SICS – Introducing Internet of Things in Product Business

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# A NOT CONNECTED PRODUCT TO A CONNECTED PRODUCT

- IOT – introduction

- Examples

- What do you have to consider when introducing IOT in your business?

- A "method" for defining a new business model and setting up corresponding sale channels and dealer structure

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# WHAT IS HAPPENING?

- "Uber, the world's largest taxi company, owns no vehicles.

- Facebook, the world's most popular media owner, creates no content.

- Alibaba, the most valuable retailer, has no inventory.

- And Airbnb, the world's largest accommodation provider, owns no real estate.

Something interesting is happening."

Tom Goodwin

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# CONNECTING EVERYTHING

- Internet of Things – allt är uppkopplat


- Ett internet som inte bara är beroende av människor för insamling av information


- Kunskap om *things*, inte bara idéer

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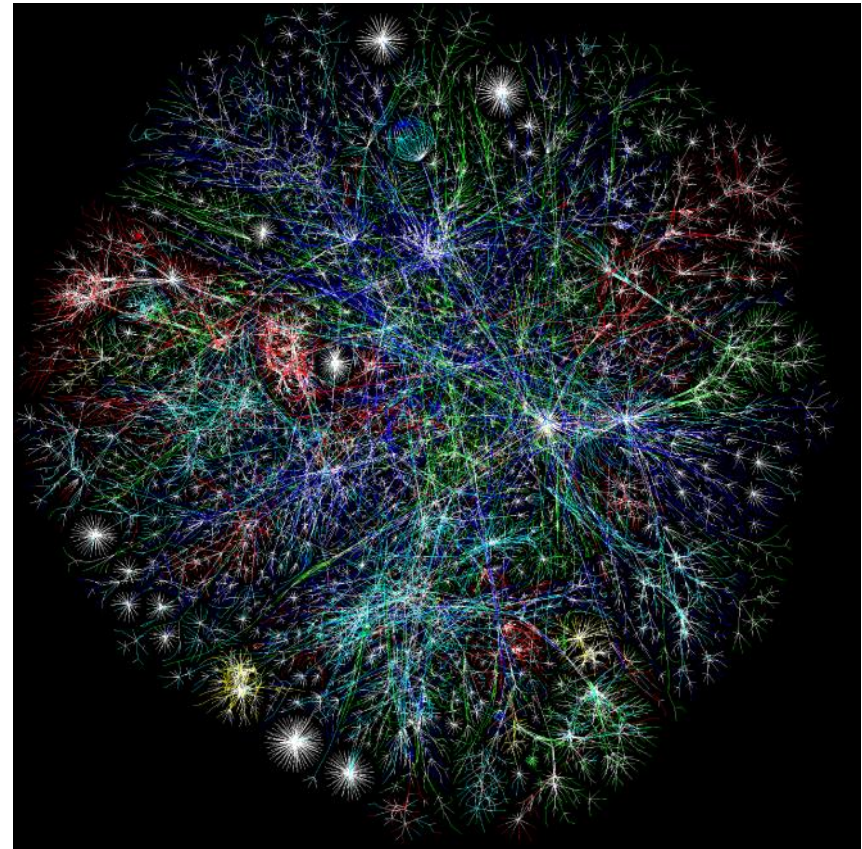
# Total Internet of Things Connections
### (in billions)



Here we are!

Source: Cisco

# VOLVO - SENSUS

- The connected car
  - On board services
  - Maintenance
  - Alerts
  - …

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# EXAMPLES: VERISURE

- Starting point a Classic home alarm system

- Transfer into Smart home business

- Action taken

    Open up for other brands products
    based on beeing a trustworthy brand.

    Examples of products integrated from
    other brands:

    - Locks from Assa

    - Humidity, temperature, etc from Anticimex

    - Heat pumps from Panasonic

- Comment: Uses its brand value to integrate complementary products/services. Does not integrate competitor products.

# LEAN HAULAGE



- **Sells a tool for efficient driving of trucks to Transport providers**

- **Technical solution –** simple device that reads the truck status from the same port as bilbesiktning uses . The device communicate with a smartphone which communicate with the cloud, and and provides the interface to the driver.

- LeanHaulage® core values puts driver, environment, safety and profitability in focus.

