

# Husqvarna Group – Off to a Good Start

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- <https://youtu.be/rp0npJDS0s8>

# Petra Sundström

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- D96
- Research for 13 some years;
  - SICS&The Mobile Life Center
  - Microsoft Research, Cambridge, UK
  - Christian Doppler Laboratory, Salzburg University, Austria
- Innovation & IoT Specialist
- Husqvarna Group

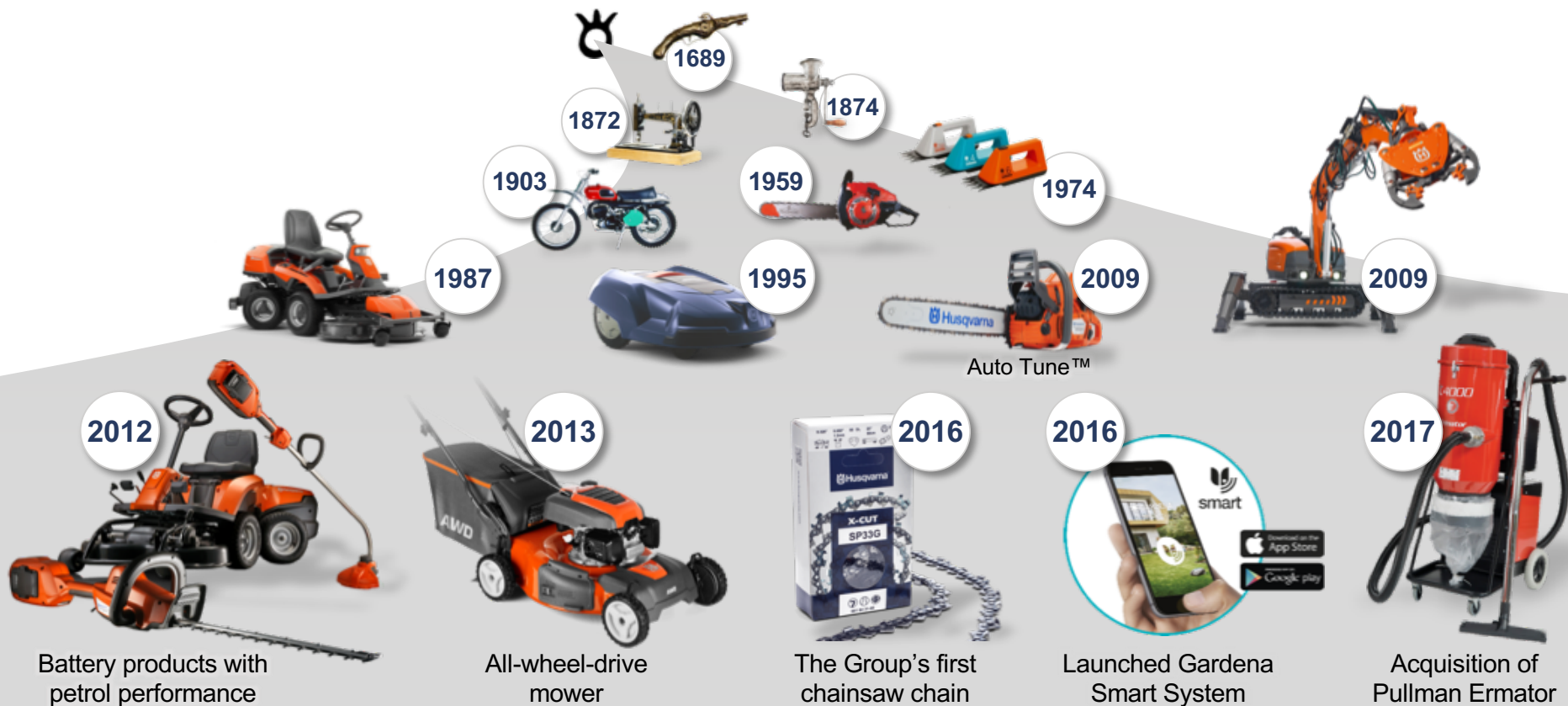


# I'll be talking of

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- IoT
- Husqvarna Group & some solution products we already have
- What we have been up to and why
- Wickedness & Design Thinking
- Innovation & organization around innovation

