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Formulating purchasing strategies with kraljic portfolio matrix: A case study in an investment management company



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ABSTRACT

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company can reduce costs. One of the activities in the procurement process is purchasing. PT XYZ has never conducted a supplier analysis or analysis of items purchased from suppliers. PT XYZ only purchases items daily; if managed properly, it can save the company's expenses and improve supplier relationships. This study aims to formulate purchasing strategies by implementing the Kraljic Portfolio Matrix (KPM). KPM has been widely applied to various cross-sectoral companies to manage suppliers more effectively. KPM divides items provided by suppliers into four quadrants based on supply risk and profit impact to minimize supply risk and maximize purchase profit. Thirty-five sup-pliers were analyzed in this study. The result shows that of the four KPM quadrants, three quadrants are filled, namely the non-critical quadrant (containing 12 suppliers), bottleneck (14), strategic (9), and none of the suppliers located in the leverage quadrant. Purchasing strategies based on these three quadrants are then formulated, and a total of seven strategies are produced. An analysis of the dominance of buyers and suppliers is also given to find out the relationship and balance of power between these parties.

Procurement is important in a company because it will directly affect how much a

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1. INTRODUCTION

Companies often produce products in large quantities and various types to meet customer demand. Companies transform raw materials into finished goods to carry out the production process. For example, in an animal feed company, raw materials include corn, coconut oil, pellets, fish meal, soybean meal, and others. Raw materials used in a leather shoe company include cowhide, glue, thread, rubber, and others. Procurement is the activity of obtaining goods or services (particularly raw materials). In this regard, companies will engage with suppliers or vendors who provide raw materials (or items) not produced internally by the company. Generally, the procurement process is crucial as it directly affects how much a company can save costs. Moreover, regular procurement companies can evaluate their business goals and ensure they are achieved.

The main objective of Procurement is operational efficiency to achieve maximum goals and profits [1]. Some activities involved in the procurement process include [2]: (i) analysis and identification of tactical procurement activities or internal requirements, (ii) negotiation and supplier management, (iii) selection of products and services that the company strategically needs, (iv) approval of company requests, and (v) obtaining or purchasing goods or services (purchasing). While procurement activities require company resources (both time and financial), this process also carries risks for the company. Therefore, procurement strategies tend to have a significant impact on overall company performance.

In this context, Kraljic [3] introduced the concept of the Kraljic Portfolio Matrix (KPM) for modeling purchasing portfolios. The core aim is to mitigate supply vulnerabilities and optimize purchasing power (for more details, refer to Section 3). The strategy involves categorizing items into four portfolio quadrants based on their impact on supply risk and profitability for the company. KPM seeks to align external risks and opportunities with internal company requirements [4]. Moreover, KPM addresses resource dependency issues balancing exploitation and diversification in various purchasing scenarios by leveraging the company's purchasing power with suppliers while minimizing risks [5]. Gelderman and Semeijn [6] have further proposed that the KPM framework enhances internal coordination and promotes cross-functional teamwork within business units. In summary, KPM is a robust tool for analyzing, visualizing, and delineating different purchasing strategy frameworks [7], making it widely recognized as a premier diagnostic and prescriptive tool for purchasing and inventory management [8].

This research aims to formulate purchasing strategies by applying KPM to the procurement process at PT XYZ. PT XYZ is a global investment management company registered and supervised by the Financial Services Authority (OJK). So far, PT XYZ has never analyzed suppliers or the items they supply; the company has only purchased items needed as if they were a daily routine. Kraljic [3] proposed that companies should manage their relationships with suppliers differently depending on the nature of the items supplied. Suppliers are categorized into four types: bottleneck, non-critical, leverage, and strategic (refer to Section 3). Each category necessitates a distinct approach to supplier management. KPM enables companies to minimize supply risks, improve profitability, and optimize their supply chain. Therefore, through this research, PT XYZ aims not only to optimize its purchasing activities with a primary focus on cost efficiency but also to foster strong supplier relationships (in terms of supplier relationship management).

The novelty of this research lies in applying KPM to an investment management company; so far, KPM has often been applied to manufacturing companies (Section 2). This research also contributes to the company's generating efficient purchasing strategies, as previously, the company never analyzed suppliers or the items they supplied.

