Propose Strategic Marketing Initiatives to Accelerate Market Share and Revenue of MEDTECH Company for Trauma Implant Device in Indonesia (Case Study at MEDTECH Company)

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ABSTRACT: Trauma is a critical global health issue, leading to millions of serious injuries and significant fatalities worldwide, particularly from traffic accidents. In Indonesia, traffic accidents were the fifth leading cause of death in 2023, highlighting the urgent need for effective trauma care. Despite the pandemic, the trauma device market in Indonesia experienced growth, with MEDTECH's portfolio outperforming the market but still underperforming in revenue generation. This research aims to address MEDTECH's challenges and formulate strategies to enhance its market presence and sales performance.

The study is divided into three phases: identifying core business issues, establishing a theoretical foundation using PESTLE and Porter's Five Forces, and conducting a SWOT analysis. The PESTEL analysis revealed opportunities such as economic growth and technological advancements, and threats including local content regulations and supply chain issues. The Porter analysis suggests moderate market attractiveness due to competition and innovation needs. The STP analysis identifies key targets, including Tier 1 hospitals for advanced Variable Angle (VA) implants and Tier 2 hospitals for cost-effective Mono Angle (MA) implants. The Marketing Mix analysis highlights the need for product updates, pricing adjustments, expanded distribution, and enhanced promotional activities. To strengthen its position, MEDTECH should focus on immediate product development and market penetration strategies, while also planning for long-term local manufacturing and regulatory compliance to ensure sustainable growth in the Indonesian market.

KEYWORDS: Trauma, Variable Angle (VA) implants, Mono Angle (M) implants, PESTLE, Porter's Five Forces, STP, Marketing Mix, Marketing Strategy, Teaching Hospital, Tier 1, Tier 2, Product Development, Market Penetration.

INTRODUCTION

Trauma is a significant global health issue, leading to around 1 million emergency department visits annually and over 200,000 treatments. Traffic accidents are a major cause, particularly affecting children and young adults, making them a critical public health concern worldwide. In Indonesia, traffic accidents are the fifth leading cause of death, with 116,000 incidents reported in 2023. Despite the challenges posed by the COVID-19 pandemic, trauma care remained a critical service, with the trauma device market in Indonesia growing from 46,000 cases in 2020 to 53,500 cases in 2021, a 16.4% increase. MEDTECH's trauma portfolio experienced a 34% growth in 2023, surpassing the market growth rate, though its revenue remains relatively small compared to the total market value.

The MEDTECH Company, offering sub-premium products of high quality at reasonable prices, faces challenges in the Indonesian market due to a lack of strategic initiatives and insufficient collaboration with channel partners. This has resulted in slow adoption of advanced technology products. Furthermore, the company contends with significant competition from local companies and low-cost brands from China, which are aggressively marketing their products and conducting educational programs. The Indonesian government's recent policy, KEMENPERIN No. 31/2022, emphasizes the use of domestic medical devices, further challenging MEDTECH's position by encouraging local production and limiting the availability of imported devices in government procurement processes.

This research aims to identify and address these business challenges for MEDTECH, proposing strategies to accelerate revenue growth and increase market share for trauma devices in Indonesia. The study will focus on understanding the market dynamics, competitive landscape, and the impact of local regulations on the company's operations.
LITERATURE REVIEW

Theoretical foundations serve as the fundamental conceptual framework for the entire research. This part provides a comprehensive overview of the theories, models, and conceptual frameworks that constitute the foundation for the research’s core concepts and research topics.

A. Trauma Implant Devices

Trauma implant devices are specially designed for orthopedic surgeries to provide crucial support, stability, and fixation for fractured or damaged bones resulting from trauma. These devices are essential in managing injuries to the musculoskeletal system. They include a range of components like screws, plates, rods, and pins, along with complex systems that can be customized to meet the specific needs of each injury and patient. By relieving pain associated with bone damage, these implants play a vital role. Due to the complex nature of bone injuries, many manufacturers produce implants in various types, sizes, and functionalities to accommodate different medical requirements. Normally bone has the capacity to regenerate and restore the properties (M.M. Shalabi, 2006). In some cases, natural healing may not occur, making trauma implants crucial for speeding up recovery. Previously, casts and splints were used to stabilize bones, but advances in surgical technology now allow for bone stabilization with minimal infection risk. Fractured bones are aligned together during the surgery. The implants manufactured by Trauma Implants Company facilitate this process. Implant implantation facilitates the recovery process and minimizes the risk of inadequate healing of the fracture (Capsur Enterprises, 2023). The development and application of implant trauma devices are grounded in a multidisciplinary theoretical foundation that spans several key fields of study. Biomedical engineering utilizes principles from mechanical engineering and biological sciences to develop devices that fulfill the mechanical requirements of the human body while being compatible with biological systems (Livio Roseti, 2017). The integration is crucial due to the complex composition of the human musculoskeletal system, which requires careful selection and shaping of materials like stainless steel, titanium, and sophisticated polymers to guarantee strength, longevity, and seamless interaction with biological tissues (Rachit Agarwal, 2015).

B. PESTLE Analysis

PESTLE analysis is a strategic tool used to assess the macro-environmental factors that can influence an organization's operations, performance, and strategic decisions (Alanzi, 2015). It stands for Political, Economic, Social, Technological, Environmental, and Legal factors. Political factors involve government policies, stability, and intervention, impacting business strategies and risk exposure. Economic factors include economic growth, inflation, interest rates, and consumer confidence, which affect purchasing power and demand. Social factors encompass demographic trends, cultural norms, and lifestyle changes that shape consumer behavior. Technological factors cover advancements in technology, such as R&D and digitalization, influencing innovation and competitive advantage. Environmental factors consider ecological concerns like climate change and sustainability, crucial for corporate responsibility. Legal factors include laws and regulations governing business practices and compliance. Together, these factors provide a comprehensive view of the external environment, helping organizations identify opportunities and threats.

