Recently we’ve been bombarded with numerous press releases expounding the unstoppable advance of M2M communications. Perhaps today it may seem like much ado about nothing, but some analysts estimate that 50 billion computers will connected in 2020, forming the basis for what will be the Internet of the future, what is known as the Internet of Things.

The explosion of the M2M market is no doubt an interesting opportunity for communications operators to develop a new alternative market, building on the traditional business which is overly saturated due to high penetration of residential and corporate cell phone lines. Aware of this situation, operators have pounced on this new market, with many of them forming their own M2M divisions (Telefónica, Vodafone, Deutsche Telekom, Orange, Sprint, Verizon, etc.)

However, in the M2M market, new lines and customers do not translate directly into easy revenue. Operators should be aware that the same business model cannot be applied to M2M devices as to mobile phones. The fact is that this market is very different from the traditional market of communications between people—in terms of average yields per line, client capture and retention costs, churn rates, sales dynamics and logistics costs.
Focusing on connectivity, it seems clear that M2M devices involve significantly lower profits than those obtained from voice and data services. The average revenue per user (ARPU)\textsuperscript{i} is much higher than the average revenue per device (ARPD)\textsuperscript{ii}. In general terms, the ratio is about 10:1, although it can be much higher in cases where the device does not have its own connectivity, when it’s part of a wireless sensor network. These wireless sensor networks (WSN\textsuperscript{iii}) communicate using free radio frequencies and only connect to the operator’s network at certain access points.

Based on the above, and looking solely at ARPD figures, the M2M market may seem economically nonviable. But looking at the big picture, its potential may be greater than the current Telco market as a whole.

But where is this potential to be found? Given the reduced ARPD and the high number of devices expected—seven times the number of people—the key metric operators need to focus on is margin. The only way to get higher margins in low-revenue situations is to cut down costs and boost revenue by providing ancillary value-added services.

According to a report by the Yankee Group, being at the forefront the M2M industry involves providing comprehensive solutions and leveraging vertical expertise. These are two aspects which most customers consider extraordinary and essential, and which no agent in the value chain is capable of offering independently.

Carriers enjoy an ideal position to serve as aggregators of the M2M ecosystem by virtue of being one of the key suppliers. However, the highly fragmented M2M value chain—with its isolated specialized groups and many supplier/buyer interfaces, leading to complicated products, high development costs and long time-to-market—does not make holding on to that leadership position easy at all.

Operators will find it necessary to forge stable and enduring alliances through win-win agreements, to become a holistic supplier, avoiding being left by the wayside as a mere communications provider because of a lack of vertical knowledge of the various industries.

Nothing is too clear yet about the business models for M2M solutions. However, we can conclude that we need to find business models that reduce costs, increase revenue and add value to the M2M chain.

Practices such as sharing network infrastructure and M2M communication modules, or the use of Cloud services, could help reduce CAPEX, while the use of device management platforms will help reduce OPEX.
Cloud services and device management platforms are available everywhere. However, M2M infrastructure sharing involves a high degree of technology standardization that is still a few years away.

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\(^1\) ARPU: Average Revenue Per User.  
\(^2\) ARPД: Average Revenue Per Device.  
\(^3\) WSN: Wireless Sensor Network.