

ITEA2-SCALARE

Scaling Software

Co-summit 2015, 10-11 March 2015, Berlin

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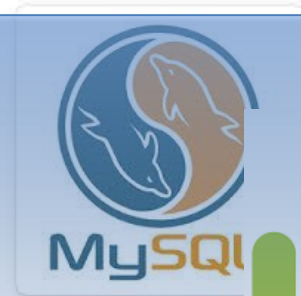
Scaling?



Scaling: hw -> sw



Scaling: proprietary -> open source

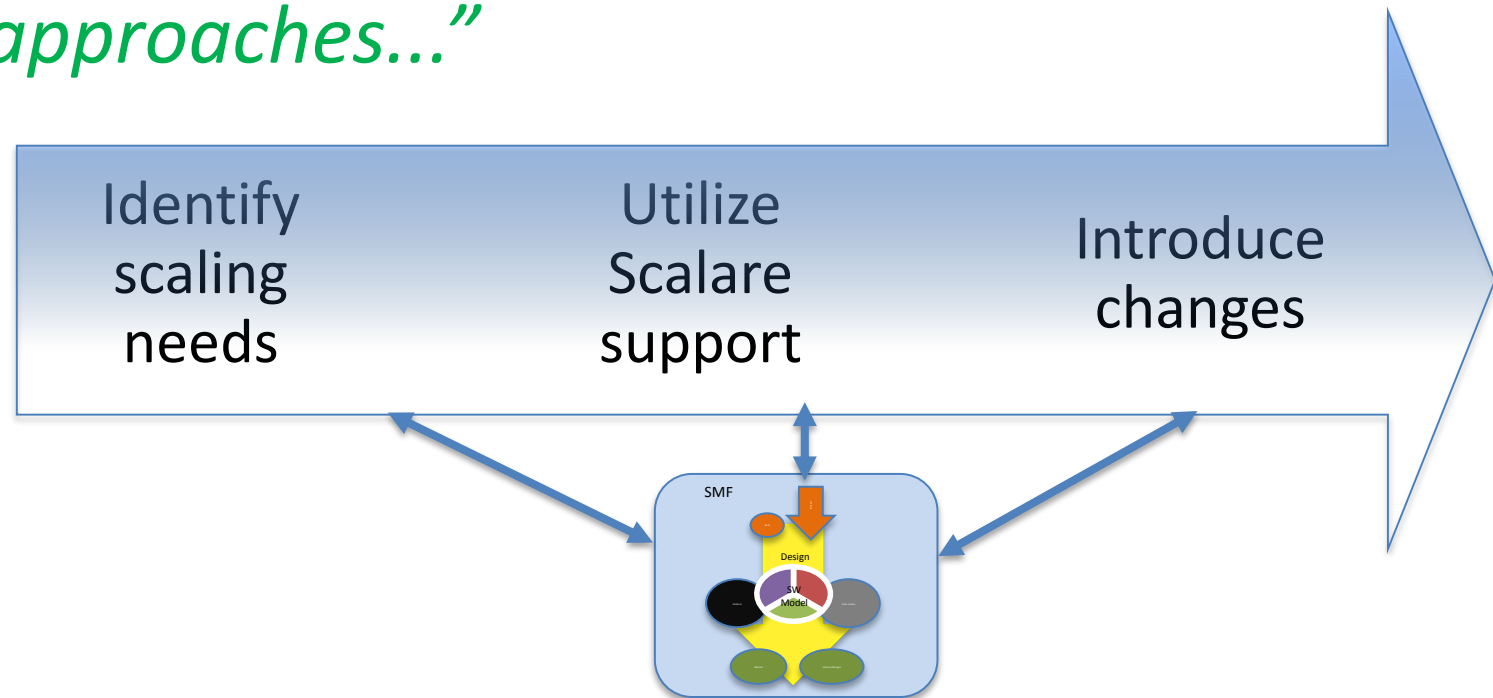


Scaling: small & local -> large & global



SCALARE in a nutshell

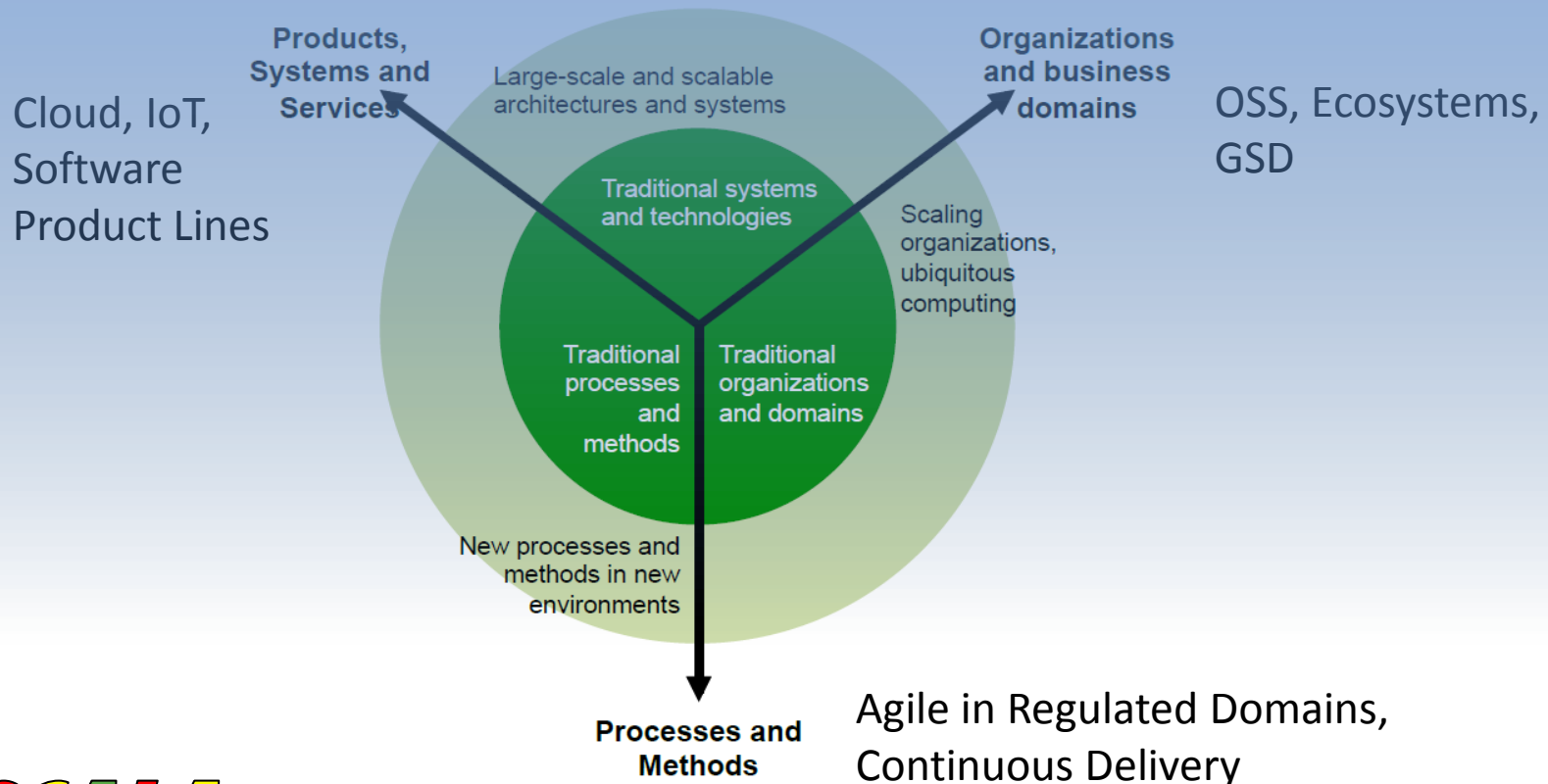
- *“to provide systematic guidance to companies, ... for various scaling approaches...”*



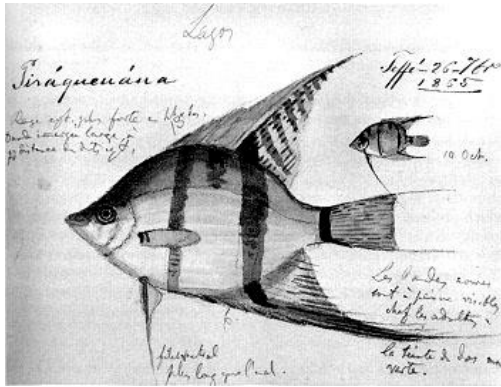
Scaling Management Framework (SMF)
Guidelines to use SMF

SCALARE is Multi dimensional

- Software is scaling along different dimensions
 - Scalare has a **Multi dimensional approach**.