- Comment: This simple technical solution shortcuts the truck brands.  It also builds a strong relation to the market!

# GOOGLE CARS
**ACTIVITY SUMMARY (ALL METRICS ARE AS OF JULY 31, 2015)**

- Vehicles
  - 23 Lexus RX450h SUVs – currently self-driving on public streets in Mountain View, CA, and Austin, TX
  - 25 prototypes – 5 are currently self-driving on public streets, mainly Mountain View, CA



- Miles driven since start of project in 2009
  - Autonomous mode: 1,101,171 miles
  - Manual mode: 842,101 miles
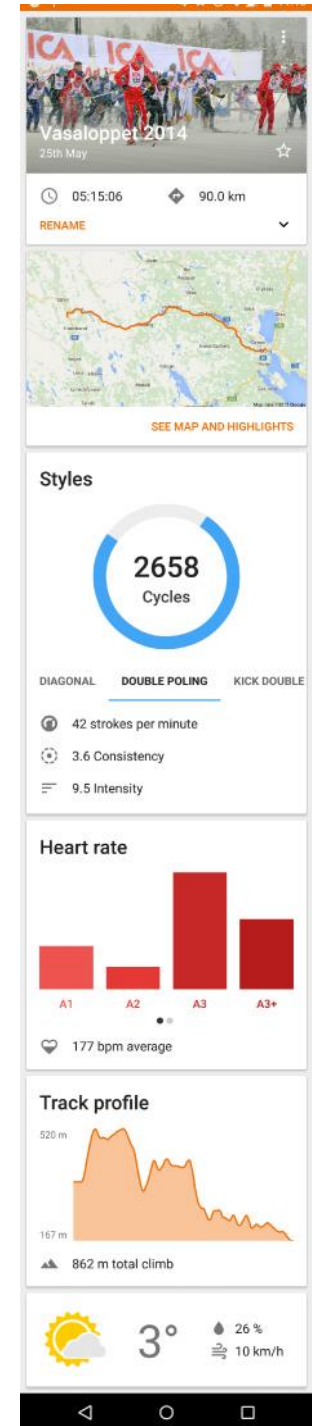  - We're currently averaging ~10,000 autonomous miles per week on public streets
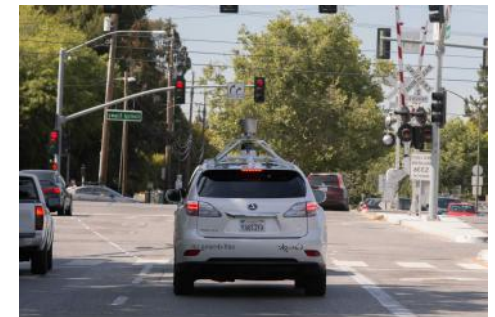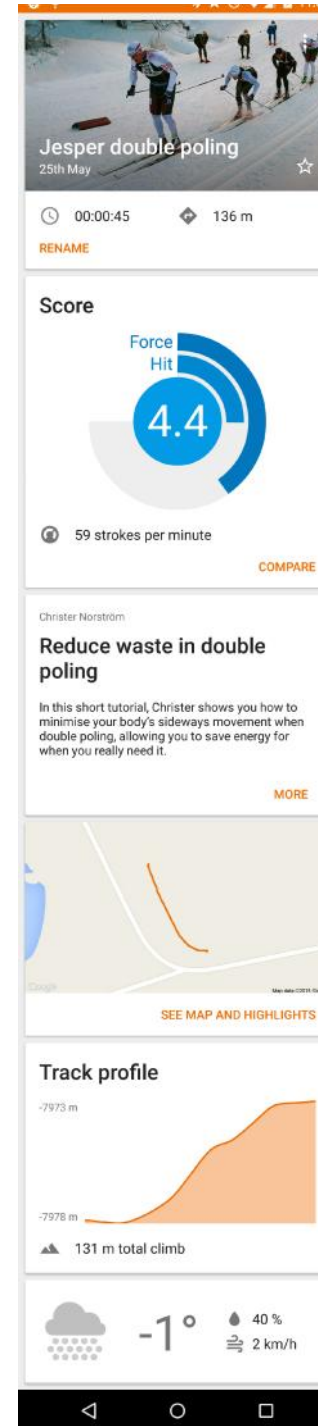
# WEMEMOVE

