# **IoT Team mini-project**

"Imagine how to innovate and transform a business in 3-5 year time with IoT (sensors/RFID/...) style applications and services"



A focus application theme for each group Answer 4 questions 10 minutes presentation

Food (farm to fork)

Group - 1



Entertainment (sports, culture)

Group - 2



Group – 3



Manufacturing Supply chain

Group - 4



Retail eg Fashion

Group - 5



Transportation
Eg Railway, automoti

Group - 6

## **IoT team exercise – Imagine and describe an awesome IoT application**

#### The context:

- You are a team of engineers newly hired by the director of innovation
- You work as a "swat team" of brilliant engineers, marketers and developers
- Your mission:
  - The board of directors is willing to invest in disrupting innovations. You and your team have 15 minutes to present your ideas of new services and demonstrate your understanding of IoT technologies and potential benefits.

You may focus on one or multiple choices:

- To boost the business of the company and drive new revenues
- To change and improve the image of the company
- To address the needs and expectations of its customers
- To lower the costs and improve the quality of production and maintenance

### ISEP An introduction to the Internet of Things

#### IoT Team Exercise



Food (farm to fork) Group - 1



Entertainment (sports, culture)







manufacturing



Retail eg Fashion



Transportation Eq Railway, automotive

Group - 6

Group - 2

Group - 3

Group - 4

Group - 5

## **Question #1**

Imagine and choose an awesome IoT solution in the category corresponding to your group. Introduce this new IoT-based solution/ service in 1 or 2 slides

Once, you have defined the new IoT solution Identify at least 2 main stakeholders (name/role)

Note: A stakeholder is an individual, a group or an organization that would be positively or negatively affected by your IoT solution/service.

- has influence or power to define objectives of the service
- has power to finance
- has power to act / decide to implement and deploy
- is getting benefits from the new service (as a provider or as a user)

## Team Exercise: Establishing a solution operational concept / scenario





Group - 1



Entertainment (sports, culture)





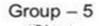
Group - 3

manufacturing

Group - 4



Retail eg Fashion





Transportation Eg Railway, automotive

Group - 6

## **Question #2: Detailed scenario**

- Define 2 capabilities and 1 (or more) associated device(s).(\*)
- •Describe what building block(s) of the solution that would be IoT enabled
- → Explain why IoT brings a specific value, why the solution requires IoT
- (\*) Note: these capabilities & IoT-enabled device must be focused to serve the 2 or more stakeholders identified in question #1

### **Team Exercise: Defining an IoT solution architecture**







Entertainment (sports, culture)

Group - 2



manufacturing

Group - 4



Retail eg Fashion

Group – 5



Transportation
Eg Railway, automotive

Group - 6

# Question #3: Technical architecture of the solution

Group - 3

- •Describe and explain (possibly with a diagram) the technical components (hardware/applications/communications...) of the solution. (\*)
- •For each element, identify what technology aspects/components would be available « off-the-shelf » and which ones require specific research and product development.
- (\*) Device / Gateway/ Service Management / Security / Service organization / Communication / back-end application / User application/ Cognitive services / IT servers / Cloud Services...

## ISEP An introduction to the Internet of Things

# IoT - Team exercise - Business Model











Food Group - 1

Entertainment (sports, culture)

manufacturing

Retail eg Fashion

Transportation Eg Railway, automotive

**Question #4** 

Group - 2

Group - 3

Group - 4

Group - 5

Group - 6

- •Outline the intended **Business Model** for deploying your IOT application/service.
  - How will it be profitable ?
  - Will it be deployed as a non-profit service? Who is going to finance it or pay for it? How much? Per subscription or pay-per-use?
- •What value strategy (\*) would you choose to focus on?
  - Operating excellence (cost)
  - Product leadership
  - Customer intimacy
  - (\*) Tracy and Wiserma argue in their book « The Discipline of Market Leaders » that any company must choose to excel in one discipline, where it aims to be the best. This does not mean that the two other disciplines should be neglected but the company/organization should aim to be merely « OK » in these other two

## IoT team mini-projet - deliverables

- You are a team of engineers and present your project to a managing director and his R&D manager
- 5-10 slides PowerPoint presentation
- Answer questions #1 to #4
- 10 minutes presentation including Q/R
- Each member of the team will speak and present some slides.

## Tips:

- Be imaginative! You may include non existing sensor features... assume that the R&D team will develop it for you!
- > Your solution or innovative service MUST require IoT technologies, architecture and devices. This should not be a simple smartphone mobile App.