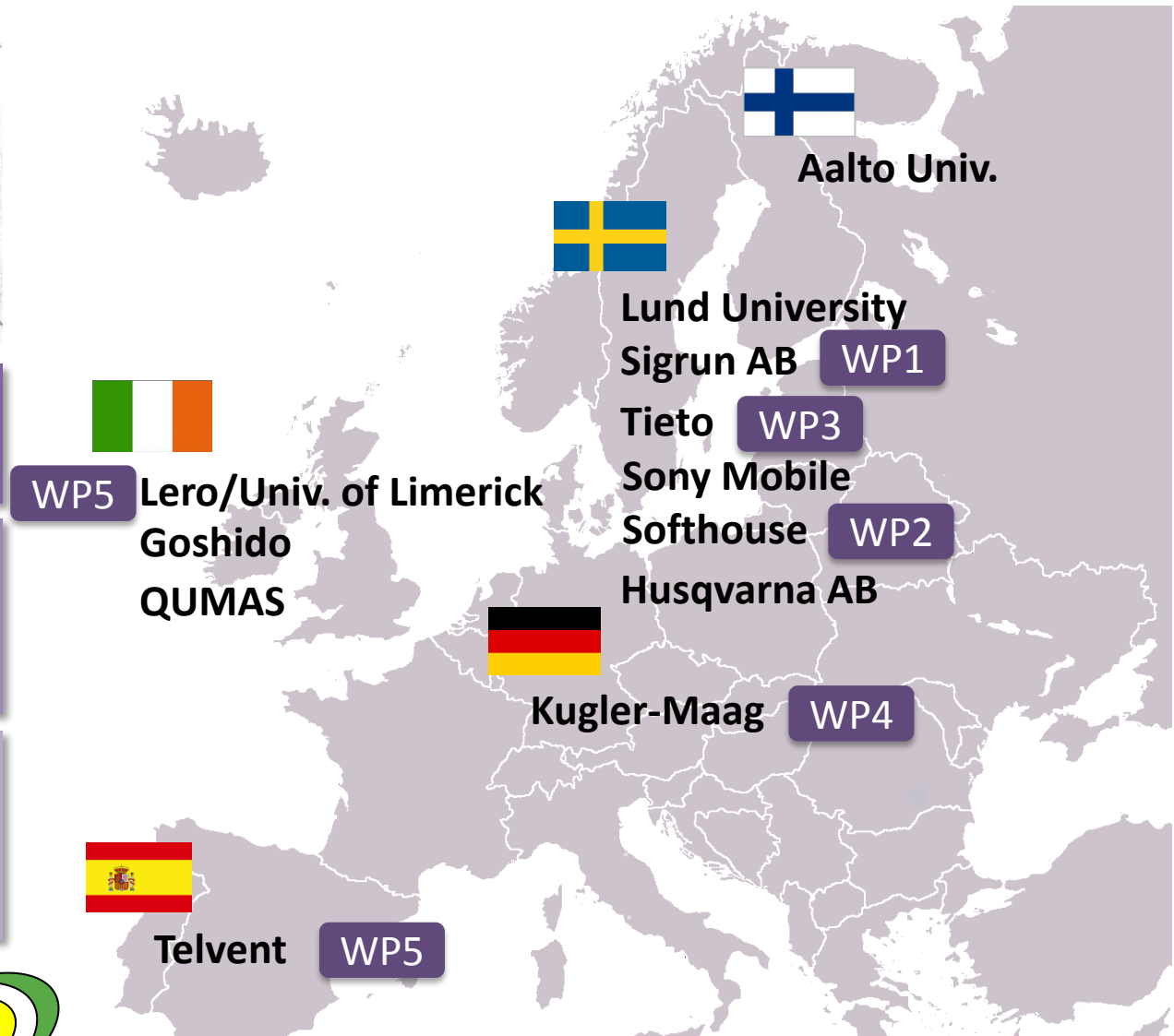
SCALARE Consortium for SCALing softwARE



3 years project,
started Dec. 2013

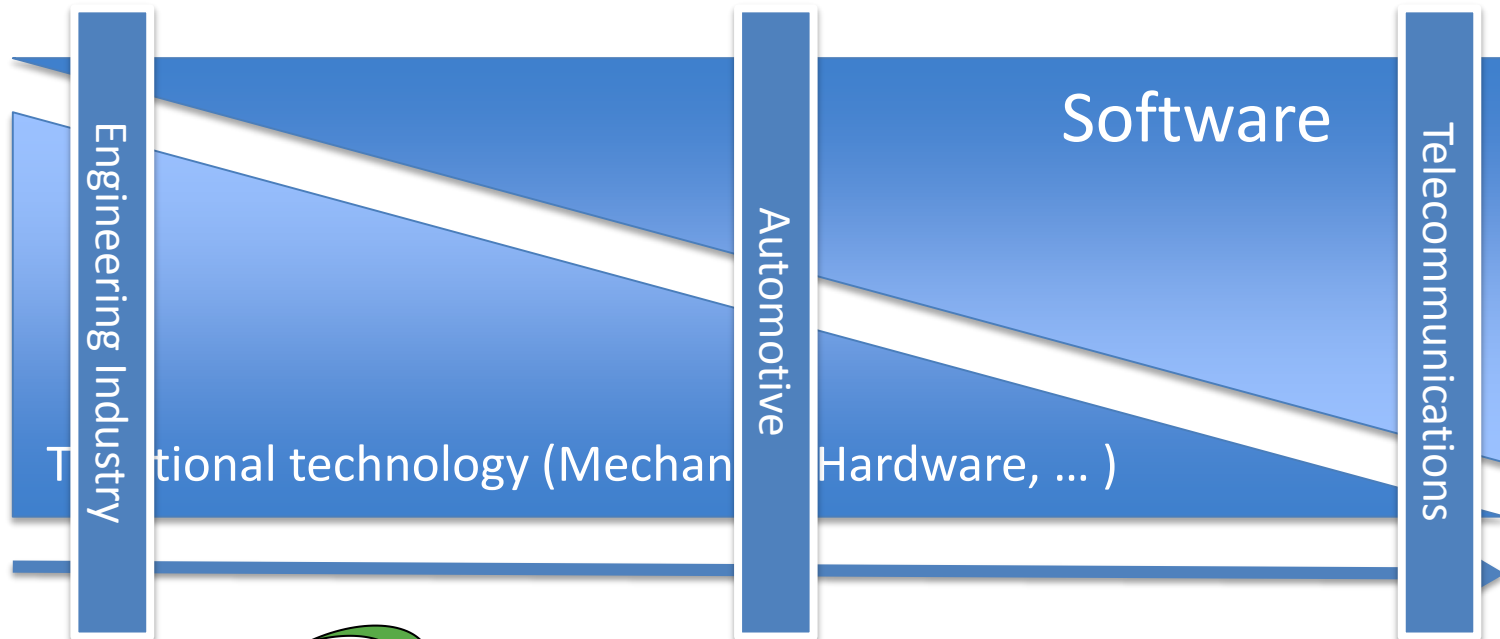
Consortium of 12
partners from 5
European Countries

Industry: 4
SMEs: 5
Universities: 3



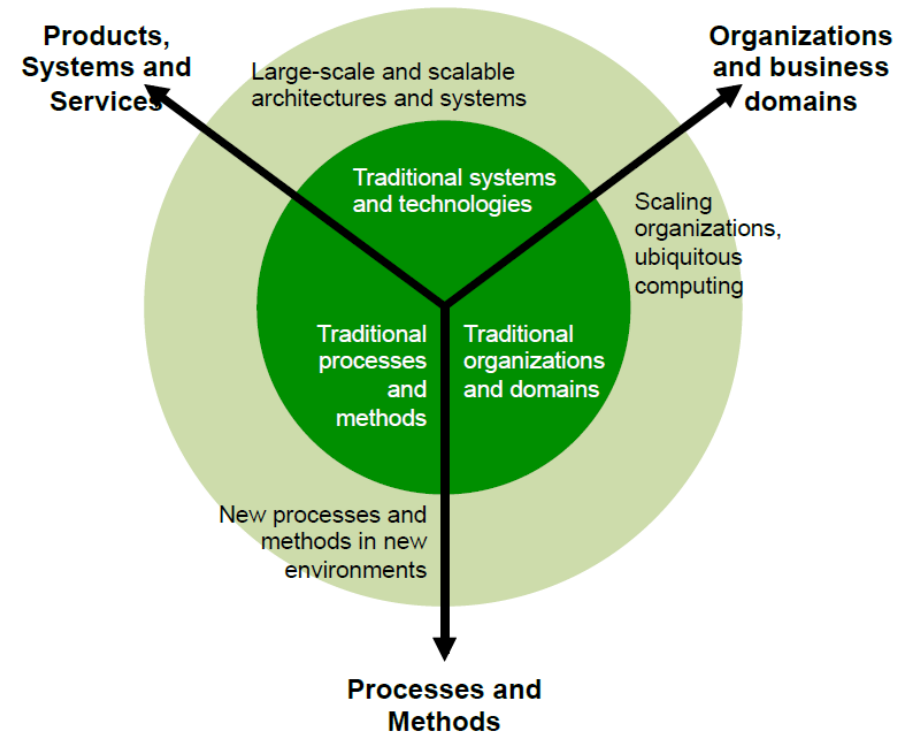
SCALARE – Project Goal

- Support and enable industries to **scale their software capability** as software moves **from secondary consideration to primary importance** in delivering innovation and competitive products or services

