CONSUMER'S PREFERENCE ON METAVERSING E-COMMERCE WITH SPECIAL REFERENCE TO POLLACHI TALUK

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Abstract

In recent years, the concept of the metaverse has captured the imagination of tech enthusiasts and businesses alike. Originating from science fiction, the metaverse represents a collective virtual shared space, typically generated by the convergence of virtual reality (VR), augmented reality (AR), and the internet. A report by Gartner predicts that by 2026, 25% of people will spend at least one hour per day in the metaverse. This presents a phenomenal opportunity for the E-Commerce industry to tap into a new and potentially lucrative market, by offering immersive experiences that bridge the gap between the digital and physical worlds. The E-Commerce industry is primed to benefit significantly from metaverse integration. By leveraging immersive experiences, E-Commerce businesses can enhance customer engagement, drive sales, and differentiate themselves in a competitive market. One of the key challenges for E-Commerce businesses is replicating the in-store shopping experience online. Traditional E-Commerce platforms rely on static product images and descriptions, which fail to capture the attention of modern consumers. However, with metaverse integration, businesses can create virtual storefronts that offer interactive and lifelike shopping experiences. Hence the present research focuses on the mindset of the customers towards metaversing of E-Commerce Platform. 204 respondents' data through questionnaire were taken for the present study. Simple percentage, Ranking Technique and Anova has been used to analyze the results and offer suggestions which may be taken for the betterment of the metaversing and its reach at greater level.

Keywords: Metaversing, Augmented Reality, Consumer's Preference, Virtual Reality

INTRODUCTION

Originating from science fiction, the metaverse represents a collective virtual shared space, typically generated by the convergence of virtual reality (VR), augmented reality (AR), and the internet. A report by Gartner predicts that by 2026, 25% of people will spend at least one hour per day in the metaverse. This presents a phenomenal opportunity for the E-Commerce industry to tap into a new and potentially lucrative market, by offering immersive experiences that bridge the gap between the digital and physical worlds. The E-Commerce industry is primed to benefit significantly from metaverse integration. By leveraging immersive experiences, E-Commerce businesses can enhance customer engagement, drive sales, and differentiate themselves in a competitive market. One of the key challenges for E-Commerce businesses is replicating the in-store shopping experience online. Traditional E-Commerce platforms rely on static product images and descriptions, which fail to capture the attention of modern consumers. However, with metaverse integration, businesses can create virtual storefronts that offer interactive and lifelike shopping experiences.

Hence the present research focuses on the mindset of the customers towards metaversing of E-Commerce Platform. The potential merger of the metaverse with e-commerce is set to ignite a revolutionary shift in how consumers interact with brands and products. This fusion envisages a shopping environment where the boundaries between physical and digital storefronts blur, enabling experiences that are not constrained by physical world limitations. Consumers could virtually try on clothing, explore digital replicas of real-world stores, or attend exclusive product launches within the metaverse. For retailers, it represents an unprecedented opportunity to redefine customer engagement, offering immersive, interactive brand experiences that drive loyalty and redefine the essence of customer service. As we stand on the brink of this new era, the integration of the metaverse into e-commerce holds the promise of transforming the retail sector, offering a glimpse into the future of shopping that is as limitless as the imagination.

STATEMENT OF THE PROBLEM

The evolution of e-commerce represents a fascinating journey through technological innovation, consumer behavior adaptation, and the relentless pursuit of more personalized, convenient shopping experiences. This progression has not only transformed the retail landscape but also significantly influenced how businesses operate and engage with their customers. A quarter of executives believe more than 15 percent of company revenue will come from the metaverse in the next five years, and about 60 percent of consumers already using the metaverse prefer an immersive activity to a physical-world alternative. Hence the present research focuses to know the preference and agreement of the consumers towards Metaversing the E-Commerce Platform and in order to find out the answer for this question, the following objectives were framed.

OBJECTIVES OF THE STUDY

The following objectives were framed to know the level of acceptance of the users of E-Commerce in Metaversing it.

- To know the personal profile of the respondents towards their Preference in Metaversing.
- To find out the inclination of the Users towards Metaversing E-Commerce
- To reveal the attitude of the users towards E-Commerce Metaversing

METHODOLOGY OF THE STUDY

The study is carried out through framing up of a structured questionnaire which was distributed among the public in and around Pollachi taluk using convenient sampling method. Around 210 questionnaires were distributed and out of it, 204 were qualified with complete data to analysis which was made through simple percentage analysis and chi-square test.

