

Impact of brand equity and after-sales service on satisfaction and repurchase intention in a chinese heavy equipment brand

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Abstract

Customer retention is a critical issue in the business-to-business heavy equipment industry which is characterized by high investment value operational risk and long-term relational exchanges. This study aims to examine the effects of brand equity and after-sales service on customer satisfaction and their implications for repurchase intention in a Chinese heavy equipment brand operating in Samarinda Indonesia. A quantitative explanatory approach was employed using survey data collected from 120 corporate customers who are directly involved in purchasing decisions and equipment usage. Data were analyzed using SEM-PLS Modeling. The findings indicate that brand equity and after-sales service both enhance customer satisfaction however their influences on repurchase intention differ in mechanism. Brand equity does not directly affect repurchase intention but operates through customer satisfaction suggesting that brand-related perceptions must be validated by satisfactory post-purchase experiences. In contrast after-sales service influences repurchase intention both directly and indirectly through customer satisfaction highlighting the strategic importance of post-purchase support in reducing operational risk. Overall customer satisfaction emerges as a key mechanism linking brand and service-related factors to repurchase intention. This study provides practical insights for heavy equipment suppliers to prioritize service excellence and experiential validation of brand value to strengthen long-term customer relationships.

Keywords: *brand equity, after-sales service, customer satisfaction, repurchase intention, heavy equipment industry*

Introduction

In an increasingly competitive business environment, firms are required not only to acquire new customers but also to retain existing ones through repeat purchases. Customer retention is particularly critical in the heavy equipment industry, which is characterized by high investment value, substantial operational risk, and long-term relational exchanges in a business-to-business context. In this setting, repurchase decisions are shaped by customers evaluations of post-purchase experiences and perceived value rather than by price considerations alone (Ekasari et al., 2023; Long & Lijia, 2024).

Brand equity is widely recognized as a strategic asset that influences customer evaluations and behavioral intentions. Recent empirical studies indicate that strong brand equity enhances customers perceptions of quality, credibility, and reliability, which subsequently affect customer satisfaction and repurchase intention, especially for high-involvement and high-risk products (Safitri & Febrilia, 2023; Wang et al., 2023). In business-to-business contexts, however, brand equity tends to exert its influence indirectly, as purchasing decisions are strongly driven by customers actual experiences after product adoption rather than symbolic brand attributes alone (Farhani et al., 2023; Urmili &

Widagda K, 2024).

In addition to brand equity, after-sales service plays a critical role in maintaining long-term relationships between firms and customers. In the heavy equipment industry, post-purchase services such as technical responsiveness, spare parts availability, maintenance reliability, and continuous technical support represent the most salient aspects of customer experience. Recent studies report that effective after-sales service enhances customer satisfaction and contributes positively to repurchase intention by reducing operational uncertainty and perceived risk (Balinado et al., 2021; Chotisarn & Phuthong, 2025). Nevertheless, other empirical findings suggest that the direct effect of after-sales service on repurchase intention in business-to-business contexts is relatively weak, as such services are often perceived as a basic operational requirement rather than a key source of differentiation among suppliers (Ekasari et al., 2023; Jasin et al., 2023).

Customer satisfaction has consistently been identified as a central determinant of repeat purchasing behavior. It reflects customers' evaluations of the alignment between expectations and actual performance outcomes. Recent research emphasizes that customer satisfaction functions as a mediating mechanism through which brand equity and after-sales service influence repurchase intention, particularly in industries involving high financial commitment and long-term operational consequences (Purnamasari & Fadli, 2024; Susanto et al., 2021; Tufahati et al., 2021). In the heavy equipment context, satisfaction is predominantly shaped by rational considerations related to operational efficiency, cost effectiveness, and long-term reliability (Long & Lijia, 2024).

Despite the growing body of recent literature, most empirical studies examining these relationships have focused on business-to-consumer settings such as automotive, electronics, and retail services (Safitri & Febrilia, 2023; Wang et al., 2023). Findings derived from these contexts may not be fully applicable to business-to-business industries, particularly the heavy equipment sector, which involves high capital intensity and long-term relational dependence. Moreover, empirical evidence regarding the impact of after-sales service on repurchase intention remains inconclusive in business-to-business contexts, indicating the need for further industry-specific investigation (Jasin et al., 2023).

Furthermore, although customer satisfaction has been widely acknowledged as a key driver of repurchase behavior, its mediating role between brand equity and after-sales service on repurchase intention has received limited empirical attention within the business-to-business heavy equipment industry, particularly in emerging markets (Susanto et al., 2021; Tufahati et al., 2021; Urmili & Widagda K, 2024). Studies focusing on Chinese heavy equipment brands operating in developing economies such as Indonesia remain scarce, leaving a clear empirical gap in the existing literature.