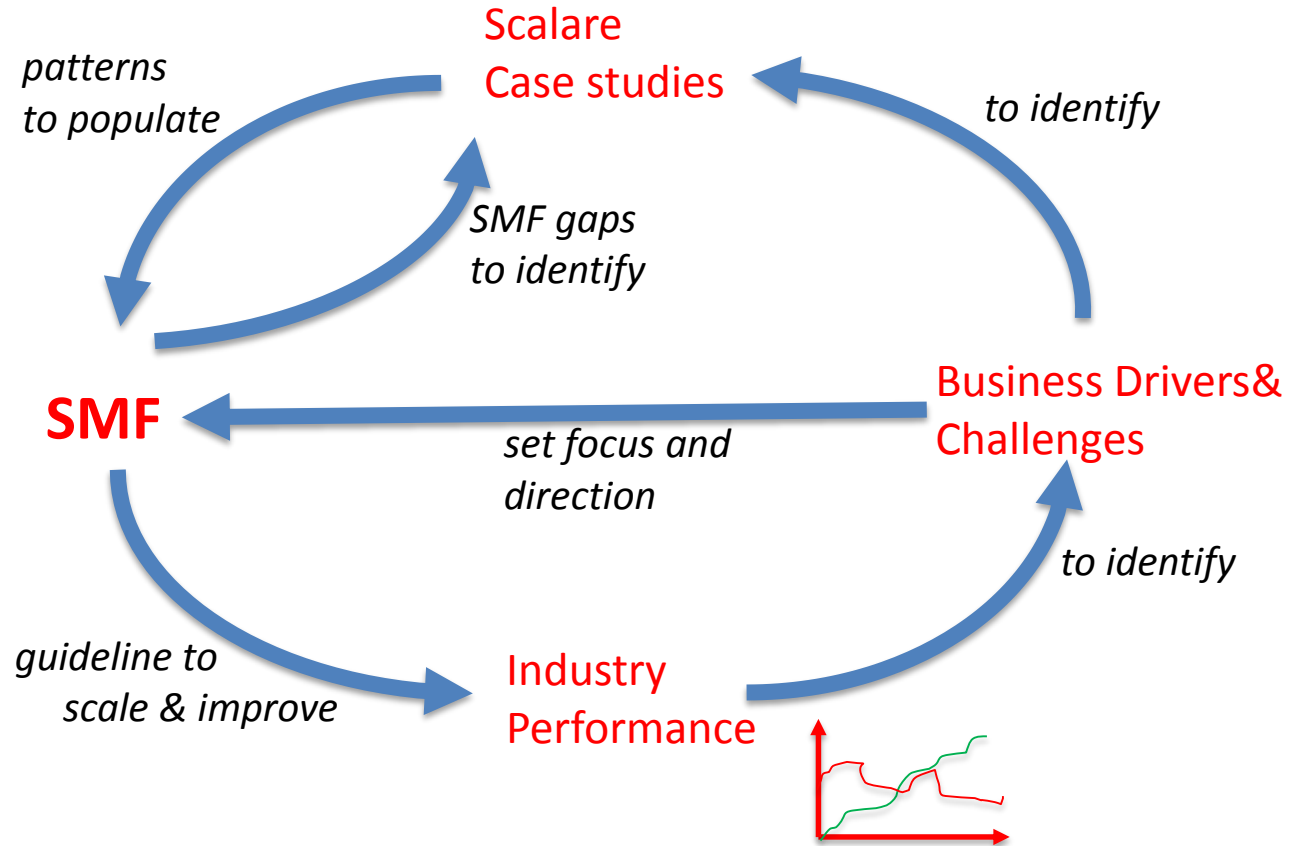


SCALARE - Results

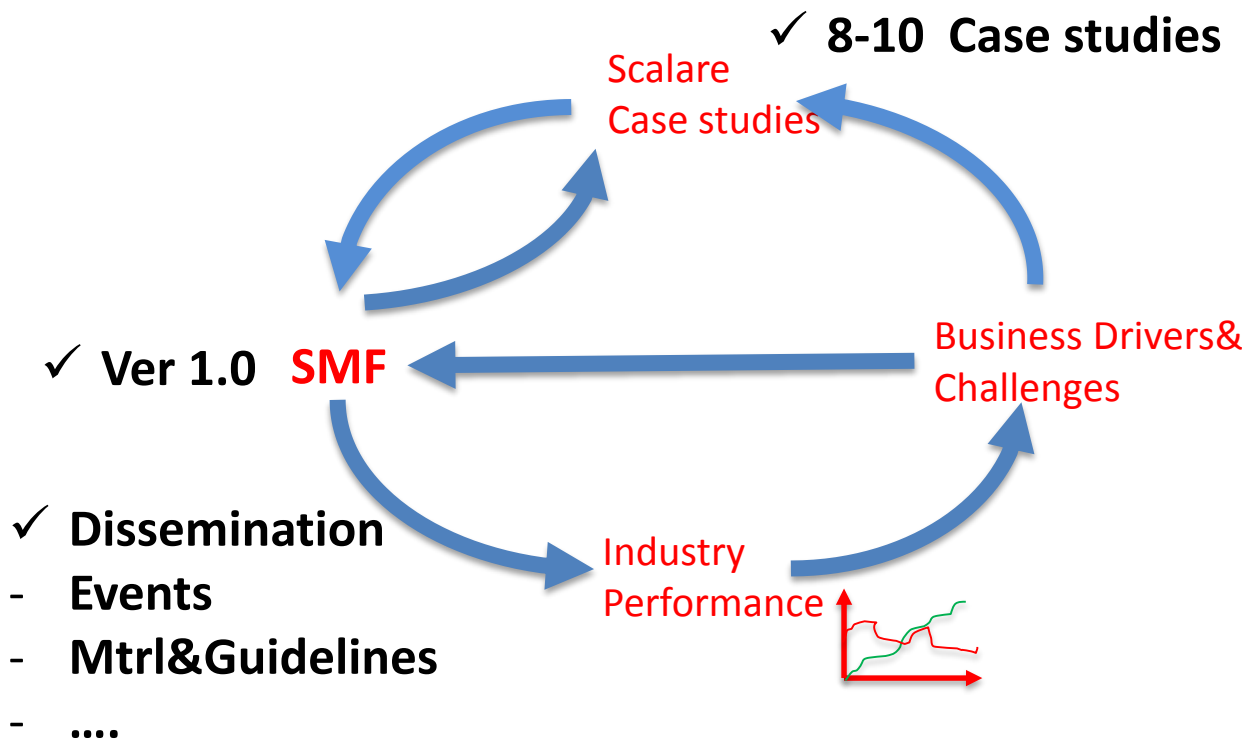
- Scalability
- Management Framework (SMF)
- Real-world industry case studies
- Training material
- Toolset
- Textbooks and course material



SCALARE Strategy



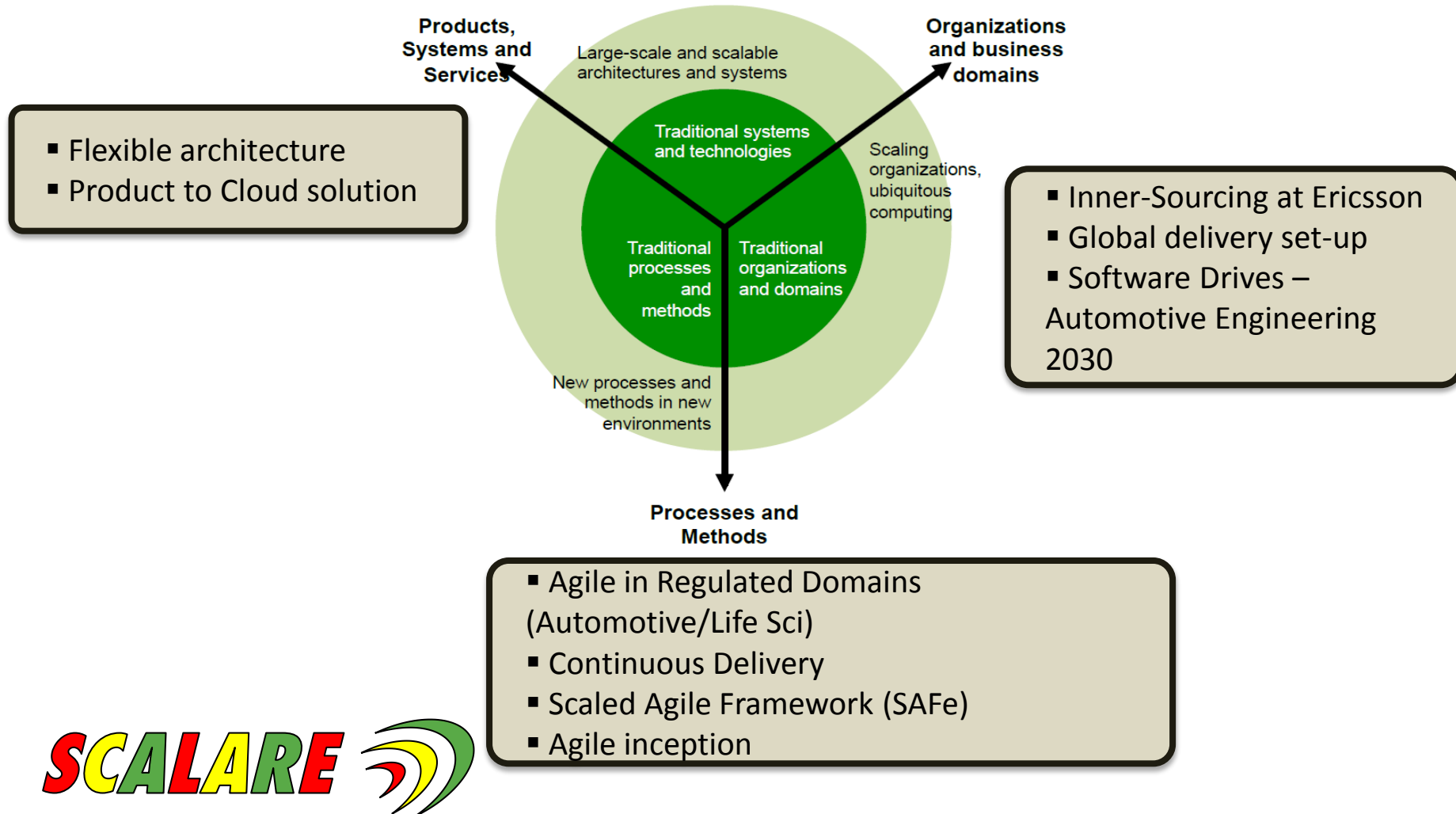
Status SCALARE



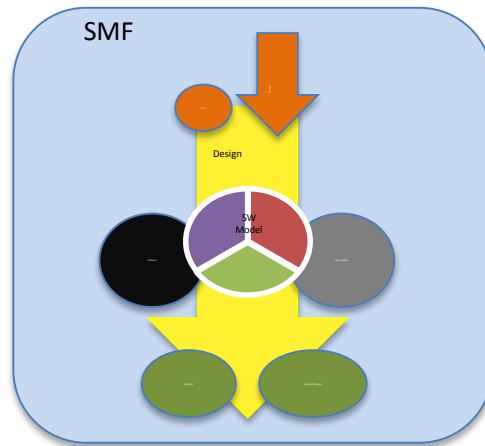
- ✓ Dissemination
 - Events
 - Mtrl&Guidelines
 -



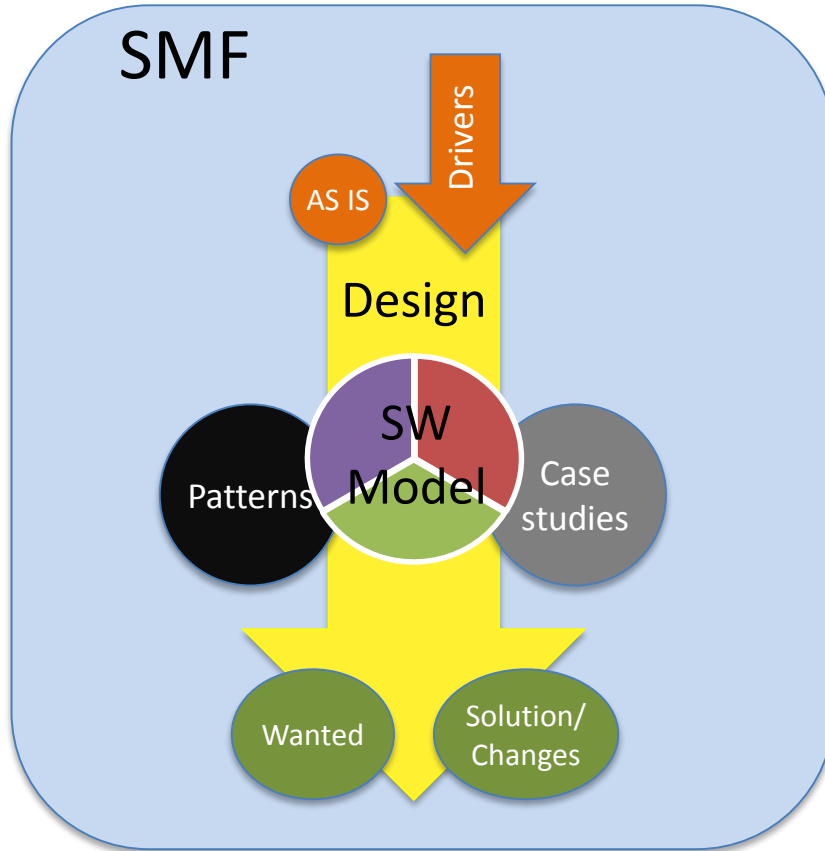
On-going case studies summary



Scaling Management Framework (SMF) in 15 minutes



How to use SMF



- 1) Define **Drivers**
- 2) Use **SW Model** to describe **AS IS**
- 3) Add **AS IS** and **Drivers** to **Canvas**.
- 4) Use valid **Case studies** and **Patterns**
- 5) Select patterns for actual situation.
- 6) Define **Wanted position**, gaps and needed **Changes**. Add to **Canvas**.
- 7) Plan and implement the changes

