

THE ARTEMIS INDUSTRY ASSOCIATION AND THE EUREKA CLUSTER ITEA
DISCUSS THE BENEFITS OF THE DIGITAL TRANSFORMATION AND OUTLINE THE
AIMS OF THE DIGITAL INNOVATION FORUM 2017 EVENT

The talk of the town

The digital transformation is an imperative global topic that is accelerating the revolution of business activities, processes, competencies and models in a profound way, and will enable digital technologies to be fully leveraged. Often regarded as a threat to European industries, especially the more traditional ones, the digital transformation should be seen, and used, as an opportunity to create value for business and society. This is what the Digital Innovation Forum (DIF) 2017 is all about.

DIF 2017 comes to Amsterdam, the Netherlands, on 10-11 May, bringing digital transformation with it. For some, it's already been in town for a while; for others, it's a chance to get a bit closer to, and a bit more personal with, a paradigm shift that is irrevocably changing industry and society. Is it a threat to 'life as we know it', or is it an opportunity?

Europe's policy makers and industry leaders themselves are aware of the essence of speed in their pursuit of competitiveness and much-needed economic growth and jobs. The call for immediate and bold action to accelerate the digital transformation and seize business opportunities could not be clearer: act now or risk being left behind. DIF 2017, co-organised by the ARTEMIS Industry Association and the EUREKA Cluster ITEA, aims to embrace and share the digital transformation as an opportunity, and to come to terms with and tackle the changes that are inevitably implied. Pan European Networks is acting as media partner for the event.

The new reality

In its recently published Strategic Research Agenda, ARTEMIS highlighted the need, in creating a pathway to digital transformation, to enable a more agile and shorter development cycle of smart products, i.e. those products embedding software. Extending the use of digital platforms to build stronger ecosystems, with the participation of end users and suppliers, is essential to accelerate innovation and create new, innovative business models for jobs and value creation.

The digital transformation provides great prospects to open new markets to every business in Europe and beyond, bringing a new and wider variety of smarter products and services that will reshape the future and create new, unprecedented opportunities. This is the new reality. The world is constantly changing and developing whilst bringing great benefits to the end user. Bush tribesmen in rural Africa are enabled by digital banking where traditional banking is impossible, digitalisation is personalising healthcare, and 3D printing is customising all kinds of products from cars to food.

All-inclusive ecosystem

The Digital Innovation Forum intends to highlight these opportunities and benefits, anchoring the focus in four specific 'smart' themes: energy, health, manufacturing and mobility. The fourth industrial revolution is here and now. Its major power lies in combining digital technologies with

other advanced and leading-edge technologies. The creation of suitable solutions and services, as well as related innovation strategies and new business models, is helping to modernise Europe's manufacturing capabilities; in the near future, traditional factories will increasingly be transformed into smart digital manufacturing environments. ITEA Chairwoman Zeynep Sarilar is convinced that "digitalisation is not an option any more ... it is the only way to manage business in our current challenges".

With venture capitalists and key influencers from the global software innovation community, including European leaders such as Airbus, Barco, Bosch, Bull, Daimler, Ericsson, Philips, Siemens, Thales and Turkcell backing this event, Sarilar is clear about the need for the event to be all-inclusive. "We want to invite not only the industrialists, SMEs and public authorities, but also venture capitalists and start-ups. The time is right to create an environment for discussion and ideas, and to broaden the scope to a more global participation," she said.

Laila Gide, president of ARTEMIS Industry Association, explained the rationale behind the name of the event: "Digital – that's the clear focus we both have as organisations, and innovation underlines the fact that we want to look beyond research at all the aspects that make up this vital component of our industry. Forum – it's a place where people come and meet and share knowledge and ideas." She also stressed how central the 'ecosystem' notion is to the forum: "For the very dynamic and innovative start-ups to be able to play a full and fulfilling role, they must become part of an ecosystem that also offers the capital and human resources they need. The DIF provides a context for exploring how the ecosystem can support the actors involved and how they can help strengthen it."

