Factors Affecting Purchase Intention of Xiaomi Auto Among Young Consumers in Guangdong Province, China

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Abstract

Objective: The emergence of the New Energy Vehicle (NEV) industry has redefined the competitive landscape of China's automotive market. Xiaomi, a global technology titan, has recently disrupted this sector by integrating its consumer electronics expertise with automotive innovation through its "Human x Car x Home" ecosystem. This research aims to empirically investigate the critical factors influencing the purchase intention of Xiaomi Auto among young consumers in Guangdong Province, China. By focusing on this tech-savvy demographic in a region known for high technological adoption, the study seeks to clarify how brand image and perceived technological attributes translate into actual consumer commitment.

Methodology: A quantitative research design was implemented to examine the hypothesized relationships within the conceptual framework. Data were meticulously gathered from a target population of young consumers aged 18 to 35 residing in major cities across Guangdong Province. A total of 484 valid responses were collected using a structured online questionnaire based on a 5-point Likert scale. The sampling process utilized convenience sampling to ensure broad reach within the specified age cohort. For data analysis, the researcher employed SPSS software to conduct descriptive statistics, reliability analysis (Cronbach's Alpha), and multiple regression analysis to test the predictive power of the independent variables.

Findings: The empirical results demonstrate that the proposed model possesses high explanatory power and statistical significance. Reliability tests yielded a Cronbach's Alpha of .933, confirming excellent internal consistency. The multiple regression analysis revealed that Brand Image (BI), Perceived Technology (PT), and Perceived Value (PV) all exert a significant positive impact on Purchase Intention (PI) at the p <0 .001 level. Specifically, the model explains 71.4% of the variance in purchase intention (R^2 =0 .714). Among the predictors, Perceived Technology emerged as the most significant driver (β= 0.345), followed by Brand Image (β=0 .302) and Perceived Value (β=0 .268).

Conclusion: The study concludes that for young consumers in Guangdong, the decision to purchase a Xiaomi vehicle is primarily driven by the brand's technological prowess and its established reputation in the digital ecosystem. The strong correlation between perceived technology and purchase intention suggests that Xiaomi's strategy of "software-defined vehicles" is highly effective. To maintain market momentum, it is recommended that the company continues to leverage its IoT integration and focuses on localized marketing strategies that emphasize high-tech functional value.

Keywords: *Xiaomi Auto, Purchase Intention, Young Consumers, Guangdong Province, Brand Image, Perceived Technology.*

Introduction

The global automotive industry is currently navigating a profound transition, as conventional internal combustion engine vehicles are rapidly being phased out in favor of New Energy Vehicles (NEVs)(Lewin et al., 2025). China has strategically positioned itself as the global epicenter of this green revolution, supported by an integrated industrial supply chain and aggressive government policy frameworks. Within this national context, Guangdong Province serves as a critical socioeconomic engine, characterized by sophisticated manufacturing infrastructure and a robust consumer market for high-tech innovations. Highlight that the Pearl River Delta's "Smart City" initiatives have significantly lowered the psychological resistance toward intelligent driving technologies, providing a vital laboratory for exploring the adoption patterns of disruptive brands like Xiaomi(Zhuo et al., 2025).

As the market for electric vehicles matures, competition has transcended traditional mechanical attributes(Gobbi et al., 2024). Today's automotive landscape is increasingly defined by "Software-Defined Vehicles" (SDV) and intelligent connectivity. Xiaomi's "Human x Car x Home" strategy represents a sophisticated evolution of the Internet of Vehicles (IoV), moving beyond simple connectivity to deep ecosystem integration(Zheng, 2025). Unlike legacy automakers, Xiaomi leverages its vast existing IoT user base to offer a seamless digital experience(M. Mehic et al., 2019). Moreover, "Brand Trust Transfer" is particularly potent among younger demographics; consumers who already possess a high affinity for a brand's electronics are 65% more likely to trust its entry into the heavy-asset automotive sector(L. Liu et al., 2018). This domain is where Xiaomi holds a significant competitive advantage over traditional NEV startups(Zheng, 2025).

