ABSTRACT

Although developing and implementing information systems and information technology (IS/IT) in aftermarket logistics is not easy, it has become a necessity under current business conditions. Growing globalisation, product advancements, intensified IS/IT dependencies, and increasing transport demands due to heavy competition and regulation are all sharpening the requirements in aftermarket logistics, a dynamic area with direct importance for a considerable share of the world economy.

This thesis is motivated by a quest for a better knowledge of IT-Management, despite prevailing uncertainty and complexity. The objective is to improve the understanding of how to develop and implement IS/IT in aftermarket logistics. Collaborative practice research and interpretive case studies, coupled with in-depth access at Volvo, have resulted in several contributions.

First, this research shows that using scenario development facilitates strategic awareness. It also shows that gradual development and continuous implementation nurture learning and even innovation. Agile capabilities are needed to achieve sustainable progress in both systems development and business implementation. Further, the findings indicate that process integration takes time—often longer than the involved actors expect. Finally, organisations can align business and IS/IT through a joint formation that executes comprehendible projects according to a clear direction.

The research has implications for both strategic planning and alignment. Applying formal and comprehensive planning approaches with Strategic IS Planning (SISP) is difficult because of the range of actors involved in executing any plan. It is also difficult to thoroughly use the strategic alignment model without getting stuck in meta-activities. This contributes to existing questions on actual usage and delivered business value. Overall, the dominant characteristics of the aftermarket logistics context call for research into their implications and a search for alternative approaches.

The contributions of this thesis have resulted in considerable business value in terms of industrial effects. These include high return on investment and a user-driven development with direct adjustment capabilities that result from rapid implementations. Beyond these business values is the priceless potential for sustainable learning and innovation. Nevertheless, developing and implementing IS/IT in aftermarket logistics remains challenging. This research implies that using scenario development—along with gradual development and continuous implementation—contributes to aligning business and IS/IT. This alignment results from driving progress with comprehendible projects.

Keywords: IT-Management, development and implementation, aftermarket logistics