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# Leadership Style of Senior Manager of Medical Device Industry in Germany: A Case Study

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## ABSTRACT

Leadership allows organizations to focus on employee development and sustain efforts for well-being. It argued that the medical device industry is complex and leadership requires support to meet the demands. Moreover, increasing globalization and politicization of social welfare institutes have increased challenges. Regulatory compliance must be followed. The study aimed to explore the leadership style of senior leaders in the context of regulatory compliance in the medical device industry after the COVID-19 outbreak. The research objective is to get insight, thoughts, and shared experiences from the medical device industry leaders as they face regulatory challenges. The research used a qualitative approach and the data was collected through conducting interviews

with medical device industry leaders and later performing a thematic analysis of the interview transcripts. The sample population taken in the research comprised 14 senior leaders from South Germany, particularly in Baden-Württemberg Region, where they shared their responses based on design questions. The questions were designed within the context of regulatory compliance. Ethical considerations maintain the anonymity of the participant. It was observed that regulatory compliance in the medical device industry has uncertain and dynamic situations where an authoritarian style of leadership becomes necessary. However, most of the leaders disagreed with this style of leadership and some resort to a democratic way of listening through effective communication or collaboration. Communication skill was found to be the most effective for leaders in the medical device industry. Leaders build personal relationships with their subordinates and try to cater to their needs. It recommended that management develop a constructive attitude to enable staff to be innovative as new medical treatment devices come into the market and staff be provided proper training. Also, female managers in upper-level management can remove gender bias.

***Keywords —*** Social Science, Covid-19, leadership, medical device, regulatory compliance, senior leaders, UK

## INTRODUCTION

After the pandemic, the medical field competition has significantly increased; it is important for the firms to come up with change and sustain competitive advantage effectively. With rapid globalization, the medical device industry is expanding in different parts of the world to provide effective healthcare activities and seek more routes to selling their products. Due to this reason, Wilson (2018) mentioned that senior leaders and organizations sought to identify new strategies and adopt necessary actions so that new markets could be capitalized on or new market trends could be approached globally. The issue of implementing change has been observed in organizations expanding to other nations. In an investigation by Jerez (2020), it is stated that political and economic landscapes have changed significantly in recent times; hence medical devices companies should also change with them. Due to this reason, more innovation-based strategies are needed so that solutions improve health costs as well as improve the quality of health (Padró & Green, 2018). Nonetheless, a dichotomy exists in medical devices that can allow research and development of innovative products and procedural solutions to serve needy people (Gbadegesin, 2020). The change forces applied to medical

organizations do not serve the best interests of the people, and the leadership role is considered the most important in doing so.

Employees are considered an integral part of a company, and they can play an important role in bringing change and elevating the chances of increasing healthcare quality. However, leaders in a medical organization are considered the most important for managing them. In an investigation by Gbadegesin (2020), it is argued that companies' strategic and competitive goals can be achieved by keeping the employees motivated and meeting the strategic vision of the firms. Leaders who previously used to lead organizations and carry extensive experience have the skills to be included in multinational medical organizations. There is a need to seek regulatory approval for medical products in all the countries they are operating in (Root, 2019). Pham et al. (2019) argued that many companies need to take medical approval for their devices, especially when the aim is to meet sales demands in that region. Hence, the leaders must play an important role in this regard by introducing a good change management plan.

## OBJECTIVES OF THE STUDY

The study aimed to achieve the following objectives (1) to highlight the gap between theoretical and practices after carrying out a critical review of what the literature defined leadership in the medical device sector in particular, (2) to determine the leadership styles of senior managers in medical device industries, and (3) to recommend the most suitable leadership styles strategies for organizations comply with the pandemic situation.

## METHODOLOGY

### Research Design

For the study, it was decided that interviews would be conducted to collect the data and also so that thematic analysis could be performed on the data collected, and since the thematic analysis was chosen as the mode of data analysis, the interview method was considered to be the most suited.

