

Module 15

Digital Transformation and Innovation for Enabling Reconfigurable Production Systems

Welcome to Module 15, Digital Transformation and Innovation for Enabling Reconfigurable Production Systems. This module consists of 5 parts as follows:

1. Manufacturing Digital Transformation
2. Modapto under the lens of Digital Transformation
3. Innovations in Manufacturing Business Models
4. Assessment Questionnaire for Reconfigurable Manufacturing Maturity of SMEs
- 5. Business Models of MODAPTO**
- 6. References – Extra Reading Material**

Each has its own set of slides and accompanying explanations that you can read in parallel. To do so in this series of accompanying texts the Reference Slide is presented in line with the supportive text.

14.5. Business Models of MODAPTO

[Slide #4]

The St. Gallen Business Model Navigator is a framework and methodology for understanding, analyzing, and innovating on a company's business model. Developed by researchers at the University of St. Gallen, it is a tool-set for developing new business models and is especially known for its focus on a core set of business model patterns.

The core of the St. Gallen Business Model Navigator is the idea that the vast majority of business model innovations are not entirely new creations, but rather the result of a recombination of existing, successful business model patterns. The framework identifies and categorizes **55 of these business model patterns**, providing a systematic way for companies to analyze their own business model and then "confront" it with these patterns to generate new ideas.

In MODAPTO the St. Gallen Business Model Navigator can be utilized to identify relevant business model archetypes that align with Modapto's capabilities and value proposition in modular automation. The existing patterns were evaluated based on their ability to support:

- Value creation via modularization
- Scalable delivery through digital enablement
- Value capture through services and recurring revenue models

[Slide #5]

The indicative Business Models that can be utilized in a MODAPTO like solution can be thus clustered in 4 main consolidated BMs as well as 1 complementary. In particular the vehicle (company) that can offer MODAPTO like service can do so as (a) a Solution provider or Integrator, (b) offer Digitalization services, (c) contract under performance-based terms and lastly (d) offer MODAPTO under an open source / open use scheme. The complementary BM is the derivative of the research conducted and can assist in educational terms.

[Slide #6]

Indicatively under the Open Source BM, MODAPTO (as a company) could assist Manufacturers in the course of the application of the solution in their own factories by assisting in the initial phases of deployment where there is inevitable the need for customization of the base offering to be tailored to their own factories.

[Slide #7]

Extending the previous MODAPTO could also undertake the whole process both at the design as well as the implementation phase.

[Slide #8]

As MODAPTO on its own is a modular system and not all factories may need the full version, another way is to de-compose the offerings (services) and the different factories can opt to use parts of it.

[Slide #9]

Further more as MODAPTO is Open Source, other third parties can develop their own services which can be introduced in MODAPTO and as such it can be offered respectively.

14.6 References – Extra Reading Material

These indicative reference materials are meant to extend the set of slides and accompanying documents for the Digital Transformation and Innovation for Enabling Reconfigurable Production Systems Module.