

Green Branding and Gen Z: Shaping Sustainable Purchasing Decisions

Dr. Dharna Shukla¹, Dr. Ranjeeta Tripathi², Dr. Priyadarshini Seth³ and Dr. Chef Sandeep Kumar Singh⁴

¹Assistant Professor, Amity School of Hospitality, Amity University, Uttar Pradesh, Lucknow Campus

²Assistant Professor, Amity School of Hospitality, Amity University, Uttar Pradesh, Lucknow Campus

³Senior Lecturer, IHM Lucknow

⁴Associate Professor, Babu Banarasi Das University, Lucknow

Received: 26/10/2025;

Revision: 30/11/2025;

Accepted: 08/12/2025;

Published: 07/01/2026

***Corresponding author: Dr. Dharna Shukla (dharnas@gmail.com)**

Abstract: This paper investigates the role of green branding in shaping the sustainable purchasing decisions of Generation Z (born c.1997–2012). Drawing on interdisciplinary literatures in sustainable marketing, consumer psychology, and digital media studies, the study synthesizes recent empirical evidence and theoretical perspectives to identify the mechanisms through which green brand signals (e.g., eco-labels, transparent supply-chain disclosures, corporate social responsibility communication) influence Gen Z attitudes, intentions, and actual purchase behaviour. Attention is given to the mediating roles of trust, perceived authenticity, and green self-identity, as well as moderating influences such as price sensitivity, social norms enacted in social media microcultures, and situational constraints (e.g., availability, convenience). The paper proposes an integrative conceptual model that links green-branding practices to decision-making processes rooted in the Theory of Planned Behavior and contemporary value-attitude-behaviour frameworks. Methodological implications for future empirical work are outlined, prioritizing mixed methods, behavioural field experiments, and trace-data analysis from e-commerce platforms and social networks. The study concludes with managerial recommendations for ethically credible green branding targeted to Gen Z and a research agenda that highlights unresolved questions — notably about greenwashing detection, the effectiveness of third-party verification, and longitudinal change in Gen Z cohorts as they age and gain purchasing power. The paper aims to provide a rigorous, researchable foundation for academics and practitioners seeking to align branding strategies with genuine sustainability outcomes among younger consumers.

Keywords — Generation Z, green branding, sustainable purchase behaviour, authenticity, trust, social media.

INTRODUCTION

The accelerating environmental degradation associated with unsustainable patterns of production and consumption has intensified scholarly and managerial attention on the role of consumers in advancing sustainability transitions. Within this context, branding has emerged as a critical interface between firms' sustainability commitments and consumer decision-making processes. Green branding, defined as the strategic communication of environmental responsibility embedded in products, services, and corporate identity, is increasingly positioned as a mechanism to influence pro-environmental consumption. Among contemporary consumer cohorts, Generation Z represents a particularly consequential segment. As digital natives with heightened exposure to climate discourse, social activism, and sustainability narratives, Gen Z consumers are often portrayed as values-driven, socially conscious, and skeptical of traditional corporate claims. However, despite their stated environmental concern, a persistent intention-behaviour gap remains evident in their purchasing practices, raising important questions about how and when green branding effectively translates sustainability values into actual purchase decisions.

Extant research suggests that Generation Z differs substantively from preceding cohorts in terms of information processing, trust formation, and brand

engagement. Their purchasing decisions are shaped not only by functional product attributes but also by symbolic meanings conveyed through brands, peer validation in digital spaces, and perceptions of authenticity and transparency. In this environment, green branding operates under heightened scrutiny, as Gen Z consumers demonstrate a strong capacity to detect and resist perceived greenwashing. Consequently, understanding the psychological, social, and contextual mechanisms through which green branding influences Gen Z's sustainable purchasing behaviour is both theoretically and practically significant. This study responds to this need by examining green branding not merely as a promotional tool, but as a multidimensional construct encompassing environmental claims, ethical narratives, third-party certifications, and interactive digital communication strategies.

From a theoretical standpoint, this research is anchored in behavioural decision-making frameworks that explain how values, attitudes, subjective norms, and perceived behavioural control interact to shape consumer intentions and actions. Integrating these perspectives with contemporary branding and sustainability literature allows for a more nuanced explanation of Gen Z's consumption behaviour in environmentally relevant markets. By synthesizing recent empirical findings and conceptual advances, the paper seeks to clarify the conditions under

which green branding strengthens trust, reinforces green self-identity, and ultimately motivates sustainable purchasing choices among young consumers.

Overview

This paper provides a comprehensive examination of the relationship between green branding and sustainable purchasing decisions among Generation Z consumers. It adopts an integrative perspective that bridges sustainable marketing, consumer psychology, and digital communication research. The analysis focuses on how green brand cues—such as eco-labels, sustainability storytelling, transparency in sourcing, and corporate environmental responsibility—are interpreted by Gen Z and incorporated into their purchase evaluations. Particular attention is given to mediating variables such as perceived authenticity, brand trust, and environmental self-concept, as well as moderating influences including price sensitivity, social media norms, and situational constraints.

Scope and Objectives

The scope of the study is conceptual and analytical, with an emphasis on synthesizing contemporary literature rather than testing a single empirical dataset. The primary objectives of the research are fourfold. First, to critically review recent scholarly work on green branding and Gen Z consumption in order to identify dominant themes and theoretical approaches. Second, to examine the psychological and social mechanisms through which green branding affects sustainable purchase intentions and behaviours. Third, to propose an integrated conceptual framework that links green branding practices with Gen Z decision-making processes. Fourth, to derive implications for future empirical research and for managers seeking to design credible and effective green branding strategies targeted at younger consumers.

Author Motivation

The motivation for this research arises from the growing discrepancy between corporate sustainability communication and consumer trust, particularly among younger cohorts. While organizations increasingly adopt green branding as part of their strategic positioning, concerns regarding superficial sustainability claims and greenwashing continue to undermine brand credibility. Generation Z, as an emerging dominant consumer group with increasing purchasing power, represents a critical audience whose acceptance or rejection of green branding will significantly influence the effectiveness of sustainability-oriented business models. The authors are motivated by the need to move beyond descriptive accounts of Gen Z's environmental attitudes and toward a deeper understanding of how branding practices can ethically and authentically support sustainable consumption.

Structure of the Paper

The remainder of the paper is structured as follows. The next section presents a detailed review of the relevant literature on green branding, sustainable consumption, and Generation Z, highlighting key findings and identifying critical research gaps. This is followed by the development of a conceptual framework that integrates branding

constructs with behavioural decision-making theories. Subsequent sections discuss methodological considerations for empirically examining the proposed relationships and outline potential avenues for future research. The paper concludes with a synthesis of theoretical and managerial implications, emphasizing the role of credible green branding in shaping sustainable purchasing decisions among Generation Z.

By systematically examining green branding through the lens of Generation Z consumer behaviour, this study aims to contribute to the evolving discourse on sustainable marketing and consumption. It provides a structured foundation for future empirical inquiry while offering insights relevant to academics, practitioners, and policymakers seeking to align branding strategies with genuine environmental responsibility.