The structure of this paper is as follows: Section 2 is a literature review section, explaining some related works; Section 3 describes the method used in this study; Section 4 presents the results and discussion; and finally, Section 5 offers a conclusion.

2. RELATED WORK

Kraljic [3] introduced the Kraljic Portfolio Matrix (KPM) as a comprehensive portfolio approach for professional purchasers, serving as an analytical tool to optimize the utilization of diverse supplier capabilities [9]. This framework has become widely adopted among purchasing professionals, particularly in Western Europe, where it enjoys substantial recognition.

According to Hesping and Schiele [10], KPM has established itself as the foundation for purchasing strategies across various sectors. Research by Boodie [11] revealed that 44% of purchasing managers in Dutch companies use KPM to formulate their purchasing strategies, with usage climbing to 80% among companies engaged in mass production. Subsequent studies by Caniëls and Gelderman [12] indicated a further % increase in KPM adoption to 61%. Over time, KPM has been prominently featured in purchasing and supply management textbooks and has gained acceptance in countries beyond Western Europe, including the United States, Canada, and Northern Europe [5]. Additional noteworthy studies on this topic include references from Vladislavovna [13], Garzon et al. [14], and Stange et al. [15].

Kraljic [3] suggested that the relationship between a company and its suppliers should not be managed similarly for all. KPM aims to develop different purchasing strategies by classifying items (or raw materials) based on supply risk and profit impact.

Supply risk can be defined as the complexity of the supply market, including availability, number of suppliers, competitive demand, make-or-buy opportunities, storage risks, and substitution possibilities [3]. Gelderman and Mac Donald [16] categorized several aspects belonging to supply risk, such as market conditions, availability/ scarcity, number of suppliers, competitive demand, make-or-buy opportunities, storage risks, substitution possibilities, on-time delivery, cultural differences, lack of logistical knowledge, supply interruptions, duty/customs regulations, shortage of qualified personnel, import complexity, payment conditions.

On the other hand, profit impact can be considered as volume purchased, expected growth in demand, percent of total purchase cost, impact on product quality, business growth [16], or impact on profitability, the criticality of purchase, and value/cost of purchase [17]. The general idea is to classify items according to purchasing strategy to minimize supply risk and maximize purchasing profit. The result is a 2x2 matrix classifying suppliers of an item into four categories: bottleneck, non-critical, leverage, and strategic (Fig. 1).

Items categorized in the leverage quadrant of the KPM are characterized by low supply risk but high total cost. These items are crucial to the company due to their significant value, yet they also entail substantial financial risk. In contrast, items in the non-critical quadrant exhibit low supply risk and minimal profit impact. Meanwhile, items in the bottleneck quadrant face high supply risk, contributing to low profitability. Lastly, items in the strategic quadrant are marked by

High Leverage Strategic Profit impact Non-critical Bottleneck Low Supply risk High Low

high supply risk and substantial profit impact.

Fig. 1. Typical kraljic portfolio matrix

Each of these four categories necessitates a tailored approach to supplier management. The primary objective of using KPM is to identify strategic items. Within this category, three distinct purchasing strategies are identified, depending on the balance of power in the buyer-supplier relationship:

- a. Exploit: Applied when the buyer holds dominant bargaining power.
- b. Balance: Used in scenarios where power is evenly balanced between the buyer and supplier.
- c. Diversify: Implemented when the supplier wields dominant bargaining power.

These strategies enable organizations to optimize their procurement practices by strategically aligning supplier relationships with the unique characteristics and demands of each category of items within the portfolio.

KPM has significantly influenced purchasing activities among professionals or practitioners and has also inspired much academic research to date [18], [19], [20]. A literature review was conducted on the Scopus database to find articles related to KPM using the TITLE-ABS-KEY(Kraljic). search query The document type and search timeframe were not limited. The results showed 102 articles, comprising 68 articles published in journals, 29 articles published in conference proceedings, 3 book chapters, 1 conference review, and 1 review (available upon request).

We then added the term "Indonesia" to the previous search query. It resulted in only five articles. It indicates that research using KPM is still limited and could be an alternative for research, especially in operations management.