# More than 325 years of innovation



# Accelerated initiative IoT Opportunities

## Building on experience and current trends

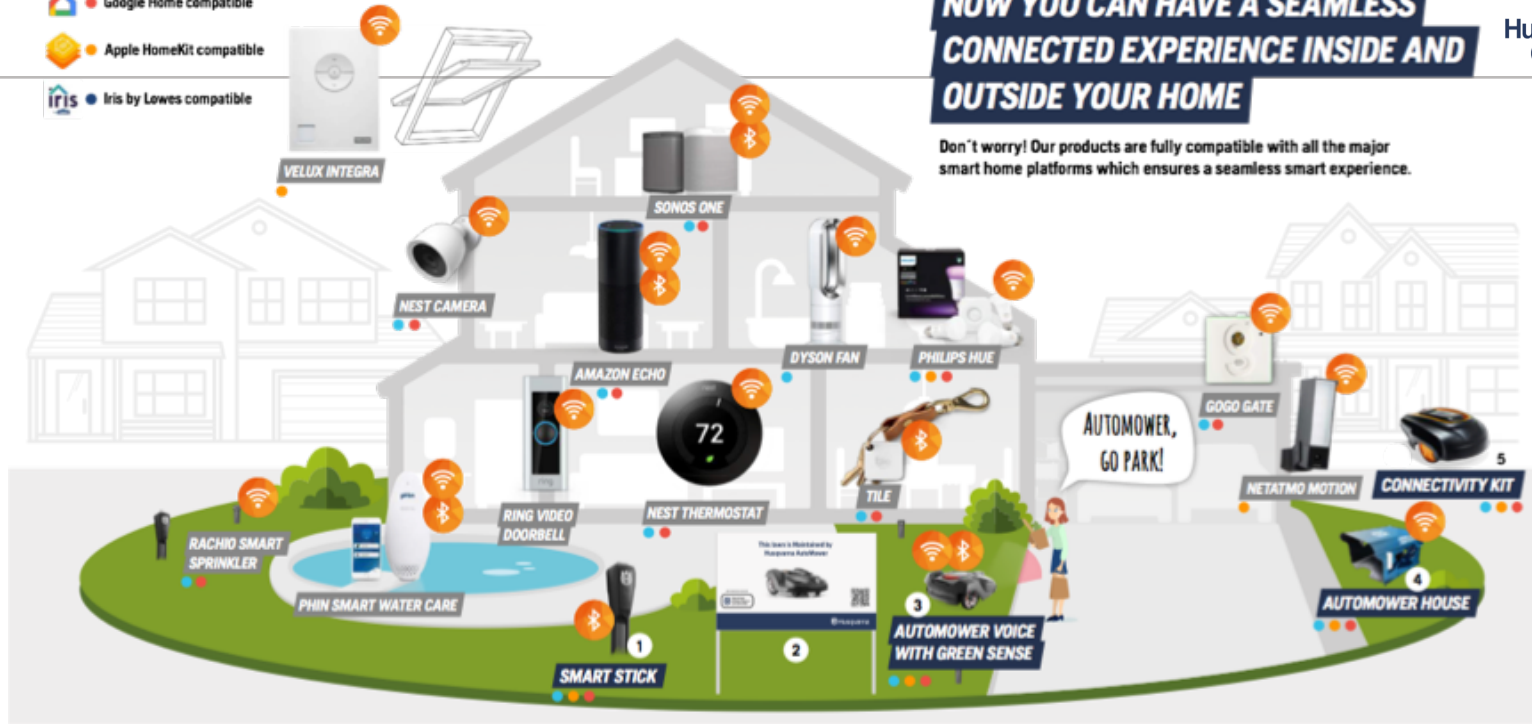
- Launched in 2016
- Provide convenience, freedom and inspiration to passionate gardeners
- Unique offering of both automatic watering and robotic lawn mowing
- Extended hardware offering and geographical distribution in 2017



-  Amazon Alexa compatible
-  Google Home compatible
-  Apple HomeKit compatible
-  Iris by Lowes compatible

## SMART HOME MEETS SMART GARDEN. NOW YOU CAN HAVE A SEAMLESS CONNECTED EXPERIENCE INSIDE AND OUTSIDE YOUR HOME

Don't worry! Our products are fully compatible with all the major smart home platforms which ensures a seamless smart experience.



### 1. SMART STICK

A flexible mowing BLE perimeter. Just stick it in the ground and decide if your robot mower should stay away or hang around The Smart Stick. Powered by 100% solar energy.