Furthermore, the research design was chosen to be interview-based for the following reasons. Face to Face interviews helps to screen more accurately. The participants were interviewed in major sessions and the overall time was between 30 to 45 minutes as they were only conducted once (McGrath, Palmgren, & Liljedahl, 2019). The interviews were semi-structured. A series of open-ended

questions was asked to gain in-depth information about participants' experiences and viewpoints. Senior Leaders in the medical device industry were contacted by email or directly with a demonstration of the objectives of the study. All interviews were recorded for analysis with the express contest of all participants. Prior to the interviews, the participants were made aware that the data collected from their interview and the voice recording of the session, would be kept anonymous by using a pseudonym.

The Study employed the following questions:

**1. What leadership skills do you find most useful?**
   a) What leadership skills do you find very useful?
   b) What leadership attributes enable you to comply with regulatory demands?
   c) What characteristics and attributes that make an effective and motivational leader do you observe in the leaders you have interacted within your life?

**2. How do you describe your leadership style?**
   a) What experience has influenced your leadership style?
   b) As a leader, how do you get your people to follow you?
   c) What do you think about how your followers perceive your leadership style?
   d) How do you motivate your followers to do their best?

3. **Is there any specific leadership style suited to the medical device industry?**
   a) Can you tell me the characteristics of competent leaders in the medical device industry?

**Data Collection**

The respondents of this study consisted of the top or senior managers who were purposively selected.

**Research Ethics**

The primary ethical consideration in this study is protecting the confidentiality and anonymity of the participants in data collection, analysis, and research results reporting. Participants will also be informed that they can opt-out and be allowed to receive a report on the results and completion of this study if they choose to participate. Finally, the ideas of relationships and forces between researchers and participants have been integrated into qualitative research. The desire to participate in research is influenced by the readiness of members to share

their involvement. Qualitative researchers often need to describe their research experience in a real way, which runs counter to their goals. The research protocol must also provide adequate info to ensure the protection of human subjects.

## RESULTS AND DISCUSSION

### Describing Leadership Styles

The paper described leadership styles from different perspectives in terms of describing leadership. Based on the findings of thematic analysis, it has been revealed that leadership is more concerned with assisting more to co-workers. Also, leadership is the one that reflects professionalism and discipline. This can also be supported by Arijanto and Wulandari (2019) findings, who have suggested that leadership fosters discipline and is responsible for developing the workplace environment, which facilitates employees to exploit their skills and creativity better. The respondents explained the stressful nature of the jobs that must practice keeping rules and regulations, which affirms Smith's (2017) assessment that employees adopt practices to ensure regulatory compliance. In view of Jackson (2018), the stressful nature of the job has greatly affected the work culture, climate, and especially the leadership style as respondents are mostly resolute to autocratic leadership style as in the medical devices industry, human lives are on the line and leaders have to deal with difficult and strict deadlines. As Sethi et al. (2017) argue that the quick response time in the medical device industry has led leaders to deal with unusual circumstances, as found in the results. Workers have no support time to explore, discuss, or see different options available in the face-paced environment. In accordance with this finding, it is incredibly hard to bring transformation in leadership style (Moghisi et al., 2020). Regulatory frameworks have made it very difficult to innovate strategies and leaders view that authoritarian style is necessary as through harnessing power and authority, staff would, on an hourly basis, requires quick, responsible decisions and quick action. Leaders in the medical device industry have the freedom to explore, discuss, and see the strengths and weaknesses of the options available.

