

The Impact of Frontier Technologies in Cities



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U4SSC Leaders

ITU U4SSC & the Cities

CITIES

Population concentration
GPD generation
Energy & Resources consumption
CO2 Emissions and pollution

& COMMUNITIES ...



Technology






TOP STRATEGIC TECHNOLOGY TRENDS 2019



Privacy and Ethics



Quantum Computing

Intelligent	Digital	Mesh
 <p>Autonomous Things</p>	 <p>Digital Twin</p>	 <p>Blockchain</p>
 <p>Augmented Analytics</p>	 <p>Empowered Edge</p>	 <p>Smart Spaces</p>
 <p>AI-Driven Development</p>	 <p>Immersive Experience</p>	

Technology Impact in Cities

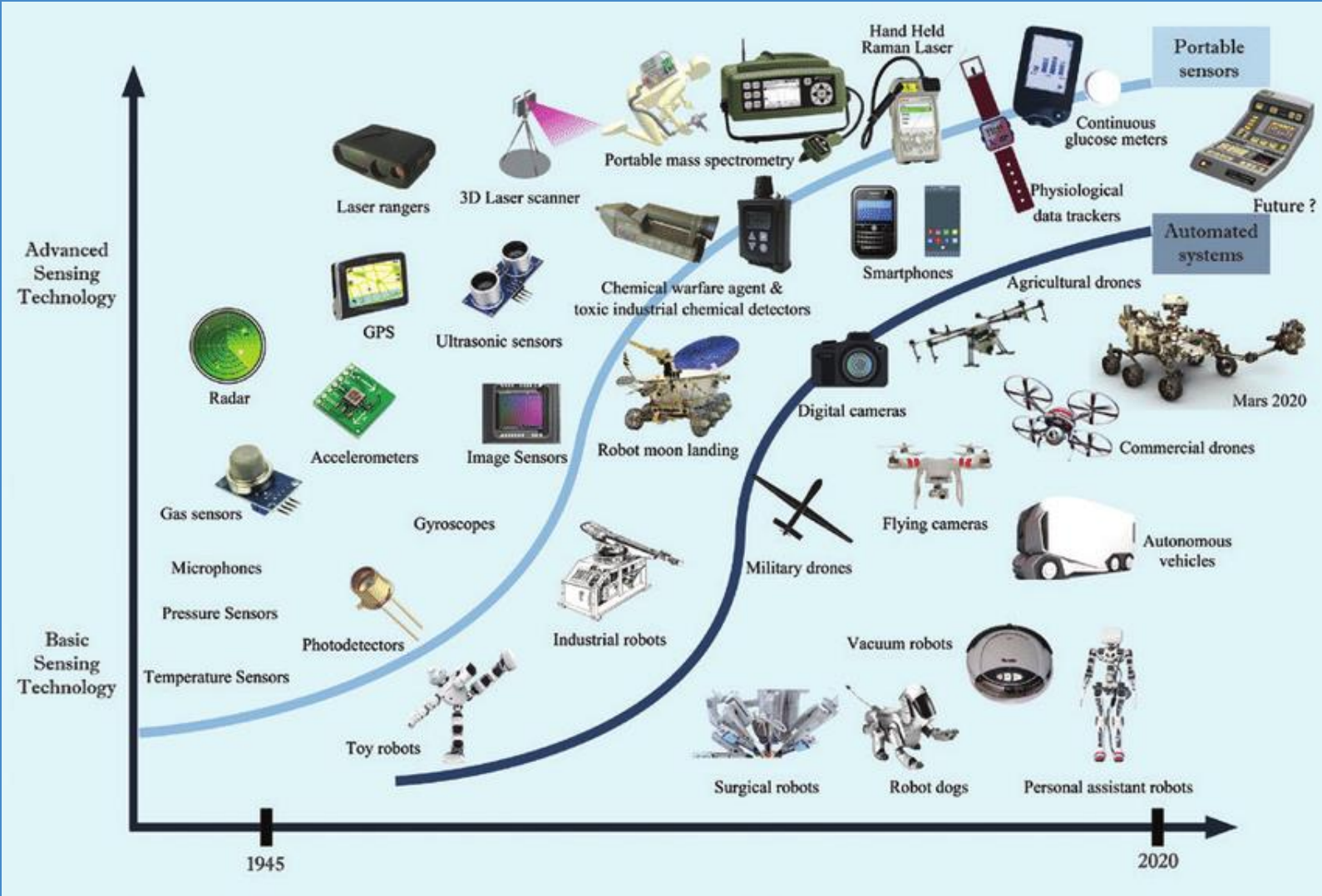
The impact of Sensing technologies
and IoT in Cities

**U4SSC Technology Impact in Cities
Deliverables 2019**

The impact of Artificial Intelligence
and Cognitive Computing in Cities

The impact of Data Processing and
Computation in Cities

Sensing Technology



Via researchgate



The impact of sensing technologies and IoT in cities

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Chapter 10 Electric Vehicles charging

