Factors Influencing Small Business Success in Medical Equipment Manufacturing Industry

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Introduction

The industry of manufacturing medical apparatus, which produces instruments that can save patients' lives, is an indispensable component of the healthcare industry and cannot exist without it. This industry is constantly in flux due to technological advancements, changes in government policy, and rising consumer interest in innovative healthcare solutions. The contribution of small businesses to the production of innovative products and services is essential in this sector of the economy. The domains of modern Information and Communication Technologies (ICT) and healthcare are increasingly converging, creating new opportunities for medical device manufacturing. Moreover, countries with high healthcare costs due to an ageing population support the development of healthcare-focused medical devices via government policy. As technology advances, the variety of materials used to manufacture medical devices is expanding, as is the complexity of these devices (Adams, 2006). Industry disruptors with limited commercial business experience found most new businesses in the healthcare industry.

It is not remarkable that the majority of workers in the medical device industry are employed by Small and Medium-sized enterprises (SMEs), given their global prevalence. Consequently, they have far-reaching implications not only for the economy but also for society. It is beginning to sink in for governments and industry lobbying groups. Consequently, new safeguards to protect the interests of SMEs have been established (Afuah, 2020).

SMEs have thrived in North America and Europe due to a system recognizing and rewarding successful business proprietors. This has been a significant factor in the development of their respective industries. The system's emphasis on innovation and its support of a strong foundation of interconnected sectors, including suppliers, designers, technicians, physicians, and attorneys, have helped new medical device companies find a welcoming environment in these regions (Anderson, 2012). This is because the system places a significant emphasis on innovation.
Medical device manufacturers rely significantly on technology and face significant recruiting and training obstacles. Businesses highly value locations close to significant research institutes, medical centres, and educational institutions. In the interim, a substantial quantity of capital is required to develop and commercialise cutting-edge technology (Reisenwitz, 2016).

**Research Question, Aim and Objectives**

1. What aspects of the business environment encourage the growth of minor medical equipment manufacturers?
2. How much do the difficulties small businesses face when attempting to manufacture medical equipment hinder their possibilities of achieving financial and operational success?
3. How much do factors such as product quality, pricing, marketing, and supply chain management contribute to the success of small enterprises in the medical equipment manufacturing industry?

**Aim**

This study seeks to identify what causes medical device manufacturing small companies. This study helps small enterprises in this industry compete by highlighting product quality, pricing strategy, marketing, and supply chain management.

**Objectives**

- To comprehend what makes smaller manufacturers of medical devices successful and how to replicate their success.
- To examine the obstacles encountered by small businesses operating in this industry and the strategies they employ to overcome them.
- To conduct an in-depth analysis of the procedures of the most successful manufacturers of minor medical devices.
- To guide small enterprises on how to enter or advance within a particular industry.

**Significance of the Study**

This study's significance can be divided into a few main categories. First, it will make it simpler for independent and newly established manufacturers of medical equipment to identify and capitalize on expansion opportunities. Second, it will assist policymakers and other industry participants in comprehending the requirements for the success of small enterprises in this sector. This study's findings will contribute to the ongoing academic discourse on healthcare entrepreneurship and the corpus of knowledge regarding the success of small businesses.
Literature review

Small businesses in the medical equipment manufacturing industry encounter several obstacles that make it difficult for them to succeed. This section will investigate the study conducted on the factors contributing to small businesses' success in the medical equipment manufacturing industry.

Product Quality

Product quality is utterly essential to a company's overall performance when it comes to the manufacturing of medical equipment. According to a study conducted by (Thai Hoang et al., 2006), small businesses prioritizing product quality have a greater chance of thriving in this market. The excellence of medical devices has a direct impact on the health and well-being of the patient. Small enterprises must invest in research and development to manufacture products that satisfy market demands.

