Role of Buyer-Supplier Relationship on Supply Chain Performance in the Energy Sector in Kenya: A Survey of Kenya Power and Geothermal Development Companies

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Abstract: Effective buyer-supplier relationships are founded on three critical elements, information sharing, trust and partnership initiatives. The study revealed the supplier relations of Kenya Power and GDC in relation to the three elements and their effect on supply chain performance. Descriptive research design was used which accurately described the association between variables minimising bias while maximising the reliability of the data. Using descriptive and inferential statistics the collected data was analysed with the aid of statistical package for social sciences (SPSS Version 21).

Keywords: Supply chain performance, Buyer-supplier relationship, Information sharing, Trust, Partnership initiatives

1. Introduction

The Ministry of Energy (MoE) is mandated by both Policy and the Law for the stewardship of the sector through energy policy development and review. The Ministry makes and articulates energy policies to create an enabling environment for efficient operation and growth of the sector, prepares a least cost development program for the power sector and facilitates mobilization of resources for the energy sector.

Kenya Power (KP) owns and operates most of the electricity transmission and distribution system in the country and sells electricity to over 2.6 million customers (as at April 2014). The Company’s key mandate is to plan for sufficient electricity generation and transmission capacity to meet demand, building and maintaining the power distribution and transmission network and retailing of electricity to its customers.

The Geothermal Development Company (GDC) is a 100% state-owned company, formed by the Government of Kenya as a Special Purpose Vehicle to fast track the development of geothermal resources in the country. Geothermal energy is an indigenous, abundant, reliable and environmentally friendly source of electricity.

The key to industrial buying success lies in the development and maintenance of long-term relationships between buyers and sellers. Existing supplier relationships are a powerful competitive advantage for a company. (Geok & Mark, 2005). According to the Public Procurement and disposal act, 2005 (PPDA, 2005) procurement proceedings must be within the established legal framework. Procurement entities shall establish procedures to provide for the making of decisions on behalf of the public entity relating to procurement. The act advocates for open tendering and the use of an alternative procedure (i.e. restricted tendering, direct procurement, request for proposals, and request for quotations, procedure for low value procurements and specially permitted procedure) only if that procedure is allowed.

The past 20 years has seen a significant shift in supply chain management, particularly with respect to the manner in which buying firms and suppliers interrelate. What traditionally operated in an adversarial form – suppliers being “played” against other suppliers in a price-oriented bid process – has been largely replaced in a more positive frame encompassing collaboration, joint problem solving, and strategic supplier and distributor integration. Part of this change in philosophy has been driven by necessity. Supply chains have grown physically longer i.e. geographical dispersion and have become far more complex i.e. increased reliance on outsourcing, increased number of critical embedded technologies, additional product design complexity. Concurrent adoption of a lean mentality to drive out waste and excess inventory has yielded increased inter-firm dependency. As a result, many buying firms have invested in more cooperative relationships as part of a risk reduction and speed-to-market strategy (Stuart et al., 2011).

Buyer Supplier Relationship (BSR) is a pre-determined one-to-one relationship between a buyer and a supplier that is supported by electronic commerce technologies (McIvor & Humphreys, 2004). It links the partners in a supply chain as well as the interdependence between firms in the whole supply chain process. At most times, business firms and organizations work together to ensure they get competitive advantage. For these firms to run well together in the supply chain, there ought to be clear flow of information between them (Narasimhan & Nair, 2005; Kim et al., 2006). The free flow of information enables every actor in the supply chain to be aware on how to act, then builds on their cohesiveness and allows the actor adequate time and opportunity to work on new ideas and knowledge to meet the ultimate market needs (Zhou & Benton, 2007; Patnayakuni et al., 2006).
An important aspect of supply chain management is the establishment and coordination of relationships by particular parties. The formation of beneficial relationships within the supply chain is an indicator for business success. They are formed because there are so many changes in the market patterns, economic environment and customer requirements. They thus are seen as cushions to the changes in the business world. These relationships are not formed for the sake of it but exist because companies see the gains that come out of it. These relationships are commonly referred to as partnerships, strategic alliances and are ways in which a buying firm forms a network with its suppliers so as to compete more effectively with other firms. Those firms which are looking out to specific suppliers have been noted to get inventory on time, have a better understanding of the market requirements and will use the least cost possible when obtaining their merchandise. In a wholesaling environment, firms with close relationships with suppliers can achieve a competitive advantage by receiving merchandise in short supply, information on new and best-selling products and competitive activity, best allowable prices, and advertising and markdown allowances (Claro et al., 2006).

