



# Analytics+ partnereita datan jalostamiseen

Avoim Data Kehittäjäyhteisö - tapaaminen 21.11.2017

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ICT Leverage.

# HILLA

## **HILLA PROGRAM**

*Your Gateway to Digital Finland*

HILLA's core is to accelerate market-driven research to business by helping companies with a strong will and capabilities to grow and internationalize.

HILLA helps companies to gain competitive advantage through strategic use of ICT.

Unique resources to develop and test next generation technologies and solutions.

Commercialization of product or service is expected to take place within 2 years.



HILLA is a Finnish nationwide acceleration and investment program aiming to create new international digital business to companies and their partners.

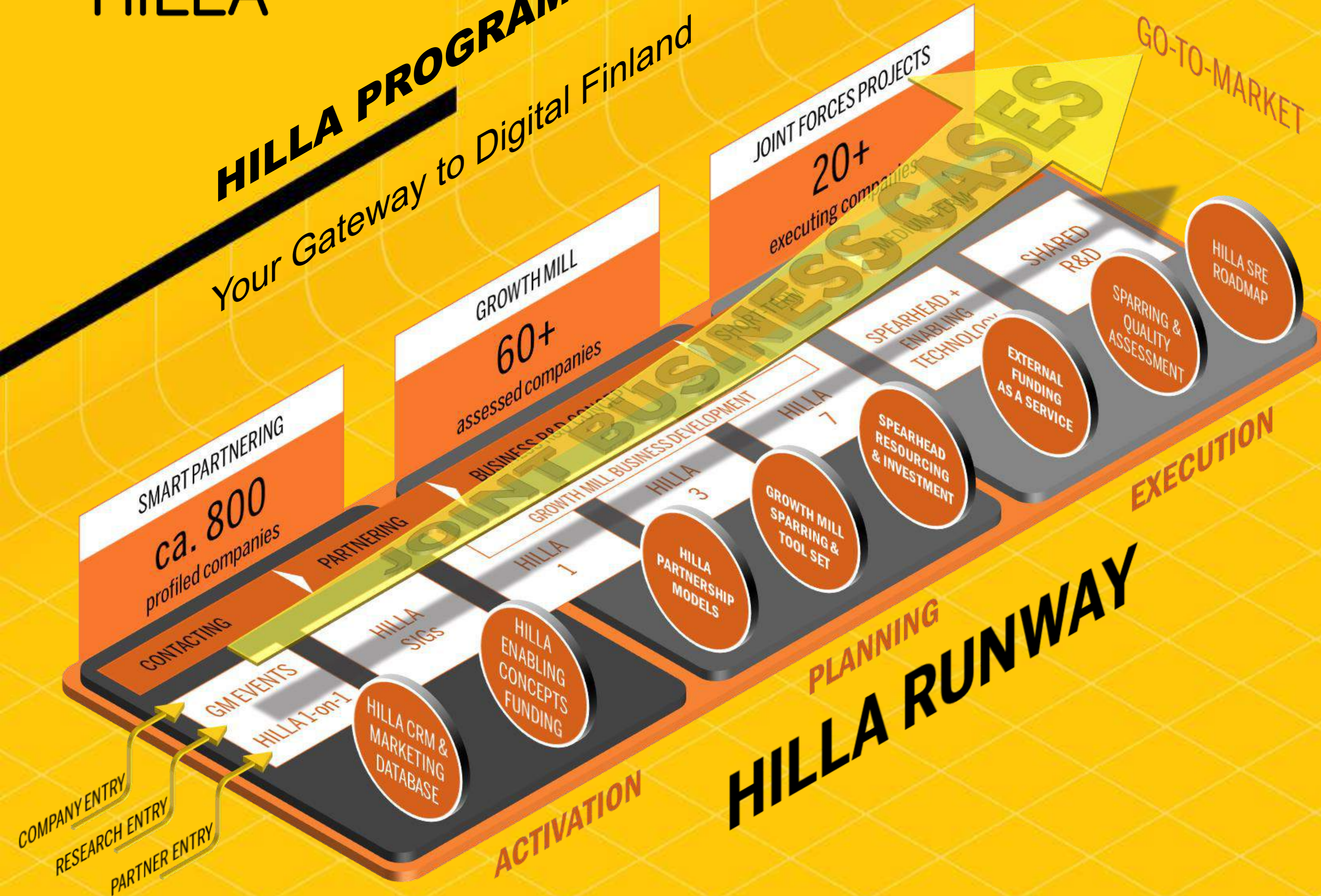
- Duration of the program is 5 years ending 2019
- 50 million euros
- 100+ persons working

ICT Leverage.

