“We aim to develop a new cloud-based business model offering new value by integrating different services. Partnering with Fujitsu, which has great expertise in the cloud and Big Data, we intend to launch a new business.”

Hiroyuki Kubotani
Chief Engineer, Cloud Solutions Center
R&D Division

Using cloud-enabled home appliances for a better lifestyle.

**At a glance**
- **Country:** Japan
- **Industry:** Electronics
- **Founded:** 1935
- **Employees:** 285,817 including affiliated companies
- **Website:** www.panasonic.net/

**Challenge**
Due to the growing ability to interconnect electrical and electronic devices at home, Panasonic envisaged applying Big Data analytics to smart appliance use data collected at the Point of Use (POU) to gain insights into consumer behavior.

**Solution**
In order to investigate the feasibility of cloud services using smart appliances, Panasonic and Fujitsu are conducted workshops and research. Panasonic’s R&D Division and Fujitsu launched a pilot project in April 2013 using smart appliances and cloud technology.

**Benefit**
- Confirmed viability of a business integrating smart home appliances with a cloud service
- Food producers can use data to develop insights around their products
- Can lead to better customer experience and more efficient operations
- Will create new opportunities for building new customer experiences and creating customer intimacy

shaping tomorrow with you
Challenge
Our growing ability to interconnect electrical and electronic devices at home with computer and network will lead to new services that deliver unprecedented comfort and convenience.

As network connects everything in the society, and the Internet of Things (IoT) becomes a reality, home electronics and white goods are being transformed into cloud-enabled, networked smart appliances. They are capable of transmitting consumer-generated data and the insights gained though analysis of this data will be fed back to households. The combination of networking, data harvesting and Big Data analytics will lead to innovative new services in line with personal, business, community and societal needs.

Leading electronics manufacturer Panasonic views this megatrend as an opportunity to enrich the lifestyles of the people who use its products. For example, with the participant’s permission, Panasonic envisages applying Big Data analytics to smart appliance use data collected at the Point of Use (POU). In order to investigate the feasibility of cloud services using smart appliances, Panasonic and Fujitsu are together conducting workshops and research. The pilot project leverages their respective strengths, namely, Panasonic’s data collected from smart appliances and Fujitsu’s cloud technology for efficient analysis and visualization of the data.

Solution
Panasonic’s R&D Division and Fujitsu launched a pilot project in April 2013 using smart appliances and cloud technology. Logs sent from smart appliances are analyzed in the cloud. The object is to verify whether raw data can be processed into useful information affording insights into consumer behavior.

The project involves Panasonic employees, using Panasonic’s steam oven in their homes. They connect to the cloud service via smartphones. The convergence service was provided by Fujitsu. Fujitsu also acts as a consultant for the project.

The first theme selected for the project is frozen food. Participants scan the barcode on the package of frozen food using their smartphone to receive the cooking data from Panasonic’s data center. On the smartphone they enter the quantity to be cooked and place the device against the oven. Then, the oven automatically starts cooking for the frozen food and simultaneously sends POU data to the cloud.

The aim is to enhance the convenience of home appliances and obtain information on consumer behavior from the POU data. This gives Panasonic a greater understanding of how their customers are using their products than they ever would from Point of Sale (POS) data alone. With this they can create new products and services much more tailored to the needs of their customers.

Benefit
Through this joint project, Panasonic has confirmed the viability of a business integrating smart home appliances with a cloud service. Analysis of data logs from participants in the cloud reveals, for example, the time, day, quantity, and type of food consumed. Food producers can use this to develop insights around their products - from portion sizing, packaging, even down to the quality of food itself. It is envisaged that statistical data harvested from consenting consumers’ smart appliances will be used for forecasting consumption of specific products, leading to better customer experience and more efficient operations.

Supermarket chains and other retailers would be able to use such a system to distribute special offers and e-coupons tailored to meet individuals’ preferences and lifestyles direct to their smartphones. For Panasonic, the advent of smart appliances plus the growing collaboration with partners in other industries will create new opportunities for building new customer experiences and creating customer intimacy. Analysis of data on smart appliance use in the home will reveal valuable insights into consumers’ latent needs that can shape a new generation of products and services. Once everything is connected, comfort and convenience will soar. Initiatives are already underway to make this happen.

Customer
Panasonic Corporation provides a wide variety of products, systems and services from consumer electronics products to industrial devices, building products and housing. Panasonic works hard to offer new value for better living in various areas such as homes, communities, businesses, the travel and car industries - helping to realize ‘A Better Life, A Better World’ for each individual customer.

Products and services
- Cloud Service
- Business Application Operational Data Management & Analytics