

Value Delivery through Supplier Integration in Pharmaceutical Industry

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Abstract

The Indian pharmaceutical industry is expanding worldwide, over the last few years, due to high consistent growth, driven by a multitude of factors both as purchasers and producers. Over the long term there is a high scope of growth and opportunities in outsourced research, custom manufacturing of bulk actives, intermediates, and outsourced trials, etc. To sustain this high growth rate, pharmaceutical companies have to be more efficient in their operations specifically, about their supply chain performance. This paper intends to highlight the importance of supplier in creating value to achieve efficient operations.

In particular, this paper surveys the relative importance of factors considered for the selection of suppliers by pharmaceutical companies, factor for measuring the performance of their supplier and also the understanding and creation of value by Pharmaceutical companies. Our survey focuses on Baddi region of Himachal Pradesh (India) and neighbouring regions where the Pharmaceutical industry plays a vital role in consolidated production of drugs in India.

We found that supplier's relationship with manufacturer play a very important role in whole supply chain performance. Manufacturing companies are looking for consistent supply of material from their suppliers over the long term. They also prefer suppliers who are experienced, well reputed and technologically qualified. Apart from these, supplier's concerns for the external environment and most importantly for quality of material are also critical.

Suppliers are expected to provide a large range of materials at lower cost to manufacturing companies. On time delivery of raw material to manufacturing unit ensures reduced manufacturing cycle time which ultimately enhanced their strategic partnership.

Our findings show that both partner i.e. suppliers and manufacturing units should understand the meaning of value creation and delivery for their customer so that both of them can be sustained profitably for the long term and enhance the performance of their supply chain.

Key Words: Supplier integration, value creation.

Introduction

Accounting for 2% of the world's pharmaceutical market, the Indian pharmaceutical sector has an estimated market value of about US \$8 billion. It's at 4th rank in terms of total pharmaceutical production and 13th in terms of value. It is growing at an average rate of 7.2 % and is expected to grow to US \$ 12 billion by 2010 year end.

The pharmaceutical industry is expanding worldwide. For some years now, it has been benefiting from the particular dynamics of the Asian economies as both purchasers and producers. Not only the markets in China and India register high growth rates but also Annual growth rates are also impressive in Singapore, Malaysia, Thailand and Indonesia.

India's pharmaceutical industry has been in transition for several years now. It is poised for high consistent growth over the next few years, driven by a multitude of factors. With proven skills in chemical synthesis, process

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development and manufacturing; Indian companies, both large and medium-sized, will benefit from a booming generics market in US and Western Europe.

Over the coming years high scope of growth and opportunities is expected in outsourced research, custom manufacturing, outsourced trials, etc. Thus, we have a heady portion of a growing opportunity (both in near and long term) and recognized competitive skills. The relative valuations may seem expensive, but we believe that it is justified given the expected earnings growth and lower risk to that growth.

The US market is expected to grow, US\$45 bn, with on-going patents over the next five years. The domestic pressure in US, to curb healthcare costs, has resulted in favourable politico-legal environment for generics coupled with increasing share of generics in prescription sales. The other big market- EU/ Western Europe is also expected to grow rapidly.

With IPR implementation in 2005, more multinational firms look to India as a low cost, efficient base and creating an environment for contract research and development in India. From being almost non-existent before 1970 to a prominent provider of healthcare products, meeting 95% of the country's pharmaceuticals needs, the Indian pharmaceutical industry has come a long way. The industry has increased from Rs. 4bn in 1970-71 to Rs. 214bn in 2002, at a compound annual growth rate of 19.8% per annum.

The total Indian production constitutes about 1.3% of the world market in value terms and 8% in volume terms. Increasing generic penetration, intense competition and fragmentation of the industry has negatively impacted overall value growth of the domestic market. In this scenario, to grow in the domestic market, companies are looking at introducing value added new products, innovation, product life cycle management and increasing their market reach.