Disagreement was found about the extent of the use of the authoritative style. Differences of opinion existed among respondents regarding what authoritative or autocratic was related to. The transformation in the leadership styles was not a sudden process; the complex nature of the medical device industry led to their authoritarian behavior as they were more adamant about negative feedback. Many respondents of those autocratic qualities made their subordinates comfortable in

their job and this view is in line with Jackson's (2018) recommendation that collaboration builds a culture of leadership that directly influences employees. The industry's regulatory compliance is very stressful, and the leaders also have situations where someone's life may also be on the line and time is a major constraint to consult others in emergencies. According to some studies (Neves & Sanna, 2016; Parvari et al., 2017), even men are likely to behave rashly when equipment or regulatory compliance is not met or is sub-standard. The leaders believe that a strict attitude is necessary to deal with a crisis, although room for innovation is still left when situations ease off. Many managers in the medical device industry are adamant about transforming the leadership style necessary for top managers in the medical device industry (Mukhtar et al., 2020). This can also be supported by the findings of Oliveira et al. (2016), who have suggested that managers of the medical device industry needed to follow the rules and regulations of the industry to maintain compliance. It is to the reason that the medical device industry is to produce excellent quality products and tools that can be utilized for the treatment purpose of patients. The rules and regulations reflect patients' health and safety prioritized in the medical device industry (Farid, Davaji, & Barani, 2016). The results obtained through thematic analysis suggest that while managing strict rules and regulations, leaders are also required to provide employees freedom so that creativity and innovation can be fostered. This implies that leaders must reflect the element of strictness in their leadership style while leading the workforce in this industry (Neves & Sanna, 2016). It is the reason that besides adhering to the quality standards and requirements, it is also essential to develop innovative products so that the competitive edge in an industry can be maintained. This can be supported by the findings of Sonsale and Bharamgoudar (2017), who have suggested that exploration and exploitation activities are essential while producing innovative designs.

**Most Useful Leadership Skills**

The strategies adopted by the leaders inadvertently shape the leader's work environment and the culture of the organization (Bäker and Goodall, 2018; Manss, 2017). In our findings, leaders tend to be very organized and schedule their routines in advance. According to Privitera, Evan, and Southee (2017), leaders provide training to their employees members for developments that would help them conduct their duty and responsibilities better. Handling medical equipment is not an easy task (Ahmed et al., 2019), and the development of the staff is given importance by the leaders, as analyzed from our research. In order to address the

challenges, it is observed that most companies try to come up with platforms of engagement and motivation by adapting to transformational leadership.

The study of Spano-Szekely et al. (2016) has also suggested that the inclusion of helpful attitude, encouragement, and motivation are nonetheless described as some of the most useful skills for leadership. This can also be supported by the findings of Kalhori et al. (2016), who have suggested that health care provided by following transformational leadership skills in light of influencing junior staff and educating them with a clear vision or support are observed as some of the most useful skills.

Leaders also motivate their employees to follow their tough routines by mentioning company policies. Nonetheless, the medical device industry necessitates this approach to function (Rooke, 2018). Supporting their employees' leader would inevitably make employees adopt job practices and life principles that would be advantageous for overall organizational and societal well-being (Bäker, and Goodall, 2018). According to one leader, Leaders should be flexible and adaptable to transformation. This would help the staff and the organizational function of the medical device industry. Bumgarner (2016), Coleman (2018), and Arijanto and Wulandari (2019) gave similar arguments that the organization's goals are important, and in the medical device industry, transformation in leadership style will result in organizational progress through better productivity and employee skill development (Mgqibi, 2019). Many participants viewed that through shared collaboration, autocratic prejudices would get acceptance by the staff. According to Smith (2017), leaders must indulge in coercive practice in the medical device industry to promote effective strategies for the work environment.

Ogbomeh (2018) literature can be counter-argued that organizational decisions can be counter-productive if the decision will not work in the facility. However, contrary to this fact, it is found that the coercive practices implemented by the leaders in the medical device industry are beneficial for the organizations to work. Around a third of the respondents disagreed with authoritative and repressive behaviors from leaders at times of disagreement on decision making. In practice, it is not observed and only three people in the interview responded to dealing in democratic ways of listening, which resolves issues through effective communication (Schiavone & Simoni, 2019). Equal number of participants resolve conflicts through collaboration and accommodation. In further answers to the questions, it can be observed that leaders in the medical device industry face critical situations where they must respond quickly and may not consider the emotional elements of a job task. According to Covelli and Mason (2017), the

collaboration related to their work is key as dealing with discernments requires effective communication, but, in our findings, not all respondents dealt with situations democratically. They also shared different skills to collaborate with others as some dealt through collaboration in the divergent view of Alabdulhadi et al. (2017) that leaders share similar characteristics.