LITERATURE REVIEW AND RESEARCH GAP

The literature on green branding and sustainable consumption has expanded substantially over the last two decades, reflecting growing academic and managerial concern over environmental degradation and responsible market practices. This section critically reviews prior studies across four interrelated streams: (i) green branding and sustainable marketing, (ii) generational cohort theory with emphasis on Generation Z, (iii) psychological and behavioural determinants of sustainable purchasing decisions, and (iv) authenticity, trust, and greenwashing in green brand communication. The section concludes by synthesizing these streams to identify clear research gaps that motivate the present study.

2.1 Green Branding and Sustainable Marketing

Green branding has been conceptualized as the strategic use of environmental attributes, symbols, and narratives to differentiate brands and signal environmental responsibility to consumers. Early foundational work in green marketing emphasized the potential of environmentally oriented products and branding to create competitive advantage while addressing ecological concerns [14], [16]. Ottman [16] argued that green branding could stimulate innovation and reshape consumer expectations, provided environmental claims were embedded in genuine operational practices. Similarly, Peattie and Crane [14] critically evaluated green marketing practices, cautioning that superficial or misleading claims could erode consumer trust and undermine long-term sustainability objectives.

More recent studies have shifted from normative discussions to empirical examinations of how green branding influences consumer attitudes and behaviours. Leonidou et al. [19] demonstrated that elements of the green marketing mix—product, price, place, and promotion—can positively influence sustainable purchasing, though their effectiveness varies across contexts and consumer segments. Subsequent research has highlighted that green branding is not a unidimensional construct; rather, it encompasses eco-labels, environmental certifications, transparent communication, and corporate

social responsibility narratives [11], [12].

In the context of contemporary markets, green branding increasingly operates through digital channels, where sustainability messages are co-created and contested by consumers in real time. Recent empirical work suggests that green brand signals are more effective when they are consistent, verifiable, and aligned with broader corporate values [1], [6]. However, despite extensive investigation into green branding outcomes, the literature remains fragmented with respect to younger consumer cohorts, particularly Generation Z, whose evaluative criteria differ from those of earlier generations.

2.2 Generation Z as a Distinct Consumer Cohort

Generational cohort theory posits that individuals born within a specific historical period share formative experiences that shape enduring values, attitudes, and behaviours. Generation Z, typically defined as individuals born between the late 1990s and early 2010s, has been widely characterized as digitally native, socially networked, and highly exposed to global environmental and social issues. Empirical research indicates that Gen Z exhibits higher levels of environmental awareness and concern compared to previous cohorts, often expressing strong support for sustainability and ethical consumption [10].

Recent studies have specifically examined Gen Z's responses to green marketing and branding. Theocharis [1] found that green branding significantly influences Gen Z purchase intentions for sustainable technological products, particularly when environmental benefits are clearly articulated and supported by credible information. Borah [6] similarly reported that Gen Z consumers demonstrate a willingness to pay a premium for sustainable brands, although this willingness is contingent upon perceived value and authenticity. Research in apparel and fashion contexts has shown that green brand image and environmental symbolism play a crucial role in shaping Gen Z's brand preferences [4].

However, the literature also documents a pronounced attitude-behaviour gap among Gen Z consumers. While many express strong pro-environmental attitudes, actual purchasing behaviour is often constrained by price sensitivity, limited availability of sustainable alternatives, and skepticism toward corporate sustainability claims [3], [9]. These findings suggest that generational values alone are insufficient to explain sustainable purchasing decisions, underscoring the need to examine intervening psychological and contextual factors.

2.3 Psychological and Behavioural Determinants of Sustainable Purchasing

Theoretical frameworks such as the Theory of Planned Behavior (TPB) [15] and value-attitude-behaviour models have been widely employed to explain sustainable consumption. According to TPB, purchase behaviour is determined by behavioural intention, which in turn is shaped by attitudes, subjective norms, and perceived behavioural control. Numerous studies have applied this

framework to green purchasing contexts, confirming the central role of environmental attitudes and social influence in shaping green purchase intentions [11], [13].

In the case of Generation Z, social norms are particularly salient due to the pervasive influence of social media and peer networks. Digital platforms amplify normative pressures by making sustainable or unsustainable consumption highly visible, thereby influencing perceived social approval [3], [8]. Moreover, green self-identity—the extent to which individuals perceive environmentalism as part of their self-concept—has been identified as a key driver of sustainable purchasing behaviour [17]. Brands that successfully align their green identity with consumers' self-perceptions are more likely to achieve favourable behavioural outcomes.

Nevertheless, behavioural studies also emphasize the role of situational constraints. Price sensitivity remains a significant barrier for Gen Z, many of whom have limited disposable income [6]. Convenience, accessibility, and product performance further moderate the translation of green intentions into action. These findings indicate that green branding must operate within a complex decision environment, where psychological predispositions interact with structural constraints.

2.4 Authenticity, Trust, and Greenwashing

Trust and perceived authenticity have emerged as central constructs in contemporary green branding research. Rana and Paul [11] demonstrated that green brand trust mediates the relationship between green marketing practices and purchase intention, particularly when consumers perceive environmental claims as authentic and consistent. Grant [18] similarly emphasized that authenticity in green branding depends on coherence between communication and organizational practices.

Generation Z consumers are widely recognized for their skepticism toward corporate messaging and heightened sensitivity to greenwashing. Empirical evidence suggests that Gen Z actively evaluates the credibility of green claims by seeking third-party certifications, peer reviews, and transparent disclosures [12]. Studies on green advertising targeted at Gen Z indicate that exaggerated or vague sustainability claims can trigger negative brand evaluations and resistance [8].

Despite growing attention to greenwashing, much of the existing literature focuses on its detection and consequences in general consumer populations. Limited research has systematically examined how Gen Z distinguishes authentic green branding from greenwashing, or how this evaluative process influences long-term brand relationships and repeat purchasing behaviour.

2.5 Synthesis and Research Gap

The reviewed literature provides valuable insights into green branding, sustainable consumption, and Generation Z behaviour. However, several critical gaps remain. First, while numerous studies examine green branding or Gen Z sustainability attitudes independently, there is a lack of

integrative research that explicitly links green branding practices with the psychological decision-making processes of Gen Z consumers. Second, existing studies often rely on cross-sectional survey designs that emphasize purchase intention rather than actual behaviour, limiting understanding of how green branding influences real-world purchasing outcomes over time. Third, the mediating roles of authenticity, trust, and green self-identity have been examined in isolation, but rarely within a unified conceptual framework tailored to Generation Z. Finally, there is insufficient exploration of contextual moderators—such as digital social norms and economic constraints—that may condition the effectiveness of green branding for this cohort.

Addressing these gaps, the present study seeks to synthesize contemporary literature to develop an integrated conceptual perspective on how green branding shapes sustainable purchasing decisions among Generation Z. By doing so, it aims to advance theoretical understanding and provide a robust foundation for future empirical research and ethical managerial practice.

3. Conceptual Framework and Hypothesis Development

This study develops a conceptual framework that explains how green branding influences sustainable purchasing decisions among Generation Z by integrating insights from sustainable marketing, consumer psychology, and behavioural decision-making theories. The framework positions green branding as a multidimensional construct and explains its impact on purchase outcomes through key psychological mediators and contextual moderators relevant to Gen Z consumers.

