

AppKettle

Rapid prototype development of
'smart' kettle



AppKettle, a UK based start-up, wanted to create an internet enabled kettle that allowed users to control it remotely. They needed an external product development partner to help turn their concept into two high spec prototype models for demonstration at a trade show in China. The aim was to facilitate AppKettle finding further funding and a manufacturing partner.

Challenge ↵

AppKettle had some existing IP for a novel method of water heater control, for which they identified a market opportunity in the control of domestic kettles.

They wanted an external partner to develop their wireless kettle concept into a fully functional, high quality prototype that was suitable for demonstration at a trade show just nine weeks later.

This timeline was critical to allow them to generate interest with manufacturers and to attract further funding.

To deliver this requirement, it was essential that safety checks were carried out as part of the development to ensure the prototype was suitable for demonstration, and that the component parts were fabricated at a suitable standard for the trade show but with a view to future mass production.

AppKettle selected Sagentia because of our significant expertise in wireless communication systems and our track record of successfully delivering against similar ambitious timescales.

Approach ↵

To ensure we hit the 9 week deadline, the project was divided into a number of parallel workstreams.

The project was initiated with a kick-off workshop to understand the IP position and to focus on translating the existing concept into a detailed specification for development and manufacture.

We then worked with AppKettle to design and implement a new system architecture to support their requirements, including the need to be suitable for mass production in the future.

Leveraging our expertise in low cost consumer appliance development and our understanding of design for volume manufacture, we implemented a development plan including:

- ↵ Industrial design of the base unit including design of the component parts for a robust prototype;
- ↵ Design, build and test of the electronics, software and firmware;
- ↵ Full development of the iOS application taking into account the usability and design guidelines provided;
- ↵ Integration of all elements of the system.

Benefit ↵

Sagentia provided a broad technical skill base that complemented AppKettle's internal resources and expertise. Working in partnership with the client, the team was able to refine the concept and turn it into a robust working prototype within the tight delivery schedule.

The quality of the fully functioning system attracted many potential investors for AppKettle, who are now working with strategic manufacturing partners to turn the prototypes into final products.