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FROM PRICE ADVANTAGE TO BRAND CONFIDENCE: INDONESIAN CONSUMERS' CHANGING PERCEPTIONS OF CHINESE-MADE SMARTPHONES

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Abstract
China's expanding digital and consumer-goods industries have reshaped competition in Asian markets, while smartphones have become important gateways to participation in the digital economy. This paper examines Indonesian consumers' perceptions of Chinese-made smartphones and changes in brand preferences between 2021 and 2026. It compares two consumer surveys conducted in 2021 (N = 1,101) and 2026 (N = 629), focusing on brand choice, perceived product characteristics, changes over time, and implications for consumer behavior and marketing strategy. Xiaomi remained the most widely used brand, although its share declined from 40.7% to 36.9%. Vivo declined from 25.2% to 17.3%, while OPPO increased from 11.0% to 24.8%. Huawei accounted for 12.9% of respondents in 2026. Meanwhile, respondents who had never used a Chinese smartphone declined from 22.6% to 8.1%. Despite greater market penetration, perceptions across seven attributes declined moderately, with the overall score falling from 3.93 to 3.81 on a five-point scale. The findings suggest that Chinese smartphone brands are moving beyond price-based competition toward differentiated positioning, technology, product experience, and perceived value. The paper discusses implications for consumer behavior, country-of-origin research, and inclusive digital transformation in Asia.
Keywords: *Chinese smartphones; Indonesian consumers; country-of-origin effect; brand image; inclusive transformation.*

1. Introduction

China's transformation from a predominantly manufacturing-oriented economy into a major source of technology, innovation, and globally recognized brands has significantly reshaped competition in global consumer markets. Chinese firms have increasingly moved beyond the traditional role of low-cost manufacturers toward the development of technological capabilities, proprietary brands, product innovation, and international market presence. Research on Chinese firms shows that their internationalization has involved not only the exploitation of manufacturing capabilities but also the acquisition and development of technological and brand assets (Child & Rodrigues, 2005). In the electronics sector, Chinese firms have progressively built technological capabilities through learning, research and development, global value chains, and internationalization (Kimura, 2019). Studies of Chinese innovative firms similarly indicate that innovation capability has become an important determinant of their internationalization strategies (Liao et al., 2020). This transformation is particularly visible in the smartphone industry, where Chinese companies such as Huawei, Xiaomi, OPPO, vivo, and other brands have evolved from latecomers into significant global competitors. Research on the Chinese mobile-phone sector shows that Chinese firms have followed distinctive catch-up strategies, combining technological development with increasingly sophisticated marketing strategies as the industry has matured (Malerba et al., 2021).

The changing position of Chinese firms is particularly significant in Southeast Asia. The region has become an important destination for Chinese consumer products and an increasingly important arena for competition among Chinese, Japanese, Korean, American, and local brands. Euromonitor International reports that Chinese exports to Southeast Asia reached USD 587 billion in 2024, an increase of 12% from the previous year, making the region China's largest export destination. Chinese firms have been particularly successful in consumer electronics, appliances,

and other technology-intensive categories, combining product innovation with competitive pricing and increasingly sophisticated branding strategies (Euromonitor International, 2025). In the smartphone category, Chinese brands' combined volume share in Southeast Asia reportedly increased from approximately 21% in 2014 to more than 60% in 2024 (Euromonitor International, 2025). This development indicates that Chinese smartphone brands are no longer competing merely as low-cost alternatives but have become important actors in the region's consumer technology markets.

The importance of Chinese consumer technology is closely connected with the development of the Asian digital economy. Smartphones have evolved from relatively simple communication devices into multifunctional interfaces between individuals and the digital economy. They provide access to communication, social media, e-commerce, digital payments, education, information, entertainment, and a growing range of economic and public services. The International Telecommunication Union and Broadband Commission have consequently identified smartphone access as an important dimension of digital inclusion, noting that gaps in smartphone adoption can continue to limit the socio-economic benefits of connectivity even where mobile networks are available (Broadband Commission, 2022). The Asian Development Bank similarly emphasizes that digital transformation can contribute to inclusive development by improving access to finance and education, increasing productivity, and expanding opportunities for individuals and small businesses, while also recognizing persistent digital divides across developing Asia (Asian Development Bank, 2025). Thus, the affordability, reliability, and technological capability of smartphones have implications beyond individual consumption: they can influence people's ability to participate meaningfully in the digital economy.

This relationship is particularly relevant in Indonesia. Indonesia is Southeast Asia's largest economy and one of the world's most populous countries, making it one of the region's most important consumer markets (World Bank, 2026a). Its digital economy was the largest in ASEAN in 2025, with a gross merchandise value estimated at USD 99 billion, although substantial disparities in digital access and quality remain across regions and socioeconomic groups (World Bank, 2025). The World Bank reports that internet use in Indonesia has expanded considerably, reaching approximately 73% of the population in 2024, while important urban-rural and regional disparities persist (World Bank, 2026b). In this context, the availability of affordable and capable smartphones is closely connected with the broader question of who can participate in Indonesia's rapidly developing digital economy.

Chinese smartphone manufacturers have established a particularly strong position in this market. Xiaomi, OPPO, vivo, Huawei, and other Chinese brands compete across different price segments and increasingly differentiate themselves through technology, design, cameras, artificial intelligence, ecosystem integration, retail presence, and brand experience. Recent market data illustrate the intensity of this competition. In the second quarter of 2025, Xiaomi accounted for approximately 21% of smartphone shipments in Indonesia, according to Counterpoint Research (Kusuma & Jain, 2025). By the first quarter of 2026, OPPO had taken the leading position in Indonesia's smartphone shipment market, while Xiaomi held approximately 21% of the market, illustrating how quickly competitive positions can change (Counterpoint Research, 2026). These developments make Indonesia an important setting for examining not only the market penetration of Chinese smartphone brands but also the perceptions that underpin consumer choice.

