



IMP<sup>3</sup>rove

European Innovation Management Academy

# Measuring digital innovation capabilities and impact for SMEs using the **Digital Innovation Quotient™**



*INSME Academy Webinar, November 2017*

Martin Ruppert

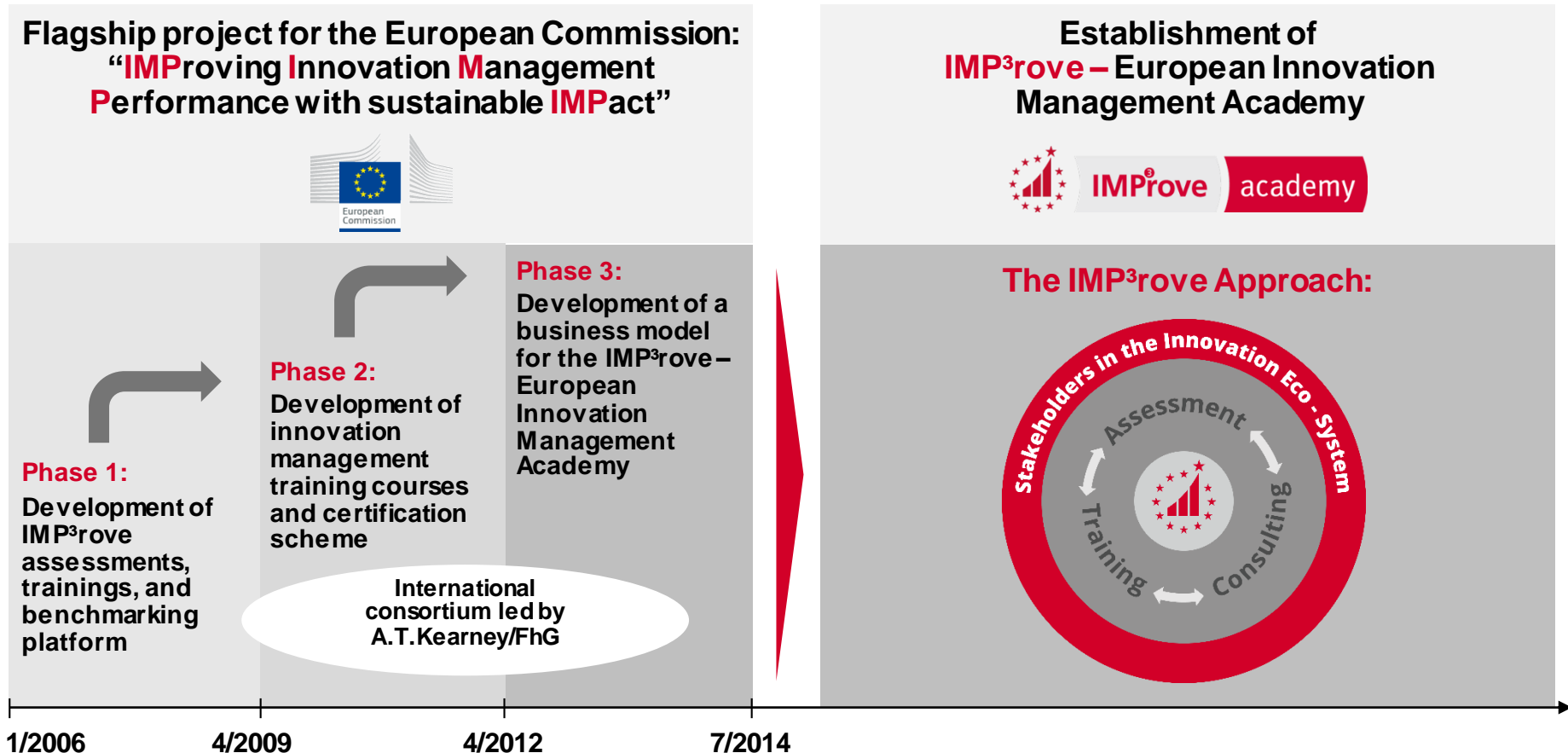


IMP<sup>3</sup>rove

academy

# Since 2006, IMP³rove Academy helps to assess and develop innovation management capabilities

## About us





# Agenda

- **Why digital innovation matters for SMEs**
- How to measure digital innovation capabilities and impact on a company-level
- How to inspire an SMEs journey towards more digital innovation
- How to measure digital innovation capabilities of a set of companies
- Q&A

