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MWC 2018
WHAT TO EXPECT

Major themes to follow and market trends to watch at MWC 2018

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Introduction

What to expect from MWC 2018

This guide sets out the main themes that Ovum expects to see at MWC 2018. Our short list is based on our own research, supplemented with interviews with vendors and service providers that are attending the event. We also highlight the companies we expect to make the most significant announcements before and during the event. Finally, we review our 2017 predictions to provide additional context.

Some of our themes have rolled over from last year – not surprisingly, 5G and IoT were highlighted by all of the vendors and service providers we interviewed. With a standard now in place for 5G, all vendors will be showcasing their new wares, although with markedly different approaches to positioning the technology.
A prominent trend among many service providers is the pursuit of an expanded role in the home. We therefore expect to see growing partnership activity among smart home vendors and service providers, with each looking to drive further product interoperability and voice integration functionality. This year, VR (virtual reality) gives ground to AR (augmented reality), which is seeing steady growth and will be on many enterprise and consumer wish lists over the course of 2018. (If you come across Merge's 6DoF Blaster game on an exhibitor's stand, be the envy of any child you know by being among the first in Europe to play it.)

From the keynote speaker lineup, you can expect to see a new brand launched, new internet player partnerships, and, of course, 4G-to-5G migration roadmaps and IoT use cases. Building on their earlier announcements, service providers will provide concrete release dates and use cases for new artificial intelligence (AI) assistants, for example, Aura (Telefónica), Djingo (Orange), and Magenta (DT). Service providers will also look to tap into the growth potential of further mobilizing entertainment-oriented businesses by launching on-the-move TV and OTT video services.

We will also see a growing presence from Chinese device vendors and a revival in wearables as consumers embrace eSIMs. We are also likely to see devices that bend. In comparison to the last few years, we feel that the keynote lineup looks a little light – suggesting that the GSMA is holding back the full agenda, which means that we may be in for a surprise speaker on the opening day.

So, whether you plan to be in Barcelona or merely track developments from afar, settle back and read on for Ovum's take on what will be hot at MWC 2018.

Richard Mahony
Global Director, Ovum

2018 themes to watch

The key overarching industry events to follow at the conference will be:

Devices – eSIMs take hold

MWC will once again see several device vendors launch their new flagship devices. The most notable launch event will be the Samsung Galaxy S9. The Galaxy S9 launch, like the other smartphone launches at MWC, will be evolutionary and focused on catching up on competitors in areas such as display technology, AI, and AR. Samsung mentioned again on its recent 4Q17 call that it was planning to launch a flexible phone. We are skeptical of exactly how much impact that could have on the market – it changes the form factor but likely will not change how people interact with their handset.

Growing Chinese brands such as Oppo will use MWC as a means to assert themselves as key players in the handset market. Ovum expects that a running theme of MWC will be Chinese manufacturers announcing availability in more countries and partnerships with more operators.

MWC 2018 should also see many more eSIM wearables, tablets, and other devices, as well as more operator support for eSIM. The Apple Watch 3, which includes eSIM, has brought the technology to consumers' attention and many manufacturers and operators should be aiming to capitalize on this interest in 2018.

5G gains more focus

The discussion at MWC around 5G will differ from previous years. Most significantly, 5G comes to MWC this year with an actual standard in place. That means vendors will be showing commercial-grade solutions at this year's event as they ready themselves for the first commercial networks expected to come online in 2018 and 2019. Ericsson came out the gate first in announcing a 5G small cell version of its Radio Dot. Ovum fully expects to see similar small cells and other radio portfolio expansions between now and March 1st.

Service provider 5G plans should become clearer this year as well, particularly in terms of deployment targets and vendor partners. Also, expect further momentum for initial 5G spectrum bands, especially 3.5GHz. In late January, Telefónica provided an example of the type of operator announcements we expect to see when it selected two cities in Spain for initial 5G deployments. What we will not see are operators' specific service plans and pricing.

Of course, 5G is not just new radios. The new network core and architectures are just as important. In that area, we should see plenty of MEC (mobile edge computing) and network-slicing demonstrations requiring a cloud-native mobile packet core. These technologies will eventually support new enterprise services.