However, market penetration does not necessarily mean that consumers perceive Chinese products positively in all respects. Country-of-origin research has long demonstrated that information about where a product is made can influence consumers' evaluation of product quality and purchase decisions. Country of origin can function as an informational cue, particularly when consumers have incomplete information about a product (Diamantopoulos et al., 2017). At the same time, country-of-origin effects interact with other product and brand attributes. Consumers may evaluate country of origin differently depending on product category, brand familiarity, perceived quality, price, and previous experience (Elliott & Cameron, 1994; Yunus & Rashid, 2016).

This issue is especially relevant to Chinese products. For decades, "Made in China" was widely associated in international consumer markets with mass production, low prices, and, in some cases, lower quality or reliability. Recent evidence suggests, however, that this stereotype is changing. Euromonitor International (2025) observes that Chinese brands in Southeast Asia are increasingly being evaluated not merely for low prices but also for quality, innovation, and value. Research specifically examining Indonesian consumers likewise identifies a decline in negative stereotypes toward Chinese smartphone brands, with consumers increasingly emphasizing the relationship between price and performance rather than simply associating Chinese products with cheapness (Amrullah & Purnomo, 2023). This transformation is consistent with the broader evolution of Chinese firms from manufacturing-oriented latecomers toward innovative global competitors.

Nevertheless, the relationship between country image, brand image, product quality, and consumer choice remains complex. Previous research on Chinese smartphones in Indonesia has shown that country-of-origin image and brand image can influence purchase intention through perceived quality and consumer uncertainty (Berliando & Wardhani, 2022; Wibowo et al., 2021). Research on Chinese smartphone brands has also found that brand image may have a more direct influence on purchase intention than country-of-origin image (Darmawan et al., 2021). These findings suggest that consumers do not necessarily evaluate all Chinese smartphones as a single homogeneous category. Instead, country of origin may provide an initial evaluative cue, while individual brands increasingly compete through their own reputations, product performance, technological capabilities, and consumer experiences.

Despite these insights, an important question remains insufficiently explored: *how have Indonesian consumers' choices and perceptions of Chinese smartphone brands changed over time?* Most existing studies provide cross-sectional evidence concerning country-of-origin image, perceived quality, brand image, and purchase intention. They offer valuable explanations of consumer behavior at a particular point in time, but they provide less evidence about whether the underlying basis of consumer acceptance changes as Chinese smartphone brands become more established.

This study addresses this issue by comparing two consumer surveys conducted in Indonesia in 2021 and 2026. Rather than examining only current market penetration, the study investigates whether the brands used by respondents and their perceptions of Chinese-made smartphones have changed over the five-year period. The analysis measures consumer perceptions across seven dimensions: price advantage, perceived added value, innovation, novelty of design, technological capability, quality and reliability, and brand image.

The comparison is particularly interesting because it may reveal a possible tension between *market penetration and consumer perception*. If Chinese smartphone brands have become more widely used while perceptions of their price advantage, innovation, technology, quality, and brand image have changed, this may indicate that the basis of consumer acceptance is also changing. Greater familiarity with Chinese brands may reduce the salience of country-of-origin stereotypes while simultaneously raising consumers' expectations regarding product performance and brand experience.

The study therefore addresses five research questions:

1.) Which Chinese smartphone brands are chosen by Indonesian consumers, and what proportion of respondents use each brand?
2.) What product characteristics are associated with consumers' choices of Chinese smartphone brands?
3.) Have brand preferences and consumer perceptions changed between 2021 and 2026?
4.) If changes have occurred, what factors may help explain these changes?

5.) What are the implications of these changes for understanding consumer behavior and developing marketing strategies for Chinese smartphone brands?

By comparing the two surveys, this study contributes to the literature in three respects. First, it adds a temporal dimension to research on country-of-origin and Chinese smartphone brands in Indonesia. Second, it distinguishes between the growing market presence of Chinese smartphone brands and consumers' perceptions of their specific product characteristics. Third, it connects consumer behavior with the broader transformation of the Asian digital economy.

The study is also relevant to the theme of digital economy, human dignity, and inclusive transformation in Asia. Smartphones are not simply consumer goods; they are increasingly important gateways through which individuals access economic opportunities, financial services, education, information, social networks, and public services. Greater availability of affordable and capable smartphones can therefore contribute to digital inclusion. Yet inclusion should not be understood merely as increasing device ownership. Meaningful inclusion requires access to technology that is affordable, reliable, useful, and capable of enabling people to participate effectively in economic and social life. From this perspective, the evolution of Chinese smartphone brands in Indonesia provides a useful case for examining how competition, innovation, affordability, and consumer trust interact in the broader process of digital transformation in Asia.

2. Literature Review

2.1 Consumer Perception and Perceived Value

Consumer perception refers to the process through which individuals select, organize, and interpret information to form judgments about products and brands (Schiffman & Wisenblit, 2018). These judgments are shaped not only by objective product characteristics but also by consumers' prior experiences, knowledge, expectations, price perceptions, brand familiarity, and available information.