C. Michael Porter’s Five Forces

One of the foundational theories that support industry analysis is Michael Porter's Five Forces framework. Developed by renowned strategist Michael E. Porter, this framework provides a structured approach to analyzing the competitive dynamics within an industry (Harvard Business School, n.d.). The Five Forces framework, developed by Michael Porter, is a tool used to analyze the competitive dynamics and profitability within an industry. It identifies five key factors: the threat of new entrants, bargaining power of suppliers, bargaining power of buyers, the threat of substitutes, and the intensity of rivalry among existing competitors. The threat of new entrants assesses how easy it is for new competitors to enter the market, influenced by factors like capital requirements and brand loyalty. The bargaining power of suppliers indicates their ability to influence prices and quality, depending on factors such as supplier concentration and the availability of alternative inputs. The bargaining power of buyers reflects their ability to negotiate for better prices and quality, influenced by buyer concentration and product importance. The threat of substitutes evaluates how easily alternative products can replace the industry’s offerings, impacting pricing power and profitability. Lastly, the intensity of rivalry examines the degree of competition within the industry, shaped by factors like industry growth, differentiation, and strategic stakes. Together, these forces help industry analysts understand the competitive landscape and identify strategic opportunities and threats.
D. Marketing Mix (4P's)
The marketing mix, also known as the 4Ps (Product, Price, Place, Promotion), is a core concept in marketing that identifies the key elements businesses can control to influence consumer decisions and achieve marketing goals. Product involves theories and strategies related to product development, branding, packaging, and overall management. Price encompasses research on pricing strategies, elasticity, perception, and tactics to attract customers. Place or distribution focuses on the methods and channels through which a product reaches the consumer, including logistics, retailing, and supply chain management. Promotion covers advertising, sales promotions, public relations, personal selling, and integrated marketing communications to effectively convey the product's value. Managing these elements helps businesses engage customers, grow revenue, differentiate from competitors, and achieve long-term success in the market.

E. STP Analysis
The STP analysis, which stands for Segmentation, Targeting, and Positioning, is a strategic marketing framework that businesses use to identify specific market segments, select target audiences, and craft unique positioning strategies. The segmentation process involves dividing the market into distinct groups based on shared characteristics, such as demographics, psychographics, geography, or behavior. This helps businesses understand diverse customer needs and tailor their marketing efforts accordingly. Targeting involves choosing specific segments to focus on, based on factors like segment size, growth potential, and alignment with the company's strengths. This ensures that marketing resources are efficiently allocated to maximize returns. Positioning then involves creating a unique brand image or perception in the minds of the target audience, distinguishing the brand from competitors through attributes like quality, price, or convenience. A strong positioning strategy helps build brand loyalty and competitive advantage, ultimately leading to business success. Overall, STP analysis enables businesses to effectively reach and engage their ideal customers, driving higher customer satisfaction and market performance.

F. SWOT analysis
The SWOT analysis is a strategic tool used to identify and understand the Strengths, Weaknesses, Opportunities, and Threats related to business competition or project planning. This framework is crucial for strategy formulation as it provides a foundation for developing strategic actions. Strengths highlight the positive aspects of existing research, such as well-established theories and robust methodologies, which researchers can build upon. Weaknesses identify the limitations and gaps in current literature, helping to justify the significance of new research. Opportunities point to areas where further research can advance knowledge or explore new trends, emphasizing the relevance of the study. Threats outline potential challenges, such as competing theories or methodological issues, that may impact the research's success. Recognizing these elements allows researchers to leverage strengths, address weaknesses, capitalize on opportunities, and mitigate threats, ensuring a well-rounded and credible research approach.

CONCEPTUAL FRAMEWORK
This section of the chapter introduces the conceptual framework, designed to clarify the relationships among various theories and concepts. The framework's visualization aids in understanding the components and elements of the variables involved. It presents a strategic marketing approach aimed at increasing market share and revenue by employing a structured process that includes market analysis, identifying target markets, and implementing a comprehensive marketing strategy mix.
The conceptual framework for this research is illustrated in the figure and explained as follows:

1. Market Analysis: This involves a thorough examination of both internal and external factors affecting the company's operations. Key tools used include PESTLE and Porter's Five Forces analyses to assess various elements:
   - Customer Needs: Identifying what the market demands in terms of product features, quality, and services.
   - Company Resources: Evaluating internal strengths, such as technological, financial, and human resources.
   - Market Competition: Analyzing the competitive landscape to identify key players and understand their strengths and weaknesses.
   - Partnership with Society: Exploring collaborations with other organizations, government bodies, and communities to enhance the company’s market presence and reputation.

2. Market Identification: Following the market analysis, this step focuses on understanding the current market situation to align the company's internal strengths and weaknesses with external opportunities and threats. It involves:
   - Company Strength: Highlighting the company's unique strengths like innovative technology, brand recognition, or superior customer service.
   - Company Weakness: Identifying internal weaknesses, such as limited staff or distribution channels.
   - Market Opportunity: Identifying potential market opportunities, including emerging markets and unmet customer needs.
   - Market Threat: Recognizing external threats, such as regulatory changes, economic downturns, or new competitors.

3. Marketing Strategy Mix: After analyzing and identifying the market, the next step is to formulate a marketing strategy using the 4Ps: Product, Price, Placement, and Promotion. This involves:
   - Product: Developing and launching products that cater to market demands and leverage the company's strengths.
   - Price: Establishing competitive pricing strategies that reflect product value and market conditions.
   - Placement: Ensuring products are accessible in the right locations through effective distribution channels.
   - Promotion: Crafting promotional strategies to enhance awareness, generate interest, and drive sales.

This three-step process enables MEDTECH Company to create a comprehensive action plan aimed at increasing market share and generating revenue. This structured approach ensures that all crucial aspects of the market and internal capabilities are considered, leading to well-informed and effective strategic decisions.

RESEARCH METHODOLOGY
The research methodology outlines the framework for conducting the study, including how data will be collected and analyzed. It is divided into three phases, each with specific objectives.