Indian pharmaceutical Industry is moving up the value chain. From being a pure reverse engineering industry focused on the domestic market, the industry is moving towards basic research driven, export oriented industry with a global presence, providing wide range of value added quality products and services.

The industry is a net exporter and manufacturer of over 350 APIs (Active Pharmaceutical Ingredients). More than 60 Indian manufacturing facilities are approved by some of the toughest Regulatory Agencies such as US FDA, UK MCA, Australian TGA, WHO etc. Globally, pharmaceutical industry in India ranks 13th in value (largely because of very low prices). The industry is highly fragmented with about 15,000 plus registered units with only about 300 in the organized sector.

The industry manufactures a wide range of drugs (over 100,000 - which includes vitamins, anti-biotics, anti-bacterials, cardio-vascular drugs etc.) Nearly 80% of the manufacturers have sales less than Rs 1 bn of the 300 manufacturing and formulation units in the organized sector; the market is concentrated at the top with the top 30 players controlling about 70% of the market share.

The Indian companies are focusing more on exports for higher growth and improved margins. Exports of pharmaceuticals consist of basic drugs (bulk), intermediaries & fine chemicals and finished formulations. The industry has been able to build a strong export market for Indian pharmaceuticals in the face of fierce competition from manufacturers in foreign countries with a long record of technology growth.

Pharmaceutical Supply Chain is highly responsible to ensure that the right drug, reaches the right people at the right time and in the right condition to fight against disease and sufferings. This is a highly sensitive supply chain where anything less than highly expected customer service level is unacceptable as it directly impacts the health and safety. The solution that many Pharmaceutical industries adopt is to carry a huge inventory in the supply chain to ensure that there is no gap in the fill rate. However, it is a big battle to ensure that there is no gap in product availability at an optimal cost unless supply chain processes are streamlined towards customer needs and demands. Core competencies of Indian pharmaceutical Industry are complex synthesis capabilities, increasingly good manufacturing practices (GMP) and Low-cost production

However, some of key challenges faced by pharmaceutical Companies are time to market, product life cycle shrinkage; increase the speed of innovation, government regulations, shortening exclusive patent life,

production flexibility, increasing cost, intense competition, increase generic penetration.

Literature Review

Value Delivery Network

A Value Delivery Network allows many companies to create customer value that cannot be created by use of the company's own value chain. It is made up of the company, suppliers, distributors, and ultimately the customers who partner with each other to improve the performance of the entire system. (Armstrong, 2005). The value delivery network consists of all the companies within a delivery network working together to reach a common goal of customer perceived value. When businesses within a delivery network partner together, it is their goal to reduce costs, increase performance, and pass the increased productivity on to their customers (Armstrong, 2005).

A relationship is a mutual alignment of self and collective interest. It is at the individual level that interactions between buyers and suppliers take place and it at this level that the well-being of buyer-supplier relationships is affected. Actors pursue self interest and have individual goals but collectively they share interests and develop relationships through common goals. (Brennan, R. and Turnbull, P.W. 1999). The underlying assumption that there are two active parties in a dyadic relationship; each co-creating value forms the basis of the IMP work. They states that interaction between companies occurs when both parties recognize their mutual interdependence and are interested in each other's resources. This interaction takes place within the context of a relationship between the companies. (Cunningham, M.T. 1980) The IMP model provides a useful framework for understanding buyer-supplier relationships. The interaction is influenced by four variables:

- (a) Variables relating to the products, information, financial and social exchange elements
- (b) Variables characterizing the parties involved both as organizations and as individuals.
- (c) Variables describing the environment in which the interaction takes place.
- (d) Variables serving to portray the atmosphere affecting and affected by the interaction, such as power, dependence, conflict, cooperation and social distance.