# A pragmatic definition of digital innovation can serve to guide the discussion

## Definition and types of digital innovation



A **digital innovation** is the **successful commercialization** of a

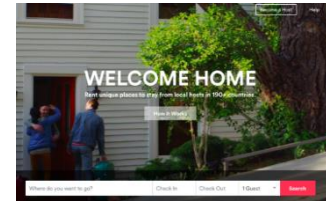
- new or enhanced
- digital and/or connected
- offering (product, service, or business model) or process.



**Product innovation**  
e.g. apps



**Service innovation**  
e.g. remote servicing



**Business model innovation**  
e.g. digital platforms

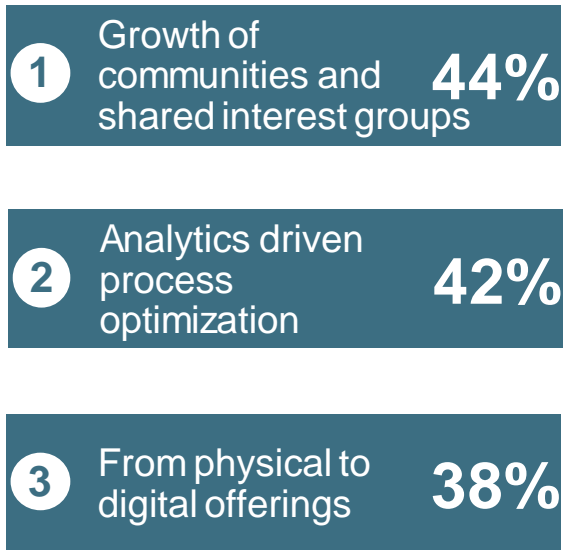


**Process innovation**  
e.g. automation in operations

# According to a pilot study with >200 firms in Slovenia, digital innovation trends matter across size segments

## Slovenian study: digital innovation trends

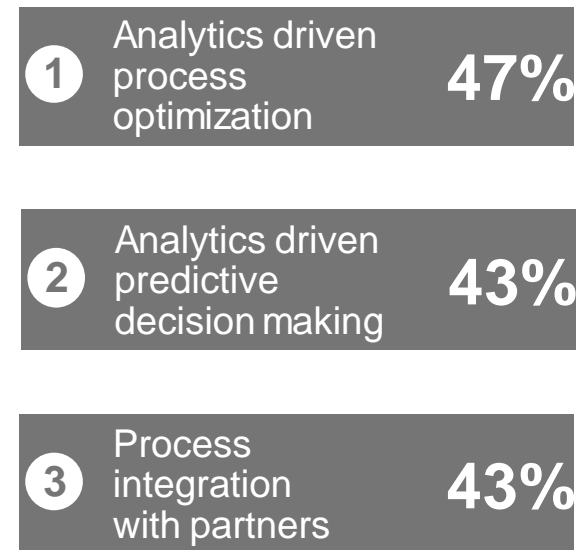
### Small companies (1-49 FTE)



### Medium size companies (50-249 FTE)



### Large companies (250+ FTE)



# However, only one out of four companies has a digital strategy

## Slovenian study: status of digital strategies

Applicability of attributes to companies' digital strategy  
(as a % of companies that selected a certain attribute)

**25%**

**Digital innovation strategy documented in writing**



**32%**

**Digital strategy build on analysis and digitization trends**





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# Companies have concrete questions on their digital innovation capabilities



Which digital innovation trends should we care about?

Everybody talks about data and analytics – what are our opportunities?

To what degree do our processes use digital opportunities?

