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Research Report: ZLC-2009-16 Best Practices of Supply Chain Integration: Inter-organizational Collaboration Laura Angélica Torres Ruge For Full Thesis Version Please Contact: Marta Romero ZLOG Director

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Best Practices of Supply Chain Integration: Inter-organizational Collaboration

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EXECUTIVE SUMMARY

An effective supplier relationship can contribute to enhancing operations performance in measures such as quality, delivery, and costs. Within the supply chain relations context, organizational learning concepts can help companies stay competitive and deal with rapid changes in markets and technologies. The correct application of these concepts can assist organizations, for example, in embracing new information technology capabilities to support their operations.

MC Manufacturer is a multi-billion dollar company that has been growing organically and has become a worldwide leader in the heavy machinery industry. The company has high quality and standardized production for all its products and services. MC Manufacturer has also been a pioneer in recognizing the importance of collaboration in the supply chain, for which it has established a Supplier Development Department. The company considers that the key factor for current and future success is their relationships with their partners and how these relations improve performance across the supply chain.

Methodology: This research studies the relationship of MC Manufacturer with its suppliers in order to assess the intra- and inter-organizational learning framework within which it operates. The framework herein developed and analyzed is based on the organizational learning constructs found in the literature, combined with case study, survey, and secondary data empirical methodologies. The rules for applying these methodological tools have been rigorously observed in the process of the construction of this study.

Some authors have defined constructs and procedures to better understand how organizations learn and how they might be guided to learn more effectively. On the one hand this study evaluates the intra-organizational framework from the point of view of Absorptive Capacity (AC), which is *the ability of a firm to exploit, evaluate and utilize external knowledge and apply it to commercial ends*. On the other hand, the inter-organizational framework in the supply chain context is analyzed from the Relational Absorptive Capacity (RAC) perspective, which is *the ability of a firm to recognize the value of new knowledge from a supply chain partner, assimilate it, and apply it for mutual benefit*.

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Major findings: MC Manufacturer has good organizational learning practices. These good practices include approaching all projects with a well defined six-sigma methodology, which seeks to improve the quality of process outputs by identifying and removing the causes of defects and variation in operative processes. Another effort made in this area is the establishment of a Supplier Development Department that incentivizes and follows up on the knowledge sharing that takes place with its suppliers.

In spite of the fact that Supplier Development is a new department, employees from other areas of MC Manufacturer agree that the Supplier Development Department

- is effective at finding solutions, has strong feelings of belonging to the organization, and has an environment of trust and support;
- Provides a valuable network effect for MC Manufacturer and its suppliers;
- Enriches projects, knows plenty of people within and beyond the organization, has good communication with other departments, and creates incentives for team work.

The study also detected that cultural and psychological traits contribute to organizational learning. Some of these cultural traits are

- the explanation of thoughts and actions in order to receive feedback,
- the predisposition to detect and fill gaps between what the market demands and what is currently offered,
- the commitment to implement lessons learnt.

The psychological traits found are

- the feeling of confidence when making decisions,
- commitment and leadership skills which increase with each project.

Recommendations: To further improve the organizational learning and take advantage of its benefits, the company should consider:

- Opening forums for sharing ideas with interdisciplinary teams, incentivizing the use of tools to share knowledge acquired in all types of experiences, and encouraging the use of technological portals for suppliers and knowledge networks.
- Involving suppliers in the process of idea generation for new projects on improvement performance, since the project identification stage. There is where new ideas should be jointly evaluated, taking advantage of supplier's skills and knowledge.
- Updating continuously the Supplier Development engineers about Supply Chain and industry trends, can enable the organization to gain awareness of innovative supply chain solutions.

Conclusions: Six-sigma methodology and the creation of the Supplier Development Department is a good way to combine efforts to meet the planned objectives of lead-time reduction in all its processes. Six-sigma is a key element for organizational learning. Likewise, the level of experience of the Supplier Development Department employees is essential for learning, assimilating, and recognizing new practices for the company.

From the intra-organizational perspective, this study demonstrates that knowledge in other departments has strongly increased due to the activities of the Supplier Development Department, thereby resulting in improved performance. Furthermore, from the inter-organizational perspective, suppliers appear to be satisfied with the functioning of the Supplier Development Department, not only because it has improved the overall supply chain, but also because it has facilitated the communication with MC Manufacturer through a centralized entity.