



Aalto University  
School of Electrical  
Engineering

# ELEC-E7830 Value Network Design for Internet Services

## Case Sports Tracker

Christine Böckelman

Lingying Jiang

Levent Kartal

Tuomas Lähteenmäki

# Company description - Suunto

- Born in 1936
- Provider with measuring instruments
- Headquarters in Vantaa, Finland
- Main products
  - Sports watches
  - Premium watches
  - Dive products
  - Compasses
  - Software

# Case description- Sports tracker

- Track sports on the smartphone with speed, distance route and calories
- Smart mobile connection with Ambit3 and Traverse watches
- Available on Android, iOS, Microsoft platforms



# Scope

## Time Frame

- ✓ 3 years
- ✓ Sports industry changes rapidly
- ✓ Technologies in software space have short lifecycles
- ✓ Developing sensor technology and IoT might be disruptive

## Markets

- ✓ Europe, North America
- ✓ Consumer market
- ✓ AppStore, Google Play, Windows Store
- ✓ B2B in the future?

## Technologies

- ✓ Mobile Application
  - ✓ iOS
  - ✓ Android
- ✓ Web Service
- ✓ Hardware (Sensors, heart rate monitors etc.)
- ✓ More Sensors → IoT?

# Major Stakeholders



**Own  
organisation**



**Other Amer  
brands**



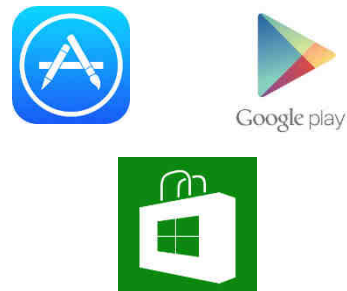
**Customers**

- End users

**Competitors**



**Distributors**



**External partners**

- Software partner

# Major Stakeholders



## Own organisation

- Define Sports Tracker objectives
- Other products to consider

## Other Amer brands

- Possibilities for co-operation

## Customers

- Key!