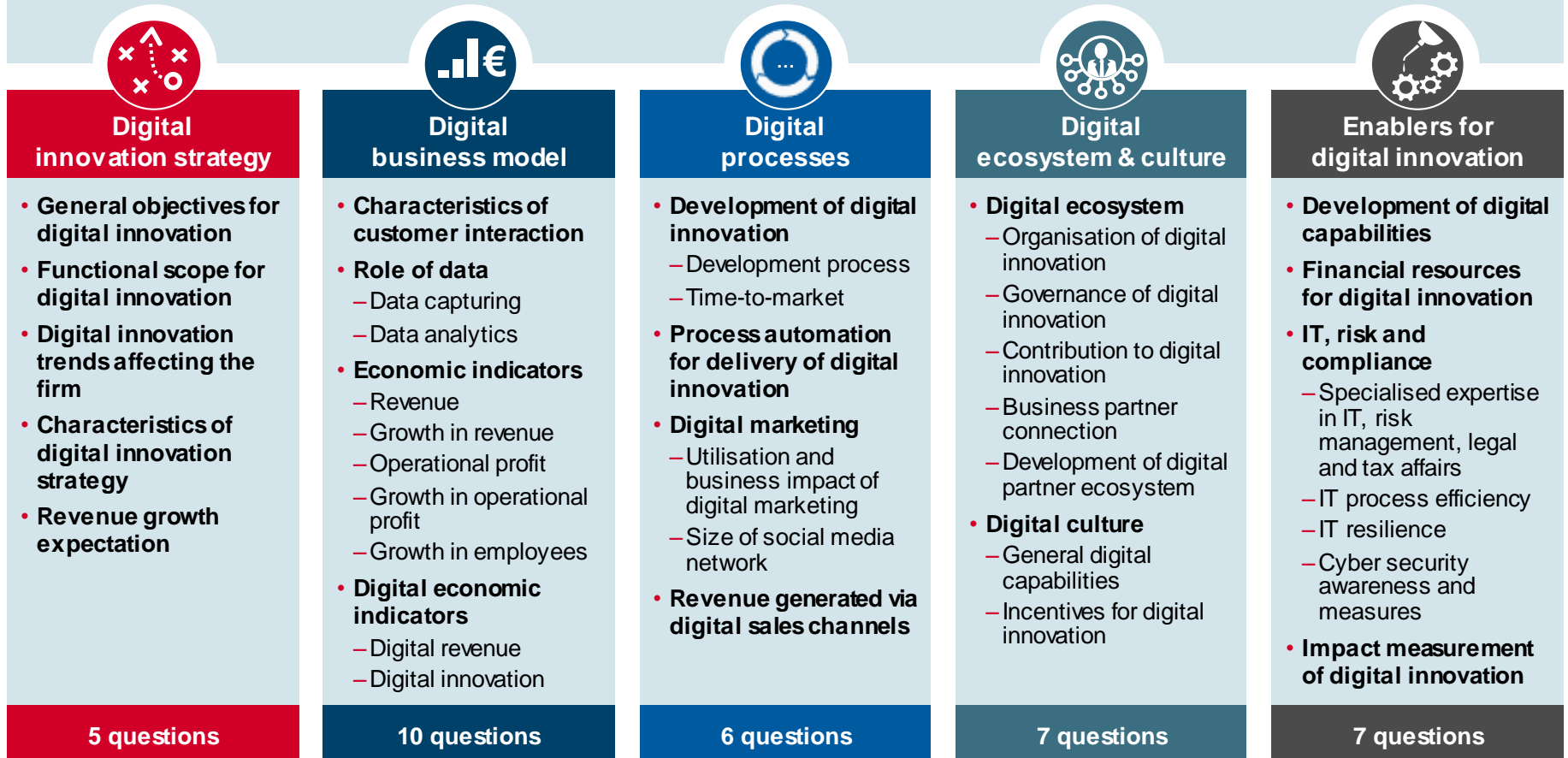
How do leading digital innovation networks look like?

