

RESEARCH ARTICLE

Understanding How Brand Awareness Develops in Business-to-Business Medical Device Markets: Evidence from Indonesian Cathlab Hospitals

Danan Jaya^{1*}

¹ School of Business and Management, Institut Teknologi Bandung, Indonesia

*Corresponding author: danan.dajaya05@gmail.com

ABSTRACT

Brand awareness has traditionally been examined from a business-to-consumer perspective, whereas its development within business-to-business (B2B) healthcare markets remains insufficiently understood. This study explores how brand awareness develops in the Indonesian medical device industry by examining the experiences of key stakeholders involved in cardiovascular medical device procurement and utilization across Cathlab hospitals. A qualitative case study approach was employed, involving semi-structured interviews with 15 participants comprising interventional cardiologists, Cathlab nurses, and hospital procurement officers. Data were analysed using reflexive thematic analysis to identify the organizational and market mechanisms shaping supplier awareness. The findings indicate that brand awareness is not primarily driven by promotional activities but develops through continuous stakeholder engagement, clinical experience, organizational trust, and repeated professional interactions. External market conditions—including healthcare market expansion, competitive rivalry, hospital heterogeneity, and substitute products—create the context within which supplier awareness evolves, while internal organizational capabilities such as technical expertise, distributor competence, product education, and relationship management reinforce supplier visibility. The study further demonstrates that physicians, nurses, and procurement personnel contribute complementary perspectives that collectively shape organizational recognition and supplier consideration. These findings extend existing B2B branding literature by conceptualizing brand awareness as a dynamic organizational process emerging from the interaction between organizational capabilities, stakeholder engagement, and competitive market conditions. Practically, the study suggests that medical device companies should prioritize long-term professional relationships and capability development over conventional promotional approaches to strengthen sustainable brand awareness in healthcare markets.

Keywords: *Brand awareness; Business-to-business marketing; Medical device industry; Marketing capabilities; Stakeholder engagement.*

INTRODUCTION

Brand awareness has long been recognized as a fundamental determinant of organizational competitiveness because it influences customer recognition, recall, and consideration throughout the purchasing process (Aaker, 1996). In business-to-business (B2B) markets, however, brand awareness extends beyond simple name recognition. Purchasing decisions are typically characterized by prolonged evaluation processes involving multiple organizational stakeholders, technical assessments, and long-term supplier relationships. Consequently, awareness develops through repeated professional interactions, accumulated product experiences, and organizational trust rather than through mass-market promotional exposure alone. Recent studies further suggest that corporate branding, marketing capabilities, and organizational agility have become increasingly important in shaping competitive advantage under rapidly changing business environments (Agag et al., 2026; Derchi et al., 2026).

These characteristics are particularly evident in the medical device industry, where purchasing decisions are complex, highly regulated, and clinically driven. Unlike consumer markets, medical device procurement requires the simultaneous consideration of clinical performance, regulatory compliance, supplier reliability, after-sales service, and professional credibility. Hospitals therefore evaluate suppliers through a collective decision-making process involving physicians, nurses, procurement officers, and hospital management. This multi-actor buying structure implies that brand awareness is not merely an outcome of promotional communication but evolves through continuous interactions among suppliers and multiple organizational stakeholders (Bogomolova et al., 2026; Shin et al., 2026).

The Indonesian healthcare sector provides a particularly relevant context for examining this phenomenon. Cardiovascular disease remains one of the country's leading causes of mortality, generating substantial demand for advanced interventional cardiology services. The continued expansion of cardiac catheterization laboratories (Cathlabs) across Indonesia has driven demand for specialized cardiovascular medical devices and intensified competition among domestic and multinational suppliers. While the growing number of Cathlab facilities creates significant commercial opportunities, hospitals are simultaneously confronted with an increasing number of competing medical device brands offering comparable technologies and clinical functions. Under these circumstances, supplier visibility and professional reputation become increasingly important determinants of organizational consideration alongside product quality and pricing.

Existing research has primarily examined healthcare marketing from the perspectives of service quality, patient satisfaction, digital transformation, and organizational performance. Recent studies have also highlighted the growing importance of dynamic marketing capabilities, digital marketing capability, and organizational innovation in strengthening firm competitiveness (Figueiredo et al., 2026; Hariandja & Santo, 2026; Hasanein & Al-Romeedy, 2026). Nevertheless, the empirical understanding of how brand awareness develops in B2B medical device markets remains limited, particularly in emerging economies, where purchasing decisions involve complex institutional structures and multiple professional stakeholders. Most brand awareness studies continue to focus on business-to-consumer settings, while relatively little attention has been devoted to industrial healthcare markets characterized by technical complexity and collaborative purchasing behaviour.

This limitation is especially evident in studies addressing hospital procurement. Physicians frequently evaluate products based on clinical familiarity and procedural suitability, whereas procurement personnel place greater emphasis on supplier responsiveness, regulatory documentation, and long-term organizational reliability.

Likewise, Cathlab nurses develop familiarity through repeated procedural exposure and product handling during daily clinical practice. These differences suggest that brand awareness is unlikely to develop uniformly across stakeholder groups but instead emerges through distinct professional experiences and organizational interactions (Liu et al., 2026; Shin et al., 2026).

Furthermore, contemporary branding literature increasingly argues that strong organizational brands are created through coherent corporate identity, consistent stakeholder engagement, and strategically coordinated marketing capabilities rather than promotional activities alone (Derchi et al., 2026). Similarly, dynamic capability research demonstrates that firms enhance market performance by integrating marketing agility, organizational learning, and customer-oriented capabilities to respond effectively to changing market environments (Agag et al., 2026; Hariandja & Santo, 2026). These perspectives suggest that understanding brand awareness in B2B healthcare markets requires greater attention to organizational capabilities and stakeholder interactions than conventional promotional frameworks have traditionally provided.

Against this background, the present study seeks to explain how brand awareness develops within business-to-business medical device markets by exploring the experiences and perceptions of key stakeholders involved in cardiovascular medical device procurement and utilization across Indonesian Cathlab hospitals. Drawing upon qualitative evidence from interventional cardiologists, Cathlab nurses, and hospital procurement personnel, this study identifies the organizational and market mechanisms that shape brand recognition, professional familiarity, and supplier consideration within hospital purchasing environments.

