

## STÉPHANE PÉAN

INNOVATION LEADER



# DIGITAL CITIES

By 2050, the global urban population will increase by 75% to 6.3 billion (i.e. two-thirds of the world population). The challenge of developing and maintaining attractive, inclusive and safe urban environments needs to be met on multiple fronts. Urban mobility, citizen safety and urban information ecosystems powered by data are key areas that are affected. That's exactly the orientation the Digital Cities focus area has taken to drive its innovation portfolio.

In 2018, the Digital Cities focus area portfolio included nine innovation activities: two related to urban mobility, four in city analytics and three in safety. The outcome was 16 products delivered and one startup created.

Some innovation activities targeted new market segments: three make use of drones to support safety and environment use cases – aerial drones in the case of Drones4Life and Drones112, but also aquadrones with Autonomous Harbour Cleaning.

Mycarlot, an innovation activity proposing a smart parking solution for cities based on predictive analytics and targeting disabled drivers, was the startup.

In terms of visibility, the Digital Cities area and its portfolio of innovation activities were represented

through on-stage sessions at two major events in 2018: the ITS World Congress in Copenhagen and the Smart City Expo World Congress in Barcelona.

Two Summer Schools took place related to Digital Cities in 2018: in Rennes (France) and Tallinn (Estonia) involving around 40 students each. The University of Rennes Summer School focused on the topic of Predictive Analytics, Big Data, Mobility and Open Platforms for an Efficient and Participative City, and the University of Tallinn on Integrating Personalised Mobility Solutions for Digital Cities. Both summer schools were highly appreciated by the participants.



## DIGITAL CITIES

INNOVATION  
ACTIVITY

## CEDUS



The City Enabler, created by the CEDUS Innovation Activity, is a FIWARE-based open-source software product allowing public and private urban service providers and local Governments to actively collaborate in exploiting urban data. Collected data is managed and visualised in order to support city managers in decision-making processes. It is also made available to all stakeholders to exploit and combine it, opening up the possibility of the creation of new business models, ventures and innovative map-based urban services.

In 2018, a unique search engine was developed and implemented to collect open data in cities. Moreover, four pilots were successfully implemented in France, Italy and Spain.

The Italian cities of Genova and Palermo were the first to adopt The City Enabler, using it for natural disaster and urban data management respectively. In South America, contracts were signed with ANTEL, a telecommunications company in Montevideo (Uruguay), for smart parking, and La Plata City (Argentina), for air-quality management. Around 20 other cities are already in discussions and a first non-disclosure agreement has been signed with a large telco in Europe.

A consortium including EIT Digital submitted a proposal for the SELECT for Cities Pre-Commercial Procurement (PCP) for the cities of Antwerp, Copenhagen and Helsinki. In 2018, the City Enabler won the final phase of the competition, with the highest score among finalists. This success was announced on stage at Smart City Expo World Congress.

To promote The City Enabler, a marketing roadshow called Enabling the City took place in six major European cities in collaboration with Open & Agile Smart Cities (OASC), CEDUS and EIT Digital. This was an opportunity, not only to contact half a dozen cities, but also to better understand their needs. The City Enabler is now a well-known name in Europe.



## DIGITAL CITIES

INNOVATION  
ACTIVITYAUTONOMOUS HARBOUR  
CLEANING

The Autonomous Harbour Cleaning Innovation Activity resulted in an integrated solution for the autonomous cleaning of harbours, lakes and ponds. The solution solves real and concrete issues faced by European cities and regions, relating to aquatic mobility, urban information, safety and cleanliness. It will accelerate the transition to more attractive and safe cities, and better water-cleaning services.

The plug-and-play solution developed by the innovation activity during 2018 is a robotic trash collection system that doesn't disrupt aquatic life or traffic, and supports recycling. The fully autonomous system consists of a waste-collector known as Wasteshark, and a docking station called Sharkpod. It communicates thanks to 4G and moves with the use of a laser-scanner-based anti-collision system and artificial intelligence.