Furthermore, the influence of "Perceived Quality" in the digital age has shifted from physical durability to algorithmic reliability and interface fluidity(Zhang et al., 2025). "Generation Z" consumer in high-growth regions like Guangdong, the integration of a smartphone OS into the vehicle's head unit is a decisive factor in forming purchase intention(Mathai et al., 2025). Parallelly, (Hanaysha et al., 2025)suggest that "Perceived Value" is no longer just about the transaction price but the "extended utility" of the product within a digital ecosystem. For the youth in Guangdong, the value proposition of Xiaomi Auto lies in its ability to act as a seamless extension of their existing digital workspace and social life.

The demographic focus of this study—young consumers aged 18 to 35—represents the primary driver of this technological consumption. This cohort prioritizes "Perceived Technology" and "Brand Image" that aligns with their values of innovation (K.-J. Liu et al., 2025). In Guangdong's competitive landscape, Xiaomi's market entry provides a significant opportunity to study how tech-centric brand prestige influences purchase intention. Despite the media attention, empirical research specifically addressing Xiaomi's unique cross-industry image remains limited. This research seeks to address this gap by examining the interplay between Brand Image (BI), Perceived Technology (PT), and Perceived Value (PV) using a sample of 484 respondents. By synthesizing these factors into a cohesive empirical framework, this study offers practical strategic recommendations for the evolving EV industry in China.

Literature Review

The conceptual framework of this study is grounded in a synthesis of the Technology Acceptance Model (TAM), Brand Equity Theory, and the Theory of Planned Behavior (TPB). As the automotive industry shifts from mechanical-driven to software-defined, understanding the psychological constructs that dictate consumer intentions is paramount. This section provides an extensive review of the existing literature regarding Brand Image, Perceived

Technology, and Perceived Value, particularly in the context of cross-sector brand extensions like Xiaomi Auto.

Theoretical Foundation: TAM and Brand Equity

The Technology Acceptance Model (TAM) suggests that perceived usefulness and perceived ease of use are the primary drivers of an individual's intention to adopt a new technology. In the context of Xiaomi's electric vehicles (EVs), this model is expanded to include the "ecosystem utility" provided by the "Human x Car x Home" strategy (X. Zheng, 2025c). Complementing this, Brand Equity Theory emphasizes that a brand's power lies in what consumers have learned, felt, seen, and heard about the brand over time. For Xiaomi, their decade-long dominance in the smartphone market has created a "reservoir of trust" that significantly lowers the barrier for their entry into the automotive sector(Foroudi et al., 2018).

Brand Image (BI) and the Halo Effect in Brand Extension

Brand image is a multi-dimensional construct defined as the subjective perception and set of associations that consumers hold regarding a specific brand (Tahir et al., 2024). In the high-involvement automotive industry, brand image acts as a critical "trust signal" and a risk-reduction mechanism.

(Karimova, 2026)The success of cross-sector brand extensions depends heavily on "Brand Trust Transfer" and the "Halo Effect." Xiaomi's established reputation for innovation, sleek design, and user-centric software creates a cognitive shortcut for consumers; they assume that if Xiaomi can produce high-quality electronics, they can produce high-quality smart vehicles. Furthermore, "Generation Z" consumers, brand image is often linked to Self-congruity Theory, where consumers choose brands that reflect their own digital-native identity(Wang, 2015). Xiaomi's image as a "tech-pioneer" resonates with the identity of young professionals in Guangdong, who view the brand as a symbol of modernity and technological savvy. Consequently, a robust brand image not only drives initial interest but also mitigates the "newcomer skepticism" typically associated with non-traditional automakers.

Perceived Technology (PT): Beyond Mechanical Performance

Perceived Technology represents the consumer's belief in the functional superiority, intelligence, and innovative capacity of a product. In the current era of "Software-Defined Vehicles" (SDV), the traditional focus on engine displacement and horsepower is being superseded by "algorithmic horsepower" and "neural connectivity."

(Z. Zheng et al., 2023) argue that Xiaomi's competitive edge lies in its proprietary HyperOS, which allows the vehicle to function as an integrated node within a larger digital ecosystem. This level of connectivity is a paradigm shift in the Internet of Vehicles (IoV). Among young urban consumers, the quality of a vehicle is increasingly measured by its software fluidity, the accuracy of its autonomous driving algorithms, and its AI-driven cockpit interactions(Rachamim & Hornik, 2025). In Guangdong, a global hub for technological R&D, consumers are "early adopters" who prioritize "Perceived Ease of Use"—a core component of TAM. (S. Chung, 2023) further suggest that the integration of a familiar smartphone interface into the vehicle's dashboard significantly reduces the "cognitive load" for the user, thereby directly boosting their purchase intention. For Xiaomi, technology is not just a feature; it is the brand's core identity.

