

Consortium Project „Logistics 4.0 & Digital SCM“

Key Facts

KEX.
Knowledge Exchange®

fir
an der
RWTH Aachen

TIME
Research Area
Technology,
Innovation, Marketing,
Entrepreneurship

RWTH AACHEN
UNIVERSITY

Fraunhofer
IPT

*We are currently in cooperation negotiations with further research partners.

Be part of the project and learn about radically new approaches and technologies in the field of logistics and SCM. The project outcome will allow you to file the potential for actions to handle the fundamental changes that come along with digital transformation:

- Develop a **comprehensive understanding of trends** that have an impact on your **horizontal and vertical supply chain processes** as well as a **detailed overview of solutions** addressing the challenges related to it.
- Select those **solutions that are most relevant for your own company** and **get in-depth analysis on the highest rated ones**, giving answers to questions such as ‘What SC processes are most suitable for full automation? How can I deploy these? Is it worth it?’.
- Benefit from a **strong network of cross-industrial key partners and technology experts**, which forms a basis for potential future collaborations based on the generated project results.

External Conditions



Start: January 2020



End: December 2020

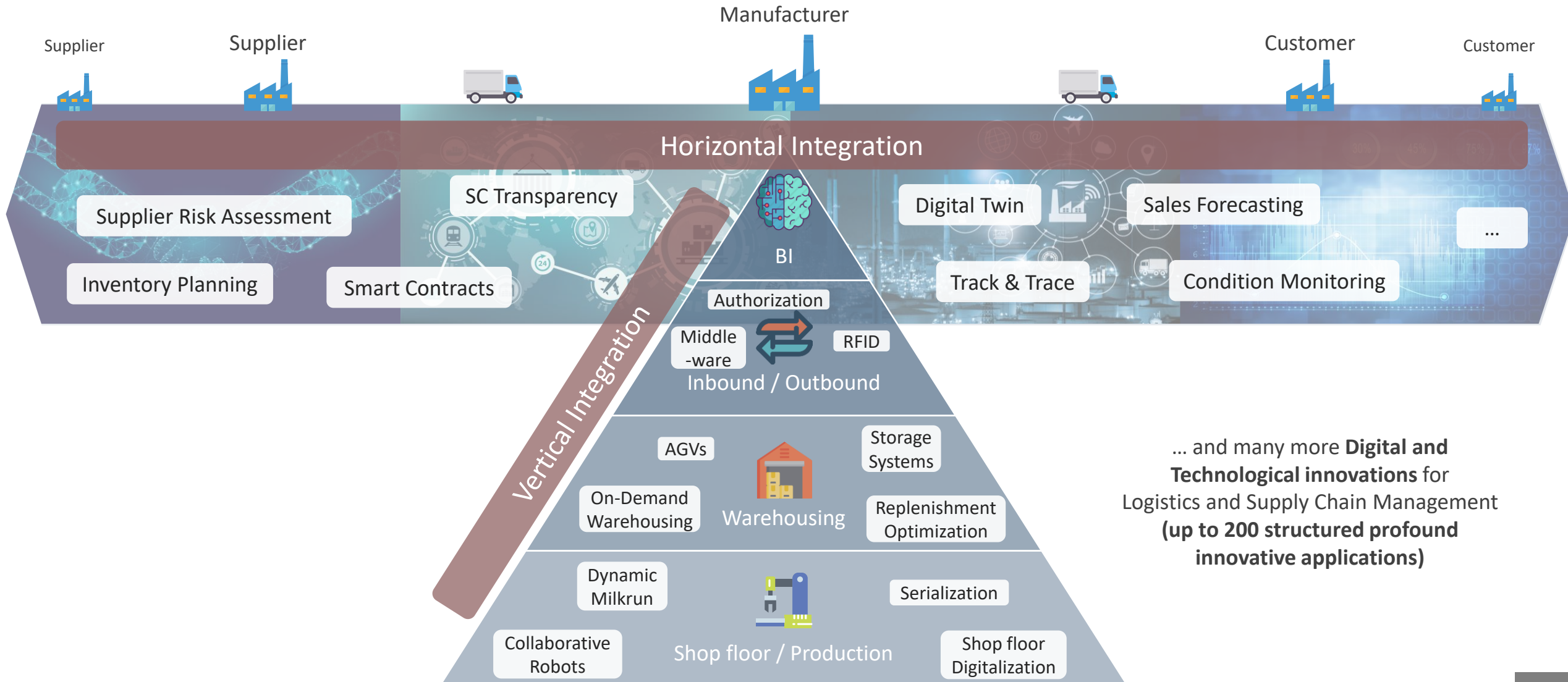


Approx. 20 consortium partners

€ 29,000

PROJECT FOCUS & FRAMEWORK

Selection of potential focus topics



WHY A CONSORTIUM PROJECT?

Benefit from synergies

Synergy & scaling effects

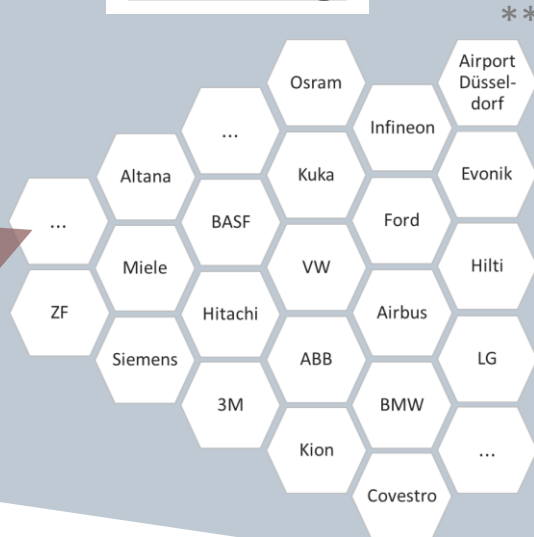