# HILLA

## HILLA PROGRAM

Your Gateway to Digital Finland



### HILLA OFFERS A RUNWAY TO

- Create smart partnerships
- Leverage latest ICT research capabilities
- Execute on joint company business cases
- Direct joint company market entry
- Long-term co-creation within focused company-research ecosystem

ICT Leverage.

# HILLA

## Shared Research Environment

Networked collection of R&D assets as-a-service



**BIG DATA**  
DATA ANALYTICS  
BLOCK CHAIN



**INDUSTRIAL INTERNET**  
DIGITALIZING INDUSTRY  
INTERNET-OF-THINGS

**DIGITAL FABRICATION**  
PRINTCENT PILOT FACTORY  
FABLAB  
3D PRINTING



**5G NETWORK**



**3D MODELS & VISUALIZATION**  
3D VIRTUAL LABORATORY  
AUGMENTED REALITY  
CAVE



**MACHINERY & CONSTRUCTION**  
OULLUZONE AUTOMATION



**WIRELESS TESTING**  
TESTING AS-A-SERVICE



**MINING**  
DIGITALIZING MINING  
MODULARITY & AUTOMATION

ICT Leverage.

# HILLA

## **HILLA PROGRAM**

*Your Gateway to Digital Finland*



**HILLA is your key contact point to Finnish corporate and research partners.**

**We search the best partners for your collaboration.**

**HILLA builds solid business cases to create revenue for all parties .**

**HILLA's international collaboration opens our partners contacts in**

- **Germany**
- **Japan**
- **China**
- **US**

**Contact us:**

**Web:** [www.hilla.center](http://www.hilla.center)

**Email:** [Hilla\\_Ohjelma@outlook.com](mailto:Hilla_Ohjelma@outlook.com)

**See the future:** <https://www.youtube.com/watch?v=MWDyawpsXcY>

[www.hilla.center](http://www.hilla.center)



# ANALYTICS<sup>+</sup> BIG ON DATA

LARGEST NORTHERN SCANDINAVIAN ANALYTICS HUB

1. **Gain** new **networks** in research, business.
2. **Get access** to **data, tools**, new **funding**.
3. **Get** unique **insight** into private sector business needs.

# Analytics+

Analytics+ gathers together the largest pool of scientists and experts in data businesses within Northern Scandinavia.

## 200+ data insight experts

Mastering data analytics requires long-term focus and 10+ years experience. Our researchers and experts have a massive track-record of carrying out challenging customer and academic projects.

## 30 partner companies

From cutting edge research on AI to business process modelling, our data analytics partner companies cover all your requirements. Analytics+ joint offering is constantly updated due to our partnership model.

## Wide analytics coverage

Analytics+ covers the most important data insight technologies and is continuously updated due to our partnership model.

## Fitted to customer needs

Each customer case is different. Our team takes care that your case is understood and fitted with the right expertise to deliver.

Our network of experts help you to find optimal partners and solutions to your needs



