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FROM REALITY TO VIRTUAL: SHIFTING CONSUMER BEHAVIOUR THROUGH THE METAVERSE IN INDIA

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Abstract
The Metaverse is a virtual world idea that is the centerpiece of contemporary dynamics within this rapidly evolving and continually shifting digital milieu. It was successful in amalgamating different dimensions in terms of virtual reality, augmented reality and mixed reality into a single platform. It is evident that in present circumstances human beings are dependent on technology and evaery aspects of human life is affected by it. So, it is very important for managers and researchers to identify how human behaviour is getting affected due to the amalgamation of technology in human life. Therefore this study will focus on identifying the motivational factors of human beings with respect to the technologically created virtual world by undertaking a qualtitative research approach through the lens of sociology, psychology, and technological dimensions. The motivational factors which are conceptualized are self presentation, escapism and social interaction.
On the basis of the data collected from one of the metropolitan city-kolkata, India, the present study is focused to identify and investigate how the augmentation of AI in human life is influencing and shaping choices of the customers. This study has implication with respect to the stakeholders of Metaverse by investigating the detailed complexity underlining human life with respect to the advancement of technology.Thus, the objective of the analysis is to offer a nuanced perspective that will support more strategic, well-informed decision-making as the Metaverse goes through this transformative phase.
Keywords: Metaverse, Self-Expression, Consumer Behaviour, Technology Adoption, Digital Transformation.

INTRODUCTION

Neal Stephenson in his novel “Snow Crash” first coined the term “Metaverse” in the year 1992, and reflected the transition from the meaning of speculative friction into tangible and significant aspect of digital realism(Stephenson, 1992). Platforms like Robolox, Decentral and Fortnite are playing significant role in integrating and transforming the Metaverse in our interrelated world(Chen et al., 2023, Terry & Keeney, 2022. In the rapid era of globalization and advancement in technology there was a surge in the demand in quick experiences, which resulted in the application of artificial intelligence(AI) to enhance and improve efficiency(Shukla et al., 2023). AI systems are now equipped to understand human cognition and give effective advice thus expedite the process of decision making(Smith & Jones, 2022). The amalgation relation between human and AI is becoming more prominent thus reflecting a new domain in the human experience in exploring a new evolving world (Richey et al., 2023; Basu et al., 2023).
The Metaverse enables creation of diverse digital environment in which human interact with the created environment with their personalized avatars(Stephenson, 1992). These digital paradigm tries to overcome the physical constraints by fostering innovation, discovery and through collaboration. The integration of augmented reality (AR) and Virtual reality (VR) in the Metaverse results in creation virtual environment which enables human to overcome the limitation posed by physical environment(Dincelli& Yayla, 2022; Ajani et al., 2023). The transformation of Metaverse from the abstract idea into a strong force which is changing the perception about the interaction of the digital environment and thus emphasizing the importance of users about immersive technologies (Bibri, 2022). With the transition of the digital landscape, the significance of consumer behaviour is increasing which is impacting the end usera as well as the business which is engaged in creation of tools that will foster the digital paradigm thus influencing the formulation of business strategies and in end boost entertainment experience. To explore this digital frontier , these study will try to address the preferences of the consumer within the paradigm of the Metaverse, and try to addresses the psychological, social, and technological dimensions that determine decision of the users and their pattern of involvement. By examining the complex interaction of the human and Metaverse, this study will try to identify the factors which create interest in the users towards these digital phenomena. In this digital era with everyday evolving technological up gradation the Metaverse plays a transformative role in shaping the dynamics of the market and also the society with the basic importance of existence of human beings (Bibri et al., 2022).
This study follows the qualitative research design to explore themes through literature review and qualitative approach increases the depth of the investigation and comprehension of the AI consumer experiences in the context specified. This study strategically established on the different consumer behaviour theories such as basic

needs, self fulfilment and esteem needs as postulated by Lasen and Ward(2009). This theories helps to identify the complex interaction between user action and their AI adoption. This study addresses the shift in the way human engages with the digital environment and thus prompting new ways of communication and social interaction(Swacha, 2021). Wong(2020) in his study found that Metaverse in the present time can be employed to increase consumer engagement and visibility of brands by creation of virtual market which specifies approach of an imaginative marketing strategy whereby consumer can engage for virtual experience. The Metaverse's potential goes beyond commerce, in changing the social relationship and boosting digital economy and pressing re-investigation about the difference between the real and virtual world (Damer, 2021). In the evolving market place companies should give importance to customer feedback in framing customized strategy to fulfil customer need and deliver customer satisfaction (Kotler et al., 2020). Customer feedback plays a pivotal role in delivering customer satisfaction and retention (Solomon et al., 2019). To remain competitive in the dynamic marketplace, organization should identify and address the shift in the consumer preferences and expectations (Hoyer et al., 2017). The enterprises which keep a close watch in their customers habits, found to be more competitive in delivering customer satisfaction and in return achieve increased profit in long run. In the Metaverse landscape, the parameters such as social, psychological, technical and ethics are very much interconnected in this dynamic virtual world. Thus, this study focuses on the increasing importance of the Metaverse and its impact in this dynamic marketplace.

REVIEW OF LITERATURE

The Metaverse portrays individuals engaging in a virtual reality environment where they contest for social status through the management of their digital personas (Zhao et al., 2022). Gartner (2022) defines the Metaverse as a conceptual framework wherein the tangible and digital realms converge through the utilisation of non-fungible tokens (NFTs) based on blockchain technology and virtual and augmented reality. In the digital variants of the Metaverse, ownership of virtual assets such as in-game assets, virtual avatars, and real estate properties is purchased via non-fungible tokens (NFTs) (Buhalis et al., 2022; Zhang, 2023). The Metaverse offers luxury retail brands a new chance to provide users with virtually wearable assets, something that has already been very common across many online games (DallasKidd, 2022). The forecasted revenue in the Metaverse market will reach $783.3 billion by 2024, which is a significant increase from $478.7 billion back in 2020. It indicates a compound annual growth rate of 13.1%, with trillion being spent by consumers on immersive experiences by 2025 (Stanley, 2021; Bloomberg, 2021). Prestigious fashion labels such as Adidas, Nike, H&M, Burberry, and others have already established their presence in the Metaverse. These companies are introducing virtual wearable items and NFTs for virtual characters (Arpaci et al., 2022; Thomason, 2022).

Major technology companies such as Microsoft, Google, Apple, and many others have enthusiastically embraced the metaverse phenomenon. Even companies in the chip and semiconductor industry, such as NVIDIA and Qualcomm, have jumped on the metaverse trend (TCS, 2023). Well-known consumer brands like Gucci and Coca-Cola have joined the trend of selling their non-fungible tokens (NFTs) on metaverse platforms (Kim, 2021). There was a continuous debate on the description and definition of metaverse because of its complexities, many researchers are of the view that it is the new evolution of web which have the potentiality to change the form of digital interaction (Smart et al., 2007).