The results:

- Up to **200 innovative applications**
- **Profound structure and segmentation** of the topic field
- **Technological and economical in-depth analysis** of the most relevant cases
- **Answers to questions such as:**
 - What SC processes can be **fully automated**?
 - Which partners / solutions can help to **integrate shop floor and planning systems**?
 - What **internal and external data sources** are relevant to improve logistics processes?
 - What type of **collaborative platforms** should I use together with my suppliers and customers?
 - What are suitable SC applications for **Blockchain technology**?
 - What are **easy first wins** that can be applied to my SC and intralogistics processes **without investing multimillion dollars**?
 - ...

Your invest:

- 12 PT*
- 29.000 €

Networking:

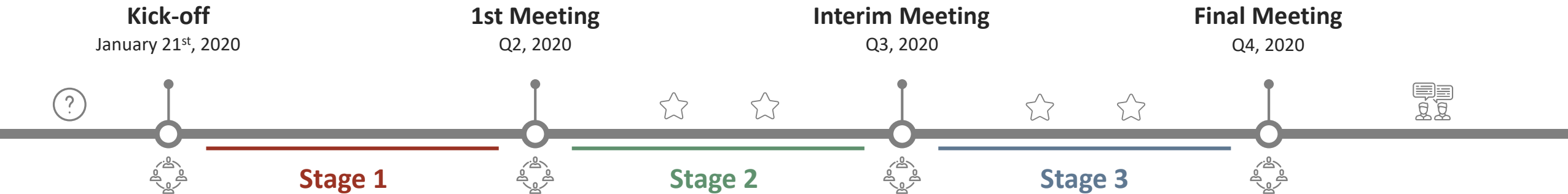


*Recommendation: 2 employees
á 4 meetings, 4 days preparation

** Excerpt of more than 250 former
consortium partners

TIMELINE & POTENTIAL RESULTS

Logistics 4.0 and Digital SCM



STAGE 1

4 months

Segmentation & application scouting

- Provision of a **profound structure** of the topic fields Logistics 4.0 and digital SCM which builds the **basis for further investigations**
- **Scanning & Scouting** for up to **200 cross-industrial applications** within the built structure, considering consortium preferences and focus directions
- Conception phase for potential **demonstrators**
- **Information basis for the selection of technology cases and demonstrators by the consortium for further evaluation in Stage 2**