Chapter 11 New challenges and opportunities

Chapter 12 Deliverable Conclusions

ANNEX cross-cutting initiatives

A.1 Smart education for smart ecosystems

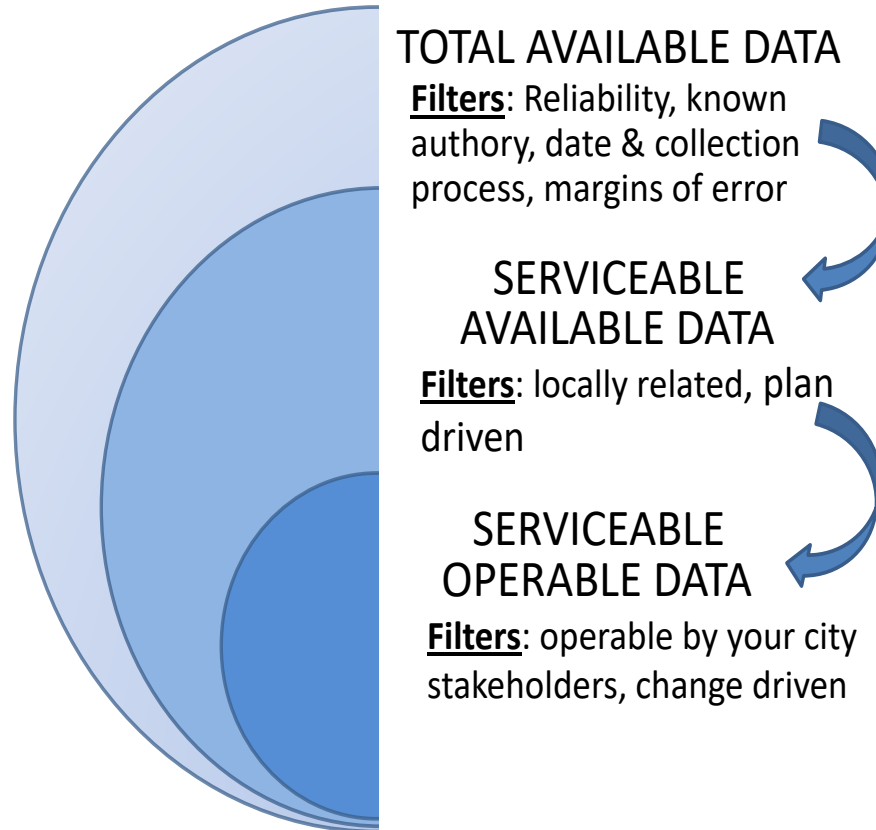
A.2 Training of smart city staff



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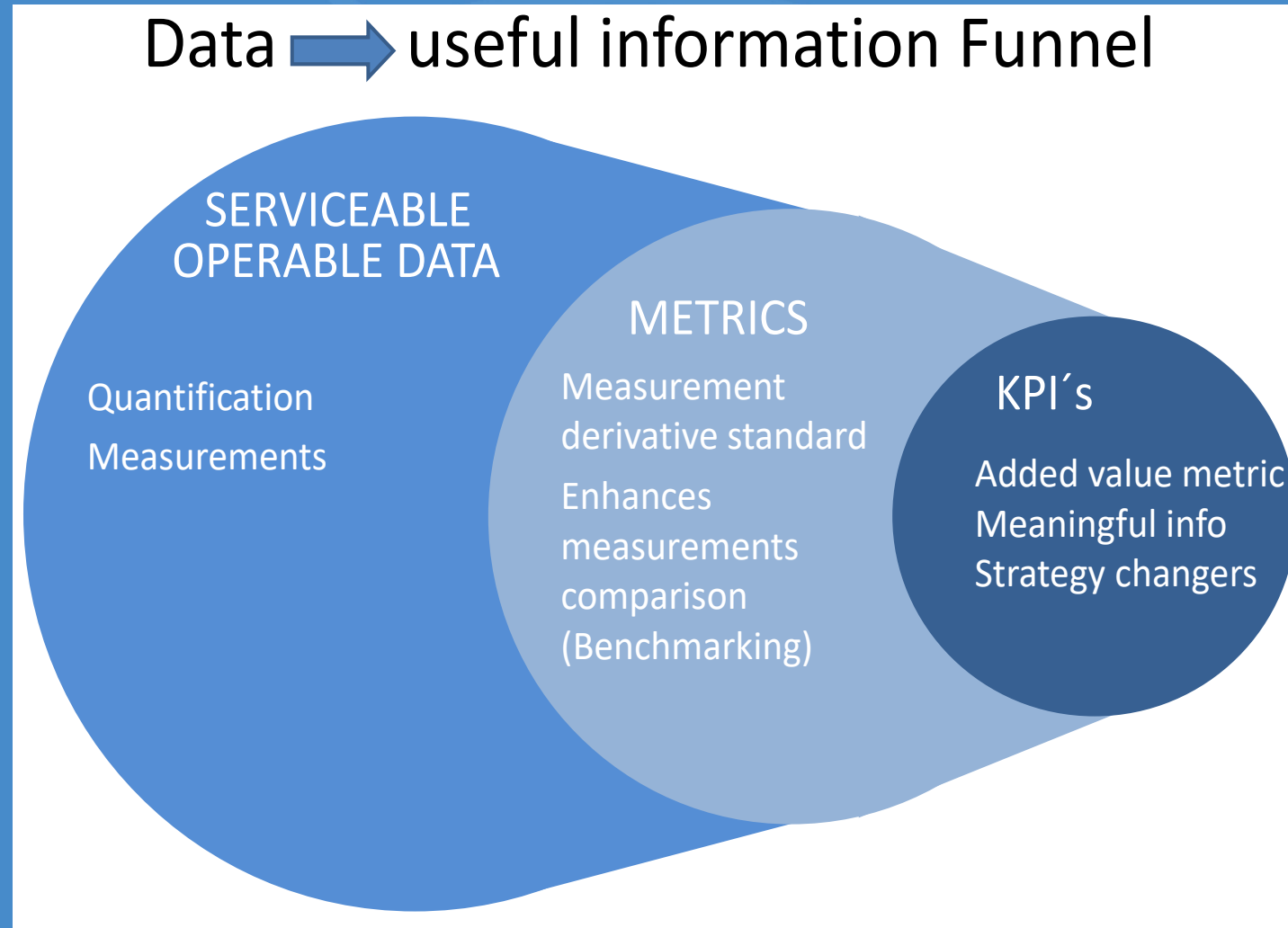
Introduction