While there are numerous benefits that a trading entity enjoys by establishing strong and long-term buyer-supplier relationship, there are impediments that stand in the way. This is even more pronounced where a public trading entity is involved. The impediments arise due to the legal framework in place. The legal framework currently in place advocates for pre-qualification of suppliers through a rigorous tendering process (Public Procurement and Disposal Act, 2005; Public Procurement Regulations, 2006). Consequently, any public entity has to advertise its requirements of supplies thus attracting a number of suppliers to bid for the same. The tendering process which is periodic results in elimination of previous company suppliers. Due to these, Kenya Power and GDC Companies end up with transactional relationships with their suppliers. The study revealed the supplier relations of Kenya Power Company and GDC. The focus was on trust building, partnerships and information sharing with their suppliers and the impact that such variables have on the supply chain performance of these companies.

1.1 Research objectives

The general objective of this study was to establish the role of buyer-supplier relationship on supply chain performance in the energy sector in Kenya. The specific objectives were: to establish the influence of trust on supply chain performance at Kenya Power and Geothermal Development Companies in Nakuru West Sub-County, to assess the contribution of partnership initiatives on supply chain performance at Kenya Power and Geothermal Development Companies in Nakuru West Sub-County, to determine the influence of information sharing between the buyer and suppliers on supply chain performance at Kenya Power and Geothermal Development Companies in Nakuru West Sub-County

1.2 Research questions

To accomplish the objectives the researcher used the following research questions: How does trust influence supply chain performance in Kenya Power and Geothermal Development Companies? What is the contribution of partnership initiatives on supply chain performance in Kenya Power and Geothermal Development Companies? What is the influence of information sharing between the buyer and the supplier on supply chain performance in Kenya Power and Geothermal Development Companies?

2. Literature Review

2.1 Theoretical Background

The study was based on the commitment trust theory of relationship marketing. The theory postulates that two fundamental factors trust and commitment must exist for a relationship to be successful. Relationship marketing involves forming bonds with customers by meeting their needs and honoring commitments (Lysons & Farrington, 2012). Rather than focusing on the short-term profits, businesses following the principles of relationship marketing forge long-lasting bonds with their customers. As a result, customers trust these businesses, and the mutual loyalty helps both parties fulfill their needs. The commitment trust theory of relationship marketing posits that relational exchanges happen with a number of partners over a long period of time (Dwyer et al., 1987).

The partnerships that exist include those of buyers and customers and buyers with the suppliers. Such relations are meant to ensure timeliness during purchase of products and better quality of products (Frazier et al., 1988). These come in as the basic reasons for firm to firm relations as concerns the study. For firms to exist well together there has to be certain adjustments and regulations to govern them. These are termed as the necessities for relationship commitment according to (Morgan & Hunt, 1994). They include communication, trust and cooperation. This whole model indicates that trust for effective relationships has to be without any form of opportunistic behaviour and uncertainty (Doyle & Roth, 1992). For this study, the emphasis was trust and commitment which are key aspects of buyer supplier relationships and how they eventually benefit the firm.

2.2 Relationship overview

Buyer supplier relationships (BSR) are connections or agreements involving firms deciding to work together and share information between them and establish a form of trust that will see them have a better advantage in the market over their competitors. These relationships are part of supply chain management strategies of a firm. Supply chain management covers business processes done starting from the supplier to the end user departments. The relationships therefore serve as a means of enabling better service, product provision and information availability between firms and to the end users (Global Supply Chain Forum, 2008). This was evident with the Romanian Small and Medium Sized Enterprises which realized that having a one-
time supplier attracted more losses especially due to receipt of poor quality goods. The enterprises then sought to have mutually beneficial relationships with its suppliers as a way of minimizing problems during procurement (Plaia & Muresan, 2007).

