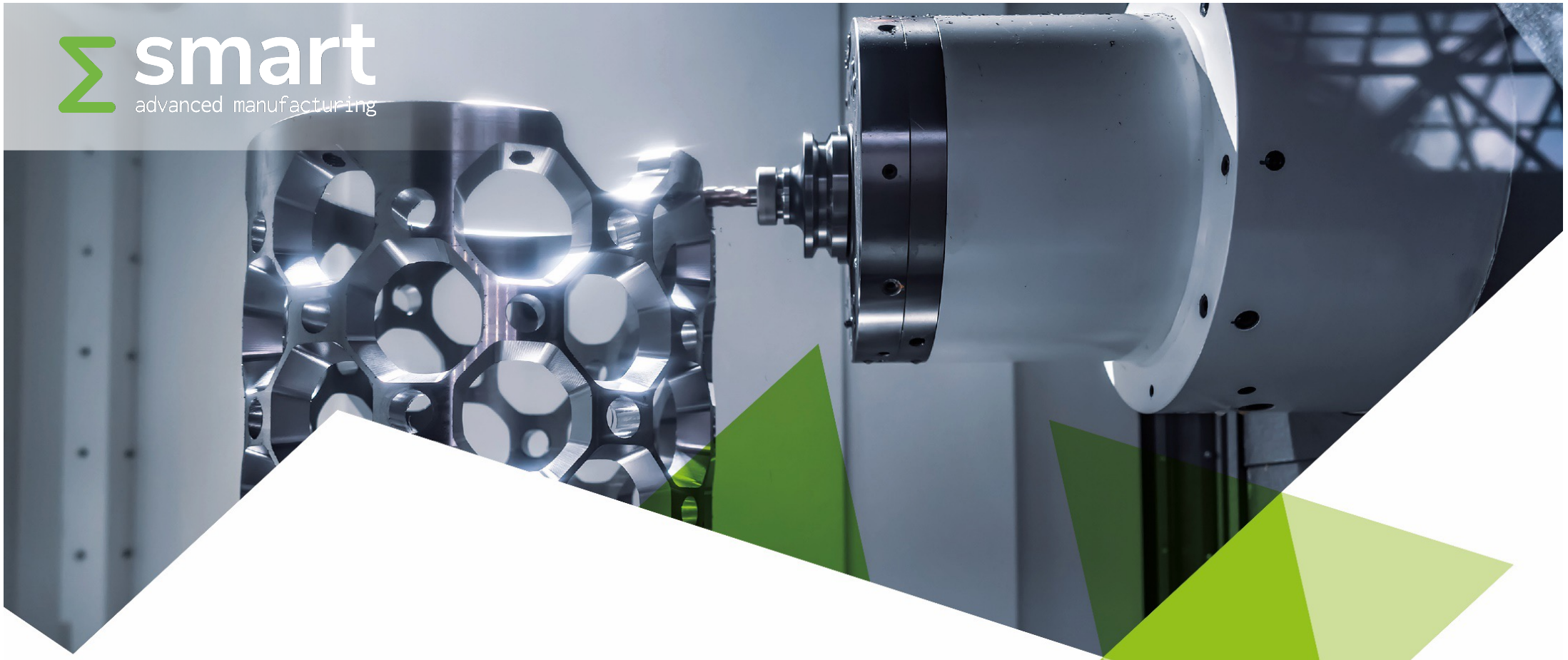


SPARK

Smart Production Analysis Reporting Knowledge

smart
advanced manufacturing

smart
advanced manufacturing

ORGANISATION PROFILE

Pannon Business Network Assotiation – Advanced Manufacturing Laboratory (am-LAB)
18 Economist, 12 Development Engineer

Pannon Business Network is a center for applied research and training to catalyze added value manufacturing liaising industry and academia, enabling digital, sustainable, resilient business transformation

- 500+ EU partner
- 101 European research&cooperation projects
- 500m2 laboratory space
- 50+ digital applications used
- 1000+ Citizens, SMEstrained on digitalization annually

Products/Services/Technical areas and R&D project expertise.

- Physical Teaching and Learning Factory Ecosytem
  - Software development
  - Mixed reallity applications
  - MR/AI solutions in manufacuring
  - Digital Twin
- Prototype development
- Collaborative Robotics
- CGI Animations (Computer-generated imagery)

PBN
advanced management

FACTORY OF THE FUTURE

am-LAB
advanced manufacturing

smart
advanced manufacturing

PROPOSAL INTRODUCTION (I)

Vision: Unique application development based on PBN's Physical Teaching and Learning Factory Ecosystem, which is provide financial information according to the real time manufacturing data. The system supports the management in decision making. (rapid financial analysis, reports, real time self cost management in manufacturing)

Motivation: All the avaible manufacturing systems and solutions are approaching only from techonolgycal side.
The production of a product involves complex financial and manufacturing processes, and in many cases, business owners can only determine the actual cost of their manufactured product through estimation.
The am-LAB TLF environment allows for unique developments under real manufacturing conditions, which can then be adapted for industry use.

Content: Identifying and integrating raw production data with Data Mining methodologies. Harmonisation of manufacturing and costs based on fictive production environment. Decision supporting with management interface with crossplatform application.