Ovum also expects that the first 5G prototype devices will be demonstrated at this year's MWC. Several operators are preparing to launch 5G in 2018, though mainly for home broadband access. Nonetheless, 5G smartphones are not far behind and consumers will want to have 5G smartphones in their hands as soon as the networks launch, if not before. With battery life already a key consumer concern with flagship smartphones, the battery life of a 5G smartphone should be a major concern for manufacturers, operators, and retailers looking to push 5G devices early.

IOT – more players look to be the one-stop-shop provider

We are looking out for IoT announcements, demos, and trends in a few key areas:

LPWAN commercialization, strategies, ecosystems: Now that some commercial deployments of NB-IoT and LTE-M are live, we expect to see more demos of real-life use cases and commercialized modules and devices. Look for more deployment announcements as both technologies expand their reach and ecosystems, and more service providers trialing or deploying several different LPWAN technologies.

Discussion and demos of 5G IoT use cases: In our view, however, the market opportunity is greater for other technologies to support a wide range of IoT use cases, even in the medium term.

AI for IoT, edge computing: We expect early demonstrations and important discussions about the mutual support between these two areas of technology, from a wide range of players. We will be looking for impactful potential use cases, and developing views on deployment timelines, costs, and revenue impact, and which verticals are likely to drive things forward: automotive, automation, and customer experience are strong candidates. Edge computing will be a key driver for this, and we expect announcements from players like HPE, Ericsson, Nokia, and Huawei.

Continued wrestling over value-chain control and customer ownership: Look for more announcements from major enterprise IT, cloud, and internet players moving to become full-service, end-to-end IoT solutions providers (not all are likely to succeed). Many are looking to add connectivity to their IoT solutions, enabling them to become one-stop-shop IoT providers. This will spur plenty of partnership opportunities.

AI – everywhere

The continued evolution of analytics, machine learning, and artificial intelligence brings about ever more ambitious services. These will not only be in connected devices, but also the cloud, the network, and apps.

AI will drive the biggest differences between 2017 and 2018 handsets. Apple and Huawei led the market in late 2017 by including AI-specific chips in their flagship devices, and Ovum expects Samsung to debut its own AI hardware on the Galaxy S9, while other Android manufacturers will be relying on Qualcomm's Snapdragon 845 for its AI capability.

This makes 2018 a key year for the development and acceptance of AI in consumer devices, but Ovum expects that AI and AI-specific hardware is here to stay. The new Sonos One, which incorporates Amazon's Alexa out of the box, is the first step, but we expect AI to increasingly be preloaded onto most consumer devices, something we saw with the launch of most TVs at CES 2018.

Regardless of how successful third-party AI applications are, the optimization and quality-of-life enhancements that AI can offer on devices means it is not going away.

Augmented and virtual reality see steady growth

We expect the buzz around augmented reality to intensify on several fronts: apps, mobile games, digital marketing, m-commerce, and social media.

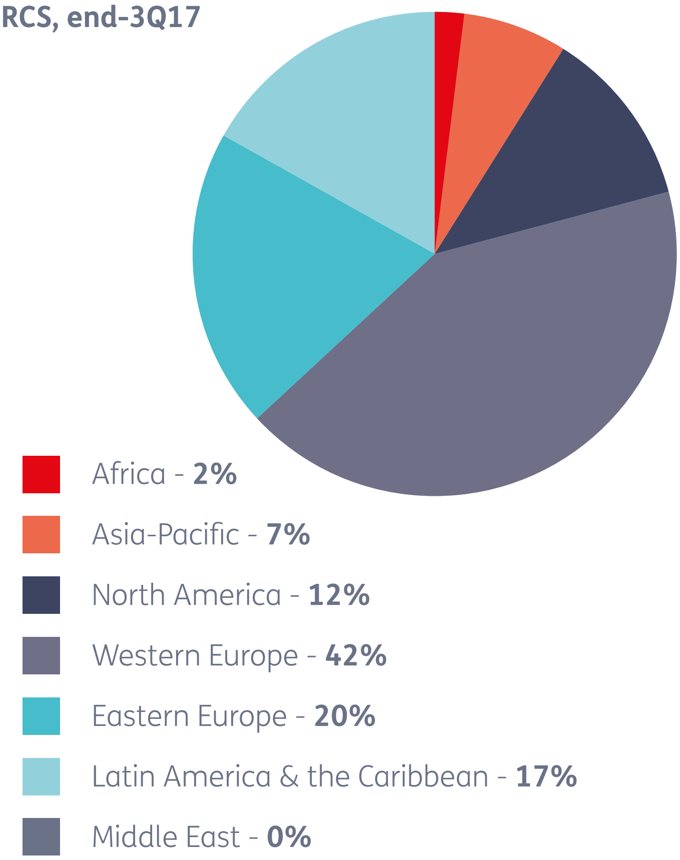
Many of the underlying pieces were put in place last year, including the Apple ARKit and Google ARCore platforms, and AR platforms from Amazon, Facebook, Snapchat, and WeChat. Although the number of ARKit-based apps is still limited, some are making waves, such as Ikea's Place m-commerce app and the Merge Blaster game, which combines smartphone AR technology with a toy gun. We expect much more innovation to emerge on the AR front this year. You can also expect the Merge Blaster game to make it onto the gift lists of your nearest and dearest this year.