2.3 Trust and supply chain performance

Trust is frequently defined as a willingness to take risk and rely on an exchange partner in whom one has confidence (Ik-Whan & Taewon, 2005). It is the belief taken by the engaging firms that the relationship will be of gain and that neither firm will take advantage of the other. The participating firms are always cautious in their undertakings because the higher the level of trust the riskier it becomes for them. Furthermore the concept of trust is hard to gauge and thus the more caution attached to the element that carries more gain when dealt with well in the relationship (Ruiz-Torres & Mahmoodi, 2007; Lazzarini et al., 2007).

Trust in the relationship can be seen from three steps. The first step being calculative trust which involves riding on a stand that trust benefits more than lack of trust. This step was utilized initially by FMC and their supplier Ryerson. Beyond this step is the cognitive trust which is based on the understanding of collective success involving trust, achievement of goals and solving problems. It means firms take time to understand one another and thus know how to deal effectively with one another. At this instance certain regulations are formed by the participating firms to govern their daily engagements. The third is a more intimate step where partnering firms have a common ground in terms of values, code of conduct and obligations. It means that the firms have taken more time to build the relationship which now goes beyond just relating. This third step has been reached by E-Z-Go, a Textron Company with Ryerson Inc. Company the supplier after working Trust between suppliers and the buyer, is a cost management strategy because consistency by the firms will cause a situation where the buyer expects good quality and defect free goods. It replaces complex legal contracts and conditions, superfluous quality control and assurance, time consuming communication and duplication of effort in planning, forecasting and replenishment. Buyers rely on a supplier’s quality management and process capability and assume that incoming parts will be defect free. Incoming parts would require no further inspection and can be delivered directly to the plant floor workstation in a just-in-time manner reducing expensive buffer and pipeline inventory. Where trust exists, buyers and suppliers can share real time product demand, develop collaborative demand forecasts, work toward optimal inventory positions and customer service levels share procurement and design issues to improve quality and efficiency reducing cost and response time to customer request (Stuart et al., 2011).

Supplier investments in specialized equipment and adaptation of production processes are eased with the presence of trust. It also leads to high levels of buyer satisfaction. It is a significant variable that led to greater information sharing in the buyer-supplier dyad in the automobile supply chain in Japan when compared to USA, thereby bringing out one key reason behind the success of Japanese auto majors across the globe (Anupam & Fedorowich, 2008). According to Stuart et al. (2011), though trust has been researched on, more needs to be expounded on. The researcher concurs with Stuart et al. (2011) on the need to even do more and see the outcomes that trust has on supply chain performance. Partnership Initiatives on the Supply Chain Performance

2.4 Partnership initiatives and supply chain performance

Supply chain partnership is a strategic coalition of two or more firms in a supply chain to facilitate joint effort and collaboration in one or more core value creating activities such as research, product development, manufacturing, marketing, sales, and distribution, with the objective of increasing benefits to all partners by reducing total cost of acquisition, possession, and disposal of goods and service (Ryu et al., 2009). The basic thinking is that companies with a common interest in meeting the needs of a particular customer through establishment of channels of communication and regular exchange of ideas and information better develop effective methods of meeting customer needs with profit for all concerned. It reduces costs while maintaining quality and reduces the design cycle time enabling customers to beat their competitors in the market with new products (Peck, 2003). Strong partnerships are critical to successful supply chain management (Joy & Larry, 2008)

Many firms in the last two decades have restructured their businesses in moving away from traditional vertically integrated forms towards leaner and more flexible hybrid organizational forms. Supply chain partnerships in the supply chain are one of the most popular hybrid organizational forms. These have been increasingly adopted by firms to manage inter-organizational collaboration in the supply chain. They provide both large and small firms with numerous opportunities to improve their conduct of business such as: wider diffusion of products without costly physical presence in the markets, risk and reward sharing, resource pooling, reduction in coordination and transaction costs, ability to concentrate on core competency, and rapid response to market needs (Stuart et al., 2011).