What do other firms invest into digital innovation?

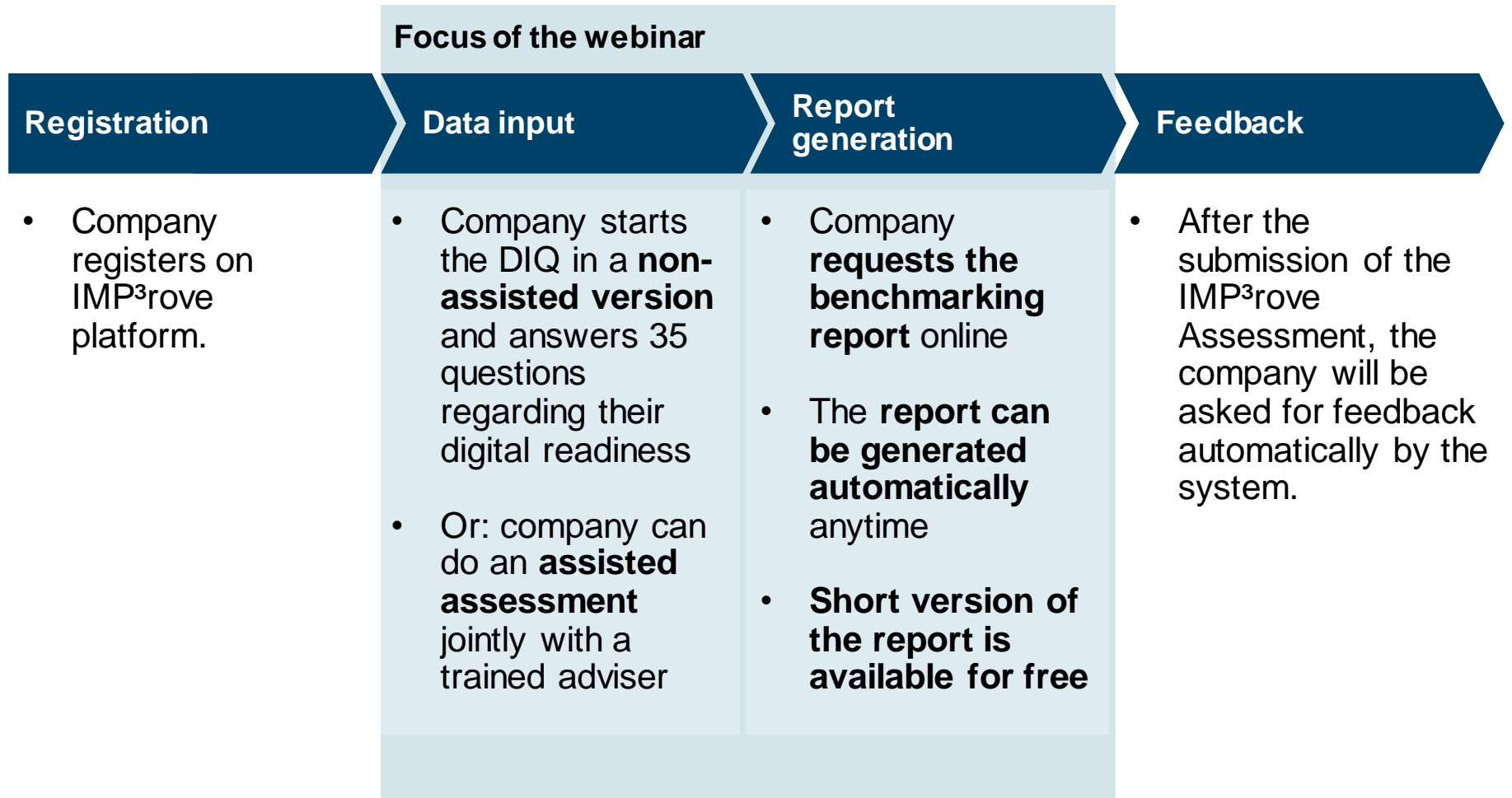
# The Digital Innovation Quotient assesses 5 dimensions of excellence in digital innovation capabilities

## IMP³rove Digital Innovation Quotient

To what degree does digital innovation contribute to your firm's business performance and value creation?