The VR market is in a period of steady growth; there are unlikely to be breakthrough announcements at MWC this year – maybe some new enclosures from handset OEMs, better 360-degree cameras, and news on portable dedicated headsets (like the Vive Focus or Oculus Go) outside of China. At least we are past the hype and desperation of firms like ZTE, Archos, and various accessory manufacturers announcing and failing to ship, or shipping only dozens of, extremely poor VR enclosures – firms are now taking a far more pragmatic view of the long-term market. One potentially interesting opportunity, given the current vogue to add voice assistants to everything – regardless of fit – is their inclusion in a VR system. This makes sense – augment the immersive nature of VR with voice control to pause, answer calls, and IM, etc.

RCS business messaging moves from concept to reality

Rich communication services (RCS) will be a hot topic at MWC 2018, and in particular the use of RCS for business messaging. Interest in the use of application-to-person (A2P) RCS as an upgrade to A2P SMS has been growing, with many of the telcos that dismissed RCS as a consumer service now keen to use RCS to upgrade their SMS-based business messaging services. Timing is crucial, since chat apps such as Facebook Messenger and WeChat already allow brands to communicate with their customers, and WhatsApp has just launched WhatsApp for Business. Most of the telcos that recently launched RCS have done so with A2P RCS in mind. During 2017, the GSMA, Google, telcos, and SMS aggregators developed proofs of concept around A2P RCS (also known as messaging-as-a-platform, or MaaP); the members of the RCS ecosystem have also been working on the development of the commercial models that will enable monetization of A2P RCS. The ability for the A2P RCS ecosystem to deliver an enhanced B2C messaging experience via MaaP could be a potential game-changer for operator-enabled business (and consumer) messaging, by allowing brands to offer a richer engagement experience to their customers, all through the RCS-based messaging client that is native to their devices (and therefore represents zero barrier to entry). In the period leading up to MWC 2018, and during the event, we can expect to see more operators launching RCS, announcements around how brands are using RCS to connect with their customers (and demonstrations of these services), and more detail emerging around the commercial models that will underpin A2P RCS and enable monetization.

