



DIGITALLI

DIGITAL STRATEGIES
FOR LIFELONG
LEARNING INSTITUTIONS

DESK AND CONSULTATION TRANSNATIONAL REPORT

Project Information

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Consultation and Desk Research

1. Desk Research

1.1. Methodology

The desk research was conducted between January and March 2025 in collaboration across the DIGITALLI partner countries—Austria, Cyprus, Slovenia, Ireland, and Greece. Each partner organisation followed a structured and aligned methodology outlined in the project guidelines to ensure consistency, comparability, and relevance.

The **research problem**, as presented to all countries before conducting the desk research, is that despite advancements in digital technology, a significant gap remains between the capabilities of lifelong learning institutions and the growing demand for AI-driven education solutions. This work package investigates the tools, strategies, and requirements for these institutions to adopt and effectively implement AI-focused learning strategies.

The **main objective** of this study is to provide a foundation for developing a practical toolkit that guides lifelong learning institutions in implementing AI-driven digital transformation strategies, while the research objectives on a wider scale are: to gather and synthesise successful case studies in the use of AI for digital learning, to analyse institutional readiness and infrastructure for adopting AI-based tools, to assess the needs of stakeholders, including educators, learners, and policymakers, in leveraging AI for lifelong learning, and to identify challenges and opportunities in deploying AI-focused learning strategies in diverse contexts.

The **research questions** for this study were based on the aim and objectives, while focusing on the current situation in digital-based implementation in adult education institutions in all countries involved, what are the barriers to implementing digital tools in education, and how can they be mitigated or overcome, and what institutional and technological essentials are needed for sustainable digital implementation in adult education.

National teams based the research on a range of academic, policy, and institutional sources, such as:

- Government strategies and white papers
- EU policy frameworks (e.g., Digital Decade, DigComp, RRF)
- National reports and statistics
- Peer-reviewed academic literature
- Grey literature, including institutional evaluations and case studies

The primary keywords guiding the searches included: “Digitalisation in lifelong learning,” “AI in adult education,” “digital skills strategies,” and “national policies for digital transformation.”

Country-specific reports were developed using sources published between 2018 and early 2025, prioritising materials post-2020 to reflect recent policy developments, post-COVID responses, and AI integration trends.

Each national report was structured around the following thematic areas:

- The digitalisation status of lifelong learning institutions
- Existing policies and national plans for digital transformation
- Current methodologies applied in the implementation of digital education
- Challenges and barriers
- Stakeholder needs and implementation drivers, particularly among educators, learners, and institutions.

The present transnational desk research synthesises the findings from these national reports to identify commonalities, divergences, and European-level trends. A comparative lens was applied to extract shared challenges, strategic alignments, and innovative practices that may inform future transnational collaboration and capacity-building within the DIGITALLI framework.

1.2. Results

Below, all data are presented categorised and in conclusion for each country that participated in the desk research. Section 1.2.1 aims to analyse and synthesise the situation across partner countries, while discussing general trends in the European context, country-specific highlights (standard and common queues as well as contrasted queues between the countries) and the implications for lifelong learning institutions. Section 1.2.2 indicates the significant national policies and strategic plans all across the five countries, how these align with EU frameworks, like DigComp, how they specifically cover other focus areas, such as AI, teacher training and inclusion, and any unique policy approaches mentioned for each country.

1.2.1 Digitalisation Status of Lifelong Institutions

The digitalisation of lifelong learning institutions within the Digitalli Project partner countries (Austria, Greece, Ireland, Cyprus, and Slovenia) highlights and concludes a commitment to developing and supporting digital capacity at different maturity and implementation levels.

National strategies recognise digitalisation as a core pillar for future-ready education systems. All partner countries indicate investing in digital infrastructure, platforms, tools, and basic skills development to support access, inclusion, and educational innovation. However, disparities exist regarding digital competencies, institutional readiness, and rural and urban accessibility.

Ireland's research has proven that the country has one of the highest levels of digital integration, with 73% of the population possessing basic digital skills, significantly exceeding the EU average of 56%. This places Ireland at 91% of the overall target for the EU's 2030 goal, which aims for 80% of the population to have at least basic digital skills. The country has also experienced an annual growth of 2% compared to the previous year. The proportion of ICT

specialists in employment has risen to 6%, surpassing the EU average of 5%. (European Commission, 2024).

Slovenia's research has shown that although it demonstrates strong policy intent through Digital Slovenia 2030, it reports lower digital skills uptake, with only 46.7% of adults having basic digital competencies. The Digital Slovenia 2030 strategy is the Government of the Republic of Slovenia's response to the development challenges of digitalisation. It intends to provide strategic planning for promoting Slovenia's digital transformation in the development period up to 2030. A significant challenge is the digitalisation of SMEs and outreach in rural regions, which is being addressed through measures, such as the ongoing construction of high-speed broadband networks in white areas, co-funded by public and private stakeholders. Furthermore, Slovenia is taking action to prepare for the next generation of electronic communication networks and is preparing to auction bands for machine-to-machine communication networks. The country is also advancing national coverage through efforts such as the Academy of Digital Transformation and the rollout of new cybersecurity centers.

Based on the desk research, Cyprus focuses on digital innovation in adult learning through initiatives like the Digital Education Plan and the Open Schools program. However, access to devices, staff training and high-quality broadband seems to still have limitations, especially in rural areas and disadvantaged regions. Regarding the digitalization status in Cyprus, the Digital Economy and Society Index (DESI) 2019 indicated that Cyprus performed below the EU average in the human capital dimension, which measures the skills required to leverage digital developments. Additionally, Cyprus has experienced delays in adopting technological innovations. Similarly, as the need for digital transformation became increasingly urgent in the lifelong learning sector, consultations highlighted the necessity of promoting the digital economy and digital education.