# How it works – 4 simple steps




# The questionnaire enables a systematic reflection on digital innovation objectives and capabilities


## Data input




Digital innovation strategy




Digital business model



Digital processes



Digital ecosystem and culture



Enablers for digital innovation

Digital innovation strategy - General objectives for digital innovation

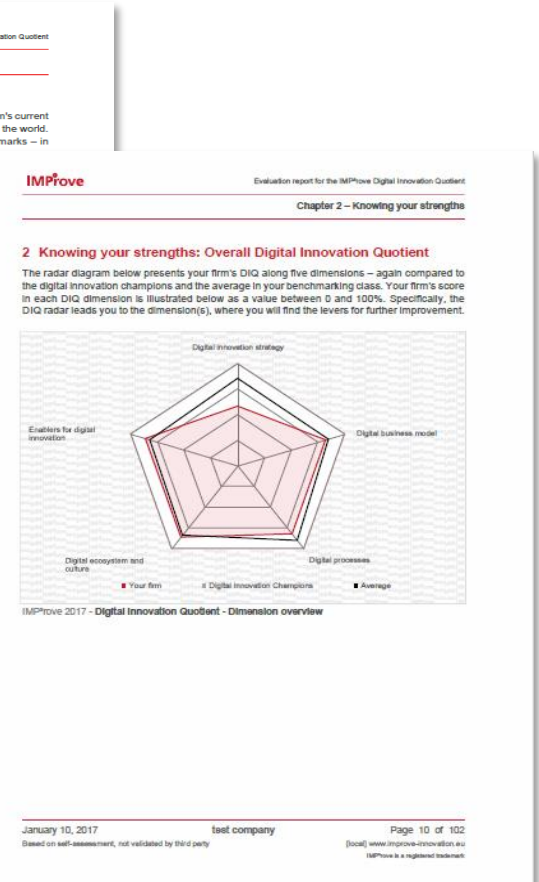
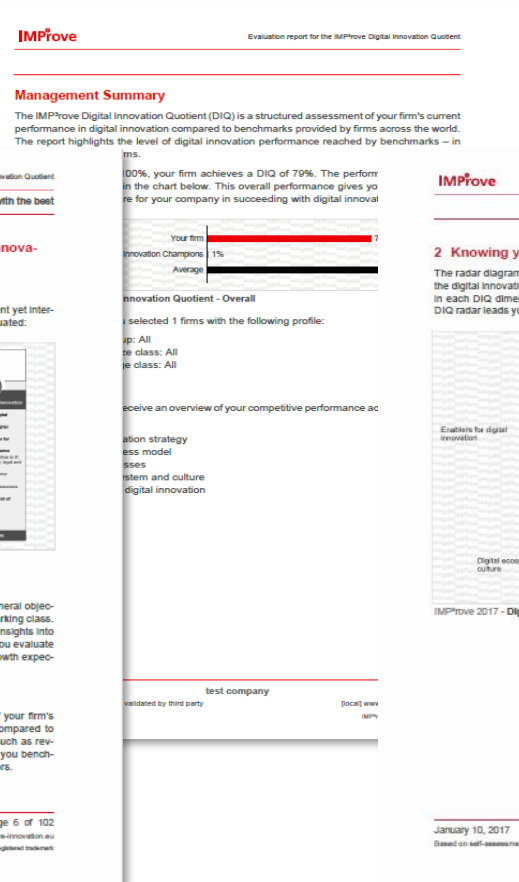
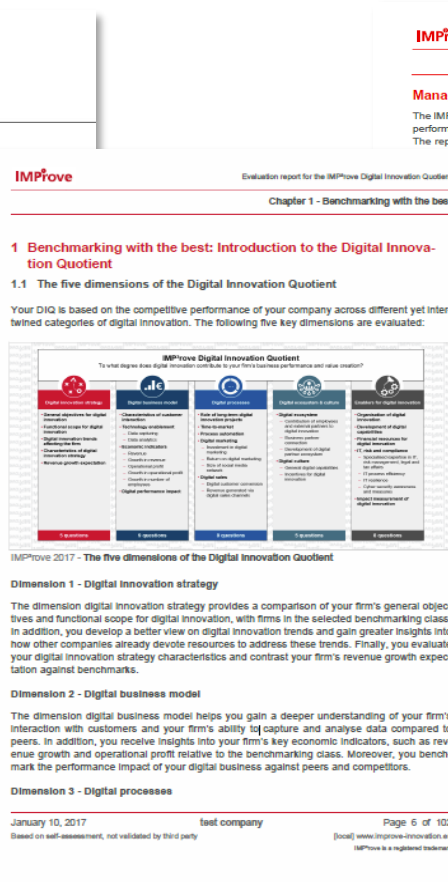
**What are your general objectives for digital innovation? For which do you allocate resources to drive digital innovation?** ?