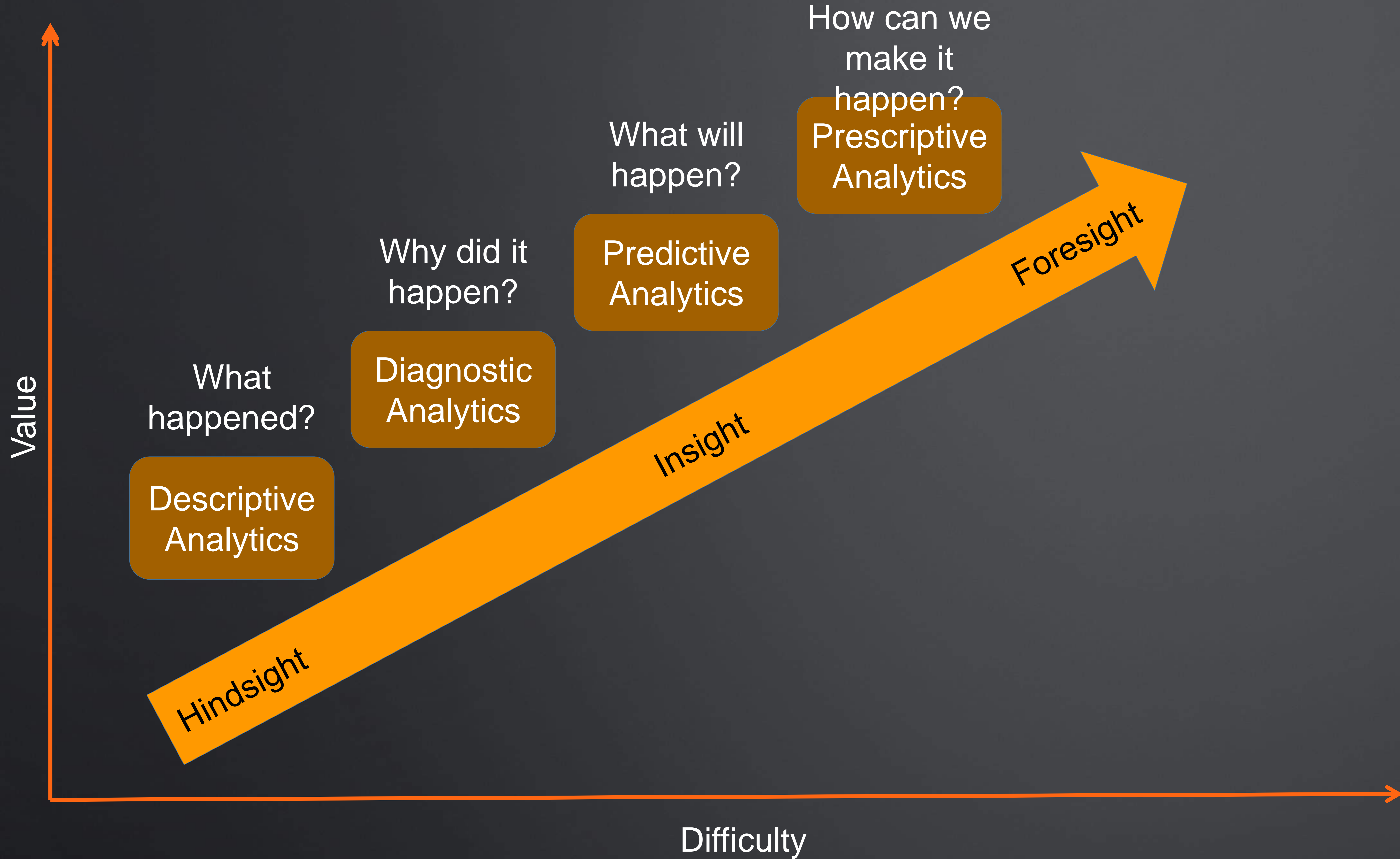


- Background in **HILLA** project.
- Co-operation of **Business & Academia**.
- Companies get **new business**, researchers get **funding & data**.

1. Find business, research **Partners** for your proposals, applications.
2. Participate in **Business cases, Projects.**
3. Participate in seminars, workshops.

# “Analytics?”

- Methodologies:
  - Statistics, machine learning, ...
- Technologies:
  - Data management, streaming, ...
- Business & domain



What is data? Where is data? How should we store data?

Data Design

Instrumentation

Data Management

Sources

Raw data

Data engineering process

What data do we analyze?

How can we analyze the data?

What is wrong or missing?

How do we approach the data?

What does the data say?

How to understand the results?

Data ingestion

Data Wrangling

Data Cleaning

Modelling

Inference

Visualization

Raw data

Analyzable data

Data

Information

Understanding

Data science process

How can we present the results?

What does this mean for our business?

How do we react to the results?

