

TO STUDY CONSUMER BEHAVIOUR ON REAL ESTATE BUYING IN THE METAVERSE

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ABSTRACT:

The behaviour of real estate agents and the impact it has on the "cycles" of the market. The stock market and real estate. The space real estate market and the goods real estate market. The virtual self's representation. The metaverse combines all aspects of augmented reality (AR), virtual reality (VR), and internet-based virtual space. These virtual spaces exist indefinitely, are shared, and are three-dimensional (3D). However, the COVID-19 pandemic has caused a significant shift in the way the real estate industry operates. As a result, brokerages and agents have been reevaluating their technology platforms considering the metaverse's application in the real estate industry.

As a result, to address this issue, these research studies will be conducted to identify the consumer behavior of the metaverse in real estate. The methodologies that will be used for this research begin with a literature review to identify potential applications of metaverse in the real estate industry, examine the challenges faced by metaverse adoption in the real estate field, and recommend ways to encourage metaverse application in real estate projects. Following that, questionnaire forms are distributed.

KEY WORDS: Metaverse, virtual real estate transaction, Consumer Behavior, virtual real estate value, Stakeholders.

INTRODUCTION:

Individuals or groups' actions, decisions, and patterns of behaviour when considering, purchasing, or using goods and services are referred to as consumer behaviour. Consumer behavior in the context of the real estate metaverse can be defined as how individuals interact with virtual real estate assets. The real estate metaverse is a virtual world in which users can purchase, sell, and own virtual properties ranging from simple digital spaces to complex 3D virtual environments. Understanding consumer behavior in the real estate metaverse is critical for developers, investors, and other stakeholders who want to effectively create.

and market virtual properties. Considerations such as user preferences, demographics, and psychographics are necessary to comprehend consumer behaviour in the real estate metaverse.

These elements may have an impact on how users interact with virtual properties and the features they seek in it. The motivations and objectives of virtual property buyers must also be understood to understand consumer behaviour in the real estate metaverse. For instance, while some users may be more interested in the social and creative aspects of virtual property ownership, others may be more interested in virtual real estate as a form of investment.

In general, developing successful virtual real estate products and services that satisfy.

users' needs and expectations require an understanding of consumer behaviour in the real estate metaverse.

So, the research has been done with respect to the demographics to understand the buying behavior of the consumer.

REAL ESTATE IN METAVERSE:

Metaverse is a new beginning to create something new, much like the early days of the Internet. Tech tycoons are spending billions to build metaverse, which they refer to as the future. But what is metaverse? Neal Stephenson, a writer of sciencefiction, first used the term "metaverse" in 1992. (Laeq, 2022a; Radhakrishna, 2022) The concept of a fully immersive virtual world where people congregate to socialize, play, and work is described in its most basic form. To create spaces for rich user interaction that mimic the real world, it is a simulated digital environment that combines augmented reality (AR), virtual reality (VR), blockchain, and social media principles. (Laeq, 2022b)

A metaverse is a virtual environment where users' avatars can communicate and socialize. The fact that this new digital world is based on a public blockchain is what sets it apart from other gaming environments like Second Life, Roblox, or Minecraft. Resources in the

NFTs (non-fungible tokens, or special digital tokens that cannot be exchanged), which include metaverses, can exist on blockchains even outside of the metaverses. In addition, blockchains allow the metaverses to have their own cryptocurrencies and thus their own financial ecosystems, providing a novel

setting to test monetary theories. Since Facebook announced that it would change its name to Meta and become a metaverse company (in October 2021), the term "metaverse" has recently gained attention from the public. (Nakavachara & Saengchote, n.d.)

CONSUMER BEHAVIOUR IN THE REAL ESTATE METAVERSE:

A new and developing field is consumer behaviour in metaverse real estate. The term "metaverse" describes a virtual setting where users can communicate with other users and computer-generated objects. Real estate in the metaverse here refers to digital properties that can be acquired, rented out, or sold by people or companies.

