



Marketing Strategies for a Medical Device Companies

DOI [10.5281/zenodo.14019288](https://doi.org/10.5281/zenodo.14019288)

Jiandong Ma

STI West Negros University, Bacolod City, Philippines
<https://orcid.org/0009-0005-2173-0103>

Winnie Joy C. Mananap

STI West Negros University, Bacolod City, Philippines
<https://orcid.org/0009-0003-3284-2798>

Mylene A. Bautista

STI West Negros University, Bacolod City, Philippines
<https://orcid.org/0009-0003-6801-8215>

Abstract:

The global medical device market is experiencing remarkable growth, fueled by pioneering healthcare technology, a growing elderly population, and a rising need for tailored healthcare solutions (Johnson et al., 2020). This study aimed to determine the marketing strategies of a medical device company in one of the largest cities in China during the Calendar Year 2024. A descriptive research design was utilized using a self-made questionnaire for the level of marketing strategies that had undergone validity and reliability tests and was given to 30 respondents. Though the level of marketing strategies of a medical device company in all areas is high, the product obtained the lowest level of marketing strategies. It concluded that the company needs to emphasize product design to boost the product's attractiveness and competitiveness in the market. The findings of this study indicate that although customers place significant importance on a wide variety of product characteristics, many companies prioritize other marketing aspects, including pricing, promotion, and location. Pay attention to the product's characteristics to avoid missed opportunities and reduced customer satisfaction. Results of the study calls for businesses to conduct in-depth market research to determine the exact features consumers value most in medical equipment and strengthen partnerships with current clients and representatives while extending into new areas to increase market share. Invest more in product design as well to make items attractive and competitive. Keep your product prices competitive, increase transparency, and promote customer trust. Moreover, maintain competitive product prices, improve pricing transparency, and promote customer trust.

Keywords: Marketing strategies, medical device companies, China

Introduction:

Nature of the Problem

The global medical device market is experiencing remarkable growth, fueled by pioneering healthcare technology, a growing elderly population, and a rising need for tailored healthcare solutions (Johnson et al., 2020). However, marketing in this area is difficult, involving thorough compliance with standards, targeting expert audiences, and blending technical information with user-friendly messages (Smith et al., 2019).

The demand for strong marketing tactics is crucial for firms to differentiate their products while maintaining a competitive advantage (Taylor, 2021). Furthermore, marketing medical devices has seen both possibilities and problems in the digital age. The internet has made it easier to access new markets and connect with clients, but it has also raised competition and made it harder to separate from competitors.

In addition, according to Jones et al. (2022), the function of digital marketing in the medical device sector emphasizes the value of using search engine optimization, social media, and content marketing to connect and interact with prospective customers.

This study examines how medical device companies market their products and how it affects their marketing success. The main focus is figuring out which marketing strategies work best for these companies so we can give them helpful advice on improving their marketing techniques.

As one of the employees in a medical device company in China, the proponent of this study was motivated to conduct a study to determine the level of marketing strategies in the areas of products, price, place, and promotion. In finding the results, the respondents and the company may be able to identify what measures can be taken into account to evaluate the marketing strategies for a medical device company.



Current State of Knowledge

The way medical device companies interact with customers and medical professionals has changed with the development of digital marketing. According to Jones et al. (2022), the function of digital marketing in the medical device sector emphasizes the value of using search engine optimization, social media, and content marketing to connect and interact with prospective customers.

Pricing strategies in the medical device industry, according to Bhasin (2019), must account for the high expense of research and development and the difficult regulatory clearance process. Worth-based pricing is a widespread technique in which prices are established based not on manufacturing costs but on the medical device's perceived worth to consumers and healthcare providers. Providing cutting-edge products at premium pricing can assist companies in entering new markets, significantly if the product improves patient outcomes or lowers long-term medical costs.

Cost transparency and competitive pricing models influence user satisfaction and usage patterns. Users prioritize stations with straightforward pricing structures and affordable rates, reflecting broader concerns about the economic viability of EV ownership (White & Green, 2022). Effective pricing strategies that balance operational costs with consumer affordability foster trust and long-term patronage among diverse user segments (Clark et al., 2019). Further, the study of Haozhen, L. et.al. (2024) shows the result on the payment and pricing section received positive feedback, indicating that fees were affordable, pricing information was transparent, flexible payment options were available, and service rates offered a good value.