Numerous research attempted to comprehend and define metaverse. In the study of Albayati et al. (2023), it was found that to understand user behaviour and their decision making process related to NFT (non-fungible tokens) of the metaverse, Theory of Planned Behaviour (TPB) plays a critical role. The components of this theory such as attitude, subjective norm, intention and perceived behavioural control helps to understand the decision making process of the consumer in related to NFT of the metaverse. Thes findings helps to comprehend the decision of individual in related to using NFT's and their participation in the realm of metaverse. The study undertaken by Risco et al. (2022) identified the factors behind the intention of the customers and their participation in Metaverse. Close examination of Social Cognitive Theory predicts the key factors such as self-efficacy, institutional support and technological literacy and how individual belief and their behaviour along with environment impact individual in their inclination and shape their behaviour and determine how they will engage with Metaverse available on Facebook. The findings of this study advocates to increase technological literacy and providing institutional support which in turn increase metaverse participation. Factor such as creative thinking of individual and fostering a imaginative culture have a positive effect on individual's involvement and participation with respect to metaverse.

The study by Schiller et al. (2023) in reference to Social Role Theory (SRT) suggested the influence and importance of gender composition on collaboration dynamics in terms of metaverse. The study also depicts that development of trust depends on the interaction of same gender and seems to be consistent with respect to gender stereotypes which results from shared understanding in terms of impression management. On the other hand interactions between different genders depict lower level of trusts, sensitivity and also understanding in the platform of metaverse. Other study which uses SOR theory (Patil & Promod, 2022) linked with theory of innovations and its diffusion (Ildas, 2022). Many theories of consumer behaviour implemented the qualitative approach to a have better in-depth understanding of consumer behaviour and with respect to metaverse phenomenon (Srivastava & Sahu, 2023; Arya et al., 2024; Dwivedi et al., 2023; Kim, 2021). Due to the capability

of qualitative approach in unwinding the complex consumer behaviour and consumer psychology and to have a better understanding in terms of in-depth analysis, qualitative approach in research study plays a pivotal role (Razafsha et al., 2012). In a specific phenomenon, qualitative research approach takes into account consumer's emotions, their thoughts in unravelling human behaviour (Austin & Sutton, 2014).

3. METHODOLOGY

3.1 METHODS

This research employed the narrative technique to examine the motivating variables influencing customer behaviour in the metaverse. Additionally, the study assessed the story's effectiveness by developing an analytical framework. The narrative approach is a method used to analyze rationalized narratives in order to extract important insights from complicated phenomena. It is an information dissemination method and a knowledge management technique that is understandable and information-sensitive (Barzaq, 2009; Hardy et al., 2023). This research employs narrative concepts to comprehend consumer experiences as some phenomenon impacts them. Therefore, the research concludes that this strategy repeats universal ideas that are deeply embedded in all human experiences (Magretta, 2002). In addition, Aaker (2018) provided a precise definition of a tale as a narrative structure that combines actual or fictional events and experiences into a cohesive sequence. The author discusses the psychological aspects, economic obstacles, user experience, and different concerns in the metaverse for customers. The narratives were analysed using NLP techniques including Named Entity Recognition (NER) for identifying people, locations, and technologies; Sentiment Analysis to gauge emotional tone; Topic Modeling to extract core thematic categories; Keyword Extraction using TF-IDF-inspired logic; Linguistic and Readability Assessment to evaluate tone and language patterns; and Demographic Tagging to assess patterns across age groups. Several tools were used for analysis purpose such as, spaCy, TextBlob, and custom Python-based NLP scripts.

3.2 Framework

An analytical framework based on the analysis of keywords from the interview (Figure 1) from metaverse perspectives gave the framework, which is further established via case study analysis and the narrative technique. The framework covers metaverse technology, concerns of consumer psychology, ethics, and legitimacy in the metaverse. The framework delves into consumers' perceptions of new technology at first. Keywords like "Virtual reality", "Augmented reality", "Blockchain integration", and "Immersive experiences" gave us the perception of the metaverse as an advancing technology. Creating a trustworthy, secure, and healthy environment for consumers to connect and explore the metaverse requires addressing psychological, ethical, and legitimate concerns. The keywords "Consumer anxiety", "Decision fatigue", "Cognitive dissonance", "Trust", and "Emotional influence" gave us the framework for discussing the psychological concerns of metaverse consumers. The "Data privacy", "Digital identity theft", "Content moderation", "Virtual harassment", and "Equity & Inclusion" made up the ethical concern framework. The legitimate concerns and consumers framework was created due to occurrence of "fraud prevention, "Regulatory framework, "Intellectual property rights", and "User accountability" keywords during interview.

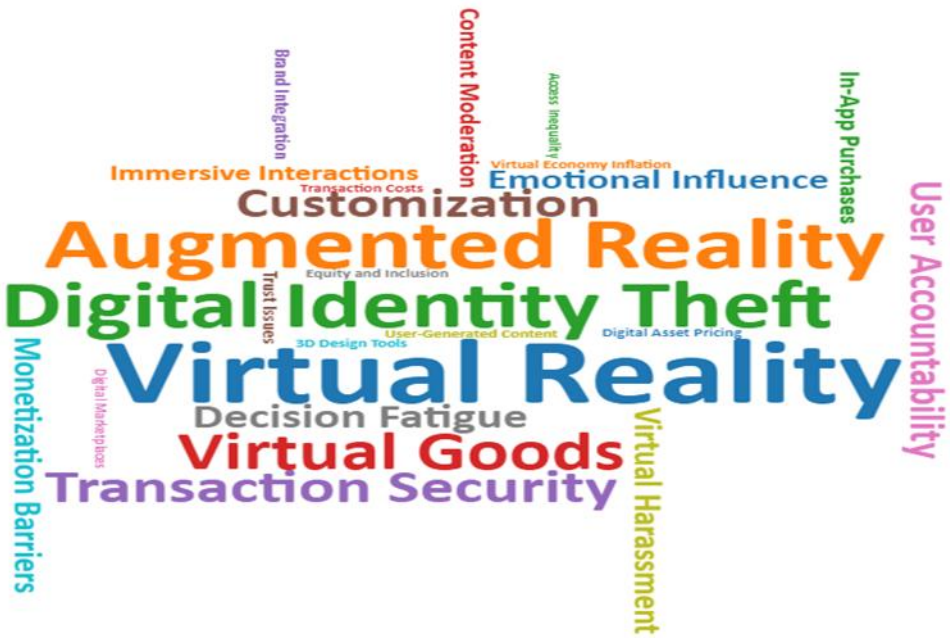
Economic challenges based on keywords "Monetisation barriers", Virtual economy inflation", "Access inequality", and "Transaction costs" make up another framework. Consumers are worried about a variety of economic issues, including the rise of the digital economy, virtual assets, and the lack of a safe environment. Governments, tech firms, and users must work together to build metaverse economic systems that are transparent, inclusive, and robust if we are to overcome these economic issues. In order to address these economic issues of the metaverse, this research offers a consumer viewpoint. Content creation ("Immersive interaction", "Customisation", "User-generated content", "3D design tools" & "Interactive environment") and Metaverse consumerism ("Virtual goods", "In-App purchases", "Brand integration", "Digital marketplaces", & "NFT commerce") are the other frameworks used. In this framework of the study, the focus is on the ways in which consumers are involved in the content creation process and how this influences their consumption of virtual products, services, and experiences.