The first article to be discussed is Muningrum and Kusumastuti [21]. This research aims to classify the goods and services requested by shipping companies in Indonesia. Previously, these commodities were grouped based on their criticality and function and then categorized using the KPM. The findings indicated that crane parts, generator parts, rigging, mooring, and lifting equipment fall into the category of strategic items; bunker fuel oil and lube oil are classified as leverage items; valve items, pump spare parts and similar components are categorized as bottleneck items; while stationery and food are considered noncritical items. This classification is intended to help companies establish appropriate relationships with suppliers, thereby enhancing the reliability of the procurement process.

The next article is Abdillah and Hasibuan [22]. This study aims to evaluate supplier selection decisions for raw materials in the pharmaceutical industry in Indonesia, specifically for large-volume parenteral or intravenous fluids. KPM was used to model the purchasing portfolio of raw materials for infusion fluids. The research successfully mapped seven items into two quadrants: four items in the Strategic Quadrant (namely sodium chloride, high-density polyethylene, low-density polyethylene, and trim cap) and three items in the Non-critical Quadrant (namely potassium chloride, calcium chloride dihydrate, and sodium lactate solution 50%).

The third article is Maisarah et al. [23]. This study explores strategic considerations in managing the Procurement of construction materials for road projects conducted by small contractors in the Greater Bandung area. The KPM was utilized to identify key construction materials. Initial data was gathered from three road rehabilitation projects, identifying seven strategic materials. These findings were subsequently validated through additional data collection from ten other small contractors. The research underscores that six itemsspecifically asphalt, concrete, reinforcing steel, cement, sand, and aggregate-are classified as strategic for these projects.

The fourth article is Putri et al. [24]. This study aimed to design procurement strategies by classifying goods for raw material procurement at CV ABC using the KPM model. CV ABC is a garment company that produces apparel. The research findings show that strategic items include bonding fabric; leverage items include polar fabric, parasitic fabric, taslan fabric, and soft-shell fabric; bottleneck items include labels and zippers; and non-critical items include thread, glue, mica, and sponge.

Lastly, Pujotomo et al. [25] mapped 22 spare parts items from PT XYZ, a power generation company in Indonesia, using KPM. The results showed eight items in the Strategic Quadrant, one in the Leverage Quadrant, six in the Non-critical Quadrant, and seven in the Bottleneck Quadrant.

The literature review results highlight that while KPM has been effectively applied in manufacturing sectors, there is a notable scarcity of research in the service company context, especially in investment management companies. It indicates a valuable opportunity to explore KPM in this area further. The KPM enables companies to minimize supply risks, improve profitability, and optimize their supply chain.



3. RESEARCH METHODS

This research attempts to formulate purchasing strategies by applying KPM to the procurement process at PT XYZ. The company is a global investment management company registered and supervised by OJK. The company has not previously analyzed its suppliers or the items they provide; instead, it has approached purchasing as a routine task. This study seeks to help PT XYZ achieve its primary goal of cost efficiency in purchasing and enhance its supplier relationship management practices.

This research belongs to the deductive approach, which follows a logical progression from general theories or principles to specific observations or conclusions. The research begins with applying a wellestablished theory, in this case, the KPM approach. The use of KPM as a framework suggests that the study is based on existing theoretical knowledge about procurement processes and supplier management.

This study then gathers specific data from PT XYZ to conduct the analysis. The data used in this research came from the Finance & Accounting Department (for-profit impact) as the secondary data and the assessment from the procurement specialist (from supply risk) as the primary data. All data are numerical data; thus, this research belongs to the quantitative approach.

There are more than 200 suppliers providing items needed by PT XYZ. Some suppliers are not registered in the system (referred to as "one-off purchases") because their value is considered insignificant (less than IDR 50 million per year or about USD 3,200). Suppliers whose value is deemed significant will be registered in the system. There are 95 suppliers registered in the system. However, out of these suppliers, only 35 suppliers have average annual spending over the last five years exceeding IDR 50 million, and these suppliers will be analyzed in this study.

The next step after the supplier identification process is calculating the profit impact. In this research, profit impact refers to the influence of suppliers on the company's profit acquisition, calculated based on the company's annual spending. Data for supplier profit impact is obtained from the Finance & Accounting Department.