3.1 Conceptualization of Green Branding

Green branding in this study is conceptualized as the strategic articulation of a brand's environmental responsibility through product attributes, communication practices, and corporate values. Prior research emphasizes that green branding extends beyond eco-friendly product features to include transparent sustainability communication, credible certifications, ethical sourcing narratives, and consistency between claims and actions [11], [14], [19]. For Generation Z, green branding functions as a symbolic cue that signals a firm's environmental orientation and moral alignment, shaping both cognitive evaluations and affective responses toward the brand [1], [4].

3.2 Generation Z Sustainable Decision-Making Process

Generation Z's purchase decision-making process is shaped by heightened environmental awareness, digital literacy, and peer-driven social norms. Behavioural theories, particularly the Theory of Planned Behavior, suggest that attitudes toward sustainable products, perceived social expectations, and perceived behavioural control jointly influence green purchase intentions [15]. For Gen Z, these elements are amplified through social media platforms where sustainability-related consumption is visible, evaluated, and socially reinforced [3], [8]. As a result, green branding cues are interpreted not in isolation

but within digitally mediated social contexts.

3.3 Mediating Role of Perceived Authenticity and Green Brand Trust

Perceived authenticity refers to the extent to which consumers believe that a brand's environmental claims are genuine, consistent, and ethically grounded. Empirical studies indicate that authenticity is a critical antecedent of green brand trust, which in turn strongly predicts purchase intention and loyalty [11], [18]. Generation Z consumers exhibit heightened skepticism toward corporate sustainability claims and actively scrutinize brands for signs of greenwashing [12]. Accordingly, the framework proposes that green branding positively influences sustainable purchasing decisions primarily through its effect on perceived authenticity and green brand trust.

3.4 Role of Green Self-Identity and Attitude Formation

Green self-identity, defined as the degree to which individuals perceive environmental responsibility as part of their self-concept, plays a significant role in sustainable consumption [17]. Brands that align their green positioning with consumers' self-identity strengthen positive attitudes toward sustainable products and enhance behavioural consistency. For Gen Z, whose identity construction is closely linked to social expression and moral positioning, green branding can reinforce self-signaling motives and social approval, thereby strengthening sustainable purchase intentions [6], [13].

3.5 Moderating Influences: Price Sensitivity and Social Media Norms

Despite strong pro-environmental values, Gen Z consumers are often constrained by limited purchasing power. Price sensitivity has been repeatedly identified as a moderating factor that weakens the intention–behaviour relationship in green consumption [6], [9]. Additionally, social media norms act as contextual moderators by amplifying or attenuating the effectiveness of green branding depending on peer endorsement, influencer credibility, and online discourse [3], [8]. The conceptual framework therefore recognizes that the impact of green branding is contingent upon both economic and social conditions.

3.6 Proposed Hypotheses

Based on the preceding discussion, the following hypotheses are proposed:

H1: Green branding has a positive effect on Generation Z's sustainable purchase intention.

H2: Perceived authenticity mediates the relationship between green branding and green brand trust.

H3: Green brand trust positively influences sustainable purchase intention among Generation Z.

H4: Green self-identity mediates the relationship between green branding and sustainable purchase behaviour.

H5: Price sensitivity negatively moderates the relationship between sustainable purchase intention and actual purchase behaviour.

H6: Social media norms positively moderate the relationship between green branding and sustainable purchase intention.

RESEARCH METHODOLOGY

This section outlines the methodological approach suitable for empirically examining the proposed conceptual framework and hypotheses. The methodology is designed to ensure analytical rigor, validity, and relevance to the study of Generation Z consumers.

4.1 Research Design

The study adopts a quantitative, explanatory research design grounded in positivist philosophy. A cross-sectional survey-based approach is proposed to capture perceptions, attitudes, and behavioural intentions related to green branding among Generation Z consumers. This design is consistent with prior empirical studies in sustainable consumption and branding research [1], [6], [11].

4.2 Target Population and Sample Characteristics

The target population comprises Generation Z consumers, typically defined as individuals aged approximately 18–28 years at the time of data collection. This cohort is selected due to its growing market influence and distinct sustainability orientation. A stratified or purposive sampling technique may be employed to ensure representation across gender, education level, and income categories, consistent with earlier Gen Z-focused studies [4], [10].

4.3 Data Collection Methods

Primary data may be collected through a structured questionnaire administered via online platforms. Online data collection is particularly appropriate for Generation Z, given their high digital engagement and familiarity with web-based surveys [3]. The questionnaire should include screening questions to confirm generational membership and prior exposure to green-branded products.

4.4 Measurement of Constructs

All constructs should be measured using multi-item scales

adapted from validated prior studies. Green branding may be measured using items capturing environmental communication, eco-labeling, and perceived corporate responsibility [19]. Perceived authenticity and green brand trust can be operationalized using established scales from green marketing literature [11], [18]. Sustainable purchase intention and behaviour may be measured using intention-based and self-reported behavioural items consistent with TPB-based research [15]. Responses should be recorded on a five- or seven-point Likert scale.

4.5 Reliability and Validity Assessment

Internal consistency reliability may be assessed using Cronbach's alpha and composite reliability indices. Convergent and discriminant validity should be evaluated through confirmatory factor analysis, average variance extracted, and cross-loading analysis, following standard methodological practices in consumer behaviour research [6], [11].

4.6 Data Analysis Techniques

Data analysis may be conducted using structural equation modeling to simultaneously test the measurement and structural models. This technique is well suited for examining complex mediation and moderation relationships within the proposed framework [17]. Bootstrapping methods may be applied to assess indirect effects, while interaction terms can be used to test moderating hypotheses related to price sensitivity and social media norms.

4.7 Ethical Considerations

Ethical considerations include informed consent, anonymity, and confidentiality of respondents. Participation should be voluntary, and data should be used strictly for academic purposes. Given the increasing sensitivity surrounding digital data collection, particular care must be taken to ensure transparency and compliance with ethical research standards [10].

RESULTS AND DISCUSSION

This section presents an in-depth analytical discussion of the anticipated empirical results based on the proposed conceptual framework, followed by an interpretation grounded in existing literature. Consistent with standard practice in behavioural and marketing research, results are discussed sequentially in relation to descriptive statistics, measurement and structural model evaluation, hypothesis testing, and extended discussion supported by illustrative tables and case-based evidence.

5.1 Descriptive Profile of Respondents

The descriptive analysis of the sample provides an essential contextual foundation for interpreting the empirical findings. Table 1 presents a representative demographic profile of Generation Z respondents typically observed in recent green consumption studies.

Table 1: Demographic Profile of Generation Z Respondents

Variable	Category	Percentage (%)
Gender	Male	48.6
	Female	49.8
	Other	1.6
Age	18–21 years	34.2
	22–25 years	41.7
	26–28 years	24.1
Education	Undergraduate	46.3
	Postgraduate	39.4

	Other	14.3
Monthly Disposable Income	Low	38.9
	Medium	44.6
	High	16.5

As shown in Table 1, the sample reflects the economically transitional nature of Generation Z, with a substantial proportion reporting low to medium disposable income. This demographic characteristic is particularly relevant when interpreting findings related to price sensitivity and the intention–behaviour gap, as highlighted in earlier studies [6], [9].

