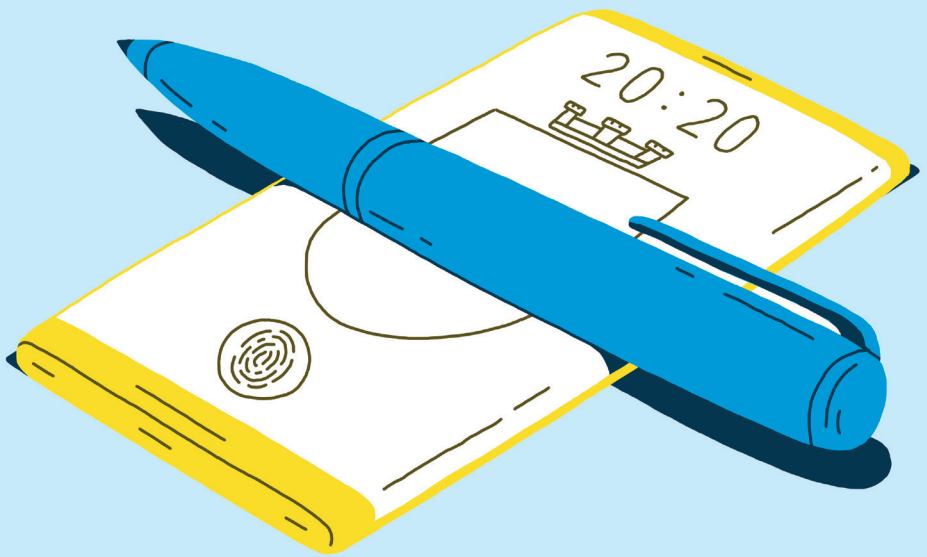


Smart City Strategy Zug Digital Networking in the Service of People



Inhalt

1. Strategy	3	2. Initiatives	10
1.1 Why We Need the Smart City	3	2.1 Efficient, Citizen-Oriented Administration	10
1.2 Our Definition of the Smart City	4	2.2 Making Society Fit for the Digital World	11
1.3 How Will We Turn into a Smart City?	5	2.3 Together for More Sustainable Mobility	12
1.4 The Objectives We Want to Reach	6	2.4 Together for a Better Quality of Life	13
1.5 The Guiding Principles for Our Joint Work	8	2.5 A Competitive and Innovative Business Location	14
		2.6 Smart Technologies for Sustainable Development	15

Imprint

Publisher	City Council of Zug
Project management	City Development Division
Adresse	Gubelstrasse 22, 6301 Zug www.stadtzug.ch
	26 May 2020

The detailed version of the Smart City Strategy can be downloaded from www.stadtzug.ch/smartcity.

1. Strategy

1.1 Why We Need the Smart City

The city is booming

Worldwide, more and more people are being attracted to the cities. In Switzerland, over 85 percent of the population currently live in a city - and the trend is rising.

The associated growth in settlement and increasing globalisation bring with them major challenges: climate change, migration, settlement density, transport logistics and prosperity gaps are just a few of them.

Digitisation as an opportunity and a challenge

Digitisation, which is advancing ever faster, plays a special role in this context. On the one hand, it offers us many opportunities to address these challenges in a targeted manner. On the other hand, it is also a major challenge for many players themselves. Institutions, administrations, companies and the population are not yet sufficiently prepared to take advantage of the numerous technical possibilities. This may be due to a lack of technical understanding, a lack of resources for the necessary investments or a fear of making mistakes.

Cooperation and exchange for faster progress

In order to overcome blockades to action, cities have begun to intensify the exchange of knowledge and experience on these topics and to learn from each other. They are supported in this by research and teaching, increasingly also by the federal government, numerous funding foundations and think tanks. They are looking for systems and technologies that support sustainable urban development and are suitable for everyday use.

What does «Smart City» actually mean?

