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10. Ljubljana Forum

From Digital Transformation to Driving Innovation and Sustainability – SMART City Zurich as an Example

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Starting Points for SMART City Zurich

- Cities will shape societal developments and drive innovation – world wide.

- **Urbanisation:** By 2050, two thirds of the world's population will live in cities. The Greater Zurich Area has 1.5 Mio. inhabitants.

- **Challenges:** Quality of life in urban areas shall be maintained or improved. At the same time, resource and energy consumption will have to be reduced.

- **Innovation:** New technologies and digital transformation offer great potential to address these challenges.

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Digitalisation: Opportunities and Threats for Sustainability

Opportunities for sustainability

- Digital networking of products and processes (industry 4.0, internet of Things) promotes efficiency, dema-terialization and reduces the demand for resources.

- Digitisation is a key technology for addressing climate change: Logistics, transport, corporate sustainability management, building technologies and a sharing economy can be strengthened.
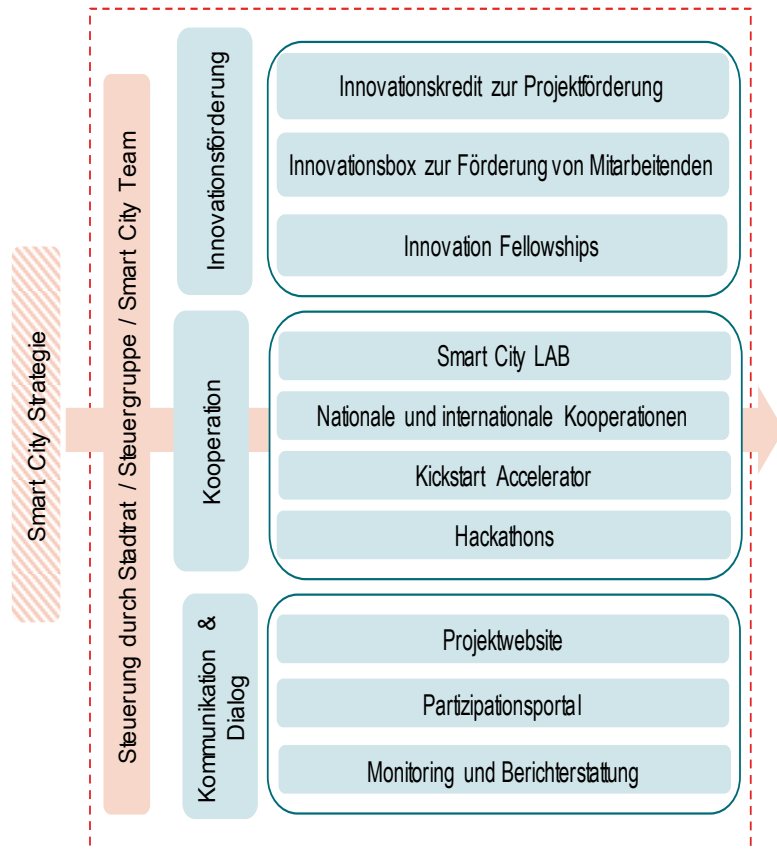
Threats for sustainability

- Already today, energy requirements of server farms produce as much CO2 as global air traffic.

- Digitisation leads to a growing demand for limited raw materials, including production, logistics and their disposal.

- This creates problems in terms of ecology, economy, jobs, politics and society.

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SMART City Zurich – Three Strategic Objectives

- **Equal opportunities** and a high quality of life for everyone. SMART City Zurich involves the entire population. This includes everyone who lives, works in or visits the city in Zurich.

- **Sustainable development:** Zurich wants to build on digital transformation to improve environmental quality and to become a 2000 watt as well as a net zero CO_2 society .

- **Innovation and attractive business.** Zurich promotes a state of the art and reliable digital infrastructure as well as attractive framework conditions for innovative entrepreneurs.

- Innovation and networking are core elements of Smart City Zurich strategy.

- Thus, Zurich is strengthening its agility in view of technological changes and grand challenges ahead.

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Innovation / Cooperation / Dialog – Three Main Elements

- **Strengthening innovation within the administration**
  — Innovation grants for projects involving several offices
  — Innovation box supporting co-workers with innovative ideas
  — Innovation fellowships for extern experts

- **Cooperations with the City of Zurich**
  — Smart City LAB supporting projects with partners
  — National und international cooperation
  — Data pool sharing internal and external data
  — Kickstart Accelerator for start-ups, companies, public offices
  — Hackathons addressing specific issues

- **Communication and dialog**
  — Website informing a public audience
  — Participation addressing the broad population
  — Monitoring and Reporting