LIMITATIONS OF THE STUDY

- The study pertains Pollachi taluk respondents preference only
- Time constraint was a limitation
- Results are to be generalised as it may carry personal bias

PERSONAL PROFILE OF THE USERS OF E-COMMERCE

Simple Percentage Analysis

It has been carried out to find out the percentage of respondents belonging to various categories in their personal profile and the level of awareness and the following results were obtained.

Parameters	Number ofRespondents (N=204)	**Percentage**
Age (in Years)		
21-30years	59	29
31-40 years	103	50
41-50 years	26	13
Above50 years	16	8
Total	204	100
Area of Residence		
Rural	84	41
Urban	120	59
Total	204	100

Gender		
Male	62	30
Female	142	70
Total	204	100
Type of Family		
Joint Family	62	30
Nuclear	142	70
Total	204	100
Educational Qualification		
No formal education	10	5
Up to HSC	33	16.1
Diploma	21	10.1
Under Graduate	66	32.4
Post Graduate	64	31.4
Others	10	5
Total	204	100
Role in family		
Head	75	37
Member	125	63
Total	204	100
Nature of Job		
Private Employee	57	28
Government Employee	36	18
NGO	33	16
Business	39	19
Agriculture	23	11
Others	16	8
Total	204	100
Family Income		
Rs. 10,000&Below	30	15
Rs. 10,001toRs. 20,000	31	15
Rs. 20,000- Rs. 30,000	40	19.4
Rs. 30,001- Rs. 40,000	15	7.4
Rs. 40,000- Rs. 50,000	75	36.8
Rs. 50,000&above	13	6.3
Total	204	100
Monthly Income (Self)		
Rs. 10,000&Below	15	7
Rs. 10,001toRs. 20,000	10	5
Rs. 20,000- Rs. 30,000	82	40
Rs. 30,001- Rs. 40,000	97	48

Total	204	100
Earning member in a family		
1	61	30
2	104	51
3	26	13
4	13	6
Total	204	100
Usage of E-Commerce		
Lessthan1year	42	21
2-3 years	41	20
4-5 years	102	50
More than 5 years	19	9
Total	204	100
Awareness on Metaversing		
Highly Aware	75	37
Aware	100	49
Not Aware	29	**14**

Sources: Primary Data

WEIGHTED AVERAGE RANKING

A weighted rank represents the rank of some observation in a dataset that has been weighted by various factors.

S. No.	Attributes	Mean score	**Preference (in Ranking)**
1	Mobile Payment System	2.72	I
2	E-Learning	2.24	VI
3	Mobile Applications	1.99	VII
4	Virtual Reality Hardware	1.77	X
5	Virtual Reality	1.87	VIII
6	Mobile Library	2.40	IV
7	Mobile Social Media	2.52	II
8	Virtual Hotel Operator Applications	2.32	V
9	Online Gaming	2.46	III
10	Metaverse E-Commerce	1.80	IX

Sources: Primary Data

ANALYSIS OF VARIANCE

Personal Profile and Attitude Level

Personal profile	Degree of freedom	Calculated F value	Table value@5%level	**Significant / not significant**
Age	4-1=3	8.43	3.24	Significant
Gender	2-1=1	0.517	3.84	Not significant

Educational qualification	6-1=5	2.618	2.60	significant

Source: Primary Data

FINDINGS OF THE STUDY

Simple Percentage Analysis

- Majority of the respondents (103) belong to 31-40 years of age.

- Most of the respondents (120) are from urban area.

- Highest gender (142) are Female

- Many (142) are from Nuclear Family

- Mainstream of respondents (66) are Under Graduates

- Greater counterpart are Member (125) of the Family

- Numerous Members (57) are Private Sector Employees

- Voluminous Person's (75) Monthly Family Income are from Rs. 40,000-Rs.50,000

- Greatest number (97) of People's Monthly Self Income are from Rs. 30,000-Rs. 40,000

- Higher Results (104) have number of Earning Members in the Family as 2 Members

- Extreme number (102) of users uses E-Commerce for more than 4-5 years.

- Lot of members (100) of the research are Aware about the Metaversing of E-Commerce

WEIGHTED AVERAGE RANKING

In order to find out the consumers preference towards using metaversed E-Commerce, the highest preference has been given to Mobile Payment System, followed by Mobile Social Media and Online Gaming in third position. Other factors were Mobile Library, Virtual Hotel Operator Applications, E-Learning, Mobile Applications, Virtual Reality, Metaverse E-Commerce and Virtual Reality Hardware.