The degree of factors influencing the market demand is high in all areas, including technological innovation, applications and industries, consumer preferences, and regulatory and economic factors. This means that the above-mentioned factors highly influence market demand. Consumer expectations and preferences show a very high degree of influence; this suggests that consumer expectations and influences in the UAV market are stable and should be approached uniformly in marketing and product development strategies (Lingfeng, C., Jerez, A., & Bautista, M., 2024).

In addition, according to Petersen et al. (2018), medical device companies' marketing tactics are significantly influenced by regulatory compliance. In contrast to other businesses, medical device companies must match their advertising approaches with strict rules enforced by organizations like the U.S. The European Medicines Agency (EMA) and the Food and Drug Administration (FDA). Marketing strategies need to ensure that statements on their products' effectiveness and safety are supported by clinical proof. Companies that abide by these rules are protected from legal risks and receive more healthcare practitioners' respect (Tiauzon et al., 2023).

Furthermore, businesses manufacturing medical devices are increasingly trying to enter overseas markets to expand their market reach. According to Kumar et al. (2018), companies must create specialized marketing plans to deal with the various laws, existing economic situations, and national healthcare systems. This requires localizing items, adjusting pricing policies, and establishing connections with key individuals in each area to achieve market traction.

Theoretical Underpinnings

The study is anchored to the Diffusion of Innovations Theory (Everett Rogers, 1962). It gives us a way to understand how new technologies are used in the healthcare field. This theory puts adopters into groups like innovators, early adopters, and the early majority to show how they affect the acceptance of new products. It looks at how much better the product is, how well it fits with what's already there, and how easy it is to see the advantage. This helps companies make products and marketing plans that fit what people want. It says getting early support from leaders and healthcare advantages is key because their approval can help more people start using the product.

Furthermore, using this theory helps the company plan marketing strategies in phases. They start by focusing on educating and validating with early adopters before reaching a larger audience. By using this theory in a study, companies can better understand how quickly their product is adopted in the market. This helps them create marketing plans that ensure the medical device meets the needs of different healthcare groups.

Objectives

The study aimed to determine the marketing strategies of a medical device company in one of the largest cities in China during the Calendar Year 2024. Specifically, this study sought to answer the following questions: 1) What is the profile of the respondents in terms of length of engagement to a company, nature of company, number of years of existence of a company, and location; 2) What is the level of marketing strategies of a medical device company according to product, price, place, promotion; 3) the significant difference in the level of marketing strategies of a medical device company when grouped and compared according to the aforementioned variables.



Research Methodology:

This section presents the discussion of the research methodology used, the subjects and respondents of the study, the research instruments used, the validity and reliability of the instruments, the procedure for data gathering, and the statistical tools and procedure for data analysis.

Research Design

The study aimed to determine the marketing strategies of a medical device company in one of the largest cities in China during the Calendar Year 2024. A descriptive research design was used in this study. According to Seidlecki (2020), descriptive research methods primarily involve quantitative data analysis but may additionally involve qualitative elements. It defines the characteristics or behaviors of a given population or phenomenon, and the primary objective is to identify patterns or trends without influencing variables. This approach can be helpful when a researcher needs to understand what exists rather than why it exists. Considering this study determines the marketing strategies of a medical device company, the researchers evaluated the descriptive research design as the appropriate tool.

Study Respondents

The respondents of this study, determining the level of marketing strategies of a medical device company with their product, price, place, and promotion, were the thirty (30) medical device companies in China. Purposive sampling techniques were utilized to conduct the study. According to Etikan et al. (2016), purposive sampling is a method that is useful for studies requiring participants with particular perspectives or expert opinions as it comprises the purposeful selection of individuals based on their expertise or experience connected to the research topic. Using this strategy, the research problem may be effectively addressed by ensuring that the sample gives the most significant and pertinent information. The researcher employed purposive sampling because it makes it possible to select people with specific characteristics, skills, or backgrounds connected to the research objectives.

