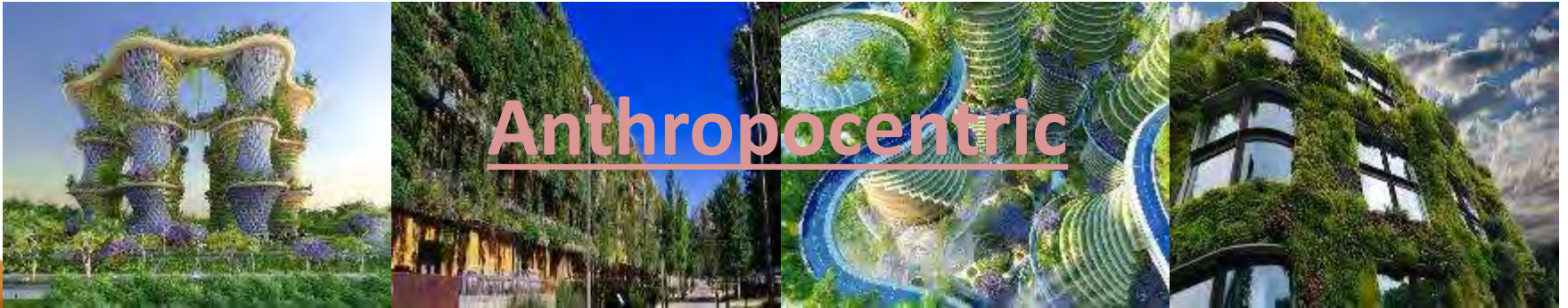


# Natural Intelligence: Heart of the cities? What place for AI?

**SMARTCITY**  
EXPO WORLD CONGRESS





What best represents future Smart Cities ?

# Urban environment can be perceived as ...

## Technocentric

ICT enabled and  
focused

Knowledge and collectivity  
centered

## Anthropocentric

## Link-centric

Spontaneous human  
interactions

Data driven technical  
networks





What best represents our diversity of human beings ?

City : perhaps the most complex system in the world ?

**Goes to ...**



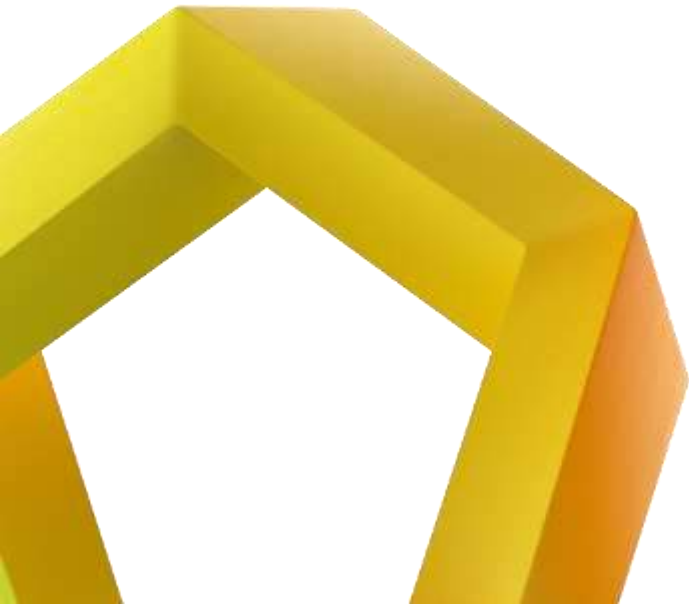
**... live from !**

## **INTERFACE**

(Symbolic, Physical, Intellectual, Natural)

