ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

A STUDY ON THE INFLUENCE OF AI-BASED PROMOTIONS ON GENZ IN MUMBAI

** Prof. Dr. Kishori Jagdish Bhagat & ** Saira Tumbi*

** Research Guide, University of Mumbai, Pragati College,** Research Scholar, University of Mumbai, Pragati College, Dombivli.*

Abstract:

AI-based promotion integrates machine learning, generative AI, and predictive analytics to create highly personalized, automated, and dynamic marketing campaigns. By shifting from mass marketing to individual, real-time engagement, the utilization of artificial intelligence (AI) is instrumental in influencing current promotional strategies, as it facilitates personalized and data-driven consumer engagement, particularly in the context of Generation Z's purchasing decisions and brand perceptions. Using a descriptive and analytical research design, this study investigates the influence of AI-based promotions on the buying behaviour of Gen Z consumers in Mumbai. Primary data were collected from 190 respondents using a structured questionnaire and analyzed using SPSS with non-parametric tests. The results suggested that buying behaviour are substantially influenced by AI-based promotions, particularly social media advertisements and personalized recommendations. The responsiveness to AI-based promotions was determined to be influenced by gender and frequency of purchase, while educational qualification and the amount spent did not demonstrate a substantial impact. The research also emphasizes that the development of brand trust and purchase intention is facilitated by engaging AI-driven interactions and accurate recommendations, while the necessity of ethical and transparent AI use is underscored by privacy and data security concerns.

Keywords: *GenZ, Promotions, AI, Promotional tools, buying behaviour*

Introduction:

Artificial intelligence has emerged as an important component in the development of contemporary promotional strategies, particularly in context of Generation Z's consumer purchasing behaviour. AI-based promotion uses machine learning, generative AI, and predictive analytics to create highly personalized, automated, and dynamic marketing campaigns. By shifting from mass marketing to individual, real-time engagement. AI-based promotional tools, including personalized advertisements, product recommendations, chatbots, predictive analytics, and targeted social media content, allow brands to transcend mass marketing and provide personalized messages to individual consumers. These tools analyze substantial consumer data comprising of their browsing history, purchase patterns and online interactions, in order to anticipate requirements and comprehend preferences.

Artificial intelligence-based promotions are particularly influential for Generation Z, who are digital natives and frequent users of mobile and online platforms. AI-driven content that is both creative and personalized captivates their attention, establishes brand trust, and mitigates the perceived risk associated with online purchasing. AI-based promotional tools improve consumer satisfaction and purchase intention by providing real-time responses, tailored offers, and accurate recommendations. AI-driven promotions have a substantial influence on the manner in which Gen Z evaluates brands, interacts with promotional communications, and makes purchasing decisions in

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

the digital marketplace.

Review of Literature:

Guerra-Tamez, et al (2024): AI-based promotions increased brand trust and engaged consumers, influencing buying behaviour. Personal recommendations, accurate AI suggestions, and regular AI tool use increased trust and purchase intention, thus influencing buying behaviour **(Pham T. C. et al (2025).** Engaging and immersive AI interactions were also found to improve brand trust's effect on purchasing behaviour (**Nie et al (2025)**. However, the researchers noted that clear, accurate, and consumer-centric, AI-based advertisements influenced Gen Z's purchase behaviour, concentration on a single generation and a unique geographic location may have restricted generality.

Peter R. et al (2025): The researcher found that hyper-personalized advertisements evoked feelings of curiosity, interest, and value in consumers, which in turn influenced their purchasing behaviour. Simultaneously, feelings of anxiety and unease regarding privacy emerged. This implied that promotions based on AI had both positive and negative consequences.

Pham T. C. et al (2025): AI tools such as personalized advertisements, recommendation systems, and chatbots improved brand perception, trust, and purchase intention by making the buying process faster and more relevant. **Andrade E. B. et al (2025):** The researchers opined that AI-driven promotions and flash deals shaped Generation Z's shopping habits. AI solutions like personalized discounts, recommendation algorithms, countdown timers, and limited-stock notifications promoted urgency and impulsivity. Flash sales caused Gen Z customers to feel FOMO and make fast purchases. However, it was noted that false urgency and unethical AI use could damage confidence.