3.3 Data Collection

The literature for this study is collected from previous research studies, books and other websites. Once the analytical framework is framed the primary data was collected through in-depth interview. It is imperative to collect and identify the underlying factors that have an effect on consumer choices in terms of purchase in the metropolitan area for formulating business strategies (Mohan Raj, 2017). In urban area, there many factors which influences consumer behaviour but there is a new trend of consumer towards innovative and value-driven products especially in metropolitan areas (Dudin et al., 2014). Factors such as urban density boost consumption, thus urban areas are considered as consumption hubs(Glaeser et al., 2003). Thus Kolkata, a metropolitan city is considered in the present study. With a qualitative research approach, and a sample size of 35 participants is considered for the study. The participants are considered who had past experience in relation to AI instruments. Primary data was collected with the help of semi-structured schedule to capture social, psychological and economic dimensions

of the AI consumers. The process of sampling is continued till response saturation is not achieved, that ensures an exhaustive collection of data from diverse location to capture required data for the study.

Figure 1: Keywords emerged during interview



Source: Authors

RESULTS

The narrative approach has been used to discuss the interview conducted to inquire about consumer behaviour in the metaverse. The themes or framework-based results are discussed further in the section.

4.1 Metaverse: An Advancing Technology

Virtual Reality and Augmented Reality are immersive technologies that play a vital role in the shaping of user interactions within the Metaverse. Virtual Reality would provide the users with completely simulated environments, giving a high degree of presence and immersion. Whereas in Augmented Reality, perception is improved by overlaying digital information onto the real world. In such a way, it allows for interaction with realistic simulations, exploration of extensive immersive environments, and interaction with virtual elements as if they formed part of the ordinary physical surroundings. Therefore, integration of VR and AR raises the quality of user experience, supporting higher levels of engagement, personalization, and immersion than earlier configurations. Both Virtual and Augmented Reality contribute to telepresence, which enables users to perceive a computer-mediated environment as if it were the actual world. Greater accessibility and lower prices for Virtual and Augmented Reality have made the devices more commonplace among users. According to one respondent :
""AI is a fantastic instrument that allows me to immerse myself in another realm of imagination, especially when I am bored with work. I eagerly anticipate engaging with it during such moments" (Pseudo name; AK. Banarjee, 28 years old)."
This statement shows that the virtual world is becoming very interactive and attractive as a source of enjoyment for younger generations (Aljanabi & Mohammed, 2023). Unlike in the past, when participation at the level of audience was in the real world, nowadays individuals more actively participate in tales and events in the virtual space (Livingstone, 2003). This dynamic represents a shift in engaging with a narrative from active physical space to immersive digital experience space (Economou, 2015). In the Metaverse, the realms of entertainment, social needs, and information for the youth all combine to make the digital experience multilayered and integrated.
Consumer behavior has shifted from physical to digital, consequently changing the nature of social interaction and entertainment. Online gaming connects friends across the world during working hours, facilitated by AI. Gwynne (2023) comments that more than bridging distances, the Metaverse redefines the way people communicate with each other. The creation of virtual economies will add economic activity, while advancements in online gaming and streaming indicate increased satisfaction levels with virtual worlds. An economic layer will interweave the social and economic activities. Avatars build identities, friendships, and self-concepts, which in turn impact how others perceive them. This virtual world revolves around virtual personas and relationships wherein monetary and social aspects are intermingled. Examining such digital exchanges provides insight into

explaining beliefs and experiences in the Metaverse. User behavior emanates from self-expression, identity, and the psychological benefits derived from virtual interaction.

4.2 Psychological Concerns of Consumers

Individuals are constantly trying to model themselves through various activities, wherein the Metaverse acts as one platform where such activities materialize through the provision of self-expression as an instinctive human drive (Reay & Wanick, 2023). This tendency toward self-expression has led to the creation and development of this scientific phenomenon called the Metaverse within our digital environment and where self-expression comes up in different forms regarding construction of customized self avatars and developing virtual space for the next generation along with extending unique content (Barrera & Shah, 2023). The Metaverse provides endless opportunities for designing and building a digital self where the users can experience a new platform for something usually practiced within the physical world (Wang et al., 2023). In this digital world, designing the persona has turned out to be one of the strongest mediums of expression where one can easily portrait various shades of their personalities which is otherwise not possible in the physical world (Belk, 2013). As respondent Sam, 19-year-old, states:

"While playing games at the shopping mall, I enter a virtual world that closely resembles the physical one, featuring beautiful sceneries and structures for engaging in wars where one can hide and engage with enemies. It feels as if we are transported to another realm. Importantly, I have the freedom to choose a character that resonates with me, and I always aspire to be a game-changer while playing. When watching movies, the immersive experience makes it seem like objects are about to hit my face, creating a sense of amazement and excitement. This virtual world offers greater entertainment with a heightened sense of satisfaction." (Pseudo name: Sam, 19 Years Old)."

From Sam's experience, it is obvious that the Metaverse plays an essential part in creating one's identity, particularly in the psychological landscape. The virtual expanse becomes a canvas for individuals to explore and test different facets of their individuality, emancipated from societal norms or expectations. The proliferation of digital technology provides a platform to explore and experiment with many aspects of identity that deviate from societal conventions.

The experience of the customers advocates self concept, that foster a sense of autonomy and empowerment. Thereby, Metaverse is acting as technologically sophisticated tool for self exploration and personal evolution(Nunes, 2023). It provides psychological opportunities for identity exploration and self expression. It acts as a good platform to consumer to escape the stressful daily life and relax(Harrison, 2023). This platform provides the consumer to explore an alternative world which is free from the physical world problems, thus feeling a sense of peace and tranquillity (Hadi et al., 2024). It also acts as a network free from physical boundaries to get connected which result in togetherness (Huang et al., 2023). The self created virtual world gives collective experience and the combined endeavour provides a path for developing a simulated society, which a marvellous gift that the metaverse provide thus fostering a sense of support and belongingness.

The beautiful essence of the Metaverse is that though the world is virtual but it provides the consumer the opportunity to be present in the virtual world in physical form. The sophisticated technology of AR (augmented reality) and VR (virtual reality) blurs the boundary of the virtual world from real world(Steffen et al., 2019). The perceptual engagement of the consumer derived from emotional attachment due to virtual experience promotes further unforgettable deep customer engagement. Step: If appropriate, categorize the equation as either homogeneous or inhomogeneous. Solution: Evaluate the coefficient and the constant term of the differential equation to see whether both are zero or at least one is nonzero. Such an equation is homogeneous. Otherwise, when one of them is zero while the other is nonzero, it is inhomogeneous.