A. Phase I
The initial phase aims to identify and thoroughly understand the core business problem faced by MEDTECH Company, specifically its small market share in the Indonesian trauma devices market. This phase involves a comprehensive analysis of the company's operations, market positioning, and competitive landscape. A root cause analysis using a fishbone diagram identifies key issues such as outdated Mono Angle (MA) locking plates, ineffective pricing strategies, limited presence in strategic hospitals, and insufficient promotional efforts. Research questions are then formulated to guide the investigation towards developing effective marketing strategies to enhance market share and sales performance.

B. Phase II
This phase focuses on establishing a theoretical foundation and conceptual framework. It includes reviewing relevant literature and theories and analyzing external and internal factors using frameworks like PESTLE and Porter's Five Forces for external analysis, and STP and the 4P Marketing Mix for internal analysis. This comprehensive examination helps understand the broader market environment and competitive dynamics, providing a basis for the data collection and analysis phases.

C. Phase III
The final phase involves data collection from secondary sources like research reports and journals, and primary sources through semi-structured interviews. This data is used to conduct a SWOT analysis, identifying strengths, weaknesses, opportunities, and threats.
The findings inform strategic recommendations, which are integrated into an actionable plan with specific goals, timelines, and success metrics. This plan aims to enhance MEDTECH's market presence and improve sales performance by addressing current challenges effectively.

![Research Design Flow Chart](image)

Figure 2. Research Design Flow Chart

**RESULT AND DISCUSSION**

This chapter presents the research findings and analysis, outlines business solutions, and provides an implementation plan. It begins with an external analysis using secondary data, applying the PESTLE and Porter's Five Forces frameworks to understand the macro-environment and industry dynamics. Concurrently, an internal analysis is conducted using STP analysis and Marketing Mix, with the latter based on semi-structured interviews, to ensure precise targeting of the company's marketing efforts. Finally, a SWOT analysis
consolidates all data from the external and internal analyses, supporting the formulation of marketing strategies and corresponding implementation plans.

A. **External Market Analysis: PESTLE**

PESTLE analysis is an essential tool for companies to navigate the complexities of the external environment that can impact their operations and performance. For MEDTECH companies, this analysis provides insights into the broader environment in which they operate, helping them anticipate potential risks and identify opportunities. The table below presents an analysis of the healthcare industry's landscape using the PESTLE approach, covering Political, Economic, Social, Technological, Environmental, and Legal factors.

<table>
<thead>
<tr>
<th>Table 1. PESTLE Analysis</th>
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<tbody>
<tr>
<td><strong>Subject</strong></td>
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<tr>
<td><strong>Political</strong></td>
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<td></td>
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![Figure 3. RIPIN 2015-2025](image-url)
The table outlines the priority development stages for the medical device industry within Indonesia's National Industrial Development Master Plan (RIPIN) 2015-2035. This plan includes a detailed roadmap for various segments of the medical device industry, focusing on enhancing local manufacturing capabilities and reducing dependence on imports. Specifically, implant orthopedics is identified as a priority sector for development.

- **Increased Use of Domestic Products (P3DN) program** (Perindustrian, 2017)
  Another key policy is the Increased Use of Domestic Products (P3DN) program, which seeks to prioritize locally manufactured medical devices in public procurement. This policy aims to boost local production, decrease dependency on imported goods, and stimulate the domestic economy. By encouraging the use of domestic products, the government supports local manufacturers and strengthens the resilience of the healthcare supply chain.

![Figure 4. P3DN in the Medical Equipment Sector](image)

The diagram illustrates Indonesia's regulatory framework for promoting the use of domestically produced goods (P3DN) in the medical equipment sector. It starts with Presidential Regulation No. 54 of 2010 on government procurement, which is further clarified by regulations from the Ministry of Industry. These include Permenperin No. 15/M-IND/PER/2/2011, outlining guidelines for prioritizing domestic products in procurement; Permenperin No. 16/M-IND/PER/2/2011, defining criteria for calculating local content (TKDN); and Permenperin No. 17/M-IND/PER/2/2011, which focuses on forming working groups and a national secretariat for the P3DN program. Together, these regulations aim to strengthen local manufacturing by prioritizing products with higher domestic content in government procurement, thereby fostering economic growth and industrial development in the healthcare sector.

- **President ordered to freeze the imported medical devices in e-catalogue when local manufactured are available** (Asia Actual, 2023).
  The government has detailed specific actions to ensure the successful implementation of the P3DN initiatives. These actions include monitoring the program's progress, addressing any arising challenges, and making policy adjustments as necessary to achieve the desired outcomes. According to Presidential Regulation 12/2021, the Ministry of Health (MOH) mandates that government hospitals purchase medical devices with a Domestic Component Level (TKDN) and Benefit Weigh Value (BMP) of 40% or more, regardless of the availability of foreign alternatives. This policy, effective from June 18th, was established in a conference involving the Ministry for Maritime and
Investment Affairs, the MOH, the Ministry of Industry, and the LKPP. Consequently, the LKPP’s e-catalogue website reflects this regulation by listing medical devices that do not meet these criteria as unavailable for purchase. There are exceptions for certain imported medical devices; under Clause 66, point 5, government hospitals may purchase foreign devices if they cannot be produced domestically or if the required volume cannot be met. However, the process for obtaining such an exemption remains unclear, especially given the current purchasing restrictions through the e-catalogue. This policy has met opposition from Indonesian distributors and multinational manufacturers, and the situation is subject to change as the government refines its implementation approach.

**Economic**

In 2023, Indonesia showcased resilience and strategic adaptability amidst global economic uncertainties, achieving a GDP growth rate of 5.05%. This performance, albeit slightly below the previous year’s 5.31%, is noteworthy in the context of prevailing global economic challenges. In 2024, Indonesia’s economy is targeted to grow at 5.2%, as agreed by the Ministry of Finance and the House of Representatives, or Dewan Perwakilan Rakyat (“DPR”).

