Theme of the year 2019

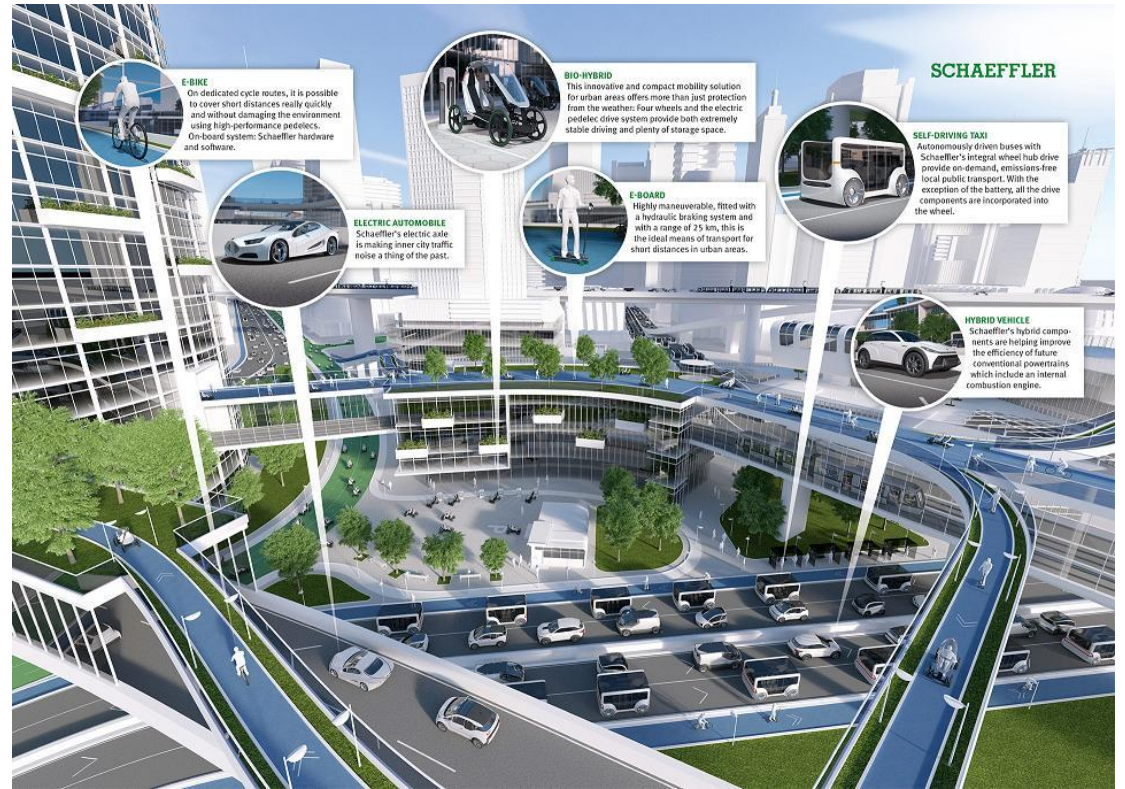Fulvio Corno

Politecnico di Torino, 2018/2019

AmI for **Mobility**

Theme of the year 2019

Fulvio Corno

Politecnico di Torino, 2018/2019

Summary

- Definition of the Theme

- Essential features

- How to proceed?

AmI for Mobility

DEFINITION OF THE THEME

Theme of the year 2019

AmI Systems   for
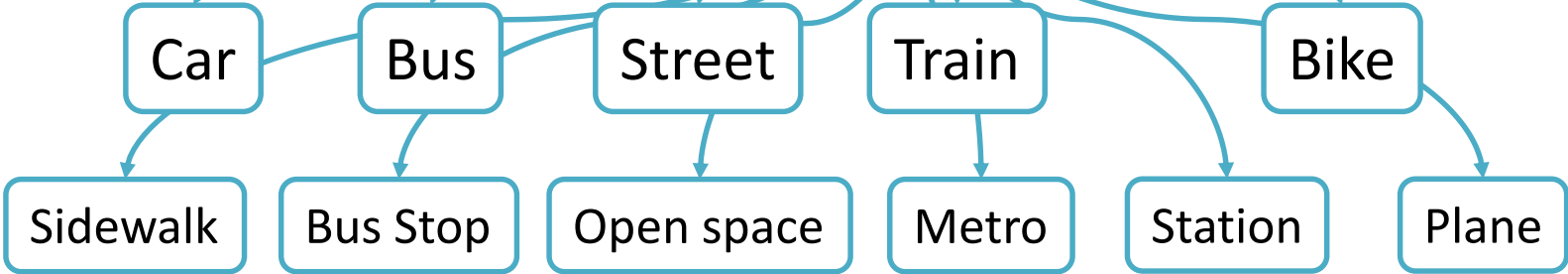
Mobility

in places...