A central concept in consumer evaluation is *perceived value*. Consumers generally assess a product by comparing the benefits they expect to receive with the sacrifices required to obtain and use it. Benefits may include performance, features, design, convenience, and technological capabilities, while sacrifices include monetary price, time, effort, and perceived risk (Kotler et al., 2022). Zeithaml (1988) similarly conceptualizes perceived value as the consumer's overall assessment of a product's utility based on perceptions of what is received and what is given. Thus, price does not operate independently of quality: a low-priced product can generate high perceived value when consumers believe that its performance and benefits adequately compensate for the price paid.

This perspective is particularly relevant to smartphones, where consumers evaluate multiple attributes simultaneously. Technology, innovation, design, reliability, and brand reputation can compensate for a higher price, while a low price may not generate value if consumers perceive the product as unreliable or technologically inferior. Consequently, the seven dimensions examined in this study—price advantage, added value, innovation, design novelty, technological capability, quality and reliability, and brand image—can be understood as interconnected components of consumers' overall evaluation of Chinese smartphones.

2.2 Country-of-Origin and Chinese Products

Country-of-origin (COO) refers broadly to the influence of consumers' perceptions of a product's originating country on their evaluation and behavioral responses. Country of origin can function as an informational cue, particularly when consumers have limited information about a product or brand. A substantial meta-analysis by Verlegh and Steenkamp (1999) found that country of origin affects product evaluations, particularly perceived quality, although the magnitude of the effect varies across products, consumers, and contexts. More recent meta-analytic evidence confirms that country-of-origin image has a moderate positive effect on consumer brand evaluations, including brand-specific associations and brand commitment

(Oduro et al., 2024).

Country-of-origin effects, however, should not be treated as a simple or permanent response to a "Made in" label. Consumers may distinguish among country image, product-country image, corporate image, and individual brand image. Fan (2019), for example, emphasizes the distinction between China's country image, corporate image, and brand image. Consumers may therefore hold mix ed evaluations: they may have reservations about China as a country while simultaneously developing positive perceptions of a particular Chinese brand through product experience.

This distinction is important for Chinese smartphones because Xiaomi, OPPO, vivo, Huawei, and other brands do not necessarily occupy the same position in consumers' minds. Meta-analytic research also suggests that the effects of different country-of-origin components vary, with country-of-brand effects particularly relevant to purchase intention (De Nisco & Oduro, 2022). In other words, consumers may increasingly evaluate a Chinese smartphone according to *which Chinese brand it is*, rather than simply according to the fact that it is Chinese.

Evidence from Indonesia supports this more nuanced interpretation. Berliando and Wardhani (2022) found that country-of-origin and brand image reduced customer uncertainty, while lower uncertainty was associated with stronger purchase intention. In this context, customer uncertainty refers to consumers' doubts or lack of confidence about the product and its expected performance. Their findings suggest that favorable country and brand images can reduce consumers' uncertainty about whether an OPPO smartphone will deliver the expected benefits. Darmawan et al. (2021) similarly found an important role for brand image in explaining purchase intention, while Wibowo et al. (2021) highlighted perceived quality as an important link between country-of-origin, brand image, and purchase intention.

2.3 Chinese Smartphones and the Changing Meaning of "Value"

Chinese smartphone brands have increasingly challenged the traditional stereotype of Chinese products as inexpensive but technologically inferior. Amrullah and Purnomo (2023), through their analysis of Indonesian smartphone communities, found that negative perceptions of Chinese brands were declining. Consumers increasingly evaluated brands such as Xiaomi, OPPO, and vivo according to whether their features and performance were "worth the price," suggesting a shift from a low-price/low-quality stereotype toward a price–performance/value perspective.

This shift is consistent with the broader development of consumer technology brands. Vera-Martínez (2021) found that perceived innovativeness and perceived benefits are important antecedents of consumer identification and loyalty toward technology brands. In technology markets characterized by rapid product cycles, consumers may therefore evaluate brands not simply on whether they offer affordable products but on whether they continuously deliver meaningful technological and functional benefits.

The meaning of value can consequently change as a product category matures. When a technology is relatively unfamiliar, consumers may rely more heavily on extrinsic cues such as country of origin, price, and brand reputation. As familiarity and direct experience increase, consumers can rely more on their own evaluations of performance, reliability, design, and technological capability. Research on country image similarly shows that familiarity with foreign brands, products, and countries is associated with more developed country-image perceptions (Leonidou et al., 2022).

This suggests that consumer perceptions should be understood as dynamic rather than static. Changes may result from accumulated consumer experience, increasing brand familiarity, technological upgrading, changing competitive standards, and shifts in the

positioning of the brands themselves. As Chinese smartphones become mainstream products rather than unfamiliar alternatives, consumers may become less concerned with whether they are "Chinese" and more concerned with whether a particular brand provides sufficient value, innovation, quality, reliability, and technological capability.

Accordingly, the strategic question for Chinese smartphone manufacturers is no longer simply: How can Chinese brands offer smartphones at lower prices? It increasingly becomes: How can Chinese brands deliver superior perceived value and convince consumers that their products are technologically capable, innovative, reliable, and trustworthy? This study examines whether the comparison between Indonesian consumer surveys in 2021 and 2026 provides evidence of such a transformation. In particular, it investigates whether changes in brand choice are accompanied by changes in the perceived price advantage, value, innovation, design, technology, quality, reliability, and brand image of Chinese smartphones.

3. Research Methods

3.1 Research Design

This study employs a comparative descriptive research design based on two consumer surveys conducted in Indonesia in 2021 and 2026. The design is intended to identify differences in Chinese smartphone brand usage and consumer perceptions across the two survey periods. Both surveys were administered online using Google Forms, an online questionnaire platform that enables researchers to distribute questionnaires electronically and collect and organize responses for subsequent analysis (Dillman et al., 2014). The use of an online questionnaire was appropriate for a study concerning consumers of digital technology and enabled responses to be collected from respondents across different regions of Indonesia. The Google Form link was sent to the individuals the researchers knew by WhatsApp messages. The respondents were also encouraged to pass the link to their friends.