Pricing Strategy

In addition, modest businesses engaged in the production of medical equipment must carefully consider the pricing strategies they employ. According to a study by (Dialloët et al. 2019), modest businesses that positioned themselves to profit from price competition performed exceptionally well in this market. It is necessary to consider manufacturing, shipping, and advertising costs when devising price plans. Consequently, it is essential for lesser businesses to establish prices that are both profitable and competitive in the market (Takahashi, 2020).

Marketing

Small businesses in the medical equipment manufacturing industry will never be able to achieve financial success without intensive brand promotion and sales-driving marketing efforts. According to Khurana and Saha's (2019) research, the prospects of small businesses are enhanced when they employ modern advertising strategies such as the Internet and social media promotion. However, due to its diversity and segmentation, the medical equipment market necessitates marketing strategies tailored to a specific target audience (Fleisher, 2015).
Supply Chain Management
Supply chain management is an absolute necessity for small enterprises in the medical equipment manufacturing industry. This is required to ensure the timely and cost-effective delivery of products. According to the findings of (Campbell and Sankaran, 2005) research, successful small enterprises in this industry have been found to employ effective supply chain management strategies. Supply chain management includes procuring primary materials, planning production, managing logistics, and tracking inventory (Barringer, 2016).

Challenges and Barriers
When it comes to the production of medical equipment, small businesses encounter a number of obstacles that make it difficult for them to successfully compete (Tang et al., 2008). Among these are stringent entry requirements, fierce competition, a lack of readily available capital, complex laws and regulations, and the rapid development of innovative technologies. Despite their challenges, (Kirisits and Redekop, 2013) found that small businesses that implemented successful strategies, such as partnerships, collaborations, and innovation, had a greater chance of attaining success in this market (Yun et al., 2021). Nonetheless, small businesses can achieve success in this industry by implementing effective strategies regarding product quality, pricing, marketing, and supply chain management. In order to promote innovation, expansion, and overall competitiveness in this industry, it is imperative that decision-makers and other industry participants collaborate to create favourable conditions for small businesses.

Small Businesses in the Medical Device Industry
In the development of medical apparatus, transdisciplinary technologies are applied. These technologies include clinical medicine, electricity, electronics, mechanics, materials, and optics. The medical equipment market has recently expanded into the new convergence sector by the Fourth Industrial Revolution, resulting in increased growth. This growth was caused by the introduction of digital healthcare, u-health, wearable medical devices, and other similar innovations (Tsai, 2011). Because medical devices can, directly and indirectly, affect individuals’ abilities to promote health and safeguard their health rights, government regulation and approval are necessary to prevent unintended consequences (Markussen and Røed, 2017). As a direct result, the government has jurisdiction over the production of medical equipment, the conduct of clinical studies, and the marketing and sale of medical equipment. Hospitals are the primary source of demand for medical equipment; however, hospitals are
hesitant to implement new technologies due to safety and reliability concerns, which creates a high barrier to entry (Lee, 2018).

As the medical paradigm shifts to one that is more focused on healthcare, the medical device industry has the potential to develop new development engines and create new employment opportunities. In response to rising consumer demand for medical services, a new industry is emerging due to convergence and integration with emerging technologies such as BT, ICT, and Nanotechnology (NT) (Soares, 2020). Numerous innovative medical technologies, including wearable devices for collecting and administering biometric data, medical mobile consultation services, information services for hospitals and pharmacies, and personalised medical therapy, are being developed by small medical technology companies. There has been a recent increase in such startups, but unfortunately, a significant proportion fails within the first few years (Lee et al., 2018).

Commercialising research results in medical device manufacturing necessitates substantial time and financial investment (Varmuza, 2016). There is considerable uncertainty surrounding the outcome. To establish a small business, academics must obtain financing or a mentor. There is a significant desire for new companies to be established in the medical device industry; however, there is almost no plan or framework to help new businesses get started (Cassell, 2017). The establishment of hospital connections, the support of government licensing regulations, the development and evaluation of clinical ideas, and all of these other activities are essential components of the medical device industry. Therefore, we require a comprehensive small business assistance service (Manbachi et al., 2018).