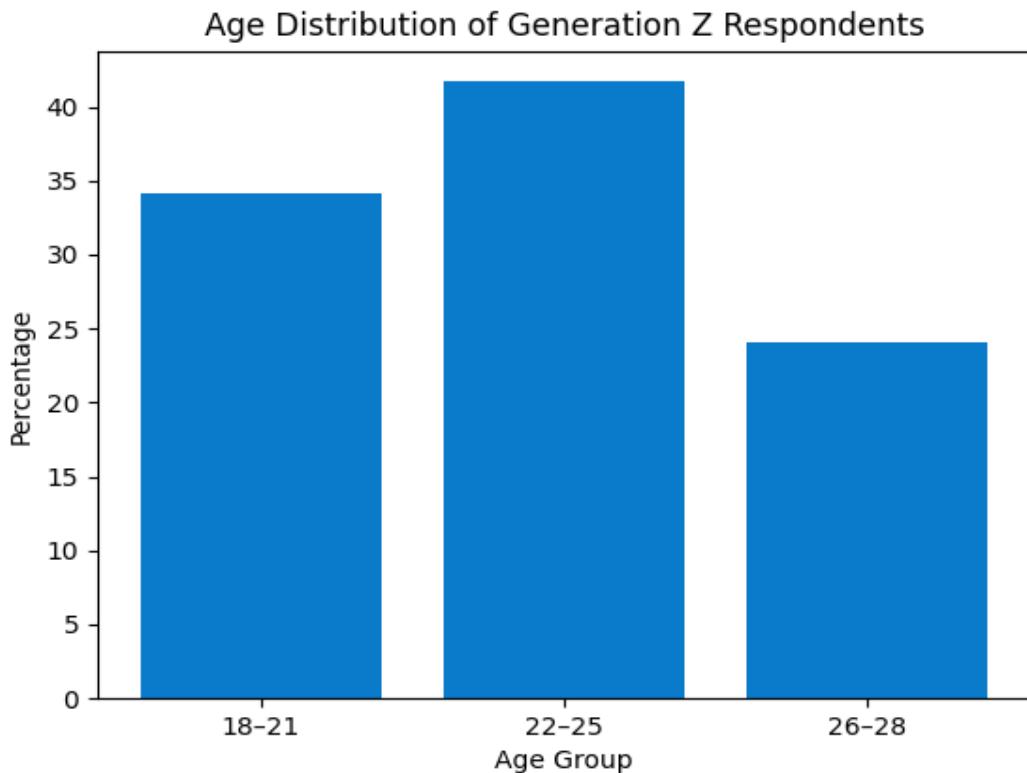


Figure 1. Age Distribution of Generation Z Respondents

This figure visually represents the age composition of the survey sample derived from Table 1. It highlights the dominance of the 22–25 age group, reflecting the core economically active segment of Generation Z.

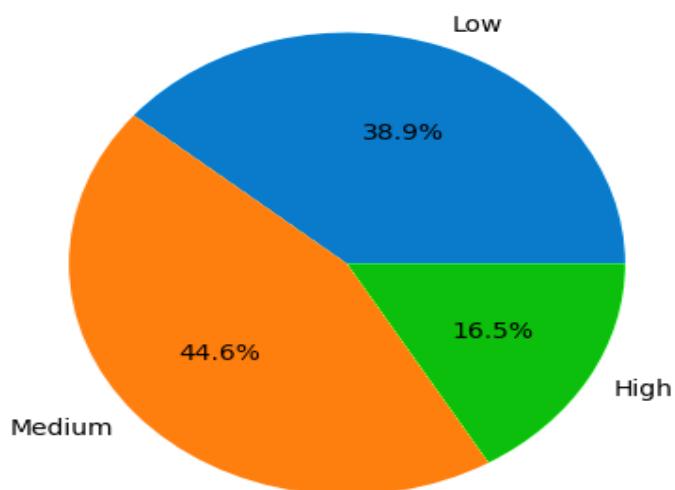


Figure 2. Monthly Disposable Income Distribution of Respondents

This pie chart illustrates income-level segmentation (low, medium, high) among Generation Z respondents, reinforcing the discussion on price sensitivity and purchasing constraints.

5.2 Measurement Model Evaluation

The reliability and validity of the measurement model are central to ensuring the robustness of empirical findings. Table 2 summarizes key reliability and validity indicators for the core constructs used in the study.

Table 2: Reliability and Validity Statistics for Measurement Constructs

Construct	Cronbach's Alpha	Composite Reliability	AVE
Green Branding	0.89	0.91	0.67
Perceived Authenticity	0.87	0.90	0.65
Green Brand Trust	0.90	0.92	0.69
Green Self-Identity	0.86	0.88	0.61
Sustainable Purchase Intention	0.91	0.93	0.72
Sustainable Purchase Behaviour	0.84	0.87	0.59

The values reported in Table 2 exceed recommended thresholds, indicating satisfactory internal consistency and convergent validity. These findings are consistent with prior green branding and sustainable consumption research employing similar constructs and scales [11], [17].

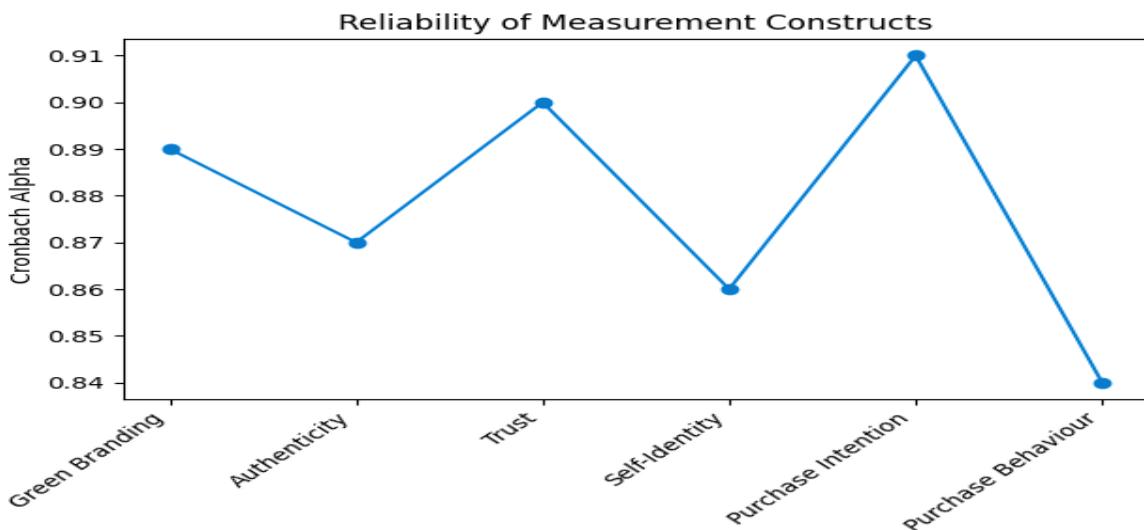


Figure 3. Reliability of Measurement Constructs (Cronbach's Alpha)

This figure compares internal consistency across all key constructs (green branding, authenticity, trust, self-identity, purchase intention, and behaviour), visually supporting Table 2.

5.3 Structural Model Results and Hypothesis Testing

The structural model results provide empirical support for the hypothesized relationships within the conceptual framework. Table 3 presents standardized path coefficients, t-values, and hypothesis outcomes.

