



Research Article

IMPACT OF STRATEGIC SUPPLIER PARTNERSHIP ON PRODUCT QUALITY PERFORMANCE: A STUDY OF FOOD PROCESSING INDUSTRY

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ABSTRACT

Product quality performance is becoming important for every industry for sustenance in this competitive world. Quality performance is the output of the processes the product has gone through and the resources that are used in the manufacturing of the product. These resources are basically the input raw material purchased from its suppliers. Thus supplier's role in the loop of manufacturing and generating right product becomes crucial. In the food industry, which is specifically agro based or based on perishable inputs, suppliers role become even more prominent in the whole supply chain. this study intends to understand the extent to which the product quality performance is influenced by supplier partnership at tactical scale. The results suggest that considering suppliers as the major stakeholders, involving them in the quality problem solving, arranging continuous improvement programs for suppliers are directly related to improvement in the product quality performance.

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INTRODUCTION

Supply Chain Management is about managing all the processes within the supply chain that delivers the right kind of product to the customer at right time and right place. it has become a driver of providing competitive edge to the companies. Companies are trying hard to beat the competitors on quality or price by gaining the edge in the ability to satisfy the customers. Now a days quality is seen directly associated to the all the activities through the product or the service s pass through. Thus total quality management is depending on the relationship with the major stakeholders in the supply chain, specifically the suppliers. As firms work hard to boost their competitiveness through product customization, high quality, cost reductions and speed to market, they place added emphasis on the supply chain. The fundamental to effective supply chain management is to make the suppliers associates in the firm's strategy to satisfy an ever shifting market place (Bhat, 2007). The firms must identify their internal and external supply chain sources to identify their key suppliers. It is important for companies to identify their key supplier relationships (Teller, Kotzab, Grant, & Holweg). Supplier relationships would result the improvement of the quality of the material provided. This in turn would aid improvement in the product quality performance. When the suppliers are treated as the internal members of the organisation, they are periodically called for

meetings and quality improvement programs, the sense of belongingness amongst them may contribute to the improvement in their services to the organisation. Continual improvement programs for the suppliers may add value to their services thereby contributing to the product improvement at the organisation level.

Literature Survey

The significance of strategic supplier partnership on the business performance has been evident from the past studies. Past literature pointed on the lack of buyer-supplier trust and collaboration and interpersonal relationship with the suppliers as the major factor to improve the supply chain performance.

The study (Nguegan & Mafini, 2017) aimed at studying the impact of supply chain management on the performance of the business. It further studied problems of supply chain management in the food processing industry. The problems in the supply chain management were identified in the seven basic areas of human resource management, technology, facilities, supplier relationship management, Customer relationship management, regulatory factors and logistics and transportation. With respect to the supplier relationship management problem, the author suggested that the supplier and buyer interactions can be strengthened by conducting regular meetings and workshops. The paper (Agus, Makhbul, & Hassan, 2008) examines the importance of strategic supplier partnership in supply chain management in relations with the business performance and product quality performance in the manufacturing industry. The results suggested that planning

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and goal setting with the suppliers, emphasizing on high quality suppliers, continuous improvement programs with suppliers, and jointly problem solving with suppliers are primarily related to the product quality performance and business performance.

RESEARCH METHODOLOGY

Objectives of the Study

- Tstudy the significance of strategic supplier partnership in food industry.
- To study the impact of Strategic Supplier partnership on the Product Quality performance.

Hypothesis of the Study

Ho: There is no significant relationship between Strategic Supplier Partnership and product quality performance.

Ha: Firms with high level of strategic supplier partnership practices will have high level of product quality performance.

Population and sampling technique: The population for the study was the food manufacturing and food processing firms in Nagpur region. The sampling technique used in this research is convenience sampling. 8 firms were selected for the collection of data. Data collection was done through a structured, self-administered questionnaire comprising of 37 statements related to the practices, importance, and barriers to the implementation of strategic supplier partnership practices by the food processing firms. Section A consisted of ten questions eliciting the operations parameters and their ranking in their organization in terms of importance. Section B consisted of 15 questions eliciting the views of respondents regarding strategic supplier partnership parameters. Response options used in Section B of the measured questionnaire were presented on five-point scales anchored by 1 = being least important and 5 = most important. Section C, consists of 12 questions eliciting the views of respondents about the barriers which can be responsible to implement strategic supplier partnership. Response options used in Section C of the measured questionnaire were presented on five-point scales anchored by 1 = least important and 5 = most important.

