

VEHICLE ICT ARENA

COMPETENCE & INNOVATION NODE

LINDHOLMEN SCIENCE PARK

Innovation Bazaar

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Renewal of the vehicle industry

Digitalization is sweeping in over the vehicle industry. It will open great opportunities for some actors - and it will be a hostile tsunami for some.

Vehicle ICT Arena was formed to support the change with a focus on the in-vehicle systems. We want to develop a strong local eco-system to be a node in a global industry.

Vehicle ICT Arena will close 2018-12-31

Context 2011 when VICTA was formed

- Geely bought Volvo Cars 2010 – Owners from China compered tió US Ford?
- Volvo – SOP delayed for first cross brand paltform – FH launched Aug 2012
- Saab Automobile in bancrupcy. Regional action to save competence.
- Volvo Cars start development of own platform SPA with Autosar 4.0
- Volvo platform based on Autosar 3.1, establish global organisation
- Connectivity the big trend. Platform and ECO-system uncertainty.
- Fouriertransform formed with 3 GSEK to invest in vehicle industry renewal.
- FFI-program "permanent"

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Arena for innovation and competence

- Join forces within vehicle ICT to reach world class
- Contribute to industrial innovation
- Driven by societal challenges for safe and sustainable transports



Varför?

Att se till att regionen överlever om någon drar ur proppen för ett storföretag

Att skapa jobb för våra barn och barnbarn

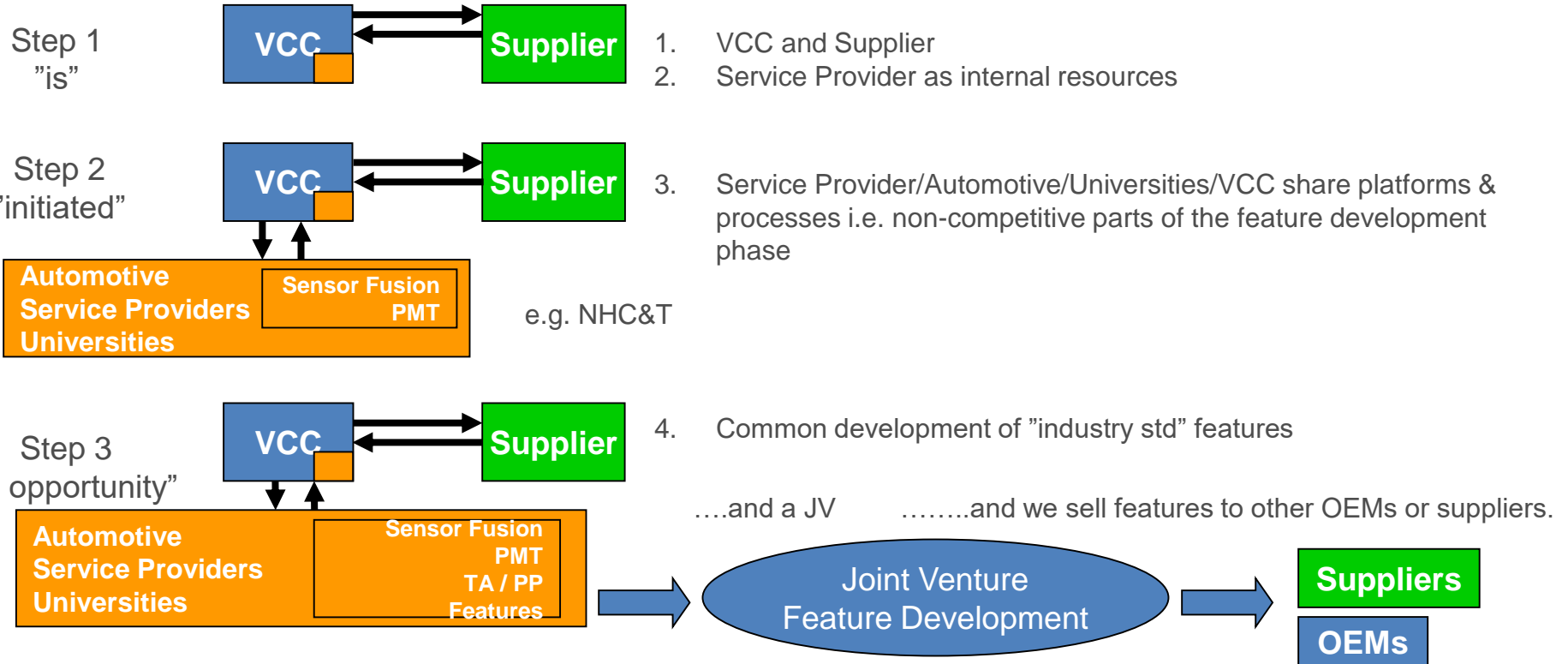
Strong incentives to act

- The amount and complexity of ICT is rapidly growing in vehicles
- Global competition is driving the industry towards fast and cost-effective product development
- Open the market by de-coupling functions from the platform by using global standards like AUTOSAR

The automotive industry needs to be able to develop, acquire and integrate software just as easy as you would in a mobile phone.



Interaction VCC, Supplier and Service provider



Digitalization and Automotive Industry

- Electrification
- Automation
- Connectivity
- Mobility as a Service



Illustration from Ericsson



Context 2018 – Vehicle Industry in Sverige

- Volvo Cars surfing on a successful products and strategy timing
- CEVT delivered platform, new brand and Geely vehicle development
- Geely EU-center at Lindholmen decided and construction started.
- Volvo all time high profitability - "Martin optimism"
- NEVS still around with high profile Chinese partnerships
- Autoliv spin out Veoneer. New centre at Lindholmen and AD-partner with Volvo Cars
- Zenuity fast track to global footprint
- Ericsson connectivity partner till Volvo Cars, Lynk&Co...5G is the future
