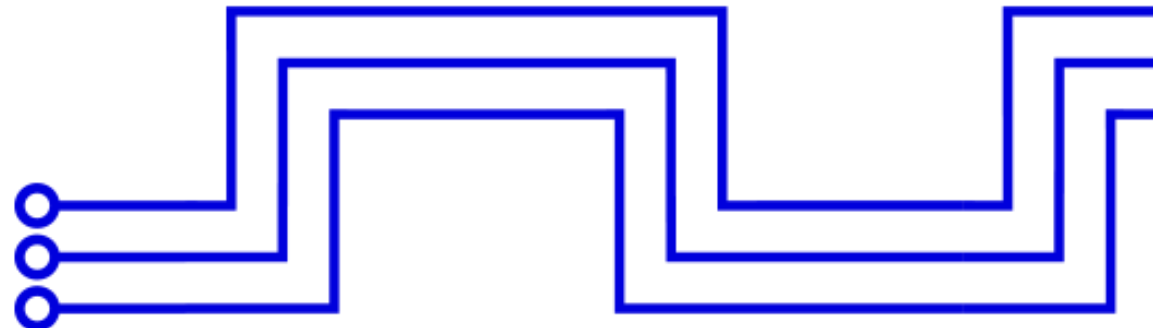# Application of Context-driven Methodology for Implementing the Smart City Concept in Czech Republic

Zuzana Schwarzová, Leonard Walletzký, Mouzhi Ge, and Patrik Procházka

Smart City and methodology

- What is smart city

- Smart city through the lens of Service Science

- Technology used as a tool to support the value co-creation

- Need for effective communication between stakeholders in different contexts

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Smart City Concept in Czech Republic

- *Smart Cities Concept - resilience through SMART solutions for municipalities, cities, and regions*

- Approved by the Government of Czech republic in 2021

- Based on a citizen-centric multi-contextual approach

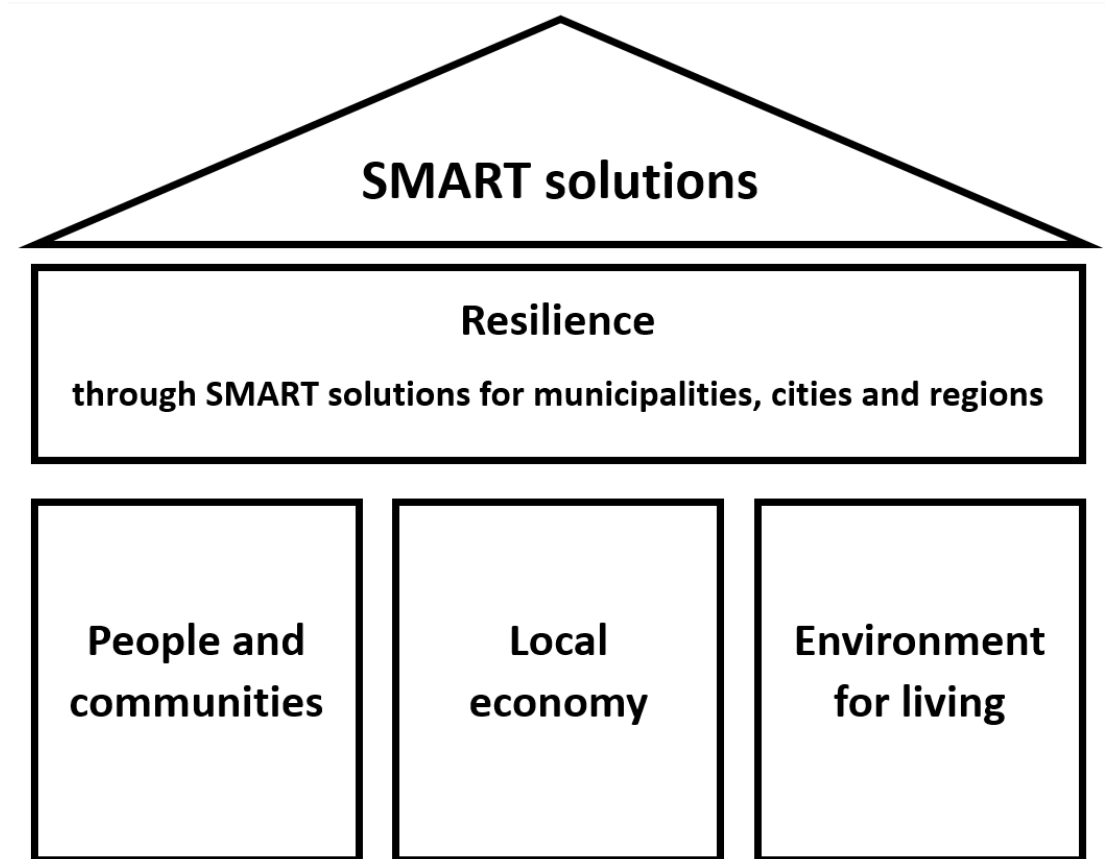- Uses service science principles and service-dominant logic

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7 SMART principles

The principles of:

1. direction change

2. resilience

3. one solution with multiple effects

4. "short distance"

5. cooperation and financial sustainability for the aim of achieving effectiveness of the solution

6. cohesion and complementarity, horizontal and vertical interconnection

7. evidence-based solutions based on facts, openness and data sharing, transparency, and equal opportunities

