SUMMARY

The master thesis "ERP and Advanced Planning and Scheduling System Integration in Standard AS" is one part of the general development and digitalisation project of Standard AS. It includes production improvement to simplify the system, speed up data management, ensure to meet deadlines and to increase turnover as well as production throughput capacity via more effective production planning and scheduling.

Master student Kristiin Bauer brought out the difficulties and possibilities, what should be carried out while integrating an advanced planning and scheduling system Preactor with an ERP system called SAF. Whole work is based on an Estonian furniture production company Standard AS, who have spent some years for searching and implementing a coherent and efficient planning system for its three production plants.

While writing this master thesis, the author worked out the capabilities and possibilities to integrate the considered ERP and APS system and brought out many advantages and disadvantages of the process results. In addition, worked through the general structure for data exchange by using IDEF1x method and made a task description and comparison of production planning in Standard AS at different points in time. The author managed a case study using DFD method about the new approach and described what could change after successful integration of SAF and Preactor. Finally yet importantly, the financial estimation of the new approach was outlined.

Integration of SAF, i.e. ERP and. Preactor, i.e. APS will allow:

- To plan production at least three months ahead;
- To plan possible deadlines and quantities for potential incoming orders;
- To prognosis the possible delivery of outsourced products and raw materials;
- To find the bottlenecks that limit consistent production flow;
- To allow quick rescheduling;
- To plan the time and resources;
- To find out solutions to untimely delivery of products.

In 2020, Standard AS have a possibility to give a push to the development process part in the SAF system and integrate it with Preactor Scheduling. This change will help to save time while providing flexibility in updating ever-changing priorities and refreshing production plans.