Publication

Conclusions

Strategy

Understanding

Insight

Business lock-in

Business analysis process

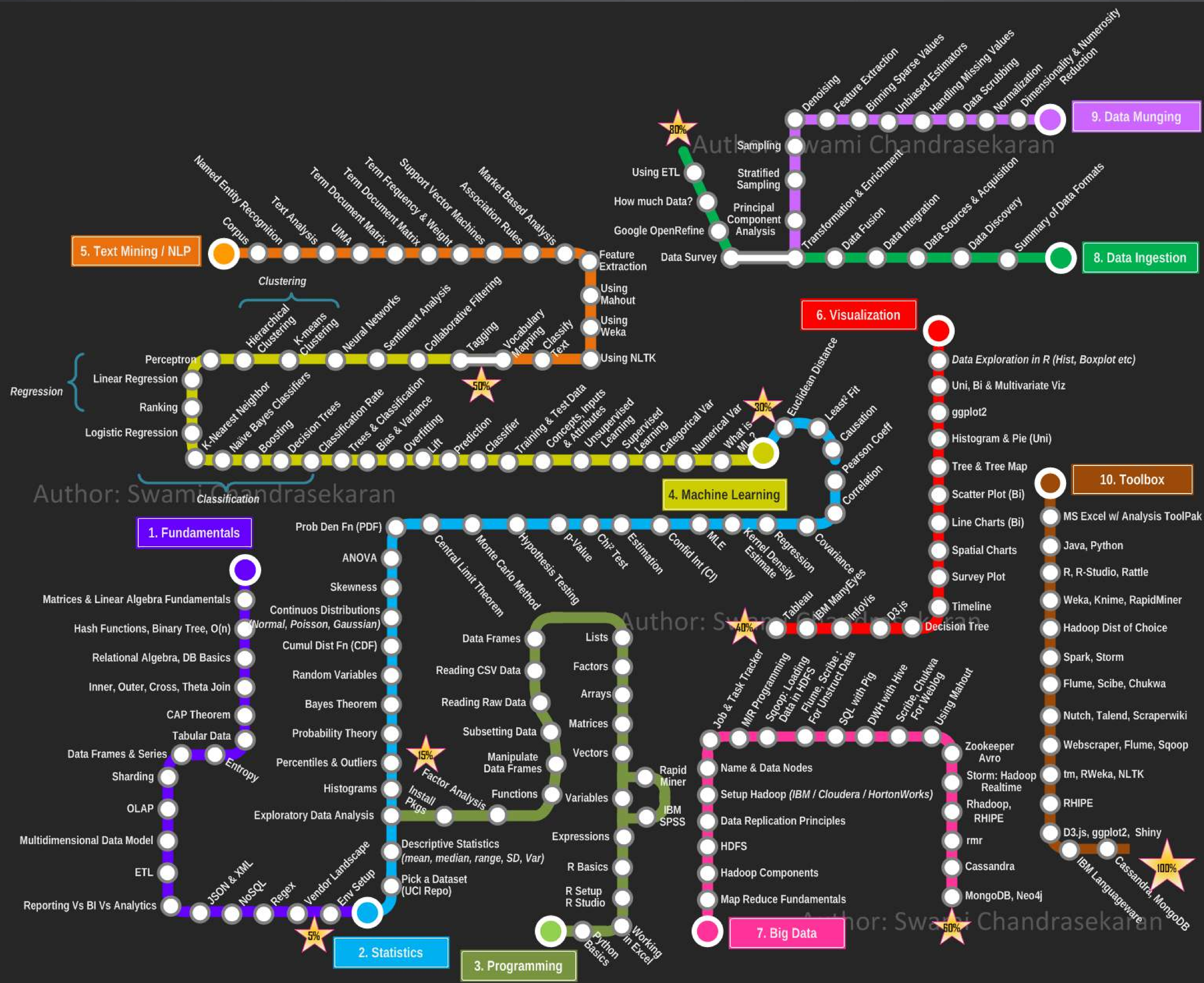
# Skills in Analytics

Mastery of data analytics require learning of tens of skills over 10+ years.

