For urban communities, being connected has become essential. For many years, cities’ digital transformation has been a central part for their development: by becoming intelligent, cities offer citizens and visitors a better quality of life and thus enhance their attractiveness. Investing in public Wi-Fi is the first step towards building a smart city.

Visitors expect high-performing connectivity

Founded in 1896, the SiL (Services industriels de la ville de Lausanne) are a multiservice provider that supplies the urban area residents with electricity, gas and heating, and also offers multimedia services to private and corporate customers in the region through their Citycable brand. The SiL, wishing to support the city’s ambitions of connectivity and provide a high-quality service to their customers, wanted to offer an efficient free public Wi-Fi for Lausanne residents and city visitors to be able to connect to the internet.

With its 145,000 inhabitants, Lausanne is a steadily growing city as well as a popular tourist destination, especially among business travelers who make up about 65% of visitors. Promoted to “Olympic Capital” in 1994, it is also home to many Olympic institutions, including the International Olympic Committee, as well as international sports federations. Host to many world sporting events, the city is getting ready to welcome the World Ice Hockey Championship and the Youth Olympic Games in 2020. Providing reliable and high-performing connectivity is therefore a key challenge for Lausanne, ahead of these major sports competitions during which the city is likely to experience peaks of traffic.

Following the implementation, between 2006 and 2012, of initial Wi-Fi hotspots in several public squares and parks in the city, as well as in indoor locations such as public libraries, the SiL wanted to deploy wider Wi-Fi coverage and expand outdoor service. This included being able to meet the connectivity needs resulting from the many cultural and sporting events that take place in the city throughout the year, including the annual Lausanne FIBA 3x3 World Tour basketball tournament, the BôNoël Lausanne Christmas market, the Festival de la Cité, the International Longines Horse Show and the Label Suisse music festival. The SiL also wanted to modernize the service offered in line with the evolution of new technologies and user expectations, while at the same time meeting the latest compliance requirements: the new system had to comply with legal standards for user authentication and log archiving and network traffic data analysis.
INTEGRATED PLATFORM PROVIDES A MODERN AND DYNAMIC INTERFACE

In search of a solution suited to the project and interoperable with existing hotspots, the SiL called on EDIFICOM. The technology integrator and “as a service” global solution provider specialized in the development of urban infrastructures is a reputable local player and has successfully supported the city in previous projects in the past. EDIFICOM directed the SiL towards Ruckus solutions: “Ruckus’ wide range of access points (APs), patented technical characteristics and international references were convincing arguments, all the more so that we select as a priority partners that have a local distribution and support,” explains Fabrice Consenti from EDIFICOM.

The integrator also put the organization in contact with real estate company Mobimo, owner of the Quartier du Flon district in downtown Lausanne, who wished to roll out Wi-Fi service for its district. Mobimo’s project was to pursue the evolution of the neighbourhood and revitalize the 55,000 m² living, cultural, urban leisure and commercial space, which includes many shops. The two organizations, quickly identifying synergies between their respective Smart City and Smart Retail projects, decided to set up a public-private partnership in order to jointly meet the city’s objectives and the Quartier du Flon’s specific needs, namely being able to understand the habits and behaviors of the inhabitants and visitors of the district.

The choice of the Ruckus solution meets several key challenges for both players. First of all, the Ruckus APs, which have proven their worth in environments such as New York City, are ideal for demanding outdoor deployments. They guarantee homogeneous and efficient Wi-Fi coverage in areas with a high density of buildings, including older buildings that may limit the Wi-Fi range. In addition, the geolocation services help Mobimo anonymously measure and analyse the flow of visitors, producing statistics on the number of visitors of the district, in order to identify the various flow areas and set up commercial operations aimed at revitalizing the whole district.

All APs are centrally controlled through the Virtual SmartZone (vSZ) platform, which leverages the city’s robust optical fiber network, ensuring rapid data transfer to the Swiss data centre. The SiL and Mobimo also benefit from the advanced features of the Linkyfi solution from AVSystem, Ruckus and EDIFICOM’s technology partner. This integrated platform, with its modern and dynamic interface, allows each organization to customize their respective Wi-Fi portals and provides them with key data on users and advanced analysis tools which give them an overview of connection behaviors and habits for each of the locations where Wi-Fi is rolled out.

Deployment of the Ruckus solutions, initiated in 2014 and which will have 90 APs set up throughout Lausanne by the end of 2019, currently includes 67 hotspots, including some 30 in the Quartier du Flon district. The service has an average of 6,000 monthly unique users, with nearly 1,000 new additional users each month. These users, which include an equal proportion of Swiss residents and foreign visitors, benefit from a reliable and efficient connection.

The partnership between the SiL and Mobimo is an exemplary model of public/private collaboration. “The fact that we were able to coordinate our project jointly with Mobimo allowed us to go further in the deployment and extend the coverage area. Where obtaining the agreement of owners to install equipment can sometimes be long and difficult, communication with Mobimo has been smooth and efficient,” explains Marc-Antoine Surer, head of commercial service at the SiL. “Thanks to the excellent communication between the two organizations and the complementarity of our projects, we were able to deploy a truly homogeneous and efficient Wi-Fi network throughout the area,” concludes the Quartier du Flon management director for Mobimo.

Thanks to this collaborative approach based on a long-term vision, the two players have considerably advanced the public Wi-Fi offer and accelerated the city of Lausanne’s Smart City and Smart Retail ambitions.

“Thanks to Ruckus, Lausanne residents and visitors today benefit from a high-quality Wi-Fi service, in line with the city’s ambitions to become intelligent and connected.”

MARC-ANTOINE SURER
Head of commercial service, Services Industriels de Lausanne (SiL)