

# THE SUPPLIERS OF PHARMACEUTICAL INDUSTRY FOR SUPPLY CHAIN MANAGEMENT

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## ABSTRACT

Supply chain management and procurement policies can strongly influence the quality of service provided by companies, therefore its ability to compete in the market. Ten years after deregulation of the pharmaceutical market in Thailand, the industry faces strong challenges. Organized purchasing groups emerged to gain bargaining power towards suppliers. Nonetheless there are traditional players (pharmacies) who remain independent. The purpose of this paper is to assess and compare the perceived quality of the service provided by the traditional distributors with the one from the economic groups, and identify which factors need to be more developed by these groups to improve its service. Twenty-two pharmacies were interviewed (ten belonging to a specific economic group and ten independent ones). Findings show that the main criteria for supplier selection are the commercial conditions. Although the access to more favourable purchasing prices is the leading reason for pharmacies joining the economic group, lack of fulfilment of the overall commercial advantages announced by the economic groups (such as service consistency and price, when compared to the monthly fee paid to the group) lead some pharmacies to remain independent. Pharmacies manager's management skills were identified as an influencing factor when choosing to be part of the economic group.

**Keywords:** Supply Chain Management, Suppliers

## INTRODUCTION

Pharmacies in Phutthamonthon District are facing a significant increase in competition as the market is no longer as regulated as before. Ten years ago the market became deregulated and many new players (drugstores) entered the market making available all products the traditional pharmacies offered under protection rules. Only the prescribed products remain regulated and available only at the traditional pharmacies. The drugstores complemented their value proposal by adding complimentary services, such as beauty and nutrition services, among others, representing strong competition to the well-established pharmaceutical market. These new players pressured selling prices down and margins no longer support low rotation inventories or urgent deliveries (that sometimes were available up to 5 times a day) at small volume pharmacies.

One way the pharmaceutical industry found to fight this competitive battle and gain bargaining power towards its suppliers was to aggregate pharmacies in economic groups. These groups allow purchasing products at lower prices due to more bargaining power and aim for high quality in service delivery. At the same time some of these groups also provide management support for those who end up managing the pharmacies but have no management background.

The span of services available at the pharmacies is an important issue for the customers, as well as product availability and attentive care (Silva, 2015). These are some of the issues that influence end customers when deciding where to purchase. By providing a service that matches retailer's expectations, suppliers can contribute to their development of competitive advantage (Mentzer et al., 2008).

Every pharmaceutical product is potentially available at any pharmacy so besides complimentary services what leads a customer to a specific pharmacy instead of another? Customer service is a strong driver and product availability is at its centre. At the same time investment in inventory is a major concern for the pharmacies as variety is wide and demand uncertainty high. Assuring immediate product availability is a major challenge for pharmacies and overcoming the lead-time gap (Christopher, 2016) is a permanent management issue. Purchasing costs are a major concern as well as on time deliveries, which are issues that pharmacies consider when deciding to join these economic groups or to keep purchasing from the traditional distributors. Under this context, the purpose of this paper is to perceive if there are differences in terms of the supply services provided by the economic groups to its joining pharmacies and the one provided by the traditional distributors/wholesalers, and identify if there are factors that these groups need to improve to make a better service available to the pharmacies. Therefore this research has two main objectives. The first one is to assess and compare the perceived quality of the service provided by the traditional supply chain agreements and the one made available by the economic groups. The second is to identify specific ways in which the economic groups can improve their service. Assessment will be

based on the perspective of the customers of the economic groups, i.e., the pharmacies compared to perception of service received by pharmacies that maintain the traditional supply system.

## OBJECTIVE

This research aimed at assessing and comparing the quality of the service provided by the traditional distribution system of pharmaceutical products in Phutthamonthon and the one made available by the economic groups that emerged when the industry became less regulated.