This study contributes to the literature in three important ways. First, it extends brand awareness research into the relatively underexplored context of B2B medical device markets. Second, it provides empirical insights into how different hospital stakeholders collectively influence the development of supplier awareness during organizational purchasing processes. Finally, the study offers a practical understanding of the organizational capabilities and stakeholder engagement mechanisms that medical device companies may strengthen to enhance their visibility and competitive positioning within emerging healthcare markets.

LITERATURE REVIEW

Brand Awareness Development in Business-to-Business Markets

Brand awareness has traditionally been recognized as a fundamental dimension of brand equity because it influences customers' ability to recognize and recall a brand during purchasing decisions (Aaker, 1996). However, contemporary branding literature suggests that awareness should no longer be viewed merely as a cognitive outcome but as a dynamic process shaped by continuous stakeholder interactions, organizational experiences, and relationship development (Derchi et al., 2026). Unlike in business-to-consumer (B2C) markets, brand awareness in business-to-business (B2B) settings develops through prolonged decision-making processes involving multiple organizational stakeholders, technical evaluations, and long-term supplier relationships. Organizational buyers rely less on mass promotion and more on accumulated product experience, professional communication, and institutional trust when recognizing and considering suppliers (Bogomolova et al., 2026). Consequently, awareness becomes an organizational phenomenon that evolves through repeated interactions rather than isolated promotional activities.

Recent studies further highlight that marketing capabilities play a critical role in strengthening organizational visibility. Firms with superior marketing agility, customer engagement, and digital marketing capabilities are better positioned to sustain stakeholder attention and reinforce brand recognition in competitive markets (Agag et al., 2026; Figueiredo et al., 2026; Hasanein & Al-Romeedy, 2026). These capabilities enable firms to communicate value consistently while adapting to changing customer expectations. This perspective is particularly relevant to the medical device industry, where purchasing decisions involve physicians, nurses, procurement officers, and hospital administrators with distinct roles and evaluation criteria. Brand awareness therefore develops through repeated clinical interactions, product demonstrations, educational activities, and supplier support rather than promotional communication alone (Shin et al., 2026). Accordingly, this study conceptualizes brand awareness development as a continuous process through which healthcare stakeholders progressively recognize, understand, and remember medical device suppliers through sustained professional interactions and organizational relationships.

Business-to-Business Marketing in Medical Device Markets

Business-to-business (B2B) marketing in the medical device industry differs substantially from consumer-oriented markets due to the technical complexity of products, stringent regulatory requirements, and the involvement of multiple organizational stakeholders throughout the purchasing process. Rather than relying primarily on mass-market communication, medical device suppliers compete by demonstrating clinical value, technical expertise, regulatory compliance, and long-term service capabilities. Consequently, sustainable competitive advantage depends not only on product quality but also on the firm's ability to establish credibility and maintain enduring professional relationships with healthcare organizations (Cai & Zainal, 2026).

Hospital purchasing decisions are particularly complex because they involve diverse stakeholders with distinct responsibilities and evaluation criteria. Physicians emphasize clinical performance and procedural suitability; nurses assess product usability and operational reliability; and procurement personnel focus on supplier responsiveness, regulatory documentation, pricing, and supply continuity. As a result, supplier evaluation extends beyond individual preferences and becomes a collective organizational process in which multiple perspectives shape purchasing decisions (Shin et al., 2026).

Recent studies further suggest that successful B2B medical device marketing requires firms to develop integrated marketing capabilities that combine customer engagement, professional education, technical support, and continuous communication. Rather than functioning as isolated promotional activities, these capabilities reinforce organizational trust, strengthen stakeholder relationships, and improve supplier visibility across different stages of the buying process (Agag et al., 2026; Hasanein & Al-Romeedy, 2026). This perspective implies that brand awareness in healthcare markets arises from sustained value creation and professional interaction rather than from promotional communication alone.

Given these characteristics, understanding how brand awareness develops in medical device markets requires examining the interactions among key hospital stakeholders who directly influence supplier recognition and consideration. Accordingly, this study focuses on interventional cardiologists, Cathlab nurses, and hospital procurement personnel, as these stakeholder groups collectively represent the principal actors involved in evaluating, using, and procuring cardiovascular medical devices in Indonesian Cathlab hospitals.

Marketing Capabilities and Stakeholder Engagement as Drivers of Brand Awareness

Marketing capability has increasingly been recognized as a strategic resource that enables firms to create superior customer value and sustain competitive advantage in dynamic business environments. Rather than functioning solely as an operational marketing activity, marketing capability reflects an organization's ability to identify customer needs, coordinate internal resources, communicate value effectively, and continuously adapt to market changes. Firms possessing stronger marketing capabilities are therefore better positioned to maintain visibility, strengthen stakeholder relationships, and improve organizational performance under competitive conditions (Agag et al., 2026; Tajeddini et al., 2026).

In business-to-business medical device markets, these capabilities become particularly important because supplier evaluation is based on long-term professional interactions rather than transactional exchanges. Medical device companies are expected not only to deliver technically reliable products but also to provide clinical education, technical assistance, responsive after-sales services, and continuous professional communication. Such activities strengthen organizational credibility while reinforcing relationships with healthcare professionals throughout the purchasing process (Hasanein & Al-Romeedy, 2026).

Recent branding research further argues that the consistency of corporate identity and stakeholder engagement increasingly influences organizational visibility. A coherent corporate brand enables organizations to communicate a clear value proposition across multiple stakeholder groups, thereby enhancing familiarity, credibility, and long-term recognition (Derchi et al., 2026). Accordingly, brand awareness should be viewed not merely as the outcome of promotional communication but as the cumulative result of coordinated organizational capabilities that consistently reinforce stakeholder experiences. Stakeholder engagement is particularly critical in hospital environments, where purchasing decisions are distributed across several professional groups. Physicians primarily evaluate clinical effectiveness and procedural compatibility, whereas nurses develop familiarity through repeated use of the product and operational experience. Procurement personnel, in contrast, assess suppliers according to regulatory compliance, documentation quality, supply continuity, and organizational responsiveness. Consequently, supplier awareness develops through the collective experiences of multiple stakeholders whose evaluation criteria differ according to their organizational responsibilities (Shin et al., 2026).

