

## SME IN THE SPOTLIGHT

# Technolution

It's all in the name: technology solutions creating value for business

Technolution is a technology integrator that brings business, technology and knowledge together. The company focuses on four domains: mobility, energy, industry, and public safety & security. Technolution has been an active partner in seven ITEA projects to date, all of which have been significant successes. Serge de Vos, CTO, reveals what it is that puts the spotlight on this SME to find out what makes it tick.

**Tomatoes and cucumbers**

"The good old Dutch greenhouse horticulture is where our roots lie," Serge begins. "It was here that 32 years ago four young dynamic engineers put their microprocessor knowledge to work for the climate control in these greenhouses to enhance the cultivation of tomatoes, cucumbers and other vegetables. This was innovative at the time because until then all the climate control had been analogue, and we came along with our digital microprocessor designs, including the hardware and embedded software. Something we are still doing today."

**Controlled growth**

In the meantime, Technolution has gradually

evolved and expanded and now employs around 200 staff. "The gradual development is important for us because we consider it essential to maintain the culture that made us what we are. So we try to control annual employee growth at around 10%. We want to hold on to the flexibility that makes us unique, and that means taking the time and care to ensure that people slot in to the culture." Serge speaks from experience since he also underwent the same process when he joined Technolution 20 years ago.

Technolution employs highly-educated professionals with a passion for technology, to create robust and attractive solutions that



matter. “We have a pretty open and informal character that ensures our doors are always open. We are highly technologically and practically driven, and our work atmosphere can best be described as informal and task-oriented. We think big but we work on solutions in small teams. That is a distinctive feature and keeps us dynamic and flexible. Given the pace of technology and the constantly changing environment in which we operate, to have such a structure and culture is indispensable in enabling us to perform at the top of our game.”

This game has been played largely in the Netherlands but, over the past five years or so, Technolution has witnessed a carefully managed expansion, particularly towards Scandinavia. “It began with the growing *Intertraffic* phenomenon in which Copenhagen wants to become a frontrunner, and we won a bid together with local partners to provide smart solutions to

enhance traffic flow in the city. So this was our first independent step over the border. The next phase is to use our reputation to extend further to the other Nordic countries.”

#### **Good fit**

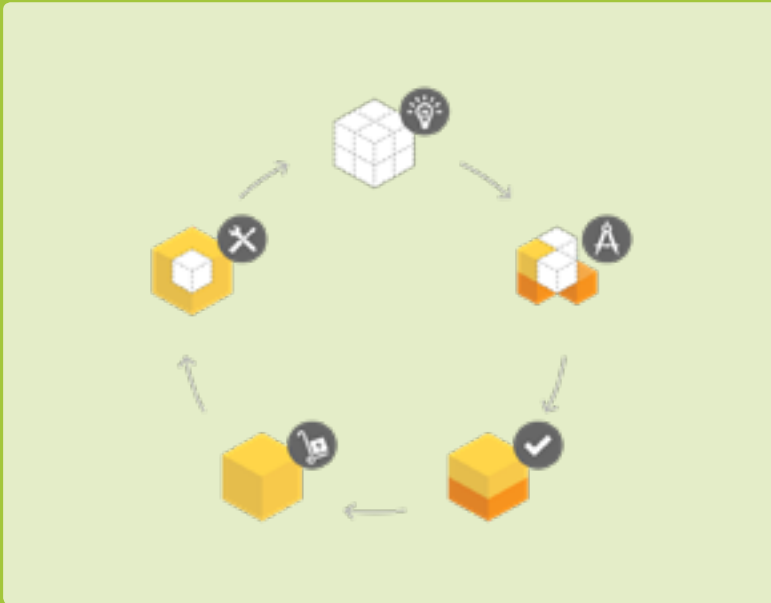
However, Technolution’s European dimension already found expression in the ITEA context when a number of years ago, the company became involved in the ITEA 2 HiPIP project at the invitation of Philips, already a familiar project partner for Technolution. This particular project targeted the development of affordable high-tech medical image-processing applications based on high-performance computing multicore, multiprocessor technologies. “Philips needed an SME and we were keen to boost our image-processing knowledge at the time, so it seemed a good fit. That was our first involvement with ITEA and it gave us a great opportunity to experience the

collaboration of a diverse consortium of large and small companies together with research institutes and academia.”