Overall, in 2023, economic growth was positive in all provinces. Java Island is still the largest contributor to Indonesia economy at 57.05% with an average growth of 4.96% (YoY). This is because the structure of the Indonesian economy is dominated by a group of provinces on the island of Java, which is the most highly populated Island and the major industrial region.

![Figure 5 Indonesia gross domestic product (2020–2023)](Source: Central Bureau of Statistics Indonesia (BPS), 2024)

![Figure 6 Gross regional domestic product Growth and Contribution in 2023](Source: Central Bureau of Statistics Indonesia (BPS) (2024); Simreg Bappenas, 2024)
The 2024 State Budget was officially enacted as Law Number 19 of 2023 on 16 October 2023. The State Budget for the Year 2024 remains committed to supporting inclusive and sustainable economic transformation, maintaining socio-economic stability, and supporting national priority programs.

<table>
<thead>
<tr>
<th>State budget (in trillion Rupiah)</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. State Revenue</td>
<td>2,895.3</td>
</tr>
<tr>
<td>1. Domestic Revenue</td>
<td>2,895.3</td>
</tr>
<tr>
<td>2. Non Tax Revenue</td>
<td>2,099.9</td>
</tr>
<tr>
<td>B. State Expenditure</td>
<td>3,308.1</td>
</tr>
<tr>
<td>1. Central Government Expenditure</td>
<td>2,487.1</td>
</tr>
<tr>
<td>2. Non-Less Ministries</td>
<td>1,860.0</td>
</tr>
<tr>
<td>C. Regional Transfer &amp; Village</td>
<td>971.6</td>
</tr>
<tr>
<td>D. Primary Balance</td>
<td>599.6</td>
</tr>
<tr>
<td>E. Reserve Fund</td>
<td>312.4</td>
</tr>
<tr>
<td>F. Deficit to GDP</td>
<td>(2,26)</td>
</tr>
<tr>
<td>G. Financing</td>
<td>552.8</td>
</tr>
</tbody>
</table>

**Figure 7 2024 state budget posture and priorities**
(Source: Ministry of Finance (2024), Fiscal Policy Agency, 2024)

The Indonesian government's 2024 budget allocates significant resources to the health sector, with a total of IDR 187.7 trillion dedicated to health-related initiatives. This budget supports several key areas aimed at enhancing healthcare services, reflecting a comprehensive approach to improving health outcomes across the country.

Social As of 2023, Indonesia's population is approximately 277.5 million, making it the fourth most populous country in the world and accounting for 3.45% of the global population. The annual population growth rate is 0.74%, indicating a steady increase. The overall life expectancy at birth in Indonesia is 71.1 years, with a notable difference between genders: females have a higher life expectancy of 73.3 years compared to 69.0 years for males. This gender disparity in life expectancy, where women generally live longer than men, aligns with global trends influenced by various biological, behavioral, and social factors. The improving life expectancy suggests advancements in healthcare, living conditions, and socio-economic development in Indonesia. However, addressing the factors contributing to lower life expectancy among males is essential for achieving more equitable health outcomes across the population.

**Figure 8 Life Expectancy in Indonesia**
(Source: PWC’s Report Data)
**Technology**

- **Indonesia as a rapid adoption of new technologies country aligned with increasing of number of cases for trauma.**

  Technological advancements within the trauma devices industry have led to the emergence of more efficient and sustainable production methods, further enhancing market growth. Key players in the industry are making substantial investments, which are anticipated to drive innovation and fuel market expansion. These investments primarily focus on the development of new products and the expansion of distribution networks, which in turn will stimulate future demand.

  The example from DePuy Synthes (Johnson & Johnson). DePuy Synthes has integrated variable angle (VA) locking plate technology into their trauma implants. This technology allows surgeons greater flexibility in screw placement, improving fracture fixation and patient outcomes. DePuy Synthes is a prominent player in the Indonesian trauma implant market, known for its high-quality and innovative products. Their advanced technologies and strong brand reputation make them a preferred choice among healthcare providers.

**Legal**

- **Halal certification**

  The Indonesian Government has implemented Presidential Regulation Number 6 of 2023, which mandates halal certification for medicines, biological products, and medical devices distributed within the country (Administration, 2023). This regulation requires that these products be certified to ensure they are free from pork derivatives and other substances prohibited by Islamic law. The compliance encompasses all business processes, including the sourcing of materials, manufacturing, storage, and packaging.

  Specific medical devices, halal certification is required particularly for medical devices containing animal-derived elements or components. Halal certification is particularly significant in Indonesia due to the country's large Muslim population. The certification ensures that products comply with Islamic dietary laws, which is essential for gaining consumer trust and acceptance.

  This regulation has profound implications for businesses in the healthcare sector:

  1. Market Compliance: Companies must adhere to these legal requirements to maintain market access and avoid legal penalties.
  2. Consumer Trust: Halal certification can enhance trust and acceptance among Muslim consumers, potentially increasing market share.
  3. Operational Adjustments: Businesses may need to modify production processes, source compliant raw materials, and undergo rigorous certification processes to meet halal standards.

**Environment**

- **The Impact of Covid-19 and the Russia-Ukraine War on the Trauma Devices Market with stock and raw material sustainability**

  An environment that defines ecosystem of trauma devices market is influenced by two major factors: The Russia-Ukraine war and the post-Covid-19 pandemic, primarily affecting stock stabilization and raw material sustainability.

  1. Supply Chain Disruptions: The pandemic caused severe disruptions in the global supply chain, leading to delays in raw material procurement and device manufacturing. Lockdowns and restrictions slowed down production, resulting in a backlog of orders and stock shortages.
  2. Increased Costs: The Russia-Ukraine war has exacerbated supply chain issues, leading to increased costs of raw materials due to geopolitical tensions and sanctions, impacting the overall cost structure of trauma device production.
  3. Logistics Challenges: Both crises have highlighted vulnerabilities in logistics and transportation networks, making it difficult to ensure timely delivery of materials and finished products.