Methodology of Analysis

In this study, data were analyzed by using descriptive statistics and correlation analysis. The Statistical Package for the Social Sciences (SPSS version 23.0) was used as the statistical analysis tool. The Pearson correlation coefficient was used to assess the association between the strategic supplier partnership parameters by the food processing industry and their influence on product performance.

Data Analysis

Prioritization of the Operation Management Functions

The Table 1 shows the level of importance given by the organization to the functions of operations management. The core functions identified were Total quality management, Strategic Supplier Partnership, Inventory Management, Logistics Management, Customer Relationship Management, use of Information technology in operations activities and Procurement Management. The collected data showed that total quality management was considered the most prioritized function in food processing or food manufacturing. There is a positive association amongst the implementation of the

activities of Total quality Management and the company’s medium-to long term success (Clemens & Doluschitz, 2018). Function of inventory management was seen prime at the second level. This could be attributed to the importance given to quantity of food stocked in the inventory, large scale storage of food items and input and output of food items in the inventory (Rakesh, 2017). Strategic Supplier Partnership was prioritized at third level by these firms. This shows the relative importance of suppliers in the process of food manufacturing.

Table 1 Prioritization of Operations Management functions

Operations Management functions	Average Rating on the scale of 1 to 10	Priority level
Total quality management	1.0	I
Strategic supplier partnership	5.3	III
Inventory management	3.4	II
Logistics management	6.1	IV
Customer Relationship management	8.0	VI
Information technology	8.4	VIII
Procurement management	7.8	V
Manufacturing/ production	8.1	VII

Strategic Supplier Partnership Practices

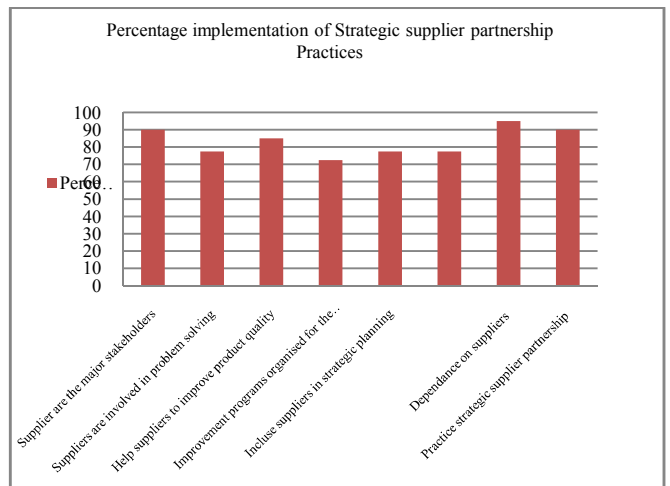


Figure 1 Percentage implementation of Strategic supplier partnership Practices

The above chart shows the implementation level of the various practices of the strategic supplier partnership. It can be seen that the dependence on the suppliers for manufacturing is considered as the most important enabler to supplier partnership. Further the consideration on the suppliers as the major stakeholders of the organization is second important function practiced by the organization. The firms have not focused on the improvement programs for its suppliers.