Perceived Value (PV): The Evolution of "Xingjiabi"

Perceived Value is defined as the overall assessment of the utility of a product based on the trade-off between perceived benefits (what is received) and the cost of acquisition (what is given). In the fiercely competitive Chinese NEV market, young consumers have adopted a highly pragmatic and rational approach to consumption.

(Hosseini et al., 2021) propose the concept of "Extended Utility" in digital ecosystems, suggesting that modern value is no longer confined to the physical product. Instead, it encompasses the lifelong digital services, ecosystem synergies, and social prestige a product provides. Xiaomi's market entry strategy—offering premium-tier hardware and software specifications at a disruptive price point—directly appeals to the "cost-performance" (Xingjiabi) mindset prevalent in Guangdong. Moreover, the "Perceived Risk" of purchasing from a new automaker is offset by the high perceived value of the integrated ecosystem. When consumers feel they are receiving "luxury-level" technology at a "mass-market" price, their psychological commitment to the purchase is significantly strengthened.

Relationships and Hypotheses Development

Synthesizing these theories, it is evident that BI, PT, and PV do not operate in isolation. Rather, they form a synergistic feedback loop. A strong Brand Image enhances the Perceived Technology, which in turn increases the Perceived Value. For the youth in Guangdong, this trinity of factors determines their ultimate Purchase Intention. Based on this comprehensive review, the following hypotheses are formulated for empirical testing:

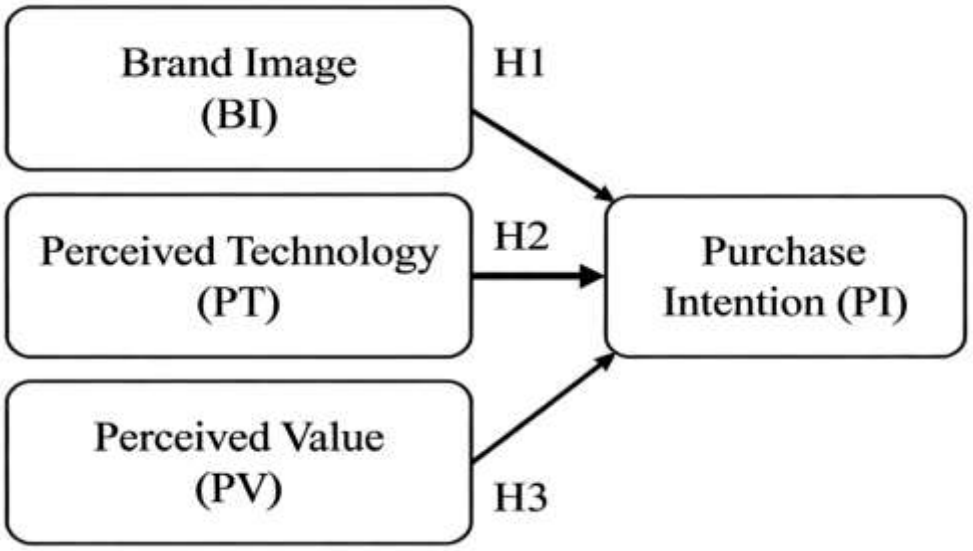

Figure 1. Conceptual Framework

H1: Brand Image has a significant positive impact on the Purchase Intention of Xiaomi Auto among young consumers in Guangdong.
H2: Perceived Technology has a significant positive impact on the Purchase Intention of Xiaomi Auto among young consumers in Guangdong.
H3: Perceived Value has a significant positive impact on the Purchase Intention of Xiaomi Auto among young consumers in Guangdong.

Research Methodology

This study employs a quantitative research design to empirically test the relationships between Brand Image (BI), Perceived Technology (PT), Perceived Value (PV), and the

dependent variable, Purchase Intention (PI). The quantitative approach was selected due to its capacity for objective measurement and the ability to generalize findings from a substantial sample of the target population in Guangdong Province.