#### **Free, open exchange**

Technolution quickly felt at home in such an environment. Six more projects followed, with the likelihood of more to come in the future. “Our researchers were very enthusiastic – and still are – about this kind of collaboration. They get a lot from these projects, which means we do, too, as a company. Not only in terms of knowledge – that’s a give-and-take – but also in terms of building relationships and networks with other players in the industry, broadening cultural horizons and getting to know different business approaches. And, of course, they love working on a tangible end product, often a demonstrator. With the combination of hardware and embedded software together with electronics still very much a feature of our

## The Technolution Circle



Development always starts with an innovation or an idea, which may occur to us, to the client or in a partnership. We take a proactive approach, thinking along with our client. This is followed by the design phase where concepts are made of a system or product. This involves such things as R&D, passion for technology and domain knowledge. Then we realise a system or product through production or implementation. If required, we can set up a full supply chain so that we can deliver the product throughout its entire life cycle. We then deliver the system, the product or the service to the client. We carry out management and maintenance or life cycle management on the systems and products that we deliver. If new ideas for improvement arise from this, the circle starts again. In this way, we keep innovating, together with our clients.



you now and then. After all, at the beginning of a project you have to try to imagine where you will be in two years' time and what your needs will be. Usually, the results come later but in this project they have come early and we have been able to put them to good use."

current work, the physical end goal provides a real motivation and a real kick when you can actually demonstrate the proof of the pudding."

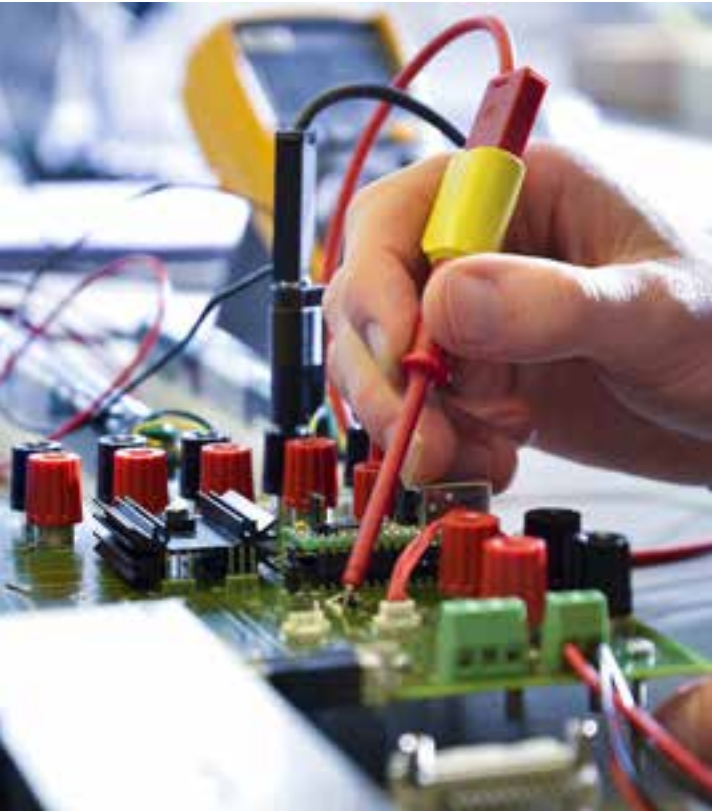
As a growing company, Technolution undertakes R&D for what it believes is absolutely necessary. "EUREKA, on the other hand, gives us the opportunity to be able to do more than just the necessary, so from this perspective EUREKA platforms like ITEA and PENTA are very important. They provide the context for a free and open exchange," Serge adds, "even though you may actually be competitors – in that room you are all on the same side focused on the same goals."

### Powerful knowledge exchange

The ITEA project in which Technolution is currently involved is the Finnish-led APPSTACLE project, the aim of which is to develop a car-to-cloud platform that uses open, vehicle-independent protocols. What drew Technolution to this project that kicked off in 2017 was the security aspect. "This has already generated value for us because the security knowledge we have gained is being put to use in an assignment we are doing for the Dutch government. We had not anticipated that we would so quickly be able to make such tangible use of this powerful knowledge exchange. These things can surprise

### Value added

For Technolution, the core of ITEA projects – software innovation – lies very close to the heart of its business. "The research that we do in these collaborative projects and the results that come out of them provide pointers to where we might steer our business objectives in future. Where do we see potential? More and more, this lies in being innovative in the solutions that we seek for our clients. So when we engage in a project like Medolution that entailed innovation in real-time image processing, we look at whether we can transfer and translate this innovation into the solutions we provide.



Ultimately, it's all in the software, and in being able to optimise and maximise performance and security such that they match the capacities of the hardware.”

Technolution maintains technology roadmaps to keep a close watch on technology trends. Active participation in collaborative projects helps in acquiring the knowledge of the technology developments that is needed to develop the right solutions. The Technolution Circle (see box on page 24) is a kind of blueprint for the solutions that Technolution creates for its clients. The parallels with the ITEA project process are fairly evident. “In a nutshell,” Serge concludes, “this is what we are about and that is one of the reasons why ITEA is and will remain a key platform for us.”

**More information**

<https://www.technolution.eu/en/>