*Please tick all the items that are fully applicable. You may specify more than one answer. If none of the items is applicable or if you do not have the relevant information to provide an answer, please select N/A.*

|  | Please tick if objectives have been defined | Please tick if resources have been allocated to meet objectives |
|--|---|---|
| Increase revenue with digital innovation       | <input checked="" type="checkbox"/>         | <input type="checkbox"/>  |
| Decrease cost with digital innovation          | <input checked="" type="checkbox"/>         | <input type="checkbox"/>  |
| Increase process speed with digital innovation | <input type="checkbox"/>                    | <input checked="" type="checkbox"/>                             |

# Automatically generated benchmarking reports provide a structured overview on the results of the company

## Report generation










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We have developed and are continuously extending a digital use case library containing examples from different industries

## Overview on use cases by industry

| Dimensions of excellence in digital innovation capabilities        | Company                           |  Digital innovation strategy |  Digital business model |  Digital processes |  Digital ecosystem & culture |  Enablers for digital innovation |
|--|-----------------------------------|---|--|---|---|---|
| Agriculture, Forestry and Fishing                                  | • FischMaster IP-Services GmbH    |   |  |   |   |   |
| Mining and quarrying   |                                   |   |  |   |   |   |
| Construction   | • Schielicke Bau                  |   |  |   |   |   |
| Manufacturing  | • Lego                            |   |  |   |   |   |
|  | • Rausch                          |   |  |   |   |   |
|  | • Walther Falboxes                |   |  |   |   |   |
|  | • Paredes                         |   |  |   |   |   |
|  | • Living Proof                    |   |  |   |   |   |
|  | • REX Gummitechniken              |   |  |   |   |   |
|  | • Schreinerei Wilhelm Luther      |   |  |   |   |   |
|  | • Hakenberger Fleisch GmbH        |   |  |   |   |   |
| Transportation, Communications, Electric, Gas and Sanitary service | • Easy Jet                        |   |  |   |   |   |
| Wholesale Trade  | • GA Import                       |   |  |   |   |   |
| Finance, Insurance and Real Estate                                 | • AdVertum AG Versicherungsmakler |   |  |   |   |   |
| Services   | • Cell Path                       |   |  |   |   |   |
|  | • Lunn                            |   |  |   |   |   |

Please reach out to us if you are interested to use this – we are happy to share the library and invite your inputs

It is assumed that in all cases that a digital innovation strategy exists beforehand. Please find SME Cases in **bold front**

Source: IMP³rove – European Innovation Management Academy 2017

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# Example: Digital innovation in processes served as an efficiency booster for a German construction company