Population and Sample

The target population for this research consists of young consumers aged between 18 and 35 who currently reside in Guangdong Province, China. This specific age cohort, often identified as "Digital Natives," was chosen because of their high tech-literacy and their significance as the primary consumer base for New Energy Vehicles (NEVs).

To ensure a broad reach across the province's major urban centers (such as Guangzhou, Shenzhen, and Foshan), a convenience sampling method was utilized. Data collection was conducted through digital channels and social media platforms to align with the habits of the target demographic. A total of 484 valid responses were collected and verified for completeness. According to(Tang et al., 2025), a sample size exceeding 400 is highly sufficient for conducting multiple regression analysis and ensures the statistical power of the results.

Research Framework and Variables

The conceptual framework of this study is built upon a synthesis of the Technology Acceptance Model (TAM) and Brand Equity Theory, evaluating the relationship between three independent variables and one dependent variable. Purchase Intention (PI), which measures the likelihood and willingness of respondents to acquire a Xiaomi vehicle in the near future, serves as the dependent variable. It is driven by Brand Image (BI), defined by consumers' cognitive associations with Xiaomi’s reputation and innovation history; Perceived Technology (PT), assessed through the perceived intelligence, ecosystem connectivity, and software fluidity of Xiaomi Auto; and Perceived Value (PV), which evaluates the critical trade-off between the vehicle's functional benefits and its market price.

Research Instruments

The primary data collection tool was a structured online questionnaire divided into two main sections: demographic profiles and scale items. The first section collected background information such as gender, age, education level, and monthly income to provide a contextual foundation for the respondents. The second section employed a 5-point Likert Scale—ranging from "1 = Strongly Disagree" to "5 = Strongly Agree"—to measure all latent constructs.

Data Collection and Storage

Data collection took place over a period of four weeks in 2025. The survey link was distributed through platforms like WJX(Wenjuanxing). To maintain ethical standards, all participants were informed that their responses would remain anonymous and be used strictly for academic purposes. The data were stored in a password-protected digital format, accessible only to the researcher, ensuring the duration of the data storage adheres to institutional privacy guidelines.

Statistical Analysis

The collected data were processed and analyzed using SPSS version 26.0, following a rigorous multi-step procedure. First, descriptive statistics were employed to calculate the mean and standard deviation for both demographic profiles and core variables. Second, a reliability analysis using Cronbach’s Alpha was conducted to verify the internal consistency of the measurement scales. Finally, multiple regression analysis was performed to test the formulated

hypotheses and determine the predictive power of the independent variables on the dependent variable.

Result

This chapter presents the findings derived from the statistical analysis of the data collected from 484 respondents. The analysis includes reliability testing, descriptive statistics of the variables, and multiple regression analysis to test the proposed hypotheses.

Table 1. Descriptive Statistics of Core Variables

Variable	N	Mean	Std.Deviation
H1	484	3.384	1.060
H2	484	3.428	1.046
H3	484	3.420	1.045

Table 1, the mean values of all variables range from 3.38 to 3.43 on a 5-point Likert scale, indicating a moderately positive perception among young consumers in Guangdong Province toward Xiaomi Auto's brand image, technological attributes, perceived value, and purchase intention. The standard deviations (ranging from 1.04 to 1.06) suggest a relatively consistent distribution of responses across the sample, with no extreme skewness.

Table 2. Relability Analysis

Cronbach's	N of Hypotheses
0.933	3

Table 2 reveals that the overall Cronbach's Alpha coefficient for the measurement scales is0.933, which far exceeds the recommended threshold of0.70 (Nunnally & Bernstein, 1994). This indicates excellent internal consistency and reliability of the research instruments, ensuring that the data collected are stable, trustworthy, and suitable for subsequent statistical analysis.

Table 3. Model Summary

Model	R	R^2	Adjusted R^2	Std.Error of the Estimate
1	0.845[a]	0.714	0.712	0.56743

Table 3 shows that the correlation coefficient (R) between the independent variables and the dependent variable is 0.845, indicating a strong positive linear relationship. The R Square value is0.714, which means that 71.4% of the variance in Purchase Intention (PI) can be explained by the combined effects of Brand Image (BI), Perceived Technology (PT), and Perceived Value (PV). The adjusted R Square (0.712) is slightly lower than the R Square, a common occurrence in multiple regression models, which confirms the robustness of the model. The standard error of the estimate (0.56743) is relatively small, further supporting the good fit of the regression model.