Dang, T.-Q et al (2025): The researcher highlighted that virtual reality–based environments, especially the metaverse and virtual influencers, influenced Gen Z consumer buying behaviour by making online shopping more immersive and engaging. Human-like virtual influencers, combined with interactivity and social presence, increased trust and emotional connection, which encouraged purchase intentions. Customer satisfaction acted as a key link between virtual experiences and buying decisions. VR-enabled marketing tools positively shaped Gen Z buying behaviour by improving realism, convenience, and perceived trust in digital shopping experiences.

Research Gap:

The review of literature was undertaken to examine existing research on the influence of AI based promotions on Generation Z consumers. Prior studies have primarily focused on specific AI-driven promotional tools such as hyper-personalized advertising, personalized product recommendations, chatbots, AI-enabled discounts, flash sales, virtual influencers, and gamification techniques. However, the literature reveals a limited examination of other important AI-based promotional elements, including digital coupons, countdown timers, and abandoned cart reminders. This identified gap highlights the need for a comprehensive study to assess the overall influence of AI-based promotions on consumer behaviour, particularly among the Generation Z.

Objectives:

- To understand the concept of AI based promotions
- To study the influence of AI based promotions on GenZ

Hypothesis:

- There is an influence of AI based Promotions on buying behaviour of GenZ. **Limitations:**
- The study is limited to the Gen Z in Mumbai region only.
- The study is limited to the buying behaviour of FMGC

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

- There is limitation of time and resources

Research Methodology:

Data Collection:

The research was descriptive and analytical in nature. Data comprised of primary and secondary data. **Primary data** was collected by using a structured questionnaire. The questionnaire was segregated into three parts: Demographics, Respondent's understanding of AI and influence of AI-Based promotions. The study integrated **secondary data** sourced from research papers, journal articles, blogs, books, and theses. Combining primary and secondary data provided a comprehensive understanding of the influence of AI-Based Promotions on GenZ.

Data Processing:

The responses were edited, classified, and tabulated. Responses from a sample of 200 respondents were received. After editing, data of 190 respondents was considered for analysis.

Data Analysis:

Statistical Package for Social Sciences (SPSS) software was used for data analysis. The study further used non-parametric tests: Mann-Whitney and Kruskal Wallis tests. Normality of the data was tested by applying Shapiro-Wilk test and Kolmogorov Smirnov tests. The independent variables were measured using Nominal Scale while the dependent variables were measured using a 5-point Likert Scale.

The results are as follows:

Table No 1: Normality Testing

Particulars	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
AI-Based Promotions	.120	190	.000	.962	190	.000

Source: Primary data analysis

Table 1 indicated that the significant value of all AI-Based promotions studied was less than 0.05, which meant that the null hypotheses were rejected. The data proved to be not normally distributed. Hence, non-parametric tests were used for further analysis.

Since the data was not normal, non-parametric tests was used for hypotheses testing.

Variable for the study:

Independent Variables: Gender, Educational Qualification, Amount Spent based on AI promotional offers, Frequency of purchase based on AI promotions, Usage of AI by Social media applications to optimize advertisements across feed, Usage of AI by online shopping websites to personalize shopping experiences.

Dependent Variables: AI-Based Promotions

AI Based Promotions include:Discounts, Offers, Sales, Dynamic Pricing, Combo Deals, Coupons and Cashbacks, Promo Codes, Price Drop Reminders, Scarcity Messages, Abandoned Cart Reminders, Virtual Try-ons, Gamification

Testing of Null Hypotheses:

To find out the influence of AI based promotions on the buying behaviour of Gen Z, Null and Alternate Hypotheses were developed on the basis of the Independent and Dependent variables and the same gets tested by applying Mann-Whitney and Kruskal-Wallis tests.