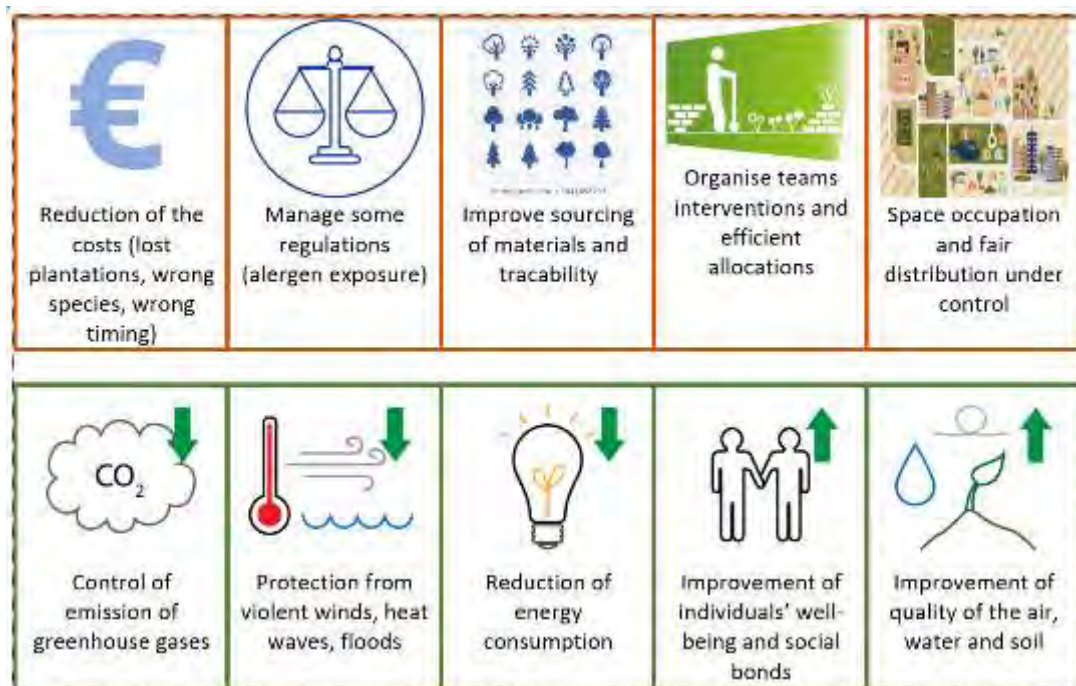


Focus on a “small” example



# Can AI help monitor urban green spaces ?

Healthy trees and green spaces requires inspections / maintenance



Technocentric

Anthropocentric

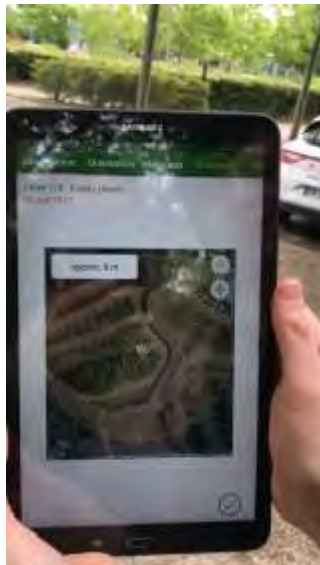
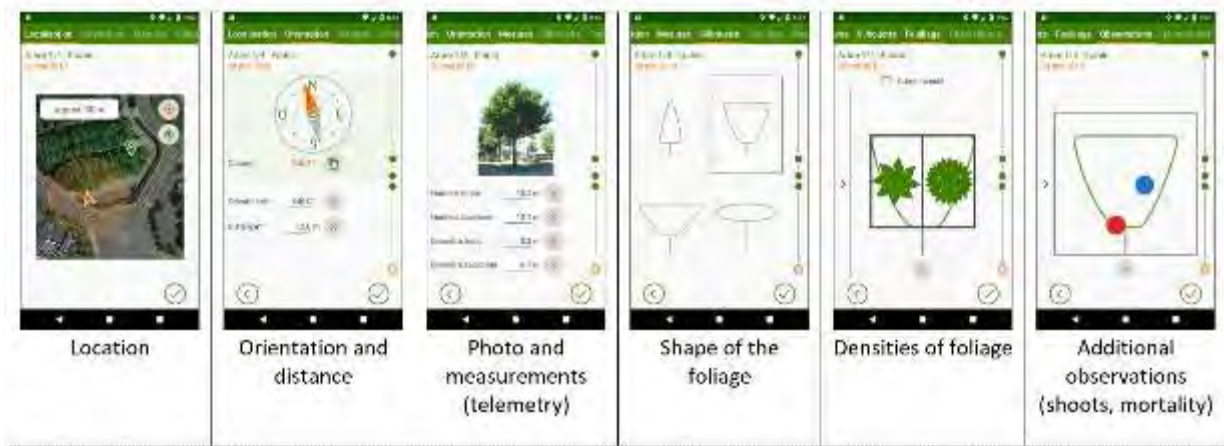




