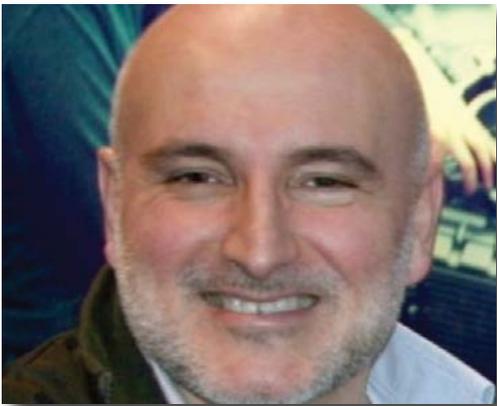


As soon as you plan for the long-term, you see the value of a standard

Enrico Scarrone, Chair of oneM2M's Steering Committee, discusses his involvement with oneM2M, the value that the standard offers and new ways of viewing Internet of Things (IoT) platforms



Q: Would you begin by talking us through your work with oneM2M and your responsibilities at TIM (Telecom Italia Mobile)?

A: From the very early 1990s, I worked for the telecommunication industry, covering research, standardisation and international consulting for network innovation and transformation. I started to work on IoT standardisation in 2008 within ETSI M2M, and I was in the initial group that founded oneM2M. I contribute at the organisational level through the Steering Committee. At the technical level, I focus on interworking and data access control topics.

In TIM, I take care of IoT related standardisation. This means supporting the development of standard solutions in ways that are coherent with the business expectations. I also support their adoption in TIM reference markets, both in Italy and in Brazil.

Q: What are your impressions of the IoT market?

A: 10 years ago, we (ETSI M2M) identified fragmentation and integration costs as a 'show stopper' for the IoT market. That may not seem the case now as we see a growing IoT market and the attention that some technical aspects, such as Artificial Intelligence (AI) and security, are attracting. Nevertheless, the major problem remains the same, too much fragmentation and too much in the way of integration costs. This is slowing the market. These are major factors behind the failure of several solutions that have been launched in the market. You can find examples from the large Internet companies to retailers that entered the smart-home solutions market and even large, industrial IoT solution providers.

It is painful to see proprietary IoT platforms and solutions being discontinued a few years after their launch, even when large and financially secure organisations are involved. There was a fantastic presentation during ETSI IoT Week when a company demonstrated an IoT body-area network to capture data from athletes' clothes and shoes. Their national team even used the system. Unfortunately, the company decided to discontinue the project.

Stories like these make me even more convinced of the value of a standard solution, with products and services that can be provided by everyone, without any linkage to specific branded solutions. I believe that the oneM2M standard is a major opportunity for businesses to exploit the IoT market profitably with solutions that are replicable and by leveraging economies of scale for devices.



Q: Based on these observations, what is your advice to organisations looking at IoT standardisation?

A: Each business needs to look carefully at what it has to do and what time frame applies to its IoT solutions. It needs to understand how much it can do in-house, how much depends on system integrator partners and how much depends on external providers. Some companies will discover that there is a quick, off-the-shelf solution. Other companies who are looking at a sustainable product will see the need for a standards-based solution. Today there is not a default decision that works for all companies and differing product time frames.

Q: How are these market dynamics affecting the IoT topics you are working on at present?

A: Imagine a future where there are many, many IoT applications and some of them have a need to exchange data with one another. oneM2M provides a very good basis for data exchange and management of IoT applications. oneM2M also provides a significant foundation for semantic interoperability, as explained by Huawei, one of our contributing members, in a recent Executive Interview. oneM2M standards provide a supporting framework that helps IoT applications to understand the information carried by sensor data. It is often defined as an interworking framework.

Nevertheless, more work is still needed before we have seamless semantic interoperability. There is also a need for more information sharing amongst vertical IoT business sectors. This is one of the more important points for me and the oneM2M leadership. As a result, we are working in a collaborative manner to make oneM2M more and more easily usable by stakeholders in different vertical sectors.

We are convinced that sharing information among different application environments will unlock the full potential of IoT, creating more and more IoT services and opportunities. That is one reason why we spend time talking

About oneM2M

oneM2M is the global standards initiative that covers requirements, architecture, API specifications, security solutions and interoperability for Machine-to-Machine and IoT technologies. oneM2M was formed in 2012 and consists of eight of the world's preeminent standards development organizations: ARIB (Japan), ATIS (U.S.), CCSA (China), ETSI (Europe), TIA (U.S.), TSDSI (India), TTA (Korea), and TTC (Japan), together with one industry consortium (GlobalPlatform) and about 200-member organizations. oneM2M specifications provide a framework to support applications and services such as the smart grid, connected car, home automation, public safety, and health. For more information, including how to join and participate in oneM2M, see: www.onem2m.org.

to organisations such as our partner, TTA, the Ministry of Science and ICT as well as local companies in S. Korea. In Europe, we are actively involved in discussions with different industry associations, such as those involved with connected vehicles and smart cities. We believe that associations in key sectors will be a strong way to raise awareness of IoT standardisation and to foster adoption.

For more information visit: www.onem2m.org