## LITERATURE REVIEW

Supply chain strategies must examine the role and contribution of long term partnerships among buyers and suppliers (Kirytopoulos et al., 2010). Buyer-supplier power and interdependence is central to any contractual agreement (Cox, 2002). There is an emerging agenda in the SCM literature that is focusing on power and dependence from a SC stakeholder's perspective (e.g. Caniels and Gelderman, 2007; Doran et al., 2005; Tomas et al., 2007; Sanders, 2008; Karabati and Sayin, 2008; Kheljani et al., 2009; Liu et al., 2012). Strategic partnering is an increasingly widespread approach for buyers and suppliers (Blancero and Ellram, 1997). Porter's classic model (1985) supports the view that the buyers and suppliers will always try to gain as much advantage through their relationship. Kraljic's Portfolio Purchasing Model (1983) classified a firm's purchased intermediate products into four categories on the basis of the 'profit impact' (based on purchased quantity, percentage of total cost, impact on product quality and expected business growth) and supply risk (based on supplier availability, make-or-buy options and mitigating possibilities). In recent times, many adaptations and refinements to Kraljic's model have led to alternative portfolio models using other classifications/dimensions (Bensaou, 1999; Olsen and Ellram, 1997). However, there is a fundamental assumption underpinning all such portfolio models; the occurrence of differences in the power and dependency between a buyer and a supplier (Cox, 2002; Dubois and Pedersen, 2002).

It is customer service that more and more sets the difference between the offerings from different players in the same industry (Christopher, 2016). Product availability is one of the most relevant issues in customer service as, although slowly, markets are becoming less sensitive to product brand. This can easily lead to lost sales for the supplier but not exactly to the point of sales as substitute products might be available. Mentzer et al. (2008) posit that by supplying good logistics service companies can add value to the value proposition for the customer and therefore support its customer to sustain competitive advantage in their own market. According to the same authors, this competitive advantage can be achieved with product availability, on time delivery and error free orders. Being able to compete in the market is therefore a consequence of the level of customer value provided, which is heavily influenced by the suppliers' service quality.

Supplier selection if a source of competitive advantage as the player is only as strong as the supply chain it is part of. Strategic procurement can set the competitive scenario of a company when compared with others in the same industry (Simchi-Levi et al., 2008). Searching for the best supply is a dynamic process that impacts the quality of the service the companies provide to their own customers. Being able to develop bargaining power and reduce supplier dependency is a way to reduce procurement costs (Kraljic, 1983).

Procurement plays a major role in creating supply chain resilience (Pereira et al., 2014). In markets where product availability plays a key role in customer service, being able to assure the best suppliers is of paramount relevance. In parallel, being able to supply competitive and resilient service influence buyers to consider those suppliers during their sourcing exercises. Service consistency and short lead times are relevant procurement issues as the retail customer, specifically in the pharmacy's market, aims a very short order cycle (Christopher, 2016).

## METHODOLOGY

The data collecting tool was interview. There were two frames for the interviews, one for the pharmacies that belong to the economic group and one for the pharmacies that do not. The structure of the interview used for the pharmacies that are independent is composed out of three parts: the first one focussed on the pharmacy, its supply and the satisfaction level with the service provided by the suppliers; the second part aimed at topics concerning the reasons that lead the pharmacy not to join any economic group; lastly, a set of topics concerning the quality of the logistic service provided by the pharmacy to its customers. The structure used for the pharmacies that belong to the economic group was also composed out of three parts: the first one focusses on the reasons for joining the economic group; the second part aimed at the satisfaction level with the logistic service and support received from the economic group; the last part aimed at the logistic service provided by the wholesalers the economic group has agreements with its own customers (the joining pharmacies). Wording was adjusted during the interviews to assure interviewee understanding of the topics.

All pharmacies were selected for this research. Out of the all pharmacies, 12 are part of the economic group and 10 are independent. In order to add variability of context to the research, pharmacies were selected from different of Phutthamonthon District in Nakhonpathom Province.

Interviews were performed with the owner of the pharmacy (which in some cases is also the technical director). Each interview lasted for about 15 to 30 minutes. There were 18 face to face interviews and two interviews performed over the phone. Interviews were written down and then key words (or its synonymous) were searched for. Data analysis followed Krippendorff (2013)'s recommendation for content analysis.

