External Factors That Affect Operational Performance: A Conceptual Model Development for Pharmaceutical Drug Wholesalers Companies in Bali, Indonesia

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ABSTRACT
Pharmaceutical distributor companies or also known as PBF (Pharmaceutical Drug Wholesalers) play an important role in the distribution of pharmaceutical products in Indonesia. Without the role of PBF, the drug will not reach the patients from the manufacturer. The PBF appointed by the manufacturer to distribute the product, has operational performance targets that must be achieved. However, like other businesses, PBF operational performance is also affected by external factor, such as the Covid-19 pandemic. The purpose of this study was to analyze the impact of external factors, those are: Covid-19 pandemic, government regulations and the intensity of competition on the operational performance of PBF in Bali. This study uses the literature review method. Data analysis in the literature review involves compiling and presenting findings from various data sources that have been collected. The result of this research is a conceptual model that synergizes sales strategy and operational control as mediating and moderating variables to minimize the negative impact of external factors on operational performance. This research is expected to contribute to the field of strategic management, particularly related to the supply chain of pharmaceutical products.

1. INTRODUCTION
PBF carries out an intermediary function from the drug manufacturer / manufacturer (or often referred to as the principal) to the health service facility before finally the product reaches the patient / final consumer (Höhler & Lansink, 2021; Rosenzweig et al., 2003). PBF carries out the function of distributing drugs based on the appointment given by the principal. The appointment is usually accompanied by a cooperation agreement that contains the rights and obligations of both parties. One of the principal’s goals in appointing PBF as an extension of an area is so that the products produced by the principal can be distributed optimally by the appointed PBF so that maximum sales can also be achieved.
Many and even distributions, customer growth and achieving sales targets are some of the principal performance indicators against PBF as their distributor (Al-Omari et al., 2020; Ridha & Hidayat, 2020). Pharmaceutical distributor companies or also known as PBF (Pharmaceutical Drug Wholesalers) play an important role in the distribution of pharmaceutical products in Indonesia. In Indonesia, the overall performance of the pharmaceutical industry itself is not as big compared other countries or is still smaller than other industrial sectors. Previous study said that the pharmaceutical market in Indonesia is only the fifth largest in Asia after Japan, China, India and South Korea (Yunus et al., 2016). In terms of the size of the business, the performance of the pharmaceutical sector in Indonesia itself is relatively small compared to other sectors. In 2014, the pharmaceutical business in Indonesia only amounted to 69.5 trillion rupiah. This value when compared to the food sector for example, the size of the pharmaceutical business is only slightly adrift from the business of one of the players in the food sector in Indonesia, namely PT. Indofood Sukses Makmur Tbk whose sales reached IDR 65.5 trillion in the same year.

The tourism sector is the main regional income for the Province of Bali and contributes 80 percent to the Balinese economy (Sarjana et al., 2020; Soritua, 2015). The hit in the tourism sector due to the pandemic certainly has an impact on other sectors in Bali (Darmawijaya et al., 2019; Paramita & Putra, 2020). Pharmaceutical Wholesalers (PBF) whose main activity is the sale and distribution of pharmaceutical products also feel the impact. This is due to distribution difficulties (many health facilities are closed such as polyclinics, especially in the early days of the pandemic, restrictions on customer operating hours, restrictions on interaction with order decision makers at customers), decreased sales levels (many doctors do not practice and/or limit practice hours) resulting in decreased interaction between doctors and medical representatives who promote drugs to doctors), and it is more difficult to obtain product supplies, especially for products needed during a pandemic (Bentlage et al., 2020; Goodell, 2020). Other external factors that have an impact on PBF’s operational performance apart from the covid-19 pandemic studied in this study are government regulations and the intensity of competition. These external factors are suspected to have a negative impact on the company’s operational performance (Chiva et al., 2007; De Jong & Den Hartog, 2010). For this reason, the company needs the right strategy, both from the corporate level to the functional level to anticipate the impact of these external factors. The functional level strategy that can be carried out by PBF is a strategy in the sales division. The sales strategy will be more effective if the operational activities are well controlled.

There are differences in research results related to control systems and operational controls. Previous study show the effect of strategic control and operational control on the success of 83 new companies in China whose equity investments were owned by established companies established between 1993 and 2007, and issued initial shares for not more than eight years (Lin et al., 2017). The results obtained are that strategic control has a negative and significant effect on the success of new companies in China, but operational control has a positive and significant effect. Other study the effect of the effectiveness of automation, salesperson control systems and satisfaction over sales areas on the performance of salespeople at pharmaceutical distribution companies in the Municipality of Banjarmasin obtained similar results (Sianturi et al., 2019). This study, which sampled salespeople (salespeople), sales supervisors, branch heads who are still active and have worked for more than one year at a pharmaceutical distributor company in the Municipality of Banjarmasin, obtained the result that there is a positive and significant effect of the salesperson control system on performance power seller. While previous study operational control (operations control) as a moderating variable of corporate entrepreneurship on innovation performance (Goodale et al., 2011). This research was conducted on 177 companies from different industries in the United States and the results obtained were that operational control variables were able to moderate corporate entrepreneurship on innovation performance. This study formulates operational control as a moderating variable of sales strategy on the company's operational performance. The better the company is in carrying out operational control, it is believed that the sales strategy will be more
effective in achieving the desired operational performance targets. This study aims to analyze how the influence of external factors, in this case the impact of the covid-19 pandemic, government regulations and the intensity of competition on the company's operational performance.

