



# Cross-Industry-Group Digital Transformation – Roadmap and Implementation



## Budgeting

Duration:	1 year
Premium:	inclusive*
Business:	inclusive*
Basis:	9.000€/member
External:	10.000€/member
Consortium:	≥ 5 members

\* For selection and participation in a second cross-industry-group: 5.000€/member

## Challenge

- Digitalization as a megatrend and omnipresent topic
- Lack of understanding about the actual implementation of digitalization
  - What are the true areas of application?
  - Which pilot projects should be selected?
  - How to organize digitalization?
  - Which skills and technologies are needed?
  - What tools are usable?
  - How to convince the employees?
  - How to initiate change?

## Target / expected result

- To identify and discuss models which have been proved successful in implementing digitalization in the company
- To ensure that the digitalization within the company concerned is accompanied by the opportunity to swap experience and ideas in the INC community

## Approach

- Patent topics to be defined by CIG partners and brief coaching to be conducted by the INC team
- Arrange a kick-off meeting and four networking meetings to discuss problem-solving approaches used in research and practice (Best Practices)
- Possibly invite external speakers specializing in specific priority areas
- Host a networking conference focusing on the latest technologies, procedures and approaches



# Cross-Industry-Group partnering with the Complexity Academy

## Product development 4.0



## Budgeting

Duration:	continuous (at least two years)
Premium:	5.000€/member
Business:	5.000€/member
Basis:	5.000€/member
Consortium:	≥ 5 members

\* For selection and participation in a second cross-industry-group: 5.000€/member

## Challenge

- Impact of digitization on research & development from product and process perspective
- Lack of cross-company / industry transparency over existing implementation approaches

## Possible topics

- How should the development department be organized for product development 4.0?
- What products are required for the development of smart products?
- Which services can complement products usefully?
- Which business models will help companies to succeed in the future?
- How can the interaction with the customer be improved?

## Approach

- Hold a kick-off meeting to define key areas of interest in the project
- Three annual workshops (1,5 days each) at the premises of each of the partners to discuss solutions from practice and research with mutual coaching
- Possibly extend an invitation to external specialist speakers



# Cross-Industry-Group TIMEX – topics from technology and innovation management



## Industrial working group at the RWTH Aachen

- Team of experts for technology and innovation management
- The TIME Research Area at the RWTH offers for a selected circle of companies the opportunity to intensify cooperation and exchange within the framework of a membership in the TIM expert group
- In regular meetings, defined focus topics from technology and innovation management are deepened in lectures, workshops and discussions and a sustainable network of experts is created

## Key areas of interest 2018

- TBD

## Example topics from 2017:

- Experimentation and validation in the business model innovation process
- Corporate Innovation Labs: Success factors in focused innovation environments
- Peer review of the R&D process
- Developing and inventing systematically: The TRIZ method

## Budgeting

Duration:	continuous
Premium:	inclusive*
Business:	inclusive*
Basis:	5.000€/member p.a.

\* For selection and participation in a second cross-industry-group: 5.000€/member



# Cross-Industry-Group

## Start-up screening and match-making for a selected search field



**Search field:** \_\_\_\_\_

Please select a search field of your interest

### Budgeting

Duration: 1 year

Premium: 7.000€/member

Business: 8.000€/member

Basis: 12.000€/member

Consortium:  $\geq 5$  members

### Challenge

- Established companies often perceive start-ups as a threat to their own business, but working together with appropriate start-ups involves many potentials
- The discovery and integration of start-ups, which complement one's own company optimally, is often associated with a high effort

### Target / expected result

- Gain access to the start-up landscape
- Identify opportunities for disruptive growth to protect your business for a selected search field
- Creation of a long- or shortlist and matchmaking between the participating companies and a start-up
- Get actionable data from an independent third party to guide decision making on strategic investments, M&A and more

### Approach

- Definition of suitable market and technology segments and research criteria
- Screening of start-ups for the defined search field and relevant criteria
- Presentation of long list of start-ups with specifications
- Presentation of short list of start-ups with detailed specifications
- Selection of start-ups for match-making
- Workshop/ Pitching with relevant start-ups



# Cross-Industry-Group

## Agile Development in Process- and Pharmaceutical Industry



### Budgeting

Duration:	1 year
Premium:	7.000€/member
Business:	8.000€/member
Basis:	12.000€/member
Consortium:	≥ 5 members

### Challenge

- Agile development methods are already being used successfully not only in software development, but also in the development of physical products, in order to counter the constantly growing pressure of innovation, cost and time
- However, transferring the methods to the process- and pharmaceutical industry, which are exposed to a similar innovation pressure, is not possible without adaptation, due to the special requirements and general conditions (for example, high documentation requirements, long development times, incrementation of the development task, etc.)
- In addition, the fundamental potential of agile methods in the process- and pharmaceutical industry is often called into question

### Target / expected result

- Review of the potential of agile development methods and tools in the process- and pharmaceutical industry
- Elaboration of an agile method- and toolbox for development projects in the process- and pharmaceutical industry

### Approach

- Initial workshop for the identification and discussion of the special requirements of development projects in the process- and pharmaceutical industry
- Review the applicability of specific agile methods and tools, taking into account the identified requirements
- Workshop for the selection of suitable methods and the joint adaptation of existing methods and tools
- Possibly validate the suitability of the adapted tools and methods in concrete development projects of the partners

# Invention Center Contact



Invention Center  
c/o KEX Knowledge Exchange AG  
Campus-Boulevard 30  
52074 Aachen, Germany

**Dr. Bernd Robertz**  
Business Developer

Fon +49 (0) 241 51038 609

Mobile +49 (0) 151 54448 609

Fax +49 (0) 241 51038 699

Email [bernd.robertz@invention-center.de](mailto:bernd.robertz@invention-center.de)