

Summary

Executive summary

Smart homes and home automation are ambiguous terms used in reference to a wide range of solutions for controlling, monitoring and automating functions in the home. Berg Insight's definition of a smart home system requires that it has a smartphone app or a web portal as a user interface. Devices that only can be controlled with switches, timers, sensors and remote controls are thus not included in the scope of this study. Smart home systems can be grouped into seven primary categories: security and access control systems; energy management and climate control systems; audio-visual and entertainment systems; lighting and window control systems; healthcare and assisted living systems; home appliances and service robotics.

The North American smart home market recorded strong growth during 2017. The installed base of smart home systems increased by 51.1 percent to reach 82.7 million at the year-end. An estimated 8.3 million of these were multifunction or whole-home systems whereas 74.4 million were point solutions designed for one specific function. As some homes have more than one smart system in use, the installed base totalled an estimated 22.3 million smart homes at the end of the year. This corresponds to 15.9 percent of all households, placing North America as the most advanced smart home market in the world. Between 2017 and 2022, the number of households that adopt smart home systems is forecasted to grow at a compound annual growth rate (CAGR) of 23.1 percent, resulting in 63.0 million smart homes. Market revenues reached US\$ 12.0 billion (€ 10.6 billion) in 2017, an increase of 46.4 percent year-on-year. The market is expected to grow at a CAGR of 24.7 percent between 2017 and 2022, reaching US\$ 36.0 billion (€ 32.0 billion) in yearly revenues at the end of the forecast period.

The European market for smart home systems is still a few years behind North America, both in terms of market penetration and maturity. At the end of 2017, there was a total of 57.6 million smart home systems in use in the EU28+2 countries, up from 40.0 million in the previous year. Around 4.3 million of these systems were multifunction or whole-home

systems whereas 53.3 million were point solutions. This corresponds to around 22.5 million smart homes when overlaps are taken into account, meaning that 9.9 percent of all households in Europe were smart at the end of the year. The number of European households to adopt smart home systems is forecasted to grow at a compound annual growth rate (CAGR) of 30.2 percent during the next five years, resulting in 84.0 million smart homes by 2022. Market revenues grew by 48.2 percent to € 8.9 billion (US\$ 10.0 billion) in 2017. The market is forecasted to grow at a CAGR of 26.2 percent between 2017 and 2022 to reach € 28.4 billion (US\$ 32.0 billion) at the end of the forecast period.

A point solution will in most cases constitute the consumer's first smart home purchase. Compared to whole-home systems, point solutions generated 61 percent of the combined market revenues in North America and Europe. The most successful point solutions to date, in terms of sold units, include smart thermostats, smart lamps, smart plugs, network cameras, multi-room audio systems as well as voice controlled smart speakers. These products are marketed by incumbent OEMs such as Signify, Honeywell, Danfoss, Belkin, Chamberlain, Kwikset and Assa Abloy; service providers such as Altice France and Centrica; and newer entrants such as Nest, Ecobee, Sonos, Canary, Proove, Netatmo, IKEA, Velux and D-Link. In the whole-home system market, traditional home automation system vendors such as Crestron Electronics, Control4, Gira and Jung are facing new competition as companies from adjacent industries have entered the market. Communications and security service providers such as ADT, Vivint, Comcast, Brinks Home Security (formerly MONI/Monitronics) and AT&T have established themselves among the largest whole-home solution vendors in North America. Major vendors in Europe include eQ-3, Deutsche Telekom, Verisure, Somfy, Innogy and Loxone.

Smart speakers with built-in voice assistants have had a major impact on the smart home industry in 2017. Amazon and Google are the largest vendors of such devices, having a combined market share of over 90 percent. During 2017, many of the well-known smart home device and system vendors have made their products compatible with Amazon Alexa and Google Assistant and more and more consumers see the benefits of using smart speakers as the main interface for the smart home. The high growth in the smart homes market can partly be credited to the popularity of smart speakers.