Data Source Catalogue For Cities



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Introduction

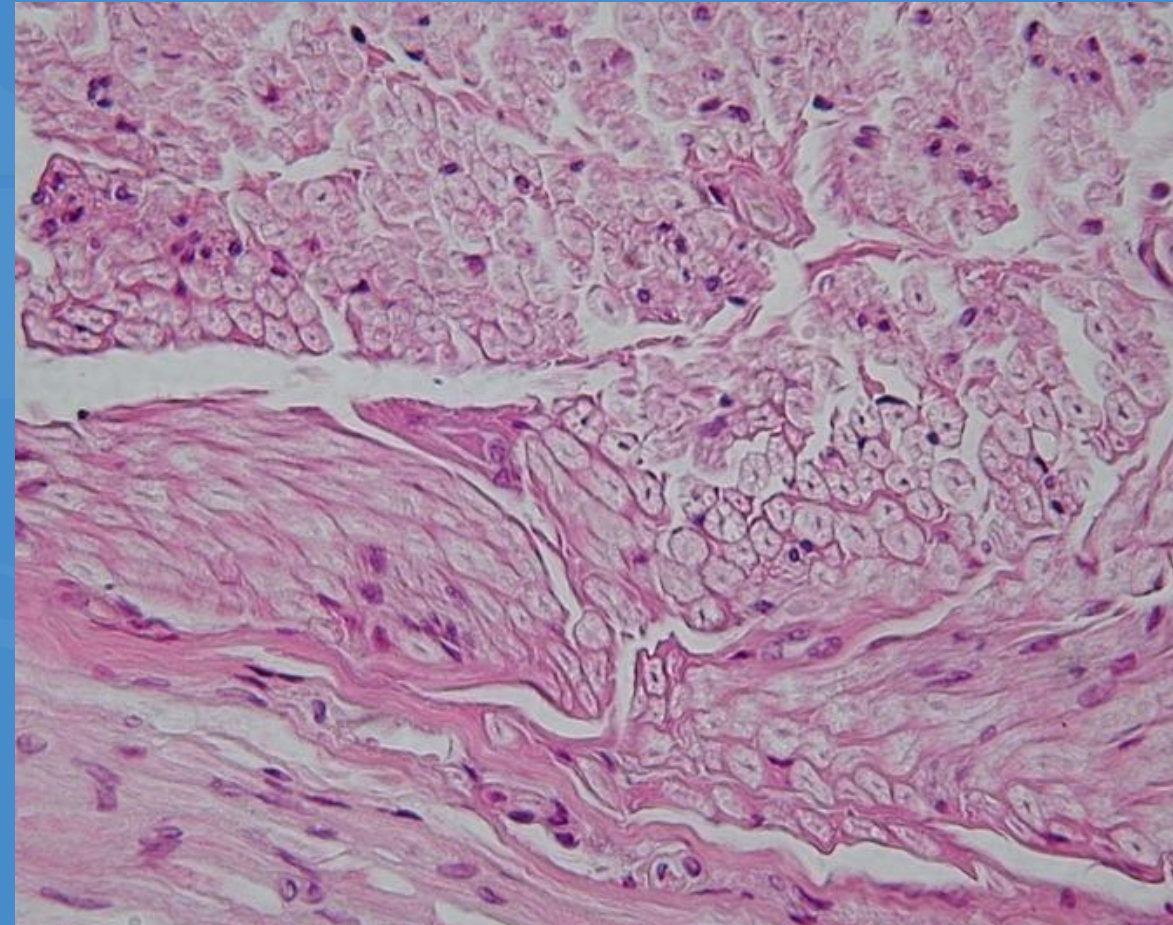


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City IoT

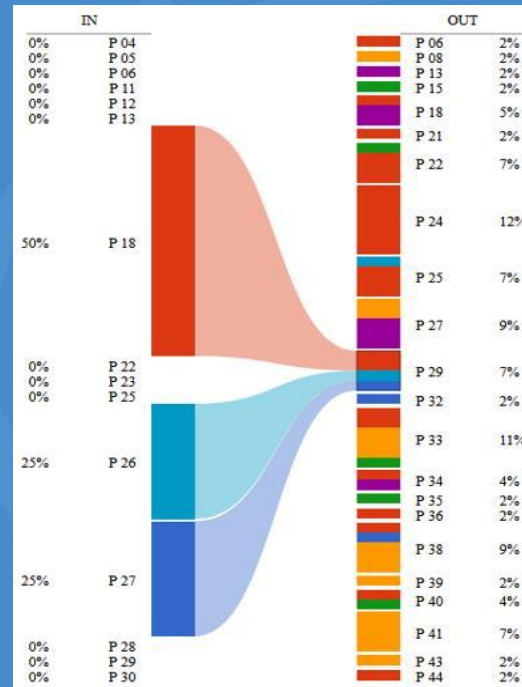
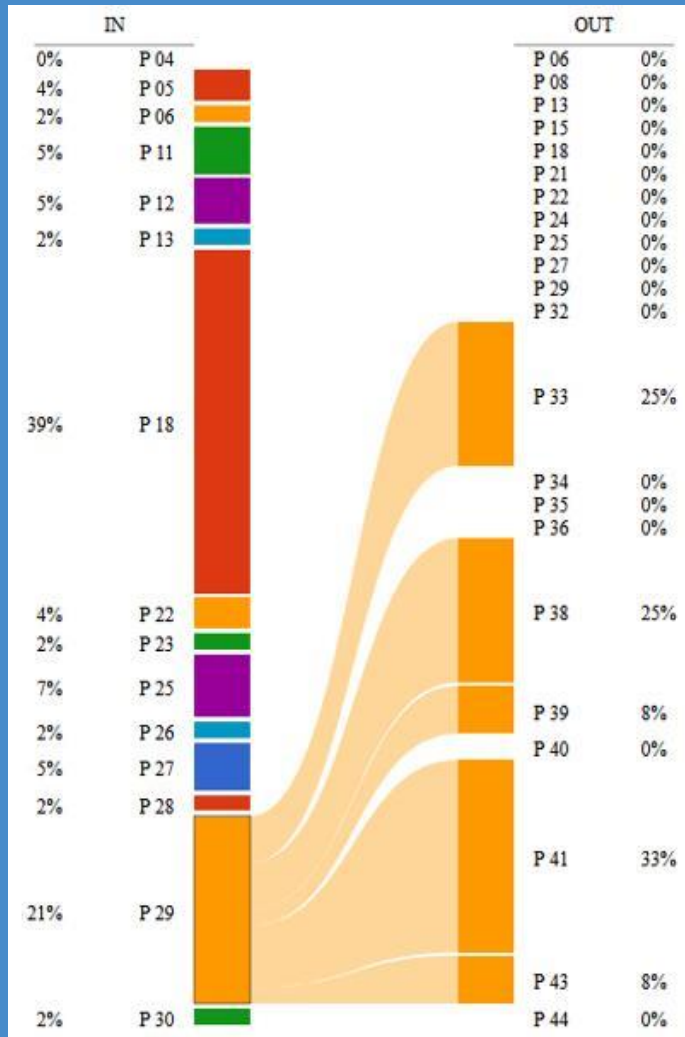