Figure 1: Geographic distribution of commercial RCS, end-3Q17



Source: Ovum

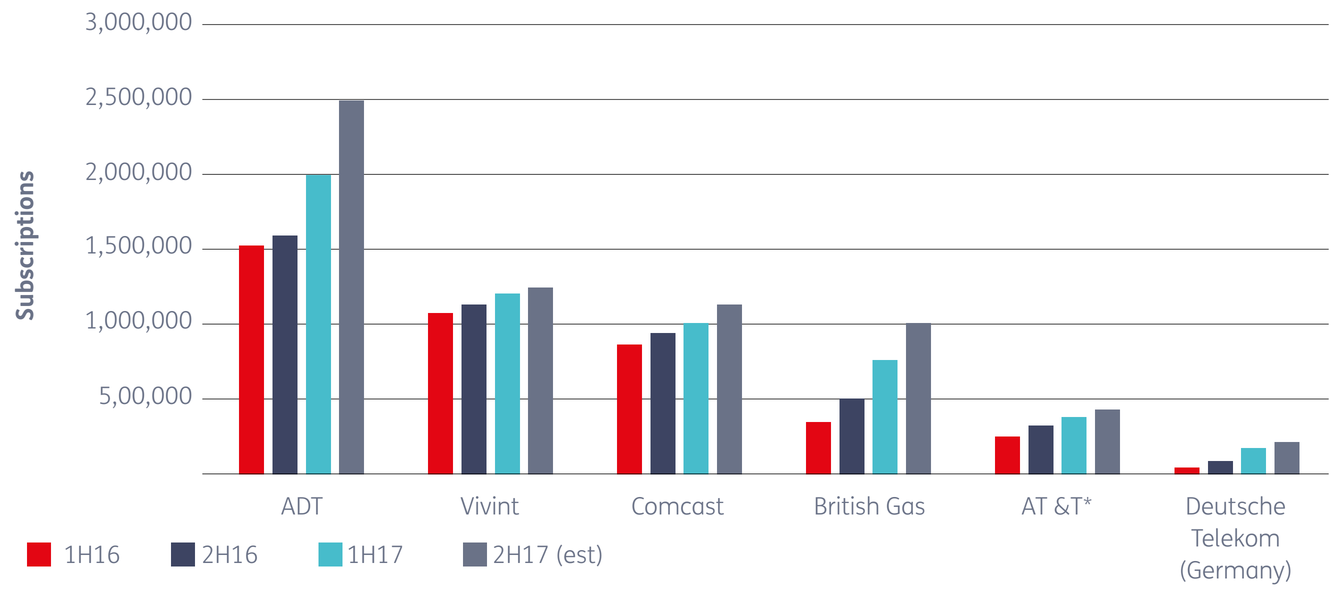
Telcos will reevaluate their role in the smart home

Smart home offers significant opportunities for telcos, but as shown below, the uptake in terms of actual subscribers has remained modest, even for the most advanced players. However, rather than turning their backs on smart home, telcos are starting to think about smart home in a different, smarter way – using the more general interest in smart home technology to strengthen their own core positioning in the home, even if they do not necessarily have a direct play (yet).

Linking smart home applications to a mass-market product, such as an advanced home Wi-Fi gateway, enables new business models to be developed that can still drive new consumer revenues, build mass-market scale, and provide value to the consumer through efficiency and simplicity (two highly valued characteristics that all too often get overlooked). Ovum is seeing more operators demonstrate this way of thinking, with Comcast being the most recent large operator to announce such a strategy.

Understandably, all types of telcos are seriously evaluating home AI assistants. What will be their long-term impact? How do they fit within our own connected home strategy? Do we partner, and if so with whom, or do we need to develop our own platform? These are all questions telcos are asking themselves. With the right strategy, telcos have much to gain from home AI assistants; we expect to hear a lot more on this topic at MWC and beyond.

Figure 2: Smart home subscriptions by leading service providers, 4Q17



*Ovum estimate

Source: Ovum

The rise and rise of video

Mobile video distribution will again preoccupy the entire mobile ecosystem as existing 4G-based initiatives are assessed and one eye turns toward the implications of the transition to 5G cellular networks. OTT video services are already available on mobile, and mobile-viewing metrics across the board are unquestionably growing. This is prompting some telcos and operators to examine the growth potential in leveraging mobile subscriber bases to build more entertainment-oriented businesses by launching TV and OTT video services. Taking into account the peculiarities of

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their market and their strategic priorities, telcos and operators are carefully positioning these services to target incumbent TV service providers' vulnerabilities, often undercutting on price, offering improved accessibility, and zero-rating or bundling cellular video data.

In the near term, Ovum will be keeping an eye on the following: how mobile video data is monetized in the context of a broader consumer go-to-market strategy; carrier billing of OTT media services, which are poised for significant growth in 2018; evolved bundling strategies that address younger audiences' disinterest in traditional, high-ARPU, pay-TV services; and the impact of 5G on entertainment distribution. We recommend checking in on these topics with the leading telcos and operators, particularly the European ones (e.g., Deutsche Telekom, Telefónica, and BT/EE), who will have a strong presence at MWC in terms of their TV, OTT, content, networking, and broadcast/OTT technology teams.

Mobile money – focus on product enhancements

MasterCard and Visa have used MWC as a platform to showcase their latest consumer and B2B offerings in recent years, and 2018 will be no different. We expect to see both make announcements in several areas, including offerings to support a range of specific merchant types and scenarios, such as connected car and unattended devices, along with developments in their emerging market, biometric authentication, and API/developer portal offerings. PayPal is also likely to announce further developments in its platform and partner strategy.

