How to be a service-oriented company when going through a technology shift

By: Markus Nilsson

Technology shifts can impose both threats and opportunities to the companies in an industry. How does a service-oriented manufacturing company survive a technology shift and use the service-strategy to its advantage?

When the contemporary technology of an industry become difficult to improve, the technology is exchanged for a new one. Technology shifts have significant consequences to the companies in the industry. Especially mature manufacturing companies who have long built their offer, business model, resources and capabilities around the contemporary technology may find it hard adjusting to the new circumstances.

The purpose of the report was to describe and analyze a mature manufacturing company's current offer and anticipate the consequences of a technology shift to the company's future offer, business model, resources and capabilities. The research was conducted as a case study of a mature manufacturing company in the transport industry undergoing the technology shift from diesel combustion to electrification, who furthermore anticipates being solution providers rather than manufacturers in the market. Empirical data was primarily semi-structured assembled through interviews with experts in the case company, but also through an interview in the ecosystem and an archive review of both company and external resources. To support the collection and analysis of the empirical data, a theoretical framework named the technology shift steering wheel was developed (see figure 1).

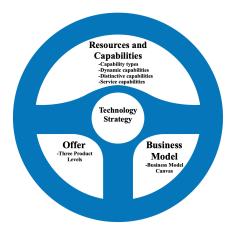


Figure 1. The technology shift steering wheel

The steering wheel consist of the technology shift (the blue frame), the technology strategy which steer the overall direction of the company, and the three perspectives of offer, business model, resources and capabilities from the purpose. The framework is anticipated to help companies understand which consequences they might encounter and help them understand both how they can survive a shift and how they can extract its full potential.

It was found that a technology shift substitutes the core technology of a company, and in response they adopt a corresponding technology strategy to acquire, manage and exploit the new technology. The company does, as a consequence, make changes their to business model to connect the new technological core to their customers' needs. They must then construct an offer around the new technology that embodies proposition. the value They furthermore need to build or possess the necessary resources and capabilities to deliver the desired business model. The consequences are implications of each other, and the technology shift steering wheel help the company steer through the shift by identifying technology consequences.