Car   Bus   Street   Train   Bike

Sidewalk   Bus Stop   Open space   Metro   Station   Plane

Theme of the year 2019

AmI Systems

for

Mobility

for users...

Passenger   Car Driver   Biker   Pedestrian

Commuter   Taxi Driver   Police   Bus Driver   Runner   Ambulance

Theme of the year 2019

AmI Systems → for

Mobility

for activities…

- Work
- Tourism
- Commuting
- Waiting

Work → Jammed, Parking

Tourism → Socializing

Commuting → High Speed, Working

Waiting → Entertainment

Jammed → Safety

Parking → Kids

Socializing → Sharing

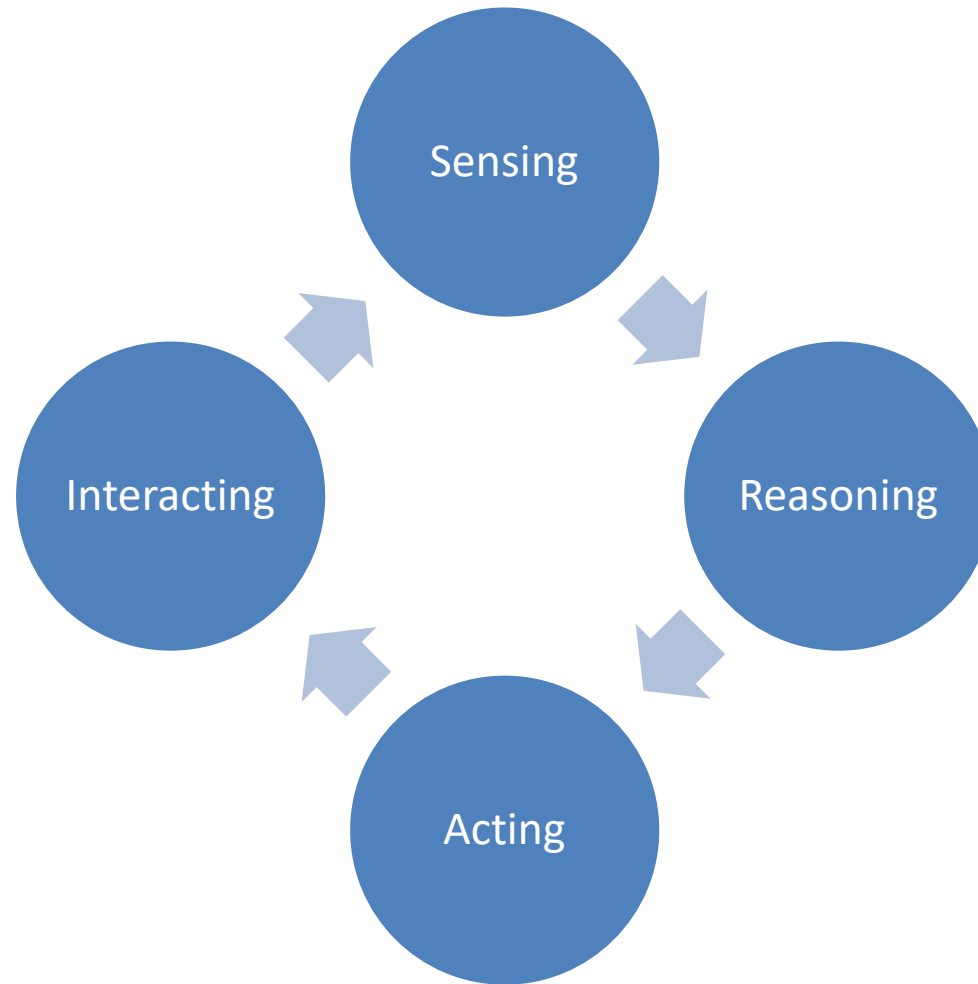High Speed → Security

Working → Music

Entertainment → Information

AmI for Mobility

ESSENTIAL FEATURES
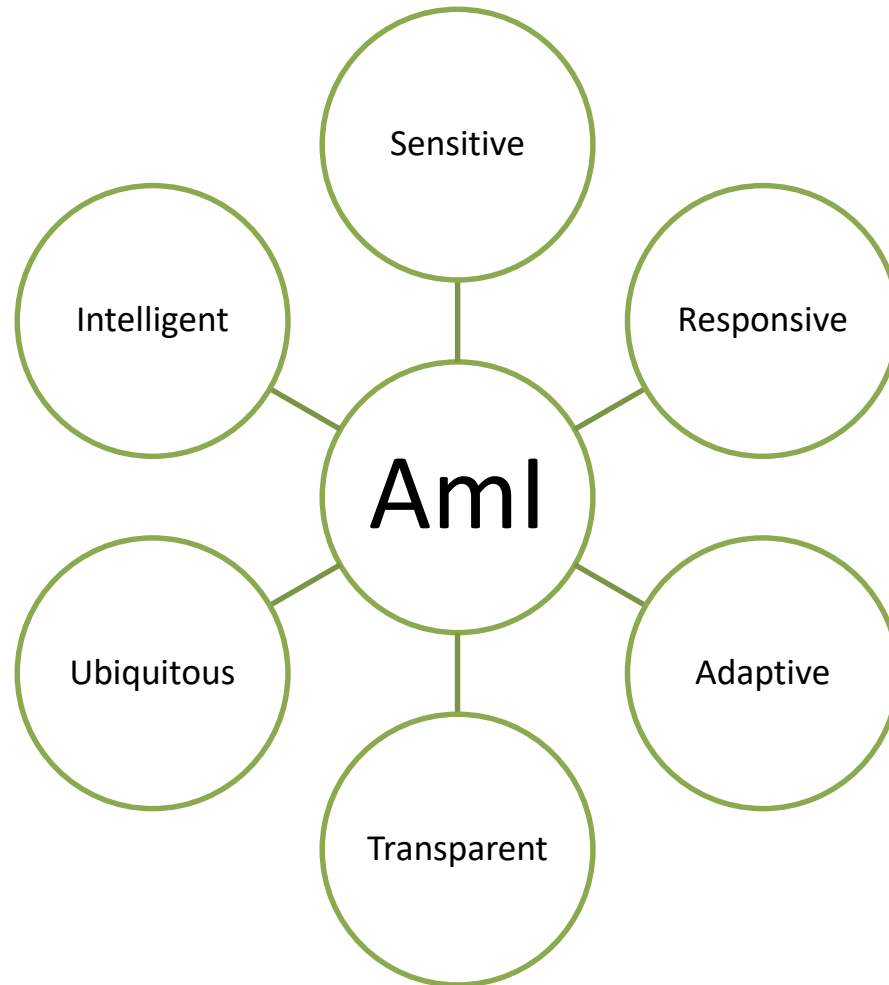
Include all 4 steps of AmI

Corollary

- No **mobile**-only nor **software**-only nor **cloud**-only nor **wearable**-only nor **hardware**-only nor **embedded**-only solutions

- No totally automated behind-the-scenes solutions (that don't involve the **users**)

- Should involve some **sensing** (environmental, user, social, cloud, body, …)

- Should involve some **actuation** (on the environment, user, social, cloud, …)

- Should not be simply deterministic (some form of **adaptation/intelligence** is needed)

About Cloud

- Integrating with cloud services (Facebook, Google Calendar, Twitter, IFTTT, …) or mobile services (location, activity, notifications, …) can be very useful

- May be used as "sensors" or "actuators"

- But: Must <u>not</u> be the <u>only</u> sensor and actuator

Try to incorporate most AmI features

Sensitive

Responsive

Intelligent

AmI

Ubiquitous

Adaptive

Transparent

Additional constraints (1)

- We can't modify the infrastructure
  - Walls, doors, hallways, …
  - Lighting, heating, cooling, Wi-Fi, Internet, …
  - Additional devices are ok

- Feasible with existing equipment
  - Devices available in LADISPE
  - Devices you own or you may lend
  - Cheap devices that may be purchased

Additional constraints (2)

- Easy to demonstrate
  - Easy to show in a lab setting
  - Easy to be moved, installed elsewhere
  - No permanent installations required
    - Except in special "safe" places (Ladispe, some office, some department, ...)