The 2021 survey obtained 1,101 responses, while the 2026 survey obtained 629 responses. The two samples were independent and were not designed as a panel; therefore, the study does not track changes in the perceptions of the same individuals. The comparison should consequently be interpreted as identifying differences between two cross-sectional samples, rather than measuring individual-level longitudinal change. Differences in the demographic composition of the samples are explicitly reported because they may contribute to differences observed between the two survey periods. Table 1 presents the demographic profiles of the two samples.

Table 1. Comparison of Respondent Characteristics, 2021 and 2026

Characteristic	Category	2021	2026
Age	Baby Boomers	8.8%	1.3%
	Gen X	27.6%	8.6%
	Gen Y	31.1%	28.5%
	Gen Z	32.4%	61.6%
	Total	**100.0%**	**100.0%**
Highest Education	Junior high school or below	1.8%	4.8%
	Senior high school/vocational school	27.3%	55.3%
	Bachelor's degree/Diploma	44.4%	33.4%
	Master's degree	22.1%	5.7%
	Doctoral degree	4.4%	0.8%
	Total	**100.0%**	**100.0%**
Monthly Income	< IDR 2 million	35.2%	52.8%
	IDR 2–5 million	22.3%	29.3%
	> IDR 5–10 million	18.1%	10.8%
	> IDR 10–15 million	9.4%	3.8%
	> IDR 15 million	15.1%	3.3%
	Total	**100.0%**	**100.0%**

Characteristic	Category	2021	2026
Province/Region of Residence	Java	81.9%	67.4%
	Kalimantan	1.0%	9.4%
	Sumatra	2.7%	9.1%
	Sulawesi	2.9%	8.1%
	West and East Nusa Tenggara	5.4%	2.5%
	Bali	3.4%	1.9%
	Papua	2.5%	1.1%
	Maluku	0.3%	0.5%
	Total	**100.0%**	**100.0%**
Occupation	Student	28.2%	39.1%
	Private-sector employee	22.3%	19.9%
	Not employed	3.9%	6.5%
	Small/medium entrepreneur	9.3%	6.4%
	Lecturer/Teacher/Researcher	14.8%	5.9%
	Other	21.5%	22.3%
	Total	**100.0%**	**100.0%**

The samples show several important compositional differences. The proportion of Gen Z respondents increased substantially, from 32.4% in 2021 to 61.6% in 2026, while the shares of Baby Boomers and Gen X declined. The educational profile also shifted toward respondents with senior high school or vocational education. Similarly, respondents with monthly income below IDR 2 million increased from 35.2% to 52.8%. Geographically, the 2026 sample was more dispersed outside Java: the share of respondents from Java declined from 81.9% to 67.4%, while representation from Kalimantan, Sumatra, and Sulawesi increased. The proportion of students also increased from 28.2% to 39.1%.

These differences are important for interpreting changes between the two surveys. In particular, a change in the mean perception score between 2021 and 2026 may reflect both changing consumer perceptions and differences in the demographic composition of the respondents. The study therefore treats the comparison primarily as descriptive evidence of changing patterns, rather than as evidence of causal change in the Indonesian population as a whole.

3.1.1 Measurement

The measurement of consumer perceptions was grounded in the literature on perceived value, country-of-origin effects, technology-product evaluation, and brand image. Rather than treating the perception of Chinese smartphones as a single undifferentiated construct, the survey examined seven characteristics that capture different dimensions of how consumers evaluate technology products.

The first dimension was *price advantage*, referring to whether Chinese smartphones were perceived as less expensive than comparable products from other countries. Price is an important component of perceived value because consumers evaluate what they receive relative to what they give up financially (Zeithaml, 1988). The second dimension was *added value*, reflecting whether consumers perceived the overall benefits of Chinese smartphones to be high relative to their cost. This is consistent with the multidimensional conceptualization of consumer perceived value, which includes price/value-for-money and quality/performance dimensions (Sweeney & Soutar, 2001).

The third dimension was *innovation*, reflecting consumers' perceptions of the extent to which Chinese smartphones offer innovative products and features. Innovation is particularly relevant in technology markets, where frequent product launches and technological improvements shape consumers' evaluations of brands (Vera-Martínez, 2021). The fourth dimension, *design novelty*, captures whether

consumers perceive the physical and product design of Chinese smartphones as new or distinctive. The fifth dimension, *technological capability*, addresses perceptions of whether Chinese smartphones incorporate advanced technology.

The final two dimensions concern *quality and reliability* and *brand image*. Perceived quality is particularly important because a favorable country-of-origin or brand image does not necessarily translate into purchase preference unless consumers believe that the product can deliver reliable performance (Wibowo et al., 2021). Brand image captures consumers' overall evaluation of the reputation and attractiveness of Chinese smartphone brands and is conceptually distinct from their broader perception of China as a country of origin (Fan, 2019).

Accordingly, the seven statements used in the survey were:

1.) Chinese smartphones are cheaper than similar products from other countries.
2.) Chinese smartphones provide high added value.
3.) Chinese smartphones have a high level of innovation.
4.) Chinese smartphones have novel designs.
5.) Chinese smartphones use advanced technology.
6.) Chinese smartphones are of high quality and reliable.
7.) Chinese smartphones have a good brand image.