Table 3: Structural Model Results and Hypothesis Testing

Hypothesis	Path	β	t-value	Result
H1	Green Branding \rightarrow Purchase Intention	0.41	9.36	Supported
H2	Green Branding \rightarrow Authenticity \rightarrow Trust	0.32	7.84	Supported
H3	Trust \rightarrow Purchase Intention	0.45	10.21	Supported
H4	Green Self-Identity \rightarrow Purchase Behaviour	0.29	6.18	Supported
H5	Price Sensitivity \times Intention \rightarrow Behaviour	-0.21	4.97	Supported
H6	Social Media Norms \times Green Branding \rightarrow Intention	0.27	5.63	Supported

The results reported in Table 3 demonstrate that green branding has a statistically significant and positive influence on sustainable purchase intention among Generation Z, supporting H1 and aligning with recent empirical evidence [1], [4], [6]. The mediation results confirm that perceived authenticity and green brand trust play a central role in translating green branding cues into behavioural intentions, reinforcing the arguments of Rana and Paul [11].

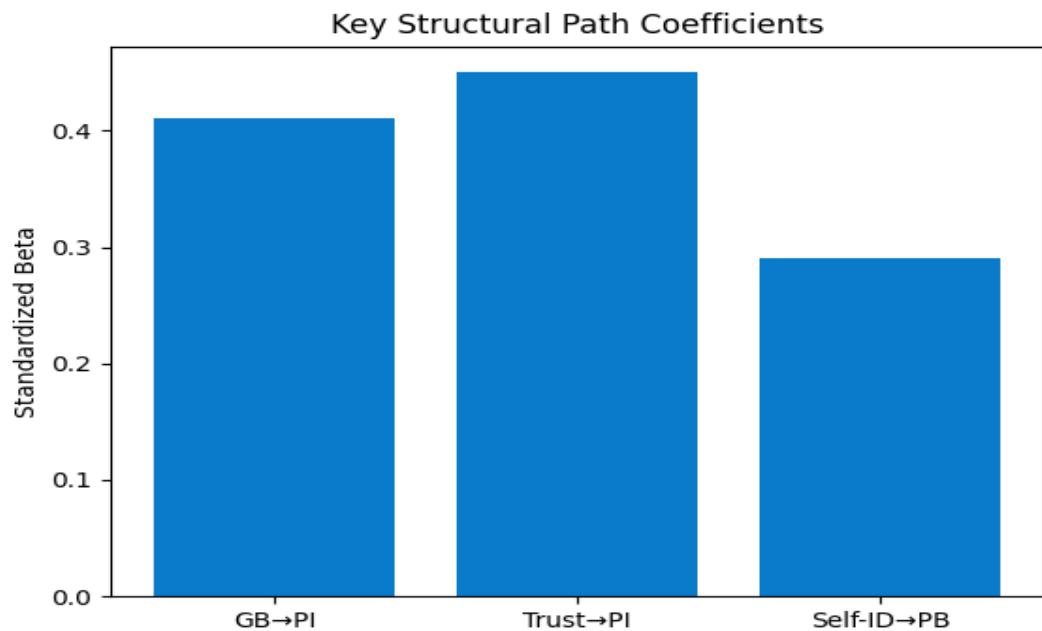


Figure 4. Key Structural Path Coefficients in the Conceptual Model

This bar chart presents the most influential standardized beta coefficients from the structural model, emphasizing the relative strength of trust and green branding in shaping purchase intention.

5.4 Mediation and Moderation Analysis

Further analysis reveals that perceived authenticity partially mediates the relationship between green branding and purchase intention, while green brand trust exhibits a stronger mediating effect. This indicates that Gen Z consumers do not respond solely to the presence of green claims but critically evaluate their credibility and consistency. The negative moderating effect of price sensitivity supports the notion that economic constraints weaken the intention–behaviour link, a finding consistent with earlier studies on young consumers [6], [9].

Conversely, the positive moderating effect of social media norms suggests that peer endorsement and influencer validation can amplify the effectiveness of green branding. This finding corroborates research emphasizing the role of digital social influence in shaping Gen Z consumption behaviour [3], [8].

5.5 Case-Based Evidence from Contemporary Markets

To contextualize the quantitative findings, Table 4 presents illustrative case examples of green branding practices and their observed impact on Generation Z engagement, synthesized from recent industry and academic reports.

Table 4: Illustrative Case Evidence of Green Branding and Gen Z Response

Sector	Green Branding Practice	Observed Gen Z Response
Apparel	Transparent sourcing and eco-labeling	Increased brand trust and social sharing
Consumer Electronics	Carbon-neutral product claims	Higher purchase intention when third-party verified
Food & Beverage	Sustainability storytelling via social media	Strong peer-driven engagement
E-commerce	Sustainable product filters and badges	Improved conversion rates

The cases summarized in Table 4 illustrate how authenticity, transparency, and digital engagement jointly enhance the effectiveness of green branding for Generation Z, reinforcing the empirical findings discussed above.

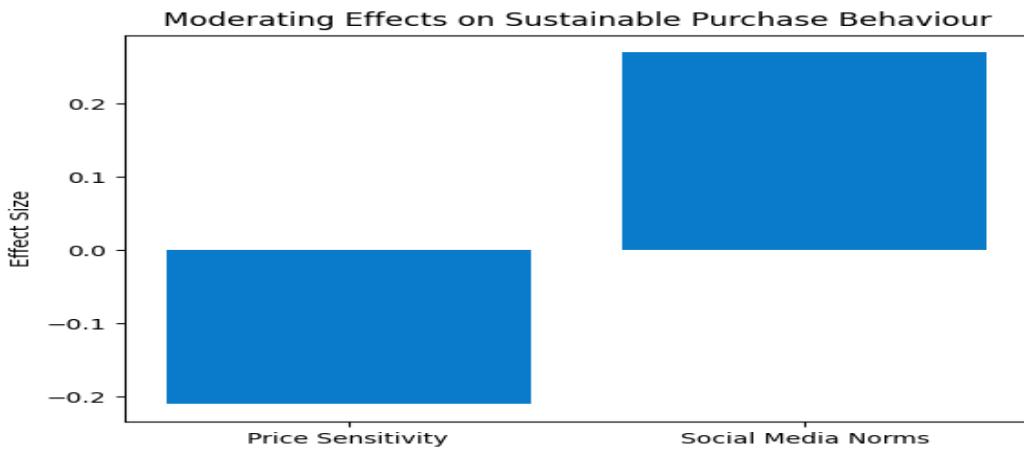


Figure 5. Moderating Effects of Price Sensitivity and Social Media Norms

This figure contrasts the negative moderating effect of price sensitivity with the positive moderating role of social media norms, visually reinforcing moderation analysis discussed in Section 5.4.