Based on these gaps, this study aims to examine the effects of brand equity and after-sales service on customer satisfaction and their implications for repurchase intention among customers of a Chinese heavy equipment brand at the Samarinda branch. By positioning customer satisfaction as a mediating variable, this study seeks to clarify the mechanism through which brand and service-related factors influence repurchase behavior in a business-to-business heavy equipment context and to provide empirical contributions relevant to both academic research and managerial practice.

Literature Review

Brand equity has been widely recognized as a strategic intangible asset that shapes customers evaluations of a firm and its offerings, particularly in markets characterized by high involvement and operational risk. Customers rely on brand-related cues to assess credibility and reduce uncertainty. Strong brand equity enhances perceived quality and trust, enabling customers to form positive expectations prior to purchase (Wang et al., 2023). In business-to-business contexts, brand equity primarily functions as perceptual capital that reassures customers regarding supplier reliability when financial and operational consequences are substantial, thereby shaping post-purchase evaluations rather than immediately triggering repeat purchasing behavior (Urmili & Widagda K, 2024). Empirical studies further show that brand equity enhances customer satisfaction by reinforcing confidence in purchase decisions (Kuswanto et al., 2023). Strengthens repurchase intention through trust and long-term brand preference (Buwono et al., 2021; Sutanto & Kussudyarsana, 2024).

After-sales service constitutes a central component of post-purchase experience, especially for high-value and technically complex products. Reliable and responsive after-sales service signals a firm's commitment to sustaining customers operations, thereby becoming an extension of the product itself (Balinado et al., 2021). Timely spare parts availability and effective technical support significantly improve customer satisfaction by minimizing downtime and operational disruptions (Ekasari et al., 2023). However, in business-to-business markets, after-sales service is often perceived as a basic requirement rather than a differentiating factor; thus, its influence on repurchase intention tends to operate through customers satisfaction with post-purchase experiences (Jasin et al., 2023). Consistent and reliable service primarily strengthens customer satisfaction before affecting behavioral intentions (Sann et al., 2024).

Customer satisfaction reflects customers overall evaluation of whether expectations are met through actual product usage and service experiences. In high-risk and high-investment industries, satisfaction is grounded not only in affective responses but also in rational assessments of performance reliability and value delivery. Customer satisfaction has been identified as a key predictor of long-term relationship continuity (Long & Lijia, 2024). Satisfaction translates consumption experiences into behavioral outcomes by reinforcing customers perceptions that prior decisions were correct, thereby strengthening commitment to the supplier (Tufahati et al., 2021). Moreover, customer satisfaction enhances behavioral commitment toward brands or suppliers (Wang et al., 2023) and mediates the relationship between perceived quality and repurchase intention (Purnamasari & Fadli, 2024).

Repurchase intention represents customers willingness to engage in repeat purchasing based on prior experiences and is a key indicator of successful long-term engagement. Customers who experience high satisfaction are more likely to demonstrate sustained commitment and repeat purchasing behavior (Hui et al., 2025). Brand-related perceptions contribute to repurchase intention through customer satisfaction (Safitri & Febrilia, 2023). While after-sales service quality influences repurchase intention indirectly by enhancing satisfaction (Pratiwi et al., 2025). Collectively, these findings indicate that repurchase intention emerges from comprehensive evaluations of brand strength, service performance, and satisfaction with post-purchase experiences. Based on these insights, we propose the

following hypotheses:

H1: Brand equity has a positive and significant effect on customer satisfaction

In heavy-equipment settings, customer satisfaction is shaped not only by initial purchase evaluations but also by value-in-use throughout the equipment life cycle, including productivity, reliability, and total cost of ownership. Brand equity may elevate customers' expectations regarding durability and operational performance; when such expectations are confirmed during use, satisfaction is strengthened (Wang et al., 2023). This mechanism is particularly salient in B2B contexts, where customers tend to assess suppliers based on risk reduction and performance consistency rather than short-term transactional benefits (Long & Lijia, 2024).

In business-to-business heavy equipment markets, brand equity acts as perceptual capital that reduces uncertainty associated with high investment and operational risk. Strong brand equity enhances perceived quality and trust, leading customers to evaluate post-purchase experiences more favorably. Empirical studies demonstrate that stronger brand equity consistently increases customer satisfaction by reinforcing confidence that purchasing decisions are appropriate and reliable (Cambra Fierro et al., 2021; Mafael et al., 2022; Seo et al., 2023; Tran & Nguyen, 2022).

H2: After-sales service has a positive and significant effect on customer satisfaction

Because heavy equipment is typically deployed in continuous operations, even minor disruptions can result in substantial financial losses, making after-sales service a dominant component of overall experience evaluation. Consequently, after-sales service quality becomes a central determinant of satisfaction through mechanisms such as downtime minimisation, faster recovery, and greater operational assurance (Ekasari et al., 2023). In addition, dependable post-purchase support strengthens satisfaction by demonstrating supplier commitment and reinforcing long-term relational value (Balinado et al., 2021).

