Executive Viewpoint series

September 2015

> "No other standard addresses IoT platform harmonization like oneM2M; it encourages modularity which makes commercial sense whether you offer components or the full solution stack."
>
> *Jeff Edlund, CTO, Communications & Media Solutions, HP*

Q. **Let's begin with an overview of** your role in HP and IoT market priorities.

JE **I'm the CTO of HP's Communications &** Media Solutions unit which focuses on software driven services for telecoms carriers, network operators and service providers. We supply many of the software components that go into carrier networks.

Over the past year, the market has changed to the extent that HP is more involved in solving problems directly for enterprise customers; we invariably bring in a carrier as part of a full-stack service offering.

Strategically, we believe that we can have a big impact in the areas of IoT service-enablement and service-platforms.

My own involvement with the IoT goes back to founding the Landscape Committee within ATIS. That is where we launched an M2M focus group and then went on to work with organizations such as the ITU, the IETF and ETSI to launch oneM2M.

Q. How does HP view oneM2M in relation to other industry initiatives?

JE There are two quite unique aspects to oneM2M. Firstly, we know that the standards development organizations (SDOs) managing oneM2M have a successful track record of driving standardization processes.

Secondly, nobody else has a harmonization vision for the IoT. There are too many initiatives out in the market and this is confusing for customers. Many of these efforts are either pushing *de facto* standards or they have gaps in what they offer. We are a firm advocate of harmonization because this encourages modularity which makes commercial sense for any company wanting to sell its solutions into many more markets.

Q. So, what are the key IoT markets for HP?

The oneM2M Executive Viewpoint Series features business insights from senior executives in companies that are commercializing products and services based on the oneM2M standard. For more information, including how to join and participate in oneM2M, see www.onem2m.org.

1

JE HP focuses on three industry verticals which we can take into many different regions thanks to our global footprint.

While we see a lot of demand in many in different parts of the market, our immediate focus is on IoT solutions for smart-energy management, smart transport (connected cars, electric vehicles, fleet- and asset-management) and smart enterprise. Smart enterprise includes applications such as factory automation, smart cities and home-automation, a segment where we've recently had good commercial success.

Q. With all of these opportunities, how is HP organizing itself to tackle the IoT market?

JE Well, the early work on oneM2M and IoT began in my group. Over the past year, as the market opportunity has developed, HP has made IoT much more visible at the corporate level. In fact, we set up a Steering Committee to oversee four activity streams: platforms and infrastructure; go-to-market initiatives; industrial segments; and, software solutions.

On a day to day basis, Nigel Upton (WW CMS IoT Senior Director) has P&L responsibility for our IoT business. He and his team will have a lot more to say about our strategic objectives over the coming months

Q. To what extent is partnering a part of HP's strategy?

JE Partnering is essential to our strategy; there are too many moving parts in IoT applications to think differently.

Looking at a smart-energy application, we have to work with utility-sector specialists, module vendors and telecoms service providers. HP is in the business of providing IoT platforms but we also supply components to established platforms such as Jasper. We can also build IoT applications or we might partner with specialists from the energy sector, depending on what our customers request.

Q. How do you see the IoT market developing over the next 3-5 years?

JE **Our recent experience is that the market is growing tremendously; we can't respond to all the custo**mer enquiries we keep receiving. So, while we are growing our staff, scalability is a challenge that will remain with us for some time.

The bigger issue is one of fragmentation. Take smart cities as an example; one municipality might start with smart parking and another with smart lighting. In many cases, these municipalities are struggling to find good advice let alone viable solutions. They often end up with point solutions **which don't help them to deal with the** bigger, smart-city opportunity where you need a platform to deal with multiple applications.

In the enterprise sector, we know of cases where somebody comes up with a bright idea to solve a particular business problem. From this, they build a solution using a vertically integrated stack. Later on, somebody else comes up with another idea and this leads to a second stack being built. Not only is this costly but the business misses the opportunity to capture correlation types of value from their data. As an industry, we have to do a much better job of educating the market about service platforms to avoid wasted investments and missed business opportunities.

Q. What advice would you give to companies that are deploying IoT services and solutions?

JE **I actually have three pieces of advice to offer. Firstly, businesses won't derive value** simply by making connections to machines because the value is in the data. Secondly, think about your IoT strategy holistically. If you build single use-case silos, **you'll spend your money poorly and** eventually have to deal with re-building.

And thirdly, companies should go with a standards-based solution. HP chose to go with oneM2M which makes everything modular. This means that we can plug-and-play in a full-stack solution or we can contribute a data **analytics or a monetization module to somebody else's solution.**