




How can we, as a city, use open data for the benefit of our citizens for needs and capacity planning (residential space, traffic, kindergarten places, city development)?



**SMART CITY  
PLANNER**

The central graphic is a square with a thick blue border. Inside the square, at the top center, is a circular logo with the text "DATA INTELLIGENCE HUB" in white. The logo is surrounded by eight blue arrows pointing outwards. Below the logo, the words "SMART CITY" and "PLANNER" are written in a bold, blue, sans-serif font, stacked vertically.



### THE PROBLEM

## City planning lacks usable data

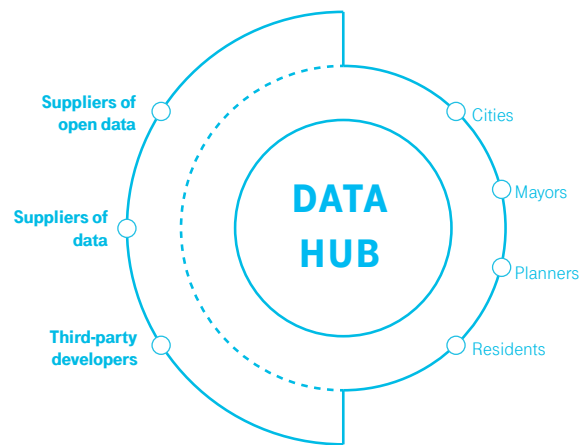
At present, medium and long-term planning is usually “hit or miss” due to a lack of sufficient data, evaluation procedures and the resulting forecasts. The available data are either not yet available in digital form or are distributed across different “data pots” within the departments.



### DEFINE CHALLENGE

## Use open data – but how?

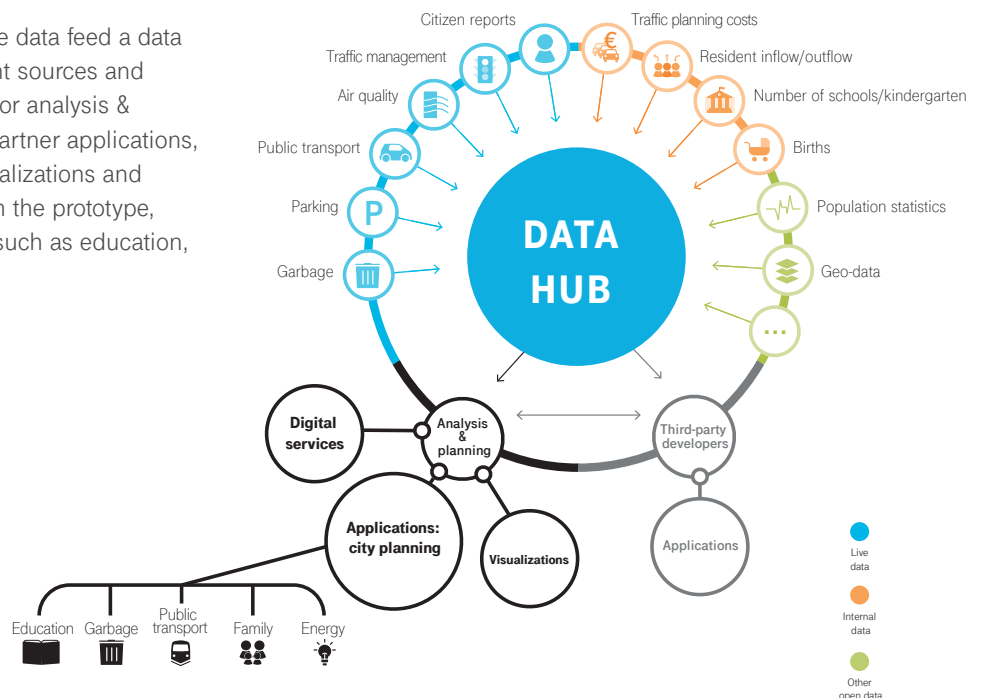
To put it simply, the principle of Open Data is: Everyone may see and use all data – for example from the public administration. Open Data as a concept is well known, but due to the lack of infrastructure and analysis methods, it is currently difficult to use it purposefully for one’s own planning.



### SOLUTION APPROACH

## Overview of data and processing paths

Open data, internal urban and live data feed a data hub. This harmonizes the different sources and provides, together with modules for analysis & planning and supplemented by partner applications, interfaces to digital services, visualizations and applications of urban planning. In the prototype, these are subdivided into topics such as education, family, transport or energy.





**USER JOURNEY**

The Smart City planner

**1. AGGREGATION**

The Smart City Planner aggregates relevant data from different open data sources to concrete topics and forecasts and helps the planner to get the most out of the data.



**2. MONITORING**

The planner gets a permanent overview of the city. Through the use of internal and external data open data, the tool monitors the actual planning and makes forecasts for the future.



**3. FORECAST**

By aggregating and analyzing the data, the best options for a planning challenge are identified and also monitored when countermeasures need to be taken.



**4. DEVELOPMENT**

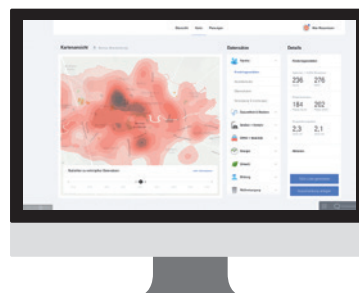
With the Smart City Planner, the administration and planning of a city is now based on data. In addition, cities can learn from other cities and find better solutions by collecting external open data sources.



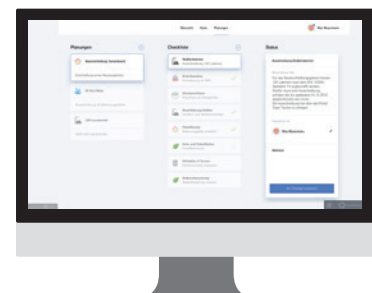
How it works:



The overview shows which data sources are evaluated for thematically bundled forecasts. Dashboard indicators in traffic light logic show the status of the planning fields.



The planning fields can be displayed as a heat map over time. Critical developments of the data sources and relevant factors can be displayed.



Finished planning packages can be clearly displayed as a list of individual measures. The necessary working steps, such as tenders, are recorded and assigned directly.

# SMART CITY PLANNER

## FINDINGS AND NEXT STEPS

### FINDINGS FROM CO-CREATION

When it comes to the handling of data, cities still have very different starting situations. In order to be able to use data for urban planning work in a meaningful way, basic work must first be carried out: Identify, collect, process and harmonize raw data. Only then can data be exchanged, compared and linked in more complex models.

The developed prototype shows an example of how interfaces between sources allow a more precise support of urban planning and represent future fields of action. In this way, data that has already been collected becomes a treasure trove of knowledge in the service of the citizen.

### OUTLOOK AND NEXT STEPS

As a step towards an urban planning application, a pilot project until summer 2019 will examine the prerequisites and basic models of prognostic procedures. One area of focus is the approach of "blending"/superimposing data from different sources as a basis for AI-optimized simulations. There is also a close exchange within Deutsche Telekom on data preparation, exchange and development of data-based applications.

»I wouldn't have thought that in just one day we would come up with concrete ideas from the findings of the research. The methods we used made our decision much easier.«

BORNHEIM

»Expand cooperation with other municipal and supraregional providers and sharpen the offer of open data.«

HAMBURG