For heavy equipment products, after-sales service represents a critical assurance of operational continuity rather than a supplementary activity. Reliable technical support, maintenance responsiveness, and spare parts availability reduce downtime risk and strengthen evaluations of post-purchase experiences. Prior empirical research confirms that high-quality after-sales service consistently improves customer satisfaction by signaling supplier commitment, reliability, and long-term partnership orientation (Balinado et al., 2021; Ekasari et al., 2023; Jasin & Firmansyah, 2023).

H3: Brand equity has a positive and significant effect on repurchase intention.

In industrial buying, wanting to buy again is more about making a smart choice for the future than just buying the same thing again, as buyers think about costs of switching, how well it fits with what they already have, and Brand equity can reduce perceived switching risk by signaling consistent future performance, thereby supporting relationship continuity (Tufahati et al., 2021).

In B2B heavy-equipment purchasing, repurchase decisions depend heavily on trust, reputation, and long-term brand credibility. Strong brand equity reinforces confidence in product performance and supplier reliability, thereby increasing customers' willingness to maintain purchasing relationships. Empirical findings suggest that customers are more

likely to repurchase from brands with stronger equity even when alternative suppliers offer comparable solutions (Buwono et al., 2021; Sutanto & Kussudyarsana, 2024).

H4: After-sales service has a positive and significant effect on repurchase intention

In heavy-equipment markets, repurchase intention is closely tied to supplier capability in delivering life-cycle support, including technician availability, spare-part logistics, and warranty responsiveness. When after-sales service ensures predictable recovery and dependable maintenance, customers experience lower operational uncertainty and are more inclined to continue with the same supplier (Habib & Sarwar, 2021; Soeharso, 2024). Thus, after-sales service functions as a relationship-stabilising mechanism that directly encourages repurchase in high-risk B2B environments (Bakır et al., 2025a).

After-sales service plays a decisive role in repurchase decisions for capital-intensive and technically complex heavy equipment products. Effective post-purchase support reduces perceived operational risk and reinforces confidence in sustaining long-term supplier relationships. Prior studies demonstrate that reliable and consistent after-sales service positively influences customers intentions to repurchase, particularly within industrial settings characterized by high switching costs (Bakır et al., 2025b; Habib & Sarwar, 2021; Soeharso, 2024).

H5: Customer satisfaction has a positive and significant effect on repurchase intention

In B2B contexts, satisfaction often represents a cumulative assessment of both product outcomes and service outcomes. Given that repurchase decisions involve substantial investment, satisfied customers are more likely to justify reinvestment based on perceived lower risk and higher expected future value (Hui et al., 2025; Wang et al., 2023). Consequently, satisfaction becomes a key relational mechanism that translates experienced performance into continued purchasing intention (Long & Lijia, 2024).

Customer satisfaction reflects confirmation that product performance and service support meet expectations formed prior to purchase. In heavy equipment industries, satisfied customers are more inclined to maintain long-term partnerships and continue sourcing from the same supplier. Empirical research consistently identifies customer satisfaction as a primary driver of repurchase intention within relational markets involving high involvement and operational risk (Hui et al., 2025; Long & Lijia, 2024; Wang et al., 2023).

H6: Brand equity has a positive and significant effect on repurchase intention through customer satisfaction

This mediation logic is particularly relevant in heavy-equipment contexts because brand equity primarily sets pre-use expectations and reduces initial perceived risk, whereas repurchase decisions are typically made after customers accumulate usage experience over time. When operational performance aligns with the brand promise, customer satisfaction consolidates and becomes the more proximal driver of repurchase intention (Farhani et al., 2023; Purnamasari & Fadli, 2024). Therefore, satisfaction plausibly functions as the mechanism that converts brand-based perceptions into repeat purchasing decisions in B2B settings (Urmili & Widagda K, 2024).

Brand equity influences repurchase intention indirectly by shaping customers evaluations of post-purchase experiences. Strong brand equity increases confidence in

quality and credibility, leading to higher customer satisfaction that motivates repeat purchasing behavior. Several empirical studies confirm that customer satisfaction serves as a key mediating mechanism through which brand equity exerts a meaningful influence on repurchase intention outcomes (Fan et al., 2025; Farhani et al., 2023; Purnamasari & Fadli, 2024; Susanto et al., 2025; Urmili & Widagda K, 2024).

H7: After-sales service has a positive and significant effect on repurchase intention through customer satisfaction

In operationally intensive industries, after-sales service enhances satisfaction by enabling stable equipment performance and minimising downtime-related losses. As satisfaction accumulates through effective post-purchase support, customers become more confident that the supplier will continue providing reliable life-cycle assistance, which strengthens repurchase intention (Chotisarn & Phuthong, 2025; Ginting et al., 2023). Accordingly, customer satisfaction captures the value-in-use benefits generated by after-sales service and transmits them into repeat purchasing decisions (Tang et al., 2024).