**Make you a better Skier**
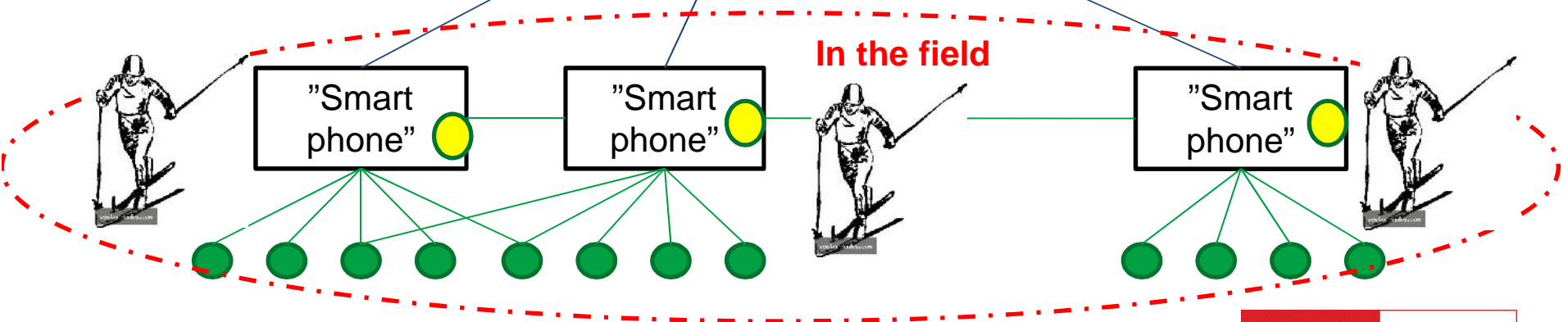
Tests– what and how do you do a particular movement
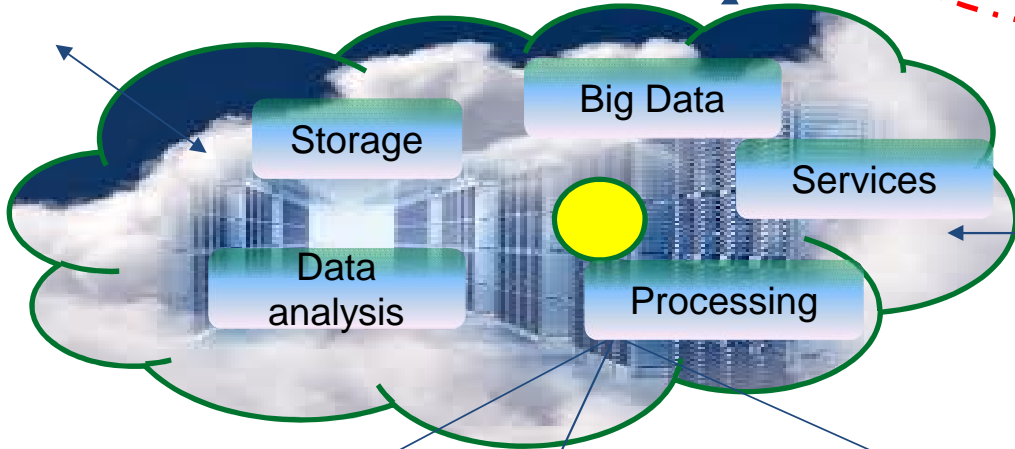
Advice and recommended exercises how you reach your goal

Specific knowledge about skiing

What about the business model?

# CONTEXT



In the lab

svt1 HD
3 HD
EUROSPORT
4 SPORT

Storage
Big Data
Services
Data analysis
Processing

Sharing
LinkedIn
YouTube
Services

In the field

"Smart phone"    "Smart phone"    "Smart phone"

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"If you are not moving at the **speed** of the marketplace you're already dead — you just haven't stopped breathing yet"

Jack Welch

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# INTRODUCING IOT

- Three major steps
  1. **Efficiency** in an existing business – introduce an infrastructure and understanding of the opportunities

  2. Increase the **value** in an existing business

  3. **New business** model – enabling new revenue channel
     - combining product and new services in the most efficient way
     - Sales channels and segmenting
     - Dealer structure

