

What types of smart home devices are most widely used in Australian households, including smart speakers, security devices and other smart home appliances?

The adoption of smart home devices in Australia continues to rise as more households integrate them into their daily lives. Smart speakers are the leading smart home devices in Australian households, with 12 million in use as of 2021. Alongside smart lighting systems and thermostats, these devices allow for convenient remote control and scheduling of appliances. Smart security devices like door locks and cameras improve home safety, while smart kitchen appliances such as ovens and refrigerators are gaining popularity. Research and Markets report that in addition to smart speakers, other widely used smart home devices include interactive security systems, monitoring cameras, and motion sensors.

Who are the most significant suppliers of smart home devices for Australian consumers? Has this changed over time?

The most significant suppliers of smart home devices for Australian consumers are global technology companies such as Amazon, Google, Apple, Samsung, and Philips. These companies provide many smart home devices, including smart speakers, lighting systems, thermostats, security devices, and kitchen appliances.

The smart home market is dynamic and constantly evolving, with new devices and brands emerging regularly. Major global tech companies like Amazon, Google, Apple, Samsung, and Philips are primary suppliers of smart home devices for Australians. They offer many smart home devices, including smart speakers, lighting systems, security devices, thermostats, and kitchen appliances. The smart speaker market has grown significantly, with Amazon and Google leading in market share. Smart lighting systems have become more fragmented, with Philips Hue facing increased competition from other companies. According to a 2022 online survey of 860 Australian consumers, Google Nest is the top brand for smart home management devices.

What are the main reasons for using a smart home device? What are the rates of smart home device usage among Australian consumers regarding the number of active users, frequency of use and the amount of data stored? Are these changing over time?

Smart home devices are primarily used for convenience, energy efficiency, improved security, and entertainment. These devices can make daily tasks easier and provide remote access to home security systems while reducing energy consumption and providing entertainment options. According to a 2021 survey by Telsyte, 69% of Australian households have at least one smart home device, with an average of five devices per household. Smart speakers are the most popular device type and are used daily by 55% of owners. As more households adopt smart home devices, the amount of data stored by these devices is also increasing. When investing in smart home technology, Australians prioritize sustainability, safety, security, convenience, and control.

How do consumers tend to choose their smart home devices? What factors do they consider when choosing between different suppliers? To what extent do users use the same supplier for their smart home devices and other interconnected devices (e.g. mobile phones)? To what extent do users use multiple different suppliers for their smart home devices and other interconnected devices?

Rising disposable income and changing lifestyles are driving the trend towards home connectivity in Australia. When choosing a smart home device, consumers consider factors like price, brand reputation, functionality, ease of use, and compatibility with other devices. Compatibility with other devices is crucial, and consumers may also consider the quality of customer service and technical support, availability of additional features or services, and device security. The factors influencing consumer choice can vary widely depending on the individual and the specific device or brand. Some users prefer to stick with one supplier for all their smart home devices, while others choose based on individual needs and preferences.

What types of consumer data are collected on smart home devices? How is this data used by the digital platform that collected the data? What other products and services is this data being used to provide (including additional revenue-generating products and services offered by the digital platform that collected the data)? Is any of this data provided to third parties? To what extent do consumers understand the data collection practices when using a smart home device?

Smart home devices collect a broad range of consumer data, including usage patterns, location data, preferences, and biometric data like voice or facial recognition. This data is used to improve device

functionality or offer additional services, such as targeted advertising or data analytics. It also significantly improves user experience and enhance device security. Third parties may also access this data to provide additional features after the consumer agrees with their privacy agreement. Consumer understanding of data collection practices varies widely, indicating a need for greater transparency and education around data collection. Privacy policies and terms of service documents outlining data collection practices are often lengthy and complex, and consumers must read and comprehend them before using a smart home device. Consumer can use contact details enclosed with the product to contact manufacturer for more details.

To what extent do smart home devices interoperate with other products or services within a digital platforms' ecosystem (for example, Alphabet's Google Nest products with Google Photos or Apple's smart home devices and its mobile operating system or App Store)?

Smart home devices can often interoperate with other products and services within a digital platform's ecosystem. This allows for seamless control of multiple devices through a single app or platform. For instance, Google Nest devices can integrate with other Google services such as Google Photos and Google Assistant, while Apple's smart home devices can integrate with its mobile operating system and App Store, enabling control through Siri or other Apple services.

Interoperability is a key factor in the smart home industry, allowing consumers greater flexibility and ease of use. Matter is a new open-source standard that aims to simplify the smart home ecosystem by allowing internet-connected devices from different manufacturers to communicate securely. The standard fosters interoperability among devices, regardless of brand, and breaks down walled gardens in the smart home.

To what extent does the experience or functionality of a smart home device differ when used in conjunction with a device provided by a different firm?

When using a smart home device with a device provided by a different company, the experience and functionality of the device may differ due to compatibility issues caused by other communication protocols. For instance, a smart thermostat designed for Google Nest may not work well with a different smart home hub, limiting its features. While some manufacturers are improving interoperability and compatibility with other devices and platforms, a universal standard for smart home devices like Matter could address these issues. With Matter, internet-connected devices from different manufacturers can communicate quickly and securely, leading to a more seamless user experience.

What consumer benefits arise from the provision of smart home devices in Australia by firms which also provide a suite of other products or services?

Firms that offer a range of products and services in addition to smart home devices can provide several benefits to consumers in Australia. Firstly, a seamless and integrated experience can be achieved when using different devices and services from the same company, simplifying the user experience and reducing the need for complex set-up processes. Secondly, data and insights from other offerings can be leveraged to deliver more personalized user experiences. For example, a company offering both smart home devices and streaming services can use data on a user's viewing habits to tailor the operation of their smart home devices to their preferences. Finally, companies with a range of products and services can offer more comprehensive customer support, which is especially important for complex smart home systems. In summary, firms that provide a suite of other products and services can benefit consumers significantly, including a more integrated experience, personalized services, and comprehensive support.

What competition and consumer harms may arise from the provision of smart home devices in Australia by firms which also provide a suite of other products or services?

The provision of smart home devices by firms offering other products and services in Australia can raise concerns about competition and consumer harm. Companies may use their market power in one area to gain an unfair advantage in the smart home device market, leading to reduced competition, higher prices, and less innovation. Moreover, the risk of data misuse or abuse is another potential concern. Companies may use data collected from smart home devices for other purposes, such as targeted advertising, without users' consent. This can raise privacy concerns and result in a loss of consumer trust. Finally, the complexity of smart home systems and the interconnectivity of devices can lead to security vulnerabilities, putting consumers' personal information and physical safety at risk. Therefore, it is crucial to carefully monitor competition and consumer harm concerns to protect consumers and ensure competitive markets.