

A Study on Perception of Gen Z Customers on Artificial Intelligence in Chennai City

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Abstract: Replication, imitation, and reproduction of human intelligence techniques by computer systems is called as Artificial Intelligence. It involves teaching machines to learn from data and make decisions with minimal human intervention. AI's potential benefits promise continued advancements and integration into various aspects of life. Individuals born between 1997 and 2012 are the most influential consumer groups, who are known as Generation Z consumers. These individuals are grown up in a digital world where Artificial intelligence and themselves are in commonplace. A unique perspective in the routine lives of Gen Z using artificial intelligence plays a magnificent task. Customers specifically from Gen Z are characterized by affinity for technology, social consciousness, and diverse interests. This study investigates the perceptions of Gen Z customers on AI, Chennai. Information about the related topic has been collected through a questionnaire with a structured form circulated among 400 respondents out of which 386 questionnaires found suitable for the study. The findings ultimately suggest that to engage effectively the Gen Z customers with businesses required to focus on practical benefits and ease of accessibility with data security. Overall, the study underscores the significant awareness and the reliability in the unique perspective of Gen Z customers to harness the full potential of artificial intelligence.

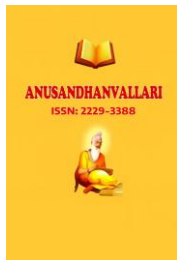
Key words: Artificial Intelligence, Gen Z, Perception, Security, Awareness, Perspectives.

INTRODUCTION:

Artificial Intelligence has reshaped the way businesses engage with customers and significantly transformed industries from healthcare to entertainment. Individuals born between 1997 and 2012 are the most influential consumer groups, who are known as Generation Z consumers. These individuals are grown up in a digital world where Artificial intelligence and themselves are in commonplace. A unique perspective on Artificial intelligence plays a crucial function in the Gen Z routine lives. Customers specifically from Gen Z are characterized by affinity for technology, social consciousness, and diverse interests.

Understanding how Gen Z consumers perceive these Artificial intelligence is crucial for businesses aiming to cater. Artificial Intelligence is increasingly integrated into various consumer experiences through chat bots, virtual assistants for personal recommendations. A deep immersion in the digital landscape from a young age for Gen Z customers their experiences with technology are distinct from their previous generations. Gen Z customers are more critical and discerning when it comes to its ethical implications, privacy concerns, and transparency when adopting and interacting with AI.

The respective study aims to discover the demographic profile of customers especially from the Gen Z generation, to venture in to the perceptions of customers especially from the Gen Z generation regarding AI and examining their attitudes towards its utility, effectiveness, and ethical considerations. The paper aims to seek and uncover the influence of AI in their decision making, engagement with brands, and overall customer experience. To come across the prerequisites and morals of Gen Z users, the business can better tailor their AI driven strategies by understanding their perspectives.



OBJECTIVES :

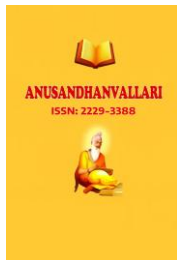
1. To understand the degree of awareness of Artificial Intelligence by Gen Z customers
2. To identify the association between gender and how do they feel about the increasing presence of AI in their life.
3. To examine the level of trust in AI technologies by Gen Z customers
4. To explore the Data privacy and security issues of AI by Gen Z customers

SCOPE OF THE STUDY:

Developing in to the beliefs, opinion, attitudes, & expectations of Gen-Z customers in various aspects of their lives towards artificial intelligence is the study's main scope. The study is geographically restricted to Chennai region. The study aimed to include with in the defined age range of generation born between 1997 and 2012. As this age group is highly relevant as they have grown up in an digital nativity environment. The study will examine far ranging applications of AI in Gen Z customers that influence their behaviour such as Chat bots, virtual assistants, personalized assistants, social media, entertainment etc. Concentrating on Gen Z customers awareness, interactions, and perceptions are the facets of AI impact on this demographic. It also examines the concerns such as surveillance, bias in AI algorithms and the transparency of AI decision-making. The study period is June to December 2024. The period of six months were being used to collect data through questionnaire to capture the most updated views. The data is collected from the Gen Z customers on AI.