Strong management commitment to develop closer relationships with suppliers through strategic purchasing effort was found to contribute significantly higher customer satisfaction. Strong buyer- supplier relationships have a significant positive effect on manufacturing performance and a positive impact on the performance of the entire supply chain. (Maloni, M. and Benton, W.C. 2000). Ford (1980) views relationship as a process that develops through time in five stages: pre relationships, early, development, long-term and final stage. Dwyer et al (1987) consider that relationships evolve through awareness, exploration, expansion, commitment and dissolution. Relationship development is a process of bonding which leads to mutual commitment to the relationship (Wilson and Mummalaneni, 1986).

Three layers of entities determine the value outcome of a relationship: resources, activities and actors (Hakansson and Snehota, 1995). Each of these layers consists of a number of entities which are related to each other. In the resource layer, individual resources are tied up together in resource collections and constellations. Activities are linked together in chains and structures in the activity layer. Actors are bound together in actor networks. The elements within each layer are related and the layers themselves are interrelated.

Three dimensions of supply chain integration: information, coordination and organizational linkage. Information integration refers to the sharing of information and knowledge among the members in the supply chain, including sales forecasts, production plans, inventory status and promotion plans. Coordination refers to the realignment of decisions and responsibility in the supply chain. Organizational linkages include communication channels between the members in the supply chain, performance measurement, and sharing of common visions and objectives. (H. L. Lee, 2000).

Improving cost competitiveness, formalizing supplier relationship through performance measurement and improvement programs, and optimizing the material value stream are some key elements that emphasizing suppliers and create value in whole supply chain. Direct material purchase is a highly integrated matrix organization aligning category managers in global purchasing linked with local business needs. Active

pharmaceutical ingredients and other chemicals are supplied both regionally and globally. (Chen Julie, 2003).

Leveraging the most cost-effective resources regardless of the supplier's size or location has become a performance cornerstone for manufacturers everywhere. (Byrne Patrick M, 2006) Actually moving beyond 80-20 procurement will require companies to adopt even more sophisticated sourcing practices in order to build more relationships with precisely the right suppliers.

Systematic management of supplier relationships to optimize the value delivered through those relationships over the course of their life cycles. This includes:

- a) Implementing technologies that support contract management and business-to-business integration and supplier collaboration.
- b) Segmenting all suppliers, most often by size & market, quality of relationship, quality of products and services, degree of integration into the supply chain, and even by cultural/strategic alignment with the business's core goals.
- c) Adopting a holistic approach to Supplier Relationship and work collaboratively with all departments.

As supplier relationships become more global and complex and the rule of 80-20 becomes less fashionable, so it will be even more integral to helping companies realize value and achieve high performance.

Supplier development programs lead to improvements in operational performance when the supplier is committed with the buyer. Such improvements would be on to the supplier's perception regarding the commitment, loyalty and relationship longevity. Buyers may influence the supplier's commitment, the communication intensity and, consequently, improve the relationship. Relationship development would include cooperation increase, shared problem solving, commitment actions, loyalty and long term relationship orientation. (Prahinski, C., Benton, W. C. 2004).

Supplier integration practices can include collaborative/long-term buyer-supplier relationships, supplier certification for product and quality systems, regular visits to supplier facilities, continuous monitoring of supplier base-performance and supplier involvement

in process/product innovations and quality management. (Macbeth, D.K. and Ferguson, N. 1994)

A qualified and reliable supplier is a key element in reducing material costs and achieving on-time deliveries, supplier selection is increasingly recognized as a critical decision in supply chain management. Therefore, supplier selection and evaluation are very important to the success of the supply chain process. Evaluation and selection of suppliers is a typical multicriteria decision making (MCDM) problem, involving both qualitative and quantitative criteria. The ones considered as most common are related to costs, quality, delivery time and flexibility. (Dahel, N. 2003)

Firms are facing increasingly competitive environments characterized by continuous pressure on costs, large global players, continuously evolving products, customer fragmentation and emerging technologies. To ensure success, firms realize that they cannot be experts in all businesses and are concentrating on their core competencies. To enhance their performance in non-core competency areas, companies are reevaluating business relationships so as to form closer relationships with strategic suppliers. (Lisa, 1997)

Firms have realized that collaborative business relationships improve a firm's ability to respond to the new business environment by allowing them to focus on their core businesses and reduce costs in business processes (Napolitano, 1997). There will be a thrust toward developing and maintaining relationship with customers. Firm's understanding in this area is very limited. Firms will need to develop commitment, trust and cooperation with their suppliers. Firms will need to invest in mutual goals, interdependence, structural bonds, adaptation, non retrievable assets, shared technology and social bonds to ensure successful relationships. (Wilson, David T., 1995).