**\$39.99**

### 2. CURIOUS NEIGHBORS

With every Automower a free sign is included so you don't have to answer the neighbors questions yourself

**\$0.00**

### 3. AUTOMOWER VOICE W/ GREEN SENSE

The new Automower with Voice Control and GreenSense. The Automower listens to your command. Green Sense insures that only the grass gets mowed.

**\$3759.99**

### 4. AUTOMOWER HOUSE SKINS

Personalize the Automower House. Choose from thousands of skins. Go Panthers!

**\$39.89**

### 5. CONNECTIVITY KIT

Always know the status of your robot mower! Retrofitted WiFi and complimentary BLE connects to your smart home. Powered by 100% solar energy. Compatible with Alexa and Google Home.

**\$129.99**



Accelerated initiative

# IoT Opportunities

- Husqvarna Fleet Services shows you how your machines are being used.
- The interactive system allows you to be strategic about maintenance, thus maximizing your uptime.
- The vibration reports and active coaching on improved working techniques allows you to be proactive and improve the health of your staff as well as the efficiency of their work.

## Husqvarna Fleet Services

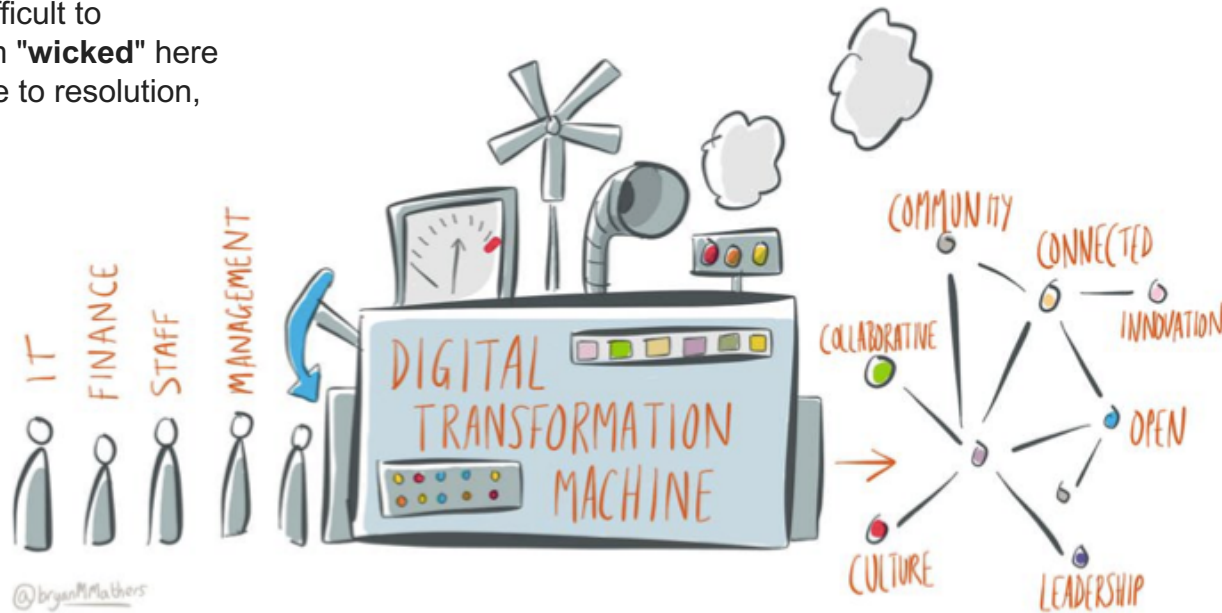




- <https://youtu.be/agqELDvFuvU>

# Like everyone, we are up for Wickedness

A **wicked problem** is a **problem** that is difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize. The use of the term "**wicked**" here has come to denote resistance to resolution, rather than evil.



