

Case Study

# Whirlpool

A Complex, Secure,  
and Scalable Solution



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### Whirlpool Corporation

Whirlpool is synonymous with quality, and is the number one major appliance manufacturer in the world. Committed to "delivering great design that fits seamlessly into life," the company markets a wide variety of appliances across well-loved brands like Whirlpool, KitchenAid, Maytag and Jenn-Air. Whirlpool strives to simplify the lives of its customers, and has a long history of technical innovation, including pioneering sensor technology that takes the guess-work out of cooking and laundry.

### Challenge

The Internet of Things (IoT) is a natural extension of Whirlpool's passion for improving the lives of customers. Smart, connected appliances promise to save consumers both time and money, and delight them with new opportunities in mobile and voice interfaces.

But executing IoT at the scale Whirlpool operates is complex:

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- 1) Connected appliances require detailed, multistep command protocols, going well beyond simple IoT devices like light bulbs and thermostats. This complexity increases rapidly across the sheer number of product categories Whirlpool operates in, including ovens, washing machines, dryers, dishwashers and refrigerators, and small appliances.
- 2) Whirlpool's IoT strategy includes a mobile app for each portfolio brand, and integrations with dozens of third-party services to create a truly connected experience.
- 3) Whirlpool is strategically rolling out connectivity to every new appliance, and will soon support millions of devices across the globe.

Whirlpool needed a partner that understood every aspect of IoT, from embedded to cloud to mobile, and could help architect a secure, scalable solution.

## Solution

Whirlpool transitioned its IoT-managed services to SpinDance in 2012, and the relationship quickly expanded to include embedded, cloud and mobile development. SpinDance's end-to-end approach to IoT made us an ideal partner for Whirlpool's connected vision.

Over the last four years, Whirlpool has engaged SpinDance engineers in a number of capacities:

- 1) Augmenting its in-house embedded development team to add product connectivity.
- 2) Provided the system design and development leadership to onboard dozens of connected product lines.
- 3) Integrate with a growing number of third-party services with the connected appliances, including Google's Nest thermostat; Amazon's Replenishment and Alexa services; and multiple energy providers.
- 4) Managed Whirlpool's North American cloud infrastructure using modern DevOps practices, ensuring a high level of uptime that gives customers a rock solid digital experience that mirrors Whirlpool's appliance reliability.

## Results

Through our engineering and IoT expertise, SpinDance has helped Whirlpool leverage IoT to grow its impressive market share and continue to be a market leader.

These efforts paid off at 2017's Consumer Electronic Show, where Whirlpool won multiple awards for its Zera connected composter, and won high praise for its Alexa-powered voice interfaces.



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