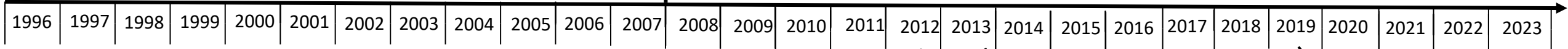


Perspective

VINNOVA's Competence Center **ISIS**
Information Systems for Industrial Control and
Supervision

LINK-SIC
Linköping Center
for Sensor Informatics and Control



Saab Automobile AB
Saab Powertrain:
Mecel AB
Scania:

Saab Bofors Dynamics,
Saab Gripen
Saab Aerospace
Saab Aeronautics:
NIRA

ABB Robotics
ABB Automation Technologies
ABB Corporate Research

Saab
bankruptcy

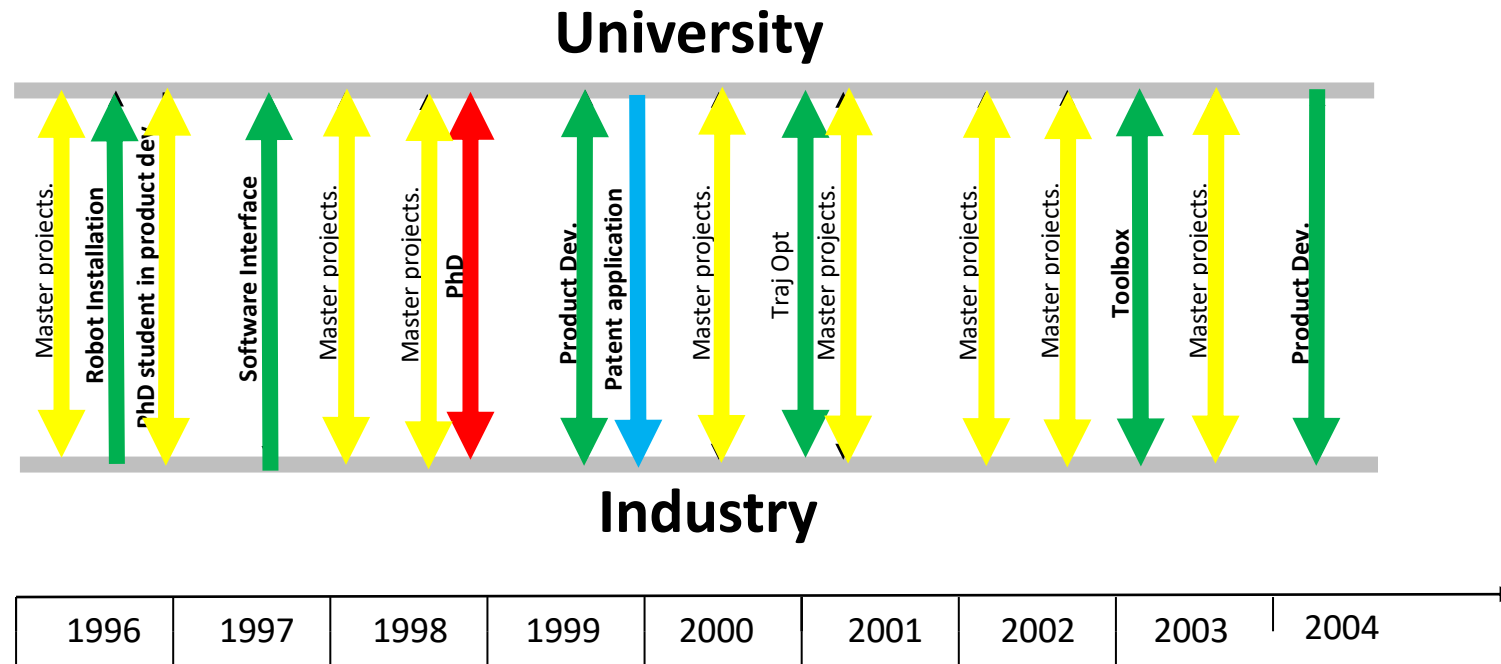
Tesla S

Skeldar

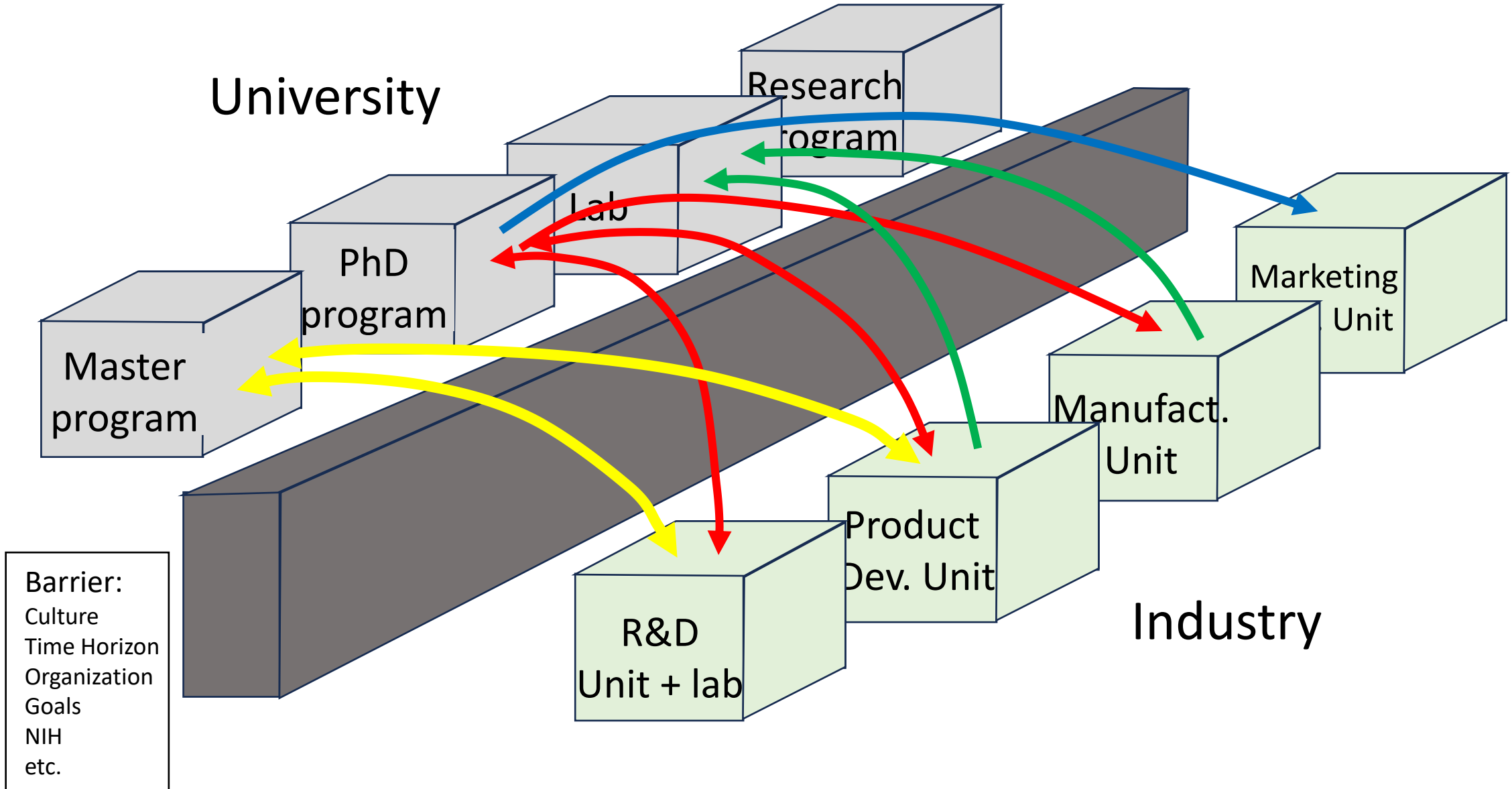
Bayraktar TB1

XC Volvo
Recharge

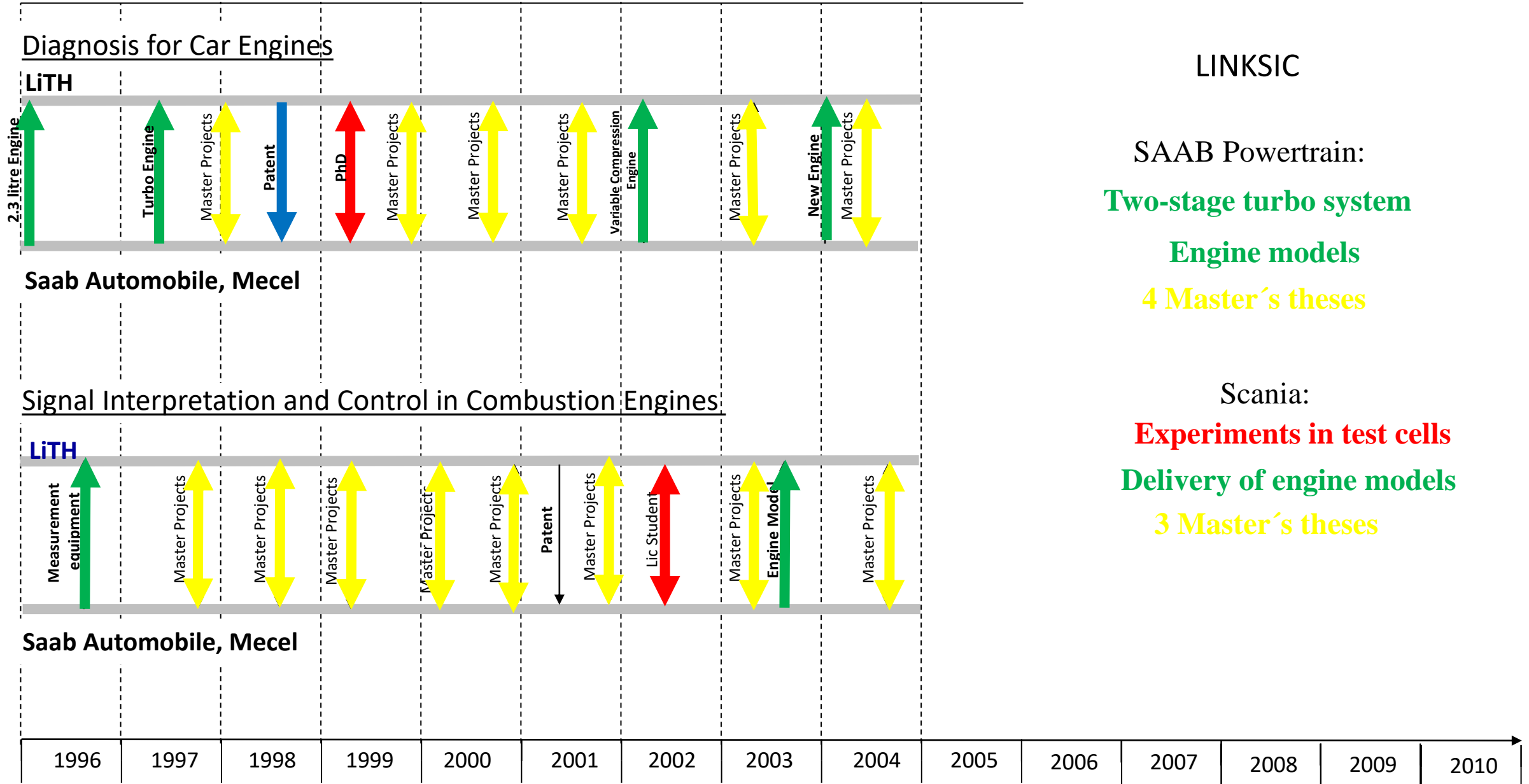
Collaboration Diagram



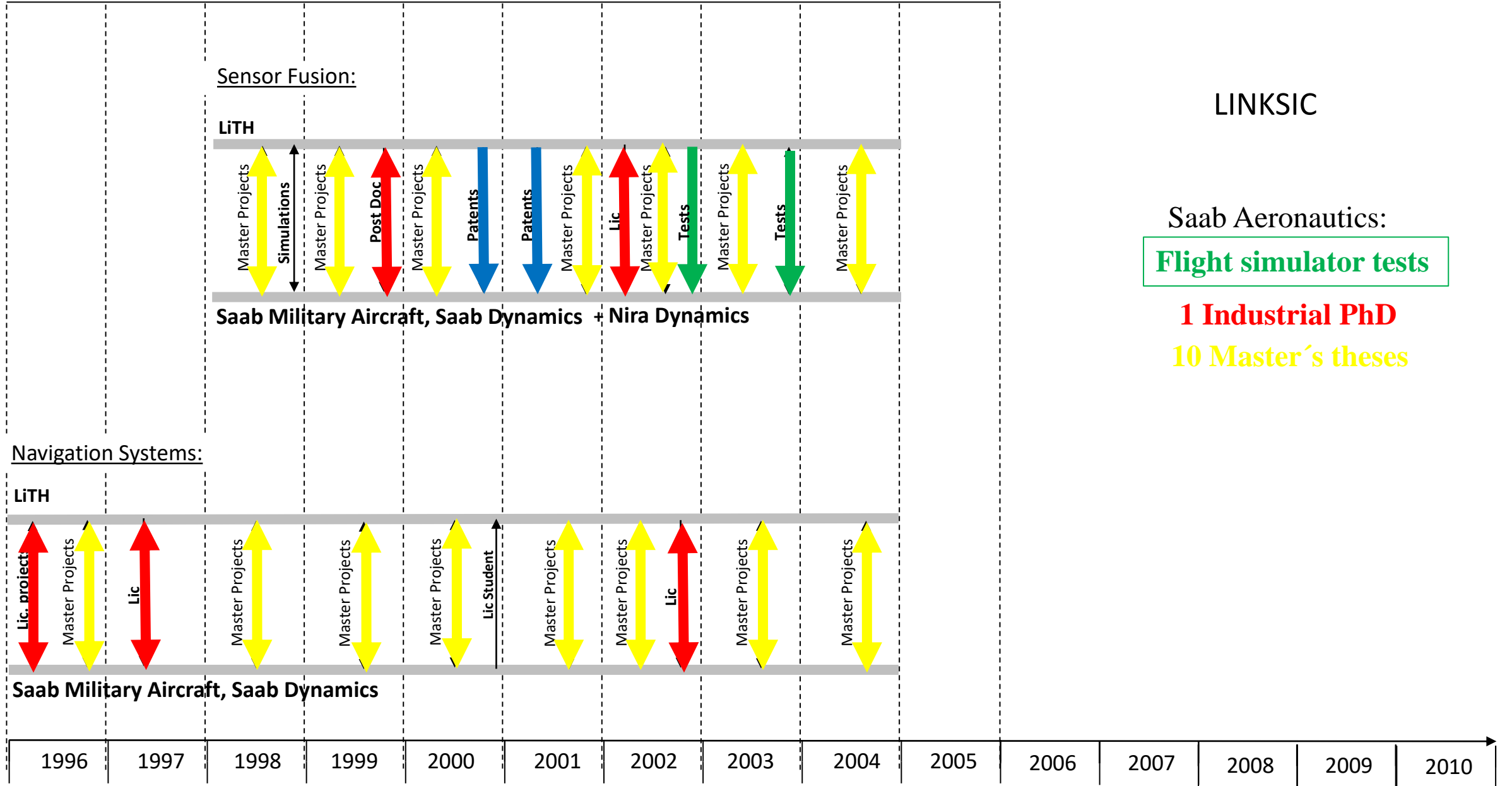
University – Industry Collaboration



Collaboration ISIS/LINKSIC <-> SAAB Automobile, Mecel, SAAB Powertrain, Scania



Collaboration ISIS/LINKSIC <-> SAAB Military Aircraft, SAAB Aerospace, SAAB Dynamics, Nira