2.5 Information sharing and supply chain performance

Information sharing in a supply chain context refers to the extent to which crucial and/or proprietary information is available to members of the supply chain. Shared information can be tactical i.e. purchasing, operations scheduling, logistics or strategic i.e. long-term corporate objectives, marketing and customer information. Prior research on the importance of formal and informal information sharing between trading partners has shown that effective information sharing enhances visibility and reduces uncertainty. It allows firms to access data across their supply chains, allowing them to collaborate in activities such as sales, production, and logistics. The extent to which information is shared can create opportunities for firms to work collaboratively to remove supply chain inefficiencies, and thus has a significant direct impact on the relationship between buyer and the supplier (Hsu et al., 2008).
This sharing strengthens the bond among the supply chain members, enables every member to be fully aware of any business undertaking and then ensures that any new knowledge is acted upon on time (Zhou & Benton, 2007; Patnayakuni et al., 2006). However, studies do not show conclusively the relationship between information sharing and positive changes within the supply chain partners. Besides this many studies have explored how information technology can be used to enable better information sharing by firms, others (Hsu et al., 2008) have even looked at what information sharing entails and what can make it work between firms. Little has focused on how information sharing can impact on the performance of a firm’s supply chain. It is in this aspect of lack of comprehensive information on this area that the study sought to unearth the actual role of information sharing on supply chain performance with reference to Kenya Power & GDC Companies.

3. Research Methodology

Descriptive research design was used which accurately described the association between variables minimising bias while maximising the reliability of the data (Kothari, 2004). The study targeted all the 58 employees from the procurement, Logistics and Finance departments in both KP and GDC companies. These are the employees directly involved in the management of the supply chain. Self-administered structured questionnaires were used to collect primary data. Using both descriptive and inferential statistics the collected data was analysed with the aid of the statistical package for social sciences (SPSS Version 21).

Multiple Linear Regression Analysis Model

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + e \]

Where

- \( Y \) - Supply Chain Performance
- \( X_1 \) - Trust
- \( X_2 \) - Partnership initiatives
- \( X_3 \) - Information sharing
- \( e \) - Error term
- \( \alpha \) (alpha)- Constant
- \( \beta \) - Beta

4. Data Analysis, Presentation and Discussion

The study sought to find out the background characteristics of the respondents i.e. Response rate, gender, age and professional qualifications in order to obtain more in-depth understanding of the research problem.

4.1 The response rate

Out of the 51 instruments issued, 36 were returned duly completed representing a response rate of 71%. This was a high response rate and was deemed good for the purposes of analysis. This high response rate was achieved by the method of instrument administration which was in this case researcher administered.

4.2 Gender of the respondents

Nineteen (52.7%) of the respondents were male while seventeen (47.3%) were female. This was attributed to the nature of the work done at Geothermal Development Company and Kenya Power. Most of the heavy tasks are done by the men. It also means the two companies have gender parity with regard to their employees.

4.3 Age of the respondents

Three (8.3%) of the respondents indicated that they are aged below 25 years, while four (11.1%), said that they are aged between 25 - 30 years, eight (22.2%) are aged between 30 – 35, 15 (41.8%) are aged between 35 - 40 years, and six (16.6%) are aged over 40 years. This indicates that both Geothermal Development Company and Kenya Power companies have a considerable representation in all the age groups. The majority of the respondents were over 35 years which implies they had substantial experience in their areas of specialization thus were in a position to give reliable information in relation to the study.

4.4 Highest level of education

The results show that 11 (30.6%) of the respondents are diploma holders, 17 (47.2%) are bachelor’s degree holders, while the rest 8 (22.2%), are masters degree holders. This means that the two companies have personnel who are adequately qualified, with majority of them having bachelor’s degrees. Thus the respondents were suitable in offering trustworthy information on buyer-supplier relationship and how it influences the performance of the supply chain.

4.5 Multilinear regression analysis results

\[ Y = 1.654 + 0.477 \times 1 + 0.402 \times 2 + 0.381 \times 3 \]

The most important factor affecting supply chain performance was the trust between the organization and the suppliers (\( \beta = 0.477 \)) followed by partnership initiatives (\( \beta = 0.402 \), and information sharing (\( \beta = 0.381 \)). The beta values for these variables 0.477, 0.402, and 0.381 respectively indicate that the dependent variable, that is, supply chain performance would change by a corresponding number of standard deviations when the respective independent variables change by one standard deviation. Therefore, the independent variables of this study are seen to influence the supply chain performance in Geothermal Development Company and Kenya Power.