AI : trees analysis + recognition

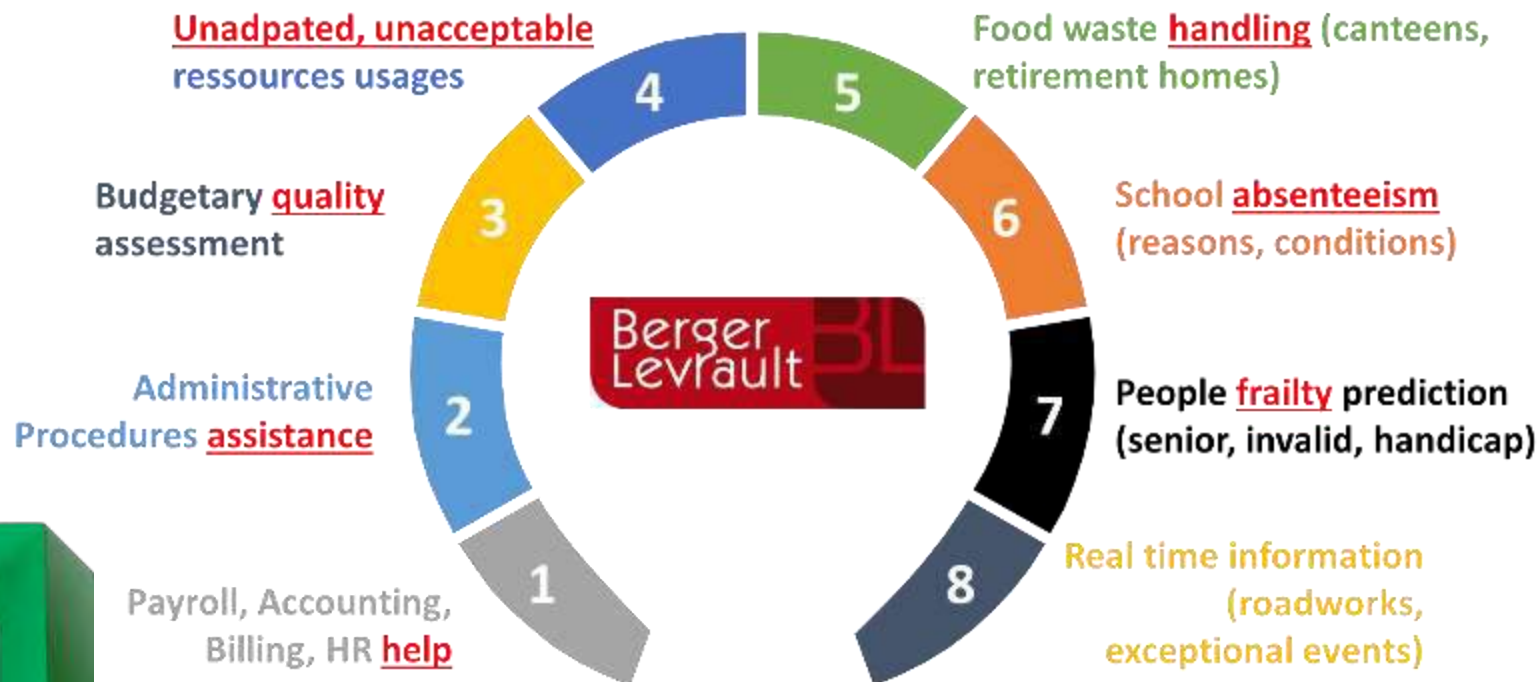
Diagnostics (algorithms)

