Coordinated Marketing Strategies in Supply Chain and its Impact on Organizational Performance (Case Study: Saipa Parts Manufacturing Companies)

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Abstract
Supply chain management and coordination of marketing strategies therewith, as one of the most challenging issues of profit organizations, involve a wide range of corporate activities directly affecting continuance and expansion of organization’s activities and underlying the corporate social popularity. Present research examines the effect that coordination of marketing strategies in supply chain may have on organizational performance in Saipa automobile manufacturing companies. The required data, based on the research model, was collected through the questionnaire distributed among the managers and experts of the understudy companies. For data analysis and test the hypothesized relationship between the variables, multivariate regression and structural equation modeling (path analysis) were used, assisted by SPSS and LISREL software, respectively. Consulting the university professors and the experts, content validity of the questionnaire was verified and its construct validity was confirmed using factor analysis. The questionnaire reliability was assessed using Cronbach’s alpha and the obtained alpha coefficient (i.e. 0.885) indicated high internal consistency of this data collection tool. The results (at 95 percent confidence) suggested a positive and significant association between coordination of marketing strategies and supply chain performance, between supply chain performance and marketing performance, and between marketing performance and financial performance of Saipa parts manufacturers. The results, however, did not support presence of a significant relationship between supply chain performance and financial performance.

Keywords: supply chain management, coordination of marketing strategies, performance.
Introduction:

In today’s competitive world, considering the characteristics of the new manufacturing environments and the nature of customers, the old production management practices which lack the necessary process integration are no longer efficient, since modern enterprises need to maintain integration throughout their production process, from raw materials through to final consumption (of goods). The business environment of today is becoming more and more competition oriented accompanied with uncertainty in working environment. In dealing with the competition and uncertainty challenges, evolution in innovation is considered crucial (Mohammad et al, 2015). Supply chain is among the new topics in the modern management systems, which is meant to optimize the entire supply chain activities and plays a key role in competitive advantage of organization (Yang, 2009). Therefore, the organizations would achieve competitive advantage that, relying on a well-managed coordination and cooperation of its supply chain partners, succeed in minimizing the cost and maximizing the value for the whole supply chain (Govindan, 2010). The importance of efficient supply chain management has become more and more evident in recent years. The present day businesses have shown simultaneous interest in the role of supply chain management in creating and maintaining the strategic competitive advantage through the customer value added (CVA) and satisfaction and business profitability (Mentzer, 2001). Many scholars consider marketing strategies a key driver of efficient and effective supply chain by reducing the response time in meeting the customer needs, and enabling developed cooperation and coordination. Thus, a focus on marketing strategies and their coordination and consistency can greatly contribute to improvement of organization (Li and Lin, 2006). Supply chain networks focus on promotion of market information as well as developed supply chain performance. Yet, while recent studies have concentrated round the benefits and advantages associated to the increasing activities of organizations for improvement of their supply chain (Zhou and Benton, 2007), few studies have so far addressed the particular effect of marketing strategies on supply chain performance. With speeding up of the production process following introduction of the new production patterns has led to faster, compatible, and well-corresponding supply chains in meeting the needs of the whole supply chain, where companies have to align their operation and processes with their business partners in order to achieve the advanced-level of corporate performance (Jayaram and Tan, 2010). As a result of these changes, companies move further towards an activity-based and dynamic integration as they become increasingly aware about importance of the movement in this direction and their adaptation with the changes as the most significant source of competitive advantage (Sisk, 2001).

In general, many authors have emphasized on significance of marketing activities in supply chain for creating competitive advantage in different ways, including through better understanding of market trends and customer needs, new product ideas, and new ideas for improving the production methods and reducing the production cycle time (Mentzer, 2004). Investigating the causal relationships between marketing strategies and identifying their effects on organizational performance can lead to discovery of empirical rules and patterns, or detection of some inadequacies in coordination between these
strategies and supply chain and their subsequent correction and improvement (see, for example, Green Jr. et al, 2012; Wagner et al, 2012; Leo et al, 2010; Koçoğlu et al, 2011). This research was conducted to find out whether and to what extent coordination of marketing strategies in supply chain affects performance of Saipa Parts Manufacturing companies. Supply chain and its management, in fact, is generator of new meanings for performance enhancement and success and in practice, too, is a strategic approach to creating coordination for marketing strategies, given the new condition of the business environment.