From the vendor and operator space, interest in providing value-added wallet products will continue to be high on the agenda for providers such as Huawei, Amdocs, Mahindra Comviva, and Worldline. The focus of these offerings will be on both enhanced offerings to merchants and other payment-accepting entities, alongside developing the customer-facing experience.

The companies to watch this year

01 Softbank

Rajeev Misra, Monday, February 26th, 12:30–13:30, Hall 4, Auditorium 1

Rajeev Misra will not talk about telecoms, other than to berate the industry's heavy-handed regulators. As the chief executive of SoftBank's $98bn Vision Fund, Misra has the financial muscle to expedite technology change. Misra will speak about investing in a better future alongside venture capitalists, so we expect to hear more about how AI and cryptocurrency will impact industries. With a new 15% stake in Uber and a seat in its boardroom, Misra will likely talk about the future of transportation, with perhaps an update on Uber's driverless car program. We also expect to hear more on robotics, following the speech from SoftBank's CEO last year in which he set a 30-year time frame during which super-intelligent robots, supported by computational biology, will surpass the human population in number and brainpower. Watch out also for SoftBank's subsidiary, Brightstar, which is rumored to be launching an enterprise mobility solution.

02 Ericsson

Börje Ekholm, Tuesday, February 27th, 09:30–10.30, Hall 4, Auditorium 1

The last year has been a difficult one for Ericsson, with the company taking large write-downs in its struggling media and cloud computing businesses. So, we expect Ekholm's keynote to give more detail of the next phase of the company's turnaround plan. There are rumors that Ericsson will be launching a new brand at MWC, so we expect to see a refined set of capabilities and positioning from the company. The company has already shown some of its 5G hand with a January 5G small cell announcement. This shows, despite challenging financials, that the company continues to invest and expand its 5G portfolio, an obviously positive sign for its carrier customers.

Ericsson's focus at the event will be on the service provider, although as a business Ericsson still has interests in enterprise and verticals. Ericsson has announced that it will sell 51% of its Media Solutions business to One Equity Partners. It will however retain 100% of its media services focused business Red Bee Media. At a top level, the strategy will likely be to demonstrate how Ericsson can support service providers to drive operating efficiencies and new revenues. These are noble endeavors and ones essentially shared by all of the vendor's competitors, but Ericsson looks to achieve them through innovating with service providers by engaging with their customers digitally to deliver new experiences. Look out for Ericsson's 4G-to-5G stand at MWC, which will showcase 5G innovation in addition to hands-on IoT case studies which will demonstrate how Ericsson, above all others, is well placed to innovate together with the service provider.

03 Telefonica

José María Álvarez-Pallete López, Monday, February 26th, 09:00–10:30, Hall 4, Auditorium 1

Telefónica's CEO Álvarez-Pallete and its Chief Digital Officer Chema Alonso will likely be showcasing delivery of Aura (Telefónica's digital assistant) and its next-generation "fourth platform," which was announced at MWC in 2017. Telefónica is also rumored to be planning to launch a new smart home portfolio with a new set of ecosystem partners. We also expect Telefónica to demonstrate new 5G capabilities and IoT use cases. Expect more on network virtualization and, of course, more IoT case studies. Telefónica is one to watch.

04 Cisco

Unlike many of its rivals, Cisco heads to MWC as a vendor whose share price is riding high. At MWC, we expect a new 5G announcement from Cisco, along with an emphasis on IoT, with a particular focus on smart cities and AI. While all vendors will be pushing their latest 5G wares, interestingly, Cisco will message that with the "right" network, an operator can deliver much of the functionality of 5G, with up to 85% of its features, today. While we do not fully know how Cisco will qualify such a claim, we will be watching for how it positions its new architectures and readiness for 5G.

With the rise in connected devices and things, Cisco is looking to simplify network resource and performance management through automation and AI technologies. We expect to hear how Cisco will help both enterprises and service providers unlock value from the data generated by connected "things." Cisco estimates that only 1–2% of this data is being exploited. The vendor aims to give the service provider greater control and insights into IoT, powered by AI, using capabilities resulting from its acquisitions in this area (e.g., MindMeld, Saggezza, and AppDynamics). We expect to see more automated services from Cisco off the back of these investments.