Instruments

A self-made questionnaire collects the needed data on the marketing strategies of a medical device company. The questionnaire was divided into two parts. Part I of the research instrument contained the respondents' profile, including the respondents' length of engagement with a company, nature of the company, number of years of existence of a company, and location. Part II of the questionnaire focuses on marketing strategies. The 7-item test was based on Product, Price, Place, and Promotion. The obtained scores for employee satisfaction with the company's balance were rated on a scale of 1-5, with five interpreted as Very High Level, High Level, Moderate Level, Low Level, and Very Low Level. The research instrument was subjected to validity (4.74-excellent) and reliability (0.821-good). All of them were interpreted as worthy and good; respectively.

Data Gathering Procedure

A questionnaire is a structured form of data collection that aims to obtain standardized information from respondents, according to Ruel et al., (2016). It is an effective and systematic way of reaching large populations. In order to collect reliable and valid data, a questionnaire's design is crucial to ensure that it meets the research objectives. The questions also need to be concise, easy to understand, and unbiased. In this research, the researcher requests authorization to actually carry out the study through the management of the participating medical companies. The researcher utilizes the instruments to target medical companies after receiving approval. In addition, marketing strategies were determined by converting the raw data into numerical code under the guidelines of a coding manual. Encoded data was computed using Microsoft Excel and the Statistical Package for Social Science (SPSS) software.

Data Analysis and Statistical Treatment

Objective No. 1 used descriptive and analytical schemes and frequency and percentage to determine the respondents in terms of selected variables: length of engagement to a company, nature of a company, number of years' existence of a company, and location

Objective No.2 used a descriptive-analytical scheme and mean to determine the employees' satisfaction with the company's compensation in the following areas: Product, Price, Place, and Promotion

Objective No.3 utilized a comparative analytical scheme and Whitney U test to determine whether or not significant differences exist in the marketing strategies of a medical device company when grouped and compared according to the aforementioned variables.

Ethical Consideration

The researchers guaranteed the respondents' choice to participate in the study, the confidentiality of the data acquired, and the nondisclosure of their names. To avoid illegal access or use, all data saved in the electronic device is disposed of whenever its use is completed.



Israel (2015) states that informed consent, which requires that participants be informed of potential risks, benefits, and the research's objective before deciding to participate, is firmly related to voluntary participation, which is essential to research ethics.

Resnik (2018) argues that voluntary involvement is crucial for maintaining the independence and worth of participants. This is particularly relevant when individuals with vulnerabilities are involved in the study, as they could feel obligated to engage in interpersonal tasks or influential individuals. The governing concept guarantees that participation is independent of other pressures and based only on the participants' choices.

Participants are, therefore, thoroughly aware of the entire research method and are encouraged to sign a consent form to participate.

Results and Discussion

This section deals with the presentation, analysis and interpretation of data gathered to carry out the objectives of this study. All these were made possible by following certain appropriate procedures so as to give the exact data and solution to each specific problem.

Table 1
Profile of Respondents

Variables	Categories	Frequency	Percentage
Length of Engagement to a Company	Shorter (less than nine years)	12	40.00
	Longer (9 years and above)	18	60.00
	Total	30	100
Nature of a Company	Agent	12	40
	Dealer	18	60
	Total	30	100
Number of Years Existence of a Company	Shorter (less than eight years)	16	53.3
	Longer (9 years and above)	14	46.7
	Total	30	100
Location	North	12	40
	South	18	60
	Total	30	100

Table 1 presents that out of 30 respondents, 18 respondents (60%) belong to the longer length of engagement to a company, while 12 respondents (40%) belong to a shorter engagement. The 18 respondents belong to a dealer company (60%), while 12 (40%) belong to an agent company. As for the number of years of company existence, 16 respondents belong to a shorter term period (53.3%), while 14 respondents (46.7%) belong to a more extended period. In addition, 18 respondents (60%) belong to the south area, while 12 (40%) belong to the north area. The result implies that most respondents belong to a dealer with longer engagement to a company, with a shorter number of years located in the southern area.