- Combitech/Saab see transport as second market for airport and defence technology.

Context 2018 in Sweden

- Enormous demand for expertise
- Lindholmen need Lund, Linköping, Stockholm and Mälardalen in a global view
- Flagship projects
 - ElectriCity – win-win for all
 - DriveMe did not deliver
- New start-ups with international attraction
 - Einride
 - Northvolt
- MobilityXLab in operation
- Test beds
 - AstaZero successful operation - eco-system
 - SEEL Electromobility Lab – Decided
- R&D program
 - FFI established "engine", 1 GSEK/year
 - WASP –3 GSEK/10 years
 - SIP - Drive Sweden, Viable Cities et.al
- Fouriertransform stopped

Vehicle ICT Arena has formed activities to support collaboration between vehicle OEMs and external software suppliers since 2012. Innovation Bazaar, Open Innovation Challenges, VICTA Lab, Born to Drive, SHOP are all examples of activities.

What is the result and lessons learned for the future?

Anders Hjalmarsson-Jordanius, senior researcher at RISE Viktoria will present results from his research.

Invited keynote speakers are Magnus Östberg, VP Engineering E&S, Aptiv and Alwin Bakkenes, MD Automotive Luxoft. Both are high level managers in leading supplier companies in the vehicle industry. Both Aptiv and Luxoft have large engineering organisations with a global foot print, and with cutting edge development centres located in Gothenburg. They partner with OEMs and tech-giants in leading projects.

They will present how their companies change over time to stay competitive, and what they want to see in Gothenburg to stay competitive and grow here.

Exhibitors

Company	Topic
Smarteye	New generation head/eye-tracking
Cybercom	osCar - V2X SW Framework
TimeCriticalNetworks, Alkit, RISE Viktoría	RETINA-projektet
MDH Mälardalens Högskola	VeriSpec - Tool demo
ESI	Tool
Business Sweden	Collaboration with Modena Italy
Fengco	Tool
Ericsson	Carla ridesharing service
Avelabs	Innovation product
RISE Viktoria	IT-students demo



Panel

- How can we make Gothenburg attractive in the change?

Hopefully the audience will contribute to a fruitful discussion.

Supporting know how from FFI projects

- Predrag Filipovikj Mälardalens högskola
VeriSpec - Structured Specification and Automated Verification for Automotive Functional Safety
- Jonas Unger Linköpings Universitet
SynCity - Syntetisk data för träning av djupa neuronnät
- Rickard Arvidsson Volvo Cars
VCloud II, Styrssystem och Reglering hos Autonomt Styrda Fordon med fokus på energiförbrukning
- Urban Kristiansson RISE Viktoria/LUK
Automatiskt laddbara fordon i prosumentens ekosystem



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