Each statement was measured using a five-point Likert scale, ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Likert-type items are commonly used to capture respondents' degree of agreement with evaluative statements, while descriptive statistics such as frequencies and means can be used to summarize response patterns when appropriately applied (Boone & Boone, 2012).

Respondents could also select "do not know." These responses were excluded from the calculation of the mean score for each perception item because respondents who did not have sufficient knowledge to evaluate an attribute should not be treated as neutral respondents. The resulting mean therefore represents the average evaluation among respondents who expressed an opinion about the respective attribute. The underlying response distributions, including the numbers selecting "strongly agree," "agree," "neutral," "disagree," "strongly disagree," and "do not know," were retained for descriptive interpretation.

3.1.2 Data Analysis

The analysis was primarily descriptive and comparative. First, frequencies and percentages were calculated to identify the Chinese smartphone brands used by respondents in each survey year. The resulting brand shares were compared between 2021 and 2026 to identify increases or decreases in the relative prevalence of each brand within the respective survey samples.

Second, mean scores were calculated for each of the seven perception attributes for both survey years. The 2021 and 2026 means were then compared to identify the direction and magnitude of changes in consumer perceptions. An overall perception score was calculated as the average of the seven attribute scores for each survey year. The analysis also examined the underlying response distributions to determine whether the changes in means were consistent with broader shifts in respondents' levels of agreement.

The analysis therefore focuses on three forms of evidence: (1) changes in brand-use shares, (2) changes in the seven perception scores, and (3) changes in the distribution of responses across the five-point scale. These descriptive comparisons are

used to address the research questions concerning brand preference, perceived product characteristics, and changes between 2021 and 2026.

Because the two surveys used independent samples with different demographic compositions, the analysis does not claim that the observed differences represent statistically tested population-level changes or causal effects. Instead, the findings are interpreted in conjunction with the literature on country-of-origin effects, perceived value, brand image, technological innovation, and changing consumer familiarity with Chinese smartphone brands.

3.2 Research Findings

3.2.1 Chinese Smartphone Brands Used by Indonesian Respondents

The first major finding concerns the changing distribution of Chinese smartphone brands among survey respondents. Xiaomi remained the most frequently used Chinese smartphone brand in both surveys, but the relative position of the brands changed substantially between 2021 and 2026.

In 2021, Xiaomi was reported as the smartphone brand used by 40.7% of valid respondents, followed by vivo (25.2%), OPPO (11.0%), and OnePlus (0.5%). Meanwhile, 22.6% reported that they had never used a Chinese smartphone. In 2026, Xiaomi remained the leading brand at 36.9%, but OPPO became the second most frequently reported brand at 24.8%, followed by vivo at 17.3% and Huawei at 12.9%. The proportion of respondents who had never used a Chinese smartphone declined sharply to 8.1%.

Table 2. Chinese Smartphone Brands Used by Respondents, 2021 and 2026

Brand / Category	2021	2026	Change (percentage points)
Xiaomi	40.7%	36.9%	−3.8
Vivo	25.2%	17.3%	−7.9
OPPO	11.0%	24.8%	+13.8
Huawei	—	12.9%	+12.9
OnePlus	0.5%	—	−0.5
Never used a Chinese smartphone	22.6%	8.1%	−14.5

Note. Percentages represent the composition of the respective survey samples and should not be interpreted as national smartphone market shares. The 2021 brand-use figures are based on the reported valid responses, which are fewer than the total survey sample.

The most notable change was the rise of OPPO, whose share increased by 13.8 percentage points, from 11.0% to 24.8%. In contrast, vivo declined by 7.9 percentage points, from 25.2% to 17.3%. Xiaomi remained the most frequently reported brand, although its share declined modestly by 3.8 percentage points. The reduction in the "never used a Chinese smartphone" category is equally notable. In 2021, almost one in four respondents reported having no experience with Chinese smartphones. By 2026, this proportion had fallen to approximately one in twelve. Within the two survey samples, therefore, Chinese smartphone use appears to have become considerably more widespread and normalized.

This pattern is illustrated in Figure 1. The figure highlights three developments: Xiaomi's continued leading position, the substantial increase in OPPO's share, and the sharp reduction in respondents who had never used a Chinese smartphone.

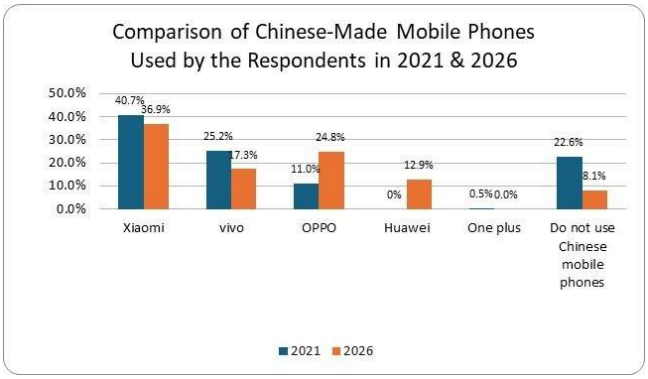


Figure 1 Comparison of Chiness-made Mobile Phones used by respondents in 2021 & 2026