  This ongoing war has created uncertain situation and instability for MEDTECH company, resulting in a decline in consumer purchasing power within the region. Additionally, the pandemic has severely disrupted supply chains, leading to challenges in production and distribution for manufacturers.
The PESTEL analysis indicates that the trauma implant device market in Indonesia presents both opportunities and threats. Key opportunities include strong economic growth, favorable demographic trends, and rapid technological advancements. These factors, along with substantial government investment in healthcare and a growing population, provide a robust foundation for market expansion and competitiveness.

However, the market faces significant threats from the political landscape, particularly local content regulations and ongoing supply chain disruptions due to global crises. These political and environmental challenges create high entry barriers and operational difficulties, especially for multinational companies. Additionally, the legal landscape presents both challenges and opportunities, necessitating careful compliance with regulations while leveraging the benefits of increased consumer trust.

### B. External Market Analysis: Porter's Five Forces

Porter's Five Forces model is a widely used framework for analyzing the competitive dynamics and attractiveness of an industry. This model helps companies understand the various sources of competitive pressure and develop strategies that fit their specific industry context. The five forces include rivalry among existing competitors, the threat of new entrants, the threat of substitute products, and the negotiating power of suppliers and customers.

By applying Porter's Five Forces, companies can assess their competitive environment, gauge the profitability potential of their market, and devise strategies to mitigate these pressures. In the trauma device market, this model provides valuable insights into industry attractiveness and helps guide strategic decisions to enhance market positioning and profitability (Thompson et al., 2021).

- **Rivalry Among Existing Competitors:**
  
  The trauma implant device market in Indonesia is highly competitive, with numerous local and international companies vying for market share. Local firms, such as Marthys Orthopedic Indonesia, which specializes in orthopedic implants, dominate the market with products containing up to 50% local content. They, along with other companies, offer advanced technologies like Variable Angle (VA) locking plates, which are particularly appealing to healthcare professionals. Additionally, international competitors, such as Mitra Fajar Selaras, market Korean implants and engage in aggressive marketing and educational programs to promote their products. The competition is further intensified by ongoing technological advancements and strong marketing efforts within the industry. Consequently, the market faces a high threat level due to the intense rivalry, compelling companies to continuously innovate and enhance their strategies to remain competitive.

- **Threat of New Entrants:**
  
  Entering the trauma implant device market in Indonesia poses significant challenges, particularly for foreign companies. This market requires substantial capital investment and advanced resources, making it difficult to break into. Recent regulations, such as the Local Content Requirement (Tingkat Komponen Dalam Negeri or TKDN) under PERMENPERIN No. 16/M-IND/PER/2/2011, prioritize locally produced goods for public hospital services. As a result, foreign companies must establish manufacturing facilities within Indonesia to meet TKDN certification, which ensures that products with a substantial amount of local content can be used in government hospitals. This requirement necessitates a significant investment in local production infrastructure. Given these high barriers to entry, including the need for considerable capital investment, the threat of new entrants in the Indonesian trauma implant device market is relatively low, thereby reducing competitive pressure on existing players.

- **Threat of Substitute Products:**
  
  There are various substitute treatment options available in the trauma market, including non-surgical approaches like physical therapy, splinting, and traction, as well as alternative medical treatments such as herbal medicine, acupuncture, and traditional bone-setting techniques. These alternatives are particularly popular in Indonesia, where cultural practices often favor them as initial treatments. They are perceived as more cost-effective and less invasive compared to surgical interventions, making them attractive to budget-conscious patients or those with mild injuries. However, these alternatives are generally less effective for severe trauma cases that require surgical intervention for proper healing. While they may appeal to certain market segments due to their cost-effectiveness, the necessity and effectiveness of trauma implants in treating serious injuries provide significant protection against this threat. Thus, the threat of substitutes in the trauma implant market is relatively low. Trauma implants remain the preferred and often essential treatment option for severe cases, ensuring stable demand despite the availability of alternative treatments.
Bargaining Power of Suppliers:
Suppliers are crucial in the trauma device market as they provide essential high-quality raw materials and components needed for manufacturing medical devices. Major suppliers include international companies such as Zimmer Biomet and DePuy Synthes, which hold significant leverage in negotiations due to their control over critical supplies. This reliance can affect the cost structure and production capabilities of the industry.
However, the rise of local companies like Marthys Orthopedic and Kimia Farma has diversified the supply base, offering more options for sourcing raw materials and components. This diversification reduces the industry's dependence on a few key suppliers, potentially stabilizing costs and ensuring a steady supply. Nevertheless, the necessity for high-quality materials in medical devices maintains some level of bargaining power for suppliers, resulting in a moderate threat to the industry.

Bargaining Power of Buyers:
In the trauma implant device market, the bargaining power of buyers is mainly influenced by physicians, who are the primary decision-makers for choosing implants. Hospitals typically follow the physicians' recommendations when purchasing these devices. This gives physicians considerable influence over demand for specific products, as their preferences and choices dictate which implants are used for their patients.
While the market is sensitive to price, and buyers do exert pressure on manufacturers to maintain competitive pricing, this does not always lead to overwhelming buyer power. Factors like brand loyalty, established relationships, and proven product performance can mitigate the influence of cost-effective alternatives and advanced technology options. These factors help maintain a balance, preventing buyers from exerting excessive power over manufacturers. Thus, the bargaining power of buyers presents a moderate threat to the industry, balancing the need for competitive pricing with the value of established trust and reliability in product performance.

Based on the detailed Porter’s Five Forces Analysis of the trauma implant device market in Indonesia, it can be concluded as per below figure:

![Porter's Five Forces Threat Summary](image)

In conclusion, the trauma implant device market in Indonesia is moderately attractive. While it shows some challenges due to intense competition and the need for continuous innovation, but the barriers to entry and low threat of substitutes provide the opportunity to company for growth. The market can be attractive if company can strategically navigate these competitive pressures by focusing on innovation, strengthening supplier relationships, and building strong connections with key decision-makers like physicians.