STAGE 2

4 months

Technology Cases & Demonstrators

- Systematic **selection of attractive applications and potential demonstrators** by the partners
- **Detailed technological and economical evaluation** of each selected application
- **Initiation phase for selected demonstrators** setting boundary conditions, required input and partners for Stage 3
- **Presentation of intermediate results in form of an interim workshop which sets direction and focus for the final stage of the selected cases**

STAGE 3

4 months

Focus cases & Demonstrators

- **Detailed elaboration** of the selected applications and demonstrators, **depending on the set direction** during the interim workshop
- Potential focus directions
 - **Implementation guidelines**
 - **Detailed economic evaluation**
 - **Final Development of selected demonstrators**
- **Information basis for partner-specific strategic decisions**



Questionnaire



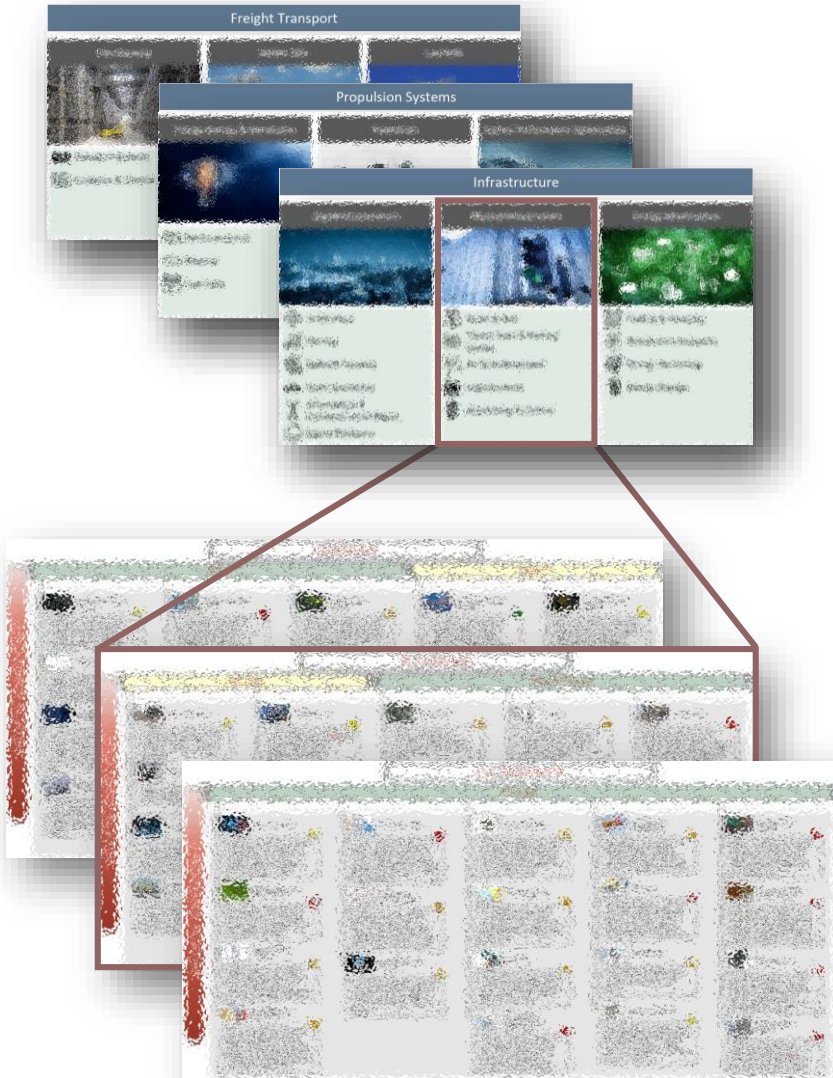
Consortium meeting / workshop



Optional Workshops
with partners/experts



Optional network/platform
meetings



Segmentation

- Evaluation of the **consortium preferences and key questions** (questionnaire)
- Structured overview of **relevant focus areas** and (sub-)segments within these focus areas, taking into account partner preferences and focus directions

Application Trees

- Pre-evaluation of up to 200 of the most relevant **cross-industrial solutions** presented to the consortium during the 1st report meeting
- **Structured overview** of current and future solutions in the context of specific applications fields

