

Growth and change Community

Insights from long-standing members

All good things come to an end: after 50 editions, this will be the final ITEA Magazine. But this is far from the only change that our Community has experienced over the years. How have we evolved and where are we heading? ITEA Chairman Dirk Elias invites four long-standing ITEA participants to share their recollections and future visions.

Despite their backgrounds in different corners of Europe, Dirk's discussion partners were all introduced to ITEA through project participation. **Johan Plomp** of the VTT Technical Research Centre of Finland has been with the organisation since the embryonic phase, having helped with the preparation of the VHE Middleware project in the very first ITEA Call. For **Thomas Bangemann** of Germany's Institut für Automation und Kommunikation e.V. (ifak), involvement began in 2001 with an invitation to join the PROTEUS project and provide it with greater scientific experience in the automation domain. And in Belgium in 2006, Barco's coordinator for funded projects **Dominique Segers** was assigned as the project lead for TWINS, later joining the ITEA Steering Group. **Aylin Yorulmaz**, meanwhile, was introduced to ITEA projects in 2010 while working as a software developer at founding board member Turkcell. Now at KoçSistem, she serves as one of the longest-standing members of the ITEA Steering Group.

"Having witnessed 15 years, I can say that ITEA has significantly evolved in both its programme and Community, such as in regard to emerging technologies and cross-sector integration. I believe the ITEA Community has grown to over 2,000

unique project partners from 37 countries. This expansion has contributed to projects that align with social responsibility and sustainability goals, which is what I like the most about it," Aylin starts.

"Things have certainly changed," nods Johan. "The way presentations are given for new projects is now partly online, which aligns with current trends. But there are still face-to-face components, which are very important. What I remember well – and which I appreciated a lot – were the Co-summits or exhibitions where projects presented their latest results. Those were eye-opening in the sense that they provided a great overview of the latest state-of-the-art technology developments and you could find the right people to collaborate with. As someone who has led projects, I had the opportunity to proudly present what we had achieved. It was also valuable to receive feedback from the audience on how our developments were perceived – whether good or bad."

"I can absolutely agree," says Thomas. "For me, my first project was an exceptional experience because it introduced me to this inspiring Community with its strong commitment to industrial ideas. I also really appreciate that the end of one project often

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sparks ideas for new ones and new challenges. It is inspiring to be part of a process where one project's results lay the groundwork for a possible next one. And last but not least, I have met many colleagues and made some good friends along the way."

"I hope you've all had that experience!" smiles Dirk. "Of course, ITEA stands for happiness as well. When you get to know people, that usually brings a moment of personal happiness. I like this very much and we want to keep it that way."

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Collaboration and constructive criticism

This sentiment is shared across the panel, who view ITEA's wide selection of partners as a vital foundation for innovation. "This mix of setting up and running a project with the different expertise and mindsets of large industrial players, SMEs and research partners is the exact chemistry for a great project," notes Dominique. "And in the last decades, this Community has really been enriched by a stronger participation of SMEs and other European countries, such as Türkiye, as well as non-European countries like South Korea."

"The way the ITEA Project Outline Preparation Days are organised makes it very easy to propose an idea and, while it may or may not fly and you may



^ Thomas Bangemann



^ Johan Plomp



^ Aylin Yorulmaz



^ Dominique Segers

or may not find partners, it's not discriminatory. Everyone can do it, and that openness is really incredible in this kind of programme," adds Johan. "Support is also very good during the project. I really like that the chairpersons have worked to ensure that reviews are constructive, focusing on how to improve the project in the remaining time rather than simply pointing out errors or failures. That's constructive criticism, and it's a big part of the Community that has developed."

"I really appreciate the traditions that ITEA has, specifically meetings where we bring together so many experienced people to let ideas grow. This makes it easier to find problems that really exist, then you can think about the challenges and solutions," Thomas continues. "If you look at the PO or FPP templates, they are presented in this exact way to guide you. I also greatly appreciate the excellent support from the ITEA Office. I've never had a question that remained unanswered, which is truly amazing – a big compliment to them. Finally, I really appreciate that evaluations are done by many people from both industry and academia who know the problems and understand the real needs. It's what enables good solutions that are useful in practice."

"On a personal level, the most important impact of this approach is that ITEA has made a strong ecosystem builder out of me and the companies around me," says Aylin. "It started a new era in my life and now I have solid experience with multiple sectors. I've become an expert in problem mining and a skilled solution concept developer, so I can build a complete multinational value chain for ITEA projects with success. The impact ITEA made on me comes back to ITEA as I bring new partners to the ecosystem."