The factors that drive demand for virtual properties are an important aspect of consumer behaviour in metaverse real estate. The need for social interaction and community building, the need for a place to express one's creativity, and the possibility of financial gains from investing in virtual real estate are a few of the main motivators.

How consumers view and value virtual properties in the metaverse is another crucial factor. A virtual property's value is frequently determined by its location, size, and degree of customization. Before purchasing virtual real estate, customers may also take the reputation of the virtual environment and the platform's security into account.

Consumer behaviour in the real estate market is likely to change and evolve as the metaverse develops and becomes more well-known. To effectively market and sell virtual properties in the metaverse,

developers and investors will need to stay up to date on these changes.

In one investigation, (Qin & Shi (2020)) looked at the factors that influence buyer behavior in virtual real estate. The study discovered that elements like perceived enjoyment, social presence, and perceived risk have an impact on consumers' perceptions of the virtual world and the properties as well as their willingness to invest in virtual real estate. The study also discovered that consumers are more likely to invest in virtual real estate if they have previous experience with virtual worlds. The smart real estate approach, as suggested by (Allameh et al., 2012), focuses on user centeredness that incorporates technologies with the environment and home users' behavior. Smart real estate is part of the smart city initiatives, which are seen as the future of urban built environment (Buckman et al., 2014).

FACTORS INFLUENCING CONSUMER BEHAVIOUR:

Numerous studies have examined the effects of gender on Internet use and online shopping, but the findings have not been found to be definitive. For instance, research by Farag et al. (2003) has revealed that men make up most online shoppers. In a similar vein, Bhatnagar and Ghose (2004) discovered ample evidence that women demonstrate a lower aptitude for computers and a higher level of computer anxiety. However, Dai (2007) found that despite their worries about the risks involved with online shopping, women outspend men in terms of both the population of online shoppers and expenditures. All these facts could be taken as proof that there are some gender differences in the usage of real estate in metaverse, but it might change.

with respect to time so, the study has done to check whether the gender influences the investment in the metaverse plot. From this the research question 1 is derived. (Akman & Rehan, 2014)

RQ 1: Does gender have an impact on the amount that people are willing to spend in buying metaverse plot?

Age is one of the factors that affects people's attitudes, and different age groups may have different buying tendencies (Hwang et al., 2006). This view is also supported by (Farag et al., 2003) who reported that age is inversely related to purchasing in a non-linear manner. Hence the factor age could be an impact in buying the land in the metaverse from which the research question 2 is derived.

RQ2: Does age have an impact on buying land parcel in metaverse?

Illiterate, partially literate, skilled, bureaucrats, professionals, businesspeople, etc. have different purchasing behavior. The brands that white collar workers prefer are often very dissimilar from those of blue-collar workers. Thus, it is simpler to analyses and predict consumer behavior. If we are certain of this line of work. (Kumar, 2014). So, the profession of a person could also be a factor in influencing or impacting the buying behavior of real estate in metaverse. From this the research question 3 is framed.

RQ3: Does profession have an impact on buying land parcel in metaverse?

OBJECTIVES OF THE STUDY:

The objectives of the present study are:

- 1.To understand the impact of age in the real-estate purchasing in metaverse.
2. To understand the impact of gender in the real-estate purchasing in metaverse.
3. To understand the impact of profession. in the real-estate purchasing in metaverse.

METHODOLOGY:

Two types of data were used in the research. one containing primary data, the other secondary data. The survey questionnaire that was created and distributed is considered primary data. The secondary data included a review of the literature on how big data changes consumer behavior, along with psychological characteristics and social media influences that affect big data predictions of consumer behavior. A questionnaire with a maximum of 12 questions was used for the primary data collection in this quantitative study. The survey was created using Google Forms, and the link was then distributed via emails and social media. The participants' responses were automatically recorded. Analysis was done on the research's data.

and then represented with numbers using the arithmetic average, charts, and tables. To predict research results, further analysis of the research was conducted using data analytics algorithms.