## Competitors

- Potential partners

## Distributors

- Control the availability
- Power to stop distribution completely

## External partners

- Software development is key

# Basic Trends and Key market uncertainties

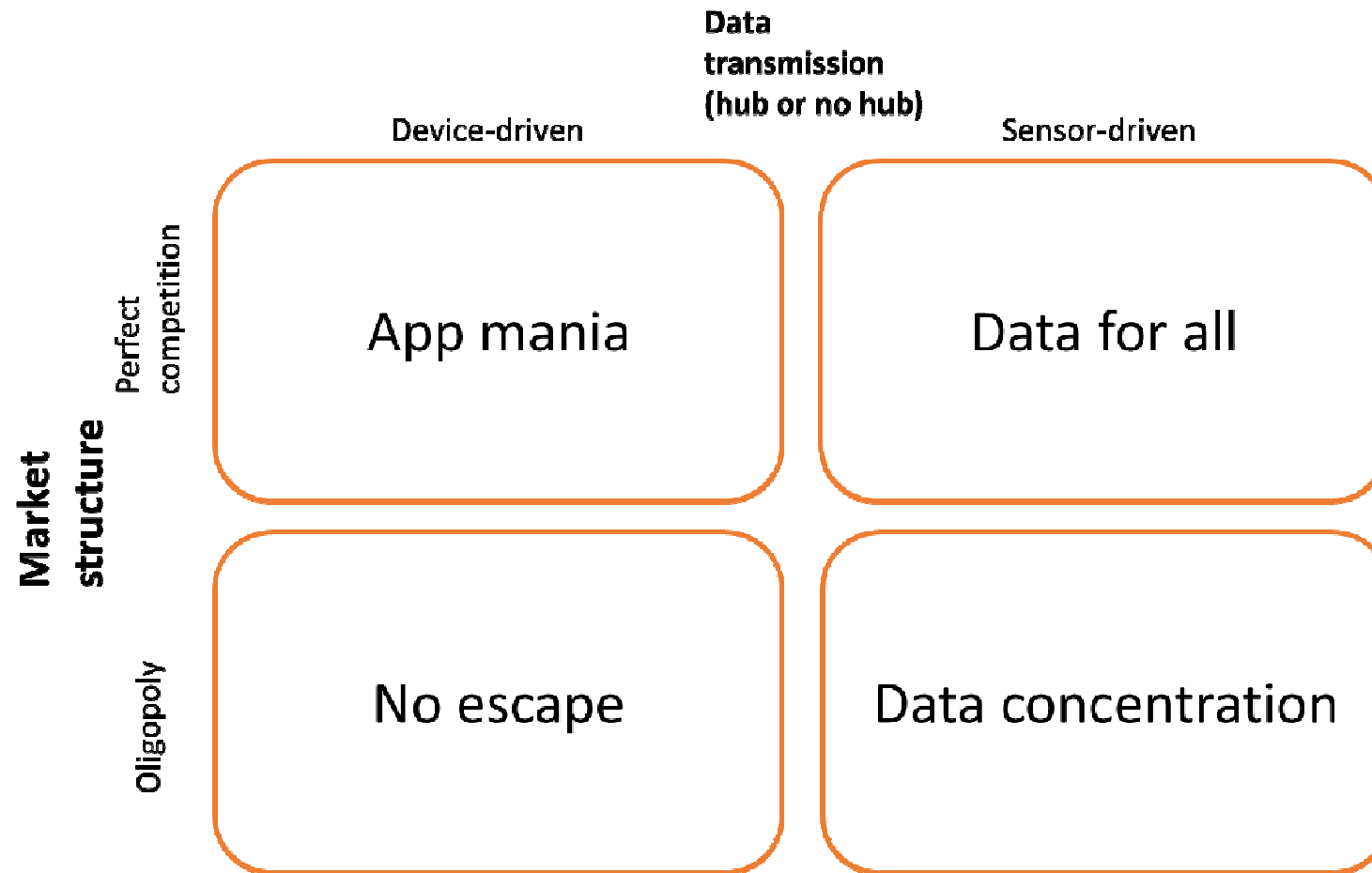
## Trends

- ✓ Increased monitoring of fitness and health
- ✓ increasingly holistic activity tracking
- ✓ growing selection of smart devices
- ✓ decreasing cost of sensors

## Key Uncertainties

- ✓ mobile phone vs. watch
- ✓ Open Data vs. Closed Data
- ✓ Google decides to rule the market vs. Perfect competition
- ✓ expanding to other sport activities vs. staying with the current