Buildings as urban tissues' cells



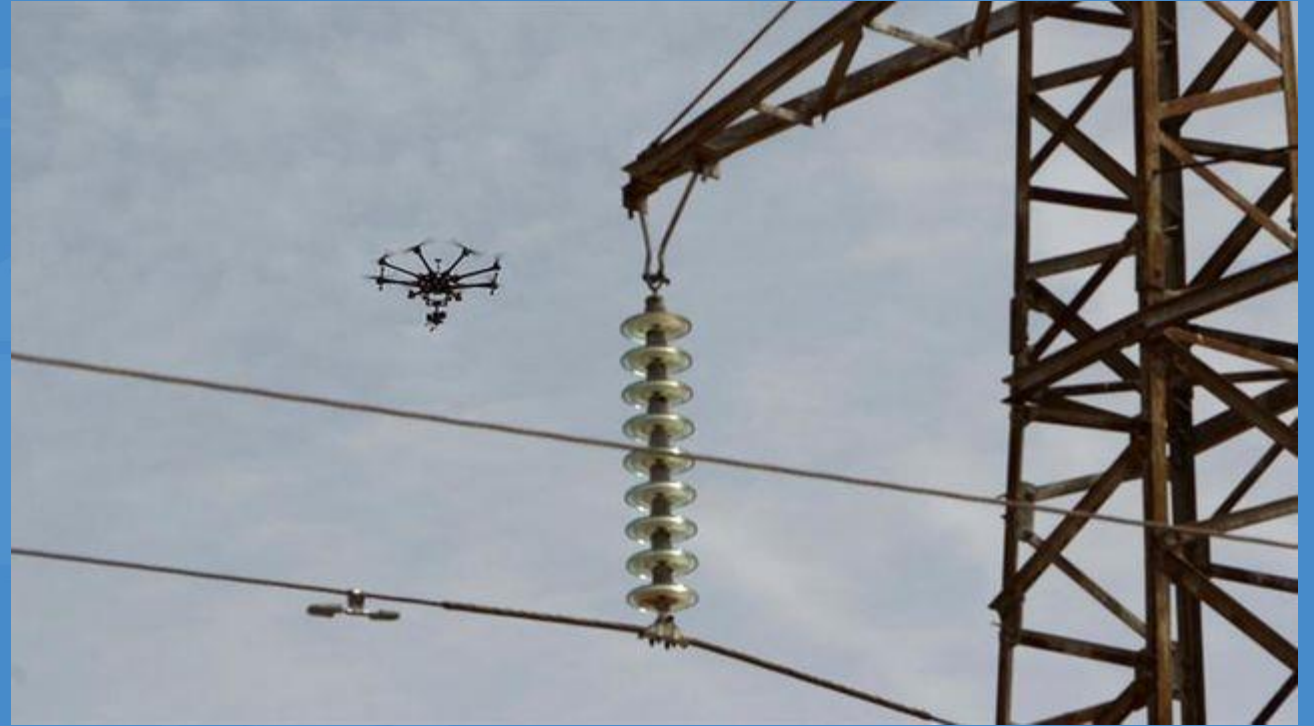
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City IoT



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Drones



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Drones



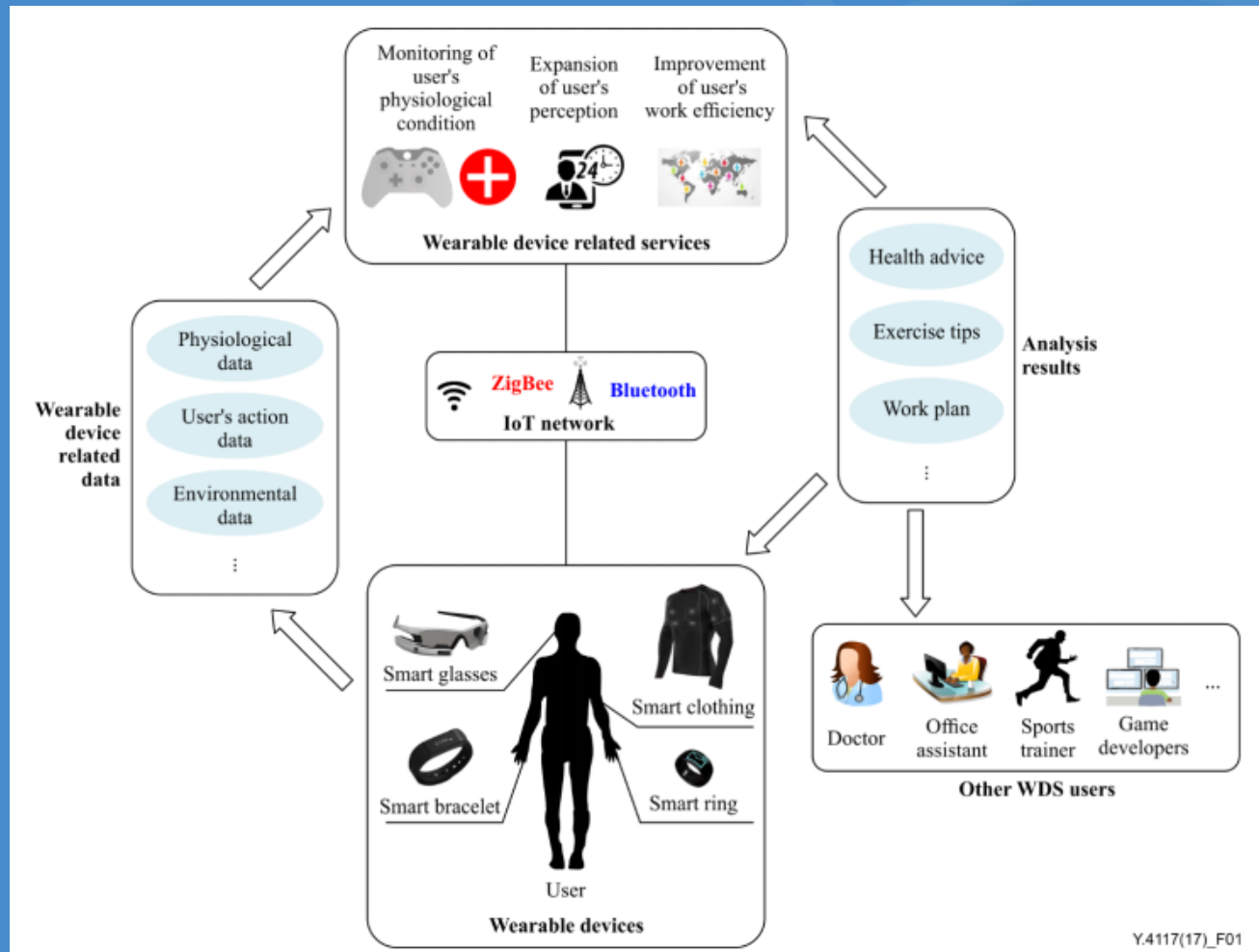
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Drones