The next step is to identify the supply risk. The procurement specialist assessed the supply risk, representing the difficulty level in obtaining a supplier. In this research, supply risk is the complexity of the purchased product, the number of suppliers for the product, and uncertainty in the supply of the product. The difficulty level is rated from 1 to 10, where a rating of 1 is the lowest level, and a supplier rated 10 is considered the riskiest.

The data used in this study is presented in Table 1. Because all data is confidential, supplier names are labelled as "Supplier A," "Supplier B," up to "Supplier AI." It can be seen in Table 1 that Supplier G, I, T, and Supplier AC received a difficulty rating of 10, indicating they are considered the riskiest suppliers due to their limited quantity and uncertainty in obtaining items (supply quantity). In contrast, Suppliers B, H, J, Y, AA, and AB are categorized as low risk with a rating of 3 (the lowest compared to others). On the profit impact side, Supplier AD and Supplier T, respectively, have the smallest and largest profit impacts, with values of IDR 52,765,680 (or about USD 3,400) and IDR 7,257,895,082 (or about USD 470,000).

 Table 1. Supply risk and profit impact of each supplier

Supplier	Supply Risk	Profit Impact (IDR)
Supplier A	8	325.000.000
Supplier B	3	343.146.455
Supplier C	8	80.564.820
Supplier D	8	216.735.429
Supplier E	4	216.735.429
Supplier F	7	1.421.120.565
Supplier G	10	6.844.787.655
Supplier H	3	334.196.640
Supplier I	10	652.820.259
Supplier J	3	66.612.560
Supplier K	8	1.819.176.493
Supplier L	6	135.859.008
Supplier M	7	99.157.500
Supplier N	4	613.116.733
Supplier O	7	267.312.000
Supplier P	7	158.786.494
Supplier Q	6	59.639.760
Supplier R	8	917.568.000
Supplier S	4	97.155.500
Supplier T	10	7.257.895.082
Supplier U	7	227.070.000
Supplier V	4	119.618.986
Supplier W	8	579.140.280
Supplier X	9	1.969.704.069
Supplier Y	3	124.562.051
Supplier Z	7	88.222.968
Supplier AA	3	358.141.739
Supplier AB	3	289.250.000
Supplier AC	10	1.462.070.802
Supplier AD	4	52.765.680
Supplier AE	4	79.998.400
Supplier AF	6	142.560.000
Supplier AG	9	885.805.728
Supplier AH	9	882.181.764
Supplier AI	6	208.332.000

4. RESULTS AND DISCUSSION

4.1. Result of the kraljic portfolio matrix

The data collected then was used to classify suppliers into four quadrants in the KPM. The median values are used to divide suppliers into four quadrants. The value 5 is the separator on the *x*-axis (supply risk). The average profit impact (IDR 839,908,881.4 or about



USD 54,000) is used as the separator on the *y*-axis. The mapping results are shown in Fig. 2.

Fig. 2. Result of the kraljic portfolio matrix

It can be observed that there are no suppliers in the Leverage Quadrant, indicating that there are no suppliers with high-profit impact and low supply risk. Next, there are 12 suppliers in the Non-critical Quadrant, signifying that these suppliers have low supply risk and low-profit impact. The average profit impact for this quadrant is IDR 224.61 million (or about USD 14,500), with an average supply risk of 3.5.

Moving on to the Bottleneck Quadrant, there are 14 suppliers, making it the quadrant with the highest number of suppliers. Suppliers in this quadrant have high supply risk but low profit impact. The average profit impact for this quadrant is IDR 231.15 million (or about USD 15,000), with an average supply risk of 7.21.

Lastly, there are nine suppliers in the Strategic Quadrant. Suppliers in this quadrant have both high supply risk and high-profit impact. The average profit impact for this quadrant is IDR 2.6 billion (or about USD 1.6 million), with an average supply risk of 8.89.

4.2. Formulating purchasing strategies

After identifying all suppliers based on the KPM, the next step is to formulate different purchasing strategies based on the suppliers' positions in the KPM [26], [27], [28]. Since there are only three quadrants containing suppliers: non-critical (12 suppliers), bottleneck (14 suppliers), and Strategic (9 suppliers). The discussion focuses solely on these three quadrants.