The value of Data

# IoT being Husqvarna Group

**User value & Data** – Here and now, and in years to come

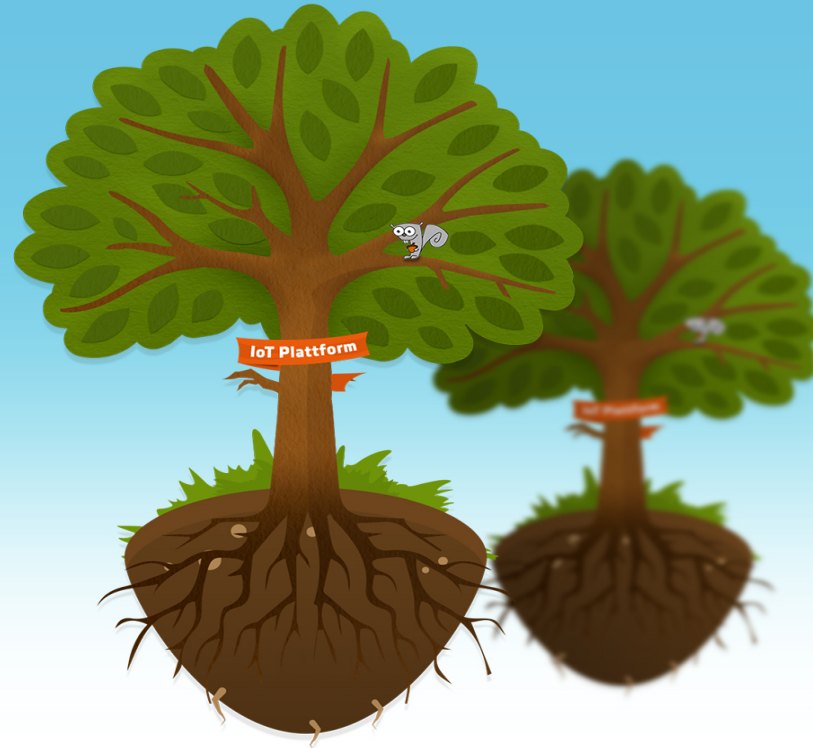
**System Products & Services**

**Possible interfaces**

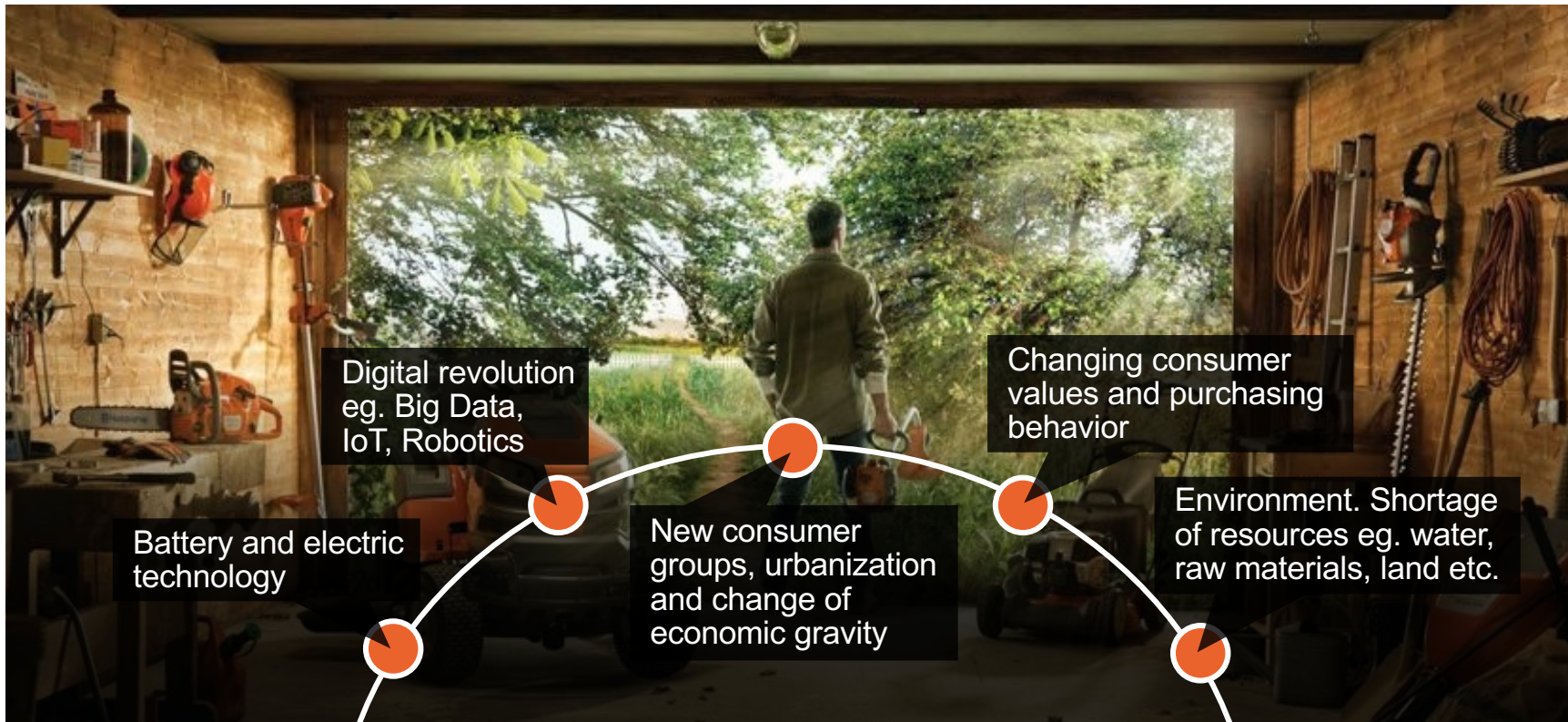
**Sensors**

**Connectivity**

**Qualitative products**



# Trends influencing the industry



## Two Dimensional organization

- Naturally, a company is fully focused on its existing

**A company that aims for long-term survival must be able to continually improve its current operations, which also facilitates future business.**

**To be able to both develop existing operations and future business, companies need to run two entirely different management and governance logics in parallel.**

## Level 21





Two examples

# Two Dimensional organization

## Boliden, the mine as an open platform for innovation



## Husqvarna Connectivity Hub (2014-2016)



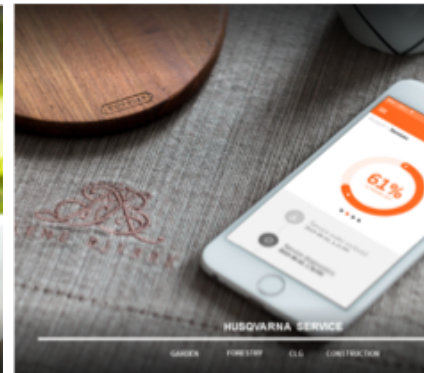
# Going from Silo to Collaborative yet Agile

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- Embracing **Design Thinking** can help us
- Design Thinking is about approaching Wicked problems
- Design Thinking is about **exploring, sorting between** and **narrowing down** the combinations of possibilities
- ***Design Thinking*** refers to creative strategies designers utilize during the process of designing. *Design Thinking is also an approach that can be used to consider issues, with a means to help resolve these issues, more broadly than within professional design practice and has been applied in business as well as social issues. **Design Thinking in business uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity.***

Ref. Wikipedia





Sorting between and narrowing down

# Prioritization and Direction

## BUSINESS CENTRIC B2B

- **Focus** on a fleet of products
- **Services/Solutions** for Fleet management, service contracts, optimization, planning, invoicing and alike
- **Position** for map view, localization, planning and optimization
- **Data** as glue for Business

TWO DIVISION

## TOOL/PRODUCT CENTRIC B2All

- **Focus** on a smaller set of products
- **Services/Solutions** for information, knowledge, how-to, manuals, research and sales
- **Position** for season based recommendation and localization
- **Data** for Recommendations

