	.000 ^b
	Residual	8.549	63	.136		
	Total	15.765	64			

a. Dependent Variable: Average_Factor2

b. Predictors: (Constant), Average_Factor1

INTERPRETATION

H0 is rejected. The regression coefficient of 0.531 for "Average_Factor1" (perceived ease of use) is statistically significant (p-value = 0.000). This indicates that marketers who perceive the metaverse to be easier to use are also more likely to perceive it as a useful tool for marketing.

OBJECTIVE 3 To assess risk factors such as privacy

issues, security concerns, or uncertainties about the return on investment (ROI) in the Metaverse.

H0: Privacy issues, concerns on ROI, Data privacy concerns and Overall risk are not significantly correlated

Ha: Privacy issues, concerns on ROI, Data privacy concerns and Overall risk are significantly correlated

Correlations

		risks	cybersecurity	return of investment	data privacy
Perceived risks	Pearson Correlation	1	.619**	.366**	.614**
	Sig. (2-tailed)		.000	.003	.000
	N	65	65	65	65
Fear of cybersecurity	Pearson Correlation	.619**	1	.374**	.680**
	Sig. (2-tailed)	.000		.002	.000
	N	65	65	65	65
Concerned about return of investment	Pearson Correlation	.366**	.374**	1	.437**
	Sig. (2-tailed)	.003	.002		.000
	N	65	65	65	65
Concerned about data privacy	Pearson Correlation	.614**	.680**	.437**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	65	65	65	65

** . Correlation is significant at the 0.01 level (2-tailed).

INTERPRETATION

- Risk and Cybersecurity: The most significant positive correlation is between perceived risks and cybersecurity (0.619). This suggests that marketers who are concerned about cybersecurity are more likely to believe that metaverse is risky.
- Cybersecurity and ROI: A positive correlation exists between cybersecurity and ROI (0.374). This suggests that marketers who are concerned about cybersecurity are significantly worried about return on investment from metaverse.
- Risk and ROI: A positive correlation exists between perceived risks and ROI (0.366). This suggests that marketers who are concerned about Return on Investment perceives Metaverse to be risky.
- Data Privacy and Cybersecurity: A positive correlation between data privacy and cyber security (0.680) indicates that marketers who prioritize data privacy are also more likely to believe that cybersecurity is important.

FINDINGS

- Metaverse companies that invest in cybersecurity may be more likely to attract businesses who are concerned about data privacy.
- Marketers who are more enthusiastic about the Metaverse's potential for brand building also tend to perceive their marketing efforts to be more successful overall.
- Other factors besides the Brand Image also play a role in shaping marketers' perception of marketing effectiveness.
- Several factors influence their willingness to adopt a new technology. The most important factors are job relevance, perceived output quality, and perceived enjoyment of using the Metaverse.
- Efforts to make metaverse platforms and tools more user-friendly could increase brands entering metaverse for their marketing game.

- Clear demonstration of potential return on investment (ROI) and other benefits that metaverse marketing should be done.
- Meta platforms should provide educational resources and support to help marketers understand and mitigate the potential risks associated with metaverse marketing.
- Meta companies should initially target or tailor messaging to marketers who are more comfortable with technology.

Future of Metaverse Marketing

The forthcoming landscape of digital marketing within the metaverse is on the verge of significant changes, as underscored by McKinsey's acknowledgment of its substantial impact on both commercial and personal realms. A massive investment exceeding \$120 billion in 2022 and a projected expectation of \$5 trillion by 2030 mark the metaverse as a focal point for brands exploring innovative avenues to engage consumers. Games like Fortnite and platforms such as Illuvium are already incorporating metaverse elements, and industry giants like Nike, Samsung, and Coca-Cola actively participate in this space. This momentum suggests a transformative shift where digital marketing, already dominating traditional approaches, is poised to evolve into a realm potentially rendering the latter obsolete. Anticipated trends in the metaverse encompass hyper-personalization, driven by extensive user data and advanced AI algorithms, facilitating customized content and offers. Virtual influencers and brand ambassadors, fueled by AI or virtual artists, are expected to play a pivotal role by cultivating dedicated followings and collaborating with brands to create immersive experiences. Interactive advertising experiences, virtual product try-ons, social commerce, and metaverse analytics are foreseen as integral components. Additionally, cross-platform integration, virtual events, extended reality experiences, and an increased emphasis on ethics and user privacy will sculpt the metaverse's

digital marketing landscape. This future holds the promise of not just evolution but a revolution in how brands establish connections with consumers, forging an immersive and engaging marketing environment

CONCLUSION

In conclusion, this study clarifies the variables affecting Indian marketers' opinions and usage of metaverse marketing. The results emphasise how crucial it is to implement strong cybersecurity protections in order to handle data privacy issues. Adoption can also be boosted by developing a favourable impression of marketing efficacy through the metaverse's capacity to establish a brand. Moreover, intuitive platforms, transparent ROI demonstrations, and learning resources can provide marketers the confidence they need to successfully traverse the metaverse. Stakeholders may create the conditions for a more successful and integrated implementation of metaverse marketing in the Indian market by attending to these important factors.

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