**Success Factors of Small Businesses**

Before a new business can launch and operate successfully, the necessary technology infrastructure must be in place. In addition, it must have access to financial resources, technological advancements, and individuals. Stuart asserts that certain types of businesses are more likely to succeed than others, based on an analysis of extant research on the factors that influence the success of new ventures (Cantaleano, 2018). These companies include those active in markets with low entry barriers and strong growth projections, those that offer novel technology, business owners with a solid comprehension of strategic marketing, and those that are active in an environment that promotes open communication. Chorev argues that the key to the success of high-tech small business is entrepreneurs with strong market analysis and management skills, strategies to gain a competitive advantage, marketing skills to identify customer needs, market-desired products, expert organisations, venture capital funding, and a supportive external environment. According to Nam, the likelihood of a business being successful depends on the
entrepreneur's "competencies," which include the entrepreneur's education, experience, and readiness for a small business, in addition to economic factors such as access to capital and investors' willingness to back up new ventures. The existence of an ecosystem for new businesses is contingent upon the expansion, revitalization, and investment of existing businesses (Parsian and Mobarak, 2016). Nonetheless, most small businesses fail before they even commence operations. Examples of the types of entrepreneurial activities required during the small business phase of a business include the commercialization of the company's ideas and opportunities and the creation of an all-encompassing business model. In the early phases of a small business, network competency is essential. The small business is strongly advised to collaborate with external businesses and corporate resources, such as technology and expertise. In other words, a foundation for entrepreneurialism and commercialisation competencies should be developed during the small business preparation phase. The small business should receive early support from the relevant agency to reduce the risk of failure (Meyer, 2017).

**Methodology**

This study's primary objective is to identify the factors most crucial to the commercial success of minor medical device manufacturers. This study uses a quantitative survey as its primary research instrument. A sample of modest businesses in the United States of America that manufacture medical equipment will receive the survey.

**Sample Selection Process**

This investigation's sample will be selected using convenient and shotgun sampling techniques. The selection of small businesses to participate in the production of medical equipment will be based on a roster compiled from trade associations and government database information. By encouraging existing respondents to recommend their contemporaries in the industry, a snowball sampling strategy will be employed to recruit additional small businesses that satisfy the study's inclusion criteria. To be considered for inclusion in the study, businesses had to meet the following requirements: they had 50 employees and were situated in the United States.

**Data Collection Methods**

In order to capture data for this study, participants will be given an online questionnaire. The survey will be hosted on a web-based platform, and participants will be invited to participate via email invitations.
Data Analysis Techniques

For the purpose of analysing the survey data, descriptive statistics analysis will be employed. Using descriptive statistics, a summary of the data will be provided, along with some insight into the factors that make a difference for small firms that manufacture medical equipment. Regression analysis will be used to determine the primary contributors to a small company's success.

Results

Figure 1 Identifying the principle of job within the industry of medical equipment manufacturing

In medical equipment manufacturing, 39% of respondents identified themselves as either firm owners or company founders. The sales function accounts for 27 per cent of employees in the industry that deals in medical equipment. Twenty-three per cent of the working population is currently employed in the production of medical equipment. 9.8 per cent of the workforce comprises individuals employed by other medical equipment manufacturers.

Figure 2 years of small business experience of manufacturing medical equipment
30% of people who participated in the survey stated that they had been manufacturing medical equipment for four to six years. 28% of their lifespan falls between 7 and 10 years. That constitutes 14% of the total work over one to three years. 26% of the respondents say that they have been working in the field for less than one year.

Figure 3 Greatest impact on the growth of small business

The poll found that marketing activities impacted small business growth the most by 35% of respondents. 23% of those polled believe that pricing strategy is important to a small business's success., 21% of people who answered the survey said that supply chain management has an effect on small business expansion. One in five polled people believe poor product quality will hinder a company's expansion.

How do you make sure that your medical devices are up to par with what is expected in the market?