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

1) **H0:** There is no significant difference between Gender and influence of AI-Based Promotions

H1: There is significant difference between Gender and influence of AI-Based Promotions

Table No 2

Gender and influence of AI-Based Promotions-Mann-Whitney

IDV	**DV**	**Sig. value.**	**Result**
Gender	AI-Based Promotions	0.014	Rejected
Post-Hoc		Male=83.50	NA
		Female=103. 50	

Source: primary data- compilation from SPSS

Table No 2 indicated that the significant value of AI-Based Promotions was found to be 0.014 for the variable of Gender, which was less than 0.05 indicating that the null hypothesis is rejected Thereafter, post-hoc test was conducted, and it was found that the mean rank of Female (M=103.50) was higher than Male (M=83.50). It can be interpreted that the females were more influenced than the male respondents

2) **H0:** There is no significant difference between Educational Qualification and influence of AI-Based Promotions

H1: There is significant difference between Educational Qualification and influence of AI Based Promotions

Table No 3

Educational Qualification and influence of AI-Based Promotions- Kruskal Wallis

IDV	**DV**	**Sig. value.**	**Result**
Educational Qualification	AI-Based Promotions	0.786	Accepted

Source: primary data- compilation from SPSS

Table No 3 indicated that the significant value of AI-Based Promotions was found to be 0.786 for the variable Educational Qualification, which was more than 0.05 indicating that the null hypothesis is accepted and that there is no significant difference between Educational Qualification and AI-Based Promotions. It can be interpreted that irrespective of the educational qualifications the influence on Gen Z is similar.

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

3) **H0:** There is no significant difference between Amount spent and influence of AI-Based Promotions

H1: There is significant difference between Amount spent and influence of AI-Based Promotions

Table No 4:

Amount spent based on AI Promotional Offers and AI-Based Promotions - Kruskal Wallis

IDV	DV	Sig. value.	Result
Amount spent based on AI promotional offers	AI-Based Promotions	0.220	Accepted

Source: primary data- compilation from SPSS

Table No 4 indicated that the significant value of AI-Based Promotions was found to be 0.220 for the variable Amount spent based on AI Promotional Offers, which was more than 0.05 indicating that the null hypothesis is accepted and that there is no significant difference between Amount spent based on AI Promotional Offers and AI-Based Promotions. It can be interpreted that irrespective of the amount spent by the respondents for their purchases based on or after watching AI promotions, the influence on Gen Z is similar.

4) **H0:** There is no significant difference between Frequency of purchase and influence of AI Based Promotions

H1: There is significant difference between Frequency of purchase and influence of AI Based Promotions

Table No 5:

Frequency of purchase and AI-Based Promotions Kruskal Wallis

I.V	D.V	Sig. value.	Result
Frequency of purchase	AI-Based Promotions	0.026	Rejected
Post-Hoc		Daily= 84.38	NA
		Weekly= 112.20	
		Monthly= 104.62	
		Seasonal= 84.24	

Source: primary data- compilation from SPSS

Table No 5 indicated that the significant value of AI-Based Promotions was found to be 0.026 for the variable of Frequency of purchase, which was less than 0.05 indicating that the null hypothesis is rejected. Thereafter, post-hoc test was conducted, and it was found that the mean rank of Weekly purchases (M=112.20) was the highest, followed by Monthly (M=104.62), Daily (M=84.38) and Seasonal (M=84.24). It can be interpreted that the respondents buying weekly were more influenced followed by monthly, daily and seasonally respectively.

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

5) **H0:** There is no significant difference between Usage of Social Media Apps and influence of AI-Based Promotions

H1: There is significant difference between Usage of Social Media Apps and influence of AI-Based Promotions

Table No 6

Usage of Social Media Apps and AI-Based Promotions Mann-Whitney

I.V	**D.V**	**Sig. value.**	**Result**
Usage of Social Media Apps	AI-Based Promotions	0.040	Rejected
Post-Hoc		Yes = 98.90	NA
		No = 75.86	

Source: primary data- compilation from SPSS

Table No 6 indicated that the significant value of AI-Based Promotions was found to be 0.040 for the variable of Usage of Social Media Apps, which was less than 0.05 indicating that the null hypothesis is rejected Thereafter, post-hoc test was conducted, and it was found that the mean rank of Yes (M=98.90) was found to be higher than No (M=75.86). It can be interpreted that the respondents using and watching AI promotions on social media and purchase on that basis are more influenced than those who do not purchase on the basis of AI promotions on social media.