**Literature review:**

**Supply chain management (SCM)**

Along improvements in production capabilities and their direct role in organization growth, industry managers realized that in the long run the reliance on supply chain alone was not enough and they needed to develop a mechanism for management of their organization. They needed to engage in managing the network of all factories and firms as the direct or indirect suppliers of their organization inputs, as well as the network of the companies related to product delivery and providing after-sales-services to the customer. It was with such reorientations that “supply chain integration” and “supply chain management” approaches emerged as the supplement (Chopra and Meindle, 2004). Supply chain is a chain that includes all related activities to flow of goods and transformation of materials, from procurement of materials through to delivery of final goods to consumer. In the product flow, two other flows are involved: information flow and flow of financial resources or cash flow (Anthony et al, 2010). In addition, supply chain management by administration of a multilevel inventory regulates and adjusts the inventory level in multiple locations and involves special treatment of information and materials coordinated among several companies (Govindan, 2010: 8). Generally speaking, activities of supply chain management are divided into two groups:

1. Main activities: input logistics, production operation, output logistics, marketing and sales, after-sales-service;
2. Support activities: organizational infrastructures (accounting, finance, and management), human resources management (HRM), research and development (R&D), purchase and procurement (Shafizadeh, 2006: 12).

**Marketing strategies and the role of coordination**

Marketing strategy is primarily focused proper and coordinated allocation of marketing activities and resources for accomplishment of business operational objectives in terms of a particular product market. Hence, the main issue concerns marketing strategy domain, that is, identification of specific target markets for a product family or a particular product and then, production of the specified product based on the marketing mix according to the potential customer needs and wishes in that target market and finally, creating competitive advantage and synergy (Ducker, 2010). Marketing strategies can generally be considered as the link between corporate-level strategy and operational
strategies, and are closely related to competitive strategies, since they specify a company’s product differentiation and position in the target market relative to competitors. Central to marketing strategies is the product target marketing, and management hopes, utilizing the 4Ps and special marketing tools and techniques, to succeed in achieving the corporate long-term goals and creating the desired competitive advantage in the target market (Kotler and Armstrong, 2001).

Marketing strategy is composed of three major components: (1) Market identification and selection; (2) Market entry strategies; & (3) Marketing-mix strategies (Rodriguez, 2011).

Performance

Measurement of performance or achievement of new businesses is always poses special challenges. There is a wide variety of definitions and measures for the corporate performance or achievement. Business performance can be measured based on different levels of analysis. Scholars normally make a distinction between objective and subjective performance measures or indicators (Mueller et al, 2001: 7). Organizational performance actually refers to business performance both in financial and non-financial areas. Here, the performance indicator of interest for measurement of business performance is a multi-component construct which is developed for customer-orientation, market share, competitive strategies, return on investment, sales growth (Mueller et al, 2001: 8). In this study, performance is measured in two respects of financial performance and marketing performance. Financial performance is focused on enterprise profitability and capability of generating return on investment and sales relative to the industry average, and marketing performance indicates enterprise ability to produce and sell relative the industry average (Green Jr. et al, 2012).

Research model:

The research conceptual model, as represented in figure 1, is set up based on prior empirical research and the theoretical background.

![Figure 1 The conceptual model](image-url)

Research hypotheses:

Based on the research purpose and the research question, the following propositions are made:
1. Coordination of marketing strategies has positive effect on the supply chain performance of Saipa Part Manufacturing Companies.

2. The supply chain performance has positive effect on marketing performance of Saipa Part Manufacturing Companies.

3. Marketing performance has positive effect on financial performance of Saipa Part Manufacturing Companies.

4. The supply chain performance has positive effect on financial performance of Saipa Part Manufacturing Companies.

**Research methodology:**

This is an applied research conducted based on a non-experimental descriptive-correlational survey design. The research statistical population includes all managers and experts of Saipa Parts Manufacturing companies. Due to infiniteness of its population, to determine the sample size, the following formula was used:

\[ n = \frac{z_{\alpha/2} \times s^2}{d^2} \]

Calculating the preliminary sample of 30 members, the variance value 0.499 was obtained. Replacing it in the formula above gave 384 as the sample size. Next, the questionnaire was distributed to the sample managers and experts of the mentioned companies, based on the initial sample size and using convenience random sampling. In fine, of 400 distributed questionnaires, 384 were found valid and used in subsequent analyses. The required actual data was collected using the standard research questionnaire\(^1\), once its validity and reliability has been verified by consulting the experts and calculating Cronbach’s alpha, respectively. It should be noted that distribution and recollection of the research questionnaire took place during the winter of 2015-2016. The assumed relationship between the model variables was examined using multivariate or multiple regression and structural equation modeling (path analysis). Hence, the results of the data analysis regarding the proposed causality between the variables in LISREL software were expressed in terms of standard coefficient and Sig-value based on which it was decided whether to accept or reject the hypotheses.

**Structural modeling:**

At this stage, data normality test and exploratory factor analysis were performed. In the output of the first order exploratory factor analysis (KMO-Bartlett’s test), KMO = 0.879 Indicates adequacy of the understudy sample. In diagram 1 and 2, the model is analyzed in term of standard estimation (standard coefficients) and significance coefficients.