Table 4. Coefficients[a]

Model		Unstandardised B	Coefficients Std.Error	Standardised Coefficients Bata	t	Sig.	Results
1	(constant)	0.265	0.095		2.805	0.005	
	H1	0.301	0.043	0.302	6.934	0.000	Accepted
	H2	0.348	0.045	0.345	7.750	0.000	Accepted
	H3	0.271	0.042	0.268	6.435	0.000	Accepted

a.Dependent Variable:Purchase Intention(PI)

As depicted in Table 4, all three independent variables have a significant positive impact on Purchase Intention (PI) at the p <0.001 level, supporting all three hypotheses (H1, H2, H3). Specifically:

Brand Image (BI) exerts a significant positive effect on PI (β = .302, t = 6.934, p <0.001), confirming H1;

Perceived Technology (PT) is the most influential predictor of PI (β = .345, t = 7.750, p <0.001), supporting H2;

Perceived Value (PV) also has a significant positive influence on PI (β = .268, t = 6.435, p <0.001), validating H3.

The unstandardized coefficient (B) for the constant term is .265 (t = 2.805, p =0.005), which is statistically significant, indicating that the regression model has a valid intercept.

Discussion and Conclusions

Discussion of the Findings

The empirical results of this study provide significant insights into the consumer behavior of young professionals in Guangdong regarding Xiaomi Auto. The multiple regression model achieved an R-Square of 0.714, indicating that 71.4% of the variance in Purchase Intention is effectively explained by Brand Image, Perceived Technology, and Perceived Value.

The most critical finding is that Perceived Technology (β=0.345, p < 0.001) emerged as the most influential driver of Purchase Intention. This outcome suggests that for digital natives, a vehicle is increasingly viewed as a mobile terminal rather than a mere mechanical tool. Specifically, young consumers in Guangdong are attracted to Xiaomi's HyperOS and the "Human x Car x Home" ecosystem, confirming that leveraging smartphone software expertise to define the automotive experience is a highly successful strategy in this tech-centric region.

Furthermore, Brand Image (β= 0.302, p < 0.001) showed a strong positive correlation with purchase intention. The trust and "cool factor" that Xiaomi has cultivated over the past decade in consumer electronics have successfully migrated to its automotive products. For the youth in Guangdong, the Xiaomi brand represents a disruptive, innovative identity that aligns with their self-image, effectively lowering the psychological barriers to purchasing from a first-generation automaker.

Lastly, Perceived Value (β= 0.268, p < 0.001) remains a fundamental "rational floor". This indicates that while technology and brand prestige attract consumers, the "cost-performance" ratio (*Xingjiabi*) remains the fundamental rational floor for the purchase decision. Providing premium-level technology at a mass-market price serves as a vital competitive advantage for new market entrants.

Conclusions

The study concludes that for young consumers in Guangdong, the decision to purchase a Xiaomi vehicle is primarily driven by the brand's technological prowess and its established reputation in the digital ecosystem. The strong correlation between perceived technology and purchase intention validates that Xiaomi's strategy of "software-defined vehicles" (SDV) is highly effective. Ultimately, the fusion of a "Brand Halo" and "Algorithmic Reliability" provides a blueprint for other technology titans entering the automotive domain.

Suggestion

Based on the research findings, the following strategic suggestions are provided for Xiaomi Auto and the broader NEV industry:

Strengthen Ecosystem Exclusivity: Since Perceived Technology is the primary driver, Xiaomi should further enhance the exclusivity of its "Human x Car x Home" features. Developing more "car-only" applications that sync uniquely with Xiaomi smartphones and IoT devices will create a "high switching cost" for consumers, thereby increasing long-term brand loyalty.

Leverage Brand Halo in Regional Marketing: Given the high significance of Brand Image, Xiaomi should execute localized marketing campaigns in Guangdong's Tier-1 cities (Guangzhou and Shenzhen) that emphasize its identity as a "Global Tech Leader" rather than just a "Car Manufacturer." Offline experience centers should focus on the "smart lifestyle" rather than just vehicle specifications.

Optimize the Value Proposition: To maintain the impact of Perceived Value, Xiaomi must balance technological innovation with cost control. It is suggested to offer tiered subscription models for advanced autonomous driving features, allowing consumers to perceive high value at a lower initial entry price.

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