Items provided by suppliers classified in the Noncritical Quadrant typically have a low per-unit value (often referred to as routine products). Additionally, many alternative suppliers can be found. From a purchasing perspective, these items only pose minimal technical or commercial challenges. Generally, purchasing managers are advised to consolidate purchasing by bundling procurement requirements [7].

Handling non-critical items requires purchasing strategies to reduce logistical and administrative

complexity [29]. Contract systems are commonly recommended for businesses with routine product suppliers [30]. The main idea is to enhance purchasing power through standardization and bundling of procurement requirements. If combining purchases is impractical, purchasing managers can efficiently place individual orders, for example, using a P-Card card (P-Card). A P-Card is a commonly issued "corporate card" to streamline procurement processes. The card enables employees to make smaller purchases without going through each transaction's formal accounts payable process. It allows employees to quickly and efficiently purchase what they need, automatically recording all transactions. The card can be linked to a credit card facility or a bank account similar to a debit card.

In most cases, the company issuing the P-Card often partners with a bank. The bank manages the P-Card, makes payments to the payee within specified periods, and invoices the client at the end of the month. This strategy aims to reduce indirect purchasing costs associated with administrative activities such as ordering and invoicing.

One of the suppliers in this quadrant is the stationary supplier. Procurement has entered into a oneyear contract to lock in prices for the stationary items listed in the catalogue. It conducts purchases through the supplier's e-procurement system using a personal account. This procurement system directly interfaces with the supplier's warehouse, allowing Procurement to view the available items directly. The supplier promptly delivers the ordered items according to the contract terms. It reduces administrative complexity for routine products and improves the speed of Procurement for necessary stationary items. Additionally, the prices offered by the supplier are more competitive due to the contractual agreement.

Besides the stationary supplier, suppliers providing printing services and rental vehicles also fall into this quadrant. The procurement strategy employed here is individual ordering. Business units can place direct orders with the suppliers, who provide monthly purchase summaries to simplify the administrative process. Applications are also developed to facilitate easy ordering, enhancing speed, accuracy, and administrative simplification.

Suppliers providing items categorized in the Bottleneck quadrant moderately impact a company's financial outcomes; however, they are considered vulnerable due to their high supply risks. Recommended purchasing strategies for these items typically involve accepting and reducing dependence.

In the accept dependence strategy, the primary focus is to ensure supply, even if it requires additional costs. In such situations, the supplier holds greater leverage over the purchasing company. Through risk analysis, the company identifies the most critical bottleneck items and considers their implications. Contingency plans may be prepared to address unexpected occurrences. A contingency plan is an alternative or backup plan that a company will execute if changes occur around the business. This is because no changes or events are always predicted in the company's business operations. This plan is often called an emergency plan, a backup plan, or even a Plan B.

On the contrary, the reduce dependence strategy aims to decrease reliance on suppliers. The most common approach is expanding product specifications or seeking new suppliers. One such supplier in this category is a provider of sworn translator services. There are many sworn translator suppliers in Indonesia, but the quality they offer varies greatly. It places supplier M, which provides sworn translator services, in the Bottleneck Quadrant. Procurement must work to reduce dependence by consistently evaluating and comparing this supplier's performance to shift them out of the Bottleneck Quadrant towards the left, ideally into the Non-critical item category. Items provided by suppliers in the Strategic Quadrant represent significant value for the company in terms of profit impact and supply risk. Often, strategic items can only be sourced from a single supplier (sole source), leading to significant supply risks.

General recommendations for purchasing managers dealing with suppliers in this quadrant include maintaining strategic partnerships, accepting locked-in partnerships, or terminating partnerships as necessary. Companies are advised to maintain strategic partnerships with their suppliers to balance dependence (where supplier strength is perceived as dominant [30]. Mutual trust and commitment associated with intensive relationships are strategies to minimize supply chain risks. Close collaboration with suppliers enhances product quality delivery reliability, reduces lead times, improves product development processes and design, and ultimately lowers costs [31], [32]. This situation can be characterized as a balanced strength, where both buyer and supplier are deeply engaged in the partnership, aiming for high interdependence.

