



Research-Project [AMRPROLOG]
Towards an accelerated implementation of AMR enabled production logistics concepts

Initial situation and limitation of the scope

Initial situation



Target (flexible production logistics)



Chaotic staging areas are a **thing of the past** with optimized production logistics

AMR in the production logistics of the manufacturing industry - How to ?

1

Strongly growing market of AMR-manufacturers > 100 manufacturers



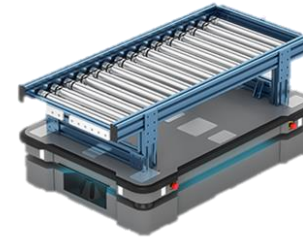
2

Continuous academic research in the fields of localization, railway planning etc.



3

AMR's are also attractively priced for SMEs - falling prices



Existing deficit

Fast integration

In-depth knowledge of standardized concept creation/selection

Practical examples

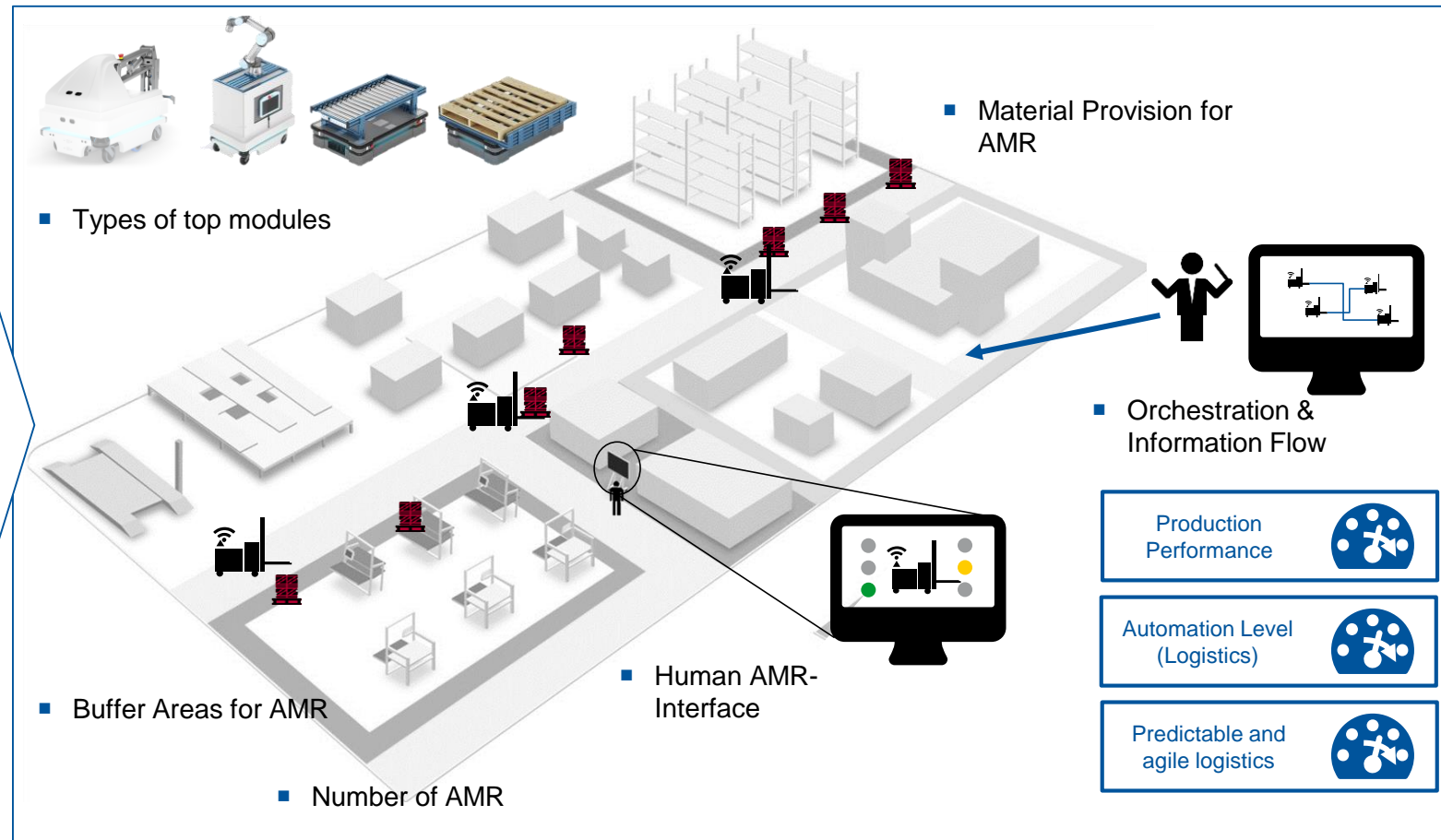
Collection of inspiring examples or best practice implementations including key criteria that lead to success

Return on Investment

Insight into technological and economic feasibility – Benefit/effort estimation not available

