

Externfinansierad FoU inom industrial cloud och IoT

Hur bygger man samarbetsprojekt?

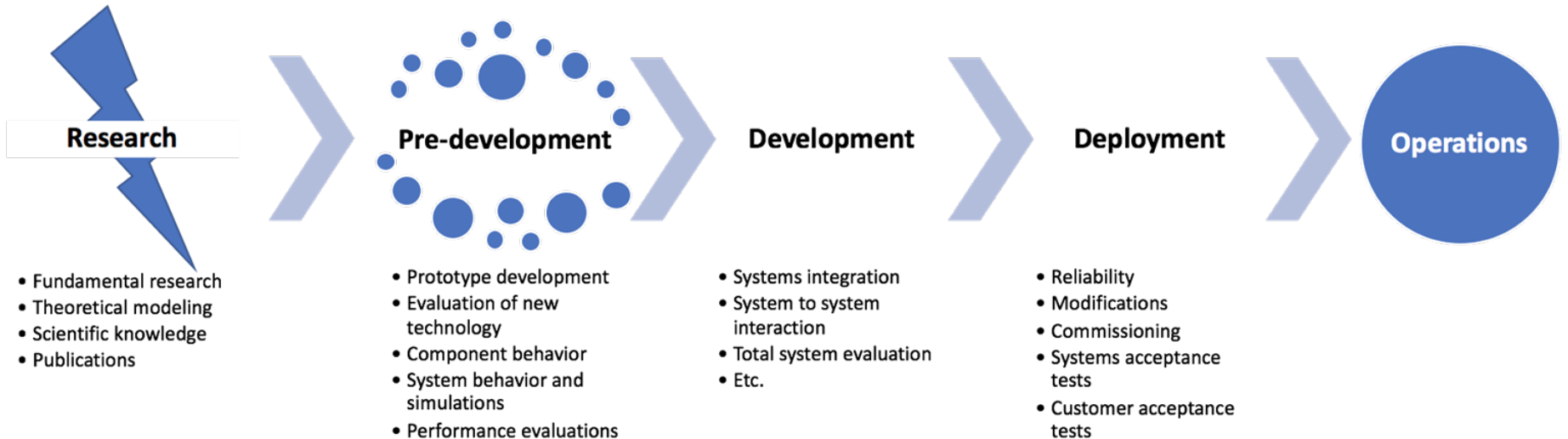
Adj. Prof. Markus Bohlin, RISE SICS / MDH / KTH

RISE

- SP, Swedish ICT and Innventia. Swerea (43 %).
- 2015 turnover 3 billion SEK (55 % from industry, 27 % from public funding)
- 3 000 employees, 30 % with a PhD
- SME clients responsible for approx. 30 %
- Run 100s of test and demonstration facilities, open for industry, SMEs, universities and institutes (RISE is owner and partner in 60 % of all Swedens T&D-facilities)



Role of RISE SICS in innovation system



APPLICATION AREAS



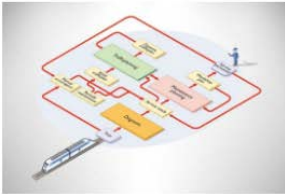
AUTOMOTIVE AND RAIL

Railways SICS has conducted research in the railway domain for more than a decade. The projects have covered a wide range of areas, including capacity assessment,



DATA CENTERS

SICS ICE is a unique national datacenter built for cloud and big data research SICS North Swedish ICT and Luleå University of Technology has built a national



DECISION SUPPORT AND BUSINESS INTELLIGENCE



DIGITAL HEALTH

Our society is facing a number of tough challenges, especially within the areas of environment, energy, transport and demographic changes. Used to its full potential, ICT can be



DIGITALIZATION OF EDUCATION

SICS is active in several courses, contributes expertise on online education, and develops novel flexible methods and digital tools for



INDUSTRIAL AUTOMATION AND MAINTENANCE

The Swedish ICT Centre for System Availability and Resource Efficiency can help improve uptime, reliability

CONNECTING UNIQUE EXPERTISE TO ENABLE THE FUTURE INTERNET OF THINGS

INTERNET OF THINGS AT SICS

A unique consortium The future is a plethora of entertainment, sports and life style apps making heavy use of sensors and actuators built into



TELECOM

In most of the ICT solutions of today Internet and telecom is a necessary and basic infrastructure. The smartphone revolution has opened up a new field of applications that

Industrial Efficiency and Automation Portfolio

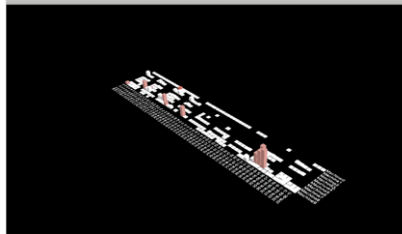
18 years of industrial experience

Systems development



- Cloud solutions & evaluation
- Model-based development
- Test-case prioritization
- Software artifact analysis
- Product variant testing
- Timing analysis

Automated analytics



- Condition monitoring
- Predictive maintenance
- Time-series analysis
- Model-predictive control
- Deviation detection

Optimization of operations



- Queueing & dimensioning
- Production planning
- Logistic systems evaluation
- Energy optimization
- Driver's advisory systems
- Battery operations

The Västerås Team



Pågående

Vinnova-projekt kring ökad innovationsförmåga för en digital transformation.

- En serie workshops för att identifiera områden där AI och molnlösningar kan implementeras
- Syfte: att undersöka hur den påverkar organisation, processer och affärsmodeller.
- Sökes: två partners från industri eller offentlig sektor

Digital Master Plant -- digitala tvillingar för hela produktionsanläggningar (med Bombardier)

- Ökad tillförlitlighet och produktionstakt
- Koppla ihop machine learning och stokastisk produktionssimulering
- Automatisk träning och identifiering av produktionssimuleringsmodeller

Nya AR och VR-lösningar

- Nya tillämpningar för AR och VR
- Hur kan vi skapa AR och VR-modeller snabbare från existerande data

Testning av AI-system

- Funktionalitet i AI/ML-baserade system baseras på den data modellerna tränas med
- Hur säkerställer vi funktionalitet och kvalitet i system baserade på AI?
- Täckningsmått, verifiering/validering av ML-baserade system