The organizational context further shapes these interactions. Evidence from healthcare organizations indicates that supportive organizational environments facilitate knowledge sharing, professional collaboration, and more effective decision-making among healthcare personnel (Liu et al., 2026). Within medical device markets, these organizational characteristics create opportunities for suppliers to strengthen awareness through sustained professional engagement, clinical education, and consistent relationship management rather than relying solely on conventional promotional activities. Based on these perspectives, this study argues that brand awareness in business-to-business medical device markets emerges from the interaction between organizational marketing capabilities and stakeholder engagement. Firms that consistently deliver relevant knowledge, professional support, and meaningful stakeholder experiences are more likely to become recognized, remembered, and considered during hospital purchasing decisions.

Research Perspective and Analytical Proposition

Building upon the preceding literature, this study conceptualizes brand awareness as a dynamic organizational phenomenon that develops through the interaction between

marketing capabilities and stakeholder engagement within complex hospital purchasing environments. Unlike consumer markets, awareness in business-to-business medical device markets is progressively established through repeated professional interactions, clinical experience, organizational trust, and continuous value communication rather than isolated promotional activities (Agag et al., 2026; Derchi et al., 2026).

Within hospital settings, physicians, Cathlab nurses, and procurement personnel perform complementary roles throughout the purchasing process. Their different responsibilities, evaluation criteria, and professional experiences create multiple pathways through which supplier awareness is developed, reinforced, and translated into organizational consideration (Shin et al., 2026). Consequently, understanding brand awareness requires examining how these stakeholders collectively perceive and evaluate medical device suppliers rather than focusing on individual purchasing decisions.

Guided by this perspective, the present study employs PESTEL, Porter's Five Forces, VRIO, Segmentation-Targeting-Positioning (STP), and Promotion as complementary analytical lenses. These frameworks are not treated as independent theories but as strategic tools for interpreting how external market conditions, organizational capabilities, and stakeholder interactions collectively shape the development of brand awareness within Indonesian business-to-business medical device markets.

Accordingly, this study is guided by the following analytical proposition: *Brand awareness in business-to-business medical device markets develops through the interaction between organizational marketing capabilities and stakeholder engagement, while being influenced by the external competitive environment and internal organizational resources.*

RESEARCH METHOD

Research Design

This study employed a qualitative case study approach to explore how brand awareness develops within business-to-business medical device markets. A qualitative design was considered appropriate because the phenomenon under investigation involves complex organizational interactions, stakeholder perceptions, and professional experiences that cannot be adequately captured through quantitative measurement alone. Rather than testing predefined causal relationships, the study sought to develop an in-depth understanding of the mechanisms through which healthcare stakeholders recognize, evaluate, and remember medical device suppliers within hospital purchasing environments. The case study strategy was selected because it enables researchers to investigate contemporary organizational phenomena within their real-life context, particularly when the boundaries between the phenomenon and its context are not clearly distinguishable (Yin, 2017). In the present study, Indonesian Cathlab hospitals provided an appropriate empirical setting, as medical device purchasing involves multiple professional stakeholders whose interactions collectively shape suppliers' awareness.

Research Context

The study was conducted in Indonesian hospitals with cardiac catheterization laboratories (Cathlabs), where cardiovascular medical devices are essential components of diagnostic and interventional procedures. The increasing number of Cathlab facilities, along with the growing demand for cardiovascular services, has intensified competition among medical device suppliers and created a highly dynamic business-to-business market. Unlike conventional purchasing settings, supplier evaluation in Cathlab hospitals involves clinical, operational, and administrative considerations, making them an

appropriate context for examining the development of organizational brand awareness. Within these hospitals, supplier awareness extends beyond simple product familiarity. Physicians evaluate products based on clinical performance and procedural suitability; Cathlab nurses develop familiarity through routine product use; and procurement personnel assess suppliers based on documentation, regulatory compliance, service responsiveness, and supply continuity. Consequently, awareness develops through interactions among multiple stakeholders rather than individual purchasing decisions.

Participants and Sampling

Participants were selected using purposive sampling to ensure that all respondents possessed direct experience with cardiovascular medical devices and hospital procurement processes. Fifteen participants were recruited, comprising eight interventional cardiologists, five Cathlab nurses, and two hospital procurement officers. These stakeholder groups were selected because they represent complementary roles within hospital purchasing environments. Interventional cardiologists provide clinical assessments of product suitability and procedural performance; Cathlab nurses contribute operational perspectives based on daily product utilization; and procurement personnel evaluate suppliers from organizational, administrative, and regulatory perspectives. Including these diverse stakeholder groups enabled the study to capture multiple viewpoints regarding how awareness develops across organizational buying processes rather than relying on a single professional perspective. Purposive sampling was continued until sufficient informational richness and thematic redundancy were achieved, indicating that additional interviews were unlikely to generate substantially new conceptual insights.

Data Collection

Primary data were collected through semi-structured interviews with 15 participants representing three key stakeholder groups in Indonesian Cathlab hospitals. Semi-structured interviews were selected because they provide sufficient flexibility to explore participants' experiences while ensuring consistency across interviews through a common interview protocol (Yin, 2017). The interview guide was developed based on the research objectives and the literature on brand awareness, business-to-business marketing, and stakeholder engagement. Questions explored participants' experiences with medical device suppliers, factors influencing supplier recognition and recall, sources of product familiarity, perceptions of supplier credibility, communication practices, educational support, and organizational interactions throughout the purchasing process. Additional probing questions were used whenever participants introduced new perspectives relevant to the development of supplier awareness.

Each interview was conducted individually to encourage open discussion and lasted approximately 45-60 minutes. With participants' consent, all interviews were audio-recorded and subsequently transcribed verbatim to preserve the richness and accuracy of the data. Field notes were also maintained during and immediately after each interview to document contextual observations, emerging reflections, and non-verbal cues that supported data interpretation. To strengthen data triangulation, interview findings were complemented with secondary sources, including publications from the Indonesian Ministry of Health, BPJS Kesehatan reports, industry reports, and peer-reviewed academic literature related to healthcare marketing, cardiovascular services, and medical device markets. The integration of multiple data sources enhanced contextual understanding and supported the interpretation of participants' perspectives.