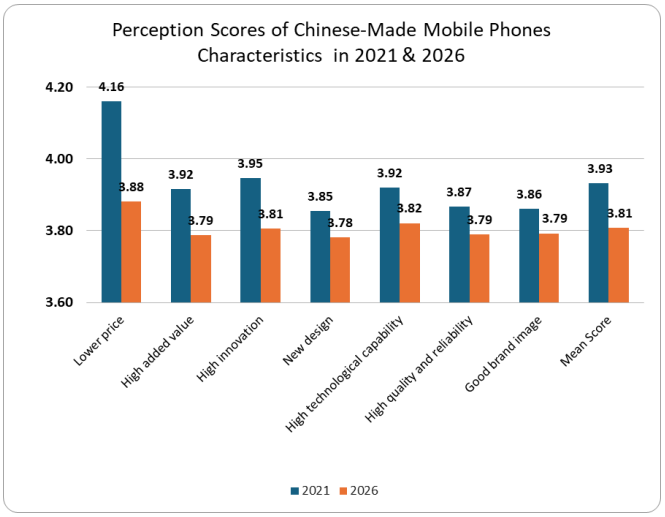


Figure 2 Perception Scores of Chinese-made Mobile Phones Characteristics in 2021 & 2026

The survey pattern is broadly consistent with the competitive dynamics observed in the Indonesian smartphone market. Industry data also indicate strong competition among Chinese brands. For example, Counterpoint Research (2026) reported that OPPO maintained the leading position in Indonesian smartphone shipments in the first quarter of 2026, while Xiaomi held a 21% shipment share. However, this external market data should be distinguished from the survey shares reported in Table 2: the former measure national smartphone shipments, whereas the latter measure brand use among the respondents in this study.

3.2.2 Perceived Characteristics of Chinese Smartphones

The second major finding concerns respondents' evaluations of Chinese smartphones across the seven measured attributes. All seven attributes received mean scores above the neutral midpoint of 3.0 in both survey years, indicating that respondents who expressed an opinion generally held positive perceptions of Chinese smartphones. At the same time, the mean score declined for every attribute between 2021 and 2026. The overall perception score decreased from 3.93 to 3.81, a decline of 0.12 points on the five-point scale.

Table 3. Perceptions of Chinese Smartphone Characteristics, 2021 and 2026

Product characteristic	2021	2026	Change
Lower price than similar products from other countries	4.16	3.88	−0.28
High added value	3.92	3.79	−0.13

Product characteristic	2021	2026	Change
High innovation	3.95	3.81	−0.14
New design	3.85	3.78	−0.07
High technological capability	3.92	3.82	−0.10
High quality and reliability	3.87	3.79	−0.08
Good brand image	3.86	3.79	−0.07
Overall average	**3.93**	**3.81**	**−0.12**

The *price advantage* received the highest score in both years. Its mean score, however, declined from 4.16 in 2021 to 3.88 in 2026, representing the largest decline among the seven attributes (−0.28). This suggests that Chinese smartphones continued to be perceived as relatively affordable, but the strength of this perception decreased.

In 2021, *innovation* received the second-highest score (3.95). In 2026, technological capability received a slightly higher score (3.82) than innovation (3.81). This indicates that perceptions of technological capability remained relatively strong even as the overall scores declined. *Design novelty* received the lowest score in both years, although the decline was relatively small, from 3.85 to 3.78. In 2026, it was followed closely by *added value, quality and reliability*, and *brand image*, all scoring 3.79.

Overall, therefore, the results show a combination of continued positive evaluation and moderate weakening of perceived advantage. Chinese smartphones were not negatively evaluated in 2026; rather, respondents remained generally positive while expressing somewhat less favorable evaluations than respondents in 2021.

4. Discussion

4.1 From "Cheap Chinese Products" to "Accessible Digital Technology"

The most substantial change in consumer perception concerns *price advantage*. The score for the statement that Chinese smartphones are cheaper than comparable products from other countries declined from 4.16 in 2021 to 3.88 in 2026, the largest decline among the seven attributes. Nevertheless, price remained the highest-rated characteristic in both years.

This combination is important. It suggests that Chinese smartphones continue to be associated with affordability, but their competitive meaning may be changing. Rather than being evaluated primarily as "cheap Chinese products," they increasingly appear to be treated as mainstream technology products whose value must be assessed in relation to technology, innovation, quality, reliability, design, and brand experience. This interpretation is consistent with evidence of declining negative stereotypes toward Chinese smartphone brands in Indonesia (Amrullah & Purnomo, 2023). It also corresponds with the broader transformation of Chinese technology firms, which have increasingly competed through technological capabilities, innovation, product design, and global brand development (Fan, 2011; Liao & Yang, 2023).

The implication is that price remains an important entry point but may be less sufficient as a long-term source of differentiation. As Chinese smartphones become more familiar and competition intensifies, perceived value increasingly depends on the total relationship between price and performance. This represents a shift from a low-price proposition toward a broader value proposition.

4.2 The Rise of OPPO and the Fragmentation of Chinese Smartphone Choice

The substantial increase in OPPO's share—from 11.0% in 2021 to 24.8% in 2026—is another important finding. During the same period, vivo declined from 25.2% to 17.3%, while Xiaomi remained the leading brand, although its share decreased modestly. The available data do not allow a causal explanation for these movements. Nevertheless, the pattern indicates that Indonesian respondents do not treat "Chinese smartphone" as a homogeneous product category.

They distinguish among individual brands.

This finding reinforces the distinction between country image, corporate image, and brand image (Fan, 2019). Country of origin may provide an initial evaluative cue, but repeated consumer experience can make individual brand associations increasingly important. Previous Indonesian research similarly indicates that brand image and perceived quality can play important roles in translating country-of-origin perceptions into purchase intentions (Darmawan et al., 2021; Wibowo et al., 2021).

Thus, competition is increasingly not simply between Chinese and non-Chinese smartphones, but among differentiated Chinese brands. The strategic challenge for Xiaomi, OPPO, vivo, Huawei, and other Chinese manufacturers is consequently to establish distinctive positions and credible brand-specific value rather than relying primarily on the collective reputation of Chinese technology.