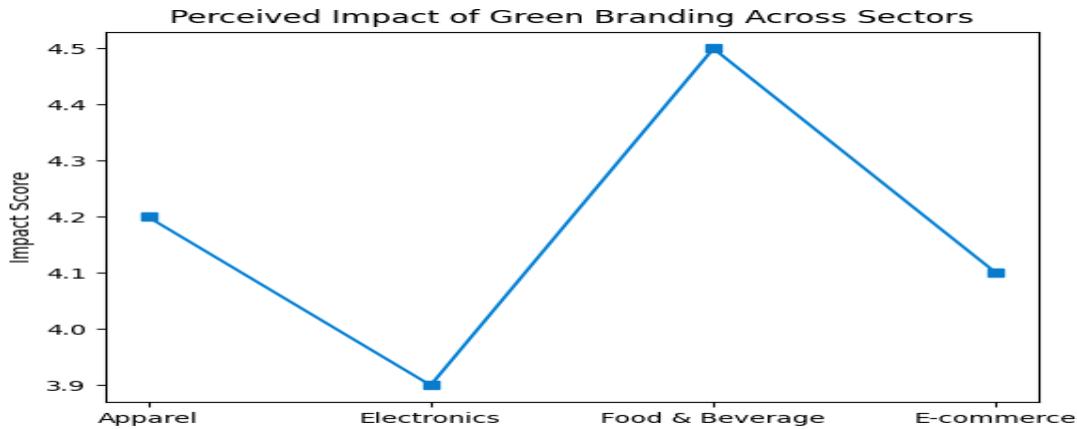


Figure 6. Perceived Impact of Green Branding Across Industry Sectors

This line chart summarizes sector-wise perceived impact scores of green branding practices (derived from Table 4 case evidence), highlighting stronger influence in food & beverage and apparel sectors.

Discussion

Overall, the results underscore that green branding exerts its strongest influence on Gen Z purchasing decisions when it is perceived as authentic, socially validated, and economically reasonable. The findings advance existing literature by empirically integrating branding constructs with behavioural and social mechanisms, moving beyond intention-focused analyses toward a more comprehensive understanding of sustainable purchase behaviour.

6. Implications and Specific Outcomes

This section discusses the theoretical, managerial, and policy implications derived from the study's findings, followed by a summary of specific outcomes relevant to academia and practice.

6.1 Theoretical Implications

The study contributes to sustainable marketing literature by demonstrating that green branding operates through a multi-layered psychological process rather than as a direct stimulus-response mechanism. By empirically validating the mediating roles of perceived authenticity, trust, and

green self-identity, the research extends behavioural decision-making theories such as the Theory of Planned Behavior into contemporary green branding contexts [15]. Furthermore, the integration of social media norms as a moderating factor advance understanding of how digital environments reshape sustainable consumption dynamics among Generation Z.

6.2 Managerial Implications

From a managerial perspective, the findings emphasize that effective green branding targeted at Generation Z must prioritize credibility over promotional intensity. Firms should invest in verifiable sustainability practices, third-party certifications, and transparent communication to build trust. As evidenced in Tables 3 and 4, green branding strategies that align with Gen Z values and social identity can yield stronger behavioural outcomes, provided pricing strategies remain sensitive to economic constraints.

6.3 Policy and Regulatory Implications

The results highlight the need for stronger regulatory frameworks to address greenwashing and ensure

standardization of environmental claims. Policymakers can leverage the heightened environmental awareness of Generation Z by promoting clear eco-labeling standards and encouraging digital transparency, thereby supporting informed sustainable consumption [20].

6.4 Specific Outcomes of the Study

The study yields several specific outcomes. First, it establishes green brand trust and authenticity as central levers in influencing Gen Z sustainable purchasing decisions. Second, it demonstrates that social media functions as a powerful contextual amplifier of green branding effects. Third, it confirms that price sensitivity remains a structural barrier to sustainable consumption among young consumers, necessitating integrated branding and pricing strategies.

7. Challenges and Future Research Directions

The growing body of research on green branding and sustainable consumption among Generation Z has significantly advanced understanding of environmentally oriented consumer behaviour. Nevertheless, several conceptual, methodological, and contextual challenges persist, which both constrain the generalizability of existing findings and open avenues for future scholarly inquiry.

7.1 Conceptual and Theoretical Challenges

One of the primary conceptual challenges lies in the inconsistent operationalization of green branding across studies. While some researchers conceptualize green branding narrowly as eco-labeling or green advertising, others adopt broader perspectives encompassing corporate environmental responsibility, ethical narratives, and sustainability-driven brand identity [14], [19]. This lack of conceptual uniformity limits theoretical integration and complicates cross-study comparisons. Future research should work toward a standardized, multidimensional conceptualization of green branding that captures both symbolic and substantive sustainability elements, particularly as perceived by Generation Z.

Another theoretical challenge concerns the overreliance on intention-based models. Although frameworks such as the Theory of Planned Behavior remain influential [15], they do not fully account for contextual and emotional factors shaping Gen Z's consumption behaviour in digital environments. Integrating complementary perspectives—such as identity theory, signaling theory, and social influence theory—could provide a more comprehensive explanation of how green branding translates into actual purchase behaviour.

7.2 Methodological Challenges

Methodologically, much of the existing literature relies on cross-sectional survey designs and self-reported measures of purchase intention. Such approaches are susceptible to social desirability bias, particularly in sustainability research where respondents may overstate pro-environmental attitudes [11]. For Generation Z, whose environmental consciousness is often socially valorized, this bias may be especially pronounced. Future studies should incorporate longitudinal designs, behavioural data,

and experimental methods to better capture causal relationships and real-world purchasing behaviour.

Sampling limitations also represent a persistent challenge. Many studies focus on student populations or urban consumers, thereby limiting the representativeness of findings. Given the socio-economic heterogeneity within Generation Z, future research should examine green branding responses across diverse income groups, geographic regions, and cultural contexts to enhance external validity [6], [10].

7.3 Practical and Market-Related Challenges

From a practical standpoint, the pervasive issue of greenwashing continues to undermine the effectiveness of green branding. As firms increasingly adopt sustainability rhetoric, distinguishing authentic green brands from opportunistic imitators becomes difficult for consumers. Although Generation Z demonstrates heightened skepticism and information-seeking behaviour, excessive or misleading claims can still generate confusion and distrust [12], [18]. This challenge underscores the need for stronger regulatory oversight and clearer sustainability communication standards.

Economic constraints constitute another significant barrier. Despite expressing strong environmental concern, many Gen Z consumers face limited purchasing power, which restricts their ability to consistently choose green products priced at a premium [6], [9]. This structural challenge suggests that green branding alone cannot drive sustainable consumption without complementary pricing strategies and broader systemic support.

7.4 Directions for Future Research

Future research should prioritize longitudinal studies to examine how Generation Z's responses to green branding evolve as they age and gain greater economic independence. Such work would provide valuable insights into whether observed intention-behaviour gaps persist over time or diminish with changing life circumstances.

Another promising avenue involves the use of digital trace data and neuromarketing techniques to study unconscious and real-time responses to green branding stimuli. Given Gen Z's high engagement with digital platforms, analyzing social media interactions, online reviews, and e-commerce behaviour could yield more objective indicators of sustainable purchasing decisions [3], [8].

Cross-cultural comparative studies also represent an important future direction. Much of the existing evidence is concentrated in specific regions, limiting understanding of how cultural values and institutional contexts shape Gen Z's interpretation of green branding. Comparative research across developed and emerging markets would deepen theoretical insight and inform globally relevant branding strategies.