## CONCLUSION

The findings derived from the interview data in this research showed the differing mindsets of senior leaders and yielded an understanding of the experiences that have shaped their leadership styles. In comparing the participants' experiences, many similarities were revealed, as well as differences related to leadership style, attributes to enact change, the impact of regulatory compliance, and leadership development. An important conclusion of this study is that the approach of a leader in the medical device industry to drive an effective strategic decision-making strategy directly impacts the successful outcome of operational practices in the medical device industry. The study also concluded that the leader's approach was directly influenced by previous experiences, emotions, and evaluative judgments about the external environment, reminiscent of Ogbomeh's (2018) perspectives.

Communication skill was found to be the most effective skill for leaders in the medical device industry. Leaders favored the view that effective communication would improve the overall performance as they would get thorough feedback as they engage people in their surroundings (Covelli & Mason, 2017). Based on the analysis, it can be concluded that leaders who support the employee in their growth and development through education and career development opportunities are identified as one of the most useful skills. The findings of Kalhori et al. (2016) have suggested that transformational leadership skills considering influencing junior staff and education are observed as some of the most useful skills in the health care sector. Moreover, Oliveira et al. (2016) indicated transformational theory is one of the most useful leadership while influencing others and coping with changes concerning the changing environment. Therefore, one of the research questions is answered as leaders with good communication skills tend to influence people and the workforce better.

From the analysis, the most useful leadership style was authoritative, as the nature of work involved in the medical device industry necessitates enforcement. Although there is always space for bettering new methods and equipment,

external departments connected with the medical device industry could help fill the requirements. The leaders want their subordinates to stay energized and motivated in work and meet certain expectations, as observed in a study by Spano-Szekely et al. (2016). As Ravand, Darvish, and Nasrabadi (2017) mention, the complexity of the medical device industry leadership is paramount and medical organizations need to comply with the regulations; and similar findings were observed as respondents stated stressful situations in the medical devices industry. The nature of service in the medical device industry has made the transformational leadership style more authoritative. There are significant gender role issues in the medical device industry as very few females hold top executive positions, although the responsiveness to their leadership style is equal in measure to men.

In terms of identifying a suitable leadership style for the medical device industry, the findings of Alabdulhadi et al. (2017) and Chao (2017) have suggested that though leaders possess a common set of skills in terms of communication skills, motivation, rewards, and recognition and others nonetheless, the leaders while working in the environment like medical device industry has to comply with certain types of rules and regulations that are considered crucial in hospital-oriented services. Further, the findings of Oliveira et al. (2016) have indicated that managers of the medical device industry are needed to be followed the rules and regulations of the industry to maintain compliance. Moreover, to develop innovative products, change is crucial so that the competitive edge in an industry can be maintained. In this aspect, Sonsale and Bharamgoudar (2017) findings have suggested that exploration and exploitation activities are essential while producing innovative designs. Therefore, the transformational theory and skills assist leaders in transforming the procedures and processes along with the workforce to foster innovation and creativity.

## RECOMMENDATION

The findings of this research recommend that change management should be focused on developing a constructive attitude instead of being rigid to change that would enable staff to be adaptable to innovation as new medical treatment devices come into the market (Ahmed et al., 2019). When leaders show positive attitudes toward their employees, their actions will more likely inhibit employee resistance to change. Leaders must recognize their behavioral processes and resistance to change as it can be detrimental to the organization and the skill set of

the staff at the middle and bottom levels (Moghisi et al., 2020). An authoritative leadership style helps to deal with such emergencies. By harnessing authoritative leaders' power and authority, they can force people to fight for a common goal, provide clear advice and consistent instructions, and help leaders deal with crises and implement solutions quickly.

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