## Schielicke Bau GmbH, Germany

|   |  |   |   |  |  |
|---|--|---|---|--|--|
| <b>Relevant digital innovation trends</b> <ul style="list-style-type: none"> <li>• Data-driven process optimization</li> <li>• Process integration with partners</li> </ul> | <b>Digital innovation objectives</b> <ul style="list-style-type: none"> <li>• Higher transparency on resource usage</li> <li>• Higher speed in reacting to damages</li> <li>• Reduction of transportation costs</li> </ul> | <b>Approach</b> <ul style="list-style-type: none"> <li>• Development of a new digital board, whose data are stored on the cloud and accessible on mobile devices by all workers</li> <li>• Digitisation of the process for reporting of damages and nonconformities of the machines (real time data available on the company's central database)</li> </ul> | <b>New capability requirements</b> <ul style="list-style-type: none"> <li>• Data capture and data processing</li> <li>• Cultural transformation of the company</li> </ul>   | <b>Impact</b> <ul style="list-style-type: none"> <li>• Return on investment readily after one year</li> <li>• Better management of resources and optimisation of their usage</li> <li>• Reduction of machine transportation costs</li> </ul> | <b>Company profile</b> <ul style="list-style-type: none"> <li>• <b>Industry:</b> Construction industry</li> <li>• <b>Location:</b> Beelitz, Germany</li> <li>• <b>Service:</b> construction projects</li> <li>• <b>Employees:</b> 100</li> <li>• <b>Turnover:</b> 15.6 mil.€</li> <li>• <b>Contact:</b> N/A</li> </ul> |
|   | <b>Functional scope of objectives</b> <ul style="list-style-type: none"> <li>• Operations</li> </ul>   |   | <b>New partner requirements</b> <ul style="list-style-type: none"> <li>• Collaboration with an IT Consulting &amp; Software developing company for digitising the company's traditional system for assignment of resources to the different projects</li> </ul> |  |  |

N/A: not applicable or no information available

Source: <http://digital.di.dk/SiteCollectionDocuments/Publikationer/DigitalskillsforSMEs.pdf>

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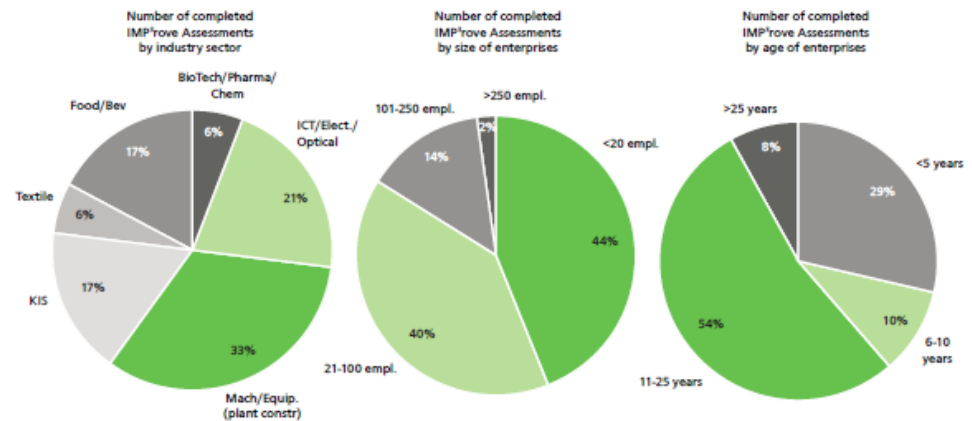
# An outlook (1/2): Considering a set of assessments, an aggregated analysis can be done

## Case example Bulgaria, excerpt from case study documentation

- Innovation management assessments were carried out by a trained team of local experts
- Using the set of company-level assessments obtained, an aggregated analysis was carried out for Bulgaria (could be done by country, company size, company age, and industry)