The sample size for the research was taken to be 180.The age group of most of the respondents was between (22- 36). The responses from male were at 53.3 % which means most of the participants were male. Most of the participants are working.

professionals and are employed. This accounts to the demographic results of the research that has been conducted for understanding the consumer behavior in the purchase of real estate in the metaverse.

METHODS OF DATA ANALYZING AND INTERPRETATION:

1. Percentage Method.
2. Chi-Square Method

EMPIRICAL ANALYSIS:

RQ 1: Does gender have an impact on the amount that people are willing to spend in buying metaverse plot?

H1: *There is a significant impact of gender in the buying of metaverse plot.*

H0: *There is no significant impact of gender in the buying of metaverse plot.*

If P value >0.05 Accept H0, Reject H1

If P value < 0.05 Reject H0, Accept H1

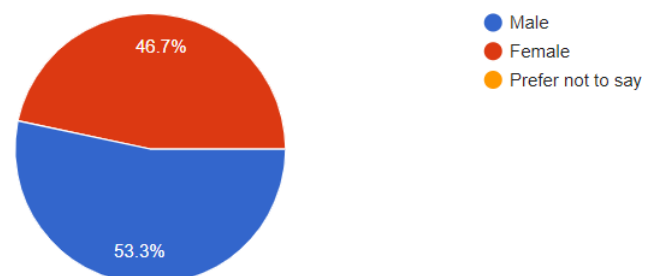


Figure 1: percentage of male and female respondents

Count of Gender	Interest towards buying. metaverse plot			Grand Total
	Maybe	No	Yes	
Female	21	20	43	84
Male	33	15	48	96
Grand Total	54	35	91	180
χ^2				0.23830281
p				>0.05

Table 1: Gender Vs Interest towards Owning a Metaverse Plot

If P value > 0.05 Reject H1, Accept H0.
Therefore, there is no significant impact of

gender on Interest towards Owning a
Metaverse Plot

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RQ2: Does age have an impact on buying
land parcel in metaverse?

H1: There is a significant impact of
age in the buying of metaverse land parcel.

H0: There is no significant impact
of age in the buying of metaverse land
parcel.

If P value >0.05 Accept H0, Reject H1
If P value < 0.05 Reject H0, Accept H1.

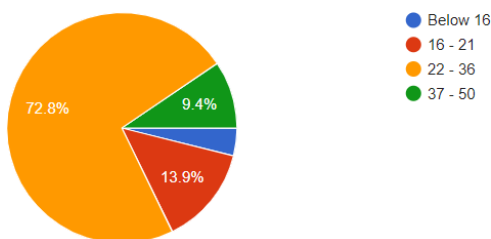


Figure 2: Percentage of different age groups of the respondents.

It is evident from the Table 2 that majority of the consumers belonging to all age group have responded that they have not purchased the metaverse plot. While applying χ^2 test, it is found that calculated.

value of χ^2 (0.04168) is less than tablevalue at 5% level of significance,

So, the p-value is 0.162. This means that there is a 16.2% chance that the observed data is due to chance, assuming a significance level of 0.05. which leads to accept null hypothesis. It means there is no significant relationship between the variable namely age of consumer and purpose of buying a metaverse plot.

Age	Metaverse Plot owning		Total
	yes	No	
Below 16	6	1	7
16 -21	10	15	25
22-36	40	91	131
37-50	10	7	17
χ^2			0.04168
p			0.162

Table 2: Age Vs Owning a Metaverse Plot

If P value > 0.05 Reject H1, Accept H0.
Therefore, there is no significant impact of
gender in the buying of metaverse plot.

RQ3: Does profession have an impact on
buying land parcel in metaverse?

H1: There is a significant impact of
profession in the buying of metaverse land
parcel.

H0: There is no significant impact
of age in the buying metaverse land parcel.