As individual suppliers relationships become more important we expect a similar thrust toward cross-functional teams that are dedicated or focused on their key suppliers. The importance of individual suppliers is expected to increase because of the emergence of sourcing on a global and relational basis with a few key suppliers. Firms will need to change goals, reward structure and group norms of the purchasing function. (Wilson, David T., 1995)

Many companies have improved their value delivery network on both side i.e. on Supplier and Customer Side. Companies have improved not only the value delivery system, but their own global delivery system. Companies reduces costs, establishes long term relationships with their suppliers, allows targeting certain distribution channels, differentiates products, maximizes information about customers , and creates lifetime loyalty; all of which creates value in the delivery network. Application of New Technology like E-commerce allows the manufacturing companies to connect with their suppliers directly that provides value in ways unknown in the traditional distribution cycle. (Stewart, Ron, 2005).

Firms will need to monitor the return on investment in establishing relationships with suppliers. Therefore, firms will need to develop a performance metric that analytically quantifies supplier relationship equity. The cost-benefit analysis of supplier relationships should result in increased supplier selectivity (Jagdish N, 1997). Managing supplier relationships will not be an easy task. The task of managing relationships on a global basis will be more complex and not analogous to domestic supplier management as most business customers have realized. Therefore, in industries where supply function is a key strategic advantage, companies need to focus on creating core competency in supply side management and develop sharper experience curves. (Sheth, Jagdish N., and Arun Sharma, 1997).

To become competitive in the pharmaceutical industry, many top-tier pharmaceutical organizations consistently ask their supply chain organization to increasingly contribute to their bottom line. Profitability has come from continuous cost cutting, rather than top-line growth. Outsourcing of manufactured and packaged pharmaceutical products has gained popularity for a number of reasons. (Hany Salama, 2004). The most significant reason is that large Pharma executives have realized they need to focus on their core competency, drug development-in which the company is working to identify new molecules-rather than managing the manufacturing and packaging of product. Thus, large Pharma organizations outsource to contract facilities in order to ensure quick turnaround in bringing products to market, as well as developing a total turnkey process in which the vendor manages the manufacturing and packaging operation. (Hoffmann-LaRoche, 2004)

There has been a growing trend toward long-term relationships between manufacturers and their suppliers. The impact of long-term relationships with specific customers on the performance of supplier firms using cross-sectional and longitudinal information indicate that maintaining long-term relationships with select customers does not come at the expense of the rate of sales growth. Suppliers in long-term relationships are able to achieve the same level of growth as firms that employ a transactional approach to servicing their customers. (Manohar U. Kalwani, 1995).

These suppliers are able to reduce costs over time through better inventory utilization; however, this reduction in cost seems to be bargained away by their customers through lower prices over time. Finally, the supplier firms in long-term relationships achieve higher profitability by differentially reducing their discretionary expenses such as selling, general, and administrative overhead costs to a greater extent than their counterparts who use a transactional approach to servicing their customers. (Narakesari Narayandas, 1995)

Value can be created by cooperation has led marketers to search for - win-win 'positions as a way to enhance profitability through collaborative value creation (Kanter, 1994). The idea of value creation and exchange is the foundation stone of relationship marketing (Christopher et al., 2002). These value perspectives suggest that value is created; as an offering and delivered through recurrent transactions within a supplier-managed relationship; through mutually interactive processes and shared through negotiated agreement within the life of a relationship and shared in interactions that emerge from within networks of relationships (Ravald and Gronroos 1996).