Supplier Rating Criterion

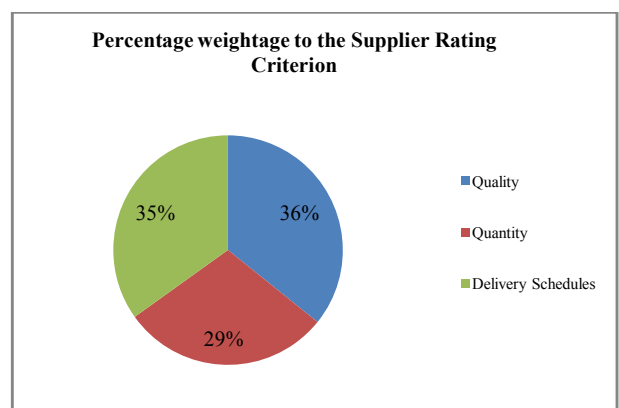


Figure 2 Percentage weightage to the Supplier Rating Criterion

Testing of Hypothesis

Table 2 Supplier partnership Practices

Variable	Supplier Partnership Practices
SSP1	Supplier are the major stakeholders
SSP2	Suppliers are involved in problem solving
SSP3	Help suppliers to improve product quality
SSP4	Improvement programs organised for the suppliers
SSP5	Include suppliers in strategic planning
SSP6	Involve suppliers in new product development activities
SSP7	Dependence on suppliers
PQP	Strategic suppliers partnership gives high product quality performance

* SSP (1 to 7) are independent variables and PQP is a dependent variable.

The extent of interaction and relationship with the suppliers depends on the qualitative parameters of trust, commitment and co-ordination. The data collected show that supplier's commitment to the organization for right quality, quantity and delivery schedules drive supplier partnership. Further trust among the supplier is also seen important. The organization also seeks co-ordination among the suppliers for the common commodities for tackling the problems of raw material requirement in cases of contingencies. Table 3 shows the correlation among the variables that define the strategic supplier partnership.

Table 3 Correlation analysis

Supplier Partnership Variable		SSP1	SSP2	SSP3	SSP4	SSP5	SSP6	SSP7	PQP
SSP1	Pearson Correlation	1	.667	.213	.445	-.076	-.076	.408	.913**
	Sig. (2-tailed)		.071	.612	.269	.858	.858	.315	.002
	N	8	8	8	8	8	8	8	8
SSP2	Pearson Correlation	.667	1	.854**	.900**	.679	.679	.856**	.453
	Sig. (2-tailed)	.071		.007	.002	.064	.064	.007	.260
	N	8	8	8	8	8	8	8	8
SSP3	Pearson Correlation	.213	.854**	1	.874**	.937**	.937**	.870**	-.078
	Sig. (2-tailed)	.612	.007		.005	.001	.001	.005	.855
	N	8	8	8	8	8	8	8	8
SSP4	Pearson Correlation	.445	.900**	.874**	1	.824*	.824*	.655	.228
	Sig. (2-tailed)	.269	.002	.005		.012	.012	.078	.588
	N	8	8	8	8	8	8	8	8
SSP5	Pearson Correlation	-.076	.679	.937**	.824*	1	1.000**	.681	-.305
	Sig. (2-tailed)	.858	.064	.001	.012		.000	.063	.463
	N	8	8	8	8	8	8	8	8
SSP6	Pearson Correlation	-.076	.679	.937**	.824*	1.000**	1	.681	-.305
	Sig. (2-tailed)	.858	.064	.001	.012	.000		.063	.463
	N	8	8	8	8	8	8	8	8
SSP7	Pearson Correlation	.408	.856**	.870**	.655	.681	.681	1	.149
	Sig. (2-tailed)	.315	.007	.005	.078	.063	.063		.725
	N	8	8	8	8	8	8	8	8
PQP	Pearson Correlation	.913**	.453	-.078	.228	-.305	-.305	.149	1
	Sig. (2-tailed)	.002	.260	.855	.588	.463	.463	.725	
	N	8	8	8	8	8	8	8	8

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Rating the suppliers curtail prejudice in decision and make it possible to consider all relevant conditions in assessing the suppliers. The suppliers are ranked based on the level of performance, like delivery, lead time, quality, price etc. The above table show that the percentage weightage given by the organization to the vendor rating criterion of quality quantity and delivery schedules. It can be seen that quality is the prime criteria followed by quantity supplied further followed by the delivery schedules.