REVIEW OF LITERATURE:

1. Bunea, Monica Triculescu et all, (Sep 2024), the study explores the buying decisions of customers of Generation Z in online shopping. Technology Acceptance Model (TAM) is adapted with the impact of AI to analyze the study. The study gives output to enhance customer buying activities, highlighting the capability of AI for online retailers. The study focuses on the managers proactive approach to optimize the user experience on artificial intelligence application that delivers benefits to the consumers which are tangible in nature.
2. Tanay Saxena (Dec 2024),this article exploring the history and evolution of marketing with an emphasis of Gen Z, the first digital-native generation.It focuses on the Indian market how Artificial Intelligence is influencing marketing strategies.
3. Ruiz-Viñals et all (Oct 2024) , this article research is on how AI influence on purchase process in fashion industry with limiting its full exploitation. The results were the attitude in relation to AI and recognized effectiveness have a positive usefulness on buying propensity of Gen Z customers.
4. N.Hima Bindu (January 2024), The research sole purpose discussed through the article is not only to understand the lifestyle choices of shopping and frames of reference of customers from the Gen Z with regard to e-shopping. The findings demonstrated that smart technologies have a considerable influence on the experiences of the customers who belong to Gen Z. The Gen Z consumers expects to be used with new devices. This group expects to electronic processes to be used in large scale for making consumers to exercise more independently. This generation of youths primarily depends on personal experience while making purchasing decisions, mainly looking at quality and prices, although they of ten forget other choices of other people with their own understanding. Eventhough, the internet is the only source to seek the information for Gen Z customers they will also get information from other people who already had an experience on the particular product for making the purchases of goods and services. For purchase related decisions Gen Z customers will take advice from the people who have knowledge on the



product.

5. MaungK. (2024) ,this paper aims to study the environmentally responsible buying behaviours of Gen Z consumers from the university campus by analyzing and testing the various precedent and moderating influences of their environmentally responsible buying behaviors.

Indicators of the study shows that the responsibility of the Gen Z customers in the society like feelings, engagement and expectations. Incentives which are external in nature such as social and material have an affirmative influence over the sustainable interests of customers specifically from Gen Z. There were no statistically significant effects from collectivist cultural values on Gen Z customers. It also shows environmentally conscious buying among the consumers of Gen Z. Further, the moderating effects of self defeating mindset, imposed obstacles, and understanding of ramifications of environmentally sustainable consumption actions on the sustainable consumption behavior of Gen Z consumers were insignificant.

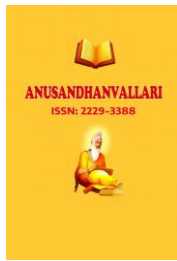
6. Salam and colleagues explore how marketing has evolved due to the consumers born between the mid-1990s and early 2010s who are called as Gen Z. These Gen Z customers basically called as "digital natives" are tech-savvy and have distinct shopping habits. The research delves into their preferences and effective ways to build lasting relationships with them. The findings reveal that Gen Z favors product lines that give precedence to societal importance, nature related issues, and green practices of sustainability. Gen Z customers lean towards and encounters over physical goods & heavily rely on social media. Gen Z customers customer preferences and effective marketing strategies are studied for the purpose of building long lasting relationships with them. The study attempted to collect qualitative data from 2010 to 2024 and drawn the insights into Gen Z customers tastes, preferences and behaviors.

7. "Consumer Decision-making Style of Gen Z," by Packiara Thangavel and team, investigates the online shopping behaviors of Gen Z. The study identifies four types of shoppers: quality focused bargain hunters, time conscious shoppers, bargain hunters, and brand-loyal shoppers. For e-retailers these insights are invaluable to understand how Gen Z approaches towards online shopping their products and services. Using generation segment on Gen Z online shoppers a conceptual framework will provide a wide range of insights to e- retailers. Internet speed and fast advancements of online shopping would have stimulated the online retailers to provide them with a large scale variety of products with utmost streamlining unlike the long standing retailers. The ramifications of the findings to professionals in marketing and online-retailers are highlighted at the end of the study.

8. "Prakash Singh's study "What Drives or Decelerates Generation Z?" examines factors influencing Gen Z's online buying intentions. The research focuses on calculated and strategic risk, beneficial, user friendliness, protection of personal information, security, and dependability. Using the Technology Acceptance Model, the investigation explains how these determinants shape Gen Z's online buying decisions. Companies can use these insights to create targeted marketing campaigns for Gen Z, though the study's findings are limited by factors like a small sample size and a focus on India.

STATEMENT OF THE PROBLEM:

To run through various sectors and is significantly influencing the consumer behaviour and expectations. Gen Z customers are the forefront AI adopting generations as they are digitally savvy and technology driven generation. Gen Z customers are not only familiar with AI technologies but also engages through platforms like social media, e-commerce, and entertainment services.