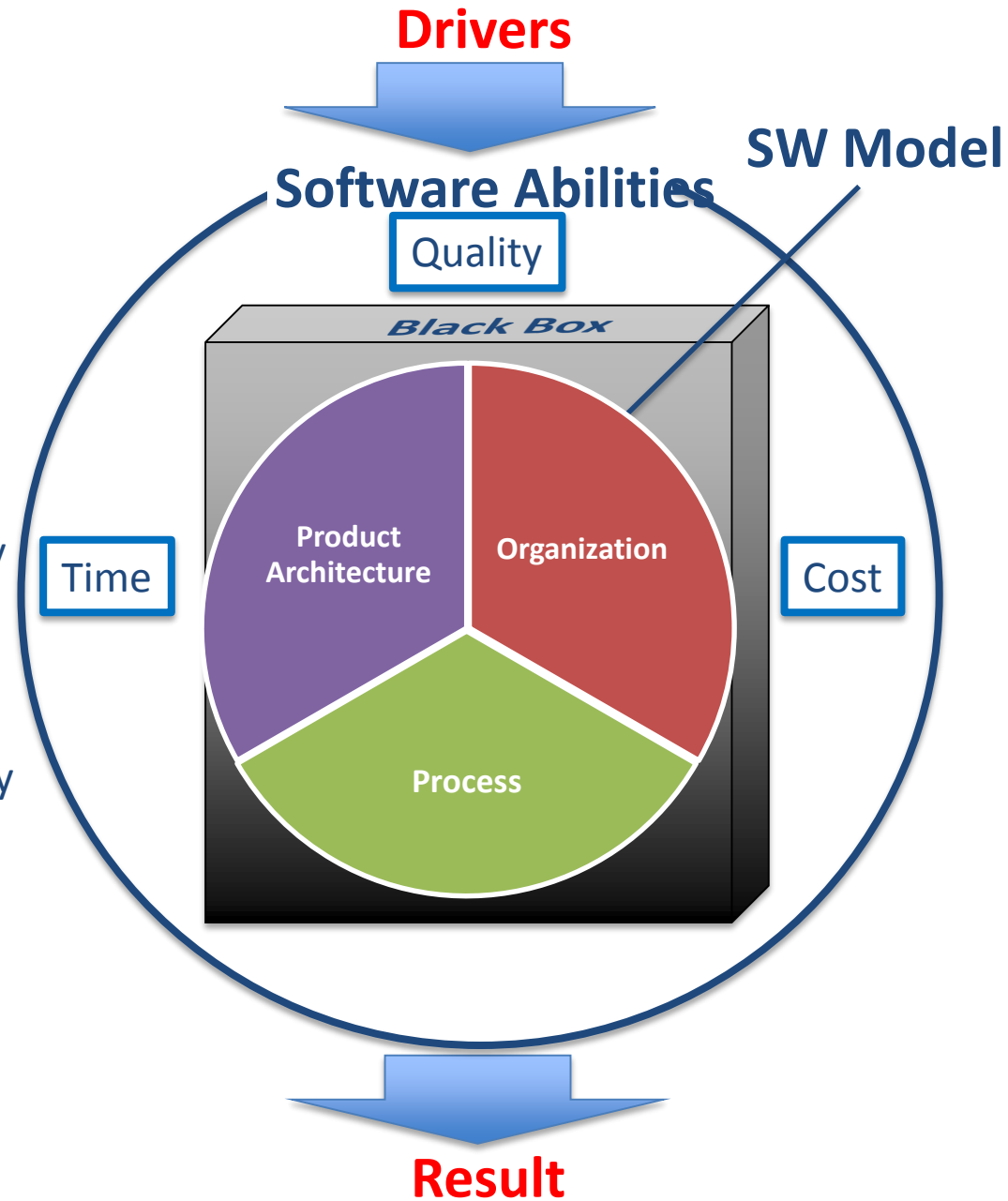
Overview of SMF

Case Studies

describes the story of how a company has scaled.

Patterns

a solution package possibly affecting several domains.



Drivers

trigger a need to scale – a need to improve abilities

Examples of business drivers are:

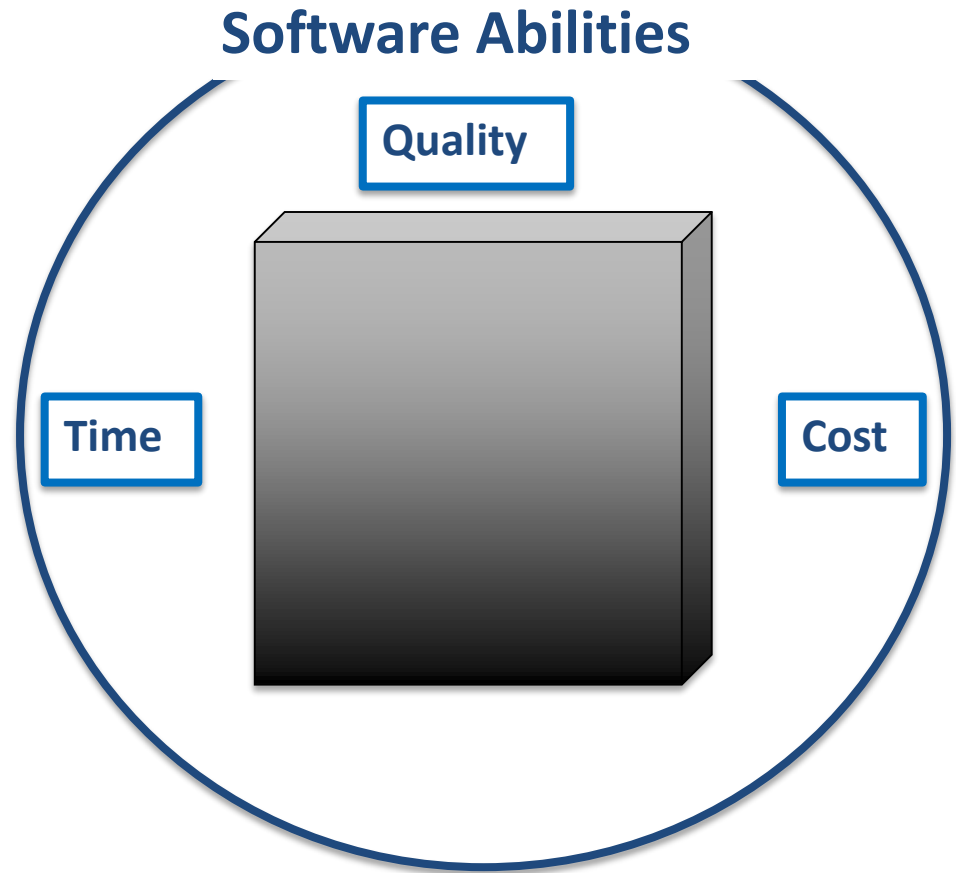
- New markets
 - Test tools company
- New products
 - Amazon web service
- Extended functionality
 - Sony phones
 - Engineering companies

- New partners and “competitors”
 - Google for Sony
 - 3rd party applications for phones
- New requirements
 - Safety standards
 - Process requirements



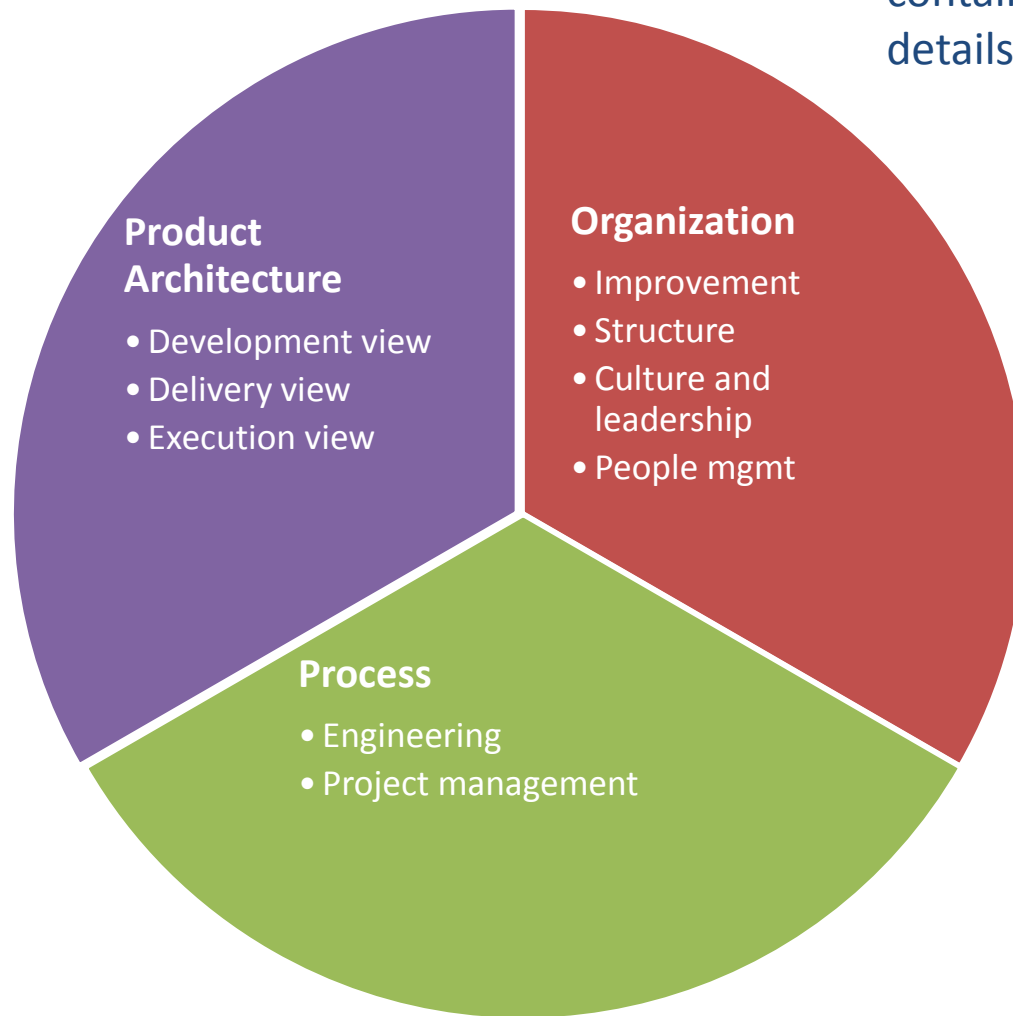
Software abilities

- Cost
- Time
 - Flexibility/Speed
- Quality
 - Safety
 - Security
 - Configurability
 - Compatibility
 - Maintainability
 - Usability
 - Serviceability
 - Evolvability
 - ...