Table 2
Level of Marketing Strategies of a Medical Device Company in the Area Product

Area	Mean	Interpretation
A. Products		
1. It has a comprehensive range of features	3.60	High Level
2. It has good functional advantages	3.63	High Level
3. It has fast and efficient diagnostic capabilities	3.77	High Level
4. It has an attractive appearance	4.07	High Level
5. It can respond quickly to your needs	4.50	Very High Level
6. Its computing power is excellent	3.83	High Level
7. It has good environmental protection and energy-saving	3.73	High Level
Overall Mean	3.88	High Level

Table 2 shows that the overall mean of marketing strategies in the product area is 3.88, which is interpreted as high. The highest mean score of 4.50, interpreted as a very high level, is on item 5, "It can respond quickly to your needs." The lowest mean score is 3.60, interpreted as a high level on item 1, "It has a comprehensive range of features."



This indicates that marketing strategies often overlook various characteristics, especially when introducing new products. In addition to explaining product features, it is also vital to ensure that the features are useful and relevant to the target market. According to a study by Patel et al. (2018), companies must conduct thorough market research to determine what factors consumers are most interested in. Companies can improve their competitive edge and boost revenue by emphasizing manufacturing products with various features that satisfy customer needs.

Kim et al. (2016) discovered that consumers were inclined to buy a product if it provided an unusual combination of features suited to their needs. However, many of these companies fail to present their products' complete features, making them less distinctive in the market.

Table 3
Level of Marketing Strategies of a Medical Device Company in the Area Price

Area		
B. Price	Mean	Interpretation
1. The price is worth it because it's powerful	3.60	High Level
2. Affordable price compared to similar products in the market	3.63	High Level
3. It's worth considering its coverage and benefits	3.83	High Level
4. The price fits my budget and expectations ✓	4.00	High Level
5. Its pricing is flexible ✓	4.50	Very High Level
6. Its monetary value is clear and transparent	3.93	High Level
7. It offers competitive pricing	3.77	High Level
Overall Mean	3.90	High Level

Table 3 presents the area's overall mean score of marketing strategies, with a price of 3.90, which is interpreted as a high level. The highest mean score of 4.50, interpreted as a very high level, is on item 5, "Its pricing is flexible." The lowest mean score of 3.60, interpreted as high level, is on item 1, "The price is worth it because it is powerful."

This suggests that price techniques tend to receive less importance than other aspects of marketing. Recently, research has focused on price's role in increasing sales and attracting consumers.

Patel et al. (2018) discovered that businesses that implemented successful pricing techniques were able to increase their market share and profitability. Companies may create profitable pricing strategies by thoroughly considering all the factors influencing price decisions.

Table 4
Level of Marketing Strategies of a Medical Device Company in the Area Place

Area		
C. Place	Mean	Interpretation
1. It's easy to find	3.83	High Level
2. It can be easily purchased	3.70	High Level
3. It applies to all hospital establishments	3.87	High Level
4. It's easy to use in any hospital ✓	3.93	High Level
5. It can be used on different software platforms	4.43	High Level
6. It is convenient for maintenance in any location	3.90	High Level
7. The response of any hospital is prompt	3.70	High Level
Overall Mean	3.91	High Level

Table 4 presents the overall mean score of marketing strategies in the area, which is 3.91, interpreted as a high level. The highest mean score of 4.43, interpreted as a high level is on item 5, "It can be used on different software platforms." The lowest mean score of 3.70, interpreted as high level, is on items 2 and 7, "It can be easily purchased, and the response of any hospital is prompt."

This implies that even though the location significantly impacts how easy and accessible a product is, it is frequently overlooked in favor of other important factors. The challenge of choosing a location is one factor contributing to this inattention to detail. To ensure that products are easily accessible to target customers, factors



including the location of stores, distribution channels, and logistics need to be carefully evaluated. Moreover, location techniques might be complicated to determine and evaluate, which makes finding out how successful they are difficult (Lee & Kim, 2016).

Patel et al. (2018) discovered that businesses were able to increase their market share as well as their profits by successfully utilizing strategies for location. Businesses may design strategies that improve product accessibility and convenience and increase sales by carefully examining the elements that impact location decisions.