Qualitative Parameters Important in Supplier Selection

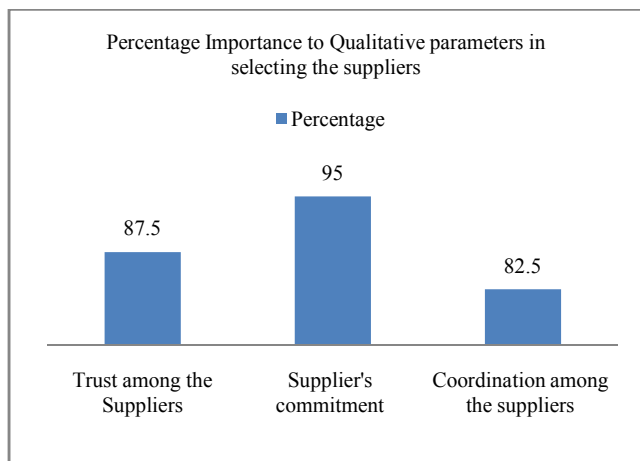


Figure 3 Percentage Importance to Qualitative parameters in selecting the suppliers

The calculations show that, for variable 1 and variable 8, the p value is 0.002 which is less than the significance level of 0.05. Hence in this case the null hypothesis has to be rejected. Hence it can be concluded that there is a statistically significant correlation between considering suppliers as the major stakeholders and the supplier partnership improving the product quality performance. The correlation coefficient is 0.913 indicates strong positive correlation between the two variables. With respect to the other variables, the significance level is more than 0.05. Thus it can be concluded that there is no statistically significant correlation between the independent variables and the dependent variable. That means, increases or decreases in one variable do not significantly relate to increases or decreases in product quality performance.

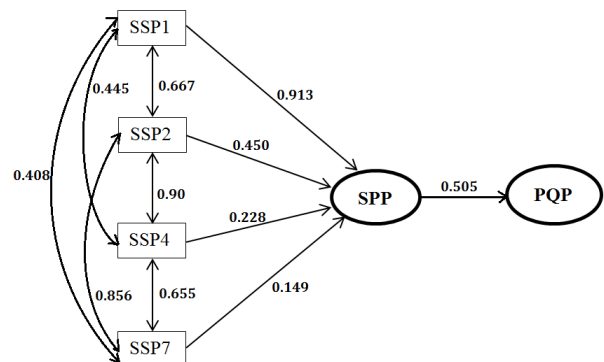


Figure 4 The structural model showing the structural linkage between strategic supplier partnership and product quality performance:

CONCLUSION

This research aimed at studying the significance of strategic supplier partnership in food industry. It can be concluded that the food processing firms have an emphasis on its supplier's as major stakeholders.

The firms involve the suppliers in problem solving. Further They help the suppliers to improve product quality they provide to the organization. They involve the suppliers in strategic planning of the organization, i.e in the objectives setting for the organization. The firms also involve the suppliers in new product development activities. Suppliers being major contributors to the firm's performance, the second objective of this study were to study the impact of Strategic Supplier partnership on the Product Quality performance. It was evidently seen that considering the suppliers as the major stakeholders of the firms, involving the suppliers in improving the product quality and organizing improvement programs for them had a positive impact on the product quality performance.

Bibliography

1. Agus, A., Makhbul, Z., & Hassan, Z. (2008). The Importance of Strategic Supplier Partnership in Supply Chain Management in enhancing Product Quality Performance and Business Performance. *Self-Assessment & Quality Awards*, (pp. 1-8).
2. Bhat, K. (2007). Relevance of Supply Chain Management to TQM. In K. S. Bhat, *Essentials of Logistics and Supply Chain Management*. Himalaya.
3. Clemens, M., & Doluschitz, R. (2018). Total Quality Management in the Food industry- Current Situation and Potential in Germany. *Applied Studies in Agribusiness and Commerce*, 83-87.
4. Nguean, C. A., & Mafini, C. (2017, November 20). Supply chain management problems in the for business performance food processing industry: Implications. *Acta Commercii - Independent Research Journal in the Management Sciences*, 1-15.
5. Rakesh, K. (2017). Supply chain & inventory management in food industry: A case study. ~38~ *International Journal of Statistics and Applied Mathematics*, 2(4), 38-42.
6. Teller, C., Kotzab, H., Grant, D., & Holweg, C. (n.d.). The Importance of Key Supplier Relationship Management in Supply Chains. *International Journal of Retail and Distribution Management*, 44(2), 1-16.

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