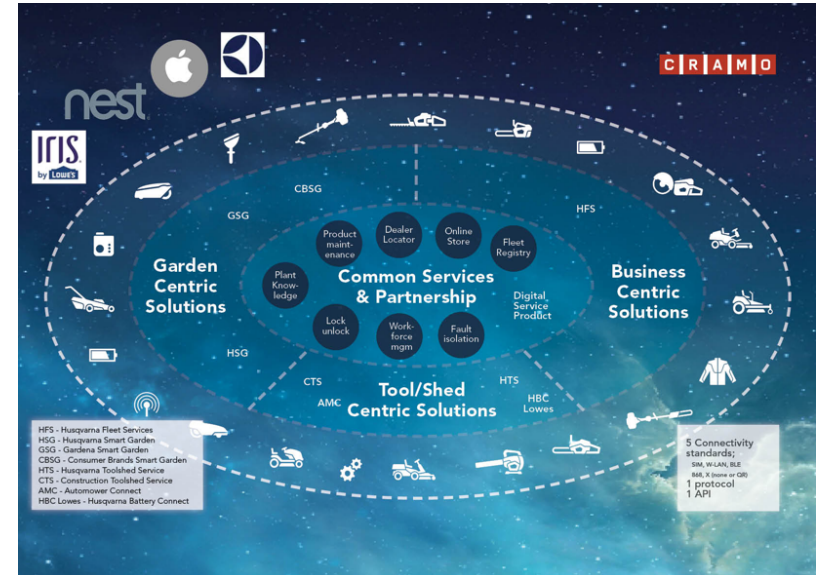
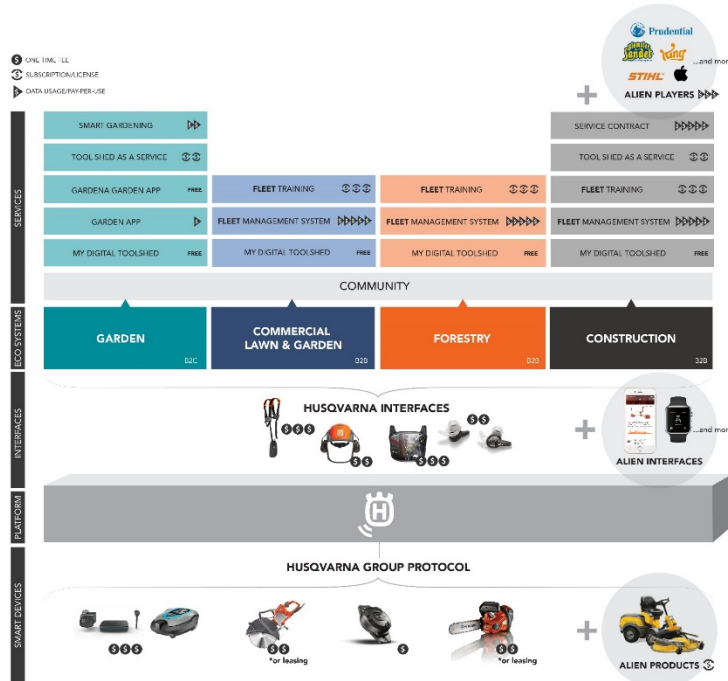
ALL DIVISION

## GARDEN CENTRIC B2C

- **Focus** on a set of co-located products
- **Services/Solutions** for automatic and inspired gardening, Smart
- **Position** for map view, weather, and garden condition
- **Data** for inspiration and Smart (algorithms)