Data Analysis

Data were analyzed using reflexive thematic analysis following the six-phase framework proposed by (Braun & Clarke, 2021). This analytical approach was considered appropriate because the study aimed to explore the processes through which brand awareness develops rather than to quantify relationships among predefined variables. The analysis began with repeated reading of interview transcripts to achieve familiarity with the data. During this stage, initial notes and reflections were documented to capture meaningful patterns emerging from participants' narratives. The second phase involved generating initial codes by identifying meaningful segments related to supplier recognition, stakeholder interaction, communication practices, professional experience, organizational trust, and purchasing processes.

Subsequently, related codes were grouped into broader candidate themes that reflected recurring mechanisms influencing brand awareness development. These themes were continuously reviewed and refined through iterative comparison across interviews to ensure conceptual coherence and clear distinctions between themes. During the final stages of analysis, themes were defined, named, and interpreted in relation to the research objectives and existing literature on business-to-business marketing and healthcare branding. Rather than imposing predetermined categories, the analysis adopted an inductive orientation while using the analytical perspectives presented in the literature review to support interpretation. This approach enabled the findings to remain grounded in participants' experiences while facilitating meaningful theoretical explanation.

Trustworthiness

The trustworthiness of the study was established by following the criteria of credibility, transferability, dependability, and confirmability proposed by (Lincoln & Guba, 1985). Credibility was enhanced through purposive sampling of participants who possessed direct experience with cardiovascular medical devices and hospital procurement activities. Interview findings were further supported through data triangulation by comparing participants' perspectives with relevant secondary documents and healthcare reports. Transferability was addressed by providing a detailed description of the research context, participant characteristics, and organizational setting, allowing readers to evaluate the applicability of the findings to comparable healthcare environments. Dependability was strengthened through transparent documentation of the research process, including interview procedures, coding decisions, and theme development. Maintaining an audit trail throughout the analytical process enhanced the consistency and transparency of methodological decisions. Finally, confirmability was promoted through reflexive analysis and systematic comparison between empirical evidence and emerging interpretations. The researchers continuously reviewed coding decisions and thematic interpretations to ensure that the findings reflected participants' experiences rather than researchers' prior assumptions.

RESULTS

External and Internal Factors Shaping Brand Awareness Development

The interview findings indicate that brand awareness within Indonesian Cathlab hospitals develops through the interaction between external market conditions and internal organizational practices. Participants consistently described awareness as an evolving process influenced by repeated professional exposure, organizational communication, supplier support, and competitive market dynamics rather than by

promotional activities alone. These findings reinforce the view that awareness in business-to-business healthcare markets emerges through continuous stakeholder interactions within complex organizational settings.

From the external perspective, five factors were identified as influencing the development of supplier awareness. First, participants acknowledged that the rapid expansion of cardiovascular services and Cathlab facilities has created substantial market opportunities for medical device companies. However, respondents emphasized that increasing market demand alone does not automatically translate into stronger supplier awareness without consistent communication and stakeholder engagement. Second, the heterogeneity of Indonesian hospitals requires suppliers to recognize differences in hospital ownership, geographical location, Cathlab availability, procedural volume, and procurement systems when approaching potential customers. As one interventional cardiologist explained, *"The top priority is hospitals with active Cathlabs and regular cardiovascular procedures, because those hospitals will use and evaluate the products more frequently."* (R3)

Third, participants consistently described the competitive environment as highly intensive, with established multinational brands achieving greater familiarity because they conduct more frequent product demonstrations, educational activities, and hospital visits. Fourth, respondents indicated that hospitals evaluate suppliers collectively, requiring companies to engage not only physicians but also procurement personnel responsible for documentation, regulatory compliance, and purchasing administration. One procurement officer stated, *"For procurement, visibility is also related to how active the supplier provides product information and required documents."* (R14)

Finally, participants noted that the availability of numerous substitute products increases the importance of repeated product exposure and professional familiarity. A Cathlab nurse explained, *"In Cathlab, we remember products that we see and use often. If a brand is rarely introduced, it is difficult for nurses to remember it."* (R10)

Internal organizational practices were also found to play a central role in shaping brand awareness. Respondents consistently identified product communication, distributor capability, promotional consistency, product education, and promotional materials as critical organizational factors. Several participants distinguished between awareness of the company and awareness of individual products, suggesting that recognition of the company name does not necessarily imply familiarity with its product portfolio. As one cardiologist noted, *"I know the company name, but I cannot mention many specific products. Other brands are more familiar because they are more often introduced."* (R2)

Participants further emphasized that distributor communication substantially influences supplier awareness because distributors frequently represent the company's primary point of contact with hospitals. Beyond commercial transactions, respondents expected distributors to explain product value, provide educational support, and facilitate product demonstrations. Product demonstrations and clinical education were consistently perceived as more effective than brochures alone in improving product familiarity among healthcare professionals (R5, R6, R9, R12). These findings suggest that organizational marketing capabilities reinforce brand awareness by enabling repeated professional interactions and sustained stakeholder engagement rather than through one-way promotional communication.

Table 1 summarises the external and internal factors identified through the interviews together with their strategic implications.

Table 1. External and Internal Factors Shaping Brand Awareness Development in Indonesian Cathlab Hospitals