A very little is known about Gen Z customers deep-seated perceptions, concerns and expectations related to AI technologies despite their high interaction with AI. As AI is offering various advantages in the form of personalized services, convenience, and efficiency and also rising with significant ethical issues like data privacy, transparency, and algorithmic bias. AI Powered products and services are potentially impacting the trust, adoption, and concerns of Gen Z customers. The study aims to explore the lack comprehensive insights in to how customers of Gen Z perceives and engages with AI. Valuable insights from the study will provide information to businesses, policymakers and also to AI developers who tailor their offering to face the unique purpose and concerns of Gen Z customers by addressing these gaps.

NEED FOR THE STUDY:

Reshaping industries were thought as futuristic which were made now real with the help of rapid advancement of Artificial Intelligence. Businesses are increasingly relying on AI for personalized product recommendations and customer experiences. The demographic set born between 1997 and 2012 are the group significantly influencing the market today. Gen Z are the early adopters and critics of technological innovations like AI. There is a critical gap in understanding how Gen Z perceives these technologies. The study also had an idea of perceiving of these technologies adoption may reshape the future. Businesses aiming to cater to the preference and concerns of Gen Z have to look into the insights of AI's benefits, risks and ethical implications.

In global consumer market, Gen Z represents a significant portion with increasing purchase power and a strong presence on digital platforms. Businesses that wish to maintain competitiveness and relevance have to understand the relationship with AI and Gen Z customers. To improve AI based products and services companies can identify strategies by exploring Gen Z's view on AI. This study also provide valuable insights of implementing AI technologies that are both effective and ethical. For anticipating the needs of tomorrow's consumers this study will layout a platform.

LIMITATIONS:

- The study solely focused on Chennai region.
- Perception regarding AI by Gen Z customers may change quickly as new developments occur.
- Only 386 customers are included in the sample.

RESEARCH METHODOLOGY

Study Area:

The assessment is implemented among the Gen Z customers in Chennai district only.

Design of Sample and Size of Sampling:

The survey methods was used to collect the primary data. A well formulated questionnaire is made to conduct and collect the data. For generating data random sampling is applied and the samples were selected systematically. Totally 368 samples were collected and all were found suitable for the study.

Sampling collection range:

The primary data is collected through random sampling technique. Justification of the sampling method is done for collecting the samples from the Gen Z customers from Chennai district only.

Designing of the Questionnaire

The Empirical and original variables are obtained by means of google form survey only. The various contributors of the study are inquired to give their assessment relating to the perception of AI in Gen Z customers. The demographic factors were being comprised in the first part of the questionnaire with choice-

based questions. The second part includes general usage of AI in their daily life. The third part consists of understanding, trust, Data privacy and security issues of Gen Z customers with 5 point likert's scale.

Data Analysis:

The Empirical and original collected information is processed using the PSPP software. The results were obtained using the below statistical tools. They are:

- Descriptive statistics using mean, standard deviation
- Chi-Square Test
- T test
- ANOVA
- Regression Analysis

Table 1 - Descriptive Statistics

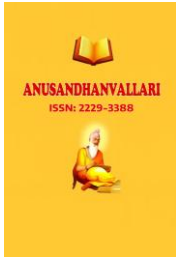
	Total number of respondents	Minimum	Maximum	Mean(μ)	Standard Deviation
GENDER	368	1	2	1.59	0.493
AGE	368	1	2	1.16	0.370
EDUCATIONAL QUALIFICATION	368	1	4	2.15	0.795
MARITAL STATUS	368	1	2	1.84	0.370
INCOME	368	1	3	1.42	0.708
VALID N	368				

Interpretation

The major part of the respondents are female with 1.59 mean is interpreted from the table, the major Gen Z customers fall under the age group of 18-24 with a mean of 1.16 under this study. The educational qualification of the respondents highly in the undergraduate level with the mean value of 2.15 and most of the customers are unmarried with the mean value of 1.84. Respondents dominant share fall in the income group of below twenty thousand with the mean value of 1.42.

Table 2 - T - Test

	No. Of Variables	M	Std Dev.	Std Err M
Gender	368	1.59	0.493	0.026
Clear Understanding of AI	368	4.02	0.767	0.040
Differentiate between traditional programming and AI	368	3.91	0.776	0.040
Most people understand what AI	368	3.91	0.831	0.043
Seek information regularly for advancements in AI	368	3.91	0.748	0.039
Easy to explain about AI to others	368	4.00	0.781	0.041



Interpretation: From the above it is revealed that a generally a high level of understanding and engagement with AI is there by the dataset of 368 respondents. The gender variable suggests a higher representation of female with a mean of 1.59. Based on mean score it is derived that clear understanding of AI will be the indispensable important factor following a mean value of 4.02 followed complied with easy to explain about AI to other with the mean value of 4.00 and other factors such as, such as can Differentiate between traditional programming and AI, Most people understand what AI is, and Seek information regularly for advancements in AI with the mean value of 3.91 for all the other factors.

