Tuomas Piikivi and his team develop the G family.

THE G FAMILY EVOLVES WITH THE CUSTOMER

Text by Raisa Saarela — Photos by Essi Lesonen

For the last few years, Program Manager Tuomas Piikivi's main responsibility with JOT Automation has been the development of the G3, an all-in-one type of testing device. His core team, along with other JOT experts, have helped bring the product even closer to the needs of customers.

– When I joined the team, we started to pay even more attention to how people actually use the device. We no longer concentrate only on the internal functionality of the device, but have adopted a more comprehensive mindset. We wanted to create a device that does not require the understanding of automation or mechatronics from our customers' testing engineers, Tuomas Piikivi says.

G3, short for Generation 3, is a device for the final, e.g. system-level, testing of smart phones. It enables the full analysis of a single device in 1 to 2 minutes. This time is enough for testing all the interfaces of a phone, including the camera, speakers, microphones, keys, and the antennas.

– It helps to save time and space. All you need is a single testing device, and products do not have to be carried around to different testing stations in the factory.

Long-term product development

The core team dedicated to developing the final testers are also the experts who work with the customer to find solutions and road mapping technologies. Additionally, there is a wide range of expertise supporting the core team, such as automation, electronics, mechanics and software specialists.

– As more and more features are added to smart devices, customers' testing strategies have to evolve. This means that not only products but also employees need to be able to develop and evolve, says Tuomas Piikivi.

We are operating on four different continents to help our customers to meet production volumes. The integration and deployment of the testing system can take anything between one and six months, but the work does not stop there. JOT's Customer Service and Support organization keeps equipment in tiptop shape and new adapters are deployed.

ROAD MAPPING TOGETHER WITH CUSTOMERS.

A wide variety of skills and expertise involved

A large share of the work requires interaction with customers, including the configuration of settings and the determination of testing conditions. This is why the core team gets involved with the customers even before the device is delivered.

– Working with testing devices requires a great variety of skills, because we need to comprehensively know not just our own product but also the customers' devices and the features that need to be tested. But that's actually the best part of this job – there are always new things coming up and no time to get bored, Piikivi says.

The heart of the G3 is the adapter, tailored according to the needs of the customers. When the product to be tested changes to another, only the adapter needs to be redesigned and replaced.

– Once the customer has provided us with test details and other data we need, it takes about two months to develop a product-specific adapter. Then we have a one-week training session with the responsible testing engineer, and then we can run elementary tests.

Fine-tuned testing for individual needs

During his three years with JOT, Tuomas Piikivi has become familiar with the company's products in many different projects. Actually, this is his second time round as a JOT employee: he first

worked for the company as a technician before graduation from the polytechnic.

– During the last few years, working methods at JOT have really evolved, and working here is incredibly interesting, Piikivi says.

– Our customers often have a dozen teams designing the different sensors, while almost all our employees need to know at least something about every sensing element.

TAILORING FOR KEY ACCOUNTS.

The field is also likely to provide a wealth of challenges in the future, and Tuomas Piikivi is already looking past tomorrow, as testing continues to become even more fine-tuned.

– As an example, it is no longer enough if the speaker makes some kind of noise. Now great sound is a must. We are paying more and more attention to the customization of our products.

This is achieved by designing modular testing applications and concepts. In the future, we want to be able to provide tailored test setups based on proven application modules.