AmI for Mobility

HOW TO PROCEED?

Immediate next steps

- By 17/03 (upload on Google Docs)
  - Group composition
  - Submitting ideas
    - Title
    - [very] short description
- Already think at AmI steps & AmI features
- Teacher validation during 18/03 class
- Final version on another Google Docs by 24/03

Submission Format

GROUP NUMBER XX

Team Members
- Team member 1, email, GitHub username, role in the project
- Team member 2, email, GitHub username, role in the project
- Team member 3, email, GitHub username, role in the project
- [Team member 4, email, GitHub username, role in the project]

Project Acronym: XXXYYYZZZ

Project Title
this is the title

Description
5-10 lines describing the project from the user's point of view. Don't mention technologies nor devices.

Submission Format

Submission Format

GROUP NUMBER XX

Team Members
- Team member 1, email, GitHub username, role in the project
- Team member 2, email, GitHub username, role in the project
- [tHub username, role in the project
- [tHub username, role in the project]

Description
5-10 lines describing the project from the user's point of view. Don't mention technologies nor devices.

> What are the benefits for the user?
> What are the main features?
> Why should they want it?
> How does it blend in their life?

> Really!

Final tips
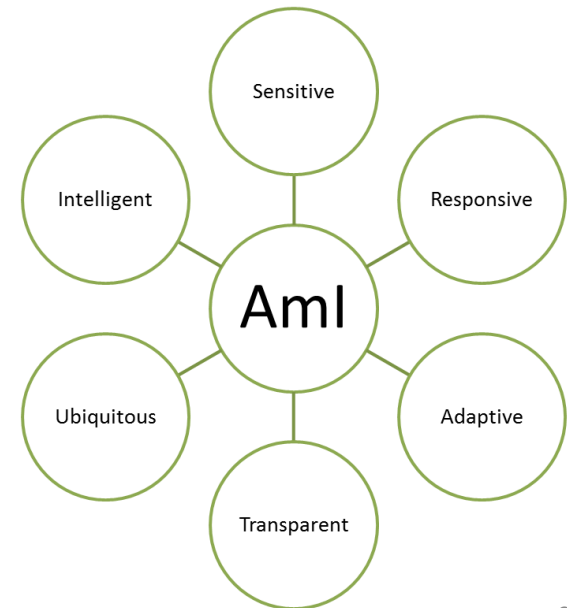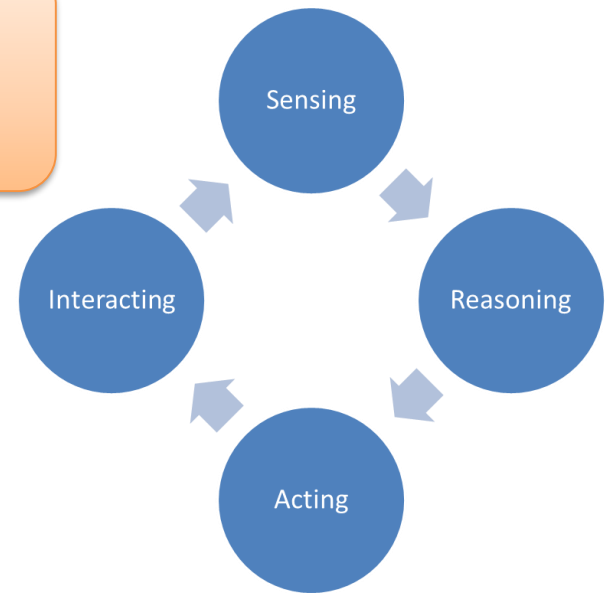

AmI for **Mobility**

- Be <u>creative</u>

- Exploit your skills or <u>passions</u>

- Concentrate on <u>2-3 key</u> features

- What will your <u>users</u> like?

- <u>Avoid</u> too much "integration" or "device support" or "data processing" work

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