TWO DIVISION

# Shared Platform & Solution Planning



# Design Thinking to consider issues, with a means to help resolve these issues

## Ways of working – Customer Journey



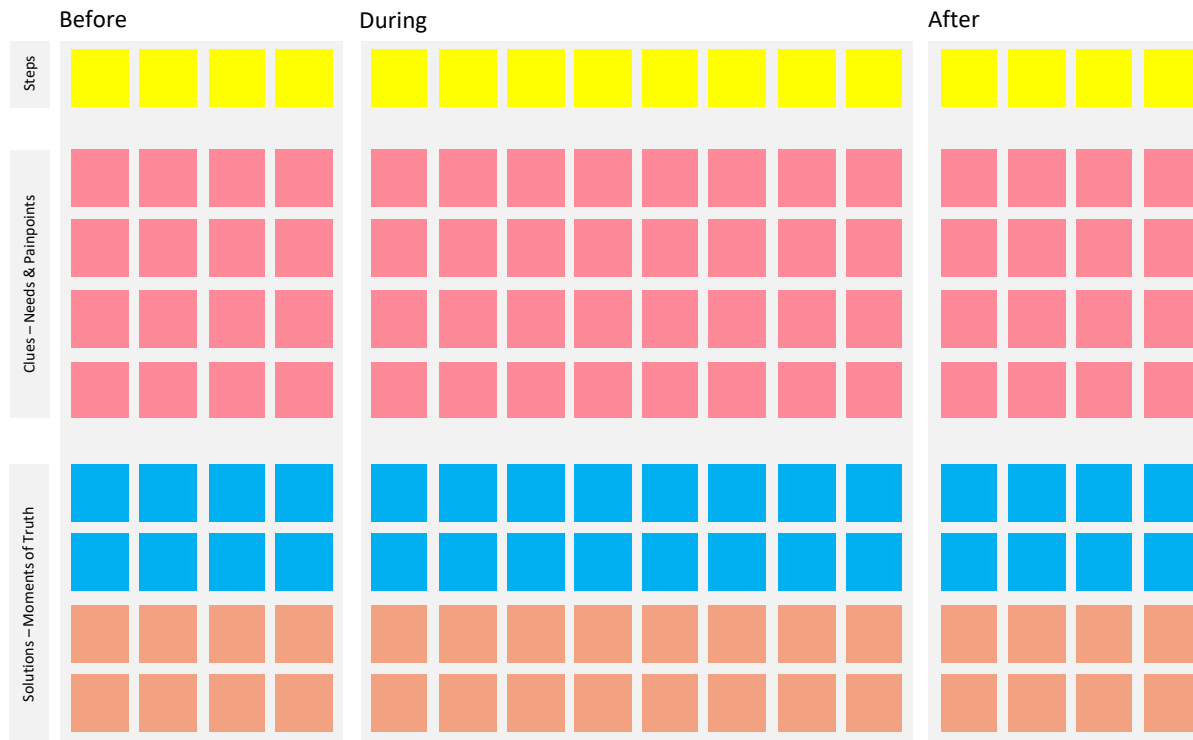
Persona | Richard 46 years old

MEDIUM SCALE CLG OWNER



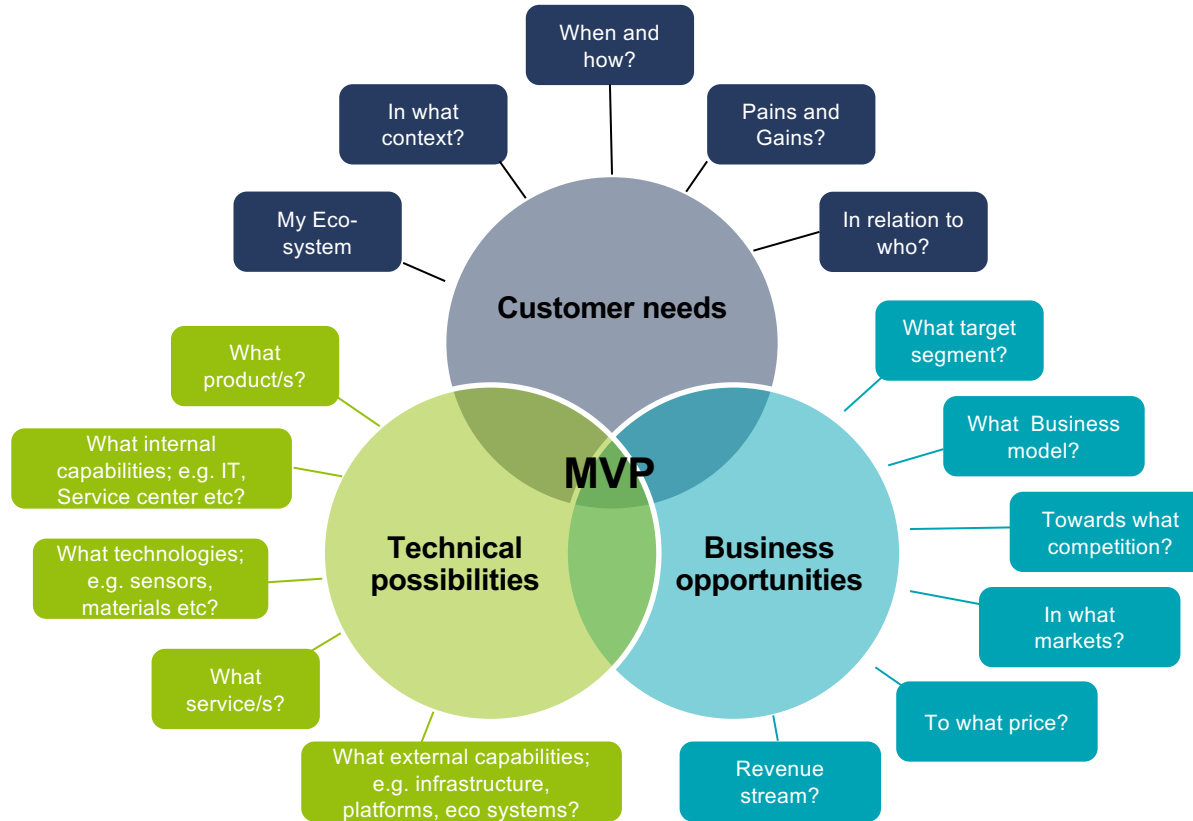
Persona | Ruppert 33 years old

SMALL SCALE CLG OWNER

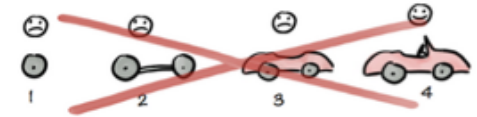


To match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity

# Ways of Working – Minimal Viable Product (MVP)



Not like this....