Developments within the Metaverse, coupled with the implementation of gamification principles, demonstrate a focus on user interaction. Gaming elements, such as rewards, achievements, and interactional challenges, utilize intrinsic motivational drivers to maintain active engagement and prolonged time exposure in the virtual space (Koohang et al., 2023). Success in acquiring recognition within the Metaverse's technological environment develops a potent psychological driver, thus feeding into a positive self-reinforcing circle of customer engagement. As user involvement in the Metaverse increases, virtual economies develop and introduce new complications that come with opportunities not usually seen in traditional markets (Hadi et al., 2024). The Metaverse is at the center of virtual economies, allowing users to generate and circulate various forms of assets, including digital land, virtual currency, items in-game, and tailored avatars, among many others (Panda, 2023). Ownership in the virtual sphere does not operate strictly within the confines of a non-physical product; to amass more virtual riches, users outlay real physical resources to generate revenue and help perpetuate dynamic virtual marketplaces. The value of assets is determined by their availability and demand, coupled with the perceived value derived from the Metaverse.

4.3 Consumers and Economic Challenges

Consider the propensity to seek higher returns. Thus, capital tends to be deployed in search of higher income prospects. A respondent relates their investments in cryptocurrency, pointing out that there are many risks of economic anomalies and the need for accredited formal regulation within the financial markets. On the other hand, the field of AI seems to pose greater opportunities due to continuous technological developments. While

cryptocurrency investments involve some hurdles, the gradually improving state of AI is open to new initiatives and strategies regarding the prospects of the financial industry. This implies that while deliberating on the risks inherent in such propositions, one should not lose sight of future developments in order to make informed decisions within the shifting world of financial investments. The consumer behaviour in terms of economic parameter in Metaverse is very much similar to that of traditional world(Far et al., 2023). The dynamics in the virtual economic world has an impact and also interact with that of the traditional market, the metaverse is not isolated much from the traditional world. The advent of blockchain technology with virtual currencies and assets and its growth emphasizes in the increase of interoperability between virtual economy with the traditional economy(Zachariadis et al., 2019). The parameters such as transparency, security and decentralization in financial transaction in the blockchain technology plays a critical role in financial solution(Upadhyay, 2020).

In the metaverse platform the adaptation of blockchain technology asks for differentiation in between economies of physical and virtual realms thus posing challenges in regulation and taxation of virtual assets. For the case of virtual realms, experience and virtual assets plays a significant role in terms of value for the users which had an impact on the economic market, in contrast to the prevailing traditional concept of creation of value and consumption. There is a requirement in terms of priorities in the traditional industry which need to be changed by taken into consideration consumer needs who invest financial resource for increasing their presence in the virtual digital world thus offering various opportunities. Industries such as fashion, entertainment, and gaming find a landscape where virtual assets and experiences surpass their physical counterparts in terms of economic value and cultural significance. The economies benefiting from the metaverse extend beyond individual consumption, reflecting broader trends in society.As one respondent expresses:

““I am a graduate with a Master's degree. Currently, I am involved in online marketing due to its advantageous nature. I compare offerings across various platforms and strategically wait for festive seasons to conduct bulk marketing, taking advantage of the lucrative offers provided by different shopping platforms during that time” (Pseudo name: Itishri, 34 years old).”

Evidence shows that internet-skilled, literate youth of today marketing their products and services prefer online digital marketing methods over traditional approaches enabled by the Internet, Artificial Intelligence, and Virtual Reality themselves, all assisting in building a better experience in marketing (Jain & Kumar, 2024). Digitalization of economic activity rescripted the nature of work, commerce, and social interaction in the metaverse. Business operations are redesigned through virtual events, conferences, and marketplaces that open up new avenues for collaboration and participation, as Jahangir and Haq (2023) and Berman (2012), respectively, have mentioned. The gig economy, big in the physical world, has metamorphosed into people’s skills and services in virtual space contributing towards developing a decentralized dynamic market in the metaverse, as Yaqoob et al. (2023) present. This means that, with the evolution of the metaverse, established markets must learn to transact within the virtual world to survive in this environment.

As the metaverse grows, virtual concerts and immersive experiences are ever more central to modern entertainment. The rising demand for virtual real estate creates opportunities both in the digital and physical realms. The legitimacy of, and wider usage of, virtual currencies presents both challenges and opportunities for traditional finance. More metaverse activity leads to significant economic impact through advertising and marketing. Virtual advertising, brand experiences, and product placement become integral in the virtual economy. The boundary between physical and virtual advertising continues to blur. The need for new ways to capture consumer attention and build brand loyalty is paramount. In the metaverse, there is little that separates the real from the digital; since a number of users will be interacting with each other, issues like privacy, security, and ethics come to the fore. Ownership and intellectual property rights are important issues that need to be considered with regards to virtual assets. Economical inequalities are part of the metaverse challenge because unequal distribution of resources and prospects could extend current economical and social inequalities.

4.4 Content Creation in Metaverse and User Experiences

Active creation in the Metaverse allows users to develop a virtual environment through creativity and innovation, exposing themselves to a new domain, according to De Rossi et al. (2024). Users are considered co-creators of the digital Metaverse since the virtual environment is basically created through the experiences produced by them. Users actively participate in designing the virtual world by creating a means for interaction, developing detailed stories, and creating virtual goods. While traditional consumerism views participants as being largely passive and focused on consumption, the Metaverse repositions users as co-creators. Co-creative ownership provides users with a feeling of community that stimulates further participation in the Metaverse, suggests Bertrand (2024). This can be further clarified with an example provided by a respondent:

““Thanks to the unique experience of being able to choose and create one's own character in-game, players are more likely to play the game. My character can be anything, I want it to be” (Pseudo name, 19 years old; Saleem).”

Motivation for self-expression drives participation in user-generated content Daugherty (2008). Metaverse users can bring fantasy to tangible form virtually, which cannot be done in the physical world. This may come in various modalities: customizable avatars, virtual arts, and virtual landscapes, thus contributing to sophisticated digital culture Gursoy 2023. It provides a hub for users to showcase their skills and creativity and evolve together with it, building an identity in digital space. As one respondent further illustrated:

"I am famous in my friend circle by the character I use in my gaming platform. Now they call me by the name of the character I created as my profile in the gaming platform. It is really a good option to build my own customised profile" (Pseudo name, 19 years old; Subho).

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""We have a team of five in the gaming platform. And three of the members are from outside West Bengal. One of the team members is very expert in that gaming platform and he uses to guide us in accomplishing the mission in the game. I come across with him through this gaming platform only. Initially, I was very naïve in this platform, so I use to follow the gaming style of some people in that platform and then I send a friend request to a member. After getting the acceptance now we use to game together in this platform andhe is from Pune" (Pseudo name, 19 years old; Subho)."