Table 5
Level of Marketing Strategies of a Medical Device Company in the Area Promotion

Area	Mean	Interpretation
D. Promotion		
1. The scope of his functions is clear	3.73	High Level
2. The characteristics are clear	3.67	High Level
3. I know his prices and preferential policies	3.90	High Level
4. I know the payment method	3.87	High Level
5. I know the brand values	4.47	High Level
6. I know the feedback channel for complaints and suggestions about the product	3.97	High Level
7. I know how to take care of it	3.73	High Level
Overall Mean	3.90	High Level

Table 5 presents the overall mean score of marketing strategies in the area of promotion is 3.90, interpreted as a high level. The highest mean score of 4.47, interpreted as a high level is on item 5, "I know the brand values." The lowest mean score of 3.67, interpreted as high level is on item 2, "The characteristics are clear."

This indicates that promotion is an essential part of marketing, although it often receives lesser attention than other parts of the marketing mix, like products, prices, and location. Promotion is necessary to create awareness, stimulate interest, and improve sales, but measuring the impact may be challenging.

Patel et al. (2018) discovered that companies could increase their market position and brand recognition through well-executed marketing campaigns. Through thoroughly evaluating the various factors affecting promotional choices, companies may formulate strategies that efficiently interact with their intended consumer base and increase profit.

Table 6
Difference in the Level of Marketing Strategies of a Medical Device Company in the Area Product when grouped and compared according to the aforementioned variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Length of Engagement to a Company	Shorter	12	11.83	64.000	0.033		Significant
	Longer	18	17.94				
Nature of a Company	Agent	12	16.92	91.000	0.410	0.05	Not Significant
	Dealer	18	14.56				
Number of Years Existence of a Company	Shorter	16	17.69	77.000	0.096		Not Significant
	Longer	14	13.00				
Location	North	12	16.00	102.000	0.771		Not Significant
	South	18	15.17				

Table 6 reveals the difference in the level of marketing strategies of a medical device company in the area of product when grouped and compared according to variables.

Using the Mann-Whitney U test, the terms of nature of a company garnered a p-value of 0.410, the number of years of existence of a company has a p-value of 0.096, and the location, which has a p-value of 0.771, is greater than the 0.05 significance level. The result indicated that no significant difference exists. The null hypothesis is, therefore, accepted.



On the contrary, several years as a consumer obtained a p-value of 0.033, less than the 0.05 significance level, indicating a significant difference. Therefore, the null hypothesis is rejected.

This implies that rankings in this sample were significantly influenced by the years a company has been in business. However, organizations with longer operations may benefit from more experience and a stronger customer base, which may result in a more significant impact across more participants or a longer time horizon (Chen et al., 2017).

Studies have shown that working relationships between medical device companies can exchange assets, knowledge, and consumer access (Smith et al., 2014). By cooperating, companies can produce innovative goods, cut expenditures, and reach more customers. Partnerships can also provide valuable data about consumer demands, competition business, and market trends.

Table 7

Difference in the Level of Marketing Strategies of a Medical Device Company in the Area Price when grouped and compared according to the aforementioned variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Length of Engagement to a Company	Shorter	12	11.38	58.500	0.019		Significant
	Longer	18	18.25				
Nature of a Company	Agent	12	16.25	99.000	0.671	0.05	Not Significant
	Dealer	18	15.00				
Number of Years Existence of a Company	Shorter	16	14.69	99.000	0.547		Not Significant
	Longer	14	16.43				
Location	North	12	17.88	79.500	0.178		Not Significant
	South	18	13.92				

Table 7 reveals the difference in the level of marketing strategies of a medical device company in price when grouped and compared according to variables.

Using the Mann-Whitney U test, the terms of nature of a company garnered a p-value of 0.671, the number of years of existence of a company has a p-value of 0.547, and the location, which has a p-value of 0.178, is greater than the 0.05 significance level. The result indicated that no significant difference exists. The null hypothesis is, therefore, accepted.

On the contrary, a number of years as a consumer obtained a p-value of 0.019, which is less than the 0.05 significance level, indicating a significant difference. Therefore, the null hypothesis is rejected.

