



Who Builds Europe's Digital Future Matters

Author: Irina Ilieva

Partner: JA Europe

Europe's digital future will not be defined by technology alone. It will be shaped by who has access to it, who understands it, and who is empowered to build with it. As artificial intelligence, semiconductors and advanced digital systems become the backbone of Europe's economy, the real challenge is no longer innovation itself, but participation.

For young people across Europe, this transition is already real. Digital technologies and AI are embedded in everyday life—from education to work to civic participation. Insights from *PulseZ – Youth Voices for the Future of Europe* show that young Europeans are not primarily concerned about technology replacing jobs, but about fairness, access and agency. They ask who benefits from digital transformation, who sets the rules, and whether opportunities are distributed equally.

This matters because the systems being built today will determine not only how Europe competes globally, but who gets to take part in shaping that future.

Evidence shows that access to digital and AI-related skills remains uneven. *Vodafone Foundation's 2025 research* highlights the emergence of a growing AI skills gap in Europe. More than one in four young people report feeling left behind when it comes to using AI in education, with those from lower-income backgrounds most affected. While most young people believe AI will play a significant role in their professional lives, far fewer feel adequately prepared by current education systems.

This gap is not simply about skills. It is about opportunity. As digital systems increasingly shape recruitment, career progression and access to work, unequal access to skills risks becoming a structural barrier—locking some young people out of the very sectors Europe is counting on for its future growth.

Nowhere is this more visible than in semiconductors and intelligent systems. Behind every AI application, smart device or digital infrastructure lies a chip. Semiconductors power artificial intelligence, mobility, healthcare, energy systems and climate technologies. They are central to Europe's economic resilience and technological sovereignty. Yet Europe continues to face a shortage of specialised talent in this field, even as demand accelerates.

Closing this gap requires more than industrial investment. It requires clear, accessible pathways that connect education to real economic opportunity, particularly for young people entering the labour market.

This is where RESCHIP4EU comes in. The project brings together universities, industry and ecosystem partners to address Europe's talent challenge in chips and embedded systems by design. At its core is a doubledegree master's programme in Intelligent

Chips and Systems, built to combine advanced technical training with realworld application, international mobility and interdisciplinary thinking. Students in the programme study across multiple European countries, gain hands on experience through industrylinked internships, and benefit from financial support mechanisms that help widen access. Crucially, the programme is not only about acquiring knowledge. It is about enabling students to translate skills into meaningful roles in sectors that are shaping Europe's future.

This approach reflects a broader shift that young people themselves are calling for: not more abstract training, but clearer routes from learning to participation.

JA Europe's role within RESCHIP4EU is rooted in this same logic. For decades, JA Europe has worked to bridge the gap between education, employment and

policy, ensuring that millions of young people every year are not only prepared for the future of work, but able to enter it, navigate it and shape it. Across its programmes, JA Europe focuses on building skills while also addressing access, inclusion and opportunity—particularly in fastmoving sectors where barriers to entry can be high.

By connecting learning with real labourmarket needs, JA Europe helps young people strengthen their employability and transition more effectively from education into work.

Through initiatives such as EU Code Week, JA Europe scales digital and AI-related learning across Europe, turning policy priorities into real participation for young people.

Youth perspectives reinforce this need. Young people do not want to be passive recipients of technological change. They want a seat at the table. They want systems that recognise their potential and pathways that allow them to contribute.

Europe's digital transition will not succeed on innovation alone. It will succeed if advanced skills are accessible, learning pathways remain open, and young people from diverse backgrounds are enabled to participate in strategic sectors such as chips and intelligent systems.

Because who builds the future matters—and Europe's future will be stronger if it is built with young people, not just for them.