In heavy-equipment markets, after-sales service may affect repurchase behaviour primarily through customers' satisfaction with post-purchase support. High-quality service reduces uncertainty and operational disruptions, thereby enhancing satisfaction and encouraging repeat purchasing. Recent empirical findings support the mediating role of customer satisfaction in translating after-sales service quality into repurchase intention, particularly in B2B contexts (Chotisarn & Phuthong, 2025; Ginting et al., 2023; Ngo et al., 2025; Tang et al., 2024).

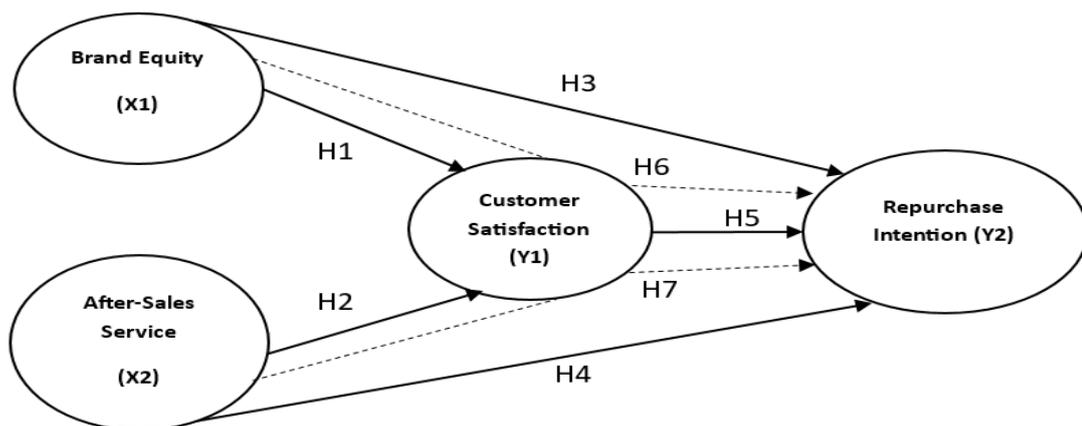


Figure 1. Research Design

Methods

This study adopts a quantitative explanatory approach using a cross-sectional survey design to examine the causal relationships between brand equity and after-sales service on repurchase intention, with customer satisfaction serving as a mediating variable. This approach is appropriate for validating theory-driven conceptual models in marketing research and for testing both direct and indirect relationships among latent constructs.

The study population consists of all corporate customers that have purchased and operated Sany heavy equipment at the Samarinda branch. Given the business-to-business context and the strategic nature of heavy equipment procurement decisions, purposive

sampling was employed to ensure that respondents possessed relevant knowledge and experience related to the research constructs. Respondents were selected from customers who have made repeat purchases of Sany units at the Samarinda branch, consistently use Sany's after-sales services including maintenance, repair, and spare parts support, and are involved as decision-makers or are responsible for the maintenance and operation of the units.

The final sample comprised 120 respondents, which satisfies the minimum sample size requirement for Partial Least Squares Structural Equation Modeling based on the 10-times rule proposed by Hair et al. (2024) according to this rule, the minimum sample size should be at least ten times the largest number of structural paths directed at a particular construct or the largest number of indicators used to measure a construct. Given that the proposed model includes 20 indicators, the sample size of 120 respondents is considered adequate for estimating the structural relationships and testing both direct and mediating effects.

Primary data were collected through a structured questionnaire developed by adapting validated measurement items from prior studies and tailoring them to the heavy equipment industry context. A five-point Likert scale was used to measure respondents' perceptions. All respondents had experience with Sany's after-sales services, ensuring that the evaluations reflected actual and relevant post-purchase experiences.

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with the assistance of SmartPLS software. Model evaluation consisted of assessing the measurement model, including convergent validity, discriminant validity, and construct reliability, followed by structural model assessment to test direct relationships and the mediating role of customer satisfaction. This analytical approach was selected due to its suitability for predictive research in business-to-business contexts involving relatively small sample sizes and models of moderate complexity.

Result and Discussions

Respondent characteristics are presented to provide an overview of the profile of Sany heavy equipment customers included in this study. The respondents consist of customers who are directly involved in the use of the equipment as well as in purchasing decision-making processes, ensuring that the data collected are relevant for analyzing the effects of brand equity, after-sales service, customer satisfaction, and repurchase intention. A summary of the respondent characteristics is presented in Table 1.

As shown in Table 1, in terms of gender, the respondents are predominantly male, accounting for 85.83% of the sample. With regard to age, the largest proportion of respondents falls within the 45–54 years age group (33.33%). In terms of educational background, most respondents hold a bachelor's degree (46.67%). Regarding organizational position, the majority of respondents occupy roles as business owners (31.67%), followed by directors and managers.