5. Summary of Findings and Conclusion

The research findings were organized in-line with the objectives of the study. The specific objectives of the study were: To establish the influence of trust on supply chain performance in KP and GDC, to assess the contribution of partnership initiatives on supply chain performance in KP and GDC and to determine the influence of information sharing between the buyer and supplier on supply chain performance in KP and GDC.
5.1 How trust influences the supply chain performance in Kenya Power and GDC

It was established that trust between the organization and the supplier had a substantial effect on the supply chain performance. From both the descriptive and Multivariate regression analysis there is an influence on the dependent variable. Most of the respondents agree that trust enhances communication between the organization and suppliers.

The respondents differed on the issue that trust leads to the implementation of just in time production. They believe the incoming parts and materials are never to the specifications thus requiring inspection. On the contrary, it leads to the implementation of Vendor Managed Inventory since the organization trusts that the suppliers will honour their contractual agreements thus managing the inventory of the organization effectively. Moreover trust between the organization and the suppliers leads to company satisfaction since suppliers invest heavily in their production processes thus producing high quality products which are in-line with the customer’s specifications thus buyers satisfaction.

It was also established that trust results in collaborative demand forecasts between the organization and suppliers. This means that the trust between the organizations and their suppliers is very high and productive as it makes each party aware of the requirements needed by the other. There were differing views as to whether trust results in zero or minimum backorders. Most of the respondents in both Kenya Power and GDC agreed that trust results in minimum or zero back orders. With trust in place there will be free flow of information within the supply chain thus both partners will share product design and production, collaborative demand forecasts thus ensuring customer satisfaction.

5.2 To assess the contribution of partnership initiatives on supply chain performance

On the influence of partnership initiatives on supply chain performance a large number of respondents from both GDC and Kenya Power were emphatic on the positive impact of partnerships on supply chain performance. A good number of respondents indicated that the partnership initiatives reduce risks in product introduction. Working with the supplier ensures that the product developed is according to the companies specifications thus facilitate higher take up of the product.

Most of the respondents disagree with the statement that partnership initiatives lead to a reduction in the product design cycle time. This is attributed to the fact that GDC and KP companies are state owned thus have to adhere with Public Procurement and Disposal Act, 2005 and Public Procurement Regulations, 2006 which advocates for the competitive bidding process. However, some of the respondents were in agreement with the notion partnership initiatives reduce the product design cycle time.

Partnership initiatives result in wider diffusion of products without costly physical presence in the markets. This is because partnering involves joint efforts and collaborating with suppliers from different regions which diversifies the distribution networks which reduces the costs of product distribution. In addition, since partnering involves resource pooling any arising risks are shared among the partners.

5.3 To determine the influence of information sharing between the buyer and supplier on supply chain performance.

Most of the respondents in both the companies indicated that communicating customers’ future strategic needs throughout the entire supply chain is least important this can be attributed to the fact that procurement processes are initiated once the user department raises the need. On contacting your end users to get feedback on performance and customer service, the respondents unanimously agreed it’s an important supply chain management strategy. Free flow of information ensures efficiency in the supply chain.

Employing routine follow up procedures for customer inquiries or complaints is an important supply chain management strategy. This is important as this helps the supply management personnel to review their strategies thus improving their product and service provision. Increasing vertical information sharing using EDI technology enhances shipment performance of suppliers and greatly improves the performance of the supply chain system.

5.4 Suggestions for Further Research

The study recommends that a study be done to determine the effect of the supply chain management processes (the buyer-supplier trust, partnership initiatives, and information sharing) on the efficiency of respective departments within the company. This will show the extent to which the variables affect particular departments so that they are able to be more effective and efficient in their duties. The study also proposes a study to determine the effect of the supply chain management strategies (the buyer-supplier trust, partnership initiatives, and information sharing) on the profitability of the companies. This will show the extent to which the variables affect the entire organization.