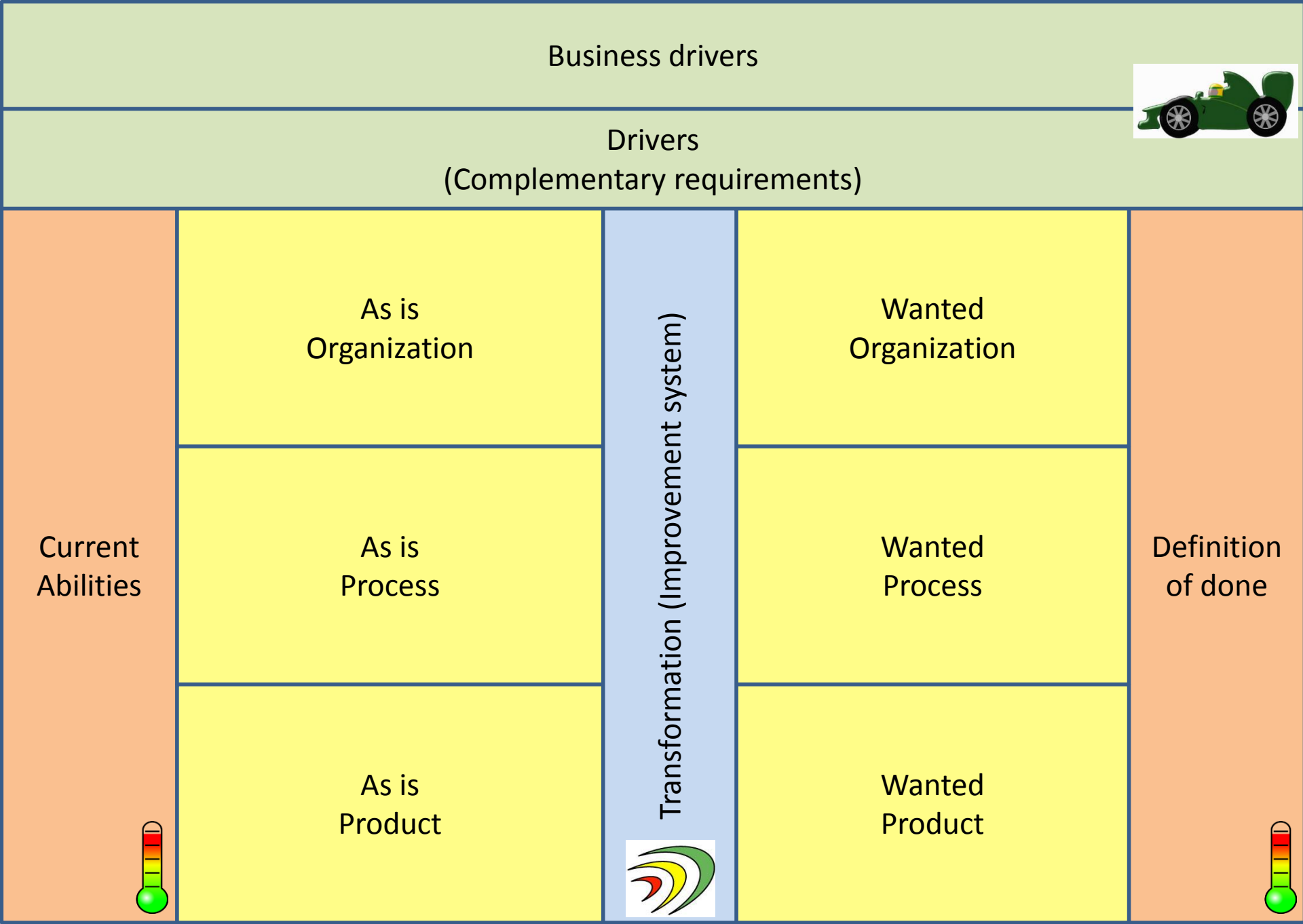


Software Model

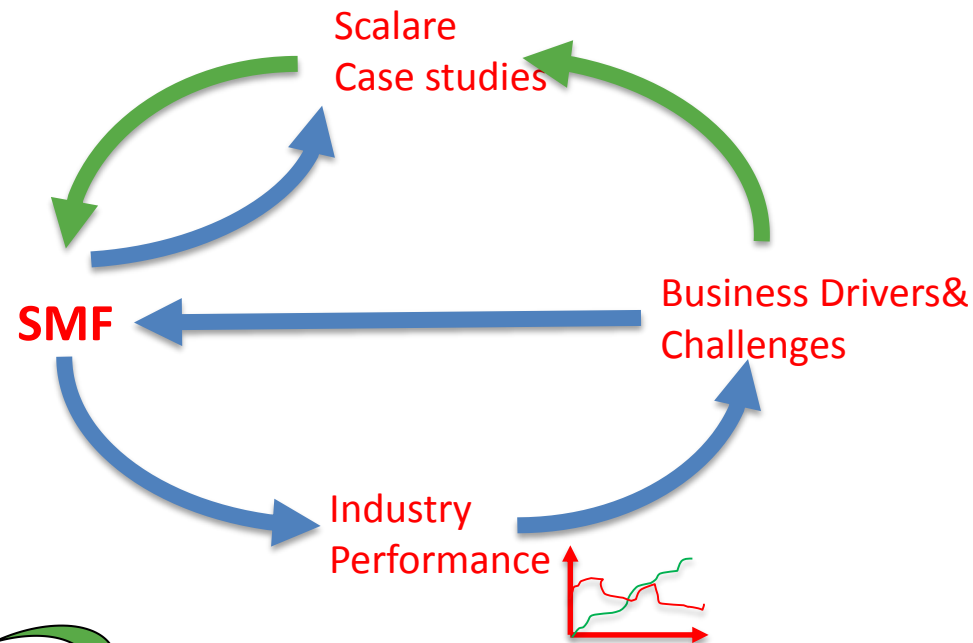
contains references for how to find details.



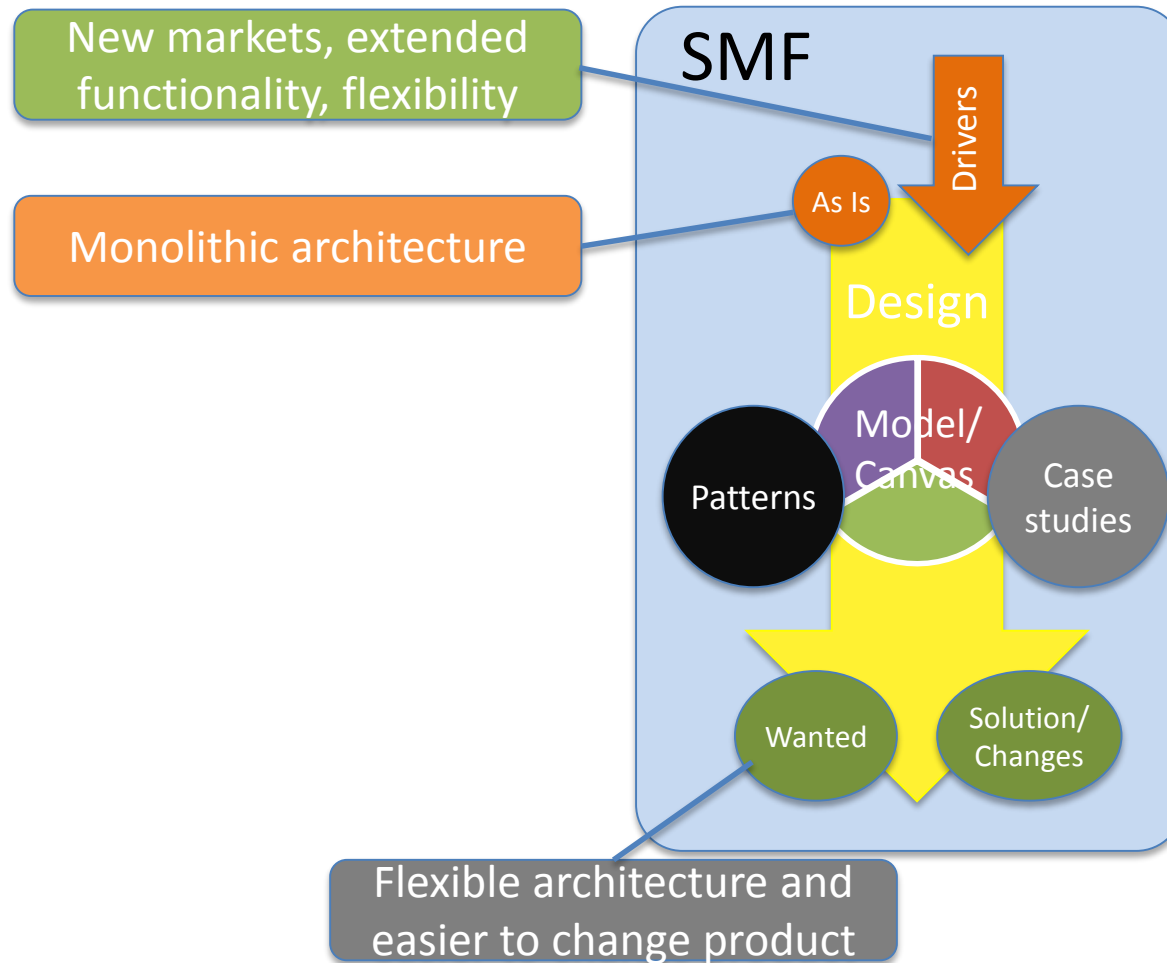
SMF CANVAS



A Case Study – and how it populates our SMF

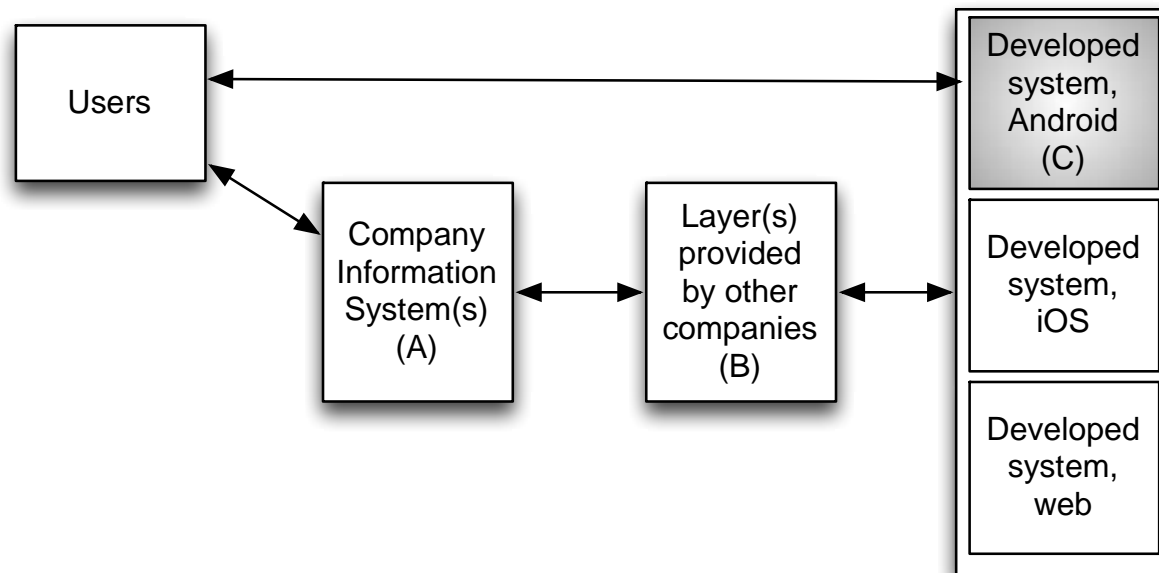


Case study / example



Technical background

- Case company has developed a software system that is part of another system



Business drivers

- Case company sees a need to be proactive when it comes to
 - New market opportunities
 - New products and services
 - New business models
 - Extended functionality
- Today the product is intended for one customer group, but that can change with short notice

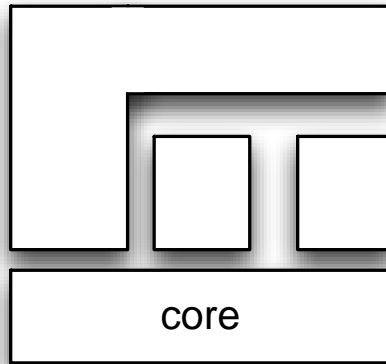


Product changes made by the case company

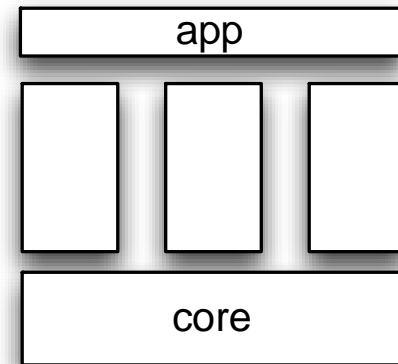
- Division of the software into “pipes”
- Lowering the amount of reuse, with the goal to improve the maintainability and maintain the quality.



