

Vision:

The vision of Tool East is to develop an open source application for SMEs that allows them to work in tool clusters, favours competitiveness and increases their productivity. It will enable tooling clusters to reduce response times and allow the usage of a more dynamic business model at lower costs. Existing open source applications will be adapted and modified in order to meet the vision.

Objectives

- Lay the foundation for an Open Source ERP Infrastructure that can be easily implemented by novice newcomers and replicated for other SME sectors
- Develop open source Enterprise Resource Planning (ERP) applications for tool and die making enterprises by e-collaboration of small and medium-sized software enterprises (SMEs)
- Enable SMEs to participate and collaborate in dynamic business networks
- Strengthen competition and competitiveness of Eastern European SMEs
- Support the tool workshops and die making companies with integrated applications using open source technology
- Connect Customer Relationship Management (CRM) functionalities within ERP applications
- Bring interoperable information technologies to SMEs in the NAS states, enabling industrial clusters in these areas to conduct e-commerce to deal with far-Eastern wage competition on the model that is successfully protecting jobs in many western European industrial clusters

Currently Eastern European SMEs do not have the resources to implement existing complex ERP applications. But in order to meet increasing customer demands they have to become aware of their order, stock and material situation with a suitable ERP application.

The tool and die making industry is involved in the design and production of a wide range of usually customized goods and is hence a highly complex and labour-intensive industry branch. Furthermore, it is an order based business dependent on the technical and technological innovations, solutions and tools. Therefore tool and die making workshops combine innovation and knowledge-intensive processes with the abilities and skills. Since the used technologies range from traditional manufacturing technologies to more innovative manufacturing technologies it can occur that a particular tool part cannot be produced by using the available technologies in one company. Consequently there is a need for sharing capacities and knowledge resources. Toolmakers have to constantly evolve by changing their organisation and technology and optimizing their business processes in order to sustain competition. Since time-to-market is one of the major concepts in mentioned branches, the tool-makers are also forced to adapt to rapid prototyping. This means that those companies have to be connected in tool-making clusters in order to survive which enables them to share knowledge resources and capacities.

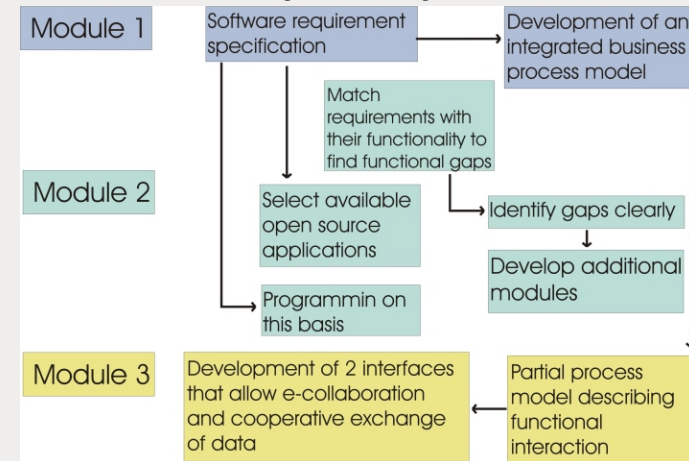
In order to meet all these demands a suitable ERP application is needed.



Approach

The project has been categorized into four main modules with each module achieving distinct goals:

- Module I: Definition of a generic business process model for tool and die making workshops
- Module II: Open source software architecture and application development
- Module III: Open source software architecture and application development
- Module IV: Findings of trainings and education



Module I will give an overview of where the software system will fit into the organisational structure and daily activities. This module aims to design more effective, efficient and flexible business processes. Within module II the best open source solutions available will be evaluated and selected. It has the aim to develop additional modules to support all processes described in the business process model. Module III will provide additional functionalities via interfaces. It aims to make exchange as well as management easier and to exchange across corporate boundaries. Within Module IV a methodology to carry out personnel training will be developed.

Tool-East consortium consist of:

- 3 Research Institutes
- 5 Industrial Enterprises
- 5 IT Enterprises
- 2 Toolmakers Clusters

FIR-Germany-Coordinator

BIBA-Germany

EMO ORODJARNA-Slovenia

HERTI-Bulgaria

Insiel-Italy

IT Partners-Bulgaria

JSI-Slovenia

Kuhn Technology-Bulgaria

Mayking-Italy

Procesna automatizacia-Slovak Republic

Quintelligence d.o.o- Slovenia

TECOS-Slovenia

Toolmakers Cluster of Slovenia (TCS)-

VALJI-Slovenia

ZMM "Metalik"-Bulgaria

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Partners



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Tool-East

Open Source Enterprise Resource Planning And Order Management System For Eastern European Tool and Die Making Workshop