Dimension	Empirical Finding	Representative Evidence	Implication for Brand Awareness Development
External Environment	Growing cardiovascular services and expanding Cathlab facilities create increasing market opportunities; however, market growth alone does not improve supplier awareness.	Respondents indicated that awareness requires continuous communication despite increasing market demand.	Market expansion creates opportunities but sustained stakeholder engagement remains necessary for awareness development.
	Hospitals differ substantially in geography, ownership, Cathlab availability, procedural volume, and procurement systems.	<i>"The top priority is hospitals with active Cathlabs and regular cardiovascular procedures..."</i> (R3)	Brand awareness should be developed through differentiated engagement strategies according to hospital characteristics.
	Competition is characterized by strong visibility of multinational brands supported by frequent product demonstrations and educational activities.	Participants consistently recognized competitor brands because of greater exposure and stronger hospital presence.	Repeated professional exposure reinforces supplier familiarity and organizational recall.
	Supplier evaluation involves both clinical and administrative stakeholders.	<i>"Visibility is also related to how active the supplier provides product information and required documents."</i> (R14)	Awareness develops across multiple organizational stakeholders rather than through individual decision-makers alone.
	Availability of substitute products increases reliance on product familiarity.	<i>"We remember products that we see and use often."</i> (R10)	Repeated product exposure strengthens recognition and recall in highly competitive markets.
Internal Organization	Product-level awareness remains lower than corporate awareness.	<i>"I know the company name, but I cannot mention many specific products."</i> (R2)	Organizations should strengthen communication of product portfolios alongside corporate identity.
	Distributor capability strongly influences organizational visibility.	Respondents expected distributors to explain product value instead of focusing solely on price (R5).	Distributor competence becomes an important mechanism for developing supplier awareness.
	Consistent communication through hospital visits and follow-up is essential.	Participants emphasized repeated communication rather than one-time promotion.	Awareness develops progressively through continuous professional engagement.
	Product demonstrations and clinical education are preferred over brochures.	Respondents (R6, R9, R12) consistently perceived demonstrations as more effective for technical products.	Experiential learning reinforces product familiarity and stakeholder confidence.
	Practical promotional materials facilitate communication with healthcare professionals.	Participants preferred concise catalogues, product summaries, handling guides, and supporting documentation.	Clear and practical communication materials support continuous awareness development.

Source: Research data, 2026

Segmentation, Targeting, and Positioning

The interview findings indicate that market segmentation within the Indonesian Cathlab medical device market extends beyond conventional demographic or geographic considerations. Instead, participants consistently described segmentation in terms of hospital service capability, procedural intensity, organizational characteristics, and decision-making structures. These findings suggest that supplier awareness is more effectively developed when marketing efforts are aligned with the operational characteristics of healthcare institutions rather than broad market classifications.

Regarding market segmentation, respondents emphasized that hospitals with active cardiac catheterization laboratories, high volumes of cardiovascular procedures, and established interventional cardiology services represent the most relevant market segments. Differences in hospital ownership, referral status, procurement procedures, and regional accessibility were also identified as important considerations when planning marketing activities. As one participant explained, *"Hospitals with active Cathlab services become our priority because product utilization is higher and physicians are more familiar with new technologies."* (R3)

The findings further demonstrate that target market selection is primarily influenced by institutional readiness to utilize cardiovascular medical devices rather than by hospital size alone. Participants described tertiary referral hospitals, private hospitals with advanced cardiovascular services, and institutions with regular procurement activities as strategic targets because they provide greater opportunities for product evaluation, clinical interaction, and long-term professional engagement.

Positioning emerged as another important component influencing supplier awareness. Rather than emphasizing price competition, respondents consistently associated strong market positioning with product quality, clinical reliability, after-sales service, distributor responsiveness, and continuous professional support. Several participants indicated that suppliers who actively organize product demonstrations, clinical workshops, and educational activities are perceived as more credible and are therefore more easily recognized during purchasing discussions. These findings suggest that positioning within business-to-business medical device markets is constructed through sustained professional relationships and organizational credibility rather than promotional claims alone. Consequently, effective positioning contributes not only to competitive differentiation but also to the gradual development of brand awareness among physicians, Cathlab nurses, and procurement personnel.

Promotion as a Mechanism for Brand Awareness Development

The interview findings consistently indicate that promotion should be understood as a continuous stakeholder engagement process rather than a series of isolated marketing activities. Participants repeatedly associated supplier awareness with the frequency and quality of professional interactions instead of conventional promotional exposure. Respondents explained that companies become recognizable because they regularly visit hospitals, provide clinical education, demonstrate products, and maintain communication after initial contact. These findings suggest that promotion functions primarily as a mechanism through which supplier visibility and organizational familiarity are progressively developed.

Hospital visit programmes emerged as the most important communication activity. Participants emphasized that direct visits enable suppliers to introduce both the company and its product portfolio while simultaneously understanding the operational characteristics and clinical needs of individual hospitals. The findings indicate that visit objectives should differ according to existing awareness levels. Hospitals with limited

familiarity require introductory communication and portfolio presentation, whereas hospitals already familiar with the supplier benefit from follow-up discussions, product evaluations, and relationship development.

The interviews further revealed that educational activities should be tailored to different stakeholder groups. Interventional cardiologists expressed greater interest in clinical performance, procedural suitability, and evidence supporting product effectiveness. Cathlab nurses emphasized practical guidance related to product preparation, handling, and routine clinical use, while procurement personnel required clear information regarding product catalogues, regulatory documentation, supplier qualifications, and purchasing requirements. These findings demonstrate that stakeholder-specific communication strengthens organizational awareness because different professional groups evaluate suppliers according to distinct organizational responsibilities.

Product demonstrations were also consistently perceived as more influential than passive promotional materials. Participants explained that demonstrations allow healthcare professionals to observe product functionality directly, ask technical questions, and relate product characteristics to clinical procedures. Such activities increase familiarity with both the supplier and its product portfolio while reducing uncertainty regarding product application. Similarly, respondents regarded practical promotional materials—including company profiles, product catalogues, concise product summaries, comparison sheets, handling guides, regulatory documentation, and digital educational videos—as valuable tools supporting communication initiated during direct interactions.

Participants also highlighted the complementary role of digital communication. Email updates, WhatsApp follow-up messages, online presentations, digital catalogues, and professional networking platforms were viewed as useful for maintaining contact after hospital visits rather than replacing face-to-face engagement. Respondents consistently indicated that digital communication reinforces existing professional relationships but cannot substitute for direct interaction when introducing technically complex medical devices.

Another important finding concerns the role of distributors. Because distributors frequently represent the company's primary interface with hospitals, participants expected distributor personnel to possess sufficient technical knowledge, standardized communication materials, and the ability to explain product value beyond pricing considerations. Consequently, distributor competence was viewed not merely as an operational function but as an essential contributor to supplier visibility and organizational recognition. Finally, respondents emphasized that promotional intensity should vary according to hospital characteristics and strategic priority. Hospitals with greater procedural activity and stronger market potential were considered appropriate recipients of more frequent educational activities, demonstrations, and follow-up communication, whereas emerging hospitals could initially be supported through periodic educational and digital engagement.