A minimum viable product was designed to satisfy all types of customers in diverse potential markets. The current design of the Sharkpod is low-cost, portable and resilient to waves, currents and seawater. The solution was proven to autonomously harvest substantial amounts of floating garbage (up to 10 cubic decimetres per hour), dump this in a container and be electrically charged for the next round.

The business champion of the Autonomous Harbour Cleaning Innovation Activity is RanMarine Technology, which also owns the product. In 2018, new markets were entered, tradeshow visits and demonstrations given. All resulted in concrete customer interest and the sale of a solution to the city of Dubai, with intent for more.

Early in 2019, RanMarine was invited to attend a high-level event in Berlin – the Digitising Europe Summit 2019 – attracting 400 high-ranking guests.





## DIGITAL CITIES

# SCALEUP CASE STUDY

## ROMBIT



Belgian scaleup Rombit, founded in 2012, helps both governments and the port sector quickly improve workflows, planning-efficiency, health and safety and site security. It delivers hard- and software solutions that closely integrate with buy-or-build internet of things (IoT) devices and with the proprietary Romware™ brand.

The Antwerp-based company has already implemented IoT solutions for smart cities and harbours in several Belgian cities and municipalities. Among Rombit's clients are the city of Antwerp, Euroports and Sea-Invest. The scaleup has previously won the Logistics of the Future Innovators Award and the Fujitsu Startup Award.

Rombit was one of the finalists in the Digital Cities category of the EIT Digital Challenge 2017, and joined the EIT Digital Accelerator shortly after. With the support of the Accelerator's satellite office in San Francisco, the company expanded its worldwide reach through various high-level meetings with potential clients in the US. It was named Most Innovative International Startup 2018 at the Bridge SF conference.

The EIT Digital Accelerator also supported Rombit to scale in Europe, by connecting it with several potential customers in the French, Dutch and Spanish markets. In 2018, Rombit displayed its dashboarding solutions at the Smart City Expo Barcelona and, after being introduced by the EIT Digital Accelerator, to several big French companies.

*"We developed very good relationships with EIT Digital's business developers. We see EIT Digital as an organisation that can open doors for us with customers that we want to work with."*

**EVERT BULCKE**  
CSO, ROMBIT





## DIGITAL CITIES

SCALEUP  
CASE STUDY

## CLEVERCITI



Founded in 2012, Cleverciti has developed a powerful sensor technology for on-street parking detection and management.

The German scaleup brings together all aspects of smart parking management in one integrated system – from overhead sensors to mobile apps, management software and analytics. The company aims to reduce parking-search traffic and carbon dioxide emissions to solve some of the most urgent challenges faced by cities today.

Fast and easy to install, Cleverciti's sensors analyse parking spaces along a city's streets, sending an update every three to 10 seconds to the Cleverciti Cockpit and Circ 360™ display, or another white label application.

The company targets cities, airports, shopping malls and stadiums in Europe and the US. It already has over 40 customers around the world, including Dubai and London.

The scaleup was the winner of the Digital Cities category of the EIT Digital Challenge 2017, and joined the EIT Digital Accelerator shortly after. Throughout 2018, Cleverciti was supported by the EIT Digital Accelerator's team of dedicated business developers, helping it to scale its business in Europe.

With the help of the Accelerator, the company attended various events, such as Startup Europe comes to Silicon Valley, and Mobile World Congress America in Los Angeles, where they were listed in the GSMA 100 – a global innovation discovery initiative designed to identify and advance the next generation of connectivity and digital services. In September 2018, Cleverciti was a featured panelist at the EIT Digital Conference in Brussels.

*"To acquire customers and operate businesses in different countries requires many resources. With the support of the EIT Digital Accelerator, we will have the chance to strengthen our international sales efforts and expand in more markets faster."*

**MAXIMILIAN VENHOFEN**

DIRECTOR BUSINESS DEVELOPMENT, CLEVERCITI