C. Internal Business Analysis: STP (Segmentation, Targeting, Positioning)
STP analysis – a three-step framework that examines MEDTECH Company’s products as well as the way the company communicate the value and benefits to specific customer segments. It means that segment the market, target select customer segments tailored to
the right positioning according to customers desires and expectations. STP analysis is effective because it segments the customer base into smaller, more specific groups. This approach enables the development of tailored marketing strategies, enhancing the ability to reach and engage each distinct target audience.

1. **Segmentation:**

   Trauma device market is far too big and far too vast for anyone – even the biggest corporation with the most resources – to address. This is why breaking down the market into manageable segments is crucial. Identifying and clearly defining the specific segment company intend to target helps in focusing efforts and resources more effectively.

   To evaluate business opportunities accurately, it’s essential to define Total Available Market (TAM), Serviceable Available Market (SAM), and Serviceable Obtainable Market (SOM). Total Available Market (TAM) represents the overall revenue opportunity if the product achieves full market penetration. Serviceable Available Market (SAM) is the portion of TAM targeted by the products within company reach. Serviceable Obtainable Market (SOM) is the realistic segment of SAM that company can capture, considering competition and market constraints. This segmentation enables more precise strategic planning and resource allocation, ensuring efforts are directed toward achievable and impactful goals.

   Based on Clarivate Market Insight Trauma Devices Asia Pacific Data, April 2022, on procedural perspective, forecast in Indonesia for Total Available Market of trauma procedures in 2024 about 68,800 procedures which contain of Plate & Screw, Intramedullary Nail, Cannulated Screw, Dynamic Hip Screw, Ancillary Trauma, and External Fixation procedures. However, if referring to the products that company have and available in market which known as Serviceable Available Market is plate and screw market, the total 2024 forecast is about 25,900 procedures, it’s taken 38% portion for all total trauma procedures. Considering market competition and conditions in Indonesia, from local content policy to technology advancement as well as company resources, the realistic segment of SAM that company can capture which known as Serviceable Obtainable Market, estimated about 10% portion equivalent to 2,590 procedures as sub-premium product in the market. Below table is the segmented SOM based on geographic of hospitals in Indonesia aligned with healthcare infrastructure support.

   - Java Island: Java Island, comprising major cities like Jakarta, Bandung, Surabaya, and Semarang/Solo, is characterized by a high density of healthcare facilities, known as Tier 1 hospitals. This high density indicates a well-established healthcare infrastructure capable of managing a large volume of medical procedures, including complex trauma cases. Consequently,
Java Island offers the highest contribution to the SOM for trauma implants, driven by advanced medical capabilities, a large patient base, and greater accessibility to specialized trauma care.

- Sumatra Island: Sumatra Island, represented by cities like Medan, Padang, and Palembang, exhibits moderate healthcare facility density. While the infrastructure is substantial, it is not as comprehensive as in Java. Hospitals in these regions, predominantly Tier 2, can handle significant trauma cases but may refer more complex cases to larger, more equipped facilities. As a result, the SOM contribution from Sumatra Island is moderate, reflecting a growing but less dense market compared to Java.

The segmented Serviceable Obtainable Market table provides a clear view of the potential market for trauma implants across different regions in Indonesia. This analysis helps prioritize marketing and sales efforts to maximize market penetration and revenue in high-opportunity areas.

2. Targeting

After defining the market by doing market segmentation based on Serviceable Obtainable Market, step two of the STP analysis is targeting. The main objective is to be targeting the segments company have previously identified and determine which ones are most likely to generate the desired conversions. These conversions considering some factors such as company’s resources and how the company can grab the opportunity. During this stage, analyze the segmentation based on segmenting the size and the opportunity in the hospital across Indonesia. Prioritize the segments with the highest potential for achieving company’s goals. The key of running implant business is by targeting accounts with big volume that can generate revenue. This helps to allocate resources effectively and develop targeted account to reach. Considering where the most cases drive for trauma injury, it can divide by Tier 1 and Tier 2 hospital as per below:

- Tier 1 hospital: Tier 1 hospitals are typically the highest level of care facilities, often with specialized trauma centers. They have comprehensive resources and capabilities for trauma care, including 24/7 availability of trauma surgeons, advanced diagnostic equipment, and the capacity to handle the most severe and complex trauma cases. Examples of Tier 1 Hospitals: RSUP Dr. Cipto Mangunkusumo Jakarta, RSUP Dr. Hasan Sadikin Bandung and RSUD Soetomo Surabaya, and RSUD Soeharso Solo.

- Tier 2 Hospital: Tier 2 hospitals provide a significant level of trauma care but may refer the most complex cases to Tier 1 hospitals. They have substantial resources, including emergency departments and general surgical capabilities, but may lack some of the specialized services available at Tier 1 facilities. Examples of Tier 2 hospitals: RS Adam Malik Medan, RS M Djamil Padang, and RS M Hoesin Palembang.

3. Positioning

The final step in this framework is positioning. Looking at the market trend lead by the key player from local company, Martyhys Orthopedic. They have positioned itself as a key player in the local market for trauma implants by focusing on producing high-quality, cost-effective orthopedic solutions. Utilizing advanced materials such as titanium and stainless steel, Marthys offers a comprehensive range of implants designed for various surgical needs, including plates for different anatomical locations. This crucial phase involves differentiating the products in the minds of target account. With many businesses from competitors and they are offering similar products, it's essential to identify and highlight what makes the offering unique. Refer to the given product positioning from global team as well as benchmarking from what competitors positioned themselves per below table.

<table>
<thead>
<tr>
<th>Target</th>
<th>Product Positioning</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>Variable Angle Product</td>
<td>• Advanced trauma care facilities</td>
</tr>
<tr>
<td></td>
<td>• Design &amp; Function: The VA system incorporates a variable angle locking technology in the screws, allowing for more flexible and secure fixation.</td>
<td>• High patient capacity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Availability of specialized trauma teams and advanced surgical capabilities</td>
</tr>
</tbody>
</table>

Table 2. Product Positioning
Applications: Best suited for complex fractures where multiple angles and adjustments are necessary to achieve optimal fixation.
Versatility: Provides greater flexibility during surgery, accommodating a wider range of anatomical variations and fracture patterns.