Collaborative activities bring together people of similar tastes and create social networks beyond geographical boundaries. Additionally, shared experiences raise motivation levels. With a growing Metaverse, continuous content created by its users will lead to more innovation and creative virtual design. The virtual world remains in a state of flux created by and shaped through the collaboration of its users. User-generated content is the key to making the landscape more interactive, with new themes introduced in various active communities (Huang & Huang, 2023). It is the diverse userbase that constantly develops and enriches the digital environment of the Metaverse. Another respondent states:

"My child who is 10 years old and is admitted to a good school suddenly was using vulgar language which was very bad. I went to the school to know the reason, with the perception that he was having friends who might be using this type of language. But I didn't find anything from his friend circle or found any environment from where he can learn this vulgar language. Suddenly, in one late night, I saw my son playing games on the computer and using this language while playing the game with his microphone. After that day, I disconnected the internet connection on his computer" (Pseudo name, 42 years old; Bapi).

User-generated content not only enriches the Metaverse but also brings new challenges. As user-generated content is open to all contributors, there are chances of incorporating unwanted or harmful content. Therefore, addressing quality, safety, and other ethical issues is crucial. Maintaining equilibrium between liberty in terms of creativity, ensuring safety and quality, and addressing ethical concerns is important for fostering a positive and collective user experience. Platform developers should implement mechanisms to check any unwanted ethical issues that may arise due to harmful content creation. Another respondent shares:

"During the pandemic, I lost my job. During that time, I came across cryptocurrency through one of my friends. I opened an account on one of the cryptocurrency platforms. Initially, I used to ask my friend how to operate, but with time and the user-friendly nature of the platform, I now operate it on my own. Initially, I made a good profit, which supported me financially during that time" (Pseudo name, 48 years old; Bokul).

The easy accessibility of users in content creation in the Metaverse has given rise to a group of influencers and digital content creators. The line dividing users and creators gets erased by the application and contribution of user-generated content.As a result, a new marketplace for goods and services in virtual mode termed the digital economy, is created, where content creators can monetize and materialize their assets, services, and performances (Mancuso et al., 2023). With the advancement of the Metaverse economy, user-generated content shapes the cultural landscape along with economic dynamics (Jönsson &Örnebring, 2011). Moreover, another respondent expresses:

""One Sunday, I took my 12-year-old daughter to visit South City Mall. There, she had her first experience with a VR wearable device. While using the device, she enthusiastically moved her hands. After the experience, she was elated and told me it was truly a new and enjoyable thing. Curious, I asked her why she was moving her hands during the device's use. She explained that she felt like she was moving through a jungle, encountering different animals that came close to her. To protect herself from these virtual animals, she had to use a virtual weapon, which is why she was using her hands to operate it. Her words conveyed that she perceived the experience as real while using the device" (Pseudo name, 40 years old; Shantanu)."

Besides interactive visual content, user-generated content in the Metaverse provides immersive experiences through collaboration projects, such as developing story plots and role-playing through adventures. This means that users contribute to storylines that are continued outside any one platform. Such user-generated narratives are dynamic, unpredictable, and engaging, thus sustaining the involvement of participants over time (Gursoy et al., 2023). It is the participatory character of the narrative that ensures the elimination of the line separating the user from the creator. Collaboration continues into the educational sphere. Virtual classrooms have appeared in the Metaverse today, enabling an educationally collaborative environment-one in which knowledge is exchanged with the assistance of user-generated educational content (Onu et al., 2023). There is the creation of educational resources by users within the Metaverse, hence the facilitation of interactive learning and changes in traditional modes of education (Xu et al., 2023). This transformation of the educational system is a result of the Metaverse's ability to enable the collaborative creation and use of knowledge.

4.5 Ethical Concerns and Metaverse

Such deployment of technology in creating virtual experiences does, however, raise a number of concerns relating to data security, surveillance, and unauthorized access to personal information. According to Xu (2023), monetizing user data within the Metaverse brings up ethical questions on the ability of an encompassing framework that will protect users' privacy rights from any form of exploitation and improper usage of personal data. Digital personas constructed by users help them to express their individuality, which is considered an identity that may at times reflect their real selves or some other identity apart from their physical selves. This was aptly captured by one of the respondents when they expressed:

""Because no one, except those very close to me, could recognize me, I frequently alter my real name and age. At times, I utilize my elder brother's mobile device to engage in online gaming, as I am particularly fond of its realistic nature" (Pseudo name used: Jaidev, 18 years old)."

This insight illuminates the respondents' inclination for anonymity and the lengths they go to retain it. It highlights the significance of privacy and the allure of immersive online gaming. Striking a balance between the freedom to reveal one's name and the ethical duty to prevent malevolent activities is extremely important. Evaluation and revision of user protection along with the system of identity verification is an utmost requirement in the Metaverse. For often the communication in between the user and the virtual environment increases the ethical complexities which further affect the behaviour of the user in the actual physical world. The user's encounter in the stimulated virtual world often become indistinct and can have a profound effect in the behaviour of the user when the user encounter in the physical world(Nguyen & Alexander, 1996). Ethical consideration is necessary for user's experience in games, more specifically in their interaction and their conduct in the virtual environment and to protect the users from any detrimental conduct, any harassment like cyberbullying in real world (Dwivedi et al., 2023). To address these problems an optimistic strategy implementation is required which include technology measures, community guidelines and educating the users (Habbal et al., 2024).

To ensure total commercialization of digital environment which enable social interaction should be accessible to all irrespective of their socio-economic condition and technological knowhow(Nahi et al., 2023). User engagement with the virtual world have the potential to create distortion in the human perspective which can lead to attention diversification towards physical reality(Kara et al., 2023). Detailed study and proper design is very much needed for addressing ethical concerns in terms of immersive technology. It is imperative to protect user's well being minimizing the hazards, and promoting healthy interaction and engagement in the Metaverse (Cockerton et al., 2024). Smooth transition between different digital platforms is necessary for user satisfaction and happiness as users explore distinct Metaverse platforms (Barrera & Shah, 2023). A insightful revelation from one of the respondent about the design of few AI tools:

""One day, I found myself alone in my room, feeling tense. Seeking an outlet, I engaged in a chat with an AI tool, instructing it to suggest unethical activities. While using the AI platform for general suggestions was seamless, I was surprised to discover that when I asked for advice on negative aspects, the AI consistently recommended positive activities, resembling a guardian. This experience left me amazed, and later, I realized that the AI tool had been designed in a responsible and ethical manner" (Pseudo name: Soumen Das, 28 years old)."

A great deal of attention is also paid to the development of the service part of the economy, and much importance is given to the social sphere.