4.3 From Country-of-Origin Cue to Brand-Experience Heuristic

The findings also support a broader interpretation of changing consumer evaluation. Country-of-origin research suggests that consumers may use country information as an extrinsic cue, particularly when product information is limited (Verlegh & Steenkamp, 1999). As consumers become more familiar with products and brands, however, direct experience and product-specific information can become increasingly important (Alba & Hutchinson, 1987; Li & Wyer, 1994).

The present findings are consistent with this possibility. By 2026, only 8.1% of respondents reported never having used a Chinese smartphone, compared with 22.6% in 2021. At the same time, respondents continued to evaluate Chinese smartphones positively but somewhat less strongly across all seven attributes. This combination may indicate a process of market normalization. As Chinese smartphones become familiar and mainstream, consumers may rely less on a broad "Made in China" judgment and more on questions such as: Which brand? What technology? How reliable? What experience? And is it worth the price?

The implication is a potential transition from a country-of-origin heuristic toward a brand-experience heuristic. This does not mean that country-of-origin effects disappear. Rather, their influence may increasingly operate together with brand familiarity, perceived quality, and previous consumer experience.

4.4 Why Did Perceptions Decline?

The decline in all seven perception scores requires cautious interpretation because the surveys do not directly measure its causes and were conducted with independent samples. Four explanations nevertheless provide plausible directions for interpreting the pattern.

First, *sample composition changed substantially*. The 2026 survey included a much larger proportion of Gen Z respondents (61.6% versus 32.4% in 2021) and respondents with monthly incomes below IDR 2 million (52.8% versus 35.2%). These differences may influence expectations, purchasing power, technology use, and product evaluation. The observed decline therefore cannot be interpreted as definitive evidence that Indonesian consumers as a whole became less favorable toward Chinese smartphones.

Second, *increasing consumer experience may produce more demanding evaluations*. Consumer expertise changes how individuals process product information and evaluate alternatives (Alba & Hutchinson, 1987). Once Chinese smartphones become familiar, consumers may compare them more closely with competing brands and judge technological features that were once distinctive as increasingly standard.

Third, *competition may raise consumers' reference standards*. Chinese brands increasingly compete not only with Apple and Samsung but also with one another. Greater choice enables consumers to compare price, technology, design, reliability, and brand experience across several brands. Consequently, positive evaluation of one attribute does not necessarily translate into a stronger overall perception.

Fourth, *normalization may reduce the novelty premium*. In an emerging product category, technological advancement may generate strong positive reactions because it exceeds expectations. Once the technology becomes commonplace, the same capability may simply become an expected feature. The decline in perceived innovation from 3.95 to 3.81 can be interpreted in this context.

These explanations should be regarded as interpretive propositions rather than causal findings. Testing them would require longitudinal panel data or multivariate analysis controlling for age, income, education, region, prior smartphone experience, and brand used.

4.5 Digital Economy, Human Dignity, and Inclusive Transformation

The findings have implications beyond smartphone marketing because smartphones increasingly function as gateways to participation in the digital economy. Access to an affordable and capable smartphone can facilitate communication, digital payments, e-commerce, education, employment, information, and social participation. Digital inclusion is therefore not simply a question of owning a device but of having meaningful opportunities to use digital technologies.

This perspective connects digital transformation with *human dignity*. A human-rights-based approach to digital development emphasizes that technology should expand people's capabilities and opportunities rather than reproduce or deepen existing inequalities. UNESCO's (2021) framework for inclusive digital transformation explicitly links digital development with human rights, accessibility, openness, and participation. Similarly, the UN human-rights framework recognizes the growing importance of digital technologies for participation in economic, social, and public life while emphasizing that technological development must remain grounded in human dignity and fundamental rights (UN Human Rights Council, 2021).

From this perspective, affordability matters because high device prices can constitute a barrier to digital participation. However, affordability alone is insufficient. A device contributes to meaningful inclusion only when it also provides adequate performance, reliability, security, usability, and access to relevant digital services. UNESCO's (2024) human-centered approach similarly emphasizes that digital transformation should be accessible and rights-based rather than measured simply by technological diffusion.

The present findings provide an interesting illustration. The proportion of respondents who had never used a Chinese smartphone declined from 22.6% to 8.1%. This suggests greater diffusion of Chinese-made smartphones within the populations represented by the two surveys. However, it should not be interpreted as direct evidence of increased national digital inclusion because the surveys are not nationally representative and their demographic compositions differ. Nevertheless, the continued positive evaluation of Chinese smartphones—with all seven attributes scoring above 3.7 in 2026—suggests that affordability is accompanied by perceptions of technology, innovation, quality, reliability, and brand value. For inclusive transformation, the relevant principle is therefore not simply "the cheapest technology," but "accessible technology that enables meaningful participation."

This distinction is particularly important in emerging Asian economies. The contribution of technology to human dignity depends not only on whether people can acquire devices but also on whether those devices enable them to exercise agency, pursue education and economic opportunities, communicate with others, access information, and participate in social life.

Digital transformation becomes genuinely inclusive when technological progress expands these capabilities without leaving disadvantaged groups behind. UNESCO (2021, 2024) similarly emphasizes that digital technologies can support human development while warning that inequalities in accessibility, skills, and rights protection can reproduce existing social inequalities.

