



NEC Solution Innovators, Ltd.

Updated tablets allow customers to connect with regional financial institutions



NEC Solution Innovators project manager, Takuya Manabe, and his team often travel throughout Japan - not for pleasure but for work. A 27-year veteran in financial technology, he recently worked to bring financial services to farmers and residents in the countryside, who are mostly in what the Japanese refer to as their silver years. As the rural population ages, a number of financial institutions in the countryside have consolidated or closed down, leaving the remaining residents with even less access to essential services.

NEC Corporation provides a combination of products and solutions to meet the complex and ever-changing needs of its customers. They are a leader in integrating IT and network technologies that benefit businesses and people around the world, with more than 100,000 employees bringing the company's century of expertise in technological innovation to empower people, businesses, and society. Explaining the role of NEC SI, Manabe said, "NEC as a whole prides itself on providing social solutions. NEC SI's role within the company is to provide all-round, one-stop IT solutions to the organization. We work with various divisions such as consulting, marketing and sales within NEC."

"I play the role of an IT architect, planning the software framework and overall direction of the system, hardware, and network," said Manabe. "As system integration specialists, we develop software and hardware, and one of NEC group companies provides 24-hour all-year-round support domestically, so clients feel very secure using our system. I believe this is where our strength lies."

Manabe worked with two colleagues, Nobuhiko Kouchi and Akinobu Nishi, to come up with a solution that would enable farmers and people living in the countryside who do not have easy access to physical financial institutions facilities to carry out financial transactions. For years, financial institutions have used a system based on PDAs, but the small screens were hard to upgrade and the UI was uncomfortable for the customers they were visiting. It was difficult for the customers to both read documents and to sign them and, therefore, for the bankers to execute the necessary operations. They needed a more customer-friendly, accessible solution that takes advantage of the latest technology.

Kouchi, an assistant manager who has been with the company for 11 years, and Nishi, a sixth year IT engineer with the company, also specialize in financial solutions for systems such as the ATM server, supporting older PDAs, and developing applications for tablets. Each brought their own client expertise to develop a customized application to be used on Windows-based tablet.

Programming Roadblock

“Some of our clients were already using a specialized tablet for banking, but we decided to offer an easier-to-use tablet with better functions,” said Manabe. “We took feedback from the ground to get some ideas when the development process started. After several months of iteration, we realized that to make the tablet a success, UX would be a major factor.”

In order to achieve outstanding UX, the team decided to use WPF to develop the tablet application on the .NET Framework. The team has been using C/C++ as well as Microsoft technologies, but this was the first time for them to use WPF for actual development.

Kouchi said, “We were concerned with the decision internally. I asked my colleagues whether anyone had experience with WPF but it seemed no one had experienced it a lot.”

In order to succeed with the project, they needed assistance from outside, and Infragistics was able to support their project from the beginning. Infragistics’ platform specialists provided onsite training that covered fundamentals of WPF platform such as XAML, Layouts, Data Bindings, Commands, Styles, and Templates. In addition, Infragistics built a sample screen for the training to represent a business scenario the project needed to cover.

“Fortunately, we had a chance to have conversations with Infragistics to understand their components and service offerings. After the meeting, we decided to receive WPF training from Infragistics to acquire the necessary skills for the project. When we asked about our programming issues during the WPF training, Infragistics provided sample codes to solve the problem right away. The decision to work with Infragistics and the decision to use [Infragistics Ultimate UI for WPF](#) controls proved the crucial move in the eventual successful development. If not, it wouldn’t have helped how many engineers we had onboard at the time,” said Manabe.

Using Infragistics’ WPF controls for the development of the extracurricular assistance application, the product was launched three years after it was originally envisioned.

Infragistics' WPF controls help to make developers more productive in building Windows desktop apps using WPF. This broad array of controls includes high-performance charts, high-performance grids, a scheduling UI with agenda, and data entry controls that save developers time in creating new WPF applications.

After purchasing Infragistics WPF controls, Manabe and his team received priority support from Infragistics, as Infragistics support provided sample codes very quickly.

"We received tons of support and were surprised by the ease of use of the solutions provided," recalled Nishi, who was the main contact to interact with Infragistics Support Team. "Our main point of contact was email. We also used phone support service and received a response within 24-hours."

In this project, the features mainly utilized were Infragistics' WPF editor controls and reporting functions that were available at that time. Functions such as restricting the maximum number of digits in an editor and limit alphabet input were integrated using Ultimate UI for WPF.

“ What we appreciate the most is the robust training and support from Infragistics with regard to any programming issues in WPF platform, which we did not have experience. Thanks to this we were able to complete our project within budget and time frame. ”

Takuya Manabe - Project Manager for NEC Solution Innovators

Handy Solution for Rural Challenges

For end-use clients, the public relation offices from regional financial institutions, the main benefit of switching from PDAs was the intuitive and easy-to-use layout. The screen was larger for clearer viewing, and buttons were provided for various functions, as the older generation were not so used to tapping the screen or zooming in and out with finger swipes.

"Customers for the clients can do various banking services at their clients' home, in place of going to the bank with a bank booklet", said Kouchi. "There was also no need for clients' customers to sign papers physically, as these could be signed electronically online."



"The functionalities of the tablet can be tailored to clients' needs. And in the future we will add facial recognition features to eliminate the need for passwords," added Manabe.

Each tablet and application package requires customization for the client, and around 13 to 15 months is required from planning to set-up at the end-user. The first user of NEC SI's financial services tablet came onboard in May 2016, and by the end of 2017, five corporate clients were onboard.

" We will work to speed up the development process and churn out these tablets in the tens of thousands in a few years' time. We believe we can do this by using Ultimate UI to its maximum potential "

Takuya Manabe - Project Manager for NEC Solution Innovators

Start Your Own Success Story

To get your company's success story started, check out these samples to learn more about how [Infragistics Ultimate UI for WPF](#) enables developers to build high-performing applications quickly and easily. Then try Ultimate UI for WPF along with the full suite of Infragistics developer products available for a [free 30-day trial as part of Infragistics Ultimate](#).

About Infragistics

Infragistics is a worldwide leader in providing tools and solutions to accelerate application design and development, insights and collaboration for any organization. More than two million developers use Infragistics enterprise-ready UX and UI toolkits to rapidly prototype and build high-performing applications for the Cloud, Web, Windows, iOS and Android devices. Infragistics Enterprise Mobility solutions ReportPlus and SharePlus, give business users the latest advancements in self-service business intelligence and collaboration software. Additionally, Infragistics offers expert UX Services and award-winning support.