Initial: monolithic

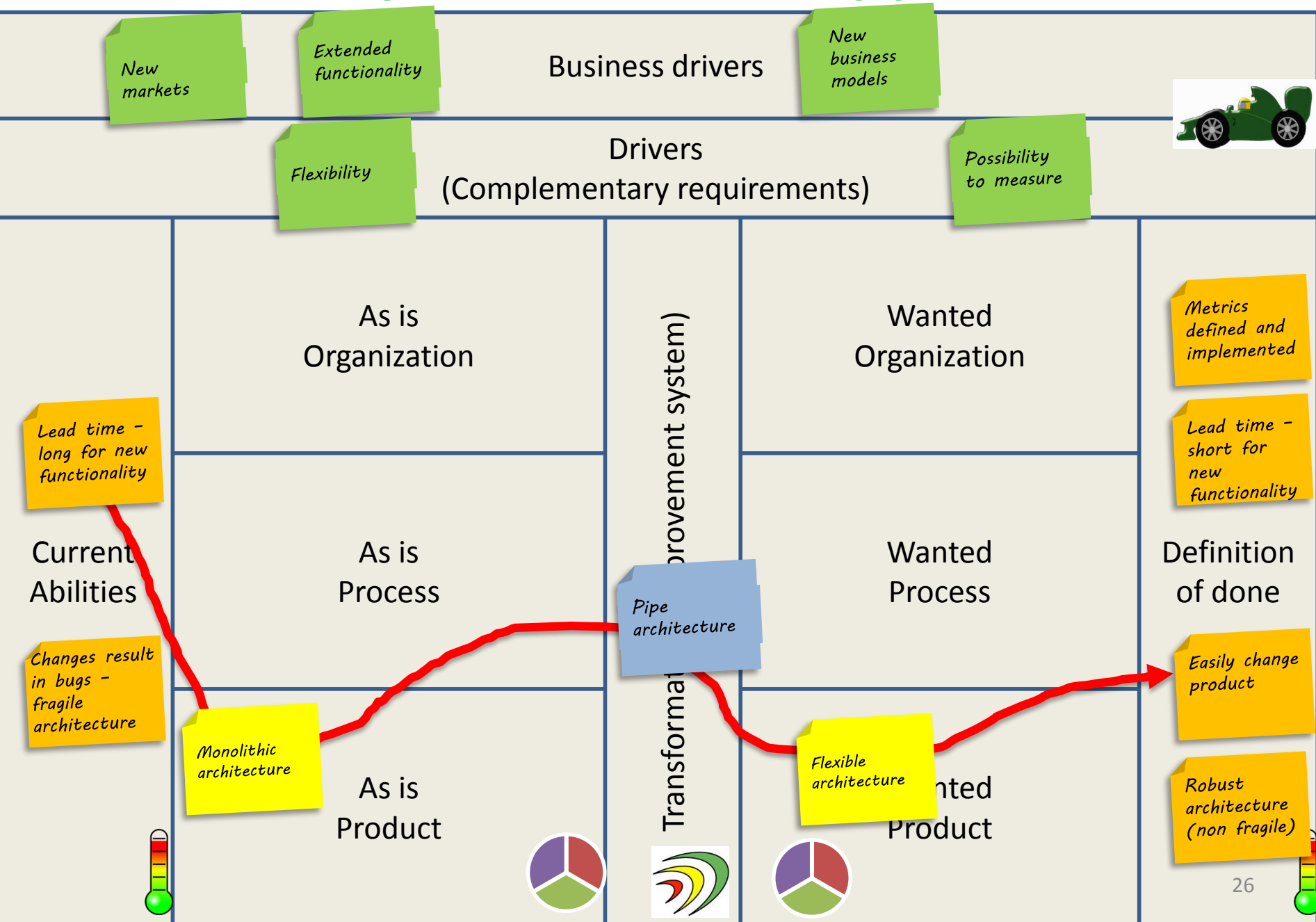


Current



To be: "piped"

Case study Softhouse mapped to SMF



Result of Case study



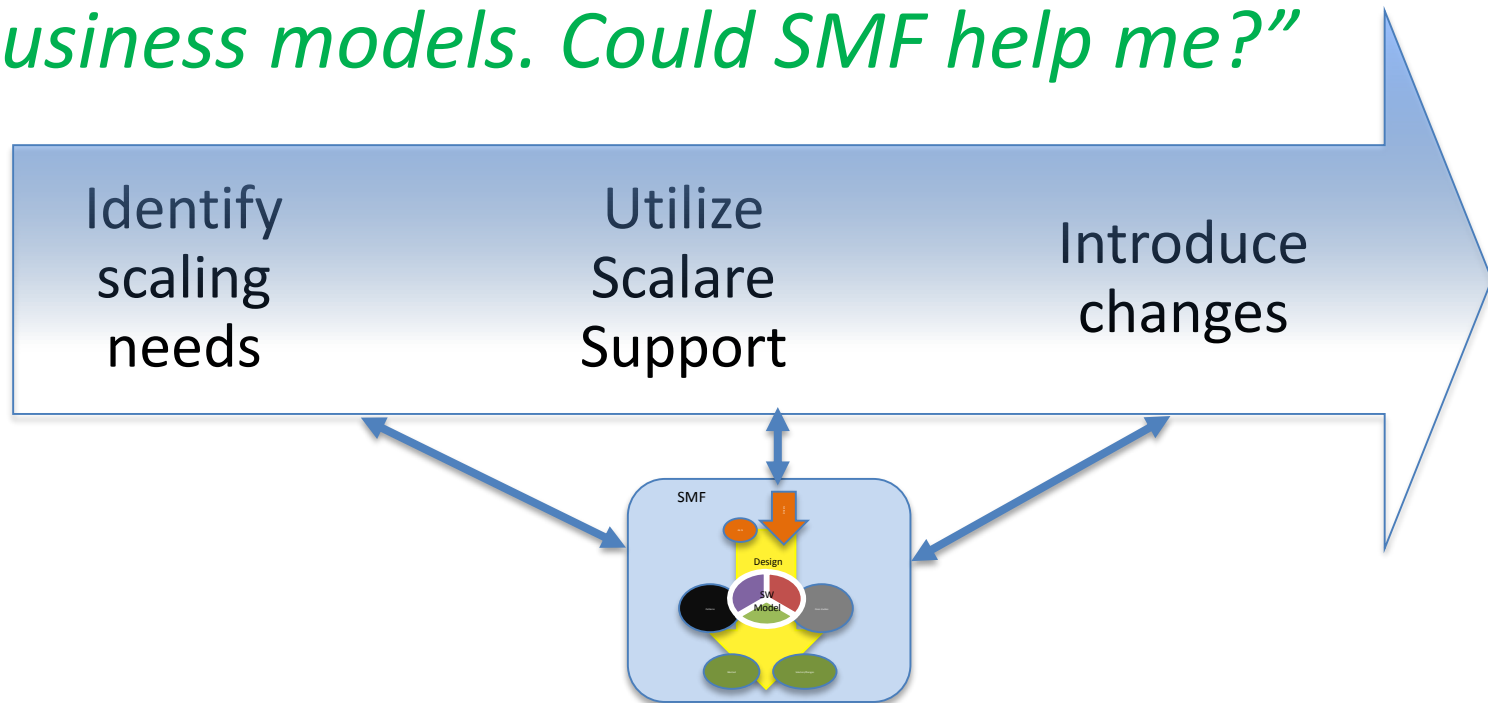
Table 1: Metrics results

Project	Referenced projects	C_e	Referencing projects	C_a	I
P1	P2, P4, P6	33	P2, P4, P6	3	0.5
P2	P1, P3	2	P1	1	0.67
P3	–	0	P2, P4, P5, P6	4	0
P4	P1, P3	2	P1	2	0.5
P5	P3	1	–	0	1
P6	P1, P3	2	P1	1	0.67

- Developers perceive the new architecture as easier to work with
- Metrics seem to correlate with opinion
- Subjective questions can be used in other projects
- Analysis procedure (metrics) can be generalized and used in other situations

A future SCALARE user

- “hmm, we have a single-purpose product that we need to scale to different markets and business models. Could SMF help me?”*



Scaling Management Framework (SMF)
Guidelines to use SMF

Identify scaling needs

- Type of software
 - Embedded, several users
- New business drivers:
 - Extended functionality
 - Several user types



