

MWC16 bulletin



Key take-aways from MWC16:



the Internet of Things is work in progress with demos and use cases



we haven't seen any scaled IoT services yet



manufacturing, logistics, transportation, and health are the first mover industries



regulators need to do more to enable IoT and ensure a level playing field



monetisation models are still emerging



the industry is moving into a phase of digital transformation that will last five years

Those who make the annual pilgrimage to Mobile World Congress will be familiar with the anticlimax on departure from days of buzzing around the noisy halls of the Fira to return to the routine of office work. But this year the event that drew over 100,000 visitors replaced any feelings of sadness with an urgency around how much work is to be done to get the Internet of Things (IoT) to scale.

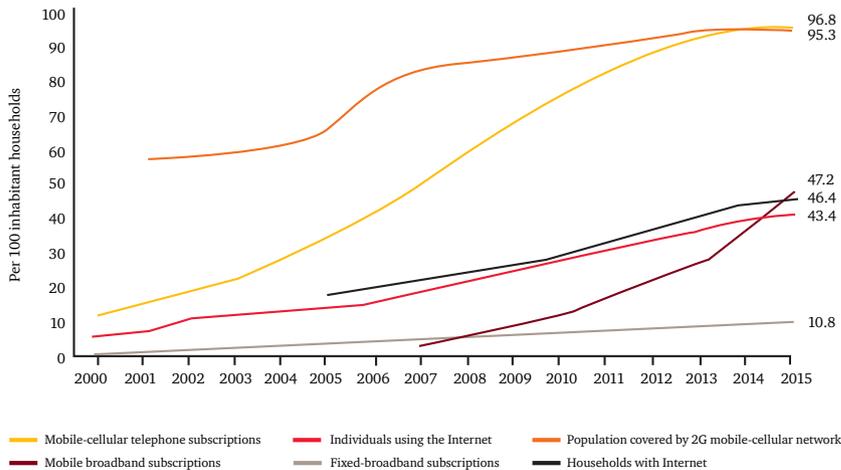
PwC's key conclusion from MWC16 is that the IoT is here to stay, and compared to last year's anticipation has now become a real work in progress. Here are our brief highlights from MWC16 and the key takeaways we expect will be important for the coming months.



The Internet of Things comes to life

A welcome relief from the hyperbole that anticipated the ascent of WiFi, 3G and mobile internet, talk of numbers for the IoT and speculative analysis was replaced by an industry of use cases, experimental demos and on-sale items which are bringing the world of connected objects to functional reality. At the GSMA's Innovation City, you could look at cabin bags ready-equipped with tracking devices, connected cars equipped with machine-to-machine devices to track performance, driver behaviour and road safety. The subtle shift of MWC towards all things mobile-enabled continues: there were more stands hosted by auto manufacturers and appliance makers, while telco executives spent more time walking around and less time at booths showcasing network technologies. This supports our view that the uptake of IoT may prove to outpace earlier transformations in the mobile industry as indicated in the diagram. According to Business Monitor International, there were already 14 billion IoT connected devices by end 2014, which indicate very rapid take up.

Mobile industry technology uptake 2000 - 2015



Source: ICT Facts and Figures, The World in 2015

Take-aways

All in all, we had a workmanlike MWC this year with less hockey-stick type stats and more sleeves-rolled up conversations that will continue well beyond the event. Going forwards, from a PwC perspective we see several themes confirmed by MWC16:

- The IoT is here to stay and heralds a revolution for the telecoms industry
- Industries are already disrupting each other's value chains and launching new services which never existed before
- First movers for IoT services will be from the logistics, agriculture, cities and health industries
- Customers and enterprises expect unprecedented levels of functionality in services, real time and synchronized across multiple formats and devices

PwC was busy this year at MWC

At MWC's prestigious Ministerial Programme, PwC chaired a panel focused on the Internet of Things. The panelists included a Global Telco CEO, the head of a major European telecom regulator, senior Government leaders from South Korea and Brazil and the Director of an auto manufacturer's Connected Car programme. A number of important messages came out of this panel, emphasizing the need for policy makers to take further steps to enable the IoT to scale, for industries to allow and tolerate failures, for regulators to keep an open mind and be ready to change established regulatory paradigms, and for governments to be ready to engage in more public-private partnership to drive transformational societal projects, such as smarter cities.

PwC hosted its first Digital Revolution Summit (DRS), with speakers from various industries explaining specific problems and solutions to implementing the IoT. DRS took place in Hall 8, once seen as a distant corner of the MWC real estate, but now emerging as a magnetic zone for upstart innovators and developers to show off their latest offerings.



Source: Twitter

New year, new acronyms

Not surprisingly for the telecoms industry, IoT wasn't the only acronym on show. 5G was talked of a lot, as was LPWAN and VR:



5G will put in place network architecture that enables more harmonization across transmission technologies which today are still distinct (such as CDMA and GSM). However, we don't see an immediate move to harmonized network infrastructure – in fact the opposite – which is a period of time where both service providers and customers will use hybrid network options to optimize the cost and quality of their data connectivity.



LPWAN – Low Power Wide Area Networks - will enable network operators to repurpose the 2G network to run on low power and to carry low volume drip-feeds of data only, enabling networks to reach up to 7x as far as they do today. This will enable new uses of IoT in areas such as agriculture, one of the early movers for IoT-enabled value. For example, we expect to see benefit through solutions which enable farmers to track how effectively animals are grazing, control irrigation levels and monitor crop sunshine exposure. LPWAN is a must-understand topic for CFOs and CTOs.



VR - Virtual Reality - is becoming closer to commercial reality too, with numerous demos this year allowing visitors to experience virtual activities such as skiing down an Alpine slope. We see VR as reaching the potential to scale shortly, with gaming being the first obvious use.

- Vision and open-mindedness is required from policy makers and regulators to enable IoT to thrive, and to tolerate “fast failures”
- How each partner in the ecosystem will monetize from a commonly offered IoT service is still emerging

In our view, these trends underpin the expectation that IoT will transform business models, digitize user experience and revolutionise how we manage our enterprises. One day in the not too distant future, we will wake up and realise we've changed our world so completely that it is unrecognizable from what we had before.

Thank You



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