

Popular science summary: “Investigation of communities of practice in a harmonized supply chain ERP landscape”

This Master thesis is investigating how communities of practice can enhance knowledge sharing in a context of improving a harmonized Enterprise Resource Planning (ERP) system used in supply chain. A student from the faculty of production and materials engineering at Lund university (LTH) collaborated with the Global Trinity organization from Alfa Laval (Lund, Sweden) to answer the research question. The global Trinity Organization is the department in charge of delivering IT solution across the Swedish manufacturing company’s supply chain to improve the organization’s value stream. An investigation of two business units (BU) from Alfa Laval was conducted in order to compare their level of maturity regarding communities of practice, but also their supply chain ERPs. The BUs that were used are the gasketed plate heat exchanger (GPHE) and the decanter (DEC) BU.

It has been concluded in this project that CoP does improve the harmonization process and capabilities of mERPs (manufacturing ERP). Moreover, enhanced collaboration between stakeholder, and using only one mERP solution will improve the standardization of business operations leading towards a more flexible and sustainable supply chain. However, while there are some similarities across the GPHE and DEC BU regarding benefits and challenges of CoPs, there are also some differences when it comes to their CoP needs. In fact, their driver for organizing CoPs vary since they do not have the same level of technical expertise about the new D365 mERP solution. In one hand, the GPHE BU organizes efficient CoP frameworks to exchange technical knowledge in order to better identify gaps and improve their new harmonized D365 mERP capabilities. On the other hand, the DEC BU seeks to have CoPs to gain more basic knowledge about the new mERP in order to know what exact needs the DEC BU would require from the new mERP solution. As mentioned in the report, ERP implementation might fail due to poor change management or lack of quantifiable goals resulting in loss of high investment costs. Even though the Global Trinity organization has the resources to deliver IT solutions for all BUs; it is up to the BU to be ready to invest by conducting a clear plan and business case of what the new IT solution would offer them. Without a clear plan, Global Trinity will then focus more on other BUs who showed their clear interest to invest on the new D365 mERP solution as Global Trinity has a limited amount of resources. However, for CoPs to be optimal, all the stakeholders need to do more than what they are just supposed to do. In fact, it is important to constantly look for new CoP improvements that would contribute to expanding explicit and tacit knowledge across the whole organization. Hence, several recommendations were found in this thesis. Those recommendations were then ranked based on a score model by giving them a score from 1 to 5 regarding two KPIs: Benefits and implementation effort. Based on the ranking process, the recommendations have been ranked from the best recommendation to the least favorable based on the order as follows: Training program, capability forum, newsletter, Performance measure, and finally, Cross-BU CoP through leverage.

Finally, this project was a qualitative research with potential recommendations. Therefore, there must be more investigation about what the requirements are to make those solution realistic not just for Alfa Laval but any organizations. Moreover, future work should be done following this project as digitalization is a capability area that never stops improving. Therefore, companies need to constantly apply new changes in their way of collaborating to better grasp any relevant knowledge located within digital documents or individuals. Without change, a company would lose competitive edge as there are other organizations that constantly challenge themselves to improve their business operations.