

TNO-ESI & Fontys MBSE cooperation

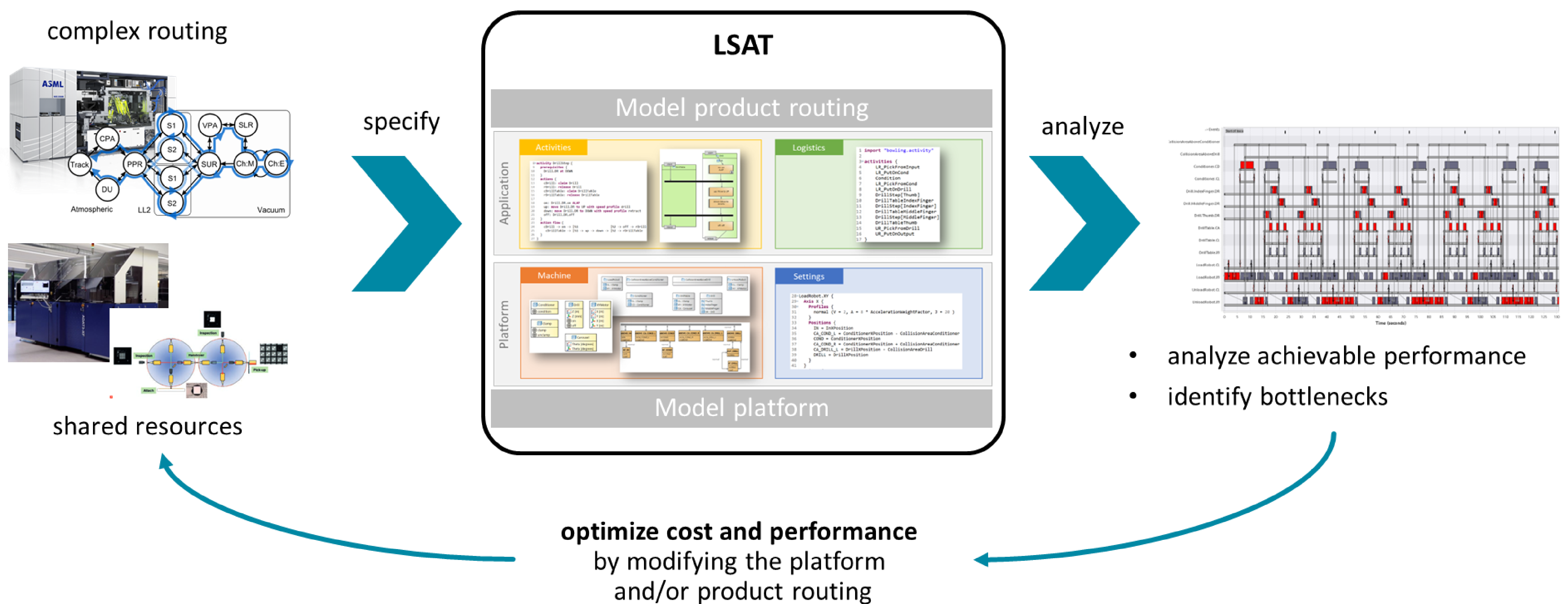
In the domain of Flexible Manufacturing Systems

Authors

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Conclusion

In this cooperation we are looking at the application of the TNO-ESI tool LSAT for performance monitoring in standard production processes, as can be done on Fontys' Festo set up and in the potentials of the LSAT tooling for defining and maintaining Digital Product Passports for products.



Digital Product Passport

The Digital Product Passport (DPP) is the way how the European make industry is standardizing the data exchange. Digital Product Passports are key in a return flow

(<https://data.europa.eu/en/news-events/news/eus-digital-product-passport-advancing-transparency-and-sustainability>).

We want to investigate the extent to which the LSAT method, with its tool, can be applied in the manufacturing industry (the Fontys Festo tool) with the aim of generating parts for a DPP. Ideally, DPP data should come from a company's ERP, MES or PLM systems.

Plan

Phase 1 – Implementation and performance analysis – The assignment is to model the Festo system at Strijp TQ using the LSAT tool. The model to be created must make it possible to perform problem analysis on the system.

Phase 2 – Generating DPP - In the second phase of the assignment, the emphasis is on generating data from the LSAT model (of the Festo system) in order to determine whether it can be used to efficiently and effectively record parts of a Digital Product Passport (of the product from the Festo system, or an equivalent).

LSAT Industrial and academic ecosystem

Wafer scanner wafer handling, ASML



Die bonders, Nexperia-Itec



xCPS, TU/e



Partners:



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