Geolocalisation

[illegible]



# Day to day activities AI assisted !



## Different AI's for two data-centric cultures ?

Big Datasets

Machine/Deep Learning

High level

Actionable by machines

15% of the collected data

Small datasets

Adaptive/Evolutive Learning

Day to day

Actionable by humans

85% of the collected data

**Big data is about machines**

**Small data is about people**

**Implement**

**Innovate**

**Search**



**Information Technologies**



**Artificial Intelligence  
Components**



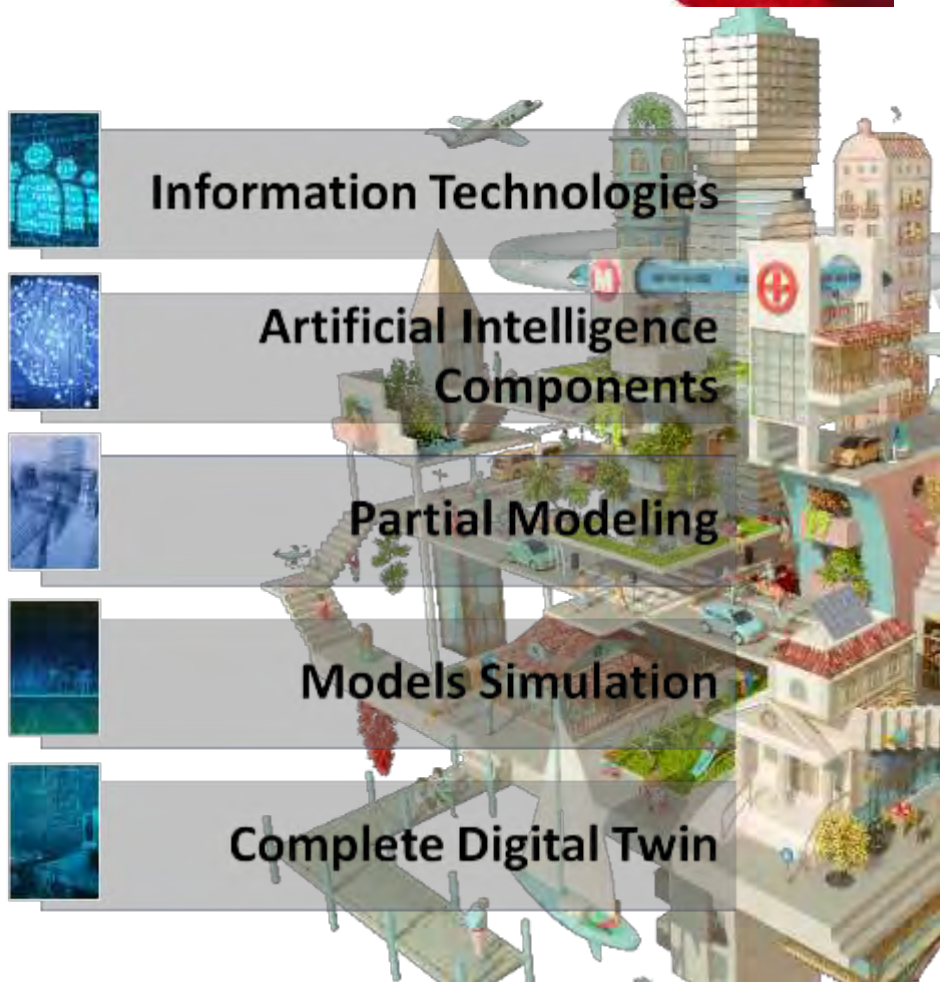
**Partial Modeling**



**Models Simulation**



**Complete Digital Twin**



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Fira Barcelona

  
**CITIES MADE  
OF DREAMS**