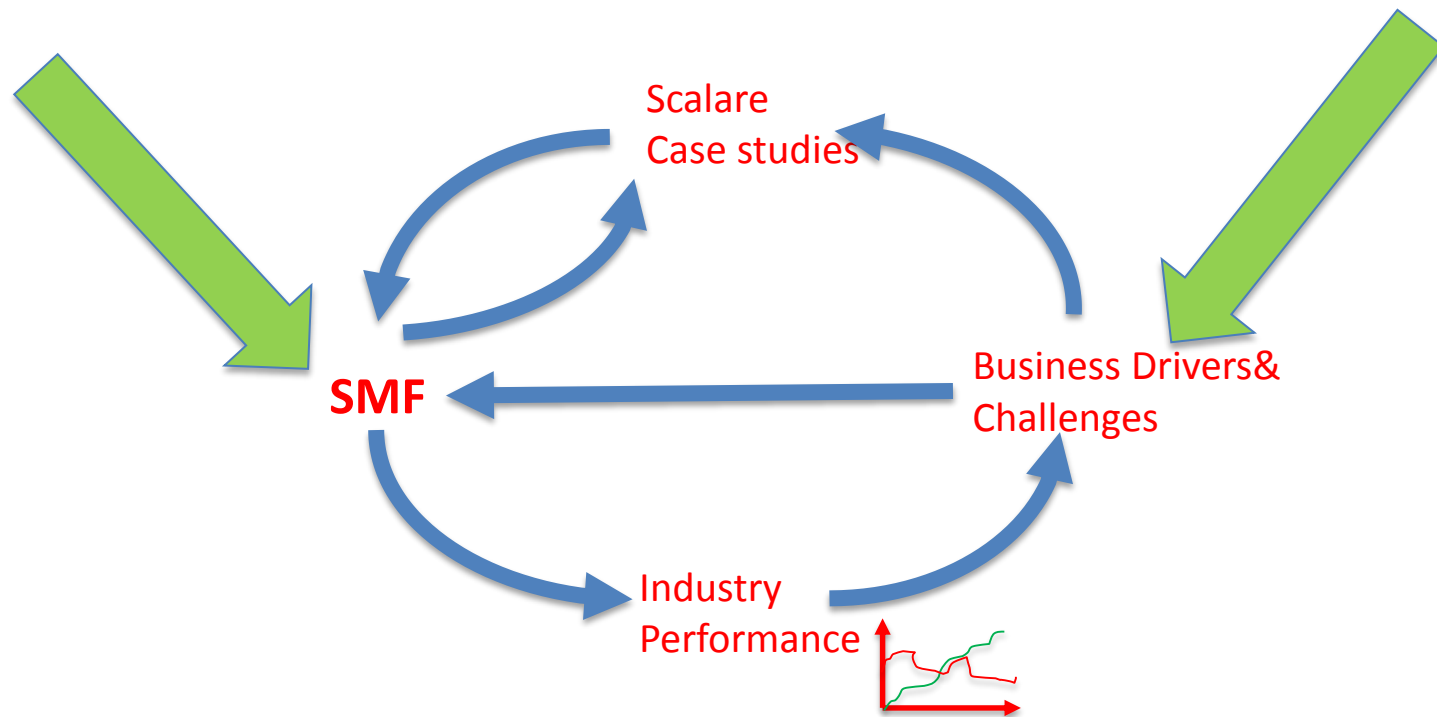
Utilize support

- The situation is rather similar to the presented case study
- The case study reports are studied in more detail
- A plan for change is derived (influenced by the example)

Introduce change

- Changes are introduced
- After some time the effects can be studied
- Results are fed back to the SMF

Today – we want to find experiences and patterns from YOU...

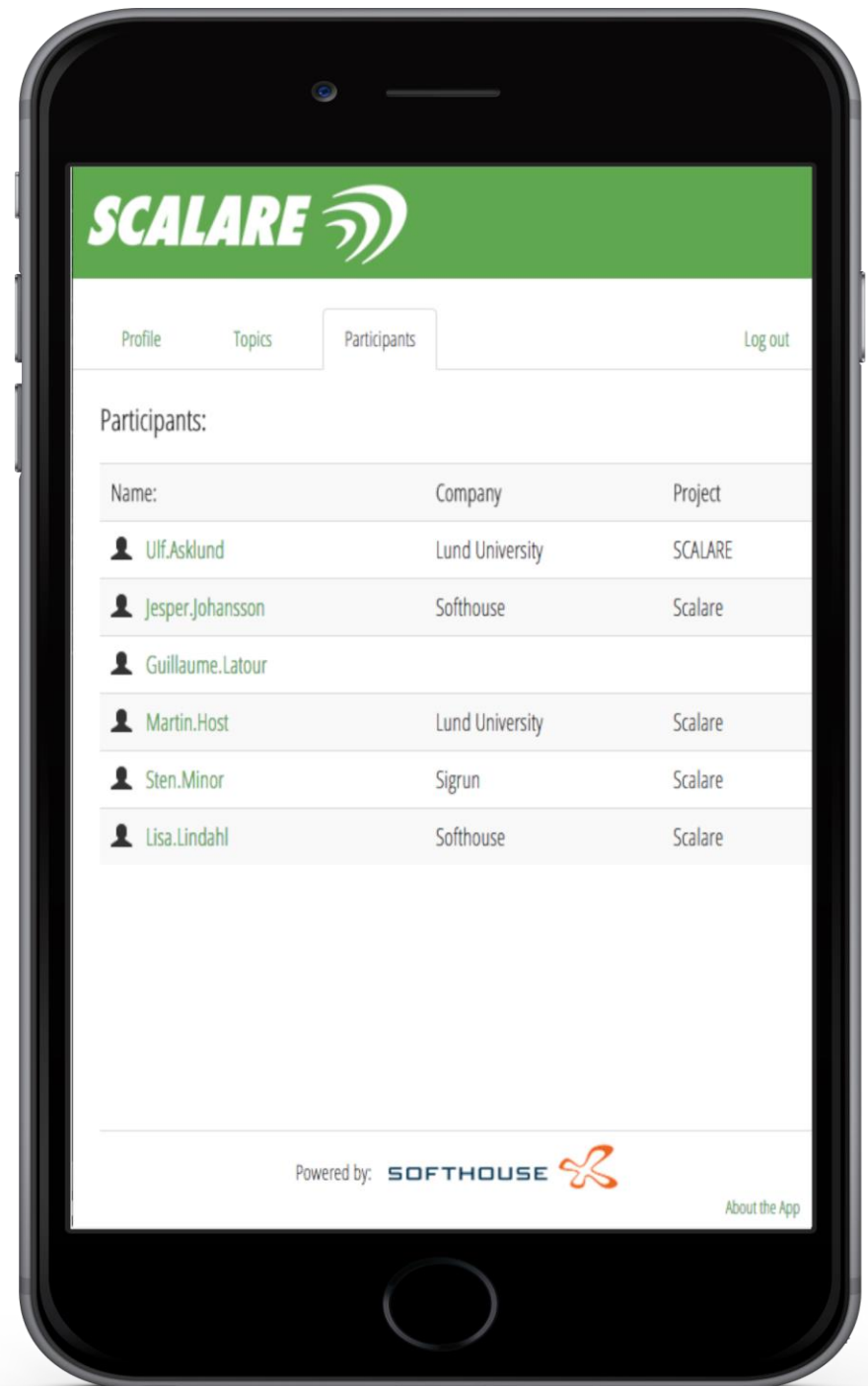


SCALARE Mingle App!

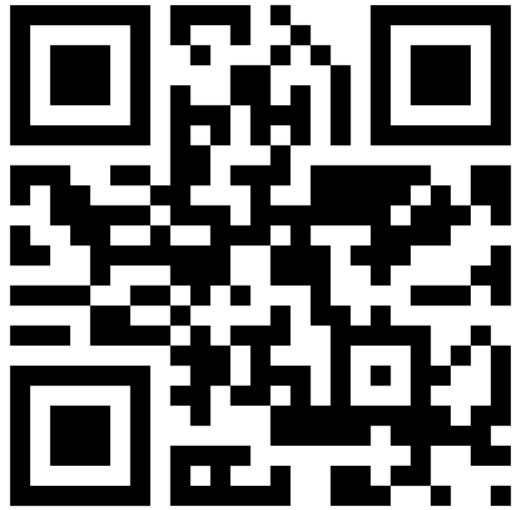


Mingle App

- Why – to find and connect with others that are interested in your project or your topics



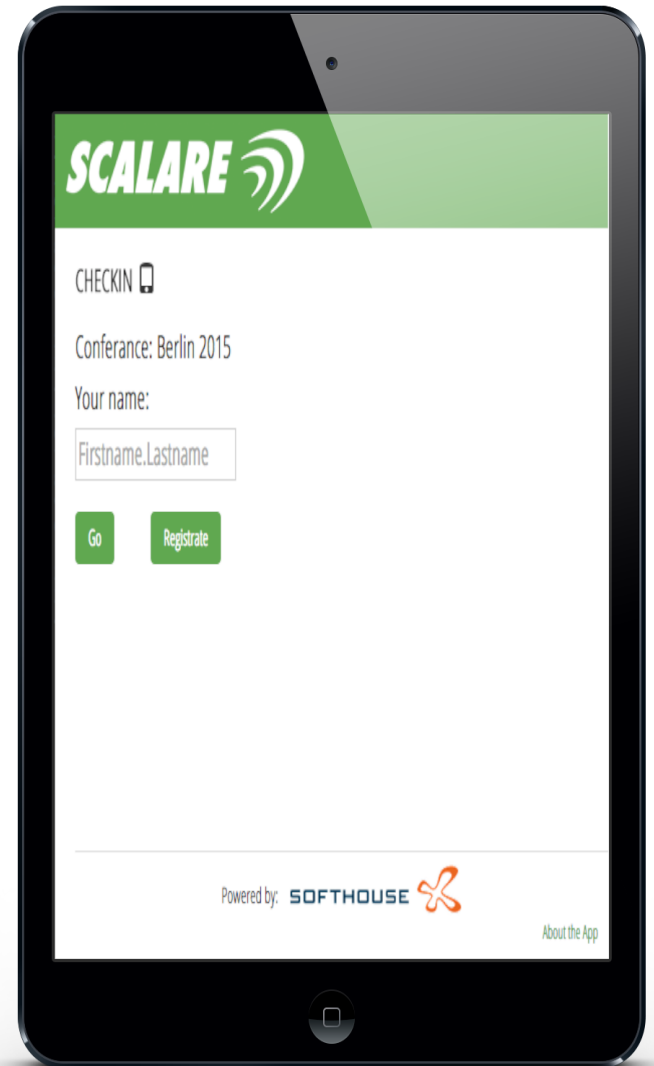
Use QR Code Reader APP



Or type in this link in your browser

<http://www.apps-softhouse.com>

Registrare first time!