These findings indicate that promotion in business-to-business medical device markets extends beyond persuasive communication. Instead, promotion represents a coordinated process of professional engagement through which repeated interaction, technical support, educational activities, and relationship continuity collectively strengthen brand awareness among physicians, Cathlab nurses, and procurement personnel.

Organizational Resources Supporting Brand Awareness Development: A VRIO Perspective

The interview findings indicate that the development of brand awareness is supported not only by external market conditions but also by the effective utilization of internal organizational resources. Applying the VRIO framework provides a systematic perspective for understanding which organizational capabilities contribute to sustainable supplier visibility within Indonesian Cathlab hospitals. Participants consistently emphasized that technical product knowledge constitutes one of the company's most valuable organizational resources. Healthcare professionals expect company representatives and distributors to possess comprehensive knowledge regarding product specifications, clinical applications, regulatory compliance, and procedural suitability. This capability enables suppliers to communicate product value effectively and strengthens organizational credibility during professional interactions.

Respondents also highlighted the importance of established relationships with physicians, Cathlab nurses, and procurement personnel. Rather than developing through isolated promotional activities, these relationships are gradually strengthened through repeated hospital visits, educational programmes, product demonstrations, and continuous technical support. Such long-term stakeholder engagement enhances supplier familiarity and contributes to sustained organizational awareness. Another resource identified through the interviews is the company's distribution and service capability. Participants indicated that supplier responsiveness, product availability, after-sales support, and the ability to provide timely technical assistance significantly influence how healthcare professionals perceive and remember suppliers. These operational capabilities complement product quality by reinforcing confidence in the supplier's reliability.

The findings further suggest that accumulated organizational experience within the cardiovascular medical device market represents an additional strategic resource. Respondents associated experienced suppliers with greater credibility because they demonstrate familiarity with hospital procedures, procurement requirements, and clinical expectations. Organizational experience therefore supports more effective communication and facilitates stronger professional relationships across multiple stakeholder groups.

From a VRIO perspective, these resources generate organizational value because they directly support stakeholder engagement and enhance supplier recognition throughout the purchasing process. Furthermore, many of these capabilities—particularly accumulated clinical relationships, technical expertise, and organizational reputation—require substantial time, experience, and organizational learning to develop. Consequently, they are not easily replicated by competitors, allowing companies to maintain stronger organizational visibility within highly competitive medical device markets. The findings indicate that sustainable brand awareness is reinforced when valuable organizational resources are integrated with consistent stakeholder engagement. Rather than functioning independently, technical expertise, distributor capability, organizational experience, and professional relationships collectively strengthen supplier recognition and contribute to long-term organizational positioning within Indonesian business-to-business medical device markets.

Competitive Environment Influencing Brand Awareness: A Porter's Five Forces Perspective

The interview findings indicate that brand awareness develops within a highly competitive business environment in which multiple external forces influence how suppliers are recognized and evaluated by healthcare organizations. The application of

Porter's Five Forces provides a structured perspective for interpreting the competitive conditions surrounding Indonesian Cathlab medical device markets and their implications for supplier visibility. Participants consistently described rivalry among existing suppliers as the most influential competitive force. Respondents noted that multinational medical device companies maintain strong visibility because of their established reputations, extensive product portfolios, frequent hospital visits, educational programmes, and long-standing professional relationships with healthcare providers. Consequently, respondents generally demonstrated greater familiarity with suppliers that maintained continuous engagement with hospitals than with companies relying primarily on transactional marketing activities.

The threat of new entrants was perceived as relatively moderate because entry into the cardiovascular medical device market requires substantial financial investment, regulatory approval, technical expertise, and the establishment of professional credibility among physicians and hospitals. Participants explained that newly entering suppliers often experience limited organizational recognition during the early stages of market entry, making sustained stakeholder engagement essential for gradually developing awareness and professional trust. Regarding the bargaining power of buyers, the interviews revealed that hospitals exercise considerable influence throughout the purchasing process. Procurement decisions involve not only physicians but also procurement officers, hospital management, and administrative personnel who evaluate suppliers from different perspectives, including clinical performance, regulatory compliance, pricing, after-sales service, and supply reliability. As a result, supplier awareness must be established across multiple organizational stakeholders rather than within a single professional group.

Participants further indicated that the bargaining power of suppliers is shaped by their ability to provide differentiated products, reliable technical support, and responsive after-sales service. Suppliers offering specialized technologies, comprehensive clinical education, and consistent distributor support were generally perceived more positively than suppliers competing primarily on price. These findings suggest that organizational reputation and service quality strengthen supplier recognition while simultaneously reducing dependence on price-based competition.

Respondents acknowledged that substitute products remain readily available within the cardiovascular medical device market. Healthcare professionals frequently evaluate alternative products before making purchasing recommendations, particularly when competing technologies demonstrate comparable clinical performance. Under these conditions, repeated product exposure, technical demonstrations, and accumulated clinical experience become important mechanisms through which suppliers differentiate themselves and reinforce organizational awareness despite the availability of competing alternatives. These findings demonstrate that the competitive environment influences brand awareness not only through market rivalry but also through institutional purchasing structures, regulatory requirements, technological differentiation, and stakeholder expectations. Brand awareness therefore emerges as a dynamic outcome of continuous interaction between organizational capabilities and competitive market forces.

DISCUSSION

Brand Awareness as a Relational and Organizational Process

The findings demonstrate that brand awareness in business-to-business medical device markets extends beyond conventional notions of brand recognition and promotional exposure. Rather than emerging through isolated marketing activities, supplier awareness develops progressively through repeated professional interactions, clinical experience,

organizational trust, and continuous stakeholder engagement. This finding supports contemporary branding literature that conceptualizes awareness as a dynamic organizational process shaped by accumulated stakeholder experiences rather than merely a cognitive outcome of marketing communication (Derchi et al., 2026).

Unlike business-to-consumer markets, where individual consumers often develop awareness through advertising and mass communication, awareness within Indonesian Cathlab hospitals evolves through organizational buying processes involving physicians, Cathlab nurses, procurement personnel, and hospital management. Each stakeholder contributes distinct evaluation criteria based on professional responsibilities, creating multiple pathways through which supplier recognition is established. Physicians primarily assess clinical performance and procedural suitability, nurses develop familiarity through repeated operational use, while procurement personnel evaluate supplier responsiveness, documentation, and organizational reliability. Consequently, organizational awareness becomes the cumulative outcome of interactions across several professional groups rather than the perception of a single decision-maker.