2. METHODS

This study uses the literature review method. The initial stages are scientific articles, journals, books, research reports, and other publications that discuss the influence of external factors to be studied, such as the impact of COVID-19, government regulations, and the intensity of competition on the company's operational performance (Kusmaryono et al., 2021; Snyder, 2019). Data collection was carried out by involving reading thoroughly and understanding the content of each selected article or publication. During this process, it is important to record and organize important findings related to the influence of external factors on the operational performance of the company. Data analysis in the literature review involves compiling and presenting findings from various data sources that have been collected. Researchers can identify patterns, trends, or differences in the influence of external factors on the operational performance of companies that emerge from the literature reviewed. Then researcher finds similarities or differences in research results reported by different data sources. Furthermore, a synthesis is carried out by linking these findings to compile a comprehensive picture of the influence of external factors on the company's operational performance.

3. RESULTS AND DISCUSSIONS

Results

The COVID-19 pandemic has had a negative and significant impact on operational performance

On the downstream side, the performance of the pharmaceutical industry is closely related to government regulations, especially those related to the distribution of pharmaceutical products. Compliance with regulations ensures that pharmaceutical companies will develop and distribute quality and safe products, related to their role in health care, prevention and cure of disease and saving human lives. In the pharmaceutical industry in Indonesia, government regulations tend to change in a more stringent direction (Sharma & Modgil, 2020; Yunus et al., 2016). In the distribution channel, PBF is obliged to follow the rules of drug distribution flow according to the Minister of Health Regulation No. 1779/Menkes/Per/XII/2010. In this case, Pharmaceutical Wholesalers (PBF) may not directly sell products to consumers (patients), including selling products to doctors who prescribe drugs to patients, but must go through health service facilities, such as hospitals, clinics, and pharmacies for medicines, prescription drugs and drugstores for non-prescription drug products. This regulation has a good aim to ensure the distribution of drugs is in the right direction and the distribution is more controlled. However, on the other hand, the uneven distribution of health care facilities throughout Indonesia causes the distribution of pharmaceutical products to be not optimal and has an impact on the achievement of PBF's operational performance. Regulation of the Minister of Health of the Republic of Indonesia No. 26 of 2018 regarding the requirement for PBF to have a CDOB (Good Drug Distribution) certificate also has an impact on PBF's operational performance. This regulation actually has a good purpose, namely to ensure that each PBF has standard facilities and carries out operations according to the rules of good drug distribution. However, on the other hand, there are things that PBF considers quite burdensome, namely, firstly, the extra costs that PBF has to pay to prepare the equipment needed as a CDOB requirement, and secondly, selling products to several customers that was once possible, is forced to no longer be done. because if the PBF continues to do so, the CDOB certificate will not be issued by BPOM.

The rules for procuring medicines in government agencies by e-purchasing or also known as e-catalogs also have an impact on PBF performance achievements, especially for local PBFs. Previous study said that on the one hand, the implementation of government procurement of goods/services with e-catalogue will be more open, transparent and efficient by reducing the process and time in the procurement of government goods and services. But on the other hand, the implementation of e-catalog will erase the role of small and medium-sized businesses that have been part of the distribution chain (Iqbal, 2020). The procurement of drugs, first the government through the LKPP (Institution for the Procurement of Goods and Services) will conduct an auction for the types of drugs needed. Then from the incoming bids, the government will include products that meet the criteria on the e-catalog list. In this case, it is not only the suitability of the type of product that determines but also the price. To be able to compete, drug manufacturers, in this case the factory/principal, will try to reduce prices, including by cutting distribution channels. This causes local PBFs in regions which have been an extension of the principal's role to diminish because the principal will directly appoint or choose to cooperate with
national-scale PBFs, namely PBF-PBFs which have distribution networks or branch offices in almost all parts of Indonesia. Even if local PBFs still play a role in the distribution flow of e-catalogue products, it is because the appointed national PBFs do not yet have branch offices in several regions. The distribution margin that will be obtained by local PBFs in distributing these e-catalogue products will be minimal because e-catalogue products are generally priced as economically as possible.