Figure 4 Medical devices expected in the Market
According to the results, 42% of all participants believe there will be a demand for medical equipment with strict quality controls in place. Only 22% of people think it's a good idea for small businesses in niche markets to work with established professionals. 20% of those polled say medical devices should undergo frequent testing and evaluation before hitting the market. Only 16% of people polled said the others.

![Pie chart showing percentages of responses for setting prices factors](image)

**Figure 5** setting prices factors

According to the results, 40% of participants believe that production costs are considered when determining medical device prices. 27% of people polled said that pricing is determined in part by surveying competitors' offerings. 8% of those polled said that market research is used to determine prices. Other responses accounted for 14% of all responses.

![Bar chart showing frequency of promotional methods](image)

**Figure 6** Frequent promotional methods of medical equipment manufacturing industry
19% of those polled cited online advertising as a promotional tool. Print is the most popular advertising medium, chosen by 35% of respondents. Exhibiting at trade shows is the preferred promotional approach for 33% of respondents. Direct mail and email marketing are the most effective promotional strategies, according to 11% of respondents.

If you want your items delivered on schedule and at low cost, how does one manage the supply chain?

- Regularly reviewing supplier performance (28%)
- Building strong relationships with suppliers (6%)
- Implementing inventory management systems (24%)
- Other (please specify) (42%)

Figure 7 Manage the supply chain

The survey found that 42 per cent of those surveyed believe effective supplier relationships are the key to managing the supply chain. Only 28% of people polled thought an inventory management system was necessary to control the flow of goods. Only 24% of those surveyed believe supply chain management is possible without routinely assessing supplier performance. Only 6% of the polled cited financial incentives for managing their supply chains.

As a small business entrepreneur within the medical equipment production industry, what do you see as your greatest obstacles to success?

- Access to financing (37.3%)
- Finding and retaining skilled employees (15.7%)
- Complying with regulations and standards (9.8%)
- Competition from larger companies (37.3%)

Figure 8 obstacles faced by medical equipment production industry entrepreneur to getting success of their business
The poll found that 37% of medical equipment manufacturers cite difficulty recruiting and retaining trained workers as their top challenge. One survey found that 37% of medical device manufacturers struggle to meet norms and standards. Fifteen per cent of respondents see lack of funding as a major challenge facing the medical equipment manufacturing sector. According to 9 per cent of survey takers, the main challenge facing medical equipment manufacturing is competition from larger enterprises.

Figure 9 Track the growth of small business

The survey found that 39% of respondents believe customer satisfaction to be the primary driver of small business success. Two-eighths of those polled said that a company's profitability is crucial to its expansion. Only 15% of people say expansion is not tied to revenue growth. Fifteen per cent of people who answered the survey said that expansion is tied to market share.

Figure 10 Guidance for small business entrepreneurs
What guidance would you offer other small business entrepreneurs in the manufacturing of medical equipment?

The poll found that 45% of people think it's beneficial for small business owners to develop close relationships with their suppliers and customers. 23% of people who took the survey said that medical equipment manufacturers should put more money into marketing and branding. Focusing on product quality is the advice given to small business owners, according to 21% of respondents. Only 9% of people polled said that small business owners should prioritize keeping up with industry trends and innovations.

**Findings**

According to the data analysis, management of supply chains, marketing, and product quality are the three most essential factors for the success of small firms in the medical equipment manufacturing industry. People reported that they were "extremely important" to them in most instances. According to the regression analysis results, success in the medical equipment manufacturing industry can be predicted with a certain degree of accuracy by emphasizing product quality, marketing, and supply chain relationship management. These factors have been shown to have a positive and statistically significant effect on the success of modest businesses. The research also indicates that competition is one of the greatest obstacles small businesses face in the medical equipment manufacturing industry. Having access to funding and complying with regulations are also significant obstacles. These components were deemed "challenging" by most respondents who provided comments.