PT XYZ can implement this strategy to build rental services. A close working relationship with building managers is crucial to provide comfort and the services offered by building management to building tenants. Similarly, long-term tenants also comply with building management regulations to maintain good relations and cooperation. It is done because their collaboration is long-term. Both parties must build a good relationship and cooperate to provide comfort to each other.

In addition to building management services, there is also a travel agent service here, the preferred global travel agent selected by global management worldwide. The global agreement with headquarters makes It difficult for procurement to find alternative suppliers with similar service providers. What needs to be done is to build close cooperation with the same mission, which is competitive pricing. Although appointed by headquarters, this travel agent is also expected to provide excellent service at competitive costs and 24hour on-call service. In this case, the supplier is required to provide monthly reports for travel costs per journey and which items can be cost-saving, such as class selection and flight schedules, hotels, and information on advantageous flight options that can be alternatives for employees traveling on business trips. The reports generated by the supplier and the control exercised by procurement over the alternatives offered are expected to improve supplier performance and procurement performance in controlling travel costs.

The "accept a locked-in partnership" strategy typically arises when a buyer finds themselves in a situation where they are bound to unfavourable conditions imposed by a supplier and cannot easily exit the arrangement. This predicament often occurs because the supplier holds patents or has a dominant position in the market for specific products, effectively creating a quasi-monopoly. The supplier holds significant leverage in such scenarios, leading to a supplier-dominated relationship. Unlike a "maintain strategic partnership" strategy, where both parties are deeply engaged and collaborate closely, the "accept a locked-in partnership" strategy reflects a more passive stance from the buyer's side. Here, the buyer acknowledges their dependence on the supplier's unique offerings or market position, accepting the terms set forth by the supplier due to limited alternatives or competitive options. This strategy underscores a pragmatic approach where the buyer continues the partnership despite less favourable conditions, prioritizing continuity over immediate renegotiation or seeking alternative suppliers.

Three suppliers are the main drivers of PT XYZ's operations because they provide services that other companies do not have, have specific patents, and are global leaders in data, news, and business and financial insights. By utilizing the technological strength of the supplier, PT XYZ can make accurate decisions and information about financial markets. This supplier has the largest profit impact at PT XYZ, so the strategy is to accept a locked-in partnership. This supplier offers its services with data access using a terminal/ personal account that can be owned with an annual subscription fee. PT XYZ must monitor the use of these terminals. as some terminals are not used but are already invoiced due to changes in the number of employees in the relevant department. Control of this account is necessary because the amount charged is quite substantial.

Terminating a partnership strategy is used when supplier performance becomes unacceptable and cannot be improved. Buyers will seek to reduce their dependence on the supplier. One way to do this is to find alternative suppliers. This termination service can be the best alternative for one of the outsourcing service providers in this quadrant. Outsourcing also plays a critical role in the company's sustainability. Services offered by companies include call centers, providers of new project developers, providers of external audits for new projects, and providers of assistant labour. Procurement continues to seek alternative suppliers to push down the prices offered by these suppliers. Price evaluations are conducted when contracts expire. By always searching for alternative suppliers, Procurement hopes to obtain the best offers and achieve significant cost savings for these suppliers.

4.3. Buyer vs supplier dominance matrix

It is interesting to examine the domination of power between buyers and suppliers [5], [33], [34], depicted as "buyer vs. supplier dominance matrix." This buyer vs. supplier dominance matrix is a strategic tool used in Procurement to analyze the power dynamics between buyers and suppliers. It helps organizations understand each party's relative influence in the supply chain, which can inform decisions about negotiation strategies, supplier relationships, and overall procurement strategy.

The matrix has two components: buyer dominance and supplier dominance. The buyer dominance axis represents the extent of control or influence over the supplier. High buyer dominance indicates the buyer has significant power and leverage in the relationship. On the other hand, the supplier dominance axis reflects the level of control or influence the supplier has over the buyer. High supplier dominance means the supplier has substantial power and bargaining leverage.



Fig. 3. Buyer vs supplier dominance matrix

Fig. 3 illustrates scenarios of buyer dominance and supplier dominance in relation to purchasing strategies. The diagonal line on the graph represents positions where buyer dependence equals supplier dependence, indicating a balanced power relationship. Strategies positioned to the left of the diagonal line indicate situations where buyers hold dominant bargaining power over suppliers. In these cases, buyers are in a stronger position to negotiate favourable terms and conditions, leveraging their market position or alternative options. Conversely, strategies positioned to the right of the diagonal line signify scenarios where suppliers possess dominant bargaining power over buyers. Suppliers in these situations may have unique products, patents, or market control that give them significant leverage, allowing them to dictate terms and conditions to buyers. Understanding these power dynamics is crucial for developing effective purchasing strategies. Depending on whether the buyer or the supplier holds the upper hand, organizations can tailor their approaches to negotiation, partnership management, and risk mitigation accordingly.

Strategies in the Strategic and Bottleneck Quadrants (except maintaining strategic partnerships) imply supplier dominance or high dependence on suppliers. The accept a locked-in partnership strategy clearly indicates that the buyer is "locked" into a situation where the supplier controls (or monopolizes) the market to some extent, and the buyer cannot exit this situation. On the other hand, terminating a partnership strategy, although similar in the situation, involves the buyer attempting to exit by finding another supplier and terminating cooperation with the current supplier. The accept dominance strategy implies that the buyer accepts the condition that the supplier's power is greater because there is no guarantee that the supplier will provide items to the buyer. Meanwhile, when the buyer uses the reduce dependence strategy, it is similar to accepting dominance, but the buyer attempts to escape supplier dominance by seeking new alternative suppliers.

Strategies in the Strategic Quadrant (specifically maintaining strategic partnership) imply a balance of power between supplier and buyer. Both parties value the cooperation and are committed to maintaining it. Strategies in the Non-critical Quadrant also imply a balance; however, this condition can easily shift to buyer dominance if the buyer has several alternative suppliers. It is because the items provided by the supplier are generic items that can be replaced.

5. CONCLUSION

To close the gap in the literature that there is limited study applying KPM to an investment management company in Indonesia, this study aims to formulate various purchasing strategies for different suppliers using KPM in the procurement process at PT XYZ, an investment management company.

There are more than 200 suppliers of PT XYZ. We only analyzed 35 suppliers, with an average annual spending over the last five years exceeding Rp 50 million. We then analyzed their profit impact (based on the company's spending on the respective supplier) and supply risk (supply uncertainty provided by the supplier). Data for supplier profit impact was obtained from the Finance & Accounting Department, while the supply risk was obtained from the assessment of the procurement specialists.

The investigated suppliers were then mapped based on supply risk and profit impact. Among the four quadrants of the KPM, only three are populated: Noncritical Quadrant (12 suppliers), Bottleneck Quadrant (14 suppliers), and Strategic Quadrant (9 suppliers).

The non-critical quadrant consists of suppliers providing low-value items per unit (usually in large quantities), often called daily routines. The recommended strategy is to bundle procurement items to save costs and simplify logistics and administration processes. An example of an item in this quadrant suitable for this strategy is stationary supplies. Alternatively, an individual ordering strategy can be employed if bundling is not feasible. An example of this strategy is rental cars, where PT XYZ can directly order from the supplier, providing a monthly purchase summary for streamlined administration. The Bottleneck Quadrant includes items with uncertain supply where suppliers exert more control. The suggested strategies here are either accepting the existing dependence or reducing dependence by expanding product specifications or seeking new suppliers.

Lastly, the items in the Strategic Quadrant hold significant value for the company and substantially impact profit and supply risks. Three strategies are recommended: (i) maintain a strategic partnership if both parties trust each other and are committed to minimizing supply risks; (ii) accept a locked-in partnership if the supplier dominates the market and the buyer is locked into the situation; and (iii) terminate a partnership, if the buyer seeks to end a relationship with a supplier dominating the market whose performance cannot be accepted or improved.

This study could be expanded by conducting similar analyses in investment management companies. Examining other comparable companies could assist researchers in generalizing the findings and understanding potential purchasing process dynamics in similar settings. Another promising avenue for future research is embracing the KPM approach's sustainability aspect [35], [36].

A limitation of this study is that the generated strategies may conflict with company policies. Therefore, validating the strategy against the company's policies is essential. Multi-criteria decision-making methods [37], [38], [39], [40] could be employed to explore this direction.

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