Previous study who examined the factors that affect the profitability of pharmaceutical companies in Indonesia also said that the National Health Insurance Program (JKN) by the government also has an influence on the performance of the pharmaceutical industry in Indonesia (Lim & Rokhim, 2020). The growth of the Indonesian pharmaceutical market, when viewed from the JKN program which started in 2014, there was a decline in sales in 2018 and 2019 for patent drugs and generic drugs, especially in the non-government sector. Several other studies related to the JKN program who said the JKN program made hospitals inefficient due to frequent delays in disbursing BPJS Health claims and low rates for INA-CBGs (Indonesia-Case Base Groups) (Irwandy & Sjaaf, 2018; Nurtatinjo et al., 2016). INA-CBGs is a payment system with a package system based on the disease received by the patient. Hospitals will receive payments based on the INA-CBGs rate which is the average cost spent by a diagnosis group. The shortage of product supply at the pharmaceutical service facility (PSF) also occurs due to the constraints faced by PSF in claiming the costs they incur (Bartl, 2014; Nugraheni et al., 2020). Then the delay in payment from BPJS Health will also cause delays in payments to the PBF so that the PBF will not be able to serve the supply of goods to the hospital optimally. This can cause the sales target of PBF to hospitals not to be achieved. The indicators that will be used to measure the impact of government regulations on the operational performance of PBFs in this study are: Permenkes No. 1779/Menkes/Per/XII/2010 concerning the Flow of Pharmaceutical Products, then Minister of Health Regulation No. 26 of 2018, Regulation of the Food and Drug Supervisory Agency Number 9 of 2019 and Regulation of the Food and Drug Supervisory Agency Number 6 of 2020 regarding Good Drug Distribution Methods, then procurement of drugs to government agencies with an e-catalogue system and the National Health Insurance program (JKN).

**Government regulations have a negative and significant impact on operational performance**

The intensity of competition is a condition that will exist in every industry. Previous study examined organizational structure, competition, and performance measurement system on company performance in 667 companies listed on the Taiwan Stock Exchange (Lee & Yang, 2011). The results show that when there is greater competition among firms, the positive relationship between firm performance measurement and firm performance has a higher significance. Other researched the silver industry in Bali found that industrial competition has a negative and significant influence on business performance (Yasa & Sukatmadja, 2017). Previous study examined the moderating function of industrial competition variables on the influence of corporate strategy on organizational performance (Ogaga & Joseph, 2017). Wood manufacturing companies in Jepara Regency already have their respective market shares. The indicators used in the competition intensity variable in this study are: the intensity of industrial innovation development, the intensity of industrial promotion, the intensity of opening industrial branch offices, determining industrial interest rates, barriers to entry into the industry, substitute products in the industry, supply strength of suppliers, and strength customer offers.

**The intensity of competition has a negative and significant effect on operational performance**

There are 3 (three) levels of business strategy, namely: corporate level strategy, business unit level strategy, and business unit level strategy. functional (functional level strategy). Corporate strategy focuses on determining which businesses the company should run (Allison & Kaye, 2015; Wild & Wild, 2015). The business strategy develops competitive advantages in business segments while the functional strategy operates at the work unit level, such as marketing, production and finance to ensure that each work unit has a strategy to support its company’s business. Sales strategy is a strategy at the functional level in the sales work unit. Previous study define sales strategy as the extent to which a company engages in a series of activities and decisions regarding the allocation of scarce sales resources, namely: people, sales effort, and money to manage customer relationships on the basis of each customer’s value to the company (Panagopoulos & Avlonitis, 2010). There are four dimensions in sales strategy, namely: customer segmentation, customer priority, sales model and the use of multiple sales channels. Sales strategy and its dimensions are conceptualized at the functional level of salespeople in the organization, the dimensions of sales strategy should also be beneficial to salespeople when practiced in their daily activities. Several studies related to sales strategies that are more implementable in daily activities (Rohadi et al., 2014; Royan, 2011). The strategies related to sales operations mentioned are area
mapping, strategies to increase the number of customers and strategies to increase sales with a product focus. Based on the discussion above, the indicators that will be used to measure the sales strategy are the strategy to increase the number of sales with customer extension, the strategy to increase the number of sales with customer intensification, the strategy to increase sales with product focus, and mapping the sales operational area. The conceptual development model is show in Figure 1.