Like this!



# But... It might also be...

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I do not need a drill.  
I need a hole in the wall







Until it exists

# The Battery Box is a Wicked problem

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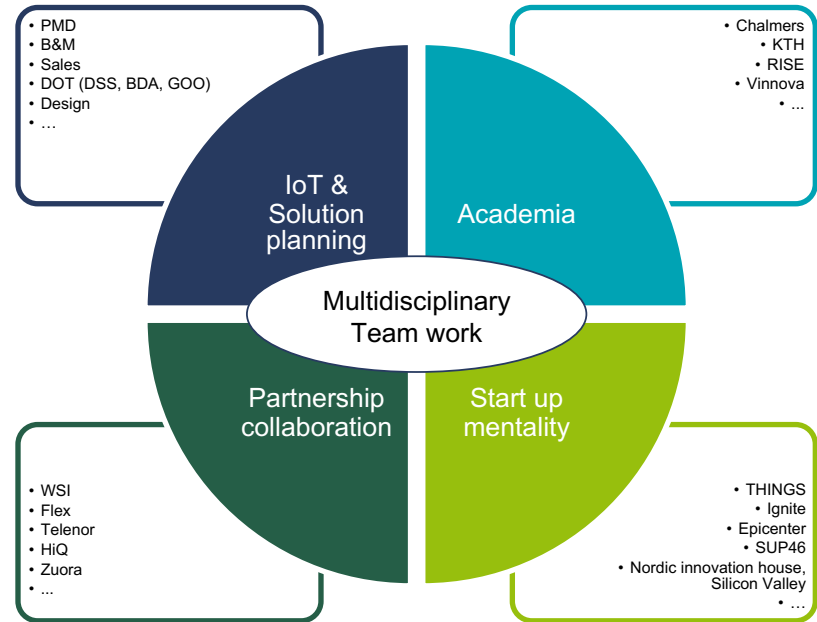
- Does it need to be a Box?
- How should the Box look like?
- How many lockers?
- How shall the lockers be positioned?
- Products and accessories in the lockers? Or separate lockers?
- How many shall there be?
- How much shall it cost?
- How long shall the rental time be?
- What products?
- Equal number of products vs lockers, or not? The consequences of choice.
- Member rentals? Or anyone?
- Connected products?
- What interpretation of data? And where?
- Only our products?
- App? Web? Store?
- Competition?

**There is not ONE best answer**

# Digital/Creative expertise in Transformational times

## Virtual Innovation Lab (VIL)

- VIL is to help the Group to **execute** on ideas and business opportunities relevant for more than one Division and/or Group
- VIL is to inject competence, ideas and novel ways of working (Ideas for execution can though come from anywhere in- or outside the organization)
- Location, team and means for execution needs to be adapted to each individual idea/business opportunity, e.g.;
  - By the means of setting together and **validate a Proof of Concept** around an idea novel to the Group, by the creation of a temporary co-located multidisciplinary team at location where relevant in relation to scope and the dynamics of the idea, e.g. the *Battery Box project*
  - **External execution** through established network of start ups, academia, and potential partnership collaborations, e.g. *HACS, Husqvarna Active Communication System*
  - **Assistance with conceptualizing an idea internally** through the activities of a workshop, prototyping and validation, e.g. multidisciplinary workshop with Construction extending Toolshed into a *diamond tool selector app*



Far more than a buzz statement

# Aim high, start small, “fail” forward

- Visionary reports
  - First 2015, aiming for 2020
  - Second 2017, aiming for 2019



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# But if nothing else, please remember

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- We are moving towards **Wickedness**
- We need to take some **Early bets**
- As a more traditional silo organization we *need* to embrace methodology of **Design Thinking** to approach current and upcoming wickedness

*Otherwise opportunities will remain as challenges...*



**Husqvarna  
Group**

[www.husqvarnagroup.com](http://www.husqvarnagroup.com)