

#S3CONFERENCE2024

2–3 | December | 2024

Skills Development for Smart Specialization

Budapest

s3conference.nkfi.gov.hu



Set of recommendations based on lessons learnt from the implementation of Smart Specialization Strategies and success stories, as well as on the conceptual framework of skills development for smart specialization and providing evidence for better integration of skills development into S3 strategies.

The “Skills Development for Smart Specialisation” conference, held on 2-3 December 2024 in Budapest, was a pivotal event organized by Hungary’s National Research Development and Innovation Office (NRDIO) under the Hungarian EU presidency, with co-funding from the European Commission. This conference was hosted at the prestigious venue of the National University of Public Service to discuss the critical intersection of education, skills training, and regional development strategies.

The event aimed to explore how the known and applied tools of knowledge exploitation, the valorisation process, and its actors can contribute to the ethical and mutually beneficial utilization of the economic and social benefits derived from knowledge and research. The focus on smart specialisation is particularly relevant in the current climate, given the pressing need to enhance European competitiveness, which is closely linked to improving skills and was one of the key priorities of the Hungarian Presidency.

The high-level welcome notes were delivered by key figures, emphasizing the importance of aligning educational and training initiatives with the EU’s strategic goals. Discussions at the conference highlighted the role of education and training in empowering digital innovation and securing the EU’s future competitiveness. This dialogue is crucial as Europe faces significant challenges, including a competitive global market, an ageing workforce, and a skills deficit among younger workers.

The conference aligns with Hungary’s EU presidency priorities, which advocate for stronger cooperation between educators, training institutions, and employers to spur job growth and enhance economic competitiveness. Notably, the event addressed the importance of vocational education and training reforms and the need for effective inter-regional cooperation to support strategic success.

Overall, the “Skills Development for Smart Specialisation” conference significantly contributed to shaping the future of Europe’s economic and social landscape, fostering dialogue and collaboration among stakeholders to enhance Europe’s competitiveness through innovation and strategic skill development.

01

Smart specialization is key to European competitiveness.

The recent discussions on Smart Specialization and regional development focused on the critical issues shaping Europe's future competitiveness and innovation. The representative from the European Commission, in the opening keynote, emphasized that the EU must prioritize sustainable and fair competitiveness, economic security, and open strategic autonomy. She highlighted these as key areas for future policy focus, stressing that Europe's resilience depends on strengthening these pillars.



Similarly, the representative of the co-organiser university of the event reinforced in the keynote speech the importance of fostering skills development and building stronger connections between regions and institutions. He stressed that such collaboration is essential for overcoming current challenges and creating more cohesive and competitive regions.

Representative of Wallonia provided insights into the region's approach to Smart Specialization during the Belgian presidency. She outlined the region's four guiding principles: fostering innovative ecosystems, ensuring clarified governance, enhancing competitiveness and attractiveness, and aligning with broader European ambitions. These principles aim to create a more dynamic and resilient regional economy within the context of European goals.

One expert on Smart Specialization Strategy (S3) explained the importance of S3, which focuses on aligning policy support and investments with national and regional priorities to build on competitive advantages. He pointed out the emerging global and EU challenges, including the need for a comprehensive strategy that addresses decarbonisation, boosts competitiveness, and reduces dependencies.

A representative of the Commission further emphasized the need for a structured framework for skills development across various domains. He highlighted the importance of fostering a "brain gain," avoiding brain drain, and ensuring that Europe has the right skills to maintain and strengthen its position in the global market.

The Vice-President from the Hungarian Research Network also touched on the interconnectedness of economic growth, innovation, and skills, particularly in the context of digitalization and the green transition. He called for a shift in mindset and greater investment in digital tools to boost Europe's competitiveness and support regional development, underscoring the need for a more digitized and green economy.