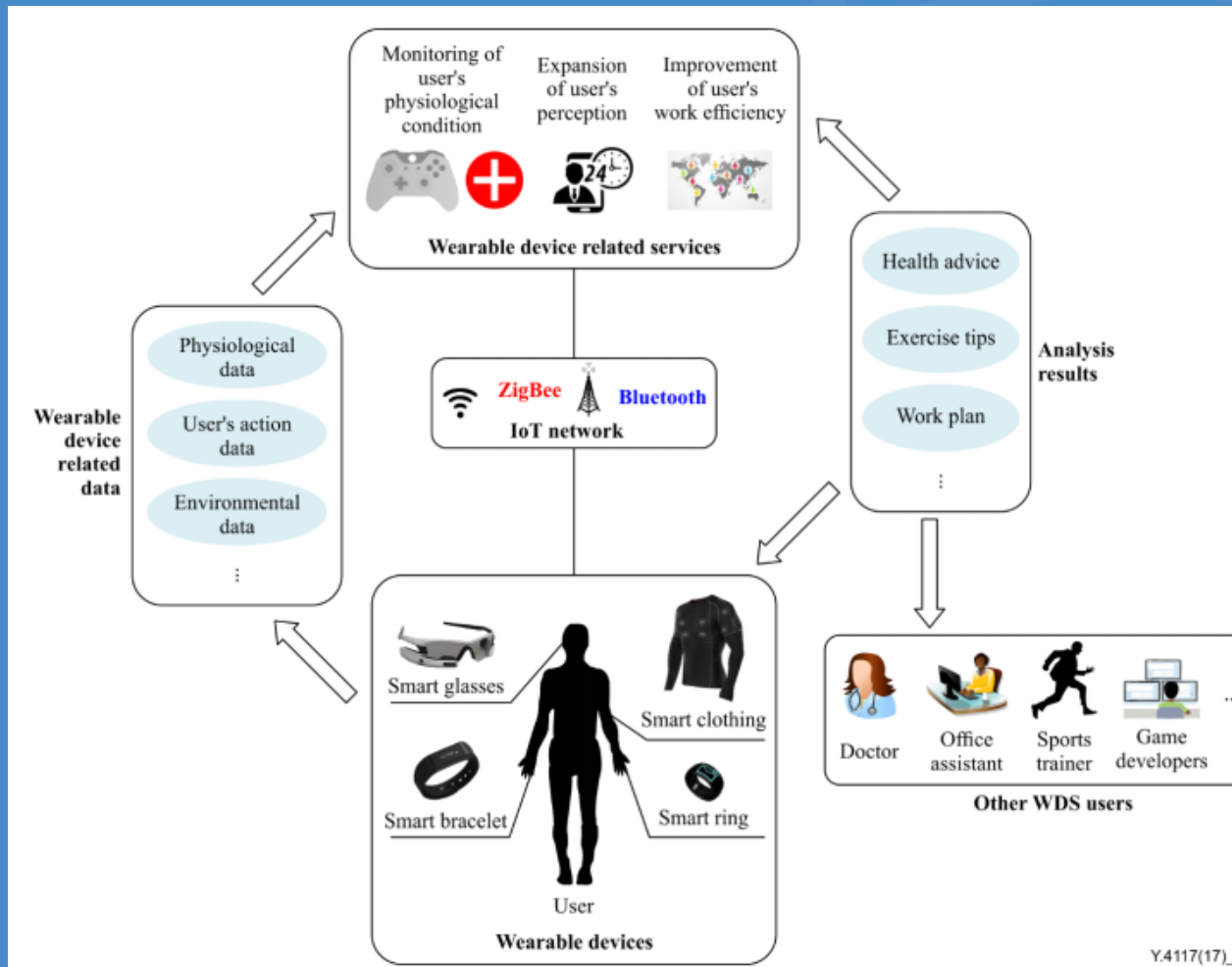
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Wearables



The impact of sensing technologies and IoT in cities

Wearables



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Salud personal
 En 2013 hay un gran boom en el número de ventas de dispositivos (Fitbit, Nike Fuelband, Jawbone, ...) para monitorizar variables de salud como actividad, ritmo cardiaco o tensión. Se prevé que se vendan 80 M de dispositivos para monitorizar actividad física en 2016.¹

Gafas de realidad aumentada
 Google lanza el prototipo de las gafas en 2013 y espera llegar al mercado masivo en 2014. Se estima un precio de 1.500 dólares.

La ropa como sensor
 Empresas como Nike, Sproutling, Rest Devices ... empiezan a incluir sensores en la ropa.⁷

BioSensores
 Monitorización de variables médicas como glucosa (ejemplo Medtronic³), colesterol, ... Se espera un mercado de 139 k Millones de dólares en 2018.⁴

Smartphone
 Se convierte en el HUB que centraliza la comunicación con dispositivos personales.

Smartwatch
 Samsung, Sony, Qualcomm ya han lanzado su modelo de smartwatch; se espera que Apple haga lo mismo.

Localizador
 La localización de objetos llega al mercado a precios asequibles: Tile⁵ (1395 dólares), StickRFind⁶ (4911 dólares dos unidades).

Other WDS users
 Doctor, Office assistant, Sports trainer, Game developers

Footnote:
 1. www.fitbit.com, www.nike.com
 2. ABI Research
 3. www.medtronic.com
 4. Transparency Market Research
 5. www.thetileapp.com
 6. www.stickrfind.com
 7. www.nikeplus.nike.com, www.sproutling.com