Collaboration ISIS <-> ABB Robotics

LINKSIC<-> ABB Robotics

Supervision and Control of Industrial Robots:

LiTH

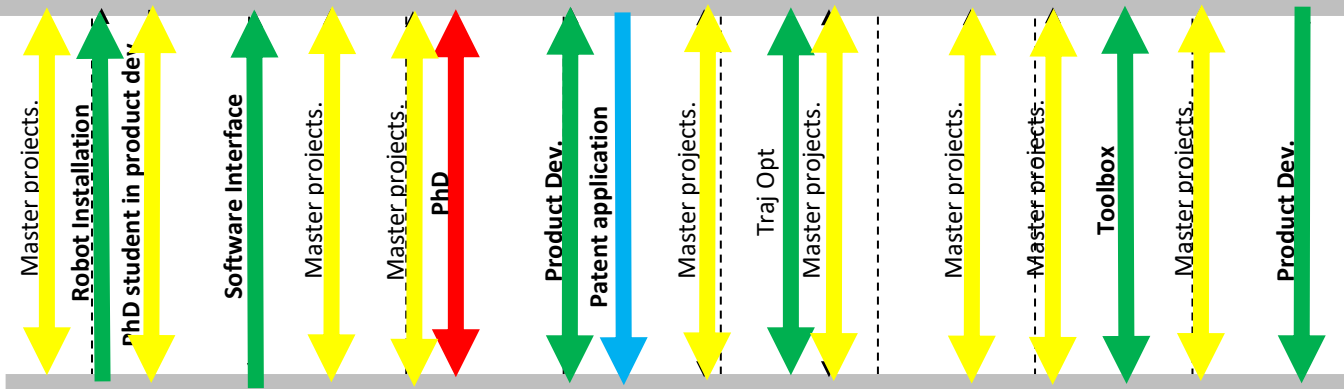


ABB Robotics

New robot controller at LiTH
Identification tool to ABB
Experiments at ABB robotlab

1 PhD
1 Industrial PhD
1 Lic

5 Master's theses

Identification tool

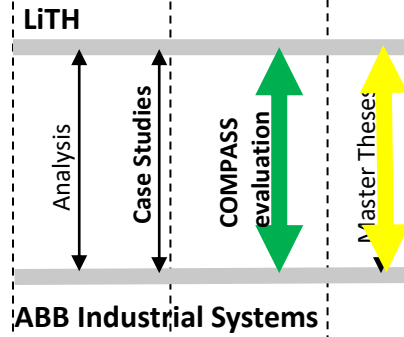
Trajectory Optimisation Product

ILC Product

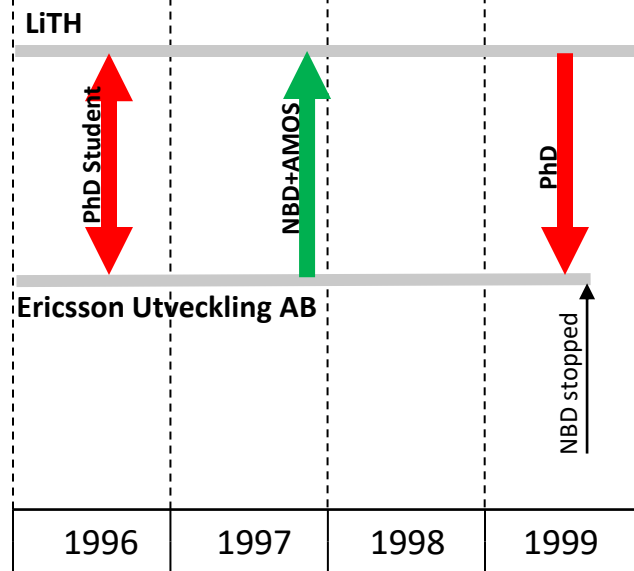
1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010