FIGURE 9. COMPANIES WHICH HAVE COMPLETED THE IMP3ROVE ASSESSMENT BY SECTOR, SIZE AND AGE

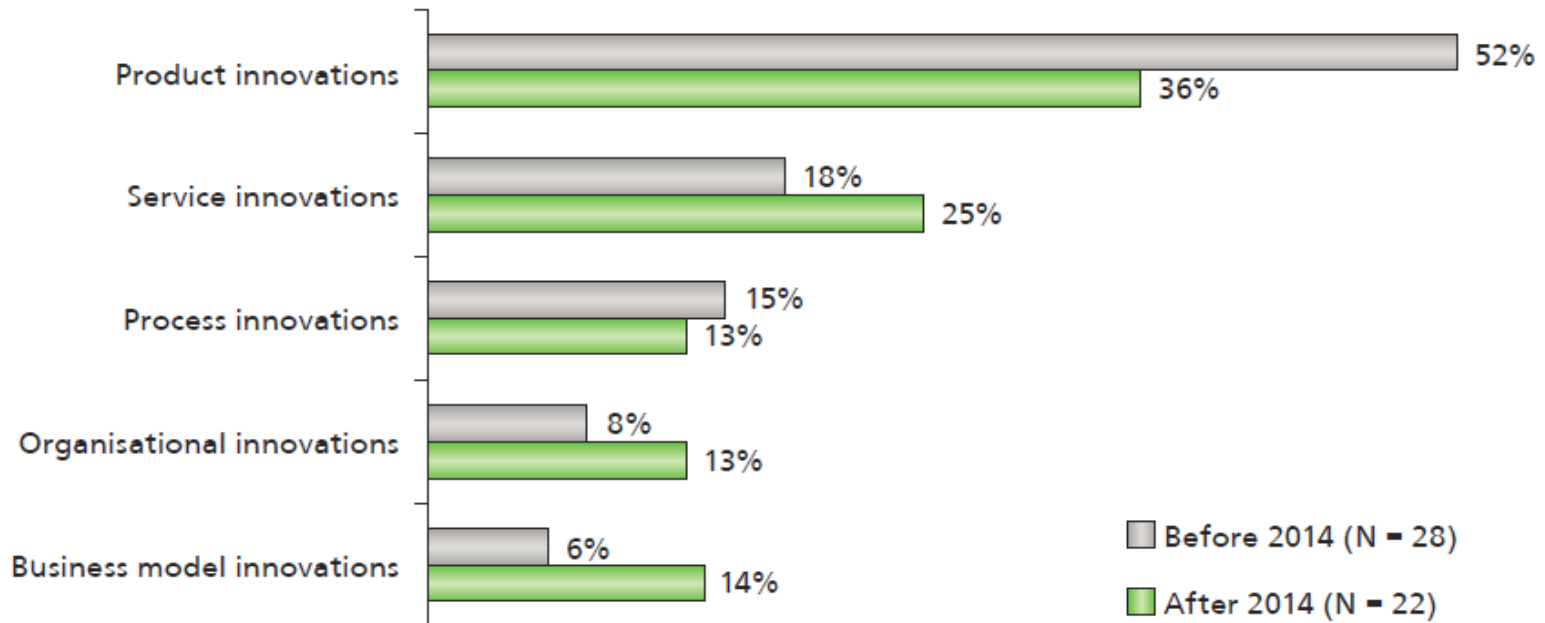


Source: IMP3rove – European Innovation Management Academy; data as of October 2015.

# The chapter contribution for innovation.bg included an analysis of trends in innovation in the country


## Case example Bulgaria, analysis of operational profits from innovation

FIGURE 14. ALLOCATION OF OPERATIONAL PROFITS FROM INNOVATION



Source: IMP<sup>3</sup>rove – European Innovation Management Academy; data as of October 2015.

## An outlook (2/2): The platform does not only serve to identify issues – also to identify inspiring champions



**Turkish Innovation Management Competition:** focus on „how to innovate“ rather than „what“ the innovation is

**Approach:** participating companies do the IMP³rove assessment online, jury reviews short-listed companies – anyone who participates gets a benchmarking report

**Impact:** >1,000 companies participating over the last 4 years; great media attention, award handed over in conference centre of Istanbul by the leading policy makers



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Any questions?





# We would be delighted to collaborate with you to foster digital innovation capabilities of SMEs

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