Plafond coverage is high from National Insurance (BPJS)

Tier 2
Mono Angle Product
- Design and Function: The MA system features a traditional fixed-angle design, which provides stable fixation for trauma cases.
- Applications: Ideal for straightforward fracture cases where a rigid fixation is needed.
- Simplicity: Easier to use with a simpler implantation procedure, suitable for standard orthopedic practices.

Comprehensive emergency and general surgical services
Good patient capacity but limited compared to Tier 1
Some specialized trauma services, with more complex cases referred to Tier 1 hospitals.
Limited plafond coverage compared to Tier 1

The STP analysis for MEDTECH company involves segmenting the market based on geographic regions and healthcare facility density, primarily focusing on Java and Sumatra Islands. Tier 1 hospitals, offers significant market opportunities for advanced products like Variable Angle (VA) implants, while Tier 2 hospitals present moderate opportunities for simpler products like Mono Angle (MA) implants. Company targets these segments by positioning VA products as advanced solutions for complex cases in well-equipped hospitals and MA products as cost-effective options for standard cases in less specialized facilities.

D. Internal Analysis: Marketing Mix (4P’s)
Based on the insights gathered from the semi-structured interviews from 3 expert in the industry, it provided in-depth information about various elements of the business’s approach to the market. By examining the responses, author gained valuable insights into how the company develops and manages its products, sets pricing strategies, selects, and optimizes distribution channels, and conducts promotional activities. Below table is the summary contain of sub-dimension defined after doing coding process.

Table 3. Marketing Mix Analysis

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Sub-Dimension</th>
<th>Interviewee 1</th>
<th>Interviewee 2</th>
<th>Interviewee 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Strategy</td>
<td>Mix</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Concern</td>
<td>Product Concern and Strategy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pricing Concern</td>
<td>Pricing Concern and Strategy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribution</td>
<td>Distribution Concern and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strategy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion Concern</td>
<td>Promotion Concern and Strategy</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Product
Current situations: The current product offerings (MA) from company are outdated compared to competitors (VA), with users in major cities no longer wanting to use old products. They have a strong preference for new technologies that offer better outcomes and
benefits. While company has the new technology product (VA) but not ready yet in the market. These conditions have led to a decline in the company's revenue in Jakarta

**In Depth Interview analysis:** Complete product offering is compulsory needed in the market. The demand for new technology products (VA) were pushed following the user preferences. Due to the company is not ready to promote the new technology because the complexity of product launching process, coupled with the absence of dedicated marketing personnel who can drive the new product launch. There is a dilemma, the company needs to avoid making the MA stock being slow-move while still driving adoption of the VA with clear segmentation. The interviews also revealed that ensuring adequate stock and product size availability is crucial to meeting market demands. The company needs to build enough stock and instruments to drive additional cases and offer a complete product range to stay competitive.

**Price**

**Current situation:** The current price offering for MA implant around 2-6 million rupiah depends on size and type of implant. While most vendors in the market are selling VA implant with similar price. This condition makes the price offering from company is not competitive in the market.

**In Depth Interview analysis:** The company’s pricing strategy currently faces several challenges, such as the MA pricing not being competitive compared to competitors who offer advanced technology (VA). There is a need to review and adjust pricing strategies to ensure they align with market conditions, particularly by proposing competitive pricing for new VA products upon launch, which is essential for hospitals with limited budgets. To enhance market penetration, the company should consider lowering the price of MA products, as users prefer to use new technology products that are cheaper.

**Place**

**Current situation:** The current distribution from company is very limited and selected area to be covered while the opportunity is bigger than the area of company can cover. These happened because channel partner is not driven well by the company lead to limited account to be served and small share in the market.

**In depth interview analysis:** The company’s distribution strategy must focus on ensuring that new technology is available in major cities to tap into technologically advanced markets. Strengthening relationships with distributors, ensuring their readiness (stock and resources) before product launches, and focusing on large accounts in government and teaching hospitals will be key to successful market penetration. Increasing the distribution reach also need clear segmentation on placing the product like for instance VA as a new technology is suitable for Tier 1 hospitals and MA is suitable for Tier 2 hospitals

**Promotion:**

**Current situations:** Currently the implant orthopedic team has not implemented specific marketing activities like training and education programs to engage with Healthcare Professionals (HCPs). Due to the company’s internal limitations, the team's efforts are mostly limited to routine activities while competitors actively doing marketing activity to engage with hospitals.

**In depth interview analysis:** Promotional activities currently face significant gaps, with the company’s educational programs being insufficient compared to those of competitors. Competitors actively conduct education programs to increase awareness and adoption of their products, particularly in teaching hospitals. Marketing activities in teaching hospitals are crucial because they serve as reference centers.

However, there is a need for dedicated marketing roles to drive these activities. The insufficient promotional activities have led to ineffective sales, underscoring the need for increased investment in marketing initiatives.

Moreover, team readiness is crucial to ensure that the value of the products is effectively communicated in the market. Training teams in selling skills and product knowledge, along with collaborating with regional teams for educational programs for users, such as factory visits, can significantly improve sales effectiveness.