# Initial scenario themes

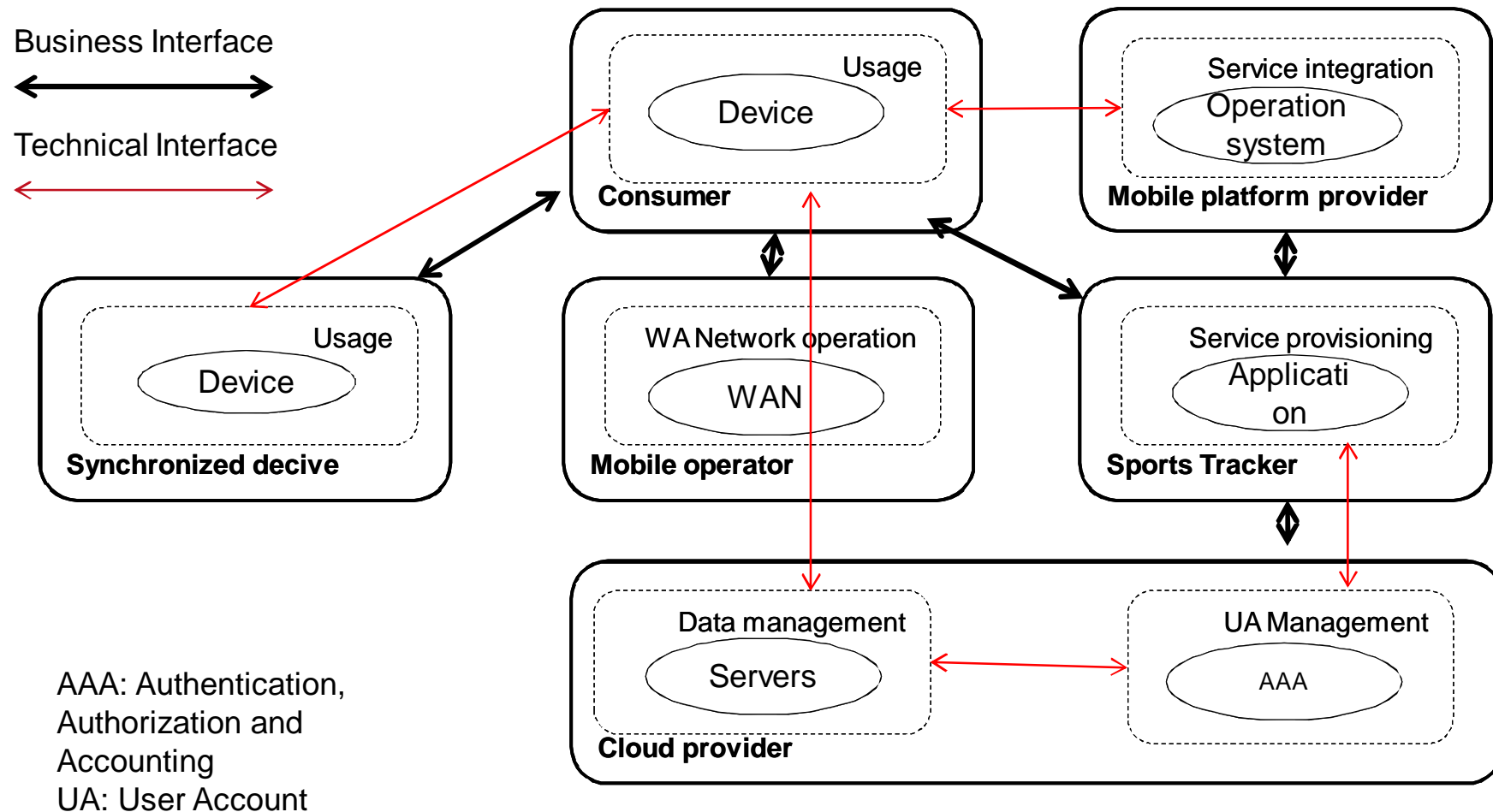




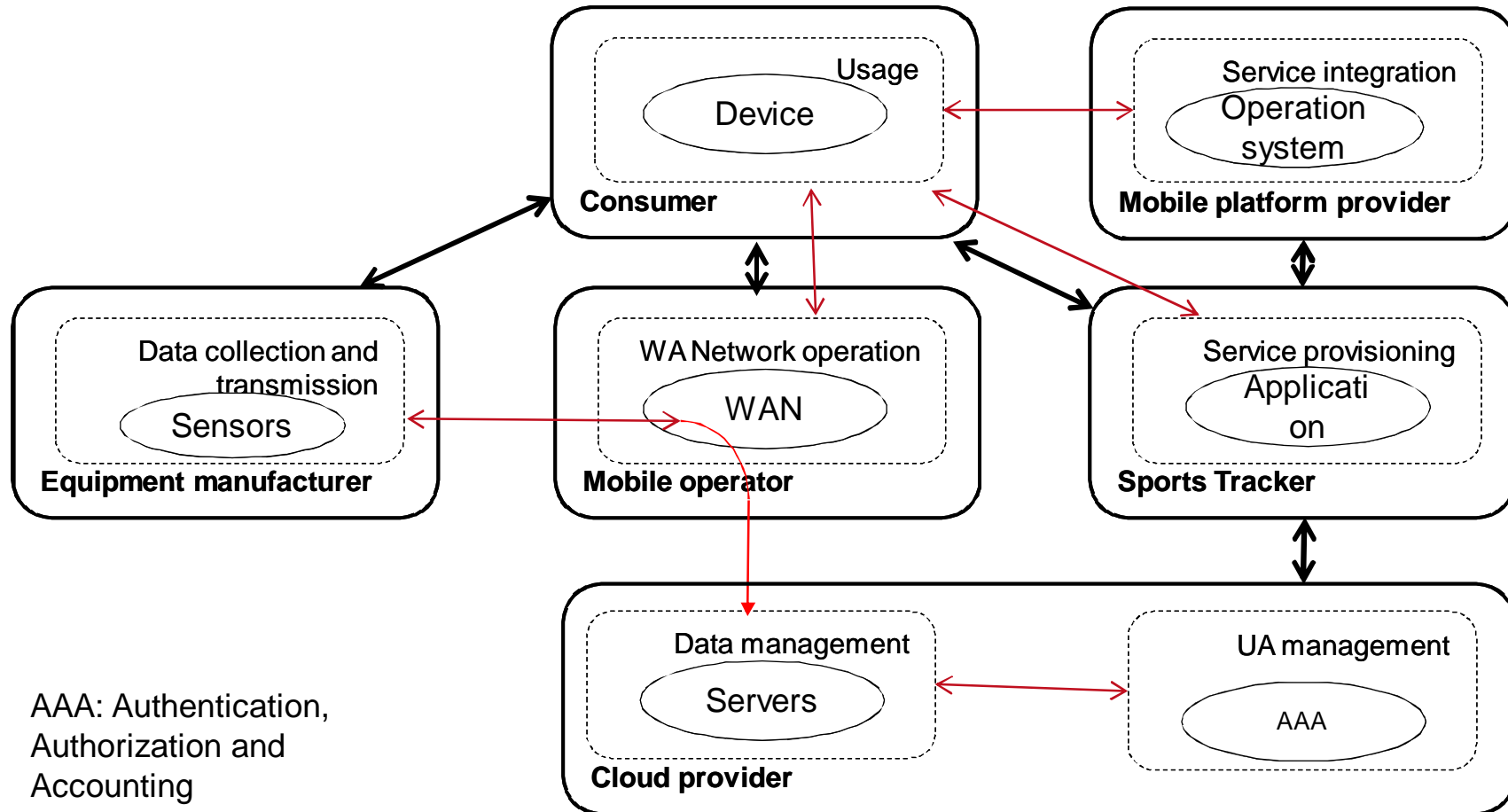
# Initial scenarios

|                  |                     | Data transmission<br>(hub or no hub)  |  |
|------------------|---------------------|---|--|
|                  |                     | Device-driven   | Sensor-driven  |
| Market structure | Perfect competition | <ul style="list-style-type: none"><li>• Consumer benefits</li><li>• Low barriers to market entry</li><li>• Innovation due to competition</li><li>• Low profits from subscriptions</li></ul> | <ul style="list-style-type: none"><li>• Consumer choose apps and equipment</li><li>• Possibility for sports cloud</li><li>• Mobile operator power</li></ul>              |
|                  | Oligopoly           | <ul style="list-style-type: none"><li>• Mobile platform providers rule</li><li>• Partnerships/joint ventures are essential</li><li>• Customer lock-in</li></ul>                             | <ul style="list-style-type: none"><li>• Big player expands to sensor manufacturing</li><li>• One players controls all the data and can sell it to other actors</li></ul> |

