

# Stakeholder Involvement in City Transformation: Towards a Smart Old Town

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*Abstract: The ongoing digitalization of society is of increasing importance for city transformation and a driving force for cities to become smart. The aim of this study is to explore stakeholder challenges in becoming a “smart old town” and to contribute with innovative implications based on stakeholder involvement and governance. An interpretative single case study with qualitative interviews was conducted in an old town district in a Norwegian city. The results reveal that in order to transform a city with cultural heritage into a smart city requires efforts that go beyond smart ICT implementations. We argue for collaborative governance based on an open and coordinated involvement of stakeholders.*

*Keywords: Smart city, stakeholder involvement, governance, city transformation, cultural heritage*

## 1. Introduction and Research Design

Contemporary cities are facing complex challenges to become smart. Governments and public sector organizations are gradually transforming due to networked digital technologies and the emerging open and “smart” innovation environment (Schaffers et al, 2011; Josefsson & Steinthorsson, 2020; Anthopoulos, 2015; Bernhard, 2014). The ongoing digitalization of society embraces dimensions of integration, equality, citizen needs, sustainability and quality of life that are of increasing importance for city transformation and governance. The smart city concept includes hence more than information and communication technology (ICT) since the involvement of stakeholders and bottom-up driven ideas are in focus (Anthopoulos, 2015; Aranguren et al, 2010). Smart cities are frequently about improvement and efficiency in public administration and in development of businesses, society and culture in the urban environment, focusing on creativity and sustainability while fostering human, social and relational capital (Caragliu et al, 2011; Axelsson & Granath, 2018; Josefsson & Steinthorsson, 2020). More and more emphasis is being put on developing innovative solutions to societal challenges through open and inclusive innovation processes, compared with the previously dominant focus on expert-driven innovation (Lindberg et al, 2015; Agbali et al, 2019).

One important and unique resource in city transformation is the local cultural heritage (Al-hagla, 2010). When cultural heritage meets innovation processes and ICT several complex issues evolve and the need for transparent innovation processes are required combined with stakeholder involvement (cf. Axelsson & Granath, 2018; Angelidou et al, 2017; Koukopoulos et al, 2017).

The aim of this paper is to explore stakeholder challenges in becoming a smart old town and to contribute with innovative implications based on stakeholder involvement. The following research questions are addressed: What are the stakeholder challenges in transformation of an old town district? How can the transformation into a smart old town be governed in order to enhance stakeholder involvement? An interpretative single case study approach with qualitative interviews was applied (Walsham, 2006). The case was an old town district in a Norwegian city ("Old Town"), originated from the 17th century with 100,000 visitors a year and it is also a living area for 340 local citizens. The data includes 18 one-hour semi-structured on-site interviews with a total of 21 respondents (a mix of tradesmen, citizens, property owners, craftsmen, nonprofit associations, educational institutions, local government and municipal organizations, as well as local elected officials). The interviews were recorded and transcribed and analyzed according to the themes of the interview guide.

## **2. Findings and Conclusions - Towards a Smart Old Town**

The study is positioned as unique in terms of its complex nature of transforming an old town to become a smart old town based on an open and coordinated involvement of stakeholders. Local citizens emphasized that the Old Town should not merely be seen as a picturesque scenery backdrop but as a real living city. Other respondents representing businesses expressed a wish to preserve the past, the cultural heritage, by using it in the present time. A particular challenge concerned the unclear governance of the city transformation as it was not fully discussed, communicated, negotiated or anchored among stakeholders nor related to the municipality. Respondents clearly state that there is lack of governance and communication and they wish to be included and suggest doing this step-by-step to build community involvement and trust. Communication and collaboration was fragmented among those who produce, use and intermediate the Old Town due to the fact that the information rarely reaches beyond its own grouping. There is no common communication channel covering all stakeholders. There was an obvious need for an inclusive innovation process, as a holistic local community design process that develops visions, strategies and action plans related to the specific city. It was necessary to clarify and formalize the process of decision-making as well as to follow the contemporary digital development of society by upgrading skills of digital communication and use of open data in order to become a smart city.

The study brings forward the opportunities that lies in the dynamics of interaction between the spirit of cultural heritage and the body of governance that go beyond ICT implementations. The city transformation process needs to take point of departure from the uniqueness of the city's resources and the elements of place, citizens, technologies, businesses and visitors need to be balanced since they are mutually dependent. An organizing body including a communication platform that coordinates and governs activities and flows of information is needed. Given that smart city is not only about advanced ICT implementation the findings contribute with vital challenges that need to

be considered in order to become a smart old town. Smart city implementations have wide-ranging societal implications that require further studies.

## References

- Agbali, M., Trillo, C., Ibrahim, I. A., Arayici, Y., & Fernando, T. (2019). Are smart innovation ecosystems really seeking to meet citizens' needs? Insights from the stakeholders' vision on smart city strategy implementation. *Smart Cities*, 2(2), 307-327.
- Al-hagla, K. S. (2010). Sustainable urban development in historical areas using the tourist trail approach: A case study of the Cultural Heritage and Urban Development (CHUD) project in Saida, Lebanon. *Cities*, 27(4), 234-248.
- Angelidou, M., Karachaliou, E., Angelidou, T., & Stylianidis, E. (2017). Cultural heritage in smart city environments. *International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences* 42,
- Anthopoulos, L. G. (2015). Understanding the smart city domain: A literature review. *Transforming city governments for successful smart cities* (pp. 9-21). Cham: Springer.
- Aranguren, M. J., Larrea, M., & Wilson, J. (2010). Learning from the local: Governance of networks for innovation in the Basque Country. *European Planning Studies*, 18(1), 47-65.
- Axelsson, K., & Granath, M. (2018). Stakeholders' stake and relation to smartness in smart city development: Insights from a Swedish city planning project. *Government Information Quarterly*, 35(4), 693-702.
- Bernhard, I. (2014). E-government and e-governance. Local implementation of E-government Policies in Sweden, Doctoral thesis, Royal Institute of Technology, Sweden.
- Caragliu A., Del Bo, C., & Nijkamp, P. (2011). Smart cities in Europe. *Journal of Urban Technology* 18(2), 65-82.
- Josefsson, M. Y. & Steinthorsson, S. R. (2020) Reflections on a SMART urban ecosystem in a small island state: The case of SMART Reykjavik, *International Journal of Entrepreneurship and Small Business*, in press.
- Koukopoulos, Z., Koukopoulos, D., & Jung, J. J. (2017). A trustworthy multimedia participatory platform for cultural heritage management in smart city environments. *Multimedia Tools and Applications* 76(24), 25943-25981.
- Lindberg, M., Ericson, Å., Gelter, J. & Karlberg, H. (2015). Social Change through Place Innovation. *Design Research Journal*, (1), 9-13.
- Schaffers, H., Komninos, N., Pallot, M., Trousse, B., Nilsson, M., & Oliveira, A. (2011). Smart cities and the future internet: Towards cooperation frameworks for open innovation. In *The future internet assembly* (pp. 431-446). Springer, Berlin, Heidelberg.
- Walsham, G. (2006). Doing interpretive research. *European Journal of Information Systems*, 15(3), 320-330.

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