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Indoor positioning



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Indoor positioning



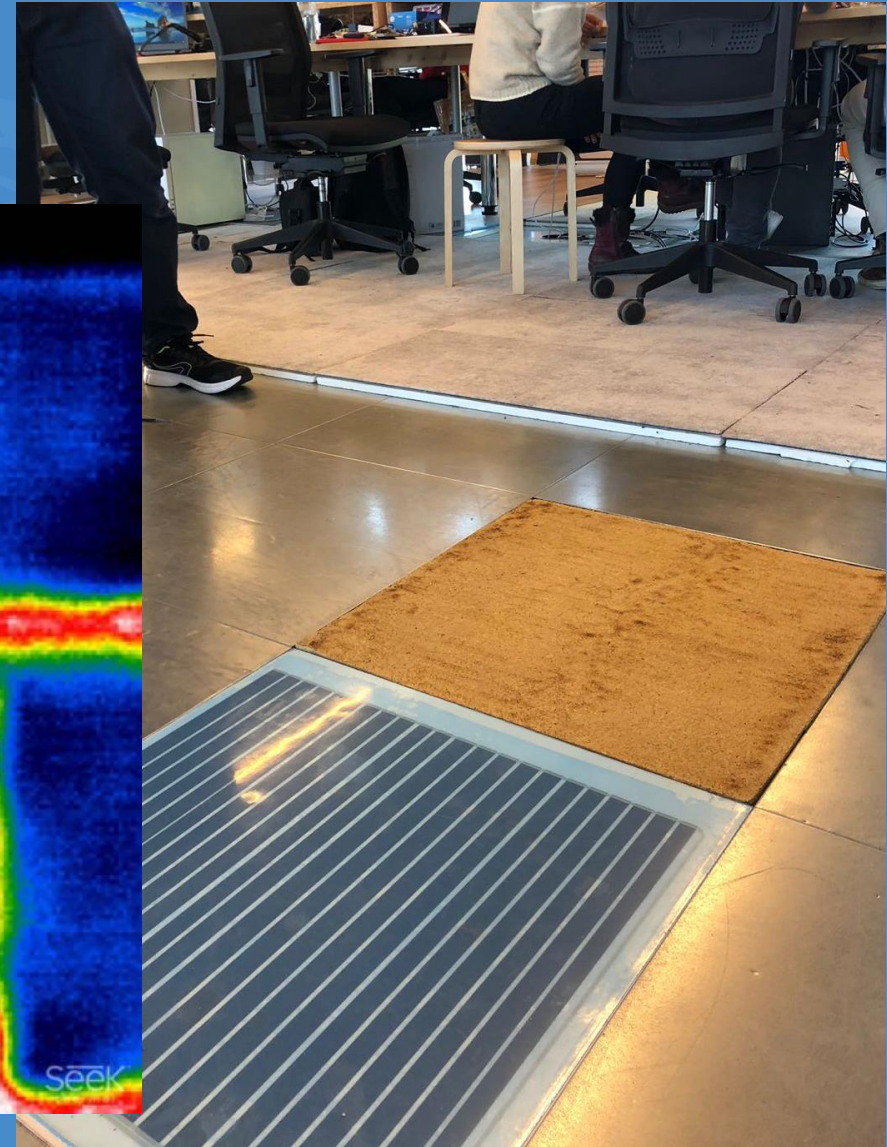
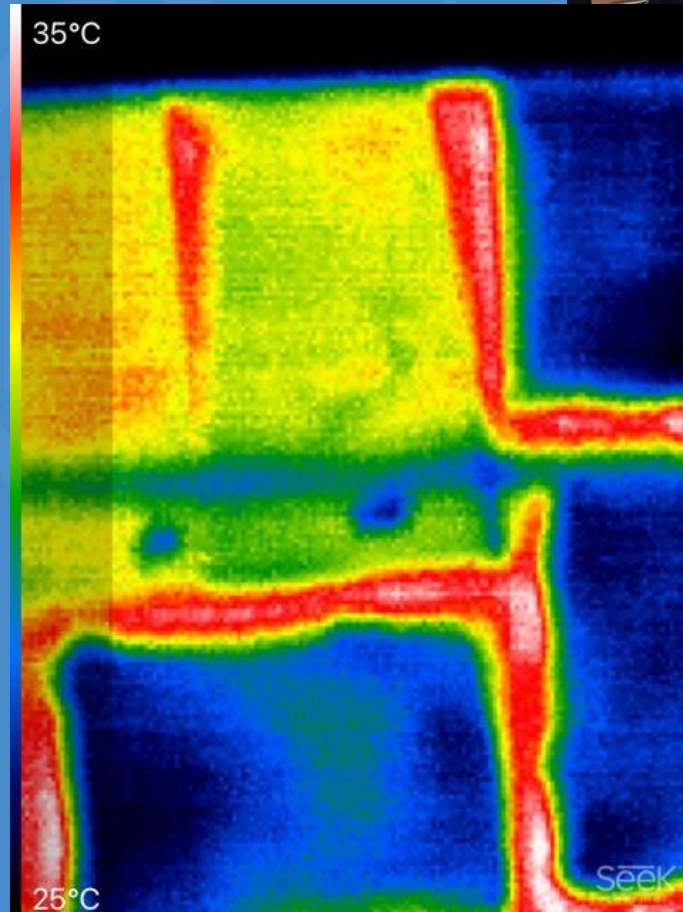
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Indoor positioning



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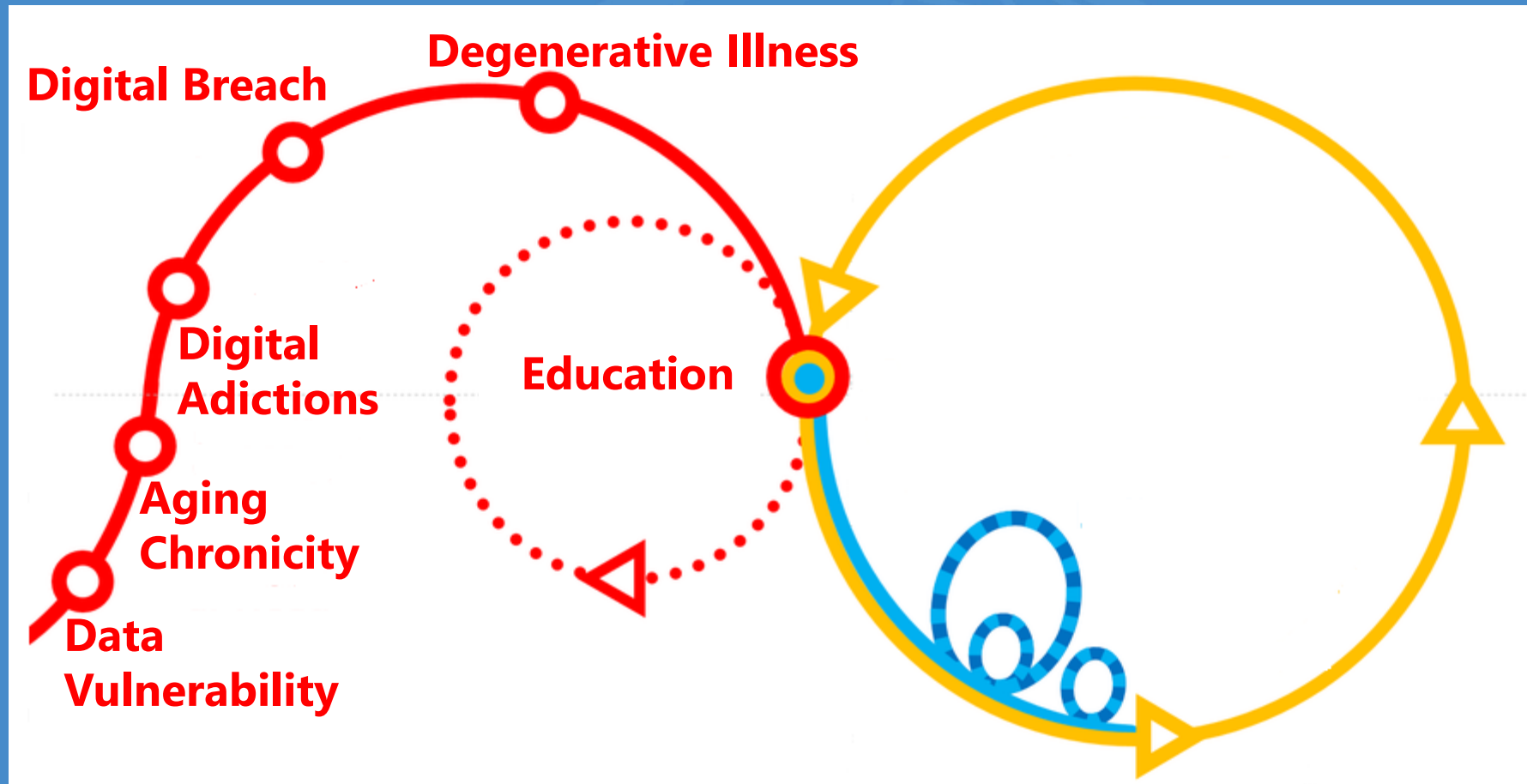
Indoor positioning