Value has been considered to be an important constituent of relationship marketing and the ability of a company to provide superior value to its customers is regarded as one of the most successful strategies. This ability has become a mean of differentiation and a key to the riddle of how to find a sustainable competitive advantage (Heskett et al 1994).

Walters and Lancaster (1999a and 1999b) determine value as the utility combination of benefits delivered to the customer less the total costs of acquiring the

delivered benefits and is then a preferred combination of benefits compared with acquisition cost. There seems to be an agreement that value is a function of what a customer gets, the solution provided by an offering, and the sacrifice of the customer to get this solution. Consumer's overall assessment of the utility of a product based on a perception of what is received and what is given, is known as perceived value (Zeithaml, 1988). In a relational context the offering includes both a core product and additional services of various kinds. Many companies today have partnered with specific suppliers and distributors to create a superior value delivery network, also called a supply chain (Magnet, 1994).

Christopher (2002) defines a value delivery network/supply chain as the network of organizations that are involved through upstream and downstream linkages in the different processes and activities that produce value in the form of products and services in the hands of the ultimate consumers. In order to gain competitive advantage value delivery network/supply chain collaboration or integration is required i.e. the backward/upstream and forward/downstream collaboration/integration. Mentzer (2001) says a value delivery network comprises of number of players in which a firm whether manufacturing or service, holds the key by creating and offering values in terms of output to its customers.

Need of The Study

In an increasing competitive marketplace, firms are seeking new methods of enhancing competitive advantage. Today, purchasing is becoming a strategic function and a key factor in competitive positioning. This paper suggests that effective relationship with suppliers will provide firms with next-generational competitive advantage. With consolidation of firms within industries, continuous product evolution and constant pressure on costs, supplier relationships will become more critical in the future. This paper discusses the emergence of supplier relationships, and how this shift toward supplier relationships has and will change the role, processes and strategies of firms. Although purchasing has strategic importance within a firm, good relationships between customers and suppliers are elusive. Firms, therefore, need to emphasize aspects that will enhance supplier relationships. This research paper highlights the need of

supplier relationship management especially in case of pharmaceutical industry.

The main highlights of this study focused on Supplier Relationship in Pharmaceutical Industry in Baddi Region of Himachal Pradesh and neighbouring areas. Supplier Relationship generally focuses on activities such as increasing the accuracy and availability of contract information, monitoring, measuring, managing, and reporting on supplier performance, improving internal users' compliance, designing and implementing process improvements jointly with suppliers, such as new logistics solutions and quality-assurance programs, working with suppliers to reduce costs on both sides, launching joint product-development projects with suppliers.

All these activities are clubbed together further into 3 main parameters:

- Selection of Competent Supplier with respect to your product
- Supplier Performance measured on specific parameters
- Value understanding, creation and delivery by supplier

Selection of Competent Supplier with respect to your product:

For selecting a specific supplier for a particular product there are number of selection criteria are to be considered which are as follows:

- Cost Performance: At which cost Supplier will provide you the raw material?
- Delivery Performance: How quickly Supplier deliver the respective material?
- Quality performance: What is quality of material provided by respective Supplier?
- Geographical Proximity or Location: How far Supplier is located from the manufacturing unit?
- License: Whether Supplier have license to provide the required material?
- Reputation: What is Reputation of respective Supplier in market?
- Experience: Whether Supplier is Experience or not?
- Technology: whether Supplier is having new advanced technology?
- Responsiveness: How quickly Supplier respond?
- Personal Relationship: What type of Relationship Supplier have with other customer?

- Environmental Concern: How much Supplier is concerned about Environment?
- Long Term Stability: Whether Supplier have stability for long term or not?
- Reliability: How much respective Supplier is reliable?