This could mean that short-term collaborations may employ attractive pricing methods to increase customer attraction or sales. In addition to prices, long-term relationships might prioritize the longevity of the partnership (Smith et al., 2014).

Table 8

Difference in the Level of Marketing Strategies of a Medical Device Company in the Area Place when grouped and compared according to the aforementioned variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Length of Engagement to a Company	Shorter	12	14.21	92.500	0.461		Not Significant
	Longer	18	16.36				
Nature of a Company	Agent	12	16.71	93.500	0.490	0.05	Not Significant
	Dealer	18	14.69				
Number of Years Existence of a Company	Shorter	16	15.03	104.500	0.726		Not Significant
	Longer	14	16.04				
Location	North	12	16.08	101.000	0.739		Not Significant
	South	18	15.11				



Table 8 reveals the difference in the level of marketing strategies of a medical device company in the area of price when grouped and compared according to variables.

Using the Mann-Whitney U test, terms of length of engagement to a company garnered a p -value of 0.461, the nature of a company garnered a p -value of 0.490, number of years of existence of a company has a p -value of 0.726, and the location, which has a p -value of 0.739, is greater than the 0.05 significance level. The result indicated that no significant difference exists. The null hypothesis is, therefore, accepted.

It indicates that connections between companies would not significantly affect place promotional efforts in this particular circumstance.

Previous studies have indicated that cooperative partnerships can be advantageous for medical device companies, particularly with regard to resource sharing and access to markets (Smith et al., 2014). However, the particular circumstances of the medical device industry and the area under study may restrict the impact of these partnerships on place marketing strategies. Factors like distribution channel dynamics, legal constraints, or the unique characteristics of the target market may more significantly influence the success of location marketing efforts.

Table 9

Difference in the Level of Marketing Strategies of a Medical Device Company in the Area of Promotion when grouped and compared according to the aforementioned variables

Variable	Category	N	Mean Rank	Mann Whitney U	p-value	Sig. level	Interpretation
Length of Engagement to a Company	Shorter	12	15.00	102.000	0.772	0.05	Not Significant
	Longer	18	15.83				
Nature of a Company	Agent	12	16.92	91.000	0.411	0.05	Not Significant
	Dealer	18	14.56				
Number of Years Existence of a Company	Shorter	16	15.75	108.000	0.849	0.05	Not Significant
	Longer	14	15.21				
Location	North	12	15.67	106.000	0.923	0.05	Not Significant
	South	18	15.39				

Table 9 reveals the difference in the level of marketing strategies of a medical device company in the promotion area when grouped and compared according to variables.

Using the Mann-Whitney U test, terms of length of engagement to a company garnered a p -value of 0.772, the nature of a company garnered a p -value of 0.411, number of years of existence of a company has a p -value of 0.849, and the location, which has a p -value of 0.923, is greater than the 0.05 significance level. The result indicated that no significant difference exists. The null hypothesis is, therefore, accepted.

It indicates that connections between companies would not significantly affect place promotional efforts in this particular circumstance.

According to Smith et al., (2014), promotional strategies may be restricted by the particular circumstances of the target market under study and the market for medical devices. More significant variables that impact promotional efforts could involve the environment of competition, rules, or the type of products being driven.

Conclusions:

In conclusions, the level of marketing strategies of a medical device company in all areas is high, and the product obtained the lowest level of marketing strategies. It concluded that the company needs to emphasize product design to boost the product's attractiveness and competitiveness in the market. The findings of this study indicate that although customers place significant importance on a wide variety of product characteristics, many companies prioritize other marketing aspects, including pricing, promotion, and location. Pay attention to the product's characteristics to avoid missed opportunities and reduced customer satisfaction. The results of this study emphasize how important it is for manufacturers of medical devices to put first the creation and distribution of their devices' complete feature set. Businesses may set themselves apart from the competition, respond to the specific needs of their target market, and ultimately improve sales and customer loyalty by focusing on product features.