However, while pursuing a unified digital space, researchers have to address issues related to the structural complexity of AI tools. Unification of technology, avatar, and user identity; digital assets; and many other elements binds together, needing holistic, ethically engaged analysis in order to translate digital potential into real application (Andrew 2022; Aljanabi & Mohammed 2023).

Interoperability across platforms creates a flexible virtual environment, giving users access to various experiences, content, and communities. Stewart comments that it provides options in line with needs and increases Metaverse competition. Standard protocols of data-sharing, communication, and security improve interoperability, producing a consistent and user-friendly atmosphere. Johri et al. comment that growth in Metaverse will integrate several platforms into existing and future technology. The integration of augmented reality, AI, and IoT allows new forms of interaction. Nassif et al. illustrate how different heterogeneous platforms seamlessly integrate the physical and virtual worlds to facilitate smooth transitions. Alimam et al. provide an explanation of how such integration will result in increased interactivity and a stable digital environment.

4.6 Future and Metaverse Consumerism

As the Metaverse evolves, consumer behavior will shift with emerging trends and a change in the way people engage digital spaces. Advancing technology, evolving market dynamics, and rising user expectations are set to drive a new era of Metaverse consumerism. Key themes include AI integration, through AI-powered assistants, personalized recommendations, and dynamic content algorithms ready to enhance experiences with timely, tailored interactions. As one respondent said:

""Earlier, when I was playing a game, it did not have as good quality of picture and sound, as well as the option for self-changing content. But now, due to the augmentation of AI support, I can make changes as if I am there in the virtual world"(Pseudonym: Ramesh, 26 years old)."

In the above formulation, the respondent shows that due to AI intervention, his joy has increased, reflecting a user tendency to seek help from AI. These intelligent systems adapt not only to user preference but also predict the

needs to build a more engaging and personalized environment in the Metaverse. Advanced capabilities of AI in the future might lead to the materialization of realistic AI avatars in the Metaverse, which would be able to communicate through natural discourse and involve users in much more meaningful interactions with each other and virtual surroundings. One of the respondents commented:

““When I was ill due to an infection, there was no one in my home to talk and console. It was only AI that consoled and conversed with me like a friend and family, helping me overcome both physical and psychological illness. I truly appreciate it” (Pseudonym: Vyom Chaterji, 20 years old).”

The attitudes of the respondents about artificial intelligence display that AI might work both on a family and social level as a companion or a source of companionship and reflect the level of appreciation given to AI for its soothing impact during times of hardship. In connection with the Metaverse, it is perceived that there will be an interconnected ecosystem where smooth mobility across different platforms and technologies is possible. It is believed that the existing sharp division of the different Metaverses will, in time, merge into a continuous digital space that would allow cross-platform interaction, shared virtual economies, and increased interoperability Zhang et al. (2024). According to one respondent:

““I find joy in the use of a cross-platform and interconnected system of the Metaverse, which aided me in completing my graduation. Being a physically challenged person, I face difficulties in moving out frequently” (Pseudonym: Ashraf, 32 years old).”

The respondent's admission reflects the impact the Metaverse has had on education thus far, specifically in the realms of accessibility and the ability to achieve learning goals by students with physical disabilities. The popularity of Metaverse platforms is increasing due to growing user demand for a unified user experience that would let users move seamlessly across Metaverse environments without friction. Interoperability among Metaverse platforms will establish a Metaverse standard so that users could navigate between or move content from one digital space to another without difficulty. The arrival of blockchain and blockchain-related decentralized technologies should change the economic configuration of the Metaverse. One respondent summarized:

““I invested my capital in cryptocurrencies, which enabled me to generate profits from my investment, resulting in a handsome return. However, there have been instances where I faced losses. Nevertheless, I must say that due to AI augmentation, managing investments has become somewhat easier for me” (Pseudonym: Jamesh, 29 years old).”

This statement places the Metaverse on an equal footing in economic importance and emphasizes its potential to reshape digital ownership and monetary systems. Its impact is expected to become increasingly prominent in emerging trends, including the adoption of DeFi in virtual worlds, the use of blockchain virtual assets, and the utilization of NFTs for creating digital ownership of assets (Wang et al., 2024). These technologies stand to redefine digital ownership and allow for the buying and selling of virtual goods across the Metaverse with greater security. Through the integration of blockchain technology, virtual economies may overcome issues of transparency and trust through secure and decentralized digital transactions (Shah & Uddin, 2023). The digital world is also expected to be influenced by AR and VR, most specifically in the Metaverse. With the broad deployment of AR glasses, advanced VR headsets, and other mixed-reality experiences, significant potential exists for more interactive virtual worlds. One can expect greater immersion, near-realistic simulations, and feelings of full presence in the virtual world of the Metaverse (Venugopal et al., 2023). As one of the participants revealed:

““I became the victim of theft when a hacker infiltrated my wearable devices and indoor devices, such as cameras, and traced my location when I was away from home” (Pseudonym: Reghu, 27 years old).”

The respondent's account emphasizes that cybercrime is a concern in developing the Metaverse and there is a need to address security-related issues in the development process. The sophistication and subtlety of social interactions are likely to increase in the Metaverse. The more advanced social artificial intelligence algorithms will enable highly realistic virtual avatars, capable of conveying emotions, expressions, and body language in a much more effective manner than current systems are able to accomplish. This could enhance the relation-building in online communities, making it similar in feel and manner to any physical world interaction. The integration of social VR environments and virtual event spaces could revolutionize conceptions of social interaction- gathering individuals together for co-created experiences in immersive virtual spaces. As one respondent stated:

““My children are highly involved in virtual games, which adversely affect their health and also disconnect them from the real world” (Pseudonym: Benu, 47 years old).”

The respondent's comment reflects how virtual gaming is becoming more common and gives sufficient grounds to address this issue, with a specific focus on health-related concerns. This is one of the negative features of the Metaverse. On the other hand, the development of the Metaverse can embed gamification to a greater degree, using game principles in order to raise user activity and motivation. Virtual economies in the Metaverse may use higher-order game mechanics, such as quests, challenges, and rewards, to ensure long-term user engagement. Gamified experiences exist beyond entertainment, from education to commerce and every other aspect of Metaverse use, serving as vital building blocks within an active, dynamic digital environment. The more integrated the Metaverse becomes with daily life, the more attention will shift to digital identity, and by extension, privacy. Together, self-sovereign identity solutions and technologies focused on privacy could be key in offering a needed trust framework that underpins user interactions and transactions. As virtual experiences and digital goods are increasingly important to everyday lifestyles, one can envision that scholars will continue to focus substantial

attention on the environmental impact of the Metaverse. This will likely be seen in how users increasingly embrace platforms and experiences that create or facilitate higher levels of environmental sustainability, thus driving market forces across the virtual world.