Supplier Performance measured on specific parameters:

Similarly for measuring supplier performance some main parameters are as follows:

- Average Cost per Requisition (What is Average cost of each requisition with that Supplier?)
- Average Lead Time for each purchase (What is Average lead time for each purchase?)
- Supplier's On time Performance (How consistently Supplier is delivering the material on time?)
- Supplier's Quality Rating (What is quality rating of Supplier?)
- Supplier's Involvement in Product Development (How much Supplier involved at new product development stage?)
- Complaint Handling (How Supplier handles all the complaints?)

Value understanding and creation:

Finally what the company understands from the term-VALUE, how it is to be created and delivered to their customer with the help of their suppliers. To measure this following statements are to be posed

- Value is combination of benefits delivered to the customer.
- It is what one get for what one pay.
- It is a triad of product, quality and price.
- It includes both core product and additional services associated with it.
- It cannot be created rather perceived by the customer.

Objectives of The Study & Research Methodology

The main objectives of the present study are- To create and deliver Value through Supplier Integration in Pharmaceutical Industry.

The present study is based on an empirical analysis of Pharmaceutical supplier. The study is based on primary data as well as secondary data. The identity of the Pharmaceutical Manufacturer (PM) is anonymous due to

the need for confidentiality. This study was performed as a non-sponsored and unsolicited mail survey directed to a manufacturer.

The population consisted of 100 corresponding executive of the manufacturer at Baddi (Himachal Pradesh) and neighbouring areas. The executives responsible for the supplier selection at the manufacturer. In total, 80 executives participated in the survey.

A questionnaire was sent to each of the executives selected in the survey. The selected executives at the PM were either in charge of the purchase/store department or either the member of the same. Each respondent at the PM was initially contacted by phone in order to confirm their appropriateness to respond to the questionnaire, and eventually to promote the importance of the survey.

Accordingly, a substantial amount of work was performed in the preparation, implementation, control and conclusion of the mail survey. The questionnaire was framed with notable variables like number of suppliers and key suppliers, type of agreement, type of selection of suppliers, factors for selection of suppliers, how frequent communication with suppliers, criteria for supplier performance, value creation components etc. measured on nominal or ordinal scale. For example, each respondent was briefly introduced to the research project to stimulate his or her interest and willingness to participate in the survey.

Target Population & Sample Size

In this study, the target population included the personnel of purchase and store department of pharmaceutical companies who directly deals with their suppliers. A larger sample size leads to increased precision in estimates of various properties of the population but due to certain limitations of the study the sample size is restricted to 80 respondents.

Data Analysis and Interpretation

The measurement instrument in this study is a survey questionnaire and the measures of the variables were developed from extensive literature on the subject of Supplier Relationship. The Survey questionnaire is sub divided into 3 parts:

- Factors for Selection of Suppliers
- Criteria for Supplier Performance
- Supplier's Views on Value Creation

X1 – X14 = factors influencing selection of supplier B1-B14
= are constants.

A) SPSS Result and Analysis of Supplier Selection

Factors:

Selection of Suppliers factor model in pharmaceutical supply chain is as follows:

$$Y = 0 + \sum_{i=1}^{14} \beta_i X_i \quad (i= 1 \text{ to } 14)$$

The data analysis has been done in a holistic manner using the Factor Analysis test approach from SPSS software.

Output of Factor Analysis:

Descriptive Statistics:

Variables	Mean	Std. Deviation	Analysis N
Cost Performance	3.78	0.84	80
Delivery Performance	4.34	0.76	80
Quality Performance	4.60	0.76	80
Geographical Proximity	3.48	1.06	80
License	3.78	1.17	80
Reputation	3.53	1.35	80
Experience	3.61	1.28	80
Technology	3.64	1.26	80
Responsiveness	4.36	0.62	80
Personal Relationship	2.55	0.97	80
Environmental Concern	3.95	1.05	80
Stability	3.68	1.41	80
Reliability	4.59	0.65	80
Others	2.84	1.17	80

Interpretation: The number of valid cases for this set of variables is 80. The preferred minimum sample size requirement is more than 50 valid cases is satisfied. The ratio of cases to variables in a principal component analysis should be at least 5 to 1. With 80 and 14 variables, the ratio of cases to variables is 5.71 to 1, which exceeds the requirement for the ratio of cases to variables.

