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# Buyer-Supplier Relationship for the Kraljic's Portfolio Model and What Products Are More Suitable for Online Auctions

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**Abstract**

Procurement is an integral part of a corporation or organization, different corporation or organization have different reliance on procurement. Therefore, when suppliers purchase products, they can be roughly divided into four types of products, which are leverage products, strategic products, routine products and bottleneck products. In this paper, the author discusses the different buyer-seller relationships and purchasing strategies when buyers purchase the above four types of products.

**Keywords:** Buyer-Supplier Relationship, procurement strategy, Kraljic's portfolio model, online auction

## 1. Introduction

There have some reasons that why "category" is important for procurement strategy. First of all, it can help the purchasing manager to develop different strategies for different products to maximise the profit and avoid economic losses. For example, for bottleneck product, the purchasing manager should search for alternative suppliers or products to reduce the risk of products shortage due to supplier's problems. Secondly, buyers can objectively analyse their relationship and the balance of powers with suppliers which can help buyers to better manage their relationships (Van Weele, 2014). For example, if the buyer plan to purchase a large number of products, this buyer may have higher bargaining power to get the lowest price of that product. Thirdly, it can help the buyer to make a better understanding of the product market to plan the next procurement strategy.

For example, Italy's Alfa Romeo and Japan's Nissan share some critical car components to each other. Because both of them have some car components which cannot produce cost-effectively on their own. Therefore, they purchase components from each other with better quality and low cost. These two companies become cooperative partners. This solution has lower supply risks and higher economic benefits.

The Kraljic's portfolio model (which is also known as purchasing product portfolio) is the most popular model used by the company to make procurement strategies (Van Weele, 2014). This purchasing product portfolio is shown in Figure 1. In this approach, the purchasing's impact on financial results and supply risk are two variables. The means of Purchasing's Impact on Financial Results is any purchasing activity which can impact on the profit such as the of materials, the volume of products purchased, the percentage of raw materials in total costs and so on. Supply Risk means the complexity of the supply market such as how many potential suppliers available, cost of changing suppliers, the distance of supplier, inventory risk and so on. In general, when there have many potential suppliers are available and the switching costs are low, the supply risk is low (Kraljic, 1983).

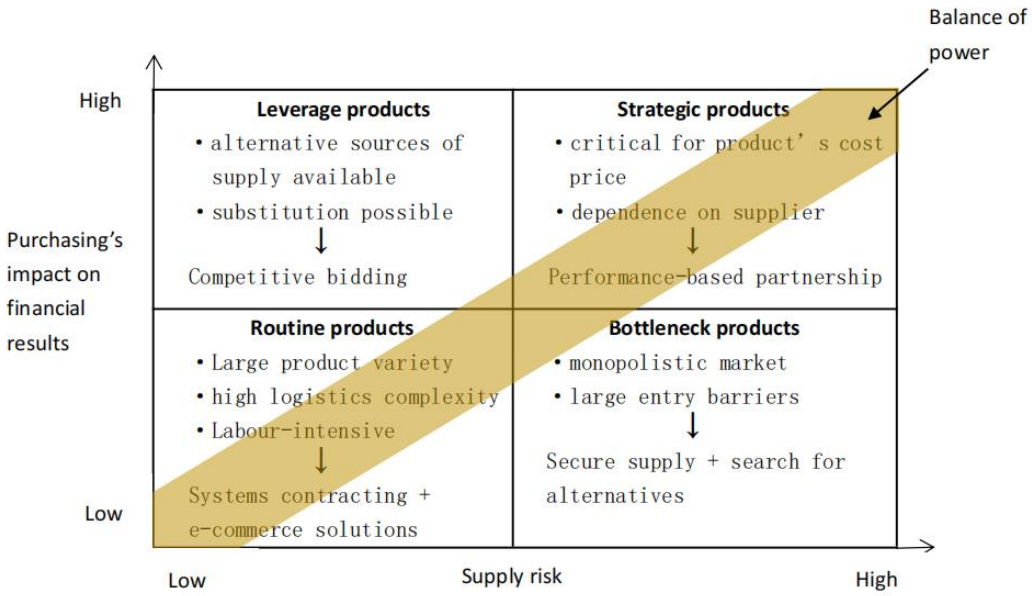


Figure 1.

Source: Van Weele, 2014, purchasing and supply chain management.