Concerning involvement in purchasing decisions, most respondents act as primary decision makers, representing 61.67% of the sample. In terms of industry sector, respondents are mainly engaged in the mining sector, which accounts for 40.83%. Regarding ownership of SANY heavy equipment, most respondents own between 6–10 units (46.67%). In terms of length of product usage, the largest proportion of respondents has been using SANY products for 4–6 years (56.67%).

Tabel 1. Demographic and Respondents' Characteristics Data Result

| Category | Detail | Total (N=120) | Percentage (%) |
|---|------------------------|------------------|----------------|
| Gender | Male | 103 | 85.83 |
| | Female | 17 | 14.17 |
| Age | 25–34 years | 27 | 22.50 |
| | 35–44 years | 35 | 29.17 |
| | 45–54 years | 40 | 33.33 |
| | > 55 years | 18 | 15.00 |
| Highest education level | Senior High School | 31 | 25.83 |
| | Diploma | 12 | 10.00 |
| | Bachelor's Degree | 56 | 46.67 |
| | Master's Degree | 17 | 14.17 |
| | Doctoral Degree | 4 | 3.33 |
| Position in the company | Director | 32 | 26.67 |
| | Manager | 30 | 25.00 |
| | Business Owner | 38 | 31.67 |
| | Purchasing/Procurement | 12 | 10.00 |
| | Supervisor | 8 | 6.67 |
| Role in purchasing decision | Decision Maker | 74 | 61.67 |
| | Unit Maintenance | 46 | 38.33 |
| | Executor | | |
| Industry sector | Mining | 49 | 40.83 |
| | Construction | 34 | 28.33 |
| | Plantation | 27 | 22.50 |
| | Heavy Equipment Rental | 10 | 8.33 |
| Number of sany units owned | ≤ 5 units | 23 | 19.17 |
| | 6–10 units | 56 | 46.67 |
| | 11–20 units | 35 | 29.17 |
| | > 20 units | 6 | 5.00 |
| Length of using sany products | 1–3 years | 28 | 23.33 |
| | 4–6 years | 68 | 56.67 |
| | > 7 years | 24 | 20.00 |
| Frequency of heavy equipment usage | Several times a week | 31 | 25.83 |
| | Daily | 89 | 74.17 |
| Frequency of sany heavy equipment purchases | 2–4 times | 45 | 37.50 |
| | 5–7 times | 60 | 50.00 |
| | 8–10 times | 13 | 10.83 |
| | > 10 times | 2 | 1.67 |

With respect to usage intensity, the majority of respondents report daily use of heavy equipment (74.17%). Finally, in terms of purchasing frequency, most respondents have purchased SANY heavy equipment between 5–7 times, accounting for 50.00% of the

respondents.

Table 2. Constructs with Items in Reliability and Validity Testing

| Constructs | Outer Loading | AVE | Cronbach's Alpha | Composite Reliability |
|---|---------------|-------|------------------|-----------------------|
| <i>Brand Equity (X1) (Aaker, 2025; Napitupulu et al., 2021)</i> | | | | |
| Brand awareness | 0.816 | 0.693 | 0.890 | 0.919 |
| Brand association | 0.818 | | | |
| Perceived quality | 0.834 | | | |
| Brand loyalty | 0.857 | | | |
| Brand preference | 0.838 | | | |
| <i>After-Sales Service (X2) (Habib & Sarwar, 2021; Kotler et al., 2022)</i> | | | | |
| Installation service | 0.814 | 0.699 | 0.892 | 0.921 |
| Warranty service | 0.832 | | | |
| Maintenance and repair | 0.853 | | | |
| Spare parts availability | 0.826 | | | |
| Customer service responsiveness | 0.854 | | | |
| <i>Customer Satisfaction (Y1) (Balinado et al., 2021; Harimurti & Indriani, 2023)</i> | | | | |
| Pride in using the product | 0.849 | 0.737 | 0.911 | 0.933 |
| Satisfaction with purchase decision | 0.848 | | | |
| Fulfillment of expectations | 0.897 | | | |
| Responsiveness | 0.879 | | | |
| Assurance | 0.817 | | | |
| <i>Repurchase Intention (Y2) (Lin et al., 2022; Sutanto & Kussudyarsana, 2024; Tufahati et al., 2021)</i> | | | | |
| Product reuse intention | 0.872 | 0.786 | 0.932 | 0.948 |
| Repeat purchase intention | 0.856 | | | |
| Recommendation intention | 0.920 | | | |
| Exploratory interest | 0.888 | | | |
| Product expansion intention | 0.895 | | | |

The measurement model was evaluated to assess construct validity and reliability based on the PLS-SEM guidelines proposed by Hair et al. (2024) as presented in Table 2. Convergent validity and construct reliability were established, as indicated by outer loadings of at least 0.70, Average Variance Extracted (AVE) values of at least 0.50, and Cronbach's Alpha and Composite Reliability values exceeding 0.70 for all constructs.