«Smart City» is a visionary and holistic system approach, which is based on the modern technologies of digitisation and includes all fields of action of urban development. The comprehensive character of the Smart City strategy offers us the opportunity to understand and live urban development as an interplay of numerous actors - not as a temporary project, but as a long-term transformation. The future-oriented and innovative character of this vision also strengthens the positioning of those cities and companies, whose self-image is based on these strengths.

1.2 Our Definition of the Smart City

The city of Zug understands «Smart City» as a city that uses intelligent - mostly digital - technologies to support the networking of people with each other and with objects. The aim is to increase the efficiency of resources and improve the quality of life of the citizens.

1.3 How Will We Turn into a Smart City?

Zug offers the ideal prerequisites for the Smart City

Thanks to the already very high level of digitisation and a strong cluster of technology companies, the city of Zug is in an excellent position to make the most of the structural change that is imminent. Nevertheless, the implementation of the «Smart City Zug» vision poses considerable challenges for the administration and the various external players, since digitisation takes place in a highly dynamic climate.

Clear guidelines: the Smart City strategy of the city of Zug

The city of Zug has therefore formulated a strategy for shaping this long-term transformation process together with the various players. To this end, an internal innovation process was initiated in 2018 and a support organisation was established.

Strategic context

The Smart City strategy ties in with the «City Idea Zug». It builds on the existing specialist strategies and supports the implementation of the City Council's legislative goals.

Smart City projects in all relevant areas

The «Smart City Strategy» maps out all areas in which we would like to make progress by networking actors and data in six fields of action:

- Administration (Smart Government)
- Society (Smart People)
- Mobility (Smart Mobility)
- Quality of life (Smart Living)
- Economy (Smart Economy)
- Environment (Smart Environment)

Innovation process of the administration

Based on the «City Idea Zug», the administration identified the potential for digitising customer and work processes in 2018 in an internal innovation process.

At the same time, it was decided to support and promote private initiatives and the first Smart City projects were defined and launched for all six fields of action.

1.4 The Objectives We Want to Reach

1. Added Value for Citizens

- Services of the city administration independent of place and time
- Strengthening participation and dialogue by supporting digital media
- Integration and inclusion through the use of digital and social networks
- Improving protection and security through the use of digital technologies and strengthening cooperation between public authorities
- More flexible and pleasant commuting through intermodal mobility
- Traffic flow and supply security through modern city logistics

2. Conservation of Natural Resources

- Improving the efficiency of resources through measurement and control
- Transparency of resource consumption through measurement and communication
- Promotion of alternative energies and energy networks
- Climate-friendly planning and construction thanks to measurement data and maps
- Better use of existing infrastructure through digital usage management
- Promotion of shared and green mobility
- Strengthening the recycling economy through improved awareness

3. Added Value for Companies & Institutions

- Transparency and efficiency through digital approval processes
- Strengthening cooperation through new networks of data and actors
- Availability of talent through an innovative and business-friendly climate
- Improvement of processes and workflows through digital tools

4. Innovation & Sustainability

- Strengthening of the business location through an innovation-friendly climate
- Promotion of innovation through networking and cooperation
- Support and mediation of sustainable forms and models of work
- Strengthening Fintech and Cryptoclusters
- Improving sustainability by strengthening digital competence
- Strengthening innovation through data availability (Open Data)

1.5 The Guiding Principles for Our Joint Work

The Smart City strategy of the city of Zug is based on the self-conception of the city of Zug, which uses pioneering spirit, proximity to citizens and agility to promote sustainable urban development. The economical use of resources and a deliberate culture of error form the framework for pilot projects and visions of the future, which are to be developed step by step together with external actors and the population.

For the Benefit of the Population

Digital Technologies are used appropriately to fulfil urban tasks and concerns of the population.

«Digital First»

Work processes are digitised where possible and reasonable. Analogistic services are only offered and pursued where they are legally required or bring a recognizable added value for residents.

Participation & Cooperation

Participation and political dialogue will be encouraged. Interest groups are involved in the development and decision-making process. Digital services support analog participation, but do not replace personal contacts in principle, but rather complement them.