05 BT

Gavin Patterson, Monday, February 26th, 14:30–15:30, Hall 4, Auditorium 1

BT has had an eventful 12 months: it reached agreement with Ofcom on the legal separation of Openreach (its access function) in March 2017 and has integrated the acquired EE mobile business. The integration is progressing well, with approximately £150m in cost synergies achieved in the first year, ahead of its own £100m target. The consumer strategy is working, with its focus on content, in particular with its approach to sports. We expect to hear about the success of this content strategy as BT prepares for the next round of bidding for Premier League football rights, which will be hotly contested, with Amazon rumored to be considering making a bid this time around. With content expected to cost more in the future, this session is likely to cover how content fits into BT's growth strategy alongside the new possibilities arising from increased fixed-mobile convergence. Under Marc Allera, BT Consumer's CEO, we expect BT will develop a more integrated fixed/mobile service portfolio and a home strategy that integrates with the internet players, without replicating their function. Unlike many other service providers, BT has remained neutral on smart home and IoT more generally, adopting a wait-and-see approach to the technology. We are therefore not expecting significant smart home announcements from BT until the market is established and its immediate fixed/mobile opportunity is exhausted.

06 HTC

Cher Wang, Monday, February 26th, 14:30–15:30, Hall 4, Auditorium 1

Ovum will be watching HTC closely at this year's MWC. The company launched a new version of its VR headset at CES last month and completed the sale of part of its smartphone business unit to Google at the end of January. HTC has not turned a profit on its smartphone sales since 2014, while its sales volume has declined from 35 million in 2011 to under 5 million in 2017. HTC's future in the smartphone market is in doubt, so Chairperson and CEO Cher Wang's keynote address could signal a major shift in the company's direction.

07 Vodafone

Vittorio Colao, Monday, February 26th, 16:00–17:30, Hall 4, Auditorium A (ministerial program, invite only)

While not keynoting at the event, Vittorio Colao is speaking on a panel about service provider technology investments, with a focus on 5G. Off the back of a recent run of acquisitions of cable operators, we expect Colao to set out the success of Vodafone's converged operator strategy and the richness of its fixed-line credentials.

Vodafone is likely to take a pragmatic approach to 5G, which will deflate some of the 5G hype that we expect to hear from many of the vendors at MWC. Unlike operators in the US, Korea, UAE, China, and Japan, Vodafone will likely defer the importance of 5G until the 2020–21 time frame, while placing more attention on the commercial IoT applications that 5G brings.

Through the lens of its V by Vodafone IoT platform, we expect to hear how IoT business is becoming a more significant topic that may hold some potential for revenue growth for Vodafone. On the content side, Vodafone will continue to distribute and resell video content rather than acquire or produce expensive content of its own. Finally, we expect Colao to use part of this session to call for lighter regulation and a more balanced playing field for service providers in relation to internet players.

08 Amdocs

Off the back of Amdocs' recent acquisition of Vubiquity, a premium content and technology solutions provider, we'll be interested to see how Amdocs' new assets will enhance its content position. Amdocs' focus at the event will be on driving continuous innovation, designing intelligent digital services, seizing entertainment opportunities, improving efficiency with zero-touch operations, accelerating business with service-aware networks, and putting artificial intelligence into action.

09 Reliance Jio

Whether or not it has a large presence at the event, many will be talking about Reliance Jio at MWC. The deep-pocketed operator, which built a network and offered free mobile voice and data services nationwide for six months to gain a foothold in the market, has rapidly developed a large business that has finally turned profitable. Others will follow this business model, but expect to hear about the model mostly in relation to IoT start-ups. The model is viable, but the capital to get it off the ground is substantial and therefore only available to the very few.

10 Alibaba Cloud

Wang Yeming, Tuesday, February 27th, 09:00–12:30, Hall 1, 1A70

Alibaba Cloud, the largest cloud computing provider in China, operates more than 13 data centers, with another two expected in India and Indonesia. While not widely known in Europe, Alibaba Cloud will likely view MWC as an opportunity to reignite its European presence. Alibaba Cloud provides cloud computing, IaaS, PaaS, and SaaS, including services such as e-commerce, big data, IoT, and data customization. We expect that it will launch its own AI service at the event.