Table 3. Discriminant Validity Results

| Variabel | After-Sales Service (X2) | Brand Equity (X1) | Customer Satisfaction (Y1) | Repurchase Intention (Y2) |
|-------------------------------------|--------------------------|-------------------|----------------------------|---------------------------|
| <i>Heterotrait-monotrait (HTMT)</i> | | | | |
| After-Sales Service (X2) | | | | |
| Brand Equity (X1) | 0,709 | | | |
| Customer Satisfaction (Y1) | 0,715 | 0,650 | | |
| Repurchase Intention (Y2) | 0,812 | 0,607 | 0,707 | |
| <i>Fornell and Larcker</i> | | | | |
| After-Sales Service (X2) | 0,836 | | | |
| Brand Equity (X1) | 0,637 | 0,833 | | |
| Customer Satisfaction (Y1) | 0,651 | 0,595 | 0,858 | |
| Repurchase Intention (Y2) | 0,744 | 0,561 | 0,656 | 0,887 |

Discriminant validity in PLS-SEM is assessed using the Heterotrait–Monotrait ratio (HTMT), with values at or below 0.90 indicating adequate construct separation, and the Fornell–Larcker criterion, which requires the square roots of the Average Variance Extracted (AVE) for each construct to exceed the inter-construct correlations (Hair et al., 2024). Based on the results presented in Table 3, all HTMT values are below the recommended threshold of 0.90, indicating that the constructs are empirically distinct. In addition, the Fornell–Larcker results reported in the same table show that the square roots of AVE for all constructs are higher than the corresponding inter-construct correlations, confirming that discriminant validity is satisfactorily established.

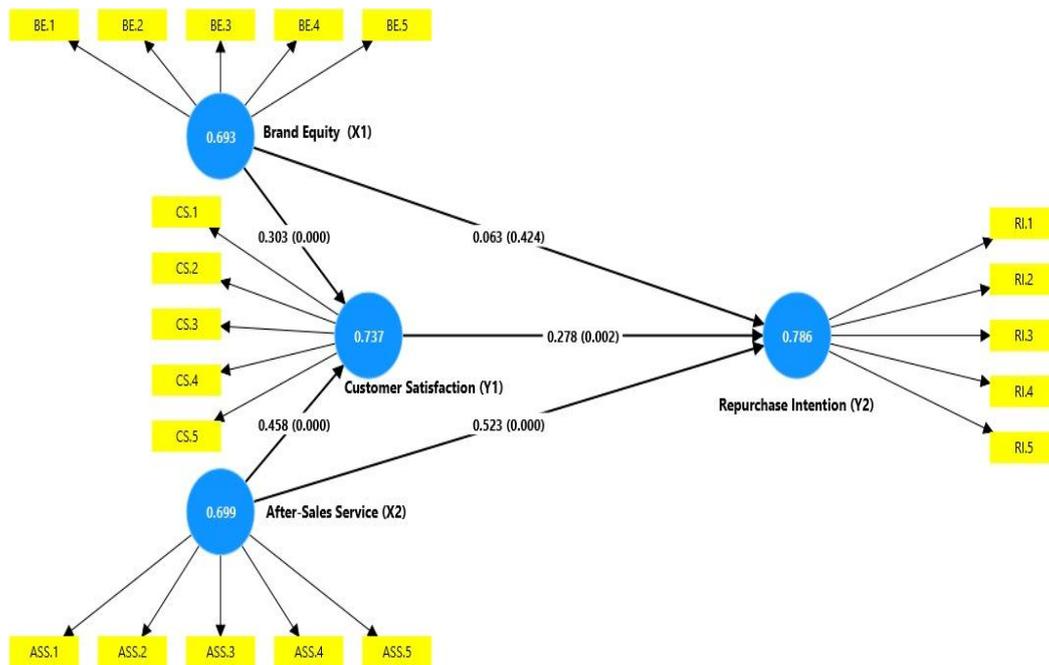


Figure 1. Hypothesis Testing Results

Table 4. Hypothesis Testing Results

| Hypothesis | Path | O | M | STDEV | T-Statistics | P-Value | Result |
|------------|--------------------------------|-------|-------|-------|--------------|---------|---------------|
| H1 | BE (X1) → CS (Y1) | 0.303 | 0.306 | 0.079 | 3.850 | 0.000 | Supported |
| H2 | ASS (X2) → CS (Y1) | 0.458 | 0.456 | 0.077 | 5.951 | 0.000 | Supported |
| H3 | BE (X1) → RI (Y2) | 0.063 | 0.065 | 0.078 | 0.799 | 0.424 | Not Supported |
| H4 | ASS (X2) → RI (Y2) | 0.523 | 0.522 | 0.089 | 5.862 | 0.000 | Supported |
| H5 | CS (Y1) → RI (Y2) | 0.278 | 0.277 | 0.090 | 3.086 | 0.002 | Supported |
| H6 | BE (X1) → CS (Y1) → RI (Y2) | 0,084 | 0,086 | 0,039 | 2,162 | 0,031 | Supported |
| H7 | ASS (X2) → CS(Y1) → RI (Y2) | 0,127 | 0,126 | 0,046 | 2,787 | 0,005 | Supported |