Collaboration ISIS <-> ABB Industrial Systems, Ericsson Utveckling AB

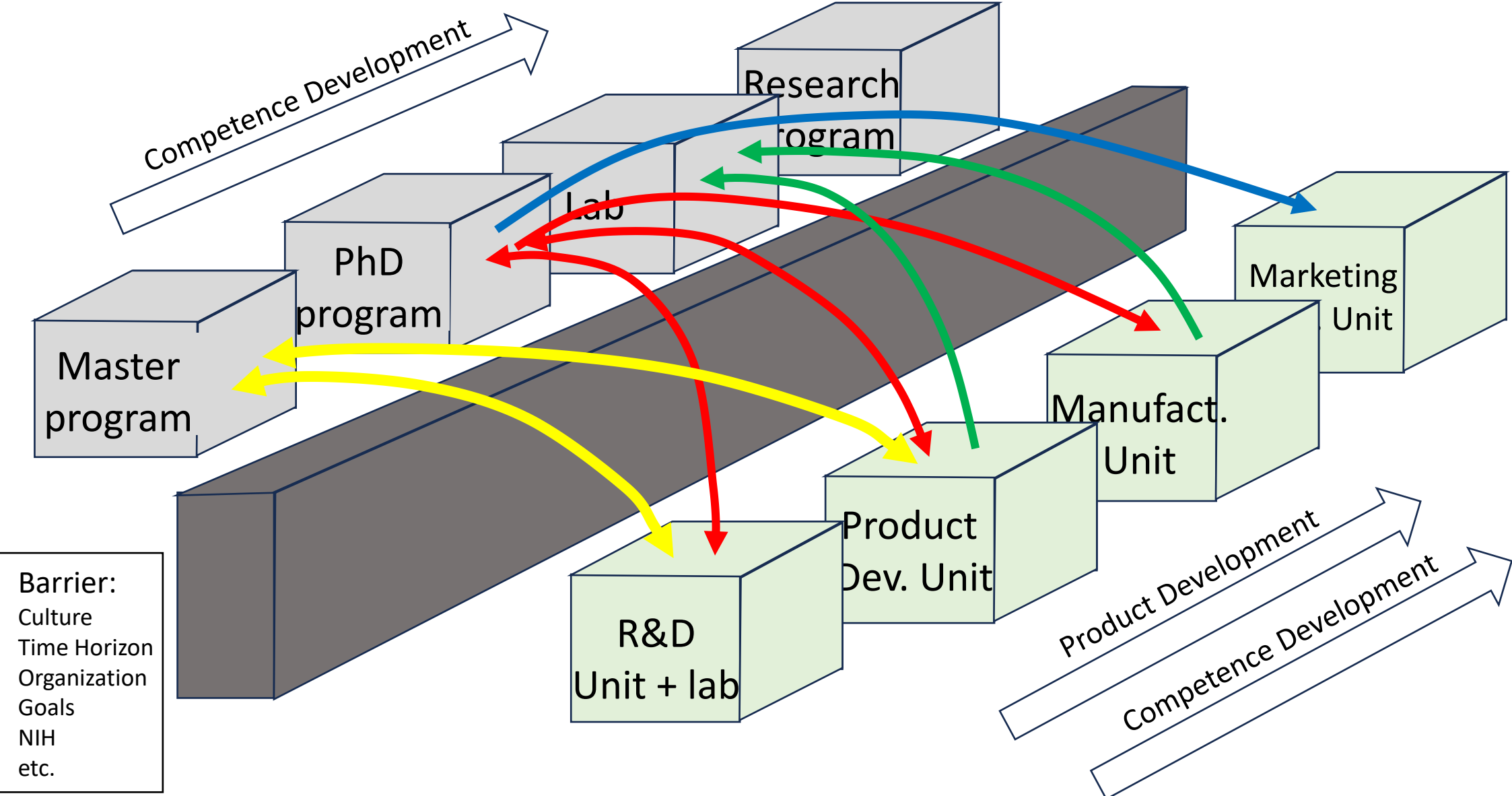
Verification Automation in Software Development:



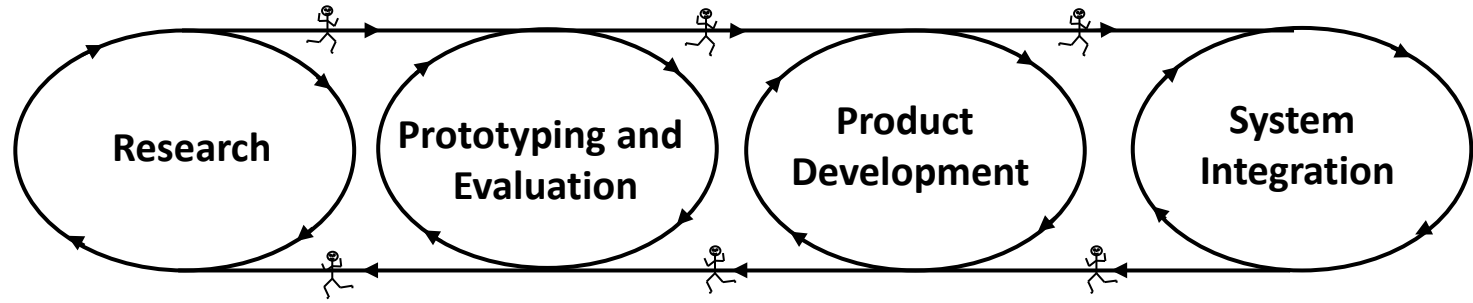
Real-Time Data Bases for Tele-communication:



Development Processes



Flow of Competence



Vehicles →

Navigation Systems →

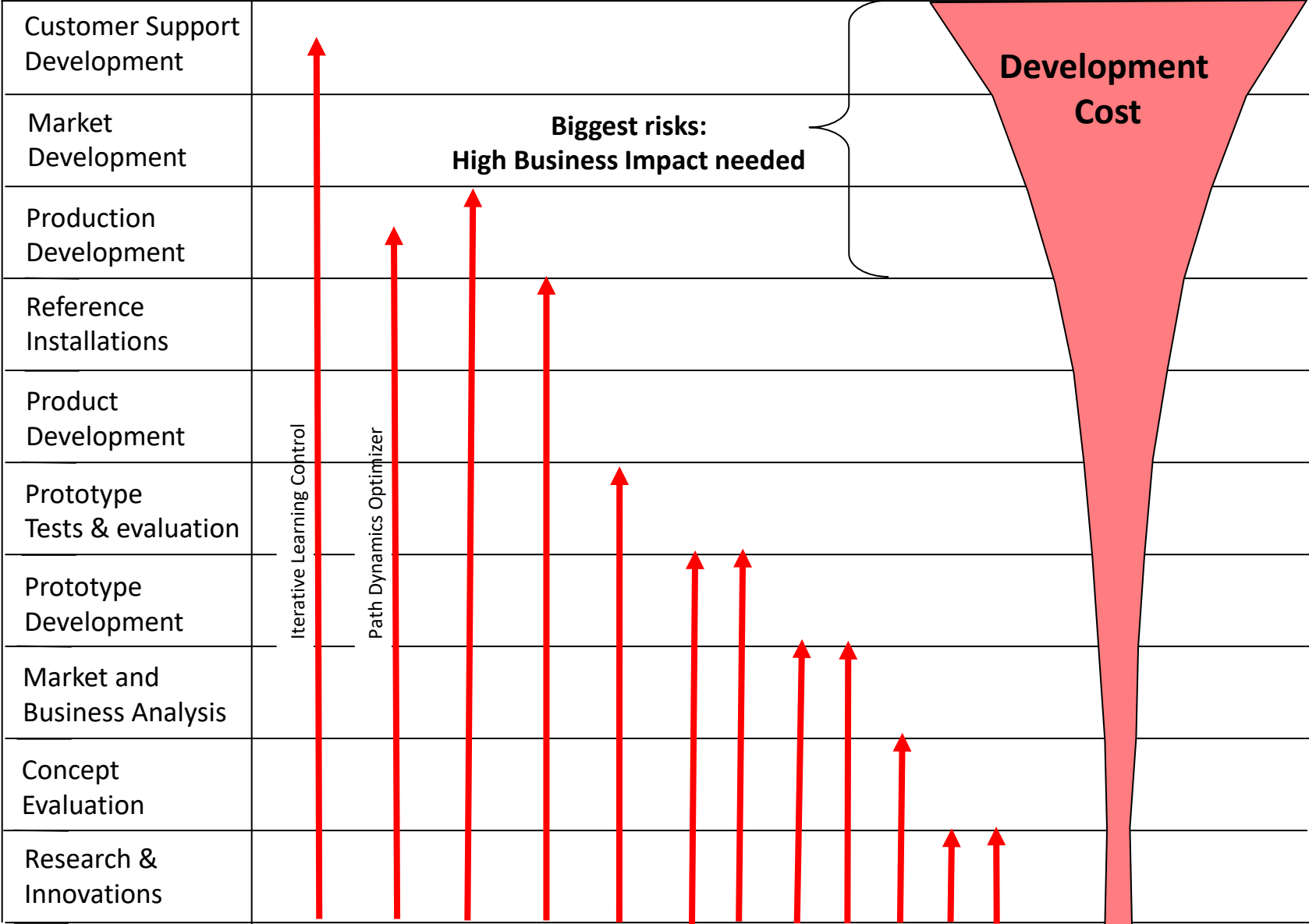
Sensor Fusion →

Industrial Robots →

University [Tapered gray bar]

Industry [Wide gray bar]

Product Development Resources



Requirements on Projects

Industry Partner Requirements:

- High Impact on products
- Timing with future customer requirements
- Integration to product platform possible
- Business model can be adapted to the results
- Core competence development
- Part of R&D Strategy
- Possibility for short term spin off

University Partner Requirements:

- Scientific Relevance
- Competence Focus
- Long term Competence Continuity
- Synergy with other research activities
- High Quality Education
- High Quality Publications

Mutual understanding for
Competitive Industry-University R&D

Literature on University – Industry Collaboration

André Luis Rossoni, Eduardo Pinheiro Gondim de Vasconcellos & Renata Luiza de Castilho Rossoni, 2023: Barriers and facilitators of university-industry collaboration for research, development and innovation: a systematic review, *Management Review Quarterly*

Katharine Lusk, 2018: Lessons learned in effective community-university-industry collaboration., BU City Uni Collab 12-18.pdf <https://open.bu.edu/ds2/stream/?#/documents/329697/page/4>

Richa Awasthy, Shayne Flint, Ramesh Sankarnarayana, Richard L. Jones, 2020 :A framework to improve university–industry Collaboration. *Journal of Industry - University Collaboration*

10 Case Studies of High-Value, High-Return University-Industry Collaborations info@uidp.net.

David H. Hsu, Po-Hsuan Hsu, Kaiguo Zhou, and Tong Zhou, 2022 :
Industry-University Collaboration and Commercializing Chinese Corporate Innovation*

Gustaf Henrik Johan Renman, 2022: University industry collaborations in AI development,
[download \(lu.se\)](#)

+ 80 more relevant papers