Recommendations

Based on the findings of this study, which showed that product features are commonly disregarded in marketing strategies, the following recommendations are offered:

Businesses ought to conduct in-depth market research to determine the exact features consumers value most in medical equipment. This could involve organizing focus groups, interviews, and surveys with the intended audience.

Continue strengthening partnerships with current clients and representatives while extending into new areas to increase market share. Invest more in product design as well to make items attractive and competitive. Keep your product prices competitive, increase transparency, and promote customer trust.

Continue strengthening partnerships with existing customers and representatives while expanding into new areas to increase market share. Invest further in product design as well to render products attractive and competitive.

Moreover, maintain competitive product prices, improve pricing transparency, and promote customer trust. In summary, medical device companies have made certain advancements in their marketing tactics, but more can be done. To continue sustainable development and keep competitive in the market, the firm needs to consistently enhance both the quality of its services and its strategy for advertising.

Acknowledgment

The researcher is grateful to the persons who contributed and extended their valuable knowledge and precious time in preparing and completing this study. Miss Winnie Joy C. Mananap, the researcher's adviser, for her guidance in various aspects, rigorous work style, profound knowledge, and approachable personality charm had a profound impact on me, also for her encouragement, patient guidance, and unremitting efforts to make my dreams come true; panel members for their encouragement, insightful comments, suggestions, and recommendations, which contributed greatly to the improvements of the researcher's thesis, and to everyone who in one way or another has been an instrumental to the completion of this paper.

References:

- Chaffey, D., & Ellis-Chadwick, F. (2016). *Digital Marketing: Strategy, Implementation, and Practice* (6th ed.). Pearson.
- Chatterjee, S., & Lakshmanan, S. (2014). Medical device pricing: Innovation and regulation in emerging markets. *Journal of Medical Marketing*, 14(4), 243-258.
- Clark, J., & Wilson, P. (2019). "Transparency in Pricing for EV Charging Stations." *Journal of Consumer Policy*
- Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th ed.). SAGE Publications.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.
- Haozhen, L., Vito Jr, M., & Bautista, M. (2024). Users Satisfaction in the Use of Electronic Vehicle Charging Stations. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRIS)*, 1(7), 198-210.
- Harrington, R. J., & Schibrowsky, J. A. (2015). The role of marketing strategy in the performance of medical device companies. *Journal of Business & Industrial Marketing*, 30(3), 304-318.
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-Based Nursing*, 18(3), 66-67.
- Israel, M. (2015). *Research ethics and integrity for social scientists: Beyond regulatory compliance* (2nd ed.). SAGE Publications
- Li, J., Zhang, Z., & Zhao, S. (2017). Medical device marketing: Promotion and the role of evidence-based communication. *Journal of Medical Marketing*, 17(3), 187-198.
- Lingfeng, C., Jerez, A., & Bautista, M. (2024). FACTORS INFLUENCING UNMANNED AERIAL VEHICLE MARKET DEMAND. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRIS)*, 1(10), 27-38.
- Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS* (7th ed.). Routledge.
- Payne, A., & Frow, P. (2017). Developing superior value propositions: A strategic marketing imperative. *Journal of Service Management*, 28(2), 243-266.
- Petersen, S. L., & Nyberg, A. (2018). The regulatory environment for medical devices: Implications for innovation and patient safety. *Health Policy and Technology*, 7(2), 161-167.



- Porter, M. E., & Heppelmann, J. E. (2015). How smart, connected products are transforming companies. *Harvard Business Review*, 93(10), 96-114.
- Prahalad, C. K., & Ramaswamy, V. (2016). Co-creation experiences: The next practice in value creation. *Journal of Business Research*, 69(9), 3524-3531.
- Resnik, D. B. (2018). *The ethics of research with human subjects: Protecting people, advancing science, promoting trust*. Springer.
- Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, 34(1), 8-12.
- Tavakol, M., & Mohagheghi, M. A. (2018). The use and interpretation of Cronbach's alpha in medical education. *Medical Education*, 52(8), 800-801.
- Tiauzon, M. J., Moyani Jr, G., Bautista, M., & Maguate, G. (2023). Management Skills of Department Heads in Relation to Employees Work performance. *Valley International Journal Digital Library*, 5327-5334.