

Media Backgrounder Human Centric Innovation: Digital Co-creation in Agriculture-Iwata City

October, 2017

In agriculture, the practice known as hybriding is commonplace. This means taking the best characteristics of multiple different breeds and bringing them together, to create a single new version that is better than each of the contributing types. The whole is therefore greater than the sum of the parts. This is a great metaphor for the way that Fujitsu works with its customers to co-create digital transformations. A recent example of how this collaboration can bring great change is in the work Fujitsu recently undertook in Iwata City, Japan, helping to revitalize the ailing traditional agriculture industry.

The challenge - an ailing agricultural industry

This collaboration took place in Iwata City of the Shizouka Prefecture in Japan, located on the East Coast close to Mount Fuji. Iwata City has suffered a downturn in its main industry of manufacturing due to the global financial crisis of 2008 and enterprises shifting their operations abroad. It has tried to promote the recession-proof industry of agriculture to become its second key industry, utilizing its ideal location for agriculture, with abundant sunshine and access to ample fresh water supplies.

The solution – use technology to empower people

Fujitsu's unique approach to creating business and social innovation uses technology to empower people. This was the starting point when Fujitsu began a close collaboration with multiple organizations in Shizuoka Prefecture to implement a smart agriculture project. The vision behind the project was to combine the expertise of different participants in the local agricultural ecosystem, to co-create a new way of working that generated new value at every step of the process.

The initiative created the SAC iWATA farm – a smart agriculture initiative implemented on 8.5 hectares of farmland. The smart farm deployed technology to support the growing and management of a number of crops including coriander, peppers, kale and tomatoes.

Fujitsu's role was to help the farm grow vegetables in a controlled environment – to ensure the crops achieved optimum productivity while also containing the highest possible levels of vitamins and minerals. This was achieved by deploying IoT sensors to monitor and control every aspect of cultivation. Information gained from collected data is also shared with the rest of the ecosystem, contributing to society's collective knowledge about cultivating different types of vegetables.

The lwata city government was also closely involved in the project, in support of its objective of encouraging new businesses to the region.

A further key Fujitsu co-creation partner is the Masuda Seed company – a company with extensive experience in creating new seed varieties. To respond to increased market demand for kale, which has become a fashionable health food, the company developed a new variety that is softer, less bitter, and can be eaten raw or included in salads, stir-fries or smoothies. By working closely with the SAC iWATA farm to contribute cultivation know-how, Masuda has helped optimize how the vegetable is grown.

The result of the project – a growing agricultural ecosystem and a renewed interest in the region

The SAC iWATA farm, and sales of crops including the new kale variety, have both been a great success – so much so that the local government has received many enquiries from groups interested in operating similar initiatives in the area. This is particularly attractive for the local

government, since the benefits reach beyond just attracting new business: not only have more than one hundred new jobs already been created, but the whole local agricultural food chain is being revitalized through the emergence of supporting services and secondary markets.

Conclusion

By collaborating in this way in lwata, Fujitsu has deployed its technology in tandem with the expertise of different businesses, helping revitalize the entire food and agriculture value chain in the region, from cultivating seedlings to crop production, processing, shipping, and sales. The end result of this relatively modest smart agriculture project is real value that has been created, not just for lwata, but also the local community and Japanese agriculture as a whole.

Online resources

- Fujitsu Technology and Service Vision 2017 microsite: http://www.fujitsu.com/global/microsite/vision/president/index.html
- Fujitsu Human Centric Innovation: https://www.youtube.com/user/Fujitsuglobal
- Discover the key for digital co-creation: http://www.fujitsu.com/qlobal/microsite/vision/2017/?DLd
- Read the Fujitsu blog: http://blog.ts.fujitsu.com/
- Follow Fujitsu on Twitter: http://www.twitter.com/Fujitsu_Global
- Follow us on LinkedIn: http://www.linkedin.com/company/fujitsu
- Find Fujitsu on Facebook: http://www.facebook.com/FujitsulCT
- Fujitsu pictures and media server: http://mediaportal.ts.fujitsu.com/pages/portal.php
- For regular news updates, bookmark the Fujitsu newsroom: http://ts.fujitsu.com/ps2/nr/index.aspx

Media contacts Isabell Horvath

Director of PR,

Corporate Communications, Global Marketing

Tel.: +49 (89) 62060 4419

E-Mail: lsabell.Horvath@ts.fujitsu.com

About Fujitsu

Fujitsu is the leading Japanese information and communication technology (ICT) company, offering a full range of technology products, solutions and services. Approximately 155,000 Fujitsu people support customers in more than 100 countries. We use our experience and the power of ICT to shape the future of society with our customers. Fujitsu Limited (TSE: 6702) reported consolidated revenues of 4.5 trillion yen (US\$40 billion) for the fiscal year ended March 31, 2017. For more information, please see http://www.fujitsu.com.