Based on Table 4, brand equity has a positive and significant effect on customer satisfaction ($\beta = 0.303$; $t = 3.850$; $p < 0.001$), thereby supporting H1. After-sales service also shows a positive and significant effect on customer satisfaction ($\beta = 0.458$; $t = 5.951$; $p < 0.001$), providing support for H2. In contrast, brand equity does not exhibit a significant direct effect on repurchase intention ($\beta = 0.063$; $t = 0.799$; $p = 0.424$), leading to the rejection of H3. After-sales service has a positive and significant direct effect on repurchase intention ($\beta = 0.523$; $t = 5.862$; $p < 0.001$), thus supporting H4. Customer satisfaction also exerts a positive and significant effect on repurchase intention ($\beta = 0.278$; $t = 3.086$; $p = 0.002$), which supports H5.

The analysis of indirect effects indicates that customer satisfaction fully mediates the relationship between brand equity and repurchase intention ($\beta = 0.084$; $t = 2.162$; $p = 0.031$), as the indirect effect is significant while the direct effect is not, thereby supporting H6. In addition, customer satisfaction partially mediates the relationship between after-sales service and repurchase intention ($\beta = 0.127$; $t = 2.787$; $p = 0.005$), since both the direct and indirect effects are significant, thus supporting H7. Overall, customer satisfaction serves as a key mechanism that translates the effects of brand equity and after-sales service into repurchase intention.

This study examines the relationships among brand equity, after-sales service, customer satisfaction, and repurchase intention in a business-to-business heavy equipment context. The findings largely align with prior studies, while also revealing context-specific differences that enrich the existing literature on industrial marketing and post-purchase behavior. The significant positive effect of brand equity on customer satisfaction is consistent with previous research emphasizing the role of brand-related perceptions in shaping post-purchase evaluations. Wang et al. (2023) argue that strong brand equity enhances perceived quality and trust, which subsequently leads to higher customer satisfaction. Similarly, Kuswanto et al. (2023) find that brand equity strengthens customers' confidence in their purchasing decisions, thereby increasing satisfaction. In the context of heavy equipment, brand equity functions as perceptual assurance that reduces uncertainty associated with high financial investment and operational risk. This mechanism is particularly relevant for the present sample, which is dominated by mid-to-late career respondents, most notably those aged 45–54 (33.33%), who are likely to prioritise reliability and risk reduction when evaluating post-purchase outcomes.

However, the finding that brand equity does not have a significant direct effect on repurchase intention is not fully aligned with studies conducted in consumer markets. For instance, Sutanto and Kussudyarsana (2024) report a direct positive relationship between brand equity and repurchase intention in consumer-oriented products. In contrast, the present finding supports Urmili and Widagda K (2024), who argue that in business-to-business markets, brand equity tends to influence repurchase behavior indirectly through post-purchase evaluations rather than directly. Farhani et al. (2023) also emphasize that in high-involvement B2B contexts, brand equity must be validated through satisfactory usage experiences before it translates into behavioral commitment. This indirect pattern is plausible given the operational characteristics of the sample. Many respondents manage sizeable equipment fleets, with 46.67% owning 6–10 units, and most report long-term usage experience, with 56.67% using the equipment for 4–6 years. Under such conditions, repurchase decisions are likely to be driven less by brand perceptions alone and more by accumulated performance and service outcomes over repeated use cycles, which explains why satisfaction becomes the primary pathway linking brand equity to repurchase intention.

The positive and significant effect of after-sales service on customer satisfaction is in line with prior empirical evidence. Balinado et al. (2021) demonstrate that reliable and responsive after-sales service reflects a firm's commitment to long-term customer support, which enhances satisfaction. Ekasari et al. (2023) further show that spare parts availability and effective technical support minimize operational disruptions and contribute to higher customer satisfaction. These findings confirm that after-sales service represents a critical component of value delivery in technically complex and capital-intensive industries. The sample characteristics further reinforce this result. Respondents are concentrated in operationally intensive sectors, particularly mining (40.83%) and construction (28.33%), and most report daily equipment use (74.17%). In such environments, downtime is highly costly, making responsiveness, technical competence, and spare-part availability salient determinants of post-purchase evaluations and, consequently, satisfaction.