6) **H0:** There is no significant difference between Usage of AI by online shopping websites and influence of AI-Based Promotions

H1: There is significant difference between Usage of AI by online shopping websites and influence of AI-Based Promotions

Table No 7

Usage of AI by Online Shopping Websites and AI-Based Promotions- Mann-Whitney

IDV	**DV**	**Sig. value.**	**Result**
Usage of AI by Online Shopping Websites	AI-Based Promotions	0.046	Rejected
Post-Hoc		Yes = 99.34	NA
		No = 79.06	

Source: primary data- compilation from SPSS

Table No 7 indicated that the significant value of AI-Based Promotions was found to be 0.046 for the variable of Usage of AI by Online Shopping Websites, which was less than 0.05 indicating that the null hypothesis is rejected Thereafter, post-hoc test was conducted, and it was found that the mean rank of Yes (M=99.34) was found to be higher than No (M=79.06).It can be interpreted that the respondents using and watching AI promotions by online shopping websites and purchase on that basis are more influenced than those who do not purchase on the basis of AI promotions by online shopping websites.

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

Findings:

Demographic Factors such as Gender, Educational Qualification, Amount Spent based on AI based promotional offers, Frequency of purchase based on AI promotions, Usage of AI by Social media applications to optimize advertisements across feeds, Usage of AI by online shopping websites to personalize shopping experiences, and usage of AI by streaming platforms to personalize content recommendations were considered for the study.

1) Out of the 190 respondents, 60 percent were females and 40 percnt were males. 2) Education Qualification was categorized as Undergraduate, Graduate, and Postgraduate and above. 38.9 percent were Undergraduates.
3) Amount spent on AI-Based promotional Offers was categorized as less than Rs.5,000; Rs.5,000 to 10,000; and Rs.10,000 and above. 64.2% spent less than Rs.5,000 on AI Based Promotional Offers.
4) Frequency of purchase to avail AI-Based promotions was categorized in to Daily, Weekly, Monthly and Seasonal. 44.2% shopped seasonally to avail AI-Based promotional offers.
5) Respondents' knowledge of the usage of AI by Social media apps to optimize advertisements across their feed was understood. 85.3% were aware of that social media app used AI to boost advertisements on the respondent's feed.
6) Respondents' knowledge of the usage of AI by Shopping Websites to personalize the shopping experience was understood. 81.1% were aware that shopping websites used AI to personalize the shopping experience.
7) Respondents' knowledge of the usage of AI by streaming platforms to personalize content recommendations was understood. 77.9% were aware that streaming platforms use AI to personalize content recommendations.

Suggestions:

1) AI-based promotional measures targeting male customers may emphasize creating value for price paid, highlighting unique spelling proposition-USP of product on offer and the functional benefits. Further, highlighting upon product specifications and need-based features so as to offer a clear picture towards purchase.
2) AI-Based promotions should be simple to understand and jargon free so that the same can be easily communicated across all sets of customers irrespective of their educational qualifications.
3) Marketers may try and use similar set of promotion mechanism across low, medium and high spending categories of customers. Marketers need to create a mechanism wherein they are able to create trust among consumers towards AI-Based promotional offers and offer loyalty points or benefits in any other form to encourage repeat purchase from customers.
4) Marketers need to plan a mechanism wherein they send reminders to consumers about the offers and expiry of those promotional offers in terms of pop-up and app-based notifications in order to encourage daily and weekly purchases.
5) Marketers can try and focus on AI-based promotion through social media advertisements and personalized recommendations, as the current generation under focus is digitally thriving and their lives revolve around their mobile phones and social networking.
6) The customers need to be more vigilant of what they watch on social media apps and shopping websites. They have to check the genuineness of the brand by visiting the official websites and purchase by going through the reviews of the consumers.

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

Conclusion:

AI is the hot selling cake in the present scenario and the world of marketing in general and promotions in particular is not left out from the same. The present study was an attempt to identify the same. AI and Gen Z almost go hand in hand, the study test and proves the hypothesis that buying behaviour of Gen Z is influenced by AI based promotions, particularly user-centric advertisement which focus upon every customer as a unique entity thereby establishing on emotional connection and leading towards purchase decision. However, the effectiveness relies upon the ethical and transparent use of data, as consumer trust may be undermined by breach of privacy and concerns towards unfair use of their data. Promotions that are AI-driven and implemented in a responsible manner may further enhance brand-user relationships and have a positive influence on customers thereby leading towards a fruitful and long-term relationship among brand and customers making a win-win situation for both.

