POSSIBLE IMPLEMENTATIONS OF THE CLOUD-BASED DATA-CENTRIC IOT PILOT PLATFORMS FOR SMART CITIES AND AGRICULTURE

János Simon

Department of Technology, Faculty of Engineering, University of Szeged, Hungary
simon@mk.u-szeged.hu

Abstract

The Internet of Things (IoT) is starting to appear everywhere in many shapes and forms. But security is one of the most crucial thing that could trip up the growth of the IoT. Following security principles used in enterprise computing can help clear that issue. Already there are more connected devices than people on the planet, according to leading researchers in this area. By 2020, there will be 50 billion connected devices, outnumbering people by more than 6 to 1. Most of these devices will be controllable over the Internet, and they will increasingly be responsible for collecting and transmitting sensitive data. Today consumers might own an app that collects information on their exercise routine. In a few years, those same people might have an Internet-enabled medical device that continually delivers data to their doctor. In the wrong hands, data from home management systems could be used to assess user's whereabouts. Likewise, businesses could be vulnerable when they connect things like HVAC, irrigation, or commercial appliances.

Key words: IoT, Smart city, Cloud platform