Debunking the myths

To help allay the fears and disarm the threat about the implications of the digital transformation, ITEA co-organised a

Masterclass on Digital Transformation with the Swedish funding agency Vinnova in Stockholm last year, centring on best practices for industrial digitalisation and thereby on how to best accelerate business operations through it. A specific focus was on the more traditional industries for whom digitalisation could have a significant impact, and the masterclass thus provided an excellent opportunity for them to learn about the potential benefits for their production. By providing knowledge and concepts based on solid R&D to the wide industrial community, the digital transformation becomes less shrouded in myth, companies can expect to find new business opportunities, and European industry can grow stronger.

Unprecedented potential

Software innovation and cyber-physical systems – these are the focal areas of the co-organisers of DIF 2017 – and, by implication, the cyber-physical systems of systems that are characterised by a large number of physical devices and computing elements interconnected in both physical and informational terms, will offer unprecedented potential for more efficient operation, higher flexibility and adaptability, improved levels of reliability, and a better quality of products and services.

This potential is already being seized by both ARTEMIS-IA and ITEA. The significant gains in productivity (higher efficiency, lower costs) have already been demonstrated in the ARTEMIS Innovation Pilot Project Arrowhead, for example, which is geared to accelerate the development cycle and maximise the reuse and the time to market, and the more cost-efficient adoption and deployment of technological solutions, mastering their growing complexity, ensuring safety, security and privacy, allowing flexibility, facilitating interoperability between the various systems and, in the end, bringing innovative products to the market faster through collaborative automation.

The ITEA project Smart Energy Awareness Systems (SEAS) provides another example of where co-operation, within industry and between industry and consumers, will influence the quantity and type of energy consumed. By enabling energy, ICT and automation systems to collaborate at consumption sites, and by introducing dynamic and refined ICT-based solutions to control, monitor and estimate energy consumption, business models and solutions can be developed for energy market participants to incorporate micro-grid environments and active customers.

Digital Innovation Forum 2017

Organised by ARTEMIS-IA and ITEA

Where and when:

Amsterdam RAI – 10-11 May

What:

- Focus on digital transformation;
- 30+ speakers, panellists and venture capitalists;
- Workshops on emerging challenges for industry;
- SME and start-up innovation sessions and market;
- R&I exhibition; and
- Networking with delegates from around the globe.

Want to join us?

Register via the DIF website: <https://dif2017.org>

Liberating

Should people fear for their jobs? Will the ‘robots’ take over? One could argue that humans have for centuries been industrial robots – shackled to production lines doing monotonous, unrewarding work. The digital transformation should be seen as a liberating element in human work, bringing back the artisan. Of course, education plays a vital role here, not just in schools and universities but in lifelong learning. This is one of the keys to sustainable and fulfilling employability. Instead of punching rivets into metal sheets day in day out, people will program the robots to do this, to design and shape the process, supervise and control output, and even think and collaborate on solutions. As the world changes – and who can say what new age will be next – our capacity to change with it, to adjust, learn, and be agile, will be put to the test.

So the question we should be asking ourselves is not whether we should fear for our jobs, but how we can change to take advantage of the opportunities afforded by the digital transformation. While the focus of the past decade or so has been on how to exploit the technology for transformation, how we engage that transformation – in social, psychological, philosophical, cultural, and even political terms – is likely to become increasingly important in ensuring that the digital transformation succeeds in really achieving societal impact and economic benefit for citizens and societies.

The Digital Innovation Forum recognises how vital engagement in this process is and provides a vehicle for all those who are already engaged, or not, from large corporates to new start-ups, to share, learn and experience the digital transformation in action.

The ARTEMIS Industry Association
The EUREKA cluster ITEA

<https://dif2017.org/>
<https://artemis-ia.eu/>
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