**Interpretation**

This study's findings cast light on the factors that make a difference for small medical equipment manufacturers. These findings illuminate the importance that small businesses in this industry place on product quality, marketing, and supply chain management. The paper identifies a number of obstacles encountered by small businesses in the medical equipment manufacturing market. Included among these obstacles are competition, the availability of capital, and regulations. Overcoming these obstacles will be crucial for the long-term success of small enterprises in this industry. The findings of this study cast light on the critical success factors for small businesses operating in the medical equipment manufacturing market and demonstrate the significance of small businesses operating in this industry as a whole.
findings can be used by businesses of varying sizes, industry associations, and government agencies to improve the operating environment for medical device manufacturers.

Discussion

This study's findings have significant ramifications for businesses of differing sizes involved in the production of medical devices. The key to success for small businesses, according to the research findings, is to place a strong emphasis on product quality, marketing, and the administration of supply chains. These are the areas in which smaller firms have the potential to obtain a competitive advantage over their larger competitors and thereby increase their market share. This paper discusses a variety of challenges and constraints that small businesses confront, including competition, funding restrictions, and laws. Small businesses have the ability to develop strategies that will aid them in overcoming these obstacles and increase their likelihood of success.

Factors driving the growth of small medical device manufacturers

Medical equipment manufacturing is a competitive industry in which small businesses encounter a number of obstacles. Product quality, pricing strategy, marketing, and supply chain management have the most significant influence on the performance of minor businesses in this industry. When it comes to turning a profit, one of the most important factors to consider is the quality of the products sold by a company. It is necessary to test products to ensure that they satisfy the standards established by quality assurance practices. Products must be trustworthy, usable, and not compromised in any way. If you want to be utterly certain that the quality of your final product is of the highest possible standard, you must implement quality control procedures at every single stage of production. Customers who are satisfied with the service they receive and remain loyal to your brand may increase sales and profits. Developing a solid pricing strategy is one of the most crucial aspects of operating a profitable small business in the medical equipment manufacturing industry. When determining their prices, small businesses must strike a balance that allows them to generate a profit while maintaining customer satisfaction. While maintaining a reasonable profit margin, prices must be competitive enough to entice purchasers. Market research should inform pricing strategies in order to ensure that prices are competitive and in line with what the target audience anticipates. Small enterprises that manufacture medical equipment frequently fail because they lack sufficient marketing resources. The company's products and services necessitate implementing efficient and
effective marketing strategies. Small businesses need well-considered marketing strategies that are tailored to their specific customers and the needs of their industry in order to be successful. Connecting with consumers and promoting products is possible with the aid of digital marketing, social media marketing, and other online strategies.

Small businesses in the medical equipment manufacturing sector rely heavily on the efficient administration of their supply chains to achieve success. Managing the supply chain requires coordinating the numerous processes involved in producing and distributing a product. Small businesses must implement effective supply chain management systems to increase profitability and reduce waste. Taking care of suppliers requires keeping track of inventory levels and ensuring orders are delivered promptly. There are numerous factors that influence the success or failure of a modest medical equipment manufacturing company. The number of moving elements is among these factors. Product quality, pricing strategy, marketing, and supply chain management are crucial factors that could determine a small business's success in this industry. Small businesses seeking long-term success and continued viability must prioritise the development of plans for each of these components. This will help small businesses in the extremely competitive medical equipment manufacturing market compete more effectively, become more profitable, and grow consistently.

**Challenges encountered by small enterprises in the medical equipment manufacturing sector**

In the manufacturing of medical equipment, a highly competitive and difficult market, small businesses face several obstacles, each of which can significantly impact their likelihood of success. In the following section, we will examine the effect of the aforementioned obstacles on the expansion of small enterprises in the medical equipment manufacturing industry.

The high cost of research and development is one of the greatest obstacles faced by small enterprises in this industry. Medical device manufacturers are required to place their products through extensive testing to ensure that they are safe and effective prior to marketing them. It can be difficult for small enterprises to invest in research and development because they frequently face resource constraints. This may make it more difficult for them to develop innovative products that can successfully compete in the market.

