



OPTIMAPS – A SUCCESS STORY IN MANUFACTURING OPTIMIZATION



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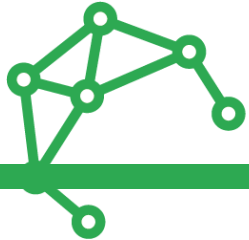


DIH4CPS is funded by the European
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- **Main objective**
To create the optimal production schedule for dynamically changing orders with modeling and optimizing functionality.
- **Team and respective roles**

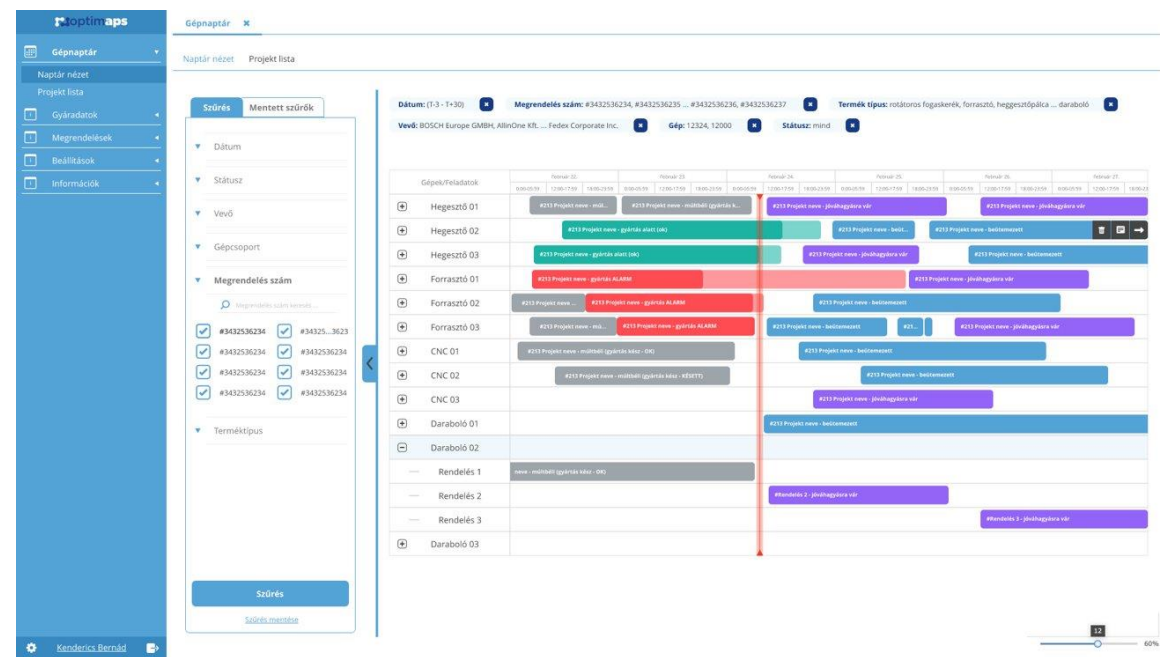


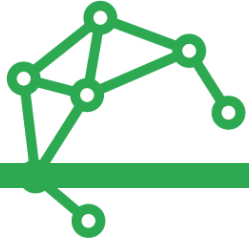
4S-2000	End-user	The primary activities include the production of machinery and parts, metalworking, designing and producing manufacturing equipment.
DSS Consulting	ISV	Has been specializing on Business Intelligence systems, implementing analytical solutions and customized applications for more than 20 years.
Innomine	DIH	A digital innovation hub, focusing on digital transformation, smart manufacturing, Industry40 and related fields (in HPC, cloud, AI, Blockchain and other technologies).



OPTIMAPS - SOLUTION BEING DEVELOPED

- Built-in **linear program solver**
- The solver can calculate with:
 - Multiple **machines** and **products**,
 - Several **productions steps** and
 - **Special tool** assignments
 - Several heuristics (ASAP, ALAP etc.)
- Integration with ERP and MES
- Intuitive UI to help the operator with to overview and interact if needed
- Integration with sensors to ensure up-to-date production data from the shopfloor

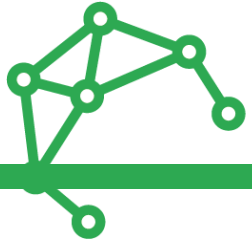




- Initially set up project and budget plan
- Weekly meetings within the experiment
- Monthly meetings with consortium partners
- Code camps and separate technological knowledge transfers

- Constant technological and execution support
 - From supporting DIH and academic partners
- Close cooperation with European academic and for-profit project members
 - Opportunity to initiate new projects





BENEFITS AND IMPACTS

- **End user:**

Cost reduction, increased efficiency

Manufacturing planning and optimization

Optimal production schedule

Paperless workflow

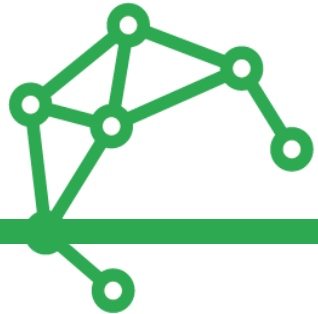
- **ISV:**

Product to be commercialized

Technological support

Help in finding potential customers + projects





THANK YOU FOR YOUR ATTENTION

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