If P value >0.05 Accept H0, Reject H1
If P value < 0.05 Reject H0, Accept H1

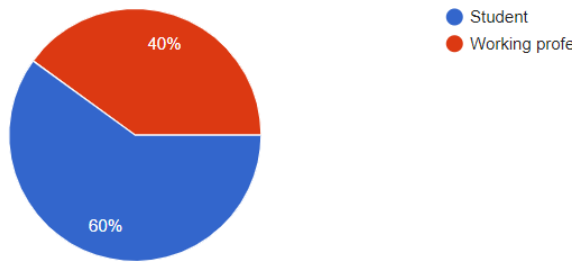


Figure 3: Percentage of working vs students.

The value of χ^2 (0.00243) is less than table value at 5% level of significance, So, the p-value is 0.88. This means that there is an 88.8% chance that the observed data is due to chance, assuming a significance level of 0.05. which leads to accept null hypothesis. It means there is no significant relationship between the variable namely profession of consumer and purpose of buying a metaverse plot.

Professions	Owning a metaverse plot		Grand Total
	No	Yes	
Student	78	30	108
Working professional	36	36	72
	χ^2	0.00243793	
	p	0.88	

Table 3: Profession Vs Owning a Metaverse Plot

If P value > 0.05 Reject H1, Accept H0. Therefore, there is no significant impact of profession in the buying of metaverse plot.

CONCLUSION:

This article describes the buying behaviour of consumers in the real estate metaverse. As the change comes in these factors, consumer behaviour also changes. The research depicted that there are so many.

demographic factors like age, gender, occupation, education, and family background which significantly affects the behaviour of consumers. Thus, it can be concluded that opinion of all consumers over the reasons of metaverse plot is equally distributed.

REFERENCES:

- Allameh, E., Jozam, M.H., de Vries, B., Timmermans, H., Beetz, J. and Mozaffar, F. (2012), "The role of smart home in smart real estate", *Journal of European Real Estate Research*, Vol. 5 No. 2, pp. 156-170, doi: 10.1108/17539261211250726.
- Farag, S., Krizek, K. J., & Dijst, M. (2006). E-Shopping and its relationship with in-store shopping: Empirical evidence from the Netherlands and the USA. *Transport Reviews*, 26, 43–61. Farag, S., Krizek, K. J., & Dijst, M. (2003). Exploring the use of e-shopping and its impact on personal travel behavior in the Netherlands. *Transportation Research Record*, 18, 47–54.
- Bhatnagar, A., & Ghose, S. (2004). Online information search termination patterns across product categories and consumer demographics. *Journal of Retailing*, 80, 221–228.
- Dai, B. (2007, December 17). The impact of online shopping experience on risk and online purchase indentations: The moderating role of product category and gender. A thesis submitted to the Graduate Faculty of Auburn University in partial fulfillment of the requirements for the Degree of Master of Science Auburn, Alabama.
- Hwang, W., Jung, H. S., & Salvendy, G. (2006). Internationalization of e-commerce: A comparison of online

shopping preferences among Korean, Turkish and US populations. *Behaviour & Information Technology*, 25, 3–18.

Akman, I., & Rehan, M. (2014). Online purchase behaviour among professionals: A socio-demographic perspective for Turkey. *Economic Research-Ekonomska Istrazivanja*, 27(1), 689–699.
<https://doi.org/10.1080/1331677X.2014.975921>

Kumar, R. (2014). Impact of Demographic Factors on Consumer Behaviour - A Consumer Behaviour Survey in Himachal Pradesh. *Global Journal of Enterprise Information System*, 6(2), 35.
<https://doi.org/10.15595/gjeis/2014/v6i2/51844>

Laeq, K. (2022b). *Metaverse: Why, How and What*.

<https://www.researchgate.net/publication/358505001>

Nakavachara, V., & Saengchote, K. (n.d.). Is Metaverse LAND a good investment? It depends on your unit of account!
<https://www.wsj.com/articles/metaverse-real-estate-piles-up-record-sales-in-sandbox-and-other-virtual-realms->

Radhakrishna, G. (2022). Legal Issues with Real Estate in the Metaverse. In *Proceedings of the International Conference on Law and Digitalization (ICLD 2022)* (pp. 74–82). Atlantis Press SARL.
https://doi.org/10.2991/978-2-494069-59-6_7