*Illustration courtesy of S.Chandrasekarun*

## Domains of analytics

1. Fundamentals
2. Statistics
3. Programming
4. Machine Learning
5. Text Mining / NLP
6. Data Visualization
7. Big Data
8. Data Ingestion
9. Data Munging
10. Toolbox



Data mining  
Big data processing and applications  
Statistical modelling and inference  
Time series  
Visualization  
Bioinformatics  
Biomedical analysis and applications  
Graphical statistical models  
Epidemiology  
Bayesian inference  
Inverse problems  
Optimization  
Dynamic modelling  
Iterative methods for numerical  
analysis  
Mathematical physics

...

Machine vision  
Machine learning  
Artificial Intelligence  
Pattern recognition  
Imaging  
Robotics  
Information security  
Signal processing  
Wearable sensors  
Data management  
Data engineering  
Data ethics  
Integrated circuits and sensor design  
Optoelectronics  
Microelectronics  
...



Retail & commerce



Automation



Information technology



Health



Telecom



Construction



Energy production



Social work & rehabilitation



Mining



Media



Metalworking

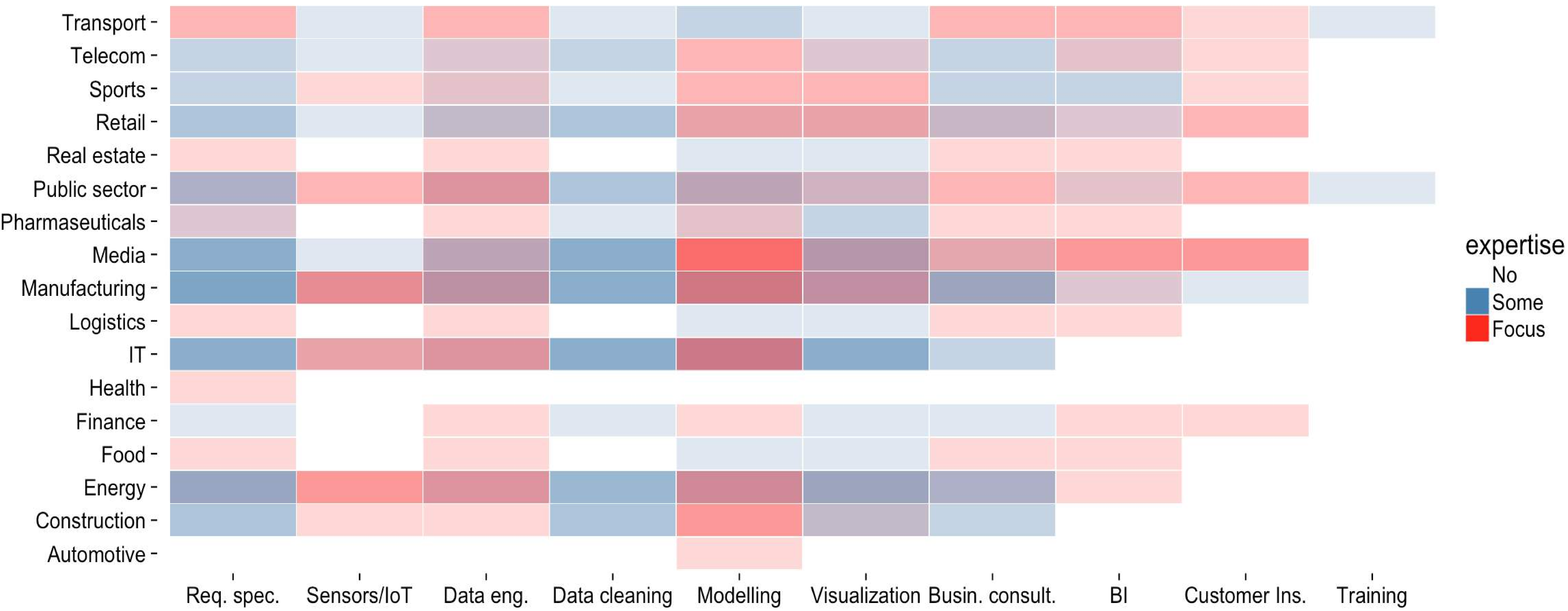


Culture

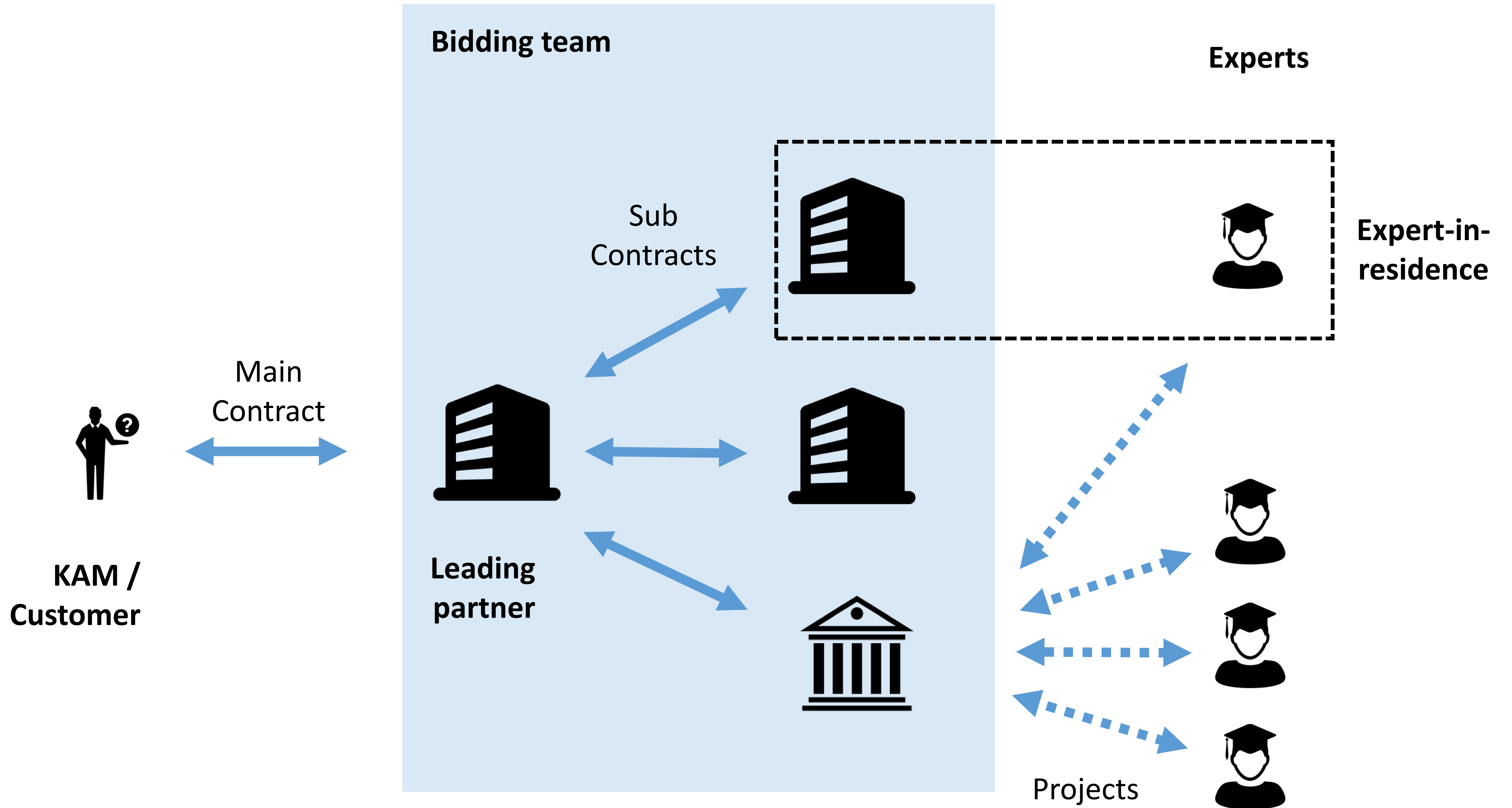




# Partner segmentation



1. Researcher will maintain her status as a member of her research unit.
  - Membership requires acceptance from researcher's superior.
  
2. Term framework:
  - NDA:s by A+. (Future projects for academia must not be restricted.)
  - Publication rights for academia guaranteed.
  - Details case-by-case.



# Interested?

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