During an interactive discussion, one group of professionals mentioned that new skills are needed as many jobs will become redundant in the future. In addition, identifying trends is crucial to stay up to date in important fields. The challenge is to create a more agile framework, sharing solutions and knowledge, while mapping and identifying future needs. People wish to stay in their companies, and Smart Specialization could play a key role.

Together, these contributions underscore the need for coordinated efforts in fostering skills, competitiveness, and innovation across Europe, while addressing pressing challenges like sustainability and economic security.

02

Smart specialization requires lifelong learning.

During the panel discussion titled “To Space and Beyond: Transferable Skills for the Space Sector”, the representative of the Directorate-General for Defence Industry and Space at the European Commission highlighted very well the key take-away messages of the panel, which focused on the need for continuous exercise, capacity building, and education. He drew attention to present state of the space industry, pointing out the problem of the aging workforce, the lack of women and limited business or academia collaboration in the industry.



In another panel, “Identifying the Types of Skills That Could Support Today’s Challenges,” speakers from diverse backgrounds explored various aspects of skills and education. While they each offered unique perspectives, all agreed on the critical importance of lifelong learning at local, regional, and international levels to meet the demands of the rapidly changing world.

The Project-Coordinator of the KIDS4ALLL project presented during the session on Horizon Europe Cluster 2 and Societal Challenge 6: *Inclusive, innovative and reflective societies – How to valorize the outcomes of successful Cluster 2 projects in service of reaching S3 goals.* This initiative, which was part of Horizon 2020, focuses on developing skills from an early age. She emphasized the importance of education for children as the foundation for their future, and she highlighted that the project is an Innovation Action aimed at creating new, specific learning methods. This includes offering learning units in Ukraine and expanding the project’s network to ensure broader impact.



03

Cooperation is needed on international level.

The implementation of Smart Specialization strategies (S3) has emerged as a central focus in fostering regional development and innovation. One expert on EU policy has emphasized the importance of strengthening interregional collaboration, improving monitoring systems, addressing regional attractiveness, and building political will to ensure the success of S3. He also stressed the need for evolving governance structures and resource management to maintain future progress.



The representative of the Latvian Ministry of Economics added to this discourse by offering insights on how to strengthen interregional collaboration – highlighting the role of a common language. Specifically, Latvia's S3 strategy has played a key role in bridging gaps between policymakers, academia, and industry, enabling more effective cooperation across regions.

Meanwhile, the representative of the Ministry of Economic Development and Technology from Poland pointed out the importance of identifying skills that can support current challenges, particularly focusing on collaboration as a crucial skill. He underscored the growing need to foster collaboration, especially in relation to the internationalization of value chains on a European scale.

The project manager of the Hungarian Centre of Excellence for Molecular Medicine highlighted the interdependence between economic growth, innovation, and skills in the context of digitization and the green transition. From a regional perspective, she stressed the urgent need for skills devel-

opment and international collaboration to unlock the full potential of digitalization, particularly in research and small-to-medium enterprises (SMEs).

During an interactive discussion, a member of the audience emphasized the problem that academia does not fully understand labor market needs, and the labor market questions what universities can offer. Attendees all agreed that the effective cooperation of these two fields is essential for competitiveness.

Lastly, the researcher of the Institute of Economics of HUN-REN shifted the conversation towards *Horizon Europe Cluster 2 and its contribution to Societal Challenge 6: Inclusive, innovative and reflective societies – How to valorize the outcomes of successful Cluster 2 projects in service of reaching S3 goals*. He discussed the importance of valorising successful project outcomes to align with S3 goals. Horn emphasized the collaborative nature of the projects, where different sectoral partners work together, with each work package being led by a dedicated leader.

04

Successful implementation of smart specialization strategies needs multi-stakeholder approach.

The discussions held across various panels highlighted the crucial role of the multi-stakeholder approach.