Null Hypothesis: Between the gender and how do they feel about the increasing presence of AI in their life there is no association.

Table Association between gender and how do they feel about the increasing presence of AI in their life - Chi square Test

Table 3 - Chi-square Tests

Gender	Very positive	Somewhat positive	neutral	Total
Male	88 (89.2)	27 (29.7)	37 (33.0)	152 (152.0)
Female	128 (126.8)	45 (42.3)	43 (47.0)	216 (216.0)
Total	216 (216.0)	72 (72.0)	80 (80.0)	368 (368.0)

Indication: 1. The importance within () relates to Row percentage

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.265	2	0.531
Likelihood Ratio	1.262	2	0.532
Linear-by-Linear Association	0.448	1	0.503
N of Valid Cases	368		

Interpretation:

The null hypothesis is failed to be rejected due to the P-value which is greater than the significant level of 0.05. Hence, it is decided that there is no significant association between gender and how individuals feel about the increasing presence of AI in their life.

Null hypothesis: No significant difference among different educational qualifications of the Gen Z customers in relation to Trust in Artificial intelligence.

Table 4 - Anova

		ANOVA					
			S of S	Deg freed	M S	F V	P V
Provide accurate information	Between Groups		4.294	3	1.431	3.213	0.023
	Within Groups		162.141	364	0.445		
	Total		166.435	367			
AI makes Unbiased Decisions	Between Groups		7.200	3	2.400	4.149	0.007
	Within Groups		210.539	364	0.578		
	Total		217.739	367			
Confidence in the security of my data	Between Groups		9.106	3	3.035	5.634	<0.001
	Within Groups		196.111	364			
	Total		205.217	367			
Rely upon for critical decision making	Between Groups		17.595	3	5.865	12.278	<0.001
	Within Groups		173.883	364	0.478		
	Total		191.478	367			
Trust recommendations provided by AI algorithms	Between Groups		6.729	3	2.243	5.351	0.001
	Within Groups		152.575	364	0.419		
	Total		159.304	367			

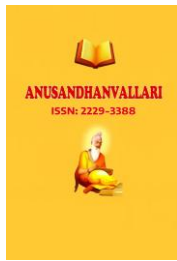
Interpretation:

The null hypothesis is rejected at 5% level with regard to all the factors of Trust is AI as the P value is less than 0.05. So there is a considerable distinction among the qualification of education with regard to the factors for reliability in AI such as provides accurate information, AI makes unbiased decisions, Confidence in the security of my data, Rely upon for critical decision making, and Trust recommendations provided by AI algorithms. To conclude the varying levels of reliability in AI technologies are different between the different education qualifications of Gen Z customers.

Table 5 - Regression Analysis

Model Abstract				
Model	R	R ²	Adj R Squ	Std. Err Est
1	0.210	0.044	0.031	0.697

ANOVA						
Model		S S	df	M S	F V	P v
1	Regression	8.094	5	1.619	3.337	0.006
	Residual	175.621	362	0.485		
	Total	183.715	367			

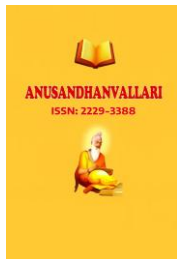


Interpretation:

The 3.337 indicates the strength of the relationship between the actual and predicted values for Gen Z customers through Multiple Correlation Analysis. The F value and corresponding P value of 0.006 suggest that the model significantly accounts for the dependent variable as variance. The predictors in the model collectively offer a meaningful explanation of trust in AI. There is a relevant statistical relationship between the independent variables and also the level of trust in AI technologies among Gen Z customers.

