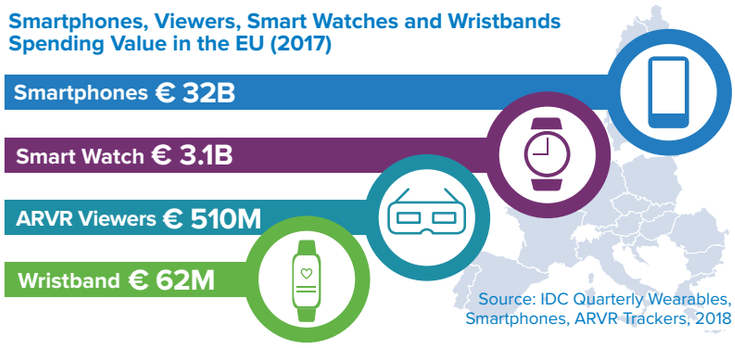
European
Large-Scale Pilots
Programme

CREATE-IoT

SMART EVENTS

SOUND AND SECURITY FOR LARGE OPEN-AIR EVENTS

Market Drivers and Potential Value



Wearables for smart ecosystems

The graph shows the total market in 2017 for smartphones, smart watches, wristbands and viewers. Although smartphones represent a more mature market, viewers and smartwatch markets are growing at the fastest pace (81% and 14% 2017-2021 CAGR, respectively). The IoT is directing event technology towards the future. The more devices connected to the internet, the more data on human actions at events are gathered, which will lead to more targeted and efficient event management.

Outdoor events, whether they are concerts, festivals or sporting events have become commonplace in many European cities. The events, attracting millions of participants, bring a number of benefits to European cities including tourism and revenues. However, there are also a number of challenges related to crowd management that come along such as noise pollution and security. IoT technologies provide a valuable way to address the increasing challenges that open–air event management is facing.

MONICA

MANAGEMENT OF NETWORKED IOT WEARABLES – VERY LARGE-SCALE DEMONSTRATION OF CULTURAL AND SOCIETAL APPLICATIONS

The **MONICA** Project is a large-scale demonstration of how cities can use IoT technologies to meet sound, noise and security challenges at big, open-air cultural and sports events, which attract and affect many people. Based on several devices such as smart wristbands, video cameras, loudspeakers, mobile phones and smart glasses, MONICA will be able to offer a portfolio of applications for enhanced city services, which will be demonstrated in **six different European cities**, involving more than **100,000 application users**.

The IoT Programme - Value Added for Europe

With more than 100€M of EU funding, the goal of the IoT Large Scale Pilots (LSP) Programme is to foster the deployment of IoT solutions in Europe, demonstrate their feasibility and benefits and promote the development of a sustainable IoT ecosystem. The projects design and apply IoT approaches to real-life challenges of high relevance, technology readiness and potential socio-economic impact for Europe. The five focus areas include IoT-enabled smart cities, smart living environments for ageing well, smart farming and food security, wearables for smart ecosystems and autonomous vehicles in a connected environment.

All the LSPs include multi-national consortia and pilots, taking advantage of the Digital Single Market perspective. By focusing on building value chains with advanced technology solutions, solving trust, security and privacy issues and validating the emerging business models, the LSPs will provide successful, feasible and replicable models of IoT ecosystem deployment already scaled at the EU level, improving European competitiveness.

In the case of smart events, the IoT Large Scale Pilots (LSP) Programme is:

- Promoting prototype developments and demonstrations involving innovative wearable solutions and services integrated in interoperable IoT ecosystems for healthcare, well-being, safety, security and infotainment applications.
- Developing IoT-based pilots to assist humans in monitoring, situational awareness and decision making. These pilots are driven by concrete business cases, open design approaches and user requirements, taking into account data protection and liability concerns.
- Involving the entire innovation value chain aiming at smart wearables demonstrations in real world settings.