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ANNEX cross-cutting initiatives

A.1 Smart education for smart ecosystems



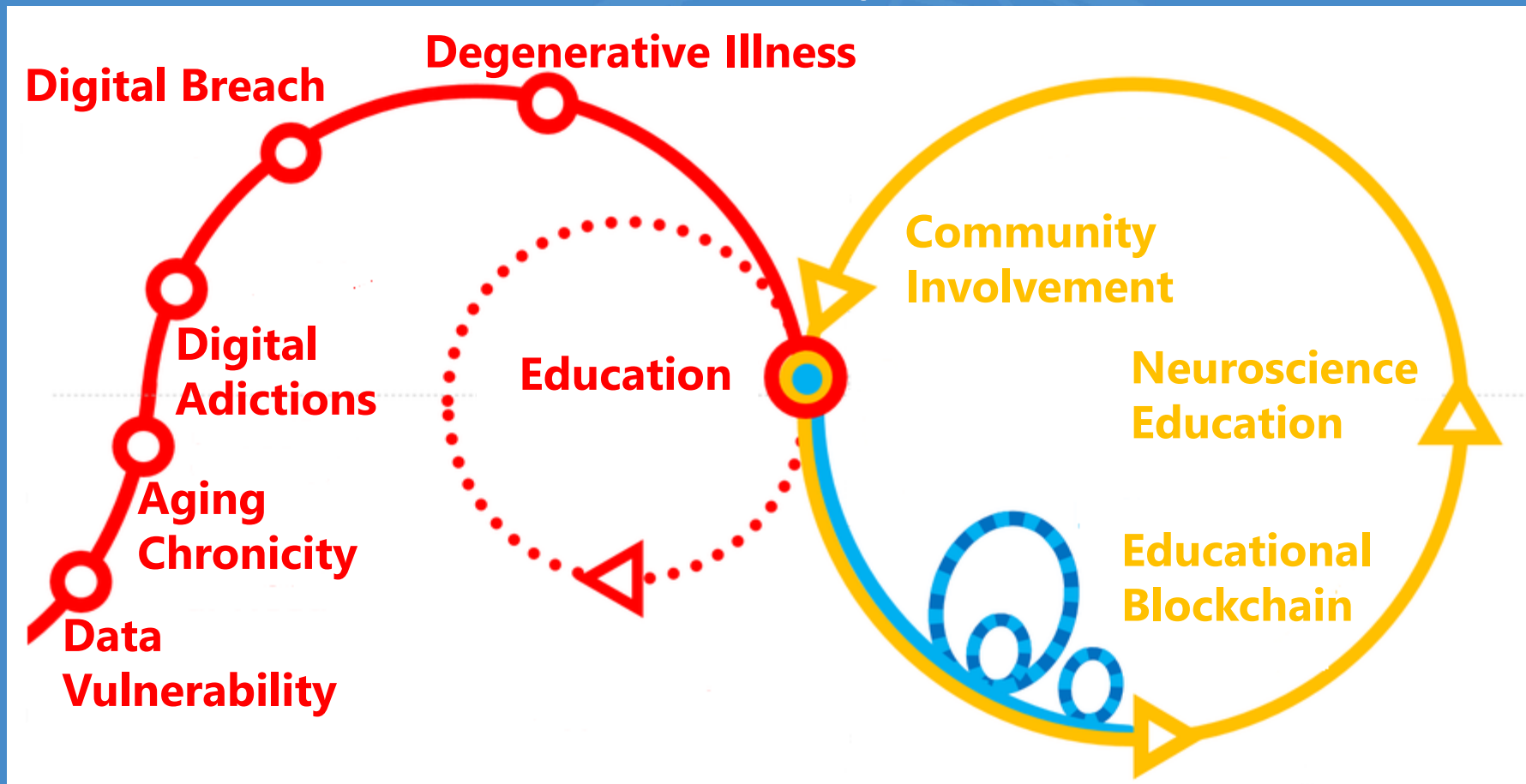
Via SHC Foundation



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ANNEX cross-cutting initiatives