Learning Organisation

In order to promote agility and intrinsic innovation in the administration, joint cross-disciplinary development is supported. A regular process of reflection is installed and a healthy tolerance for error is ensured.

Transparent Data Handling

The city of Zug is working on making non-personal administrative data freely available on the Internet in machine-readable form - in accordance with data protection and the Federal Government's strategy for «open administrative data in Switzerland» - in order to promote transparency and innovation. When cooperating with external partners, care is taken to ensure that the data sovereignty remains with the city of Zug and that the data can be passed on free of charge.

Active Role of the City of Zug

The city of Zug works in various roles with external project partners for Smart City projects. Where it is not the applicant or authorising body, it can play the role of

Facilitator or supporter if the project is of very high public interest. It thus contributes to the innovation-friendly image of Zug as a business location.

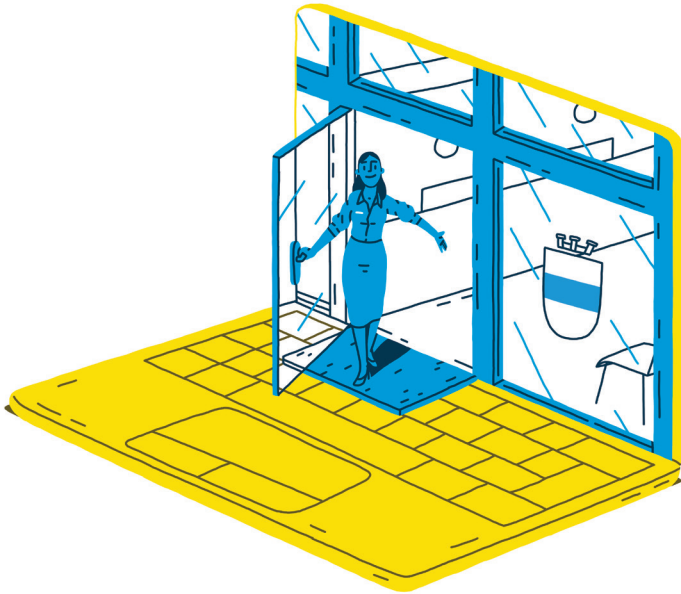
2. Initiatives

2.1 Efficient, Citizen-Oriented Administration

The city of Zug uses and promotes intelligent technologies to provide efficient and customer-oriented services, to optimise its internal processes, to increase transparency and to use the city infrastructure efficiently. In doing so, the city of Zug is set to establish an open and accessible administration which

also has a physical address and can be reached by telephone.

The city of Zug provides general data, which are of public interest and not subject to data protection, free of charge and in machine-readable form on opendata.swiss or on the GIS map service.



Digital city administration comes to people - where and when it suits them.

2.2 Making Society Fit for the Digital World

The city of Zug is using the opportunities offered by digitisation to maintain a dialogue with the population and to promote participation and involvement. E-participation extends the dialogue to new target groups, for example to younger or less mobile people. The digital competences and the

population will be strengthened through appropriate training opportunities.

Opportunities and dangers of digitisation are discussed publicly. The city of Zug takes care not to disadvantage anyone through the progress of digitisation.



On the digital village square, the future of the city of Zug can be negotiated together.

2.3 Together for More Sustainable Mobility

The city of Zug promotes and uses intelligent technologies and modern forms of mobility to achieve efficient use of the transport infrastructure, improve mobility, conserve resources and increase the quality of life in the city of Zug.

The Smart City of Zug introduces the population to new forms of mobility and uses the potential of digitisation.

Alternative energies are promoted in order to conserve resources and reduce emissions.