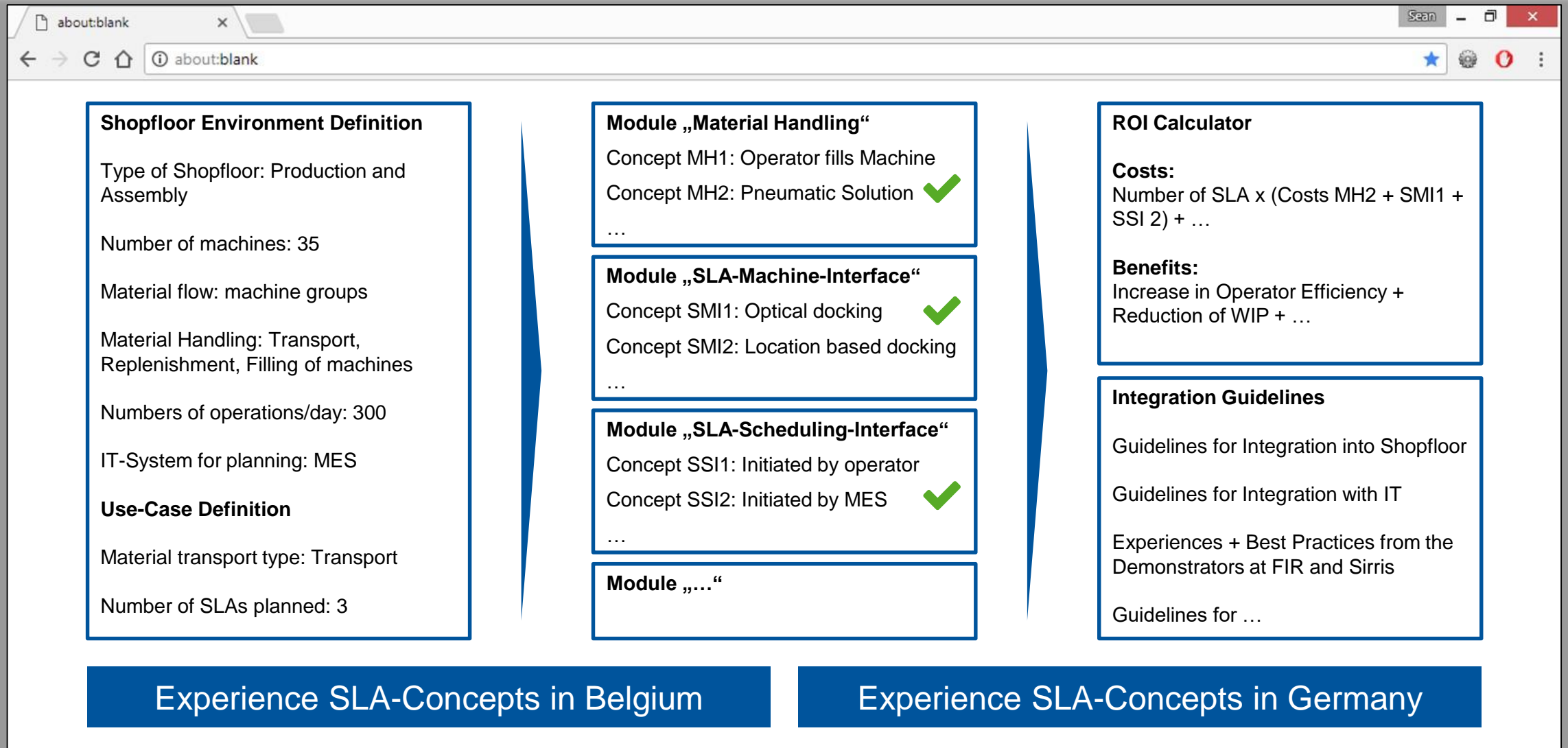
AMRPROLOG: Integral methodology to define and evaluate AMR-concepts

1. Analyses of Shopfloor Environment
2. Definition of Use Cases for AMRs
3. Generate AMR-Concept
 - Definition of Number of AMRs
 - Definition of Top-Modules for Material Handling
 - Definition of orchestration and scheduling concept
 - Definition of human interaction with AMR
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4. Evaluation of AMR-Concepts



Enable SME to use AMR for a more flexible and automated production logistic

The concept generator supports the conceptual design and evaluation of the use of AGVs in production logistics



Inter-company exchange on the design of flexible production logistics with international research partners and industrial companies

Effort	Benefit
<ul style="list-style-type: none">■ 4 Meetings of the steering-committee■ 3-5 expert interviews on the IT landscape (Operations)■ 1-2 validation dates for the developed web application	<ul style="list-style-type: none">■ Exemplary conception of a production logistics with AGVs in the own company■ Evaluation of the use of AGVs in the own production and assembly■ Exchange of best practices in areas of production logistics, implementation of AGVs and material handling■ Intensive contact to research institutes in the field of digitization, production logistics and production planning and control■ Positioning as an innovative, digitalized company, which actively participates in research and implementation

Any questions?

Feel free to contact us !

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