- Quality provided by supplier
- Environmental concern of supplier

Out of these five critical factors, first three factors are clubbed together into a common component named as Supplier's Capabilities and last two variables are clubbed together into second component named as Supplier's Concern.

Analysis & Conclusion

Supplier's Selection

Based upon the above analysis we can conclude that supplier selection is most critical in creating value. On doing the analysis of supplier's selection variables we found that out of 14 variables 5 variables are most critical for any supplier i.e.

- Experience of particular supplier
- Reputation of particular supplier
- Technology that supplier have

These two variable components are critical in performance of supply chain because if manufacturing company do not select the appropriate suppliers for material procurement then it is difficult to achieve competitiveness in their operations. We know that all strategic partners of supply chain play their specific role in an efficient supply chain to create value for their customer so it is very important to select the proper supplier for the proper material.

Supplier's Performance

After selecting the key suppliers, companies have to monitor the performance of suppliers. This is done on the basis of six main variables which are shown in data analysis. When we analyzed the sample, we found that following four variables are critical:

- Average Cost per requisition
- Average Lead Time per Purchase
- Supplier on Time Performance
- Supplier's Involvement in Product Design

Out of these four variables, Supplier's On Time performance is the most critical factor as 59% of sample survey agree that their supplier's are performing well and they rated their supplier performance on the basis of this variable.

This variable is so much critical in context with the manufacturing cycle, as whole manufacturing cycle time is increased if suppliers do not provide the required material on time or there is any delay from supplier side to provide required material. This will ultimately hamper the relationship with suppliers; make the condition of distrust between two parties and also the whole supply chain performance. After integrating all the supplier variables we found that following variables are the most important for value creation to achieve most efficient supply chain performance:

- Supplier's Capability
- Supplier's Concern
- Supplier's On Time Performance

Value Understanding and Creation

During the sample survey we found that manufacturing company's perception of understanding and creation of value is pretty much clear. We found that out of proposed five value creation statements, two statements are critical from company's point of view

That is Value is what one can get for what one pay & Value is triad of Product, Quality and Price.

Out of these two statements, Value is triad of Product, Quality and Price is the most critical in company's perception as around 66% of sample survey agreed or strongly agreed with this statement.

This statement is most critical because the product is for what a company survive, quality is through which they can retain their customers and price is basis for creating more profits if it is kept as low as possible for raw material and finished product. So companies are also thriving hard for creating value for their customers.

Future Scope of Study

Every research project has limited scope for its analysis. The research study that has been conducted has covered almost all aspects related to the value delivery through supplier integration in Pharmaceutical industry. To do an in depth analysis and a qualitative research some factors have not been taken into consideration. Based on the literature review of various reports some of the factors that are still unexplored are mentioned below:

Price: Price is one of the most important factors for the companies play a significant role in determining the purchase preference from the suppliers. The study could entail the factor of price involved in influencing the buying behaviour of the company.

Taxation: Another important aspect is taxation while doing trading with suppliers. In case of B2B market, the consumers who buy are very conscious about taxes that involved in purchase transactions to reduce their manufacturing cost. A vendor isn't obligated to collect sales tax unless they have a physical location in the state they are shipping to. Such details can be taken into consideration for future research.

Workforce issues: The workforce issues that are involved in purchase transaction between supplier and company employees are also critical. This area lays in the future scope of the research.

Supplier's policies: Like an ordinary purchase, there are times when the supplier gives certain discounts to the consumers on various pretexts. Same holds true even for B2B purchases also. The various policies of suppliers are an issue which calls in for further in depth research.

Thus, to further on the findings of the research study, the above mentioned factors can be inculcated in the future studies so as to have a more holistic view of the entire situation.

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