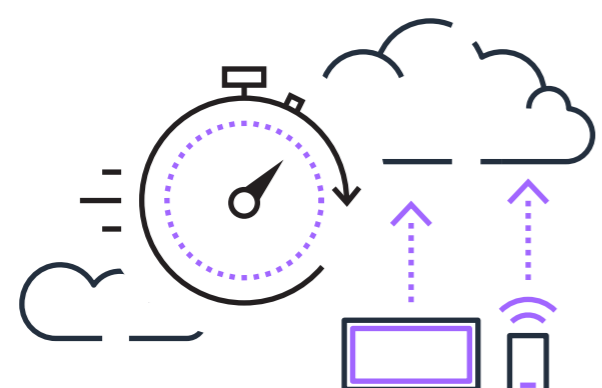


# Connected Homes with AWS IoT: Home Automation



With 940M smart home devices expected to be shipped worldwide by 2022, the connected home market is booming. AWS IoT supports home automation, a key use case, by providing software and services that help you build innovative capabilities and deliver a new customer experience.



## Consumer needs:

Integrated devices that respond to commands quickly and accurately, with or without stable cloud connections, and get better with time.

## Homes That Work for Consumers

Home automation connects and integrates devices so homes work autonomously for consumers, while learning and improving over time.



## AWS IoT Products

By considering a diverse range of devices and enabling capabilities such as device-based machine learning or cloud-based management and analytics, AWS IoT offers a holistic approach to creating home automation products and services.

<b>Amazon FreeRTOS:</b> Operating system for microcontrollers	<b>AWS Greengrass:</b> Gateway to bring cloud capabilities to the edge	<b>AWS IoT Core:</b> Secure device connectivity and messaging	<b>AWS IoT Device Management:</b> Fleet onboarding, management, and software updates	<b>AWS IoT Device Defender:</b> Fleet audit and protection	<b>AWS IoT Analytics:</b> Data analytics and intelligence

## Innovating Home Automation

Through the IoT suite, AWS provides the necessary building blocks to optimize what devices and the cloud can do.

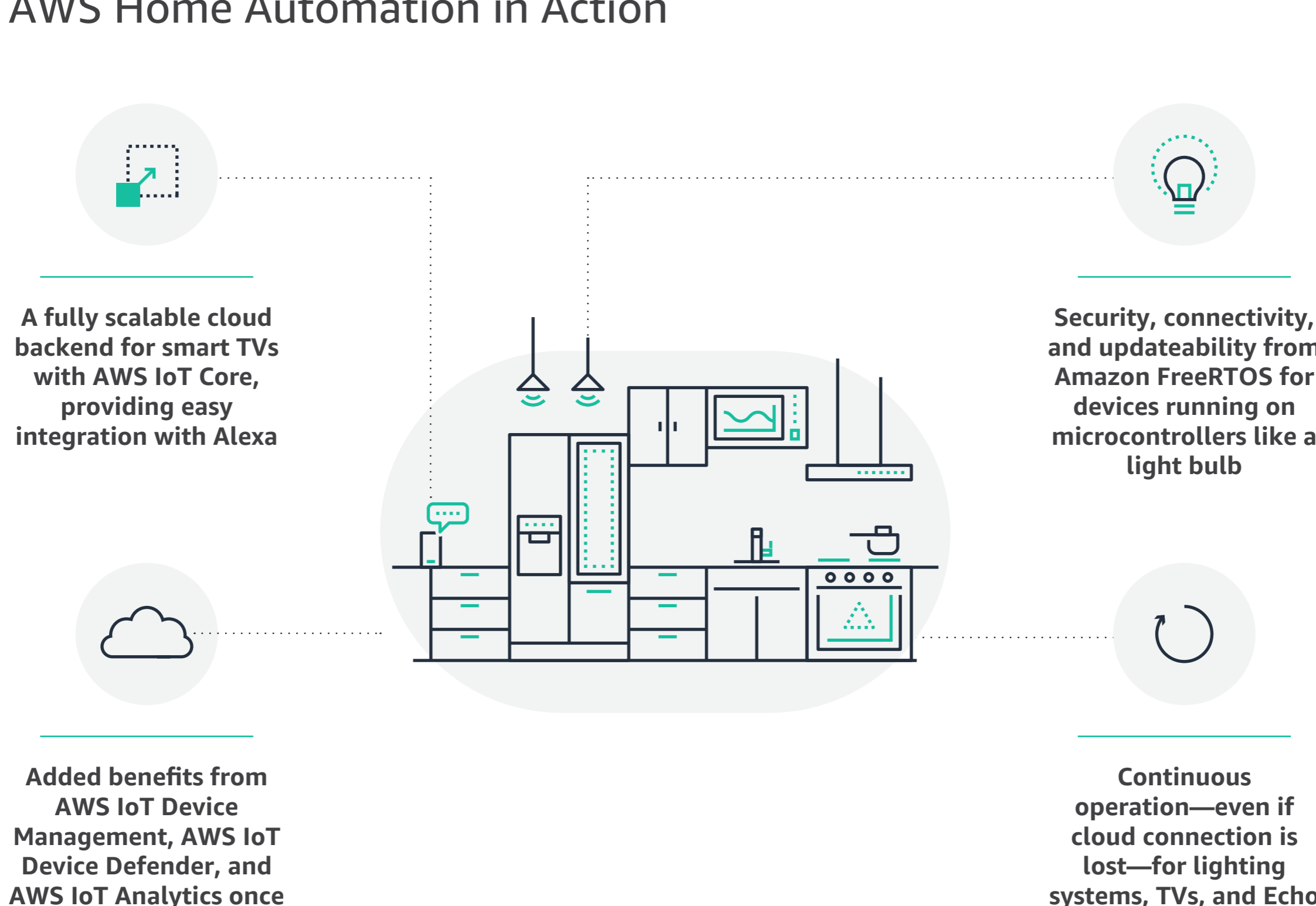
### Innovation on the device

<b>Built-in connectivity:</b> Cloud connectivity libraries with a tiny memory footprint for microcontroller-based devices	<b>Device security:</b> End-to-end encryption, authentication, and interfaces for key management	<b>Local communication:</b> Near-real time responses to local events while maintaining storage in the cloud
<b>Offline communication:</b> Continued operations without cloud connectivity, and synchronized data once connections restore	<b>Over-the-air updates:</b> Remote security updates, bug fixes, and firmware updates	

### Innovation in the cloud

<b>Reliable and persistent communication:</b> Supported connectivity with numerous communication protocols and program options to keep devices "listening" for long periods	<b>Responsiveness:</b> Scalable, low latent bi-directional communication accessible in many global regions	<b>Device management:</b> Onboarding, organization, and monitoring, creating a real-time fleet index with remote management capabilities
<b>Device insights:</b> Analytics for error logs, troubleshooting, predictive maintenance, and customer insights	<b>Low total cost of ownership:</b> Quick implementation for a faster time-to-market and elimination of custom, in-house infrastructure	

## AWS Home Automation in Action



AWS IoT gives you the tools to build responsive, secure, and intelligent devices that get better with time and improve consumers' lives.

Learn more about Home Automation with IoT

[aws.amazon.com/iot/connected-home/](https://aws.amazon.com/iot/connected-home/)