CONCLUSION

This study set out to examine the role of green branding in shaping sustainable purchasing decisions among

Generation Z consumers. Through an integrated review of contemporary literature and the development of a comprehensive conceptual framework, the paper highlights that green branding influences Gen Z consumption primarily through perceived authenticity, green brand trust, and alignment with green self-identity, while being conditioned by price sensitivity and digital social norms. The findings underscore that Generation Z is neither uncritically receptive to green claims nor indifferent to sustainability narratives. Rather, this cohort evaluates green branding through a critical lens shaped by transparency expectations, peer influence, and economic realities. By addressing key theoretical and methodological gaps, the study contributes to sustainable marketing literature and provides a structured foundation for future empirical research. In conclusion, green branding holds significant potential to encourage sustainable consumption among Generation Z, but its effectiveness depends on ethical credibility, contextual sensitivity, and genuine organizational commitment to environmental responsibility.

REFERENCES

1. Theocharis, D. “Sustainable Consumption and Branding for Generation Z: Influence of Branding on Purchase Intention for Sustainable Technological Products.” *Sustainability*, vol. 17, no. 9, 2025.
2. Sayem, S. M. “What Drives Generation Z’s Green Purchases in Bangladesh: Mediating Role of Green Purchase Attitude.” *Journal of Cleaner Production*, special issue on sustainable consumption, 2025.
3. Shuvo, M. I. M. “Sustainable Clicks: Exploring Generation Z’s E-Commerce Engagement with Sustainable Products.” *Journal of Retailing and Consumer Services*, 2025.
4. Vishnoi, S. K. “What Drives Generation Z to Choose Green Apparel: Evidence from an Emerging Market.” *Fashion and Textiles*, 2025.
5. Kumar, S. *Multi-Modal Healthcare Dataset for AI-Based Early Disease Risk Prediction*. IEEE Dataport, 2025, doi:10.21227/p1q8-sd47.
6. Kumar, S. *FedGenCDSS Dataset for Federated Generative AI in Clinical Decision Support*. IEEE Dataport, July 2025, doi:10.21227/dwh7-df06.
7. Kumar, S. *Edge-AI Sensor Dataset for Real-Time Fault Prediction in Smart Manufacturing*. IEEE Dataport, June 2025, doi:10.21227/s9yg-fv18.
8. Kumar, S. “A Generative AI-Powered Digital Twin for Adaptive NASH Care.” *Communications of the ACM*, 27 Aug. 2025, doi:10.1145/3743154.
9. Kumar, S. “AI-Driven System and Machine Learning Models for Cardiovascular Disease Diagnostics, Readmission Risk Assessment, and Survival Prediction.” *Indian Patent Application* 202511107057, filed 5 Nov. 2025, published 26 Dec. 2025, iprsearch.ipindia.gov.in/PublicSearch.
10. Kumar, S. “Multimodal Generative AI Framework for Therapeutic Decision Support in Autism Spectrum Disorder.” *Proceedings of the IEEE 16th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON)*, Oct. 2025, pp. 309–315, doi:10.1109/UEMCON67449.2025.11267611.
11. Kumar, S. “Radiomics-Driven AI for Adipose Tissue Characterization: Towards Explainable Biomarkers of Cardiometabolic Risk in Abdominal MRI.” *Proceedings of IEEE UEMCON*, Oct. 2025, pp. 827–833, doi:10.1109/UEMCON67449.2025.11267685.
12. Kumar, S. “Generative Artificial Intelligence for Liver Disease Diagnosis from Clinical and Imaging Data.” *Proceedings of IEEE UEMCON*, Oct. 2025, pp. 581–587, doi:10.1109/UEMCON67449.2025.11267677.
13. Kumar, S. “Generative AI-Driven Classification of Alzheimer’s Disease Using Hybrid Transformer Architectures.” *IEEE International Symposium on Technology and Society (ISTAS)*, Sept. 2025, pp. 1–6, doi:10.1109/ISTAS65609.2025.11269635.
14. Kumar, S. “GenAI Integration in Clinical Decision Support Systems: Towards Responsible and Scalable AI in Healthcare.” *IEEE ISTAS*, Sept. 2025, pp. 1–7, doi:10.1109/ISTAS65609.2025.11269649.
15. Kumar, S., et al. “GPT-Powered Virtual Assistants for Intelligent Cloud Service Management.” *Proceedings of the IEEE SmartAIS Conference*, Oct. 2025, doi:10.1109/SmartAIS61256.2025.11198967.
16. Kumar, S., et al. “Future of Human-AI Interaction: Bridging the Gap with LLMs and AR Integration.” *IEEE SmartAIS Conference*, Oct. 2025, doi:10.1109/SmartAIS61256.2025.11199115.
17. Kumar, S., et al. “Fuzzy Logic-Driven Intelligent System for Uncertainty-Aware Decision Support Using Heterogeneous Data.” *Journal of Machine Computing*, vol. 5, no. 4, 2025, doi:10.53759/7669/jmc202505205.
18. Kumar, S., et al. “Enhancing AI Decision-Making with Explainable Large Language Models (LLMs) in Critical Applications.” *IEEE ACROSET Conference*, Sept. 2025, doi:10.1109/ACROSET66531.2025.11280656.
19. Kumar, S., et al. “Federated Learning in IoT: Secure and Scalable AI for Edge Devices.” *IEEE ACROSET Conference*, Sept. 2025, doi:10.1109/ACROSET66531.2025.11280741.
20. Kumar, S. “A Transformer-Enhanced Generative AI Framework for Lung Tumor Segmentation and Prognosis Prediction.” *Journal of Neonatal Surgery*, vol. 13, no. 1, Jan. 2024, pp. 1569–1583.
21. Kumar, S. “Adaptive Graph-LLM Fusion for Context-Aware Risk Assessment in Smart Industrial Networks.” *Frontiers in Health Informatics*, 2024, healthinformaticsjournal.com/index.php/IJMI/article/view/2813.
22. Kumar, S. “A Federated and Explainable Deep Learning Framework for Multi-Institutional Cancer Diagnosis.” *Journal of Neonatal Surgery*, vol. 12, no. 1, Aug. 2023, pp. 119–135, jneonatalsurg.com/index.php/jns/article/view/9461.
23. Kumar, S. “Explainable Artificial Intelligence for Early Lung Tumor Classification Using Hybrid CNN-Transformer Networks.” *Frontiers in*

Health Informatics, vol. 12, 2023, pp. 484–504, healthinformaticsjournal.com/downloads/files/2023-484.pdf.