Greece has also made substantial progress with platforms such as Gov.gr, Digital School, and the Digital Transformation Bible (2020-2025). According to the 2024 Digital Decade Report, only 52,4% of adults have basic digital skills, and the ICT workforce remains below the EU average. Infrastructure gaps and institutional fragmentation present challenges, especially in public adult education centers. Yet, the country performs well in Human Capital, which indicates progress in the population's digital competencies.

Finally, Austria is recognised as a country with a well-established digital infrastructure and high internet penetration. National programs such as Digi Kompetenz, the Digital Action Plan Austria, and support for adult education centres with online platforms contribute to relatively high support for digital readiness in lifelong learning institutions. The federal ministries set strategic targets like expanding basic digital skills to 80% of the population by 2030, aligning with the EU's Digital Decade goals, and fund key initiatives. KEBÖ and adult education providers implement programs on the ground. Nonetheless, challenges persist in aligning digital inclusion efforts for older learners and minorities.

In conclusion, all countries show strong policy direction and institutional commitment to digitalisation. Still, the degree of implementation varies significantly based on national investment capacity, the level of educator training, infrastructure, and geographic differences. The division between rural and urban digitalisation, under-resourced staff, and limited infrastructure remain critical barriers to universal access and participation in digitally empowered lifelong learning.

1.2.2 Existing Policies and National Plans

Lifelong learning digitalisation across the DIGITALLI countries is primarily shaped by national policy frameworks that align closely with European Union initiatives such as the Digital Decade 2030, Digital Education Action Plan, and the European Digital Skills and Jobs Coalition. Each partner country has developed tailored strategies to drive digital transformation in education, although the level of integration and policy varies.

Austria mentions the Digital Action Plan, which focuses on e-government services, digital competencies, and inclusive education. Attention is given to providing digital infrastructure for adult learning centres and ensuring continuous upskilling opportunities. Some policies aim to support digital participation for older adults and other minorities, like migrants, often through community-based learning initiatives. At the European level, Austria aligns with and benefits from EU policies like the Digital Education Action Plan (2021–2027) and funding instruments. Austrian adult education institutions actively participate in Erasmus+ projects focused on digital innovation and inclusion. For example, OeAD manages Erasmus+ Adult Education grants, enabling providers to exchange best practices on e-learning and develop new digital curricula. Austria was also a pilot country in 2023 for the European Digital Skills Certificate (EDSC) initiative, with the Digital Skills Office helping trial a standardised assessment of citizens' digital competencies. Additionally, Austria engages in European networks such as EPALE (Electronic Platform for Adult Learning in Europe) to share resources on digital adult education. Indeed, Austria's National Digital Competence Framework (DigComp 2.3 AT) was showcased on EPALE as a model for strengthening digital skills in education. This framework, released in 2022, adapts the EU DigComp for the Austrian context, providing common reference levels for digital competence. It guides providers in curriculum design and is a foundation for recognising digital skills nationally.

Cyprus has adopted several interrelated strategies, such as the National Digital Strategy (2020-2025), which provides a cross-sectoral framework, with commitment to enhancing digital skills, improving infrastructure and promoting the use of digital tools, the Lifelong-Learning Strategy (2021-2027), embedding digitalisation as a fundamental pillar, and the AI National Strategy (2020) and Distributed Ledger Technology (DLT) Strategy, which is promoting emerging technologies and offer digital certification. These policies are reinforced by targeted initiatives like the National Coalition for Digital Skills and Jobs and the National Strategy for AI, which prioritise workforce readiness and the integration of cutting-edge technologies into adult learning curricula. Additionally, the funding available through national budgets and EU programs such as the EU Recovery and Resilience Fund is crucial in facilitating these initiatives, ensuring that Cyprus remains on track to meet its digitalisation goals.

Slovenia has an integrated digitalisation policy ecosystem, which includes Digital Slovenia (2030), Digital Public Services Strategy (2021-2030) and National Programme for the Promotion of Development and Use of Artificial Intelligence (2025). Digital Slovenia is a national strategy, closely aligned with EU priorities, that aims to enhance digital infrastructure across all educational sectors, including adult education. Horizontal principles of the Strategy are: General awareness of the importance of digital transformation; The Internet as a strategic tool of digital transformation; Protecting the free and open Internet; Pursuit of intersectoral synergistic development effects; Use of the Slovenian language and preservation of cultural identity; Promoting research and development of digital technologies and their use; Strategic

autonomy, digital single market and digital sovereignty; Democratic digital society and achieving Slovenia's development goals through digital transformation. It focuses on improving digital competencies and promoting active social inclusion. The Digital Public Services Strategy 2021-2030 was adopted in December 2022. It strives to ensure data for better services and decision-making, providing a secure, trustworthy and inclusive digital environment. Finally, the National Programme for the Promotion of Development and Use of Artificial Intelligence aims to provide an open and creative environment to exchange information quickly and efficiently, sharing experiences and best practices and providing a space for research, development, deployment, and testing of AI technologies.

Ireland has established an advanced policy environment to support digital transformation in lifelong learning, including the National AI Strategy (AI – Here for Good) (2021), Harnessing Digital: Ireland's National Digital Strategy (2