### ***Structure of Supply of Pharmaceutical Products***

Putthamonthon pharmacies can purchase directly from the laboratories or through wholesalers. The laboratories are the producers of the medicines or of other products. The wholesalers purchase from different producers/brands and then supply the pharmacies with a wider range of products.

Globally, all pharmacies have (more or less formal) agreements with the wholesalers from which they receive products on a daily basis. If the wholesaler does not have the product available or in order to use eventual commercial campaigns the pharmacy can purchase directly from the lab. Nonetheless, some pharmacies chose to purchase only from the wholesalers.

The wholesalers' service level depends on the commercial conditions agreed with the pharmacy (service, volume, selling price, number of daily deliveries). Lead times are usually short, of 12 hours up to one day.

The Putthamonthon pharmaceutical market is strongly regulated and selling prices for medicines are defined by a public institute. These prices are considered low for the labs and wholesalers. These wholesalers can also distribute products to other markets, less regulated or with higher selling prices and it is not unusual that stock outs occur in the Putthamonthon market because the products were send to more profitable markets. Pharmacies that are part of the researched economic group have access to a purchasing office for all purchases and services. For confidentiality reasons this group is not identified, and will from this point forward be called Group X. Using this Group X the pharmacies have access to lower purchasing prices, which were previously negotiated between the group and the supplier (lab or other supplier). The Putthamonthon price is always an advantage but the service level depends on commercial conditions negotiated by Group X with the wholesaler. Group X developed commercial agreements with three wholesalers. These wholesalers are not exclusive to Group X. Pharmacies who purchase under the scope of Group X order directly from these wholesalers.

**Figure 1**  
Physical and informational flows in the supply chain of Group X

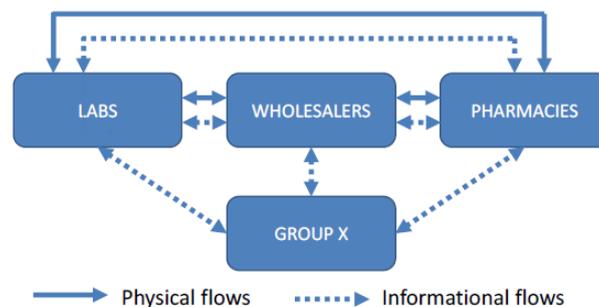


Figure 1 shows the physical and the informational flows between the pharmacies that belong to Group X and the players in the supply chain. There is always a direct and an inverse flow between every entity as returns can occur (due to expiry dates or service issues). Group X works as a purchasing office and does not hold inventory. It also works as an advisory player for management purposes and planner of additional services. The independent pharmacies (that do not belong to Group X) are linked both to the wholesales and the labs as they are not limited to purchase from the wholesalers.

## **RESULTS**

When analysing the criteria used by the pharmacies to select their suppliers, findings showed that it is mostly based on commercial conditions offered and product availability. Table 1 shows the main results. (1) Out of the 20 interviewed pharmacies (2) All the pharmacies belonging to Group X (100%). All the pharmacies belonging to Group X mentioned that they prefer to use the wholesalers with which Group X has agreement. Nonetheless, only 30% of them purchase exclusively from such wholesalers (these pharmacies are owned directly by Group X), when 70% of them state that they preferentially buy from these wholesalers but keep contacts with other

wholesalers or labs to complement their offer, to assure supply (not always the wholesalers that have agreements with Group X have product availability either because Group X missed placing the order or the product is out of stock). Taking advantage of specific campaigns was a criteria mentioned by all the pharmacies that are not part of Group X to purchase specifically from the labs. From Table 1.

**Table 1**  
Criteria considered when selecting suppliers

<b>Criteria</b>	<b>Relative per cent (1)</b>
Payment conditions and lead time	100%
Product price	60%
Product availability	50%
Delivery time range and availability during weekends	30%

Pharmacies in Group X were asked about the reasons for joining the Group. As 2 of them are owned by the Group, only 8 pharmacies were questioned about this topic. Table 4 shows the relative frequency of answers. Pharmacies could identify more than one reason for joining the Group. From Table 2.