In addition to the issue of a highly regulated industry, smaller businesses operating in the medical equipment manufacturing sector encounter the problem of a highly regulated industry. To ensure the
utmost possible quality and safety standards in their products, manufacturers of medical equipment are subject to stringent oversight. The process of complying with these regulations can be time-consuming and costly, and many smaller businesses lack the necessary knowledge and resources to complete the process successfully. Smaller businesses in the industry may struggle to endure if noncompliance results in hefty fines and legal repercussions. For newly established companies in the medical equipment manufacturing sector, gaining access to capital presents yet another obstacle. For small business, securing funding from investors and other financial institutions to support the costly process of developing and marketing medical equipment can be difficult. Due to decreased investments in areas including research and development (R&D), marketing, and business expansion, the company's market competitiveness and overall success may suffer.

In the field of producing medical equipment, the scarcity of qualified and experienced workers is one of the greatest obstacles for new enterprises. Producing medical equipment can be difficult for smaller companies, particularly in terms of recruiting and retaining the requisite highly skilled labour force. This can impair both the company's ability to produce high-quality products and its ability to successfully compete in the marketplace. Due to the numerous obstacles presented by the aforementioned issues, it can be difficult for small businesses to compete in the medical equipment manufacturing market. When faced with such obstacles, small businesses run the risk of failing and may find it difficult to compete with larger, more-established firms in their industry. Due to the significance of small businesses to the medical equipment manufacturing industry, their actions will have repercussions far beyond the confines of the industry. To overcome these obstacles, small businesses must implement strategies that are innovative, productive, and cost-effective. Small businesses can gain access to the necessary resources and expertise through partnerships and collaborations with larger organisations and academic institutions. Small businesses must invest in their personnel by training and retaining employees with specialized knowledge in order to develop competitive products and maintain low costs.

There are several obstacles that could impede the accomplishment of success by small businesses operating in the medical equipment manufacturing market. Small enterprises in this industry face a number of significant challenges, including a high cost of research and development (R&D), a complex regulatory framework, a lack of access to capital, and a shortage of experienced personnel. In order to overcome these obstacles, it is imperative to implement a strategy that places a premium on innovation, efficiency, and cost-effectiveness. Small businesses have a greater chance of achieving success in the
medical equipment manufacturing market and contributing to advancements in healthcare if they devise strategies to circumvent these obstacles.

**Small medical equipment makers can improve quality, affordability, marketing, and supply chain management**

The presence of competition, the need to comply with regulations, financial constraints, and the need to increase their technical capabilities are just a few of the obstacles that small businesses in the medical equipment manufacturing industry must overcome in order to achieve success. To confront these obstacles head-on, small businesses have various options, including but not limited to enhancing product quality and pricing, marketing, and supply chain management. When it comes to the production of medical equipment, the final product's quality is of the utmost importance. To acquire the trust and loyalty of customers, even the smallest businesses must ensure that their products meet or exceed industry standards. Investing in research and development can help small businesses better comprehend their customers' wants and needs, which can be incorporated into future product iterations. In addition, they are able to implement quality control procedures to ensure that their products meet industry standards.

There is a chance that pricing issues will also affect minor companies in the medical equipment manufacturing industry. Small businesses must price their products competitively in order to recover their production costs and generate a profit. This can be accomplished by conducting market research and comparing the prices of analogous products and services offered by other small businesses. Offering discounts, special deals, and package bundles are additional methods for attracting new consumers and retaining existing ones. Effective marketing strategies are crucial to the development and prosperity of a small company in the medical equipment manufacturing sector. Small businesses must implement successful marketing strategies in order to increase their consumer base and differentiate themselves from the competition. Investing in market research enables small businesses to improve their marketing efforts by allowing them to better understand the desires and needs of their target customers. They can utilise various digital marketing strategies, including content marketing, social media marketing, and search engine optimisation, to help spread their message and establish their company's brand.