Demonstrators

- **Idea generation** for potential and relevant demonstrators in **collaboration** with consortium and research partners
- **The consortium will vote for applications and demonstrators to be analyzed in form of technology cases within stage 2 of the project**



Technological and economical evaluation

- Aggregation of relevant **technology-** and **market-related information**
- Evaluation of current **advantages and disadvantages** of the applications chosen by the consortium and their **technological feasibility**
- Assessment of different technological concepts leading to a **technological deep dive**
- Identification of **potential technology partners**

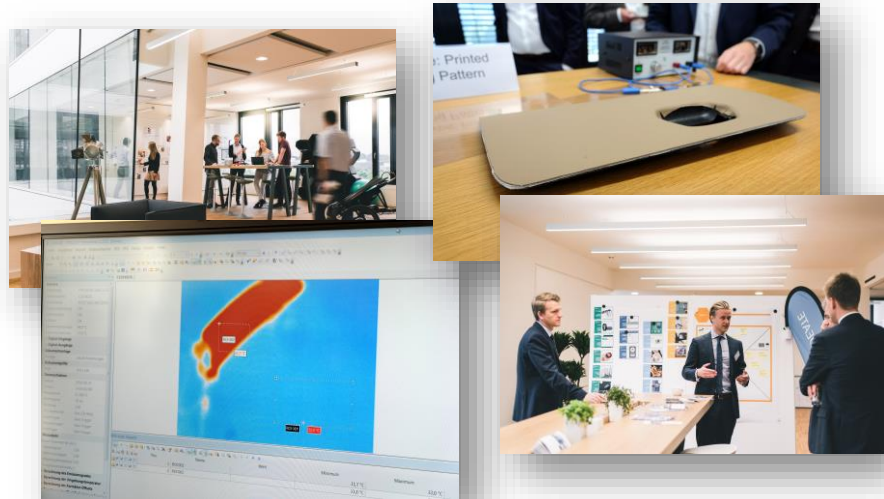
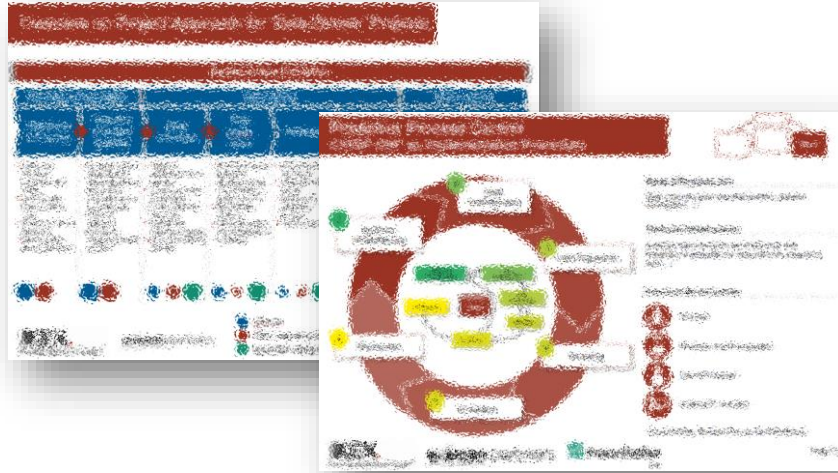
Demonstrators

- Development of **initial set-ups** for the **selected demonstrators** in **collaboration** with project and research partners as well as external experts
- Definition of **boundary conditions** and the **required input parameters** as a starting point for the final project stage
- **Presentation of (intermediate) results of technology cases and demonstrators and selection of most relevant cases by the consortium for further evaluation in stage 3**



Stage 2





Detailed elaboration of selected focus cases

■ Implementation guidelines

- Based on the results generated in stage 2, a detailed implementation guideline for the selected applications and solutions will be worked out
- The results **support partners during the initial implementation phase** of a pilot project

■ Detailed economic evaluation

- Depending on the selected application, different focus directions could be addressed, from detailed ROI calculations over market assessments to business model evaluations
- The results support partners with **insights about e.g. economic potentials and provider landscapes**

■ Final development of selected demonstrators

- Development of final demonstrators based on the interim results presented in stage 2