Registration

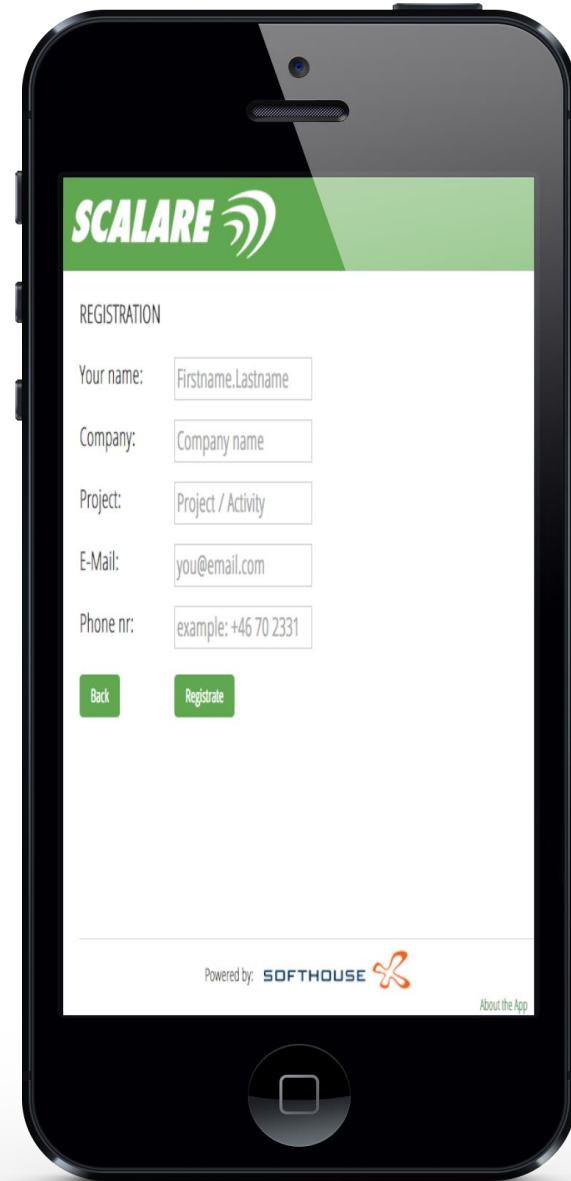
Your name: Mandatory

Company: Optional

Project: Optional

E-Mail: Mandatory

Phone nr: Optional



The image shows a black smartphone displaying the SCALARE app's registration screen. The screen has a green header with the SCALARE logo. Below the header, the word "REGISTRATION" is displayed. The form contains five input fields: "Your name:" with placeholder text "Firstname.Lastname", "Company:" with placeholder text "Company name", "Project:" with placeholder text "Project / Activity", "E-Mail:" with placeholder text "you@email.com", and "Phone nr:" with placeholder text "example: +46 70 2331". At the bottom of the form are two green buttons: "Back" and "Register". At the very bottom of the screen, it says "Powered by: SOFTHOUSE" with a logo, and a small link "About the App" is visible in the bottom right corner.



Now you Can Checkin!

don't forget the dot



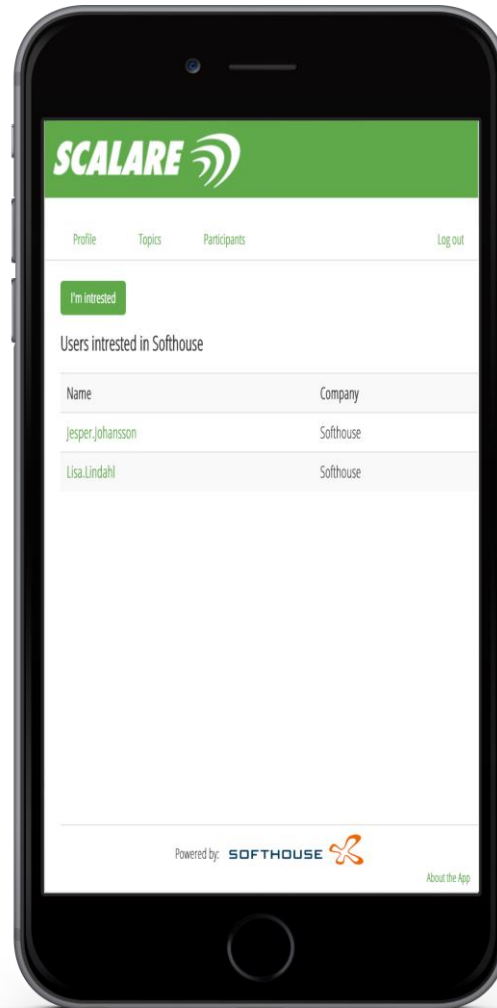
Welcome to a World of interesting topics and new contacts



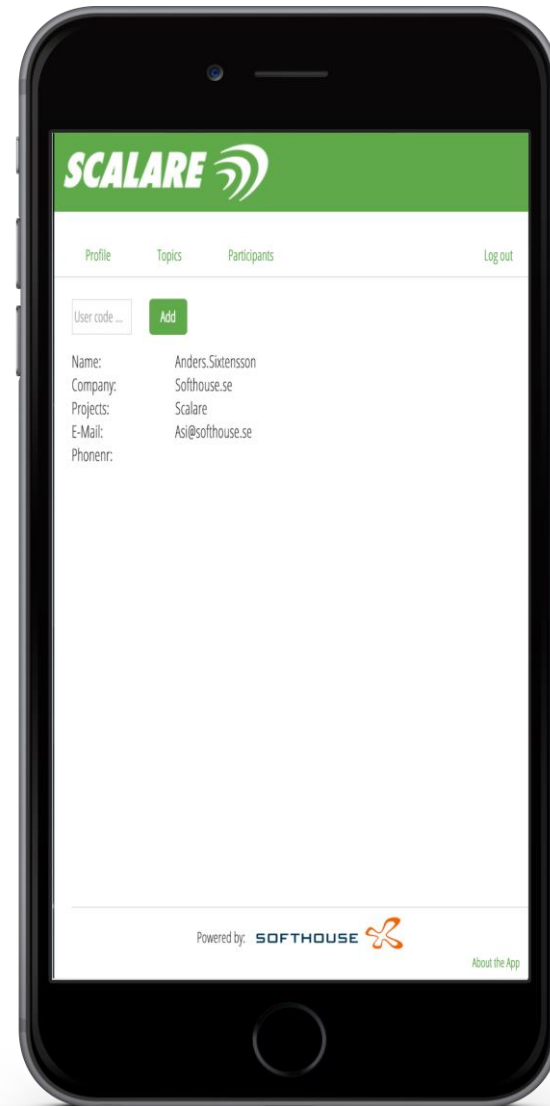
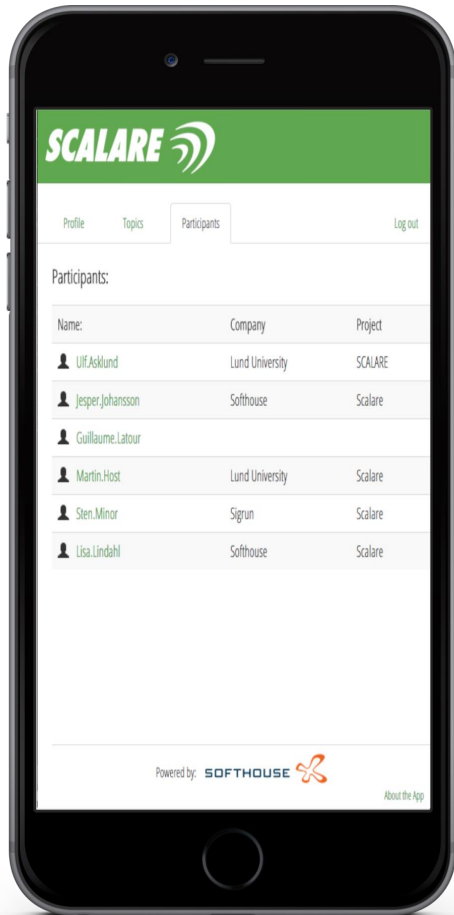
Add a new topic for others to connect



Add your interest in other topics



Challenge – find and connect with people!

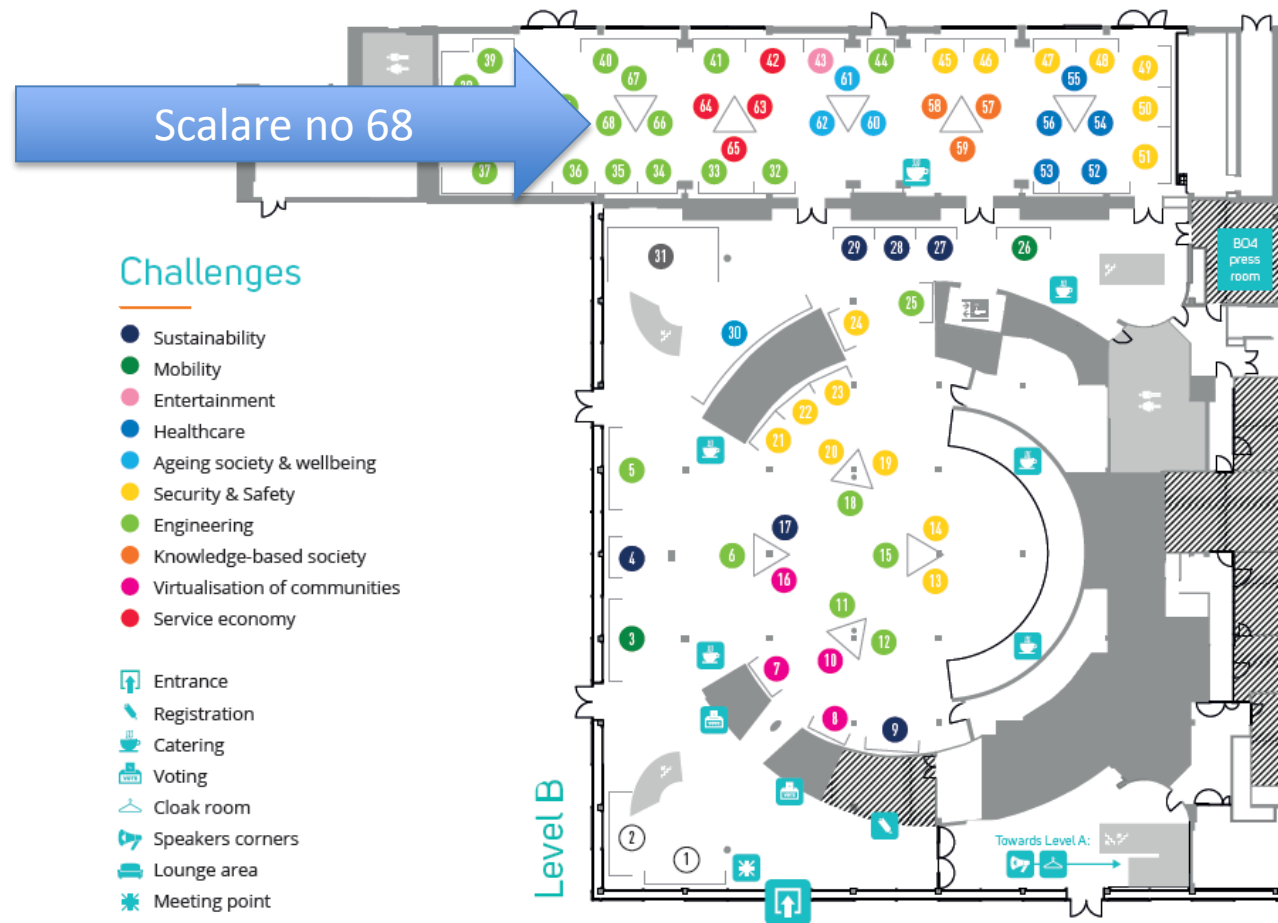


ENJOY!

- ✓ QR-Code or <http://www.apps-softhouse.com>
 - ✓ Check-In
 - ✓ Add new Topic
 - ✓ Connect to existing Topics
 - ✓ Connect with people
- ✓ **We will send you mailing lists for common interests!**



Come and challenges us and share your experiences



Thank You!