Findings of the study:

- Around 41.3% Gen Z customers are male and 58.7% Gen Z customers are female.
- Gen Z Majority customers fall in the age group of 18-24 (83.7%) from the above study.
- Most of the customers are with UG qualification with 67.4% and the minimum number of Gen Z customers are with PG qualification with 7.3%.
- Nearly 83.7% Gen Z customers are unmarried and 16.3% of Gen Z customers are also married.
- Gen Z's Majority of customers were falling under income range of lower than Rs.20,000 with 70.7% and the least customers fall under the category of earning above Rs.30,000 with 12.8%.
- Majority of the Gen Z customers are not familiar with AI with 56.5% and least with somewhat familiar with 15.2%.
- Nearly 30.4% Gen Z customers inferred that AI powered devices or sources are used by them several times a week and the least was inferred as Never with 4.3%.
- The Maximum number of Gen Z customers are using the AI powered devices or sources, the presence of AI in their life in increasing was interpreted as very positive with 58.7% and the least with neutral with 21.7%.
- Generally a high level of understanding and engagement with AI is there by the dataset of 368 respondents. The gender variable suggests a higher representation of female with a mean of 1.59. Based on mean score it is derived that clear understanding of AI is the fundamental and significant factor with an average value of 4.02 succeeded by easy to explain about AI to other with the mean value of 4.00 and other factors such as, such as can Differentiate between traditional programming and AI, Most people understand what AI is, and Seek information regularly for advancements in AI with the mean value of 3.91 for all the other factors.
- The null hypothesis is failed to be rejected due to the P-value which is greater than the significant level of 0.05. Hence, it is decided that there is no significant association between gender and how individuals feel about the increasing presence of AI in their life.
- The null hypothesis is rejected at 5% level with regard to all the factors of Trust in AI as the P value is less than 0.05. So there is a considerable distinction among the qualification of education with regard to the factors for reliability in AI such as provides accurate information, AI makes unbiased decisions, Confidence in the security of my data, Rely upon for critical decision making, and Trust recommendations provided by AI algorithms. To conclude the varying levels of reliability in AI technologies are different between the different education qualifications of Gen Z customers.
- The 3.337 indicates the strength of the relationship between the actual and predicted values for Gen Z customers through Multiple Correlation Analysis. The F value and corresponding P value of 0.006 suggest that the model significantly accounts for the dependent variable as variance. The predictors in the model



collectively offer a meaningful explanation of trust in AI. There is a relevant statistical relationship between the independent variables and also the level of trust in AI technologies among Gen Z customers.

Future Directions for Further Study:

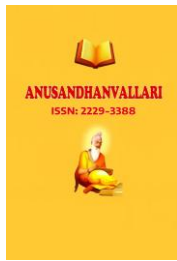
To strengthen our deep understanding of Gen Z customers attitudes towards the awareness and trust of artificial intelligence in Chennai district future research can be explored in several dimensions. Namely,

- Execute long duration studies to track the changes in the perception of Gen Z customers over time.
- To carry out comparative assessment studies across different demographic groups such as educational qualification level and occupation of Gen Z customers.
- To carry out research on psychological and cultural factors of Gen Z that influence attitudes towards Artificial Intelligence.
- To scrutinize the impact of Data privacy, algorithmic bias taken as a part of ethical consideration on belief levels.
- Using interview and focus groups, qualitative research methods can be used to understand the individual experience and concerns of Gen Z customers to gain a richer nuanced understanding.
- To analyze the influence of educational initiatives on Artificial Intelligence and its effect on perspectives.
- To analyze the part of social media and its influences in crafting views points on perception of AI.
- To compare and analyze the cultural differences with in the district of chennai on the acceptance level of and trust made on AI.
- To enquiry in various industries such as health care, finance, and entertainment, on Gen Z attitudes.
- To examine the government policies and regulations of Trust among Gen Z customers on AI.
- To have broader study on the relationship between AI devices such as smart home devices, virtual and voice assistants in daily life usage of Gen Z customers and its acceptance.
- To analyze the mental health and well being of Gen Z customers to know the psychological impact.

Conclusion

The study on the perception of Gen Z customers towards artificial intelligence, Chennai revealed significant insights into the understanding, trust, perceived benefits, willingness, experience, future outlook and data privacy. Gen Z customers exhibit a positive inclination towards artificial intelligence appreciating its convenience, personalization, and ability to enhance overall experience. Their faith and belief in AI is heavily determined by factors such as provide accurate information, feel as making unbiased decisions, confidence in the security of my data, to rely on AI for critical decision making, and recommendations provided by AI algorithms. While Gen Z customers opined with the willingness to use AI daily life with the factors AI power assistants for basic inquiries, using new products and services using AI features, comfortable sharing personal information, choose an automated over traditional methods, and actively seek out businesses that utilize advanced AI technologies.

The findings ultimately suggest that to engage effectively the Gen Z customers with businesses required to focus on practical benefits and ease of accessibility with data security. Overall this analysis underscores the essential nature of awareness and faith and belief in the original outlooks of Gen Z customers will be to realize the full potential of AI.



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