\(^1\) It was made use of the questionnaire developed by Green Jr. and colleagues (2012) with 25 query items graded on a 5-point Likert scale ranging from absolutely disagree with to absolutely agree with
(significance number).

Diagram 1 – Structural equation modeling (standard estimation)

Diagram 2 – Structural equation modeling (significance number)
The obtained values from the software output for the model goodness of fit test indicate that the research conceptual model is fairly fit and the relationships between the variables have been logically established by the research conceptual framework.

Table 1 – The model goodness of fit indices

<table>
<thead>
<tr>
<th>Fit index</th>
<th>Macro</th>
<th>Standard values</th>
<th>Estimated values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root mean square error of approximation</td>
<td>RMSEA</td>
<td>0.05</td>
<td>0.079</td>
</tr>
<tr>
<td>Normed fit index</td>
<td>NFI</td>
<td>0.90</td>
<td>0.89</td>
</tr>
<tr>
<td>Non-normed fit index</td>
<td>NNFI</td>
<td>0.90</td>
<td>0.92</td>
</tr>
<tr>
<td>Comparative fit index</td>
<td>CFI</td>
<td>0.90</td>
<td>0.93</td>
</tr>
<tr>
<td>Root mean square residual</td>
<td>RMR</td>
<td>0.05</td>
<td>0.055</td>
</tr>
<tr>
<td>Goodness of fit (index)</td>
<td>GFI</td>
<td>0.90</td>
<td>0.85</td>
</tr>
<tr>
<td>Adjusted goodness of fit index</td>
<td>AGFI</td>
<td>0.90</td>
<td>0.82</td>
</tr>
</tbody>
</table>

As is seen in table 1, with the goodness of fit index (GFI) of 0.85, adjusted goodness of fit index (AGFI) of 0.82, root mean square error of approximation (RMSEA) of 0.079, and comparative fit index (CFI) of 0.93, they all are at a reasonably good level.

Test of hypotheses:

Table 2 summarizes the results on test of the relationships between the variables in terms of the correlation coefficients (estimated path coefficients) at 5 percent significance expressed in t-statistics based on which the hypotheses are confirmed or rejected. The obtained results from estimate of the structural model and test of hypotheses are summarized in table 2.

Table 2 – The results of the structural equation modeling (path analysis)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>St. Coeff</th>
<th>Sig-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Coordination of marketing strategies and supply chain performance</td>
<td>0.70</td>
<td>8.25</td>
<td>Accept</td>
</tr>
<tr>
<td>2</td>
<td>supply chain performance and financial performance</td>
<td>-0.07</td>
<td>- 0.55</td>
<td>Reject</td>
</tr>
<tr>
<td>3</td>
<td>supply chain performance and marketing performance</td>
<td>0.72</td>
<td>7.35</td>
<td>Accept</td>
</tr>
<tr>
<td>4</td>
<td>marketing performance and financial performance</td>
<td>0.97</td>
<td>4.46</td>
<td>Accept</td>
</tr>
</tbody>
</table>

Given the results of the structural equations, the path coefficient between Coordination of marketing strategies and supply chain performance indicates that at 0.05 significance the relationship between the two variables is significant. It follows that since the Sig-value of
this path (8.25) is greater than the standard value 1.96, this path is significant at 95 percent confidence. Thus, hypothesis 1 suggesting an association between Coordination of marketing strategies and supply chain performance is accepted.

Considering the results, the path coefficient between marketing performance and supply chain performance, indicates that at 0.05 significance the relationship between the above variables is not significant. Thus, with 95 percent confidence, it is concluded that marketing performance have not effect on supply chain performance in other word The path marketing performance and supply chain performance refers to test of hypothesis 2, and since the Sig-value of this path (-0.55) is less than the standard value 1.96, this path is significant at 95 percent confidence. Thus, hypothesis 2 suggesting an association between marketing performance and supply chain performance is rejected.

The path marketing performance and financial performance refers to test of hypothesis 3, and since the Sig-value of this path (7.35) is greater than the standard value 1.96, this path is significant at 95 percent confidence. Thus, hypothesis 3 suggesting an association between marketing performance and financial performance is accepted.

Finally, considering the results, the path coefficient between supply chain performance and financial performance, indicates that at 0.05 significance the relationship between the above variables is significant. Thus, with 95 percent confidence, it is concluded that supply chain performance have a positive effect on financial performance. In other word The path supply chain performance and financial performance refers to test of hypothesis 2, and since the Sig-value of this path (4.46) is greater than the standard value 1.96, this path is significant at 95 percent confidence. Thus, hypothesis 2 suggesting an association between supply chain performance and financial performance is accepted.