In addition, the direct positive effect of after-sales service on repurchase intention is consistent with previous studies highlighting the strategic importance of post-purchase support in industrial markets. Habib and Sarwar (2021) find that effective after-sales service reduces perceived operational risk and strengthens customers' willingness to repurchase. Similar conclusions are drawn by Soeharso (2024), who emphasizes that consistent after-sales service quality fosters long-term relational commitment. These results indicate that after-sales service acts not only as a supporting function but also as a direct driver of repurchase intention in heavy equipment markets. These results indicate that after-sales service acts not only as a supporting function but also as a direct driver of repurchase intention in heavy equipment markets. This direct effect matches the buying habits of the sample, where 50.00% have made 5–7 purchases, showing that they often buy again and frequently interact with the service, which can influence their decision to keep buying.

Customer satisfaction is also found to have a significant positive effect on repurchase intention, supporting its role as a central determinant of repeat purchasing behavior. Hui et al. (2025) identify customer satisfaction as a primary driver of repurchase intention in service-intensive industries. Long and Lijia (2024) likewise report that satisfaction is the

strongest predictor of relationship continuity in high-involvement contexts. This suggests that repurchase decisions in the heavy equipment industry are largely grounded in rational evaluations of performance reliability and service effectiveness. The respondent profile provides additional support for this interpretation because a substantial portion of respondents are either decision-makers (61.67%) or responsible for maintenance execution (38.33%), meaning satisfaction judgements are closely tied to real operational outcomes and service recovery experiences rather than symbolic preferences.

Regarding mediation effects, the results indicate that customer satisfaction fully mediates the relationship between brand equity and repurchase intention. This finding aligns with Purnamasari and Fadli (2024), who show that customer satisfaction serves as a key mechanism through which brand-related perceptions influence repurchase behavior. Fan et al. (2025) similarly report that brand equity affects repurchase intention primarily through satisfaction rather than through a direct pathway. These findings suggest that brand equity contributes to repurchase intention only when it is translated into satisfactory post-purchase experiences. Most respondents report 4–6 years of equipment use, whereby repeated operational experiences provide a robust basis for confirming or disconfirming brand-related expectations, thereby making satisfaction the principal conduit for repurchase intentions.

Conversely, customer satisfaction partially mediates the relationship between after-sales service and repurchase intention. This result is consistent with Chotisarn and Phuthong (2025), who demonstrate that service quality influences repurchase intention both directly and indirectly through customer satisfaction. Ginting et al. (2023) also confirm that satisfaction represents an important, though not exclusive, pathway linking after-sales service to repeat purchasing decisions. This indicates that after-sales service exerts a dual influence by directly reinforcing operational confidence and indirectly shaping repurchase intention through satisfaction. The operational intensity reflected in the respondent profile helps explain this dual pathway. With daily equipment usage (74.17%) and sizeable fleet ownership (6–10 units for 46.67% of respondents), after-sales service can influence repurchase decisions immediately through perceived uptime assurance while also shaping longer-term satisfaction through cumulative service experiences.

Overall, the findings suggest that while both brand equity and after-sales service are important in shaping repurchase intention, their mechanisms of influence differ in a business-to-business heavy equipment context. Brand equity primarily operates through customer satisfaction, whereas after-sales service influences repurchase intention through both direct and mediated pathways. These results extend prior research by clarifying the conditional and process-based nature of repurchase behavior in capital-intensive industrial markets, particularly for heavy equipment brands operating in emerging economies.

Conclusion

This conclusion answers the research questions by demonstrating that, in the B2B heavy equipment industry, both brand equity and after-sales service help improve customer satisfaction, but they do so in different ways when it comes to encouraging customers to buy again. The main finding shows The central finding indicates that brand equity does not necessarily stimulate repurchase intentions directly; rather, its influence is realised when brand-related perceptions are validated through satisfactory post-purchase experiences. In

contrast, after-sales service emerges as a more decisive driver because it strengthens repurchase intention not only by enhancing satisfaction but also by reinforcing customers' confidence in operational continuity and the supplier's long-term support commitment. Accordingly, customer satisfaction serves as the pivotal mechanism that translates brand value and service performance into customers' willingness to repurchase.

From a managerial perspective, heavy equipment firms should position after-sales service as a core value proposition rather than a supporting function by ensuring rapid technical responsiveness, reliable spare parts availability, and proactive maintenance programs that safeguard customer uptime. At the same time, efforts to strengthen brand equity should be consistently substantiated through tangible service and performance outcomes, supported by clear value communication and customer relationship management that converts brand perceptions into satisfaction. This study is subject to limitations because the data were collected from a single branch and a single brand, which may constrain the generalisability of the conclusions across other regions, brands, or industrial segments, and the cross-sectional design does not capture changes in customer perceptions over time. Future research should look at multiple brands and regions, use long-term studies, and include other factors like trust, switching costs, perceived value, usage intensity, and industry traits to better understand what influences repurchase intentions in B2B heavy equipment markets.

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