4.7 Legitimacy Concerns and Metaverse Consumer Protection

As virtual economies and user-generated content develop complex interrelations in the Metaverse, addressing these evolving challenges of consumer protection becomes quite important. Effective regulation of virtual activities in the Metaverse requires deep examination of virtual-asset ownership, consumer rights, and governmental policy. According to a participant:

""I do not prefer online transactions when playing games. In situations where payment is involved, I choose to play with my family members at a physical shopping mall. This preference is driven by concerns about insecurity and the perceived lack of rules and regulations imposed by the government in online gaming transactions. When initiating a game, there is a cautionary notice indicating potential risks, suggesting a higher likelihood of fraud when playing online" (Pseudonym: Shyam, 42 years old)."

Another important dimension of consumer right protection in the Metaverse is the ownership of virtual assets. Core issues relate to the legal status, protection, and governance of virtual assets when the customer uses tangible resources to obtain title. A framework should be built which will protect the consumers' ownership rights over virtual assets through the construction of sound laws and legal regulations (Turdialiev, 2023). The issues involve unauthorized reproduction, deception, and misappropriation of digital assets, which raise the issue of legal redress in the case of loss of virtual assets in the metaverse. Another significant dimension of consumer rights pertains to a range of issues: privacy, data protection, unfair practices, resolution of privacy-related disputes, etc. Protection of consumer interests should necessarily involve addressing government authorities to draft legislation and regulatory measures aimed at the protection of consumer rights in the virtual world. It will allow consumers to proceed with participation in the metaverse without facing privacy issues and unfair practices. It is impossible to ensure a good regulatory environment without proper implementation of severe data protection standards, privacy rules, and procedures for reporting and responding to harassment or unfair practice events. The regulatory framework has to be designed in such a way to provide confidentiality, integrity, and well-being for consumers with an appropriate balance between free choice and measures that prevent harm. Digital or virtual currencies, NFTs, and blockchain technology in the metaverse develop new concerns related to consumer security and protection (Ajani et al., 2023).

The need for a settled discussion of legal legitimacy, cross-border transactions, and protection of consumers' rights calls for international collaboration in Metaverse domains. More than legislative policies, the need for awareness programs will better equip consumers for safe navigation in the Metaverse. Digital curricula that can instill more digital literacy, online safety, and ethics in the Metaverse will contribute meaningfully to making informed decisions and behaving appropriately in virtual environments.

4.8 Sentiment and Emotional Tone

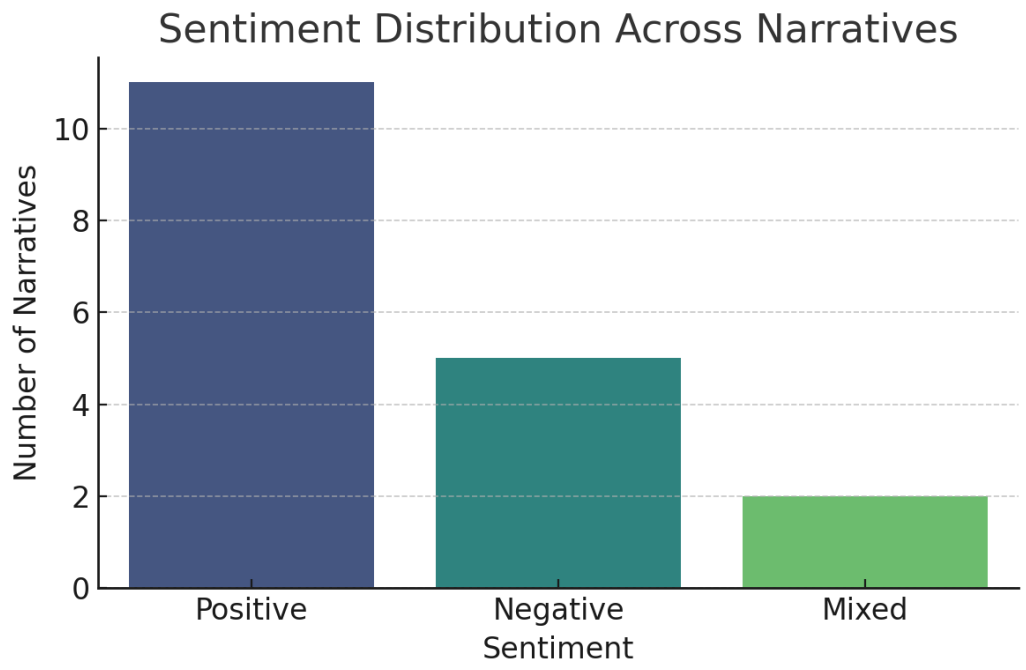
Out of 18 narratives, 11 expressed positive sentiments of joy, immersion, empowerment, gratitude, or satisfaction, which were quite often linked with gaming, companionship provided by AI, or financial benefits obtained through technology. Five showed negative sentiments where parents were concerned about language exposure and health effects; other concerns mentioned included fear of fraud or security breaches. Two narratives had mixed sentiments, highlighting both benefits and risks, especially in contexts including AI and cryptocurrency.

4.9 Thematic Clusters

Using topic modeling, six dominant themes were identified:

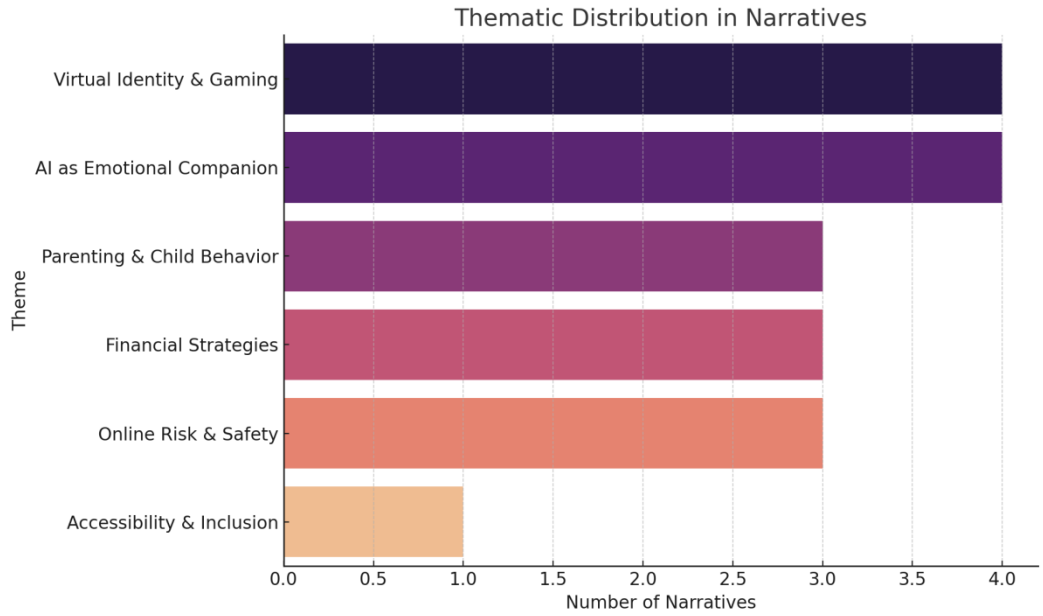
1. Virtual Identity & Gaming: Saleem, Subho, Sam, Jaidev
2. AI as Emotional Companion or Aid: AK Banarjee, Vyom, Soumen, Ramesh
3. Parenting and Child Behavior: Bapi, Shantanu, Benu
4. Financial Strategies & E-Commerce: Itishri, Bokul, Jamesh
5. Online Risk and Safety: Reghu, Shyam, Jaidev
6. Accessibility & Inclusion: Ashraf