Bibliography:

Books:

1. *Kothari, C. R., & Garg, G. (2020). Research Methodology: Methods and Techniques (4th ed.). New Age International Publishers.*

Journal Articles:

1. *Andrade, E. B., Montañez, J. T., Salabao, A. A., & Gamotin, G. D. L. (2025). Impact of e commerce flash sale promotions on Generation Z's impulse buying behavior: The mediating role of fear of missing out (FOMO). Southeast Asian Journal of Agriculture and Allied Sciences, 5(2), 89–101. https://doi.org/10.63943/sajaas.vol5iss2art97pp89-101*
2. *10*
3. *Bhagat, K. J., & Tumbi, S. (2025). A study on the influence of the marketing mix of street-side vendors on consumer buying behaviour. International Journal of Innovative Science, Engineering & Technology, 12(3)*
4. *Dai, X., & Liu, Q. (2024). Impact of artificial intelligence on consumer buying behaviors: Study about the online retail purchase. Journal of Infrastructure, Policy and Development, 8(9), 7700. https://doi.org/10.24294/jipd.v8i9.7700*
5. *Dang, T.-Q., Nguyen, T.-M., Tran, P.-T., Phan, T.-T. C., Huynh, T.-B., & Nguyen, L.-T. (2025). From reality to virtuality: Unveiling Gen Z's purchasing behavior through virtual influencers in the metaverse. Digital Business, 5, 100141. https://doi.org/10.1016/j.digbus.2025.100141*
6. *Guerra-Tamez, C. R., Kraul Flores, K., Serna-Mendiburu, G. M., Chavelas Robles, D., & Ibarra Cortes, J. (2024). Decoding Gen Z: AI's influence on brand trust and purchasing behaviour. Frontiers in Artificial Intelligence, 7, 1323512. https://doi.org/10.3389/frai.2024.1323512*
7. *Huynh, T., & Tran, T. T. (2023). Impact of gamification on Gen Z impulse buying behavior: Evidence from the Shopee application in the Vietnamese market. Global Research Review in Business and Economics, 9(5), 47–57. https://doi.org/10.56805/grrbe*
8. *Nie, Y., Liu, Z., & Jiang, Y. (2025). Exploring the impact of generative AI-driven advertising on Generation Z's consumer behavior in China: A grounded theory approach. American Journal of Applied Psychology, 14(4), 113–128. https://doi.org/10.11648/j.ajap.20251404.11*
9. *Obiso, S. M., Balala, C., Samson, E. K., Alonzo, A. A., Dadole, D. M., & Parcia, H. A. A. (2025). The influence of online sales promotion on impulsive buying behavior among Gen Z consumers. American Journal of Economics and Business Innovation, 4(2), 131–138. https://doi.org/10.54536/ajebi.v4i2.4799*

ISSN–2278-5655

AMIERJ Aarhat Multidisciplinary International Education Research Journal

Volume–XV, Special Issues– I(c) Jan – Feb, 2026

OPEN ACCESS Original Research Article

10. *Peter, R., Roshith, V., Lawrence, S., Mona, A. E., Narayanan, K. B., & Yusaira, F. (2025). Gen AI–Gen Z: Understanding Gen Z's emotional responses and brand experiences with Gen AI driven, hyper-personalized advertising. Frontiers in Communication, 10, 1554551. https://doi.org/10.3389/fcomm.2025.1554551*

11. *Pham, T. C. T., Huynh, T., Tran, P.-T., & Ly, A. Q. (2025). Exploring how AI chatbots influence customer loyalty among Generation Z on e-commerce platforms. Advances in Consumer Research, 2(5), 2473–2486. https://acr-journal.com/*

Cite This Article:

Prof. Dr. Bhagat K.J. & Tumbi S. (2026). *A Study on the influence of AI-Based Promotions on GenZ in Mumbai.* **In Aarhat Multidisciplinary International Education Research Journal**: Vol. XV (Number I, pp. 167–175)

Doi: https://doi.org/10.5281/zenodo.18642060