Smart City:

Ten Policy Recommendations for Municipalities



How Municipalities Can Successfully Realize the Digital Transformation of Urban Living and Work Environments

SUMM ARY Smart City has now entered general linguistic usage. Yet the breadth of the issues which the digital transformation of towns and cities encompasses is frequently underestimated. This spans the digitalization of authorities and administrative bodies via the healthcare and mobility sectors to the restructuring of the economy. It also includes digital education projects, the requisite infrastructure and a flexible energy supply system. But that is not yet all: For a smart city will only be able to realize its full potential if all of the above-mentioned living and work environments within a municipality are completely digitally integrated.

Challenges

To be sure, guite a lot of changes are now underway in the area of smart urban development in Germany: According to Haselhorst Associates' "Digital Germany" 1 Smart City Ranking - the latest edition of which was published in 2020 - the top-rated city, Hamburg, has now reached a 45 percent level of digitalization and is thus approaching the 50 percent mark. Moreover, with Ravensburg a mediumsized city has made it into the group of the top ten cities for the first time. This ranking has been published annually since 2018 and compares Germany's 403 largest towns and cities with a population of more than 30,000 in terms of the progress which they have made in the field of digitalization.

Nonetheless, this study also very clearly demonstrates:

Most municipalities still have a considerable amount of ground to make up in the area of digitalization.

Smaller towns, cities and municipalities in particular are often struggling to respond to the Smart City trend, due to inadequate

personnel and financial resources for instance.

They accordingly dominate the lower third of the Smart City Ranking. As well as personnel resources and financing difficulties, the representatives of German towns and cities frequently also lack the necessary expertise. For all of its prominence, Smart City remains an abstract concept for many people – municipal decision-makers are thus frequently mystified by the question of how they should most efficiently approach the digital transformation and networking of every area of life and every sphere of activity.

It is here that political leaders can – and should – remedy matters. This means that not only must Smart City be recognized as a core aspect of municipal policy; above all, its enhanced priority will then enable an immediate response if the implementation of a digital project is dragging on for too long or is getting too expensive. What is more, Smart City will thus finally attract greater attention from the general public.

This aspect is particularly important, since many digital projects are currently not yet cutting through to cities' residents. Yet it is they who are the key beneficiaries of the digital

transformation. And it is their acceptance and support which will "tip the scales" and decide the success – or failure – of a Smart City project. This is one more reason to chart the right Smart City course even now and to adopt a strategic and efficient approach early on.

A city's holistic and sustainable transformation requires a broad-based arsenal of interlocking tools and initiatives.

The precise nature of these tools and initiatives is set out below in greater detail, in the form of the following ten policy recommendations .

Solutions

1 | Analyze the Status Quo

A preliminary survey should always be implemented at the start of an urban transformation process. In other words: What is the municipality's current level of digital maturity? Every shortcoming and every area of potential must be identified, and individual fields of action must be suitably prioritized.

Once the findings are to hand, they can be compared with the standards achieved by other cities – which are in some cases further down the development path – and their state-of-the-art solutions. The disparity will provide useful guidance in relation to the need for action and the required investments .

2 | Digital Infrastructure

Without a well-developed digital infrastructure, Smart City will always remain more of a pipe dream than imminent reality. For municipalities, this means that they must first invest in broadband and fiber-optic rollouts before an extensive digitalization strategy can be initiated. For instance, the current broadband atlas² published by the German Federal Ministry of Transport and Digital Infrastructure continues to point to a significant gap between rural and urban areas in Germany. This inequality must now be vigorously eliminated .

3 | Solid Budget Planning

As with traditional change management projects, concepts for cities' digital transformation are frequently prone to miscalculations. A transformation will often take longer than planned or go significantly over budget. Solid and, above all, reliable preliminary financial planning is essential, so that a subsequent budget increase can be counteracted early on. All of the relevant fields of action should be included here: from the planning and implementation of digital projects via the necessary coaching for project participants to the organization of the overall strategy.

4 | Smart City Strategy

As a next step, a comprehensive Smart City strategy must be developed in the light of the findings identified in the preliminary survey. This will serve as a fixed reference point throughout the transformation process, in order to compare the processes currently underway with the objectives previously defined. This roadmap should

appropriately link the individual digital projects with one another. The implementation of this strategy will require integration of all of the participants in the process – representatives of the city's authorities, decision-makers in the business sector as well as the general public.

5 | Internal Communication

Right from the start, it is essential to formulate a Smart City vision which is as concise as possible, so that every city hall employee and administrator can identify with it, along with all of the other representatives of a municipality. After all, their commitment will be needed in order to ensure the successful implementation of a digital transformation process. Accordingly, this will require transparent presentation and explanation of the necessary measures at every level in an organization's hierarchy. Managers must therefore appropriately prioritize this issue and reflect this in their behavior.

6 | Training and Skills Programs

Training and skills programs for city hall employees are likewise helpful for the internal communication strategy in this respect. This framework will make it possible to respond to any questions early on and to address any skeptical attitudes in good time. Training digital navigators and assembling innovation teams are also useful measures, in order to achieve the continuous implementation of a digitalization process while avoiding any stoppages.

7 | External Communication

On the basis of this internal framework, a coherent picture must be outwardly presented and a dialog initiated with media representatives, organizations and the general public. Here again, a uniform set of arguments should be consistently presented via the appropriate communication channels for the relevant target group and for the topic in question. This communication strategy should appeal to every age group.

8 | Demonstrate Potential

Intelligent networking of the different aspects of urban life is essential in order to achieve genuinely smart development for a city and thus make it more attractive and future-proof as a place to live and work. This potential must be regularly communicated to the residents of a city through information events, workshops and civic meetings.

9 | Critical Scrutiny

The original digitalization strategy should not at any point be considered to be "set in stone." While it will serve as a point of reference over the course of the transformation process, the goals of the roadmap must be continuously reviewed and scrutinized.

Prior implementation of intermediate objectives as of fixed deadlines is helpful in this respect, along with actively obtaining regular feedback from the participants in the process. Smart City means change – and even a roadmap is subject to external change factors.

10 | Linking-Up to Establish Smart Regions

Where a city lacks the necessary resources for a transformation process, linking up with neighboring cities and surrounding regions offers considerable potential, enabling them to benefit from one another's experience and the available resources. Funding programs are available which explicitly support entire regions.

The management consulting firm Haselhorst Associates GmbH, seated in Starnberg, specializes in restructuring, strategic consulting, profit improvement as well as all-round concepts for smart cities and the digitalization of companies. This team of internationally experienced consultants produces tailored solutions for its clients – from the analysis phase via project planning to supervision of implementation.

The development of digitalization strategies for companies and for towns, cities and public authorities is a further business segment which it has added over the past few years. In the smart city sector, together with municipal utilities and public authorities Haselhorst Associates develops forward-looking concepts for digital public services. Haselhorst Associates published extensive studies on the development of smart cities in Germany in 2018, 2019 and 2020.



Jürgen Germies joined Haselhorst Associates in 2013. He has diverse expertise in the fields of industry and financing. Jürgen Germies assists our clients with strategic development, restructuring and change processes. He has extensive experience as a managing director, partner and supervisory board member for various companies. He established our Smart City business segment and works with municipal utilities and public authorities to develop wide-ranging digital public services concepts as well as comprehensive roadmaps for the process of urban transformation .

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