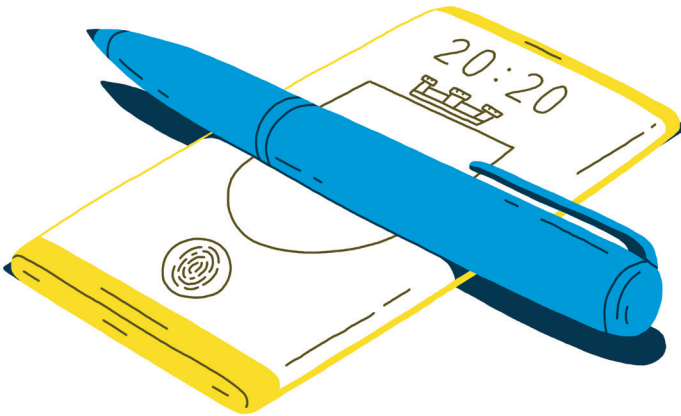
Thanks to real-time data in the smartphone, travel becomes carefree and flexibility increases.

2.4 Together for a Better Quality of Life

The city of Zug uses digital technologies to improve the quality of life of its citizens without any disadvantages to other people or to nature.

It guarantees and is committed to a safe, responsible and reliable handling of personal data, and is committed to ensuring that these

guidelines will become the standard in the private sphere as well. It supports and promotes the development and application of digital technologies to build social networks and mediation services in the areas of health and care, neighbourhoods, culture, sport and leisure.



Apps such as eZug enable access to data, services, people and groups.

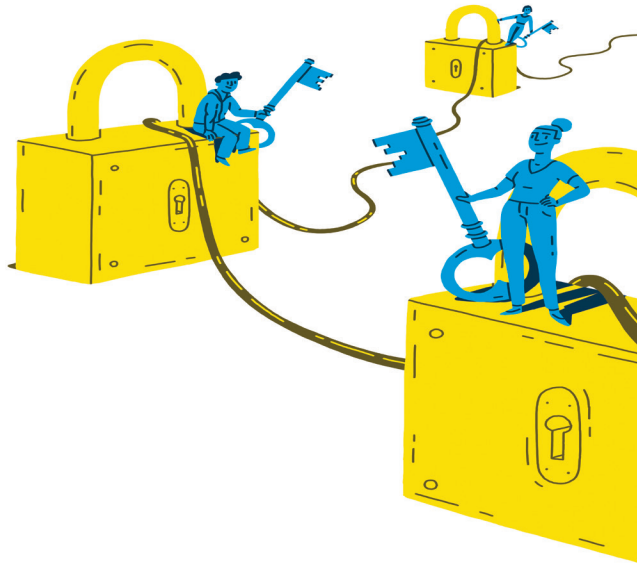
2.5 A Competitive and Innovative Business Location

The city of Zug networks and supports actors who are committed to sustainable economic growth and recycling and who develop innovations in this area. It promotes an innovation-friendly climate inside and outside the administration and maintains the start-up ecosystem at the Zug location.

In order to achieve rapid results in key target areas such as energy

efficiency, efficiency, CO2 reduction, traffic regulation or settlement development, partnership-based cooperation with the private sector (Public Private Partnership) are implemented.

A great deal of attention is being paid to new industry clusters such as Fintech or Blockchain, as companies active in these fields bring highly qualified workers to Zug.



Zug as a business location benefits from a climate conducive to innovation. Start-ups in the Blockchain and Fintech sectors receive attention.

2.6 Smart Technologies for Sustainable Development

The city of Zug promotes and uses digital technologies such as «Smart Metering» to improve the energy efficiency of buildings and facilities. It supports the use of alternative energies in order to save natural resources.

The aim is to conserve resources, reduce CO2 emissions and protect plants, animals and people from negative environmental influences. It provides information on current energy consumption, collects environmental data and makes them

available to the public in order to improve public awareness and support innovation. With active communication about the goals of sustainable development, the administration promotes understanding and self-responsibility of the population and the economy.

With binding planning instruments and approval processes, urban planning ensures a healthy microclimate and a resident-friendly design of urban living spaces.



Smart metering makes invisible knowledge visible and thus helps to use resources efficiently and sparingly.

City of Zug
Presidential Department
Urban Development Division

Gubelstrasse 22, 6301 Zug
stadtentwicklung@stadtzug.ch
www.stadtzug.ch