11 Huawei

Like all vendors, Huawei is pushing 5G and the revenue and operational benefits of the technology. To underline this message, you can expect to hear about Huawei's 5G trials with NTT DoCoMo in readiness for the 2020 Olympics. Huawei is similarly placing emphasis on AI and how it drives digital transformation. It will look to promote AI and capture its impact through the paradigm of an "exponential organization" that is able to make better, faster decisions through artificial intelligence. Details are scant, so we will be heading to the stand to establish how it is realizing these benefits for enterprises and service providers.

12 DT

DT is not delivering a keynote this year, but it has made our list because the business is investing in content and smart home services. On the heels of hinting at ANGA Com that it was considering investing in original content production, in September, DT announced that it plans to move forward with this plan. So, we hope to get a deeper understanding of its content strategy at MWC. DT's smart home strategy is among the most complete in the industry, and we will be seeking an update on progress here. As a telco that is including the smart home in its standard broadband router strategy, DT is heading in the right direction in terms of the smart home. We expect to see an update of its Qivicon product and possibly the expansion of its partnerships here.

We will be looking for an update from the enterprise business, T-Systems, where enterprise sales fell by 2.9% versus last year. In particular, we will be looking at progress against its target to generate more than €2bn annually from the cloud business by year-end 2018, doubling its June 2015 figures of €1bn (a target set in 2013). DT is also pushing hard on IoT capabilities and on taking advantage of its investments in its IoT platform and partnerships, and looking ahead, to big data. However, it has been slower than some of its competitors in getting the word out to the market effectively.

13 Nokia

Expect to hear about Nokia's ReefShark chipsets, which bring network operating efficiencies with one eye on the growing compute and radio requirements of 5G. We also expect to hear about Nokia's early trials of 5G and how it is deploying "5G ready" antennae, as well as its plans to deploy VoLTE and 5G capabilities with China Unicom.

How accurate were our 2017 predictions?

Looking through 2017 predictions a year on, there is little cause for embarrassment:

- **Greater collaboration between telcos and the OTT players:** Led by Netflix's CEO Reed Hastings, OTT players called for collaboration with the mobile industry. Hastings encouraged operators to offer tariffs that allow consumers to watch unlimited amounts of video without additional data charges, adding that Netflix was open to operators optimizing traffic generated by its video streams to conserve bandwidth and reduce congestion and costs. Hastings stopped short of discussing more expansive forms of partnership related to collaborative forms of video delivery and monetization. But Netflix's actions have spoken louder than words, with the company striking a number of mobile bundling and carrier billing deals in 2017.
- **A flurry of 5G infrastructure launches:** Both Samsung and ZTE announced their pre-5G portfolios at last year's MWC. Of the two, Samsung was broader as it promised a 5G home router base station and a network-wide management system.
- **New devices, but no Samsung 8:** We saw the resurgence of some old friends, notably Nokia (the old-school 3310 device) and BlackBerry, each of whom launched new devices. Sony launched the Xperia XZ Premium, a 5.5-inch smartphone with a 4K HDR screen. Huawei launched its Smartwatch 2, while Alcatel launched its visually spectacular A5 LED device. As expected, there were no major device announcements. This year, we will see the Samsung 9.
- **AI everywhere and the smarter network:** The "thinking network," which is powered by growing AI abilities that are incorporated into the service provider network, enables a broader set of services. In the keynote by its CEO José María Álvarez-Pallete López and Chema Alonso, Telefónica launched its "fourth platform" and its AI assistant Aura, the fruit of a long-running project aimed at developing a layer of intelligence interlinking access services, IT systems, products, and services. The AI-based digital assistant will give customers full visibility across Telefónica services, helping them manage their personal information and understand what they share with third-party companies. On the vendor side, Amdocs launched its real-time digital intelligence platform, combining its domain expertise in telecoms with AI capabilities from cognitive-computing services from IBM's Watson platform.
- **A growing prominence of mobile money:** Orange's chief strategic officer, Bénédicte Javelot, confirmed that Orange is shortly to become a disruptor itself, via the launch of Orange Bank in just a few weeks. Orange Bank will build on the success of Orange Money in the Middle East and Africa, as it aims to become the number one digital partner in the lives of its customers within the next three years.

Methodology

Research gathered via primary consumer and enterprise research, vendor briefings, and analyst market analysis and opinion.

Further reading

"Gearing up for MWC 2018," CES003-000095 (January 2018)

MWC 2017: What to Expect, TE0009-001602 (February 2017)

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