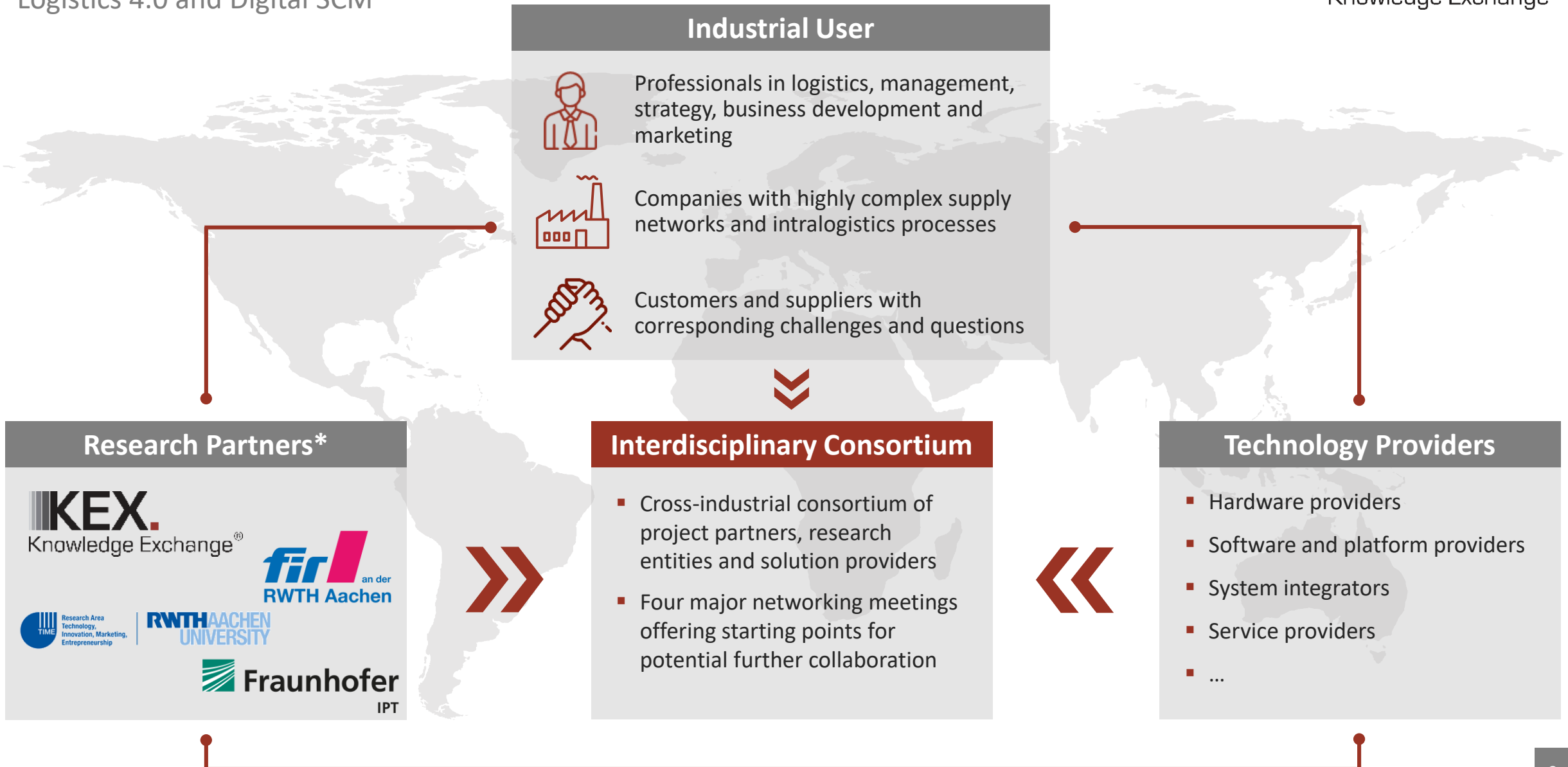
➤ **Information basis for partner-specific strategic decisions**



Stage 3

CONSORTIUM STRUCTURE

Logistics 4.0 and Digital SCM



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