

# IF ONLY WE WOULD KNOW In Smart Cities we do



## Eco-efficient Smart Cities offer better quality of life

Would you rather shop in a mall where air quality is always good, temperature stays ideal, crowds can be avoided and in case of emergency, the best possible route out is always known and shown? Most people would and already do, since this kind of big data is already available, analyzed and used.

What if, in larger scale, information could be collected citywise to improve the living experience of inhabitants? Added with information about water and electricity consumption, cities - and you - could save money and resources and direct the savings to better targets.

The challenges of climate change, over population, traffic growth and city expansion have led to urgent need to create technologies to face the ever-increasing problems. Big data collected from various sources to IoT hubs allow cities to

Smart City project in practice

 Big Data
(e.g. environmental condition, temperature, volume, traffic) collected to IoT Hubs. Analyzed and capitalized by third parties. improve sustainability and economic development. It helps optimizing energy use and reduce CO2 and water footprints. Analyzed and capitalized information gives us tools to plan more eco-efficient future.

Smart Cities are already reality. They are ecosystems where multiple innovative technologies serve residents by making cities safer, greener and more efficient. New business models emerge and while cities and industry gets smarter our quality of life improves.

Smart City, Digital City, Information City, Ubiquitous City or even Cyberville – whichever term we use the ambition is the same: to create environments that make us live and behave smarter.

- Eco-efficiency (electricity and water consumption) measuring unique. Enables savings in total energy consumption.
- 4G Service environment
- · Enables new business models



DIGILE Ltd., founded in 2008, helps organisations to benefit from the Internet Economy. DIGILE develops competence and tools for creating new businesses, jobs and well-being in the Finnish society. DIGILE coordinates industry-driven research programs to accelerate the development of digital services. It creates business ecosystems and opens the doors to Chinese and other international markets. Non-profit DIGILE is owned by more than 40 companies, universities and public organisations. www.digile.fi

### Internet of Things

## Internet of Things drives future business

- The potential for IoT is enormous as the data and number of devices connected to Internet is exponentially increasing
- The Wireless World Research Forum has predicted 7 trillion wireless devices for 7 billion people by 2020, which would amount to around a thousand devices for every human
- This will add a new dimension to the world of information and communication. Connectivity enables us to find versatile information, at all times and from everywhere

#### IoT challenge

The key challenge of IoT is to facilitate new, scalable, compatible and secure business models and solutions for everyday life



## Finnish Internet of Things program

In Finland the national IoT project aimed to address the challenges e.g. by innovating electricity and water consumption measuring systems for Smart Cities with Iot Hub based technical solutions in 4G environment.

The strategically important national IoT project was focused on

- Establishing a competitive IoT ecosystem
- Creating IoT business enablers
- Improving Finland's global IoT visibility
- Impacting IoT technology evolution and standardization

Read more: www.iot.fi







Contact for more information: kari.pentti@4g·service.fi

PARTICIPANTS IN DIGILE IOT PROGRAM CASES • 4G SERVICE • AALTO UNIVERSITY • ARCH RED • BLUEGIGA • COMPONENTALITY • CORENET • CYBERCUBE • DNA • ELEKTROBIT • ELISA • ERICSSON • F-SECURE • FALCK • FINNET GROUP • FINNPARK • FINWE • FRUCT • HARTELA • HELVAR • INTEL • IPROTOXI • JOLLA • LATURI • LAUREA UNIVERSITY OF APPLIED SCIENCES • MATTERSOFT • METSO • MIKKELIN PUHELIN (MPY) • MOBISOFT • MOHINET LAHTI • MULTIPRINT • NATURVENTION • NIXU • NOKIA • NSN • POHJANMAAN VERKKOPALVELUT (PVP) • POLAR • PROBOT • REFECOR • RENESAS MOBILE • SOFTERA • TAMP • TAMPERE UNIVERSITY OF TECHNOLOGY • TELIASONERA • THERE CORPORATION • UNIVERSITY OF HELSINKI • UNIVERSITY OF JYVÄSKYLÄ • UNIVERSITY OF OULU • UNIVERSITY OF TAMPERE • VEDIAFI • VTT TECHNICAL RESEARCH CENTRE OF FINLAND