

Master-Thesis Engineering, Profile Business Engineering

Impact management of product changes and their strategic value



Problem statement

Increasing competition in the marketplace has forced companies to bring high-quality products to market at minimal cost and in the shortest possible time. To meet these demands, product changes are of strategic value to companies as they have the ability to add improved features and functions to an existing product, making it more responsive to customer needs. Implementing product changes enables companies to improve a product's performance and increase its attractiveness in the marketplace, taking into account time, cost, and quality parameters. However, the capabilities of a single company are not sufficient to achieve sustainable competitive advantage. To create strategic value, companies must combine their capabilities with their suppliers in the value chain to achieve a competitive advantage.

Responding to these needs, Johnson & Johnson (JNJ) has entered into a new strategic collaboration with an American company called JABIL, transferring several production sites from JNJ's subsidiary DePuy Synthes to

JABIL. Within the new business model, R&D has remained a part of JNJ's competencies, but manufacturing competencies have been transferred to JABIL.

In order to better understand the opportunities in their portfolio, JNJ aims to implement an impact management methodology for product changes in a more structured and organized way. This means that the internal issues that lead to costs and external impacts, such as regulatory requirements, are weighed against the positive impacts in the market and/or the internal increase in efficiency to understand whether a particular product change should be implemented.

Result

In order to optimize JNJ's current product change management process, a process enhancement in the form of design-to-value was implemented to provide tools for a more structured product change. In addition, a strategic value-benefit analysis tool was developed to enable JNJ to evaluate the strategic value of a product change

and make implementation decisions based on that value.

Through this research project, it was shown that there is a desire within JNJ for a more structured change process, and added value is seen in the solution. The results provided a methodology for changing a product by first assessing its strategic value and providing different tools to increase this value, thus enabling a value-oriented change management process. The benefits of implementing such a method include cost, time, quality, and communication.

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