**Conclusion and suggestions:**

In the dynamic and competitive environment of today, the importance of adoption of the right strategy is no secret to any learned and knowledgeable manager, since following the path of the right competitive strategy in such environment would stabilize the organization position in the respective industry (Voola et al, 2010). Today, in the extremely competitive global environment, organizations have realized that the best value for the customer and offering the products with lowest cost, depend not only on the intra-organizational activities and processes, but also on the entire supply chain (Koçoğlu et al, 2011). This research, accordingly, investigated the likely effect that cooperation and collaboration, and the trust-based relationships activated through marketing strategies, may have on achieving a higher supply chain performance.

The results on test of the hypothesis (1), i.e. significant effect of marketing strategies on supply chain performance ($t = 8.25, \gamma_1 = 0.70; \text{Sig at } 0.05$), with 95 percent confidence confirms the significant effect of marketing strategies on supply chain performance. The positive path coefficient implies that the relationship between the two variables is a direct one. From the above results, it follows marketing strategies, as a
A series of activities, through integration can reduce the risk of the supply chain performance. Thus, small and medium-sized enterprises should consider and identify their key rivals given the needs of the individual and industrial customers. A producer should maintain a sensitive attitude toward his/her existing and prospective rivals and as chess player he/she should act in correspondence to their moves. This knowledge and information is crucial in development of the enterprise marketing strategies. It was also noted that supply chain management is focused on integration of supply chain activities and their corresponding information flow through improvement in the chain relationships for the purpose of achieving reliable and sustainable competitive advantage. Therefore, integration of communication and management of the market relations becomes of particular important in creation of this integration. It is obvious that the more a business relationship of quality and permanence is made possible, the greater the effectiveness of the activities will be for customer satisfaction.

The results on test of the hypothesis (2), i.e. significant effect of supply chain performance on financial performance ($t = -0.55\beta_{23} = -0.07$; Sig at 0.05), with 95 percent confidence does not support the significant effect of supply chain performance on marketing performance, given that the obtained $t$-value is smaller than 1.96. This result is consistent with those found by Green Jr. et al (2012) and Wagner et al (2012), but contradict with findings of Leo et al (2010); and Koçoğlu et al, 2011. As was noted, supply chain performance refers to a wide range of supply chain activities serving to meet the final customer needs, including product accessibility, in-time delivery, and the required inventory and capacity in supply chain for having a satisfactory performance allowing it to meet the final customer needs. Research has shown that supply chain efficiency would prevent waste of resources and improve production process. Performance measurement is crucial for companies, as it help them improve supply chain effectiveness and efficiency. Decision makers in supply chain tend to focus on developing measurement processes for performance evaluation. Managers should identify the main components of supply chain that require improvement, and by planning and implementation of manufacture stages for accomplishment of goals in routine, daily tasks to link them with each other, so as to eventually enhance the corporate financial performance.

The results on test of the hypothesis (3), i.e. significant effect of marketing performance on financial performance ($t = 4.46\beta_{34} = 0.97$; Sig at 0.05), with 95 percent confidence confirms the significant effect of marketing performance on financial performance, given that the obtained $t$-value is greater than 1.96. This result is consistent with those found by Green Jr. et al (2012); Wagner et al (2012); Leo et al (2010); and Koçoğlu et al, 2011, and contradicts with the research results of Greenley (1995); Harris (2001); Appiah Adu (1997); all of which conducted in Britain following the Slater and Narver’s (1994) method, and Grewal and Tansuhaj (2001). In implementation of an efficient supply chain, market performance plays an essential role, since knowledge of the market is taken into account in management and planning decision makings. Therefore, producers are
recommended to treat product improvement and development as a significant and top priority goal in line with improvement of their performance in most operational areas.

Finally, the results on test of the hypothesis (4), i.e. significant effect of supply chain performance on marketing performance \( t = 7.35 \beta_{24} = 0.72 \); Sig at 0.05), with 95 percent confidence confirms the significant effect of supply chain performance on marketing performance, given that the obtained t-value is greater than 1.96. This result is consistent with those found by Green Jr. et al (2012); Wagner et al (2012); Leo et al (2010); and Koçoglu et al, 2011. The positive path coefficient implies that the relationship between the two variables is a direct one. Today, coordination of intra-organizational activities is considered to play a central role in supply chain. Information sharing and management and the collection of the supply chain information systems can affect many internal decision made by different sections of supply chain. This implies the high importance of this element in supply chain management. The obtained results from this research, too, imply that market information and organization information in supply chain is crucial for performance of the enterprises. Therefore, managers should pay attention to improvement of information and knowledge process and information sharing in the organization, as well as organizational coordination.

Suggestions:

- Formulation of a mission based on customer satisfaction, coordination with suppliers;
- Establishment of appropriate communication and information networks and coordination in supply chain and enhancement of performance through reduced production time and focus on organizational productivity;
- High degree of responsiveness by quickly answering to and solving the final customer problems, and timely delivery of products to customers without any damage or defect.
References


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