

In short!



Great idea, how will you do it? Implementing PSS

Source: Johannes Matschewsky, Marianna Lena Kambanou & Tomohiko Sakao (2017): Designing and providing integrated product-service systems – challenges, opportunities and solutions resulting from prescriptive approaches in two industrial companies, International Journal of Production Research

Due to customer pressure and growing competition, many industrial companies that previously focused on producing and selling products are now moving towards providing integrated offerings of products and services, so-called Product Service Systems (PSSs). This could bring both economic and environmental benefits, as the life of the product is prolonged and the flow of the products is better controlled with careful design. Therefore, this is a promising concept to realize Resource-Efficient and Effective Solutions. Although PSS are a promising concept, it is not easy to implement them. For a traditional manufacturing business, there are many challenges along the way. Using the companies Levor and Navitas as case studies, the researchers have explored both challenges and opportunities in the transition from producing and selling to integrating products and services.

Changing your business model to a PSS will change several things: the organisational structure, the corporate culture as well as the business incentives. To transition successfully, you need a thought-out approach. One thing researchers see as important is that the product and the service are designed jointly at an early stage, to reach the optimal combination. Another interesting issue is the impact of the changed incentive structure: performing services and parts exchange is a source of revenue in traditional product sales, but it becomes a cost when providing a fixed price tag for a bundle of products and services. This is something the company must be aware of. As the relationship between customer and provider becomes closer when working with PSSs, the value creation for both customer and provider must also be considered.

So, what challenges did the researchers find at the two case companies? Both are manufacturers of industrial equipment and have started their PSS journey, but Levor have come further. The product is still getting too much focus, and people in the organisation are finding it hard to change from thinking about engineering product design to thinking about creating combined solutions and customer value. This mindset is also maintained by the fact that the product and service design processes lack full integration. As one of the interviewees said about the two departments: “We are only in parallel, not together. And once we come together, it is already too late”. The information the company has about its solutions is also often centred on the product, and information in general is not shared but “kept in silos”, as expressed in one interview.

Luckily, there were also solutions to be found. PSS design methods developed by in academia were introduced to the case companies. Adopting a life-cycle cost perspective meant that the company could better help assess where value is created for customers and employees along the value chain, thus showing opportunities for better efficiency and capture of value. This also showed that there was a need to integrate the budgets between departments and life-cycle stages. Cross-disciplinary meetings made it evident that the “Product development unit and Service still sit in separate kingdoms”, and that having a comprehensive overview of the design processes was difficult. Mapping the actors and appointing a PSS facilitator to integrate them can be helpful. It is a huge step for a manufacturer to go from the traditional producing products to delivering solutions and there will be many bumps in the road, but applying or testing supporting methods can make the way smoother.