The panel *“Inter-dependence between economic growth, innovation and skills in the era of digitization and green transition: the regional perspective”* emphasized the importance of fostering innovation and skills through strategic initiatives, such as training researchers, reskilling for digital skills, and supporting start-ups. Solutions included enhancing cooperation on research infrastructure, like through ESFRI and initiatives such as EuroHPC, to provide small and medium-sized enterprises (SMEs) with vital resources and encourage innovation.



Another session focused on the types of skills necessary to address today's challenges. The speakers of the *"Identifying the types of skills that could support today's challenges"* panel agreed that collaboration across sectors – industry, government, and educational institutions – was key. They stressed that educational institutions should be natural partners for industry in adapting to technological changes and meeting current market needs. The head of unit coordinating Slovene Sustainable Smart Specialisation Strategy further emphasized that education must be industry-driven, with curricula developed by industry players to ensure alignment with real-world requirements. He also highlighted that "collaboration is the skill of the future", underscoring the need for cooperation across all sectors, including SMEs, and for teaching this collaborative mind-set alongside other competencies.

In the context of *"Horizon Europe Cluster 2 and Societal Challenge 6: Inclusive, innovative and reflective societies"*, speakers noted the importance of integrating diverse stakeholders, including policymakers, economic players, and target communities, to ensure the effectiveness and relevance of projects. The representative of EIT

Digital also stressed the link between innovation and education, noting that while many start-ups face high failure rates, the talent is invaluable for economic and technological growth.

One expert introduced the ETF Skills for Smart Specialization (S4S3) approach, highlighting the need for continuous dialogue between micro and small companies, policymakers, and educational institutions to tackle persistent issues. Furthermore, Rosini discussed the importance of addressing rigidities in the education system, particularly the need for better communication between universities and vocational education, as well as the vital role of local training providers in meeting the needs of businesses.

The secretary general of the European Association of Institutions in Higher Education, setting the stage for the day's discussions, emphasized that higher education institutions must focus more on developing competences, as these will be essential for students' future careers. Together, these discussions underscored the need for a coordinated, forward-thinking approach to skills development that can support the evolving demands of the digital economy and green transition.

05

Flexible solutions are needed for global challenges.

In the panel discussion on identifying the types of skills that could support today's challenges, the representative from the Hungarian S3 department emphasized the importance of centres focusing on producing personalized knowledge and skills. He argued that these tailored solutions are crucial for addressing the specific challenges faced by regions. He highlighted that this process not only helps to meet local needs but also plays a key role in fostering effective international cooperation. By developing region-specific expertise, centres can contribute to the sharing of best practices and facilitate collaboration across borders.



06

Keeping up with new technologies is essential for European competitiveness.

During the panel session on identifying the types of skills that could support today's challenges, an expert of Smart Specialization Strategy highlighted the critical need to track and address the skills required for success in the evolving technological society. He emphasized that understanding and developing these skills is key to preparing individuals for the future.

Similarly, a researcher reinforced the importance of focusing on the education of teachers, noting that they may struggle to continuously update their knowledge and skills to keep pace with new developments. This challenge is crucial, as teachers play a vital role in equipping students with the competencies needed to thrive in a rapidly changing world. Both speakers underlined the need for ongoing support and adaptation within the education system to ensure that students are well-prepared for future challenges.



07

European cooperation is needed to fight against Brain Drain.

In discussions on the interdependence between economic growth, innovation, and skills in the era of digitization and green transition, a representative from a Widening country addressed the issue of brain drain. She emphasized the opportunity to reverse this trend by encouraging researchers to return from Western countries, noting that some have already come back to her institution. This highlighted the potential for harnessing talent to drive regional development.

Similarly, a European Commission representative, while discussing the framework for skills development in smart specialization across multiple domains, stressed the importance of fostering brain gain and avoiding brain drain. He emphasized that ensuring the right skills development is essential for strengthening Europe's competitiveness in the global market. Both speakers underscored the need for strategic approaches to talent retention and development as a key factor in driving innovation and economic growth.





#S3CONFERENCE2024