Hence, it has been found that top preferences were given to mobile payment system, social media and game apps in Metaversing.

ANALYSIS OF VARIANCE

Analysis of variance (ANOVA) is a statistical test used to assess the difference between the means of more than two groups. The analysis shows the result that Age and Gender are significant towards the attitude and preference of the consumers towards Metaversing E-Commerce while gender has no significance towards metaversing.

SUGGESTIONS OF THE STUDY

In the metaverse, the consumer experience is profoundly enhanced, transitioning from passive browsing to active, immersive participation. Shoppers are no longer just viewers but participants in a three-dimensional world where they can interact with products, environments, and even other shoppers in real-time. This level of interaction fosters a sense of presence and involvement that far exceeds what is possible in conventional online shopping. The social aspect of shopping is also amplified in the metaverse. Consumers can shop with friends or family members in a virtual space, regardless of their physical location, making shopping a shared, social experience. This social interaction not only adds to the enjoyment of shopping but also influences purchasing decisions, as consumers can seek immediate opinions and advice from their companions.

CONCLUSION

The integration of the metaverse into the retail sector is not just an incremental change but a foundational shift that heralds a new era for commerce, marketing, and consumer engagement. As we look toward the future, several implications and trends begin to crystallize, painting a vivid picture of what shopping might entail in this new virtual frontier. The future of shopping in the metaverse is anticipated to be an immersive, hyper-personalized experience, where the boundaries between physical and digital retail blur. Virtual storefronts might become as prevalent as websites are today, with consumers donning VR headsets or using AR-enabled devices to shop in three-dimensional, interactive environments. The convenience of online shopping will be coupled with the sensory richness of in-store experiences, enabling consumers to enjoy the best of both worlds.

REFERENCES

1. Chakraborty, D., Kar, A.K. & Dennehy, D. Metaverse in e-commerce industry: current trends and future prospects. Electron Commer Res (2023). Springer, August 2023

2. Anil Varma, Exploring the Metaverse's Impact on E-commerce: Opportunities and Challenges, Samdarshi, Vol 16, Issue 1, March 2023

3. Dr. Mitali Srivastava, Dr. Vijeta Verma and Saibaa Ghazala, Metaverse in E-Commerce, Journal of Harbin Engineering University ISSN: 1006-7043 Vol 44 No. 8 August 2023

4. The Consumer Protection Act, 2019, No. 35, Acts of Parliament, 2019 (India). [2]Rohit Kumar Singh, Metaverse: Making the case for consumer protection and what needs to be done, THE ECONOMIC TIMES (Jan 02, 2023, 10:57 PM), Metaverse in E-commerce Market by Platform, Technology and Geography –Forecast and Analysis 2023-2027, TECHNAVIO (Nov, 2022)

5. How the Metaverse Is Reshaping Amazon and Walmart, DATAHAWK(May 11, 2022), https://datahawk.co/blog/ amazon-and-walmart-metaverse.

6. Amazon Staff, Amazon is bringing its metaverse to 5 cities this festive season, AMAZON(Sept. 15, 2022),

7. Debasis Mohapatra, Metaverse is here to stay; India may be a key player, DECCAN HERALD, Feb.14, 2022.

8. The Information Technology Act, 2000, §69, No. 21, Acts of Parliament, 2000 (India).

9. The Information Technology (Intermediaries guidelines) Rules, 2011.

10. Shen, B.; Tan, W.; Guo, J.; Zhao, L.; Qin, P. How to Promote User Purchase in Metaverse? A Systematic Literature Review on Consumer Behavior Research and Virtual Commerce Application Design.11APPL.SCI. 23, 25-27 (2021).

11. Kaushik Patowary, World's First Virtual Store Opens in Korea, AMUSING PLANET(Sept. 2, 2011)

Web References:

12. https://marketing.sfgate.com/blog/brand-awareness-and-virtual-shopping-in-the-metaverse

13. https://www.2hatslogic.com/blog/metaverse-on-ecommerce-industry/

14. https://www.antiersolutions.com/metaverse-in-ecommerce/

15. https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/unlocking-commerce-in-the-metaverse

16. https://www.solveda.com/metaverse-fusion-transforming-ecommerce/

17. https://corporates.db.com/publications/White-papers-guides/metaverse-the-next-e-commerce-revolution