Starting at the same point

As for his view on ITEA's most significant achievements, Johan's mind goes not to a specific project but to a sense of overall purpose. "I would say that the biggest challenge in Europe, especially compared to our competitors, is that we often lack unity. If you ask me, the main impact of ITEA is bringing both research and industrial partners together to work on common topics of relevance to further European technological capabilities and ensure that Europe remains competitive in the world."

"We now have several countries from outside of Europe, such as Singapore and Canada," reminds Dirk. "But I really agree with what you said on that unity: working together in a pre-competitive phase rather than starting separately to achieve similar goals. Of course, that's also a very important ingredient for the development of standards."

This prompts Thomas to recall one of his own personal highlights. "While not all projects can be pushed to standardisation, it is indeed rewarding when certain elements make their way into recognised standards. We managed to do that in the OPTIMUM project, where we contributed results to the OPC UA companion specifications for cranes. In 2022, it won the ITEA Award for Exceptional Excellence in Innovation, Standardisation and Business impact. That was a great experience, not just because of the ceremony but also the wonderful social aspect of working together."

"ITEA has facilitated numerous impactful projects over the years," agrees Aylin. "For me, a notable example was Reflexion, which focused on leveraging data science in manufacturing and won both the ITEA Award of Excellence and the Eureka Award in 2019. I remember that a Dutch SME enhanced a platform for scriptless test automation, achieving a 50% increase in speed and effectiveness over market alternatives. A Belgian SME was also involved and the development outcomes from the project resulted in an additional €2.5 million in revenue over five years. That's an amazing achievement."

And it wasn't just SMEs that benefited: Reflexion was one of 34 projects that Barco has so far participated in. Dominique fondly recalls Digital Cinema, which defined and developed a system

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covering all elements of film production, distribution, storage and replay, including alternative uses for digital infrastructure. "That project laid the foundation for Barco Cinema, which is Barco's most successful business unit, and more than 350 additional people were hired to cope with the demand created by digital cinema," he explains. "A second project I would like to mention is 3DPathology, paving the way for our first steps in the pathology market and resulting in the first ever FDA-approved digital pathology solution." In doing so, Barco and its partners helped create the foundation for same-day diagnosis and much more personalised treatment of cancer.

A new era

Taking their conversation into the future of ITEA, the participants have varying – but not conflicting – ideas for the next steps. For Thomas, the key is to remain grounded. "I'm very happy to be part of this Community and I truly appreciate all the steps that have been taken so far. For the ones that lie ahead, it's essential that ongoing strategies and technologies remain connected to the real world, especially in terms of the cyber-physical dimension. If we lose that connection, it wouldn't be beneficial. With my background in industrial automation, I see the immense potential that software, information and communication technologies bring to the operational technology world, but we must keep them rooted in the real world."

"I think it will benefit all of the projects if they also have a wider view of what is happening in their field," says Johan. "After all, a project is only a small entity and there are a number of them working on similar kinds of topics. I already mentioned the Co-summits and collaboration in ITEA. It would be so great to have even more of an exchange of results between projects. That could be done, for example, by organising seminars on topics that are interesting for several projects so that you can share results between the projects."

"Given the increasing importance of environmental and social governance, I believe that ITEA should further strengthen its commitment to sustainability. That might include more projects on green IT solutions, energy-efficient software and digital tools supporting climate action," suggests Aylin. "As ITEA's Community-driven approach is a major strength, I also hope to see even greater efforts to involve underrepresented regions, diverse talent pools and multidisciplinary teams. I believe ITEA will evolve in this way as it has always been – and will always be – a family of distinguished stakeholders that I'm truly happy to be part of."

Dominique agrees. "Given the fact that a lot of our partners are actively doing research and collaborating on a global scale, it would be encouraging to further explore the growth of the ITEA Community with non-European regions. This could be more involvement with Asian countries but also perhaps with the United States."

"These are all excellent points," concludes Dirk. "Yes, Johan, the next step is to get more organised; I think we need to have some groups from the Community that we can support with this concept. Regarding the Community, Aylin and Dominique, I'm extremely happy that so many companies are long-lasting in ITEA but also that pretty much half of the companies at last year's PO Days were new. And Thomas, I agree exactly with what you just said. The connection between the real and the virtual worlds is absolutely essential. I am convinced we will see a very strong, even disruptive development of those aspects in the next years. When we connect the real world and the virtual world in a reliable way, we will observe what happened with IT when cloud technologies were introduced. But this time, the effect will even be much bigger as all domains will benefit from this very significant technological change, which will also lead to new business models. Many products will become services. Altogether, this will be a game changer. Always remember that only the forerunners will be the real winners in this game - and ITEA will stimulate its Community to address this unique chance and to become leaders."