

EVOLEO Technologies

EVOLEO Technologies was created 14 years ago in January 2007 in Maia (Porto), Portugal. The company of some 20 people is dedicated to the design and integration of small/medium size solutions that focus on reliable electronics, electromechanical and software systems. The company also holds EVOLEO Technologies GmbH in Munich, Germany, as part of the growing strategy. “Embedded and computational solutions, to be precise, in the B2B market” says Rodolfo Martins, founder and CEO.

Raison d'être

The company's key business areas are: Space (computer systems, embedded design), Infrastructures & Railways (monitoring, knowledge extraction for decision support) and Industrial Test Machines (quality control, test and automation systems), which Rodolfo describes as looking like ‘an ugly but effective fridge’. The root of EVOLEO's activities lies in electronics and embedded systems. “Our anchor is that EVOLEO is very horizontal with a multidisciplinary technical team that gives us a

Daring to dream

rare capability to adapt, be flexible and meet the specific needs of our customers and partners. It also helps us to participate and, especially, be useful in a very wide range of projects and topics, as long as they involve engineering. This is our main selling point. Not many companies do what we do – it's an approach that involves risks and makes it much harder to grow vertically. But,” Rodolfo adds, “the reason we exist is to be useful, to our people, the community we interact with and, if possible, to accomplish dreams! And for me, the tool to realise dreams is engineering.”

Software – the new goldmine

As for how important software innovation is, Rodolfo is in absolutely no doubt. “Everything we do – from machines to embedded systems for Space or Railways – requires software. Being an SME that focuses on the Cyber Physical Systems, computer systems in which a mechanism is controlled or monitored by computer-based algorithms, we simply can't go around the software, whether embedded or applicational. It has a growing impact on the performance and features of the different products and services we develop,” Rodolfo explains. “So, it is highly relevant for us



to participate and follow such developments. Even in areas not directly covered by ITEA projects, like Space, software is becoming the new gold mine with the democratisation of access to space and the easier recurrence of development, update, correction and implementation of AI and microelectronics. Hardware is very expensive to develop and implement physically. Software costs much less. But there is still some distrust of software, especially among ‘conservative’ industries, yet they can’t escape the need for it. After all, you can’t just send up a truck full of maintenance engineers to fix a glitch or a hack in space. Back on Earth, there are critical infrastructures where reliable software is essential. Software innovation plays a vital role, but we still have a very long way to go.”

The value of publicly funded research

For SMEs like EVOLEO publicly funded research projects are particularly relevant and contribute to knowledge transfer between universities, R&D centres, SMEs and larger enterprises, something that would otherwise not be possible. Rodolfo explains. “As an SME, it is difficult to allocate the resources we need to promote relevant research and innovation projects using private funds. The public funding allows resources to be dedicated to promoting such activities which are relevant for companies to continue to innovate their products and services. If it weren’t for

this, companies and even universities would have many fewer ongoing projects and most of them would probably be abandoned along the way. This is particularly relevant for low TRL and disruptive projects, where small companies cannot afford to risk their funds. But it is precisely such disruptive ideas that, when successful, have the most impact on and for society.”

The ITEA benefits

EVOLEO has been involved in a number of ITEA projects in the past, from automotive to energy domains, representing the diversity of its own business areas. Why become involved? “For the reasons mentioned. It gives us access to public funding and to the knowledge of universities and research centres. But it offers more besides. We benefit from business collaborations in the projects as well as the network of the ITEA Community. Through this we build up relationships and partnerships that can become long-term. It is also an environment in which we learn a lot, not only from a technical perspective but also in gaining insight into the trends in industry and society – what’s likely to be happening in the next three to five years.”

Public funding landscape

EVOLEO Technologies participates in various national and European research projects and has coordinated several H2020 and national

funding projects in recent years. “If we compare the landscape, we can see both benefits and drawbacks in the ITEA programme. For example, although the ITEA projects can often be more complex to manage, the consortia are usually larger in terms of number of entities and demonstrators. This has the advantage of allowing several partners to contribute their specific perspective for the same need and expertise, which boosts the critical mass for that project. With participation from industry and end users, small companies can learn and benefit from the experiences from their ways of working. On the other hand,” Rodolfo says, “having to go through two stages of proposal (PO + FPP) plus the national application phase is a complex and delaying process, which minimises the chances of good cooperation if funding approval comes at very different timings. This has been our experience in the past, and is the main reason why we have not participated in the latest round of ITEA projects. But we are aware that landscapes change and we would certainly be open to participating again, if the process enables us to do so. Because we know the rewards can be really beneficial. And because we know that collaboration is key to helping us fulfil our dream, our vision, of changing people’s lives for the better.”

More information

<http://evoleotech.com/>