# VNC 1 – Current Situation

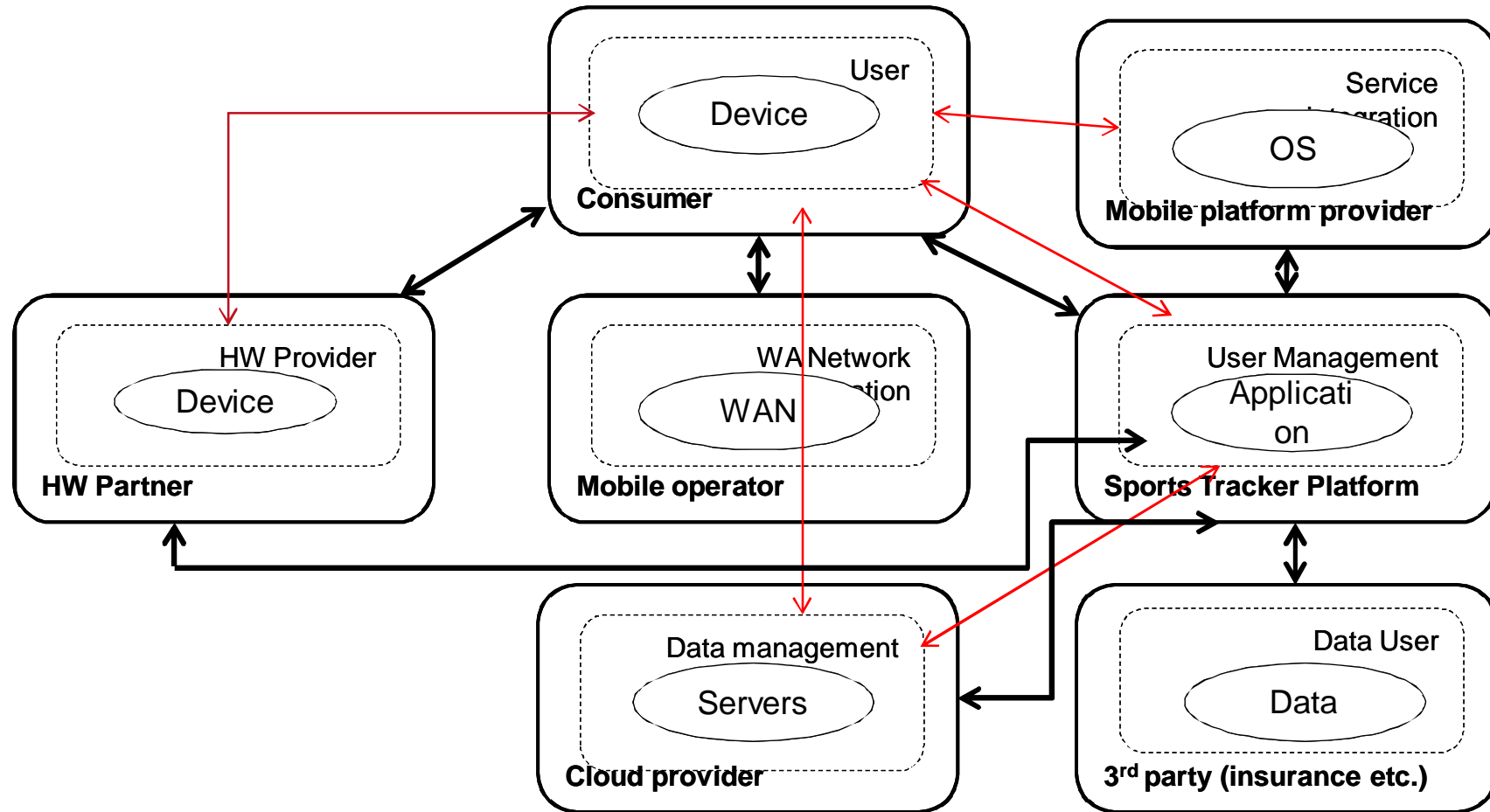


## VNC 2 – Sensor Driven



AAA: Authentication,  
Authorization and  
Accounting  
UA: User Account

# VNC 3 – Partner Driven



# VNC 4 – Sports Tracker as a Platform