**Figure 1. Conceptual Development Model**

**Discussion**

Operational performance was originally defined as a field of management that specializes in the production of goods and services, and uses special tools and techniques to solve production problems. In the pharmaceutical industry, especially on the production side, measures operational performance from several dimensions, namely: quality, delivery, cost, defects, capacity utilization, innovation and inventory (Devaraj et al., 2007) (Sharma & Modgil, 2020). Other researchers state that operational performance is a measure of: an increase in the number of on-time deliveries, a decrease in inventory levels, a decrease in product defects, an increase in product quality, an increase in product lines, and an increase in capacity utilization (Miller et al., 2018). Measure operational performance from the following indicators: cost, quality, delivery and flexibility. Measure it by: cost effectiveness, product innovation, on time delivery, product performance (Hallgren & Olhager, 2009; Prajogo, 2012). Other study used the following operational performance indicators: cost efficiency, quality, delivery, process flexibility and new product flexibility (Swink et al., 2007). Previous study mentions efficiency, schedule achievement and flexibility as part of the research framework used to measure operational performance. The operational performance construct as an indicator of “productivity” performance measures (KPIs) and “non-productivity” KPIs (Danese, 2013; Frohlich & Westbrook, 2001; Rosenzweig et al., 2003; Wiengarten et al., 2013). For example, productivity KPIs are measures of average unit production costs, procurement lead times, inventory turnover and others.

While non-productivity KPIs for example are from customer service, customer satisfaction, quality conformance, speed of product development, and on-time delivery. Previous study use operational performance dimensions such as customer service, stock control (inventory control), operational costs (operations costs), supplier relationship and competitive advantage (Ranganathan et al., 2011). Other research related to the effect of supply chain information supported by integration technology on the company's operational performance, measuring operational performance in terms of: quality, delivery, production costs, inventory levels, customer service and product mix flexibility (Ganbold et al., 2021; Sharma & Modgil, 2020). Previous study also mentions that operational performance can consist of several constructs such as competitive performance and business performance, which can include growth as well as organizational market share as aspects to be considered in future studies (Sharma & Modgil, 2020). Previous study stated that management control consists of 2 (two) types of control, namely: strategic control and operational control (Huo, 2012). Other researchers view management control as a multidimensional construct and classify it into various types of control, such as: positive and negative control, personal and impersonal control, formal and informal control (Guidice & Cullen, 2007; Harzing, 2001). Previous also said that management control includes various types of control activities, namely: cultural control, planning control, learning process control (cybernetic control) and administrative control.
(Malmi & Brown, 2008; Purwanto et al., 2020). Strategic control itself is a process of strategy evaluation, which is carried out both when the strategy is formulated and after it is implemented. Strategic control focuses more on achieving the goals of the company’s medium and long-term plans, while operational control or control focuses more on managerial skills, knowledge management, production, and activities related to daily operations (Lin et al., 2017; Luo & Chung, 2012). This operational control process can be realized, among others, with a clear organizational structure, clear job descriptions, and segregation of duties and responsibilities between departments. The next step is controlling the task of implementing the system that has been made in accordance with the duties and responsibilities of each section. The implementation of this system must be supervised by the manager or supervisor of each section so as not to deviate from the rules that have been made by the company.

The next step is controlling the task of implementing the system that has been made in accordance with the duties and responsibilities of each section. The implementation of this system must be supervised by the manager or supervisor of each section so as not to deviate from the rules that have been made by the company. Control systems related to sales operations were investigated including study who examined the sales force control system on the performance of salespeople at PT. BRI Solok Branch using 4 (four) indicators, namely: monitoring the work of salespeople, setting work systems, evaluating sales force achievements, and determining SOPs (Usvita, 2017). Previous study examined the effect of sales force control systems on sales force performance and organizational sales effectiveness at pharmaceutical distributor companies in Banjarmasin by using 4 (four) sales force system control indicators, namely: ability control, process control, yield control, intensity control. sales force support and empowerment (Sianturi et al., 2019). The use of operational control as a moderating variable, so far the literature obtained so far has only been studied who uses operational control as a moderating variable from corporate entrepreneurship to innovation performance (Goodale et al., 2011). This study will use operational control as a moderator of the sales strategy on operational performance by using operational control indicators from the previous research namely: area mapping control, customer visit control, control the effectiveness of customer visits, active product control, and control of sales support personnel (Sianturi et al., 2019; Usvita, 2017). The research results can be used as a reference in determining policies related to pharmaceutical wholesale trade. The research results can be used as a reference in evaluating important things that need attention and improvement in developing the pharmaceutical industry in Indonesia. The research results can have an impact on reducing losses or errors in determining the target of operating strategies in the pharmaceutical trade. The limitation of this study is that it does not include the company’s internal factors that can also affect operational performance, and this could be a recommendation for further research.

4. CONCLUSION

Referring to the Industrial Organizational (IO) Theory, company performance will be largely determined by industrial forces (external) rather than internal factors, including in the pharmaceutical industry. From related empirical studies and interviews with pharmaceutical wholesalers, it is suspected that there are three (3) external factors that affect operational performance, namely: the COVID-19 pandemic, government regulations, and the intensity of competition. To anticipate the negative influence of the three external factors, the right sales strategy needs to be implemented. Then operational control of the implemented strategy will be able to maximize the company’s operational performance.

5. REFERENCES


