



5 challenges when servitizing your business

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5 challenges when servitizing your business



Adding engineering services to existing products has become imperative for many manufacturers to maintaining their competitive advantage. The resulting offerings, and integrated solution of a product and a service element, may reach from full-scope maintenance contracts, over pay-per-performance agreements, to performance guarantees. While this strategy promises high gains, its implementation is often challenging. Developing a new engineering service as an integrated solution with existing or new products is

particularly pathed with various challenges that can cause the resulting offering to fail, or never to reach the market.

In our research, we have conducted a benchmark study with multiple international manufacturers to understand: What are the challenges when developing integrated solutions? We have identified five challenges of which to be aware when developing integrated solutions.

Challenge 1: Organization

Developing the integrated solution within the context of a larger organizational setting represents the core challenge. While supporting the team with the mandate of the project execution on the one side, the organizational dynamism can add further challenges on the other side. Dynamic changes of organizational priorities, management strategies or the development process with its optimization for product characteristics ignoring the service part of the integrated solution can represent major challenges. Similarly, organizational identity – often based on a legacy of engineering-based product development – requires a transition towards services, which may stir up resistance to avoid a loss of the manufacturing core. Internal forces supporting and resisting the transition towards a service culture can lead to strong organizational dynamics challenging the development project of the integrated solution.

Challenge 2: Environment

Volatile and uncertain markets are a second challenge of manufacturers developing integrated solutions. While the externalities often pose the reason for the project initiation, balancing the scoping and adaptation to the actual needs of the customer with consistency in project execution can be challenging. This is specifically true in a setting of changing customer needs, the emergence of new, local competitors in diverse markets, and changes in regional regulations. These externalities challenge the manufacturer to keep a balance between the ongoing development activities, and continuous monitoring and adjustment. Lastly, the long contracting periods of integrated solutions (e.g. 15 years) challenge manufacturers by requiring them to predict future scenarios without sufficient knowledge.

Challenge 3: Technical

While the development of products can already be challenging, designing a service on top of them creates further technical challenges. Including a detailed prognosis about the product operations phase into the development process poses strong modelling and forecasting difficulties. The amount of data faced, the forecasting accuracy required, and the modelling techniques needed to reach the accuracy, represent novel territory for many manufacturers, which necessitates fast learning. In addition, the ability to service

the product during its unknown operation creates high complexity and can only truly be evaluated, once tested “in the field”.

Challenge 4: Resources

Developing integrated solutions that contain a product and service element simultaneously requires a vast set of skills and knowledge of the development team. Availability of team members and attraction of specialized skills for the project is a difficult task. If employees are simultaneously staffed on multiple projects, emergencies in one development project take precious resources away from other projects. Moreover, the development of integrated solutions requires novel skills (e.g. modelling and forecasting of the product performance), which are often rare or non-existent in the focal organization.

Challenge 5: Relationships

If the required skills are not available in-house, organizations often enter in co-development with suppliers, customers, distributors, or universities. While being able to source external skills for the development of the integrated solution, the project team may also experience challenges in the relationship with the cooperation partner. Lack of delivered quality, delay in deliveries, hidden agendas are only a few examples which can challenge the project.



In a nutshell: While the provision of integrated solutions promises high gains, their development is non-trivial. Our analysis shows five major challenges arising from the areas of organization, environment, technical, resources, and relationships. The figure above summarizes the challenges and gives a few additional examples. The awareness of these five challenges sensitizes managers for potential loci of obstacles during the development of integrated solutions.

To gain more insights into the learnings from the benchmark study underlying this article please refer to our **benchmark study**. If you want to learn more about the challenges of servitization and management strategies to overcome them, please follow our publications (Tabea and Melanie), or engage in research collaborations with us.

About the authors

Tabea Ramírez Hernández is a PhD candidate in the Innovation Division, Department of Management, Technical University of Denmark (DTU). Her PhD research focuses on uncertainty management in the development process of integrated solutions (compound offerings of products and services). She has been actively engaged in collaborating with a number of international manufacturers across several industry sectors through analyzing and supporting their path towards servitization.

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