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The structure of Smart Cities Concept

- Main goal – resilience

- Layered structure
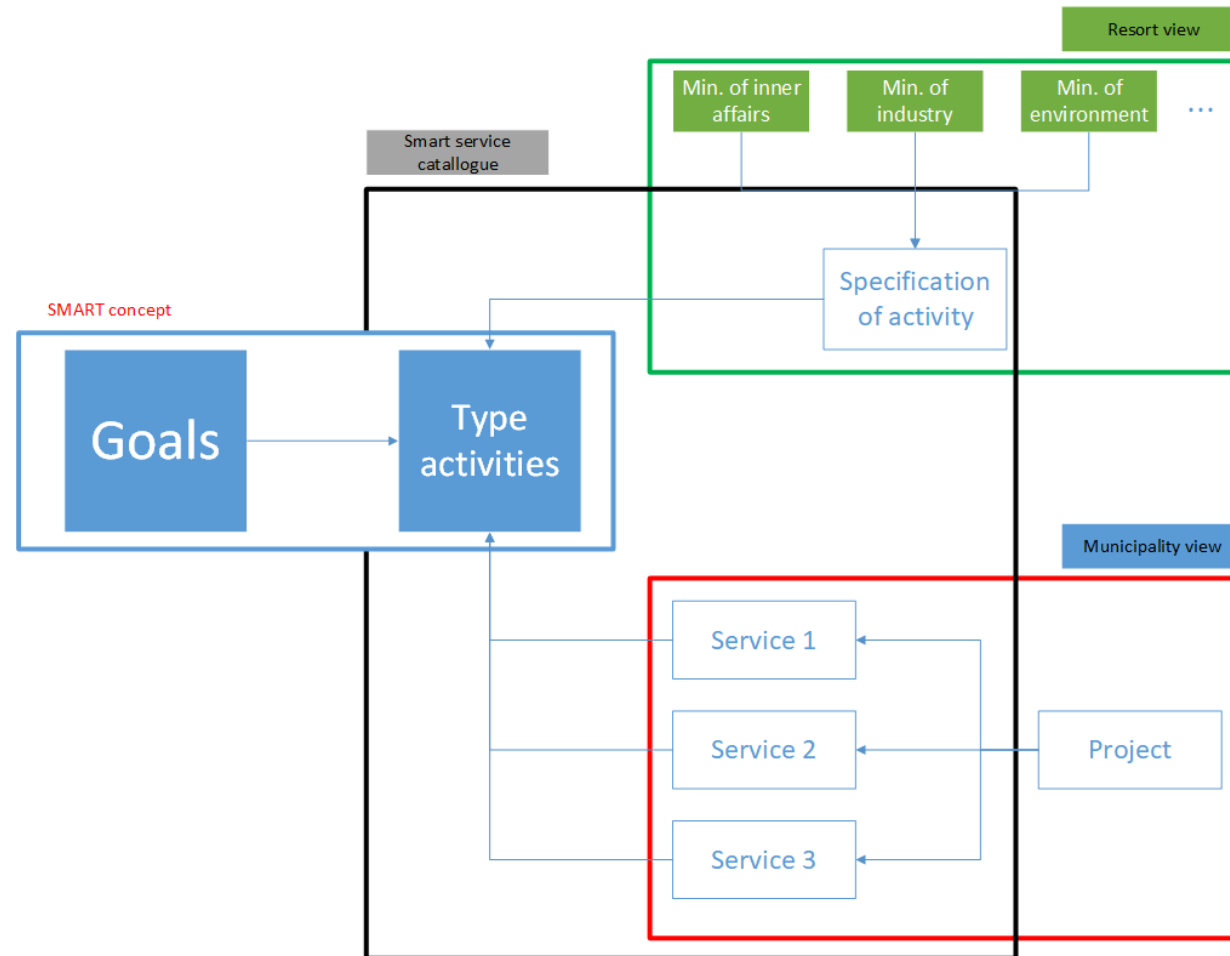- Cross-sectional covering area standing on three pillars

SMART solutions

Resilience
through SMART solutions for municipalities, cities and regions

People and communities	Local economy	Environment for living

Source: Ministry of Regional Development, Laboratory of Service Systems

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The implementation of smart agenda in Czech republic

- *Implementation Plan of the smart city concept until 2030*

- Approved by the Government of Czech republic in 2022

- Introduces two different contexts with different goals and limitations:

  - Government

  - Municipalities and regions

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Smart Service Catalogue

Limitations and case studies

Municipality and regions context

- Perspection of "smart" solutions and project in smaller municipalities

  - Focusing on ad-hoc solutions that save money in short-term

  - Smart as a government construct with no value

- Enormous disparity in similarly sized municipalities

  - Smart strategy for next 5 years vs. sewage and water pipes

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Limitations and case studies

Govement context

- All stakeholders need to understand the multi-contextual approach of the new methodology

  - Changing of responsible personel in different ministries due to election and politics

- Every change to the Smart Cities Concept needs to be approved through the official government process
- No tool to support the implementation, its tracking and management

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Further challenges

- Regulatory structures to encompass new technologies

- Data privacy encompassing the interconnectedness of smart city services

- Sustainable and eco-friendly devolopment

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Conclusion

- Problem of synchronizing the perspetives of different stakeholders

- Scalability of services and its influence on various contexts

  - Government and municipalities, government and regions, regions and municipalities, etc.

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