4.6 Theoretical Implications

This study contributes to the literature on country-of-origin and consumer behavior in three related ways. *First*, it reinforces the importance of distinguishing country image from brand image. The substantially different trajectories of Xiaomi, OPPO, vivo, and Huawei suggest that consumers do not treat Chinese smartphones as a homogeneous category. Country of origin may provide an initial cue, but individual brand associations increasingly shape consumer choice.

Second, the findings suggest that country-of-origin effects may become less straightforward as products become familiar. The sharp decline in respondents who had never used a Chinese smartphone provides contextual evidence of increasing familiarity within the survey samples. As direct experience accumulates, consumers may rely increasingly on perceived quality, technological performance, reliability, and brand experience rather than on country-of-origin information alone. This is consistent with research showing that consumer expertise and product knowledge influence the way country-of-origin information is processed (Alba & Hutchinson, 1987; Li & Wyer, 1994).

Third, the findings point toward a possible shift from a country-of-origin heuristic to a brand-experience heuristic. The question facing consumers may increasingly be not "Is this a Chinese smartphone?" but "Which Chinese brand offers the value and experience I want?" This does not imply that country-of-origin effects disappear. Rather, their relative importance may decline as Chinese brands become more established and consumers become more capable of evaluating them on product- and brand-specific attributes.

The study therefore suggests that the internationalization of Chinese technology brands should be understood not simply as the expansion of products from one country into foreign markets, but as a process through which country-based perceptions are progressively transformed into brand-based consumer relationships. This provides an important direction for future research on the evolution of Chinese brands in Indonesia and other emerging Asian markets.

4.7 Managerial Implications

The findings suggest that Chinese smartphone manufacturers in Indonesia should gradually move beyond a predominantly low-price positioning. Price remains the strongest perceived attribute, but its score declined by 0.28 points between 2021 and 2026. Marketing communication should therefore emphasize *value for money*, integrating affordability with performance, technology, design, durability, and service. The substantial differences in brand shares also indicate the importance of *brand-level differentiation*: Xiaomi, OPPO, vivo, Huawei, and other Chinese brands should communicate distinctive identities and value propositions rather than relying on a generic "Chinese technology" image. Because quality and reliability remain central to consumer evaluation, companies should strengthen after-sales service, warranty coverage, software support, repair networks, data protection, and transparent communication, thereby reducing consumer uncertainty and building brand-specific trust.

The large proportion of Gen Z respondents in the 2026 sample also suggests that younger consumers deserve increasing strategic attention, although the sample cannot be treated as nationally representative; communication for this segment can connect smartphones with creativity, content creation, education, gaming, entrepreneurship, and lifestyle. Finally, as smartphones increasingly function as gateways to broader digital services, Chinese

manufacturers have an opportunity to compete through ecosystems rather than devices alone, integrating hardware with applications, cloud services, artificial intelligence, entertainment, financial services, and other digital experiences. The strategic trajectory is therefore from price competition to value competition to brand and ecosystem competition.

5. Conclusion

This study examined Indonesian consumers' changing perceptions and use of Chinese-made smartphones by comparing surveys conducted in 2021 and 2026. Three main findings emerge. First, Chinese smartphone brands became more widely used within the two survey samples, with the proportion of respondents who had never used a Chinese smartphone declining from 22.6% to 8.1%. Xiaomi remained the most frequently reported brand, while OPPO experienced substantial growth. Second, perceptions of Chinese smartphones remained positive across all seven measured attributes, but the overall perception score declined from 3.93 to 3.81. The largest decline occurred in perceived price advantage, suggesting that Chinese smartphones may be moving from a primarily low-price positioning toward broader competition based on value, technology, quality, reliability, and brand experience. Third, the findings suggest a possible shift from country-of-origin-based evaluation toward more brand- and experience-based evaluation as Chinese smartphones become increasingly familiar and mainstream.

These findings have implications beyond marketing. As smartphones increasingly function as gateways to education, employment, financial services, commerce, and social participation, their affordability and quality can contribute to inclusive digital transformation. However, affordability alone does not guarantee meaningful digital inclusion. Technology contributes to inclusion when it is sufficiently reliable, capable, secure, and accessible to enable people to participate meaningfully in economic and social life. In this sense, the evolution of Chinese smartphone brands illustrates how market competition and technological diffusion can potentially contribute to broader digital participation in Asia.

The study has several limitations. First, the 2021 and 2026 surveys used independent cross-sectional samples rather than the same respondents; therefore, the observed differences cannot be interpreted as individual-level longitudinal change. Second, the demographic composition of the two samples differed substantially, particularly in age, income, education, and geographical distribution. Third, the survey measured general perceptions of Chinese smartphones rather than perceptions of individual brands, limiting the ability to explain why consumers chose Xiaomi, OPPO, vivo, Huawei, or other brands. Finally, the descriptive design does not establish causal relationships between country-of-origin perceptions, brand image, perceived value, and brand choice.

Future research should employ longitudinal or panel designs to examine how individual consumer perceptions evolve over time. It should also compare consumers of specific Chinese brands and examine how country image, brand image, perceived quality, perceived value, trust, and purchase intention interact. Multivariate analysis could further test whether age, income, technological involvement, prior experience, and consumer knowledge moderate country-of-origin effects. Qualitative research could complement these approaches by exploring how Indonesian consumers interpret the changing meaning of "Chinese technology." Finally, comparative research across Indonesia and other Asian markets would help determine whether the transition from price-based competition to value-, brand-, and experience-based competition represents a broader pattern in the internationalization of Chinese technology brands.

The future of Chinese smartphone brands in Indonesia will depend not simply on how cheaply they can sell technology, but on how effectively they can turn affordability, innovation, quality, and trust into meaningful opportunities for people to participate in the digital economy.

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