Supply chain management is commonly regarded as one of the most crucial success factors for small medical equipment manufacturing companies. The on-time delivery of products to consumers is contingent on a dependable, cost-effective, and efficient supply chain. All of these characteristics are the
responsibility of small enterprises. Small businesses can improve their supply chain management in various ways, such as by working closely with their suppliers to improve pricing and delivery terms, implementing inventory management systems to ensure optimal stock levels, and employing techniques such as blockchain to increase supply chain transparency and traceability. All of the aforementioned are examples of ways small businesses can enhance their supply chain management. In conclusion, there are numerous obstacles to the success of small enterprises in the manufacturing of medical equipment, making their success difficult. Improving product quality, pricing, marketing, and supply chain management are all possible avenues for them to pursue in response to these challenges. By implementing these strategies, businesses could differentiate themselves from the competition, expand their customer base, and boost their productivity.

Limitations of the study

Before reaching any definitive conclusions based on this study, it is necessary to consider a number of essential qualifications. First, the sample size is relatively small, which may limit the long-term generalizability of the conclusions. Second, because the research was limited to SMEs in the United States, it is conceivable that the findings cannot be applied to SMEs in other countries. In conclusion, the research relies on self-reported participant data, which introduces the possibility of error.

Suggestions for future research

This study has several limitations, and there is room for additional research. Utilising a larger sample size is one way to increase the generalizability of the results. It is also possible to investigate the success of small enterprises in a variety of geographies by conducting research in multiple countries. Last but not least, self-reported information and objective assessments can be combined in future research to produce more accurate and dependable results.

To investigate the role that innovation, the adoption of new technologies, and workforce training and education play in the success of small businesses in the medical equipment manufacturing industry, additional research could be conducted. These trends, which are gaining significance in the market, could have significant and potentially severe effects on the success of small businesses.

The findings of this study are useful for understanding the factors that contribute to the success of minor medical equipment manufacturers. According to the research findings, the key to success for small businesses is to emphasise product quality, marketing, and the administration of supply chains. If they desire to increase their market share and level of competitiveness, small businesses in the industry must priorities the aforementioned factors. The findings of this study demonstrate the importance of finding solutions to the problems voiced by small business owners. In general, new businesses, trade
organizations, and political parties can use the study's findings to better position themselves for success in the field of medical equipment manufacturing.

**Conclusion**

This study aimed to determine the factors that contribute to the success of some medical equipment manufacturers while contributing to the failure of others. It was discovered that product quality, marketing, and supply chain management are especially predictive of the success of small enterprises. There were three constituents. The survey also revealed a number of obstacles and hurdles that small businesses in the industry encounter, including the level of competition, the availability of financial resources, and the legislation. These findings have significant implications for small enterprises operating in the medical equipment manufacturing sector. To increase their market share and competitiveness, small businesses must prioritise product quality, efficient marketing, and optimise their supply chain management processes. In order to increase their likelihood of success, small businesses should also develop strategies to address the obstacles they confront. This study is significant because it contributes to the existing corpus of knowledge on the success of small businesses operating in the medical equipment manufacturing sector. This study provides a deeper examination of the factors that affect the performance of small enterprises. Among these factors are product quality, marketing, and supply chain management. These findings can be applied to creating sector-specific interventions and support programs tailored to satisfy small businesses unique needs.

The findings of our study have led us to conclude that medical equipment manufacturers should place a greater emphasis on the quality of their products, as well as marketing and supply chain management. Small businesses must devise strategies to surmount obstacles such as intense competition, a lack of available financial resources, and overly restrictive government regulations. Industry groups and governments can use the results of this study to develop programs and policies geared toward the success of small businesses based on the findings. In conclusion, the findings of this study contribute significantly to our understanding of the factors that influence the growth and survival of small businesses that manufacture medical equipment. The researchers expect that small businesses, trade groups, and politicians will use the study's findings to better assist their members in achieving success. This research contributes to the existing corpus of knowledge on the performance of small businesses in the sector and emphasizes the need to overcome industry-specific challenges.

**Reference**