<table>
<thead>
<tr>
<th>Major Objectives of Trust</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>It enhances communication between the organization and the suppliers</td>
<td>36</td>
<td>2</td>
<td>5</td>
<td>4.10</td>
<td>0.292</td>
</tr>
<tr>
<td>Leads to the implementation of just in time production</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>2.92</td>
<td>1.353</td>
</tr>
<tr>
<td>It leads to the adoption of vendor management of inventory</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>3.78</td>
<td>1.052</td>
</tr>
<tr>
<td>It leads to high levels of organizational satisfaction</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>3.67</td>
<td>1.071</td>
</tr>
<tr>
<td>It results in zero or minimum back orders</td>
<td>36</td>
<td>2</td>
<td>5</td>
<td>3.98</td>
<td>1.045</td>
</tr>
<tr>
<td>It results in collaborative demand forecasts between the suppliers</td>
<td>36</td>
<td>2</td>
<td>5</td>
<td>3.53</td>
<td>.805</td>
</tr>
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</table>
### Partnership Initiatives

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>It reduces risks in product introduction</td>
<td>36</td>
<td>2</td>
<td>5</td>
<td>3.95</td>
<td>1.320</td>
</tr>
<tr>
<td>It reduces the product design cycle time</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>3.32</td>
<td>.875</td>
</tr>
<tr>
<td>It results in wider diffusion of products without costly physical presence in the markets</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>4.00</td>
<td>1.963</td>
</tr>
<tr>
<td>Partnership initiatives result in risk sharing</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>3.85</td>
<td>1.220</td>
</tr>
<tr>
<td>They produce high quality and defect-free products</td>
<td>36</td>
<td>2</td>
<td>5</td>
<td>4.33</td>
<td>.872</td>
</tr>
<tr>
<td>They result in resource pooling</td>
<td>36</td>
<td>2</td>
<td>5</td>
<td>3.88</td>
<td>.604</td>
</tr>
<tr>
<td>Partnership initiatives lead to reduction in transaction and coordination costs</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>4.24</td>
<td>.784</td>
</tr>
<tr>
<td>It is a cost management strategy</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>2.89</td>
<td>.321</td>
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</table>

### Strategies in supply chain management

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involving the customers in the product/ service design</td>
<td>36</td>
<td>2</td>
<td>5</td>
<td>3.86</td>
<td>.686</td>
</tr>
<tr>
<td>Involving the customers in the company’s marketing plans</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>2.76</td>
<td>.327</td>
</tr>
</tbody>
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### Information Sharing

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating your firm’s future strategic plans to suppliers</td>
<td>36</td>
<td>2</td>
<td>5</td>
<td>3.75</td>
<td>.677</td>
</tr>
<tr>
<td>Communicating customers’ future strategic needs to the entire supply chain</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>2.84</td>
<td>.345</td>
</tr>
<tr>
<td>Contacting end-users to get feedback on performance and customer service</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>4.25</td>
<td>1.032</td>
</tr>
<tr>
<td>Employing routine follow-up procedures for customer enquiries or complaints</td>
<td>36</td>
<td>12</td>
<td>5</td>
<td>4.04</td>
<td>1.333</td>
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<tr>
<td>Use of EDI communications</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>3.46</td>
<td>0.965</td>
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### Supply chain performance

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>It delivers zero-defect products to the user departments</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>4.42</td>
<td>1.077</td>
</tr>
<tr>
<td>It responds and quickly solves problems of the user departments</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>3.88</td>
<td>2.03</td>
</tr>
<tr>
<td>It delivers products on time to the user departments</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>4.10</td>
<td>1.336</td>
</tr>
<tr>
<td>It delivers precise quantities to the user departments</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>2.94</td>
<td>.098</td>
</tr>
<tr>
<td>It has an effective feedback system</td>
<td>36</td>
<td>1</td>
<td>5</td>
<td>2.65</td>
<td>.766</td>
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### Multiple linear regression analysis model summaries

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.746</td>
<td>0.528</td>
<td>0.486</td>
<td>0.458</td>
</tr>
</tbody>
</table>

Dependent Variable: Supply Chain Performance
Predictors: (Constant), Trust, Information Sharing, Partnership Initiatives

### Multiple linear regression results

<table>
<thead>
<tr>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Co linearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.654</td>
<td>0.630</td>
<td>4.048</td>
<td>0</td>
</tr>
<tr>
<td>Trust</td>
<td>0.188</td>
<td>0.039</td>
<td>0.477</td>
<td>0.425</td>
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<td>Information Sharing</td>
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a. Dependent Variable: Supply Chain Performance

### References