These findings extend previous B2B branding research by demonstrating that supplier awareness is socially constructed through continuous professional engagement. Rather than functioning as a static marketing outcome, awareness represents an evolving organizational capability that is reinforced through repeated exposure, collaborative communication, and shared organizational experience.

Marketing Capabilities as the Foundation of Brand Awareness Development

The findings further indicate that organizational marketing capabilities constitute the primary mechanism through which supplier awareness is strengthened. Participants consistently associated supplier recognition with technical competence, educational support, distributor capability, and sustained communication rather than with promotional intensity alone. These findings reinforce recent studies arguing that marketing capability enables organizations to create superior stakeholder value through coordinated customer engagement and organizational learning (Agag et al., 2026; Figueiredo et al., 2026).

An important observation emerging from this study is that healthcare professionals rarely distinguish between communication activities and organizational competence. Product demonstrations, technical discussions, hospital visits, and educational programmes simultaneously communicate product value while strengthening organizational credibility. Accordingly, marketing capability should not be interpreted solely as a promotional function but as an organizational resource that enables suppliers to maintain visibility throughout prolonged purchasing processes. This interpretation also explains why participants consistently emphasized distributor capability. Within Indonesian healthcare markets, distributors frequently represent the supplier's principal interface with hospitals. Their technical knowledge, responsiveness, and communication skills therefore become integral components of organizational brand awareness rather than merely operational support functions.

Competitive Environments Reinforce the Need for Continuous Stakeholder Engagement

The competitive environment identified through the Five Forces and VRIO analyses further demonstrates that awareness development cannot be separated from organizational capabilities and stakeholder relationships. Strong rivalry among established multinational suppliers, together with the availability of substitute products, increases the importance of maintaining continuous organizational visibility. Under these

conditions, awareness becomes increasingly dependent upon repeated stakeholder engagement rather than sporadic promotional campaigns. The findings suggest that competitive pressure does not merely intensify market rivalry but also changes the mechanisms through which suppliers become recognized. Organizations possessing stronger relationship networks, accumulated technical expertise, and superior educational support are more likely to sustain awareness despite increasingly competitive market conditions. These findings therefore complement dynamic capability research by illustrating how organizational resources and stakeholder engagement jointly support supplier visibility in complex business-to-business healthcare environments. Overall, the study proposes that brand awareness in medical device markets should be viewed as the outcome of interactions among organizational capabilities, stakeholder engagement, and competitive market dynamics. This perspective moves beyond traditional promotional interpretations and provides a broader explanation of how supplier awareness develops within institutional purchasing environments.

THEORETICAL CONTRIBUTIONS

This study makes three important contributions to the literature on business-to-business branding and healthcare marketing. First, the study extends the conceptualization of brand awareness beyond its traditional treatment as a cognitive component of brand equity. While previous studies have primarily emphasized brand recognition and recall as individual psychological outcomes (Aaker, 1996), the present findings demonstrate that awareness in business-to-business medical device markets is better understood as an organizational process that develops through repeated professional interactions among multiple stakeholders. This perspective broadens existing branding literature by illustrating that organizational awareness is progressively constructed through stakeholder engagement, clinical experience, and institutional trust rather than promotional communication alone.

Second, the findings contribute to business-to-business marketing literature by highlighting the complementary roles of different organizational stakeholders throughout the development of supplier awareness. Physicians, Cathlab nurses, and procurement personnel evaluate suppliers according to different professional responsibilities and organizational expectations, yet their collective experiences ultimately shape organizational recognition and supplier consideration. This finding advances previous research by demonstrating that brand awareness within healthcare organizations is socially and organizationally co-created rather than individually formed.

Third, this study contributes to the literature on marketing capabilities by demonstrating that organizational resources influence brand awareness indirectly through stakeholder engagement. Technical expertise, distributor competence, professional education, organizational responsiveness, and long-term relationship management were consistently identified as mechanisms that strengthen supplier visibility. Rather than functioning solely as sources of competitive advantage, these organizational capabilities facilitate repeated stakeholder interactions that progressively reinforce organizational awareness within complex purchasing environments. These contributions support a broader understanding of brand awareness as a dynamic organizational capability emerging from the interaction between internal organizational resources, stakeholder engagement, and external market conditions. This perspective complements existing branding theory by integrating concepts from business-to-business marketing, organizational capability, and stakeholder relationship literature into a unified explanation of brand awareness development within healthcare markets.

PRACTICAL IMPLICATIONS

The findings provide several practical implications for medical device companies operating in business-to-business healthcare markets. First, organizations should recognize that brand awareness cannot be developed solely through promotional campaigns. Instead, awareness should be managed as a long-term organizational process involving continuous professional engagement with physicians, Cathlab nurses, procurement personnel, and hospital management. Companies should therefore prioritize sustained relationship-building activities rather than relying on short-term promotional exposure.

Second, marketing capability should be viewed as an organizational capability rather than a departmental responsibility. Technical product knowledge, distributor competence, educational programmes, and responsive after-sales support collectively strengthen supplier visibility by creating meaningful professional experiences throughout the purchasing process. Third, stakeholder-specific communication strategies should be developed to reflect the distinct informational needs of different hospital stakeholders. Physicians require evidence regarding clinical performance and procedural suitability; nurses benefit from practical product training and operational guidance, while procurement personnel require comprehensive documentation, regulatory information, and supplier reliability. Tailoring communication according to stakeholder roles increases the relevance and effectiveness of organizational engagement.

Finally, organizations should integrate relationship marketing with capability development. Investments in distributor training, professional education, clinical support, and knowledge sharing not only improve service quality but also reinforce long-term organizational awareness and competitive positioning within increasingly competitive healthcare markets.

CONCLUSION

This study set out to explain how brand awareness develops within business-to-business medical device markets by examining the experiences of interventional cardiologists, Cathlab nurses, and procurement personnel involved in cardiovascular medical device purchasing across Indonesian Cathlab hospitals. The findings demonstrate that brand awareness is not primarily generated through promotional exposure but evolves through repeated professional interactions, clinical experience, organizational trust, and sustained stakeholder engagement. Consequently, supplier awareness should be understood as a dynamic organizational process rather than a static marketing outcome.