Diagram labels:
- Smart City Strategie
- Steuerung durch Stadtrat / Steuergruppe / Smart City Team
- Innovationsförderung
  - Innovationskredit zur Projektförderung
  - Innovationsbox zur Förderung von Mitarbeitenden
  - Innovation Fellowships
- Kooperation
  - Smart City LAB
  - Nationale und internationale Kooperationen
  - Kickstart Accelerator
  - Hackathons
- Kommunikation & Dialog
  - Projektwebsite
  - Partizipationsportal
  - Monitoring und Berichterstattung
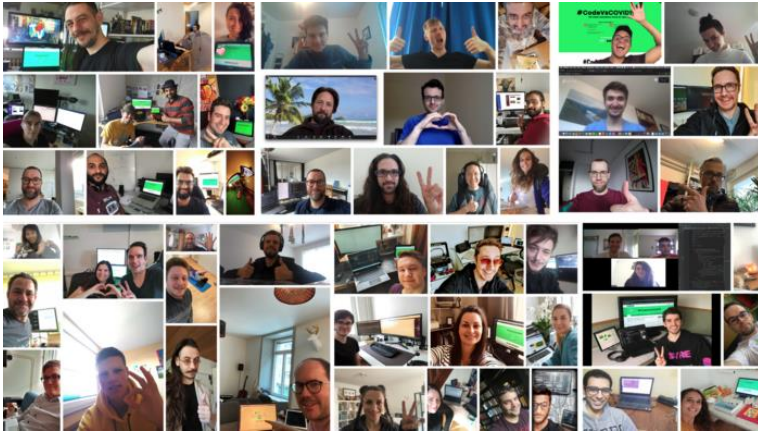
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Experience made – in Zurich and in other places

- Projects implemented under the umbrella of SMART City Zurich are diverse. They include top-down as well as bottom up initiatives.
  - — Citywide network for the Internet of Things
  - — Connecting services for an integrated urban mobility
  - — Neighbourhood projects
  - — Equal opportunity platform
  - — Care centre communication
  - — Digital support of participatory processes

- «SMART City» became Zurich's innovation hub.
  - — Coaching co-workers, public offices as well as privat companies with regards to innovation and digital transformatio

- The digital transformation of the public administration has become business as usual!

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Developping SMART City Zurich – Lessons Learnt

- From digital transformation to smart innovation!
  - We startet with strenghtening digital capacities in the administration – and ended up with a compre-hensiv innovation programme.

- Including policy makers from the beginning!
  - We involved policy makers on a regular bases in order to assure their support.

- Bringing together internal and external expertise!
  - We empowered an internal steering committee and teamed them up with an external sounding board.

- Empowering the population!
  - Many down to earth projects have been proposed.
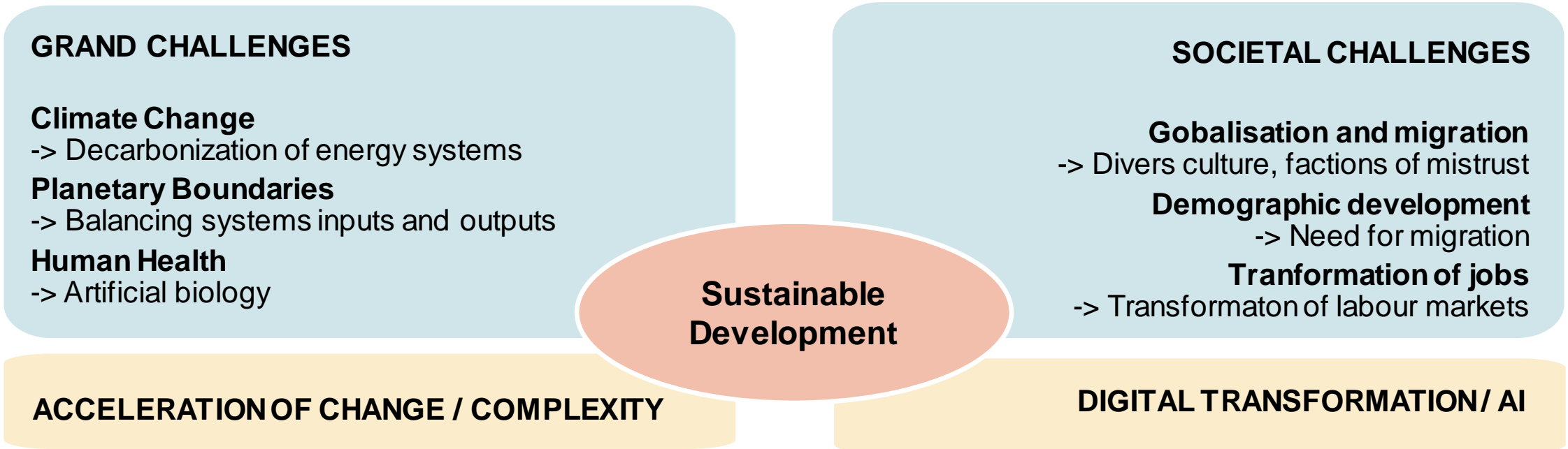
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So far so good?

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Inspite of 40 Years of Sustainability and Digital Transformation

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Lets Put the Focus on Sustainable Development!

GRAND CHALLENGES

Climate Change
-> Decarbonization of energy systems
Planetary Boundaries
-> Balancing systems inputs and outputs
Human Health
-> Artificial biology

SOCIETAL CHALLENGES

Gobalisation and migration
-> Divers culture, factions of mistrust
Demographic development
-> Need for migration
Tranformation of jobs
-> Transformaton of labour markets

Sustainable Development

ACCELERATION OF CHANGE / COMPLEXITY

DIGITAL TRANSFORMATION / AI

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We know enough.

We have the technologies.

We ourselves bear responsibility for the change needed.

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Impressum

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