# EXAMPLE

## PROFESSIONAL POWER TOOLS (PPT AB)



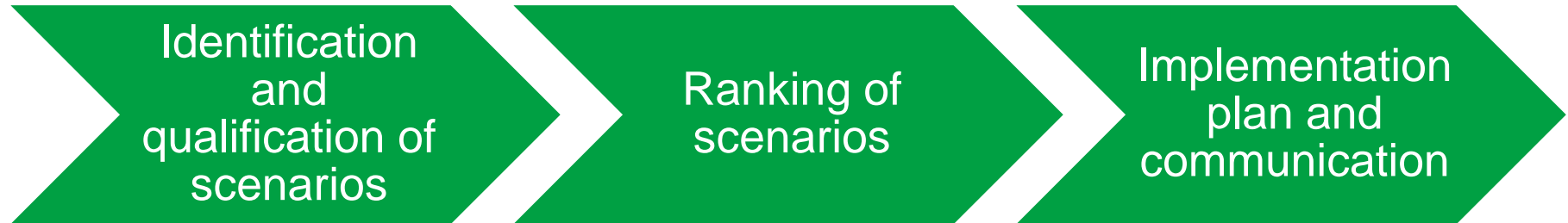PPT AB is today mainly a product business.
To grow the business and differentiate from competitors PPT AB aims at transforming into a combination of product and service business. The business is b2b.

# QUESTIONS TO BE ANSWERED

This transformation relies on a number of answers to critical issues such as:

- Overall business model for products and services, short and long term
  - Value Proposition (product, service)
  - Customer Relationship
  - Customer Segments (from PPT AB only to customers with only competitor products)
  - Sales Channels (existing dealers, new dealers, portal etc.)
  - Revenue Streams (high level pricing/payment models and a general kick-back models)
- Openess to other brands in the service offer
- Sustainability of the business model
- Implementation road-map including communication to internal stakeholders

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# WORKING METHOD

| Identification and qualification of scenarios | Ranking of scenarios | Implementation plan and communication |
|---|---|---|

**Identification and qualification of scenarios**
1. Find scenarios
2. For each scenario:
   - Value prop., Channels, Customer segm…
   - Identify external benchmark

**Ranking of scenarios**
1. Evaluate scenarios against each other
2. Use four dimensions:
   - Competitors
   - Customers
   - Substitutes
   - New entrants
3. Eliminate the least good scenarios

**Implementation plan and communication**
1. For the remaining scenarios estimate revenues and costs
2. Perform sensitivity and risk evaluation
3. Describe possible transitions between scenarios
4. Develop communication material

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# Business Model Assessment

## Scenario space: what dimensions are defining the scenarios?

Customers segments:

| PPT AB installed base | Mixed installed base Customer have both PPT AB products and competitor products | No installed base |
|---|---|---|

Sales channels:

| Existing dealers | Existing + new dealers | Existing dealers + portal | Existing + new dealers + portal |
|---|---|---|---|

Value propositions:

| Product only | Product + PPT AB services | Product + Open services | Services only |
|---|---|---|---|

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# The generic scenario description

**A combination of the front end of Business model canvas with more details and product/market matrix**

| Value Proposition | Customer Relationship | Customer Segments |
|---|---|---|
| | Channels | |
| Revenue Streams | | |

| | PPT AB installed base | Mixed installed base | No installed base |
|---|---|---|---|
| Bundled sales | | | |
| Service sales | | | |
| Product sales | | | |

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LEVEL21

# Scenarios to be analyzed

## The scenario space is 3x4x4 = 48 minus some scenarios describing todays business only

**Only PPT AB products**

| | Product only | Product + PPT AB service | Product + Open service | Service only |
|---|---|---|---|---|
| Existing dealers | | | | |
| Existing + new dealers | | | | |
| Existing dealers + portal | | | | |
| Existing + new dealers + portal | | | | |

**PPT AB plus competitor products**

| | Product only | Product + PPT AB service | Product + Open service | Service only |
|---|---|---|---|---|
| Existing dealers | | | | |
| Existing + new dealers | | | | |
| Existing dealers + portal | | | | |
| Existing + new dealers + portal | | | | |