PROPOSAL INTRODUCTION (II)

Expected outcome:

1. Development of a controlling module related to TLF, which provides financial information based on data generated during production, creating opportunities for more efficient management and corporate decision-making.
2. With the module, companies can better understand production processes and financial impacts, aiding in optimization and cost reduction. Therefore, it can help maximize efficiency, minimize costs, and increase corporate profitability.
3. To operate, we collect data from production and company operations, combine it with financial data (creating cost centers), and incorporate product recipes to determine the actual cost price of certain product groups.

Impacts:

Developing a model in a small and medium-sized enterprise (SME) environment that:

1. Improved financial efficiency.
2. Analyses based on detailed and real-time data, providing instant cost breakdowns.
3. Cost reduction opportunities through optimized processes.
4. Enhanced decision-making in financial and manufacturing domains.

Schedule:

Start 01.01. 2025
End date:
Project duration 24 Month,

PARTNERS

Current Consortium: list of partners already involved in the project

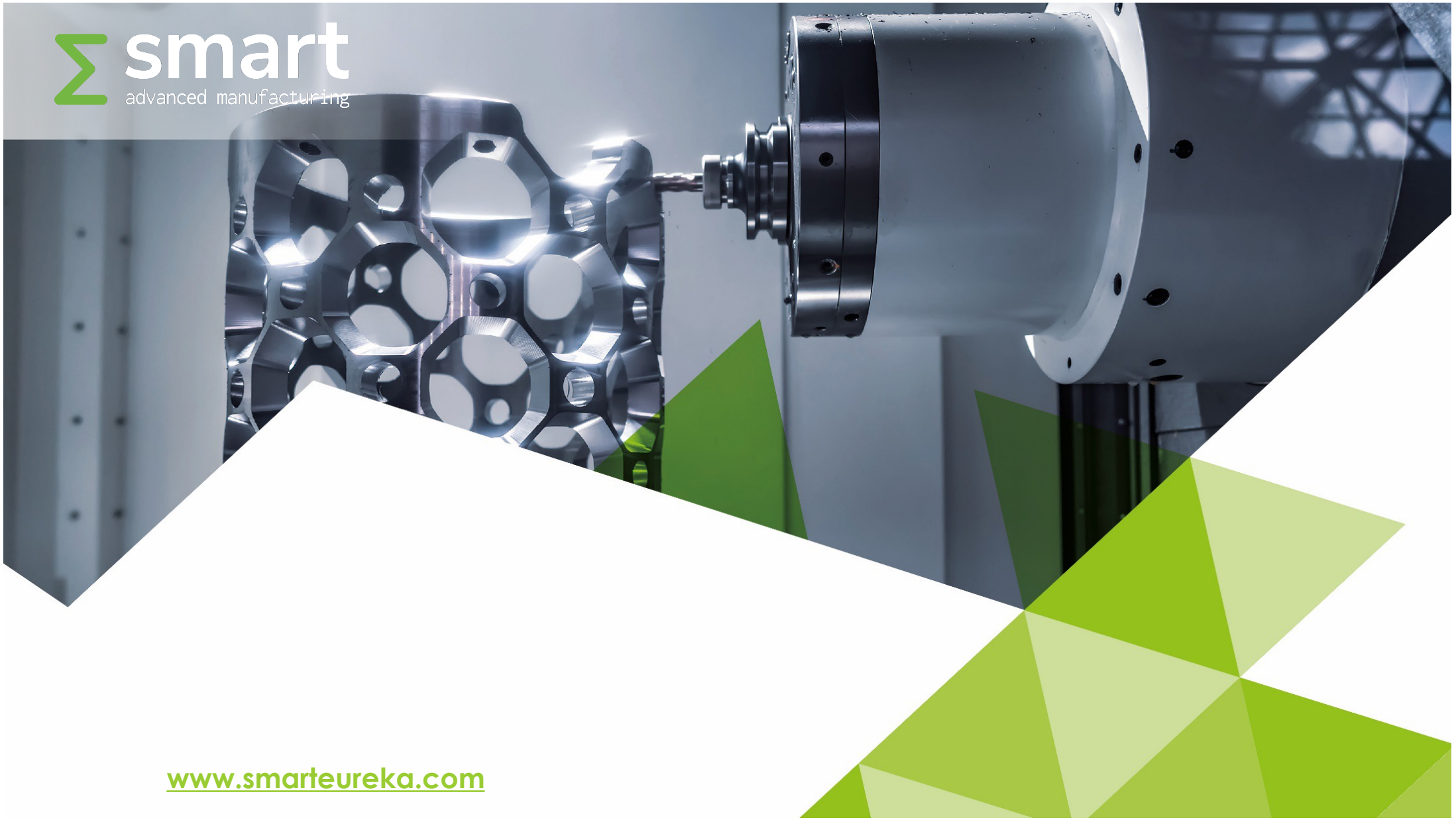
Partner search: type of partner searched and countries of origin (if necessary).
SME – End users
SME – End users
Use - Case Providers
Research institutes

smart
advanced manufacturing

CONTACT INFO

Contact info:

Krisztina Bárdos
digital@pbn.hu



www.smarteureka.com