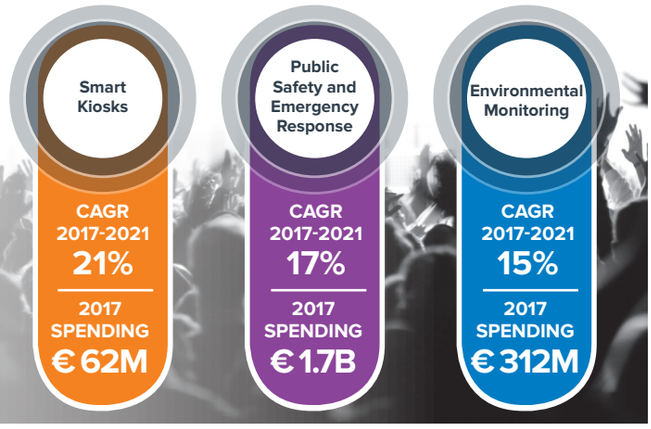
European Large-Scale Pilots Programme

CREATE-IoT

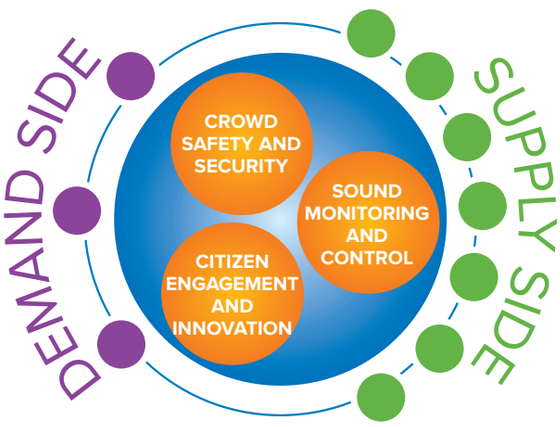
IoT and Smart Events: Crowd Management-related Use Cases

Smart events and crowd management revolve around a number of use cases responding to different strategic priorities from smart kiosks for civic engagement to emergency response for data-driven public safety through environmental monitoring for improved sustainability. According to IDC public safety and emergency response is the largest use case with more than € 1 Billion spending in 2017, followed by environmental monitoring and use cases for enhancing citizens engagement, such as smart kiosks.

Source: IDC Worldwide Internet of Things Spending Guide, 2018
IDC Worldwide Smart Cities Spending Guide, 2018



The Smart Events Ecosystems and Stakeholders



DEMAND SIDE

- Cultural event organiser
- Public and business administration
- Citizens

SUPPLY SIDE

- Tech experts
- Telecom companies
- IT, infrastructure and systems integration service provider
- Security and privacy experts
- Cognitive scientists
- Regulatory specialists
- Entrepreneurs/Start-ups

BENEFITS

ENTREPRENEURS / START-UPS

- Access to innovation tools for solution development
- Increased visibility from participation in events and hackathons
- Development of new business models, services and products
- Networking and funding opportunities

RESEARCHERS & EXPERTS

- Participation in large research programmes
- Networking and collaboration opportunities with other experts, companies and cities
- Access to data on pilots and applications

TELCO, TECH & SERVICE COMPANIES

- Revenues generation
- Products and services improvement and testing
- Access to new business models and products/ services
- Access to extended network of partners
- Insights into consumer habits and needs

BENEFITS

CITIZENS

- Improved sound experience
- More engaging events
- More safety
- Less noise for local citizens
- Co-creation of sustainable solutions

EVENT ORGANISERS

- Improve event organization
- Detect and handle security incidents
- Collect data for performance improvement
- Increase satisfaction for performers, audience and public administration
- Replicate in other cities and settings

PUBLIC ADMINISTRATION

- Compliance with regulation
- Improved quality of life for citizens
- Improved emergency response
- Better crowd monitoring and management
- Support of local tourism and revenues

Contacts

www.european-iot-pilots.eu
IoTEuropeanLSPProgramme
IoT_euLSP

The CREATE-IoT project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 732929

CREATE-IoT
european-iot-pilots.eu/create-iot/
CREATE-IoT
CreateIoT_eu

MONICA
www.monica-project.eu
MonicaIoTforCities
MonicaProject