**E. SWOT Analysis**

To effectively understand of formulating marketing strategy of MEDTECH Company, it is crucial to perform a comprehensive SWOT analysis. This involves examining both internal and external factors that influence the company’s performance. The following SWOT analysis below are consolidated after doing external and internal analysis. These insights to support strategic decision-making and business planning for MEDTECH Company.
Table 4. SWOT Analysis

<table>
<thead>
<tr>
<th>Strength (Internal Analysis)</th>
<th>Weakness (Internal Analysis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Diverse implant range (VA &amp; MA) tailored for various patient needs and anatomically</td>
<td>1. Outdated product offering (MA) and not yet ready for new technology (VA) launch.</td>
</tr>
<tr>
<td>designed for Asian patients.</td>
<td>2. Current pricing not competitive.</td>
</tr>
<tr>
<td>2. Innovative VA (Variable Angle) products with technology embedded in screws, offering</td>
<td>3. Limited access for product distribution.</td>
</tr>
<tr>
<td>better outcomes compared to competitors.</td>
<td>4. Insufficient educational programs and marketing initiatives.</td>
</tr>
<tr>
<td>3. Product range segmentation, VA for advanced cases, MA for regular cases</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunity (External Analysis)</th>
<th>Threat (External Analysis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Government budget focus to healthcare sector</td>
<td>1. Local content policy and e-catalog freezing in Government hospital.</td>
</tr>
<tr>
<td>3. Large and growing population</td>
<td>3. Intense competition from local company with advanced technologies.</td>
</tr>
</tbody>
</table>

Based on define SWOT analysis above from external and internal analysis, author using TOWS matrix to develop marketing strategies for as recommendation for business solutions.

Table 5. TOWS Analysis

<table>
<thead>
<tr>
<th>Objective: Increase Market share and accelerate company’s revenue.</th>
<th>Strength (S):</th>
<th>Weakness (W):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Diverse implant range (VA &amp; MA) tailored for various patient needs and anatomically designed for</td>
<td>1. Outdated product offering (MA) and not yet ready for new technology (VA) launch.</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunity (O):</th>
<th>SO Strategy:</th>
<th>WO Strategy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Government budget focus to healthcare sector</td>
<td>1. Launching Variable Angle implant in big cities (S1, S2, S3, O1, O2, O3)</td>
<td>1. Set-up VA implant price above MA implant (W2, O1, O3)</td>
</tr>
<tr>
<td>2. Rapid adoption of new technologies in healthcare.</td>
<td>2. Expanding MA usage among existing customers for basic trauma cases (S1, S3, O1, O3)</td>
<td>2. Targeting VA for Tier 1 Hospitals in conjunction with teaching center (W1, W3, O1, O2, O3)</td>
</tr>
<tr>
<td>3. Large and growing population</td>
<td></td>
<td>3. Set competitive pricing below the VA product (W2, O1, O3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Focus MA to Tier 2 hospitals for increased market penetration (W1, W3, O1, O3)</td>
</tr>
</tbody>
</table>
CONCLUSION AND RECOMMENDATION

Conclusion:
MEDTECH company market share is considered very small in Indonesia compared to the market leader from local company, despite the market size for trauma cases is very big. MEDTECH company should pay attention and focus to capturing big opportunities from the market to keep up with market dynamics. The results of this research indicate that the key external and internal situations that affect MEDTECH company performance as well as several business solutions that can be implemented by the company to increase market share and gain more revenue in Indonesia.

Based on the SWOT analysis, MEDTECH faces several internal and external challenges that affect its performance. Internally, the company struggles with outdated product offerings, uncompetitive pricing, and limited distribution channels. Additionally, there is a lack of effective marketing initiatives, leading to a small market share in the trauma segment. Externally, the company is impacted by local content policies, geopolitical tensions, and intense competition from local firms with advanced technologies. To address these issues, MEDTECH needs to leverage its diverse product range and technological innovations, while enhancing its market strategies and compliance with regulatory requirements.

To accelerate market share and increase revenue, MEDTECH can implement two primary marketing strategies.

Short-term Strategy:
1. Product Development for VA Implant: This strategy involves launching the VA implant in major cities, targeting Tier I hospitals and teaching facilities. By positioning the VA implant at a premium price above MA products, the company aims to attract top medical professionals. Promotional activities include partnerships with hospitals and local Key Opinion Leaders (KOLs), workshops, and sales training to ensure a successful market entry. This strategy is designed to increase market share and establish the VA implant as a leading choice in advanced trauma care.

2. Market Penetration for MA Implant: Focused on increasing usage among existing customers, particularly for basic trauma cases, this strategy involves setting competitive prices for MA implants, below those of VA products, to attract cost-sensitive segments in Tier 2 hospitals. Promotional efforts will build brand loyalty through clinical support, targeted sales, and marketing campaigns emphasizing reliability and cost-effectiveness.

Long-term Strategy:
Go Local Strategy: This strategy aims to enhance MEDTECH’s market presence and comply with Indonesian TKDN regulations by establishing local manufacturing or forming joint ventures. Key activities include infrastructure investments, securing regulatory approvals, and partnerships with local entities to ensure knowledge transfer and operational efficiency. Additionally, it focuses on customizing products for local needs and optimizing supply chains. This approach not only aligns with regulatory requirements but also strengthens MEDTECH’s competitive positioning and sustainability in the Indonesian market.

Recommendation:
All the proposed business solutions should become a project for MEDTECH company and need to put collaborative effort as well as defining the project leader to lead this project, in this case the most suitable key person is coming from marketing personnel as the issues related to marketing. The following recommendations are proposed for MEDTECH Company:
1. Product Development and Innovation: Accelerate the launch of new VA implants and update the MA product line to meet market demands and compete with advanced technologies.
2. Pricing Strategy: Implement a more flexible pricing strategy, offering competitive prices for MA implants while positioning VA implants as premium products to target different market segments.
3. Distribution Expansion: Strengthen distribution networks by partnering with more Tier 2 hospitals and improving collaboration with distributors to ensure product availability.
4. Promotion and Marketing: Enhance promotional efforts through strategic partnerships with teaching hospitals and local KOLs, focusing on educational programs and workshops to increase product awareness and adoption.
5. Local Manufacturing: Consider establishing local manufacturing or joint ventures in alignment with the Indonesian government's TKDN policy, reducing dependency on imports and enhancing market access.
6. Operational Excellence: Invest in infrastructure and human resources to support the company's expansion and improve service standards, including implementing 24/7 service for urgent cases.

REFERENCES