**Table 2**  
Reasons for joining Group X

<b>Reason for joining</b>	<b>Relative per cent</b>
Access to more favourable prices	71%
Offer of specialized services	55%
Recognition of Group X as having a new strategic model	42%
Need to adapt to the new legal conditions	28%
Differentiation of final service	16%
Improved competences to serve customers	14%

Although financial issues are the main reason for joining Group X, pharmacies also pointed the additional services made available by Group X as a selling issue. Nonetheless, although more affordable prices is the key issue, it has been identified as a selling point Group X cannot fulfil. In fact, this is only a theoretical advantage as it was recognised by these pharmacies that product availability is poor at the selected wholesalers. This is also a reason for these pharmacies to maintain agreements with other wholesalers beyond the selected three. As for the currently independent pharmacies, Table 3 shows the reasons stated for not joining any economic group. From Table 3

**Table 3**  
Reasons for not joining any economic group

<b>Reason for not joining</b>	<b>Relative per cent</b>
It has not yet been considered	35%
Commercial advantages presented do not compensate	30%
Want to keep their independence	25%
No group has yet showed enough advantages	20%

Findings show that the financial advantages were not enough to capture the attention of these pharmacies. The more modern looking ones do not recognise the need for the support of one of these groups, which leads to conclude that the physical support at the point of sales could be also considered a good value proposition from Group X. In most cases the technical director of the pharmacy is also the owner, which means that that person has to divide its attention between the technical support to the customers and the management of the business. In one specific case the technical director is fully dedicated to the management of the business and stated that he can achieve as good financial deals as the ones offered by the groups, but that it only happens as a consequence of his time investment in procurement.

Based on the results obtained, even considering that the sample is not representative of the industry, it is possible to posit that Group X is experiencing some problems in fulfilling the promises it makes to the pharmacies of the Group, especially in terms of product availability at the more favourable prices. Nonetheless, widening the services made available at the pharmacies and the new visual appearance of the spaces are topics well perceived by the pharmacies. As the commercial conditions are a key issue for joining Group X, the Group should adjust its procurement strategies to meet the expectations of its customers (either by developing more bargaining power towards wholesalers to assure supply, or run its own distribution centre to be able to fulfil orders from the pharmacies that join in – both in terms of volume and in terms of lead time fulfilment)

## CONCLUSION AND FUTURE WORK

This research aimed at assessing and comparing the quality of the service provided by the traditional distribution system of pharmaceutical products in Phutthamonthon and the one made available by the economic groups that emerged when the industry became less regulated. The assessment was put to practice from the perspective of the pharmacies.

Findings lead to conclude that when managers of pharmacies have more time to dedicate to procurement issues it is possible to achieve better quality of supply (price, lead time consistency and product availability) than the service provided by the wholesales with agreements with the economic group analysed. These issues are the more relevant ones for the pharmacies when assessing their suppliers but the pharmacies of the analysed group need to keep parallel suppliers to achieve the service supply their desire. Product availability issues should be the main focus of the group if it wants to improve the quality of the service provided. Nonetheless the Group is well recognised for the range of complementary services made available for its pharmacies and the marketing support they provide. The supply chain management focuses on the source of Cultivated banana species and fertilizer. The farmers have distinct materials and networks, such as neighborhoods, famers in the province, Kasetsart Kamphaeng Saen University, or local market (Anchalee Hiraphaet, 2017).

A single economic group as analysed and the sample used was limited (only 22 pharmacies). It would be interesting to expand this research to more pharmacies of the same group. In the same line of research, it would be interesting to compare the difficulties of supply of this Group with other economic groups. As the quality of the service provided is better assessed by its customers, further research should be perform to assess if the quality of supply influences customers' perceived quality of the service provided at the pharmacies.

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