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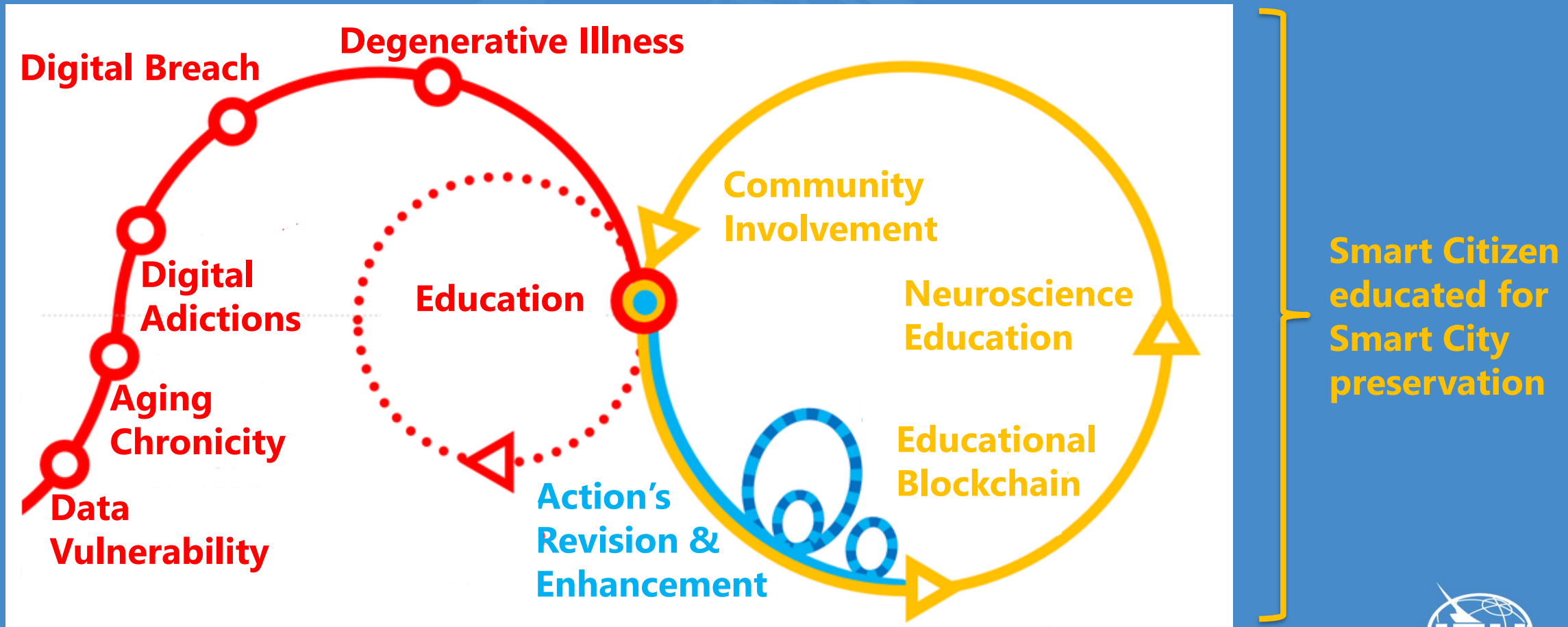
Via SHC Foundation



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ANNEX cross-cutting initiatives

A.1 Smart education for smart ecosystems



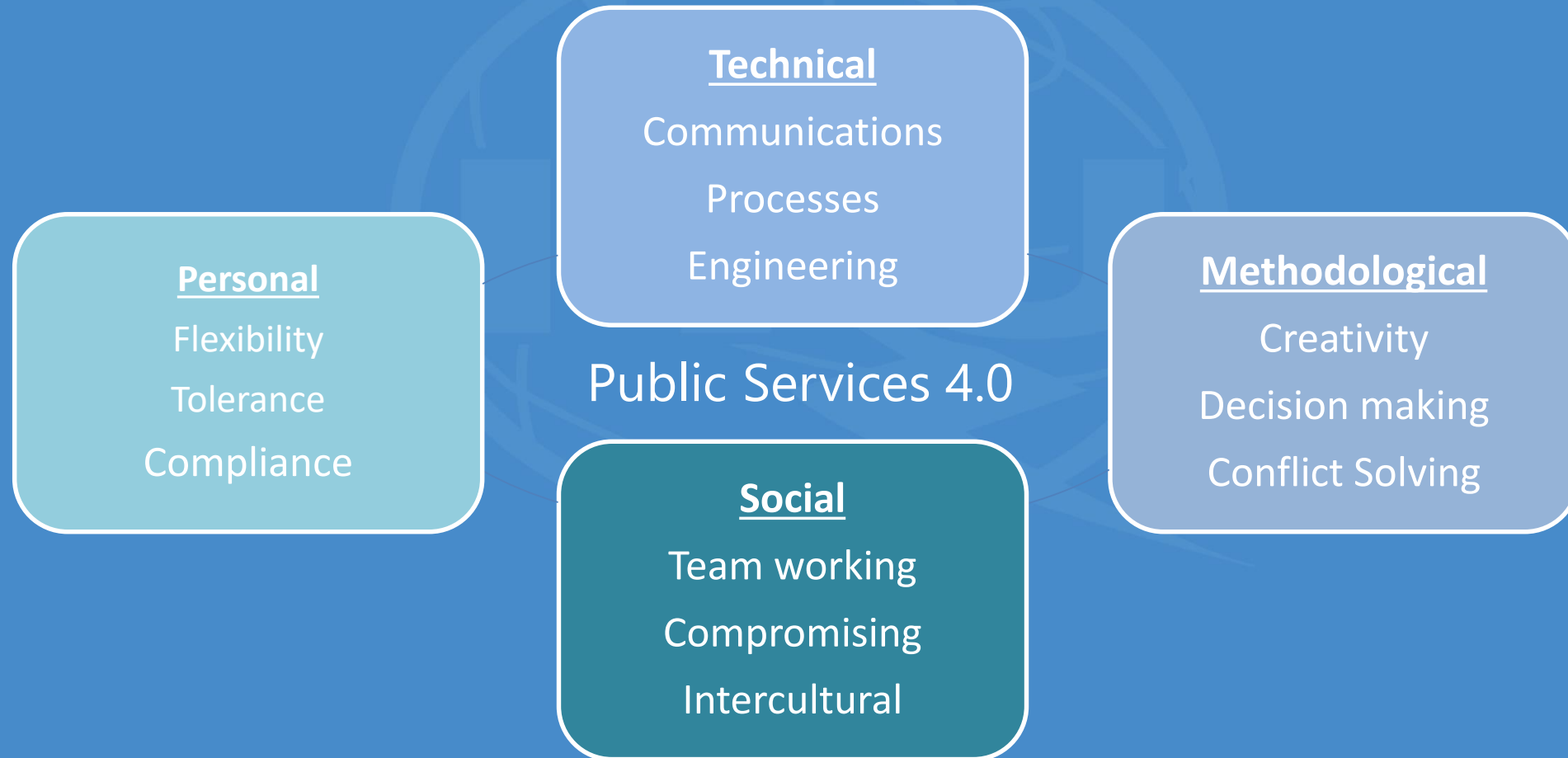
Via Smart Healthy Citizen Foundation - Habits research



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ANNEX cross-cutting initiatives

A.2 Training of smart city staff



A hand holding a robotic hand against a futuristic digital background. The background features a glowing blue globe, various data charts, and percentages like 100%, 90%, 50%, 40%, 30%, 20%, and 10%. The text "Thank you!" is centered at the top in white.

Thank you!

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