The study further demonstrates that organizational marketing capabilities—including technical expertise, distributor competence, professional education, communication quality, and relationship management—serve as the principal mechanisms supporting awareness development. These capabilities enable organizations to maintain continuous visibility throughout prolonged organizational buying processes while simultaneously strengthening credibility among multiple healthcare stakeholders. In addition, the competitive environment reinforces the importance of sustained stakeholder engagement because supplier recognition increasingly depends upon organizational capability rather than promotional intensity alone.

From a theoretical perspective, the study extends existing brand awareness literature by introducing an organizational perspective on awareness development within business-to-business healthcare markets. Rather than conceptualizing awareness solely as individual cognitive recognition, the findings demonstrate that awareness emerges through the interaction between organizational resources, stakeholder engagement, and

institutional purchasing processes. This perspective contributes to branding, business-to-business marketing, and healthcare marketing literature by integrating organizational capability and stakeholder relationship perspectives into a broader explanation of supplier awareness development.

The findings suggest that strengthening brand awareness within medical device markets requires organizations to move beyond conventional promotional approaches and invest in long-term professional engagement, organizational learning, and relationship-based marketing capabilities. Such an approach enables suppliers to establish sustainable organizational visibility while responding effectively to the increasing complexity of healthcare purchasing environments.

Limitations And Future Research

Several limitations should be acknowledged when interpreting the findings of this study. First, the study focused exclusively on cardiovascular medical device markets within Indonesian Cathlab hospitals. Consequently, the findings may not be directly transferable to other healthcare specialties, medical device categories, or healthcare systems operating under different institutional and regulatory environments.

Second, this research adopted a qualitative case study approach involving a relatively limited number of participants. Although the selected respondents possessed substantial professional experience and provided rich empirical insights, the findings are intended to generate conceptual understanding rather than statistical generalization.

Third, the study examined brand awareness from the perspectives of healthcare stakeholders involved in hospital purchasing processes. Future research may incorporate additional organizational actors, including hospital executives, biomedical engineers, distributors, regulatory agencies, and healthcare policymakers, to provide a broader understanding of organizational buying behaviour within healthcare markets.

Future studies may also employ mixed-method or quantitative approaches to examine the relationships identified in this research. The conceptual mechanisms proposed in the present study—including organizational marketing capabilities, stakeholder engagement, organizational trust, and competitive environments—could be empirically tested using structural equation modelling across broader healthcare contexts. Comparative studies involving different countries or medical specialties would further enrich the generalizability of the proposed framework and contribute to the development of business-to-business healthcare marketing theory.

REFERENCES

- Aaker, D. A. (1996). *Building Strong Brands*. Free Press, Michigan University.
- Agag, G., Ali, M., Sharkasi, N., & Eid, R. (2026). Unpacking marketing agility: Effects on customer mindset metrics and hotel performance under technological dynamism and structural flux. *Tourism Management*, 116. <https://doi.org/10.1016/j.tourman.2026.105427>
- Bogomolova, S., Lesar, L., Baum, N., Jardine, B., Lockshin, L., Loch, A., & Buckley, J. (2026). Exploring the intensity of power asymmetry in food supply systems: an application of systems thinking. *Industrial Marketing Management*, 133, 53-66. <https://doi.org/10.1016/j.indmarman.2026.01.002>
- Braun, V., & Clarke, V. (2021). *Thematic Analysis: A Practical Guide*. SAGE Publications. <https://books.google.co.id/books?id=eMArEAAAQBAJ>
- Cai, Y., & Zainal, S. R. M. (2026). AI adoption and perceived organizational performance in Chinese pharmaceutical sales: Efficiency and motivation pathways. *Problems and Perspectives in Management*, 24(2), 743-758.

[https://doi.org/10.21511/ppm.24\(2\).2026.50](https://doi.org/10.21511/ppm.24(2).2026.50)

- Derchi, F., Buratti, N., & Vitellaro, F. (2026). Building Corporate Brand Identity in Exponential Organizations: The Role of a Massive Transformative Purpose. *Administrative Sciences*, 16(6). <https://doi.org/10.3390/admsci16060245>
- Figueiredo, R., Agag, G., Yousaf, A., & Soliman, M. (2026). Digital marketing capability: Its impact on marketing agility and service innovation in the hospitality industry. *International Journal of Hospitality Management*, 135, 104607. <https://doi.org/10.1016/j.ijhm.2026.104607>
- Hariandja, E. S., & Santo, I. (2026). How dynamic marketing and service innovation capabilities translate into hotel performance: The roles of service excellence and brand identity. *Innovative Marketing*, 22(2), 42-54. [https://doi.org/10.21511/im.22\(2\).2026.04](https://doi.org/10.21511/im.22(2).2026.04)
- Hasanein, A. M., & Al-Romeedy, B. S. (2026). Driving Marketing Innovation in Tourism and Hospitality Through Digital Talent: The Mediating Roles of Digital Culture and Digital Strategy. *Administrative Sciences*, 16(5). <https://doi.org/10.3390/admsci16050225>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. SAGE Publications. <https://books.google.co.id/books?id=2oA9aWlNeooC>
- Liu, A., Jintana, S., & Boonlab, S. (2026). Burnout and performance in multi-site physician practice: a dual-pathway model of policy and organizational support in China's healthcare reform. *Cogent Business and Management*, 13(1). <https://doi.org/10.1080/23311975.2026.2635160>
- Shin, S., Liu, Q., Lu, S., & Nelson, P. (2026). Incorporating switching reasons into a factor-analytic choice model: A study on benefit segmentation of physicians. *Quantitative Marketing and Economics*, 24(1). <https://doi.org/10.1007/s11129-026-09306-0>
- Tajeddini, O., Tajeddini, K., Gamage, T. C., & Hameed, W. U. (2026). Smart insights, stronger performance: Leveraging business intelligence and dynamic capabilities in tourism and hospitality. *International Journal of Hospitality Management*, 133, 104410. <https://doi.org/10.1016/j.ijhm.2025.104410>
- Yin, R. K. (2017). *Case Study Research and Applications: Design and Methods*. SAGE Publications. <https://books.google.co.id/books?id=uX1ZDwAAQBAJ>