**No similar products at all**

| | Product only | Product + PPT AB service | Product + Open service | Service only |
|---|---|---|---|---|
| Existing dealers | | | | |
| Existing + new dealers | | | | |
| Existing dealers + portal | | | | |
| Existing + new dealers + portal | | | | |

# Porter 5 forces

## Focusing on the four front-end forces
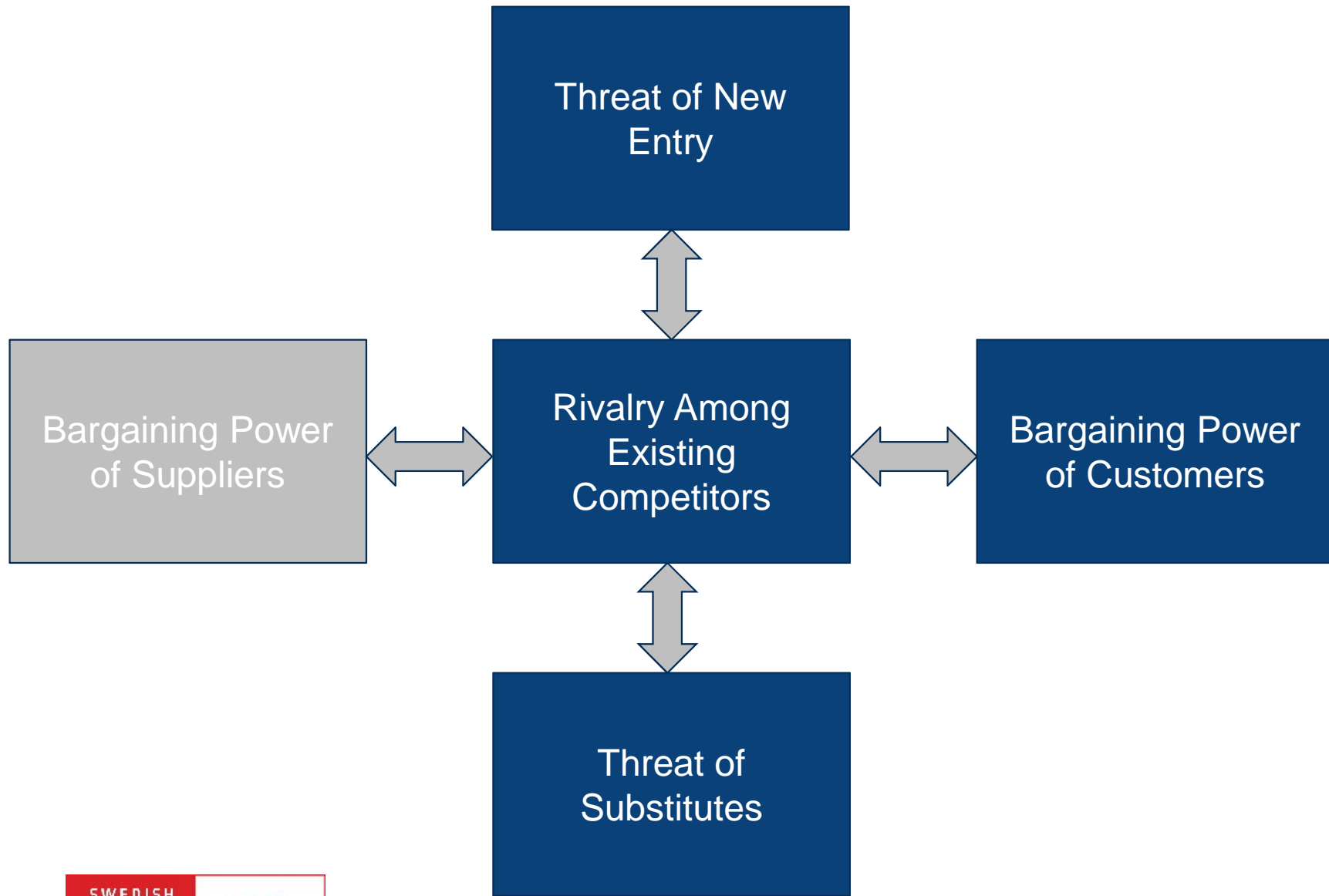
# SUMMARY

Introducing IOT rises questions regarding the
business model – it is not only a matter of
technology