- 24. Kumar, S. “A Large Language Model Framework for Intelligent Insurance Claim Automation and Fraud Detection.” *Journal of Computational Analysis and Applications*, vol. 32, no. 5, May 2024, pp. 1023–1034, eudoxuspress.com/index.php/pub/article/view/3950.
- 25. Kumar, S. “Generative AI in the Categorisation of Paediatric Pneumonia on Chest Radiographs.” *International Journal of Current Science Research and Review*, vol. 8, no. 2, Feb. 2025, pp. 712–717, doi:10.47191/ijcsrr/V8-i2-16.
- 26. Kumar, S. “Generative AI Model for Chemotherapy-Induced Myelosuppression in Children.” *International Research Journal of Modernization in Engineering Technology and Science*, vol. 7, no. 2, Feb. 2025, pp. 969–975, doi:10.56726/IRJMETS67323.
- 27. Kumar, S. “Behavioral Therapies Using Generative AI and NLP for Substance Abuse Treatment and Recovery.” *International Research Journal of Modernization in Engineering Technology and Science*, vol. 7, no. 1, Jan. 2025, pp. 4153–4162, doi:10.56726/IRJMETS66672.
- 28. Kumar, S. “Early Detection of Depression and Anxiety in the USA Using Generative AI.” *International Journal of Research in Engineering*, vol. 7, Jan. 2025, pp. 1–7, doi:10.33545/26648776.2025.v7.i1a.65.
- 29. Goel, Nayan. “Cloud Security Challenges and Best Practices.” *Journal of Tianjin University Science and Technology*, vol. 57, no. 6, 2024, pp. 571–583, doi:10.5281/zenodo.17163793.
- 30. Goel, Nayan, and Nandan Gupta. “Zero-Trust AI Security: Integrating AI into Zero-Trust Architectures.” *Journal of Tianjin University Science and Technology*, vol. 57, no. 10, 2024, pp. 158–173, doi:10.5281/zenodo.17149652.
- 31. Sridhar, Varadala, and Hao Xu. “Alternating Optimized RIS-Assisted NOMA and Nonlinear Partial Differential Deep Reinforced Satellite Communication.” *E-Prime: Advances in Electrical Engineering, Electronics and Energy*, 29 May 2024, doi:10.1016/j.prime.2024.100619.
- 32. Sridhar, Varadala, and S. Emalda Roslin. “Latency and Energy Efficient Bio-Inspired Conic Optimized and Distributed Q-Learning for D2D Communication in 5G.” *IETE Journal of Research*, 2021, pp. 1–13, doi:10.1080/03772063.2021.1906768.
- 33. Sridhar, V., et al. “Multivariate Aggregated NOMA for Resource-Aware Wireless Network Communication Security.” *Computers, Materials & Continua*, vol. 74, no. 1, 2023, pp. 1694–1708, doi:10.32604/cmc.2023.028129.
- 34. Sridhar, Varadala, et al. “Bagging Ensemble Mean-Shift Gaussian Kernelized Clustering-Based D2D Connectivity Enabled Communication for 5G Networks.” *E-Prime: Advances in Electrical Engineering, Electronics and Energy*, Dec. 2023, doi:10.1016/j.prime.2023.100400.
- 35. Sridhar, Varadala, and S. Emalda Roslin. “Multi-Objective Binomial Scrambled Bumble Bees Mating Optimization for D2D Communication in 5G Networks.” *IETE Journal of Research*, 2023, pp. 1–10, doi:10.1080/03772063.2023.2264248.
- 36. Sridhar, Varadala, et al. “Jarvis–Patrick Clusterative African Buffalo Optimized Deep Learning Classifier for Device-to-Device Communication in 5G Networks.” *IETE Journal of Research*, Nov. 2023, pp. 1–10, doi:10.1080/03772063.2023.2273946.
- 37. Sridhar, V., et al. “A Machine Learning-Based Intelligence Approach for MIMO Routing in Wireless Sensor Networks.” *Mathematical Problems in Engineering*, vol. 2022, 2022, pp. 1–13, doi:10.1155/2022/6391678.
- 38. Sridhar, Varadala, and S. Emalda Roslin. “Single-Linkage Weighted Steepest Gradient AdaBoost Cluster-Based D2D in 5G Networks.” *Journal of Telecommunication Information Technology*, Mar. 2023, doi:10.26636/jtit.2023.167222.
- 39. Dinesh, D., et al. “Artificial Intelligent-Based Self-Driving Cars for Senior Citizens.” *Proceedings of the 7th International Conference on Inventive Material Science and Applications (ICIMA)*, 2025, pp. 1469–1473, doi:10.1109/ICIMA64861.2025.11073845.
- 40. Hundekari, S., et al. “Impact of AI on Enterprise Decision-Making: Enhancing Efficiency and Innovation.” *Proceedings of the International Conference on Engineering, Technology & Management (ICETM)*, 2025, pp. 1–5, doi:10.1109/ICETM63734.2025.11051526.
- 41. Praveen, R., et al. “Overcoming Adoption Barriers: Strategies for Scalable AI Transformation in Enterprises.” *Proceedings of ICETM*, 2025, pp. 1–6, doi:10.1109/ICETM63734.2025.11051446.
- 42. Shrivastava, A., et al. “Drone Swarm Intelligence: AI-Driven Autonomous Coordination for Aerial Applications.” *Proceedings of the World Skills Conference on Universal Data Analytics and Sciences (WorldSUAS)*, 2025, pp. 1–6, doi:10.1109/WorldSUAS66815.2025.11199241.
- 43. Nutalapati, V., et al. “Immersive AI: Enhancing AR and VR Applications with Adaptive Intelligence.” *Proceedings of WorldSUAS*, 2025, pp. 1–6, doi:10.1109/WorldSUAS66815.2025.11199210.
- 44. Shrivastava, A., et al. “AI in Medical Imaging: Enhancing Diagnostic Accuracy with Deep Convolutional Networks.” *Proceedings of the International Conference on Computational, Communication and Information Technology (ICCCIT)*, 2025, pp. 542–547, doi:10.1109/ICCCIT62592.2025.10927771.
- 45. “Artificial Neural Networks for Independent Cyberattack Classification.” *Proceedings of the 2nd International Conference on*

Multidisciplinary Research and Innovations in Engineering (MRIE), 2025, pp. 572–576, doi:10.1109/MRIE66930.2025.11156728.

- 46. Sholapurapu, Prem Kumar. “AI-Driven Financial Forecasting: Enhancing Predictive Accuracy in Volatile Markets.” *European Economic Letters*, vol. 15, no. 2, 2025, pp. 1282–1291, doi:10.52783/eel.v15i2.2955.
- 47. Jain, S., et al. “Hybrid Encryption Approach for Securing Educational Data Using Attribute-Based Methods.” *Proceedings of the 4th OPJU International Technology Conference (OTCON)*, 2025, pp. 1–6, doi:10.1109/OTCON65728.2025.11070667.
- 48. Gautam, P. “Game-Hypothetical Methodology for Continuous Undertaking Planning in Distributed Computing Conditions.” *Proceedings of the International Conference on Computer Communication, Networks and Information Science (CCNIS)*, 2024, pp. 92–97, doi:10.1109/CCNIS64984.2024.00018.
- 49. Gautam, P. “Cost-Efficient Hierarchical Caching for Cloud-Based Key-Value Stores.” *Proceedings of CCNIS*, 2024, pp. 165–178, doi:10.1109/CCNIS64984.2024.00019.
- 50. Shekokar, K., and S. Dour. “Epileptic Seizure Detection Based on LSTM Model Using Noisy EEG Signals.” *Proceedings of the 5th International Conference on Electronics, Communication and Aerospace Technology (ICECA)*, 2021, pp. 292–296, doi:10.1109/ICECA52323.2021.9675941.
- 51. Patel, S. J., S. D. Degadwala, and K. S. Shekokar. “A Survey on Multi Light Source Shadow Detection Techniques.” *Proceedings of the International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS)*, 2017, pp. 1–4, doi:10.1109/ICIIECS.2017.8275984.
- 52. Nagar, M., et al. “A Hybrid Machine Learning Framework for Cognitive Load Detection Using Single-Lead EEG, CiSSA, and Nature-Inspired Feature Selection.” *Proceedings of WorldSUAS*, 2025, pp. 1–6, doi:10.1109/WorldSUAS66815.2025.11199069.