M2M Research Series

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What are the key business opportunities in the emerging wireless M2M market? Berg Insight's M2M Research Series is a unique series of market reports published on a quarterly basis. Each title offers detailed analysis of a specific vertical application area such as smart metering, fleet management or vehicle telematics. Once per year we also publish summaries of our research with detailed forecasts for the Global and European wireless M2M markets, respectively.

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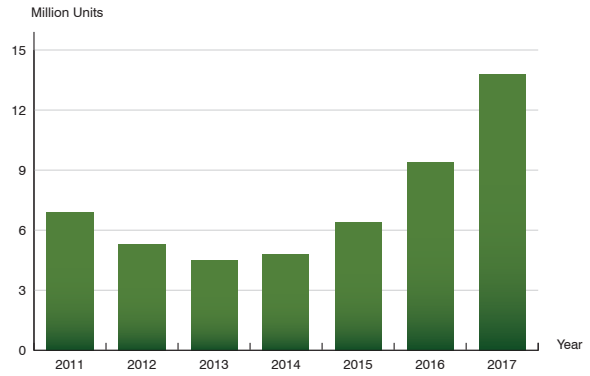
Wearable technology is a new promising segment in the consumer M2M market

The consumer electronics market has experienced an incredible growth during the digitalisation era in the last decade. Today, dedicated devices such as PNDs, digital cameras, handheld gaming consoles, e-readers and PMPs are facing fierce competition from converged multipurpose devices such as smartphones and tablets. Wearable technology is an emerging product category with very high growth potential in the coming years. Mobility, connectivity and personalisation are three of the most important trends within consumer electronics. Instant access to information and social networks as well as consuming and sharing media are important parts of people's digital lifestyles. The growing desire for people to stay connected makes wireless consumer devices an opportunity for the telecom industry to expand their market beyond mobile handsets.

Consumer electronics has emerged as a new application category for wireless M2M in the past years. Consumer M2M devices are neither classified as handsets, PCs, tablets nor traditional M2M devices. The product category includes e-readers, portable media players, gaming consoles, digital cameras, digital photo frames, PNDs, speed camera warning devices, personal tracking devices, consumer health devices, sensor devices, smart glasses, smart watches and wearable activity trackers. The reasons for cellular connectivity vary and are often a way to meet the needs for connected features introduced in multipurpose devices. Media and entertainment devices can offer instant distribution of digital content. Imaging devices enable instant media sharing on social networks and seamless usage of cloud storage services. Personal navigation devices and speed camera warning devices can provide users with real time traffic information and other online content. Personal tracking devices and consumer health products enable remote monitoring of sensor statuses such as location, blood pressure and glucose levels. Wearable technology allows for mobility and increased autonomy which can enhance the usability of these products.

The market for consumer M2M devices is still in its early stage. Until now, the most connected device categories are e-readers and PNDs. New connected products such as Sony's PS Vita and Samsung's Galaxy cameras as well as smaller scale success stories from newer entrants such as the PocketFinder from Location Based Technologies show the market potential. Berg Insight estimates that total shipments of consumer M2M devices reached 5.3 million devices in 2012. Growing at a compound annual growth rate of 21.1 percent, the shipments are expected to reach 13.8 million devices by 2017. Berg Insight predicts that smart watches, personal tracking devices and digital cameras will then be the best selling product categories, accounting for over 23 percent, 17 percent and 14 percent respectively of the total shipments. Berg Insight estimates that the number of connected M2M consumer devices reached 15.1 million at the end of 2012. Growing at a compound annual growth rate of 16.8 percent, the number of network connections from consumer M2M devices are expected to reach 32.8 million in 2017. Due to early mass adoption and relatively steady sales of the 3G equipped Kindle from Amazon, E-readers will at the end of the forecast period still be the most common consumer M2M device accounting for 27 percent of the total number of connections. PNDs, smart watches and personal tracking & monitoring devices will at the same time account for 17 percent, 13 percent and 12 percent respectively of the total number of connections.



Annual shipments of consumer M2M devices with embedded cellular connectivity, million units (World 2011–2017)

North America is currently the most important market for consumer M2M devices and accounted for about 3 million of the total device shipments in 2012. The second largest market is Europe with 1.7 million device shipments followed by the rest of world with 0.5 million device shipments. Berg Insight anticipates that North America will remain the largest region with a market share of 36 percent in 2017. Europe and the rest of world will account for 34 and 30 percent respectively of the connected device shipments in the same year. Continuously decreasing prices of cellular modules and chipsets are key developments for growth in the connectivity market. The deployment of high-speed cellular networks such as HSPA+ and LTE on most markets is another important driver enabling bandwidth-hungry applications. The exploding sales of connected mobile broadband products such as tablets further illustrates the benefits of cellular connectivity and will increase the demand for other consumer M2M devices as well. The telecom industry is depending on multiple connections per user for growth. Business model innovation is required in order to make it attractive for consumers to have multiple devices with cellular connections.

This report answers the following questions:

- Which consumer devices offer the best potential for embedded cellular connectivity?
- What are the main drivers behind growth in Europe, North America and ROW?
- When will cellular connectivity be a common option in consumer devices?
- What are the experiences from adding cellular connectivity to consumer devices so far?
- How will the global consumer device market evolve over the next five years?
- In what ways will LTE impact the consumer M2M device market?
- How can the mobile industry contribute to the adoption of wireless technology in consumer electronics?
- Which are the leading manufacturers of consumer electronics products?

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Glossary

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Johan Svanberg is a Senior Analyst with a Masters degree from Chalmers University of Technology. He joined Berg Insight in 2007 and his areas of expertise include embedded connectivity and wireless M2M markets.

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