Figure 2: Sentiment Distribution



Source: Authors

Figure 3: Thematic Distribution



Source: Author

4.10 Entity Recognition and Keyword Extraction

Entities were extracted across three categories: Persons, which included Pseudonyms-AK Banarjee, Sam, Bapi, etc; Places included West Bengal, Pune, and South City Mall; Technologies/Concepts included AI, VR, cryptocurrency, gaming platform, and metaverse. Salient keywords included AI, virtual, game, character, profile, investment, emotion, fraud, parent, freedom, customization, and real-world disconnection.

4.11 Readability and Tone and Age-Based Patterns

The sessions used mainly conversational language with reflective undercurrents. Younger informants talked about immersive experiences, identity, and play. Adults highlighted security, utility, parenting, and financial purposes. Gaming Immersion, character building, role-play, social identity (10–19 years), Artificial Intelligence interaction, emotional bonding, Financial Technology (20–30 years), Online Marketing, Child Behaviour, family-oriented decisions (30–40 years), Risk aversion, Ethical concerns, Parental control (above 40 years).

CONCLUSION

The Metaverse is gaining immense popularity among the youth, be it gamers or businessmen or entertainment seekers. This paper highlights the need for a regulatory mechanism in the usage of AI platforms. A trend is noticed that the number of AI enthusiasts is continuously growing. In the future, marketing in the Metaverse seems to gain huge possibilities since engagement becomes immersive. At the same time, it is a significant point to accept that addictive behavior is going to develop. Also, this paper highlights the fact that AI helps in reducing loneliness among people staying alone. However, on the other side, it says AI will make people disconnect from their near and dear ones like relatives and family members, which has cultural importance in countries like India, where being connected to family itself is considered important, especially when compared with Western nuclear families. Children, with the easy availability of mobile phones at home, have started showing an increased interest in gaming. This shows that it is a prevalent practice in order to engage the children and entertain them using mobile phones, and depicts how parenting has changed to ensure that the younger generation remains happy and engaged. The Metaverse combines fun with responsibility. As AI and immersive experiences continue to rise, a robust regulatory framework for consumer protection, privacy, and ethics is paramount. In the face of the ever-changing digital world, international cooperation, digital literacy, and ethical guidelines will be imperative to ensure a safe and positive user experience in this virtual world. Indeed, the study says that balance must be sought between technological advancement and protecting users' well-being and rights in this dynamic space.

The Metaverse is becoming increasingly popular among youth, be it gamers, entrepreneurs, or seekers of entertainment. The study stresses the need for a regulatory mechanism on the use of AI platforms. A definite trend that seems to emerge is an increasing number of AI enthusiasts. In the future, there is much marketing potential in the Metaverse because it offers a new and interesting platform for immersive experiences. There is, however, a need to be aware that addictive behaviors may arise. The study also suggests that AI can make a constructive contribution to reducing loneliness among people who are isolated. The other side of the coin is that AI contributes to detachment from loved ones, such as relatives and family members, which is culturally important in India, for example, where the connectedness of family is part of society in contrast, for example, with the West with its large proportion of nuclear families. Children are influenced, no doubt, by the easy availability of mobile phones in every home and seem to have an increasing tendency to gaming. Perhaps this is because a common method of babysitting children and keeping them occupied is to give them mobile devices to play with-a reflection of changes in parenting methods to keep children happy and occupied. Lastly, the Metaverse is a multifaceted platform with its aspects of leisure and compulsion. With the increasing integration of AI and immersive experiences in the Metaverse, strong consumer protection, privacy, and ethics regimes will be required. In this dynamic space, countries are supposed to cooperate on an international level, boost digital literacy, and guide ethical guidelines for a balanced approach where technological advancement sustains user well-being and rights.

6. Implications for Future Research

The metaverse has reached significant visibility in both academic and business circles. Based on the above, some areas of possible further research include the following: Ethics in AI Design-investigation of user perceptions of AI moral behavior, including the functionality of blocking unethical prompts; Child–Parent AI Mediation-the requirement for parents' AI literacy; Digital Identity Formation-the effect of avatars and profiles on the identity of youth; Tech-Induced Emotional Support-an investigation into AI as a therapeutic agent; and Online Safety Frameworks-control of virtual platforms and respective financial tools.

The themes that emerged in narrative analysis and topic modelling approach indicate the practical implications for researchers as well as businesses. The metaverse as an advancing technology calls for a user-friendly interface and cross-platform compatibility to encourage adoption. The compatibility and ease factors would enhance telepresence which is similar to the suggestion given by Jafar et al. (2025). Business focussing on user education and onboarding would reduce resistance to joining immersive experiences. Choice overload within metaverse platforms would simplify user decisions and minimises dissonance. The study’s thematic revelation of the immersive elements like NFT’s, Avatar, Blockchain, VR, and AR proves the importance of these elements to the users. Employing AI and machine learning to assess user immersive behaviour and preferences is essential for developing personalised experiences that align with individual (Dwivedi et al., 2023). Immersive involvement in the Metaverse must be prioritised, since the platform may facilitate discussions on real-world issues (Mogaji et al., 2024). The outcome variables extracted from the narrative and topic modelling analysis in context of metaverse are trust, loyalty, and psychological factors. The psychological concern points towards building emotional trust by brands through storytelling and inclusiveness. Inclusion of diversity in avatars and virtual spaces will foster equity and inclusion. Nevertheless, ethical issues and data privacy, are of utmost importance in this evolving domain. The ethical concern of consumers could be solved by platform developers by integrating encrypted data storage and identity protection mechanisms. To cater to the regulatory framework issues, clear Metaverse governance policies are needed. Identity verification implementation to reduce identity theft and cyber fraud. Creation of value driven digital products, transforming pricing and ownership will enhance consumerism in the metaverse.

The metaverse has gained a significant place in the academia as well as in business world,

therefore, the implications for future research would be Ethical AI Design: How users perceive AI's moral behavior (e.g., blocking unethical prompts), Child-Parent AI Mediation: Need for AI literacy among parents, Digital Identity Formation: Role of avatars and profiles in youth identity development, Tech-Induced Emotional Support: Exploring AI as a therapeutic agent, and Online Safety Frameworks: Regulation of virtual platforms and financial tools.

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