There has a limitation for using purchasing portfolio to find out the appropriate procurement strategy. For example, if one product is in the strategic position in purchasing portfolio for the buyer, which not means that product is also in the strategic position in customer portfolio for the supplier. A good fit of the position of the certain product in buyer's purchasing portfolio and supplier's customer portfolio is a precondition to develop effective collaboration. Therefore, some company start using Dutch Windmill as an extension of the purchasing portfolio (Van Weele, 2014). There have some other models for procurement decisions such as A.T. Kearney Procurement Chessboard and The Kamann Cube (Habib, 2018).

By using the purchasing portfolio approach, all the products that the company needs to purchase are divided into 4 parts which are leverage products, strategic products, routine products and bottleneck products. Both bottleneck products and strategic products are not suitable for using the online auction. The characteristics of these two types of products are the limited number of suppliers and limited suppliers' capacities. However, the premise of running the online auction is that a large number of suppliers are willing to participate, and there should be sufficient and fair competition among suppliers to obtain a relatively low transaction price for the buyer (Mena, Hoek & Christopher, 2014). Normally, bottleneck products can only be obtained from one supplier which means monopolistic market, therefore, this supplier will not attend the online auction, or the purchase price will not drop significantly in the online auction (Van Weele, 2014).

Leverage products and routine products are more suitable for using the online auction to purchase especially for leverage products. Both these two products have many available suppliers and substitutes, the products are standardised and the cost of switching suppliers is very low (Van Weele, 2014). However, the price of routine products is hard to be influenced by suppliers or buyers, and the degree of market transparency is high. Therefore, even if the company use the auction for purchasing routine products, the transaction price will not be lower than the market price and the buyer will not get much profit from routine products. Hence, routine products are not suitable for online auction.

The most suitable products for using the online auction to purchase are leverage products. First of all, there are many suppliers of leverage products, and the supplier switching cost is low. Secondly, a slight change in the price of leverage products can significantly affect the company's bottom line (Van Weele, 2014) which means the buyer hope to get a lower price through the online auction, thus achieving higher profits. Secondly, the quality of the products obtained from different suppliers is the same. Hence, buyer can purchase leverage products from many different suppliers. Nevertheless, organising an online auction requires a certain amount of investment, so the buyer will only organize online auction when it may bring huge profits to buyers. All in all, leverage products are the most suitable for using the online auction.

**2. Select Appropriate Suppliers Attend the Online Auction**

There are procedures from supplier selection to the potential supplier attend the online auction.

1) The buyer should determine the purchasing specifications of the goods or services that need to purchase. And specifications should contain as much detail as possible because the suppliers will bid based on this specification (Lysons & Farrington, 2016).

2) The buyer will make a bidders' long list which including some suppliers that the buyer thinks they can complete the business excellent. The detail about sources of suppliers is explained in the next paragraph.

3) The buyer will send an RFI to the suppliers who are in the long list and ask suppliers to response. The RFI includes some basic information about the business and requires suppliers to provide some references for previous projects and other information such as their financial status, customer references, product range and experience. Another reason for sending RFI is to find out which suppliers are interested in that business (SAP, 2006).

4) According to the responses of RFI, the buyer will evaluate each supplier and puts all pre-qualified suppliers in the short list (Monczka et al., 2016). The buyer will evaluate suppliers from different categories such as finance, production capacity, quality, cost structure, technology, reputation, resources, past performance, environmental factors and etc.

5) Buyer sends RFP to each supplier who is in the short list and requiring suppliers to the response it. The RFP has more detail about the business and the buyer will choose some potential suppliers based on the response of RFP from suppliers (Regional Centre of Excellence, 2018). Buyer will send tender documents which including specification, award criteria, invitation to bid and draft agreement to each potential supplier and invite them to attend the e-auction (Mena, Hoek & Christopher, 2014).

There are some different ways to find out the suppliers' information. First of all, there have some systems to rate and rank of suppliers by each supplier's experiences. For example, Shell installed an information platform to monitor the purchasing spend per product category and supplier. Also, Shell buyer use the vendor ranking system to make sure their business is performed at the best suppliers. Secondly, some data suppliers update information about different suppliers through websites (Van Weele, 2014). It can help the buyer to find out the potential suppliers easily and the suppliers' contact information also can be found such as E-mail address. Thus, the buyer can obtain the supplier information from the current supplier or some suppliers that have worked together before. There have many other ways to find the information about suppliers such as social media, information databases, trade journals, trade directories, sales representatives, internal sources and etc. (Monczka et al., 2016).

There have some categories that the buyer might to use to assess supplier's capabilities. Buyer can choose some categories which they think are important to evaluate suppliers and give these categories different weight. After that, the buyer can rate suppliers to assess the capabilities of suppliers. There have some categories that will use to assess the range of supplier capabilities (Monczka et al., 2016).

- Process and design capabilities
- Management capability — overall professional ability and experience
- Financial condition and cost structure
- Environmental features and actions — reduction of harmful materials
- Longer-term relationship potential
- Total quality management
- Technical capability
- Operations and scheduling capability
- Personnel relations
- E-systems capabilities
- Technological sophistication and efficiency of the equipment
- Calibre of the supervision and inspection personnel
- Evidence of good management and housekeeping practices
- Types of inventory systems
- Nature of the receiving, storeroom, and shipping areas
- Quality control philosophy
- Employee contract expiration dates
- Service support capability

- Existing contracts held and performance
- Delivery performance
- Information system capability

**3. Process and Criteria for Awarding the Contract**

In general, the award criteria in the online auction is ranking the suppliers based on their bid. There have two different award criteria, one is the criteria of lowest price, the other is the best economic criteria (Regional Centre of Excellence, 2018). If the buyer chooses the criterion of lowest price, the supplier who bid the lowest price will award the contract. If the buyer chooses the best economic criteria, which means some other factors will affect the role of award contract. The buyer must accurately provide the weights of these factors in the award criteria and explain how bids will be evaluated. Therefore, in the e-auction, the supplier with the lowest bid may not award the contract. For example, Volvo's environmental requirements for purchased products are very high. Therefore, when they purchase seat fabrics, they use the best economic criteria and the environmental fabrics account for 5% weight.

After the online auction, the buyer will rank the all the suppliers based on award criteria and suppliers' bid. According to the rank and award criteria, the buyer will select a winner. After that, the buyer will organise a post auction negotiation if it is required. Then, the buyer will inform all the suppliers who did not award the contract and explain why. At the same time, the winner supplier will be notified that they award the contract. There will have a standstill period (at least 10 days) before the buyer signs the contract with the winner supplier. In that period, the losing suppliers have the opportunity to appeal if they find the contract is illegal. After that, the supplier will sign the contract with winner supplier.

If the buyer award contract to a single supplier, the buyer becomes dependent on this supplier and the risk of supply interruption is increased. For example, if there is a problem with the raw material of this supplier, it will directly affect the buyer. And the buyer cannot find the replacement supplier immediately. However, if the buyer only purchases products from one supplier, the cost of the transaction is low and the supplier evaluation process will be easier. Thus, the supplier will be achieved economies of scale and the purchase price is low. If the buyer award contract to multiple suppliers, the buyer's ability to resist risks will be better for example, if one of the suppliers stop supplying, the buyer can purchase alternative sources from other suppliers. what is more, because there has competition among suppliers, the buyer may get better quality, price and delivery performance. However, the buyer needs to spend more money and time to evaluate these suppliers and the management fees and transaction costs will increase (Costantino & Pellegrino, 2010).

There have some benefits for buyer awards the contract to existing suppliers. First of all, because suppliers and buyer have already cooperated, the level of trust between them is very high and suppliers are very efficient at processing orders. Thus, suppliers may adjust their future development according to the needs of the buyer to better meet the buyer's order. However, the purchase price might be higher than the market price and other suppliers may have better alternatives.

There have some benefits for buyer awards the contract to new suppliers. The purchase price may be the lowest in the market or the quality of the products are better than other suppliers. However, suppliers and buyer need time to adapt to each other's operation pattern. Moreover, the buyer may not know the supplier's capabilities and the risk of capacity bottleneck might occur.

After the e-auction, the online auction should be assessed. We can assess the online auction process from the following aspects.

- By using the online auction, whether the final purchase price has reached the buyer's expectations.
- During the entire online auction process, whether occurred any unforeseen problem.
- Is the online auction implemented as planned?
- What buyer can learn from an online auction?
- Which part of online auction can be improved in the future?

**4. Conclusion**

Therefore, for purchasers, analyzing which type of products they need can effectively reduce procurement costs and procurement efficiency. At the same time, as a seller, it is also crucial to understand the types of your products in the entire market, so that you can not only find the buyers you need, but also sell the products at a reasonable price. With the popularity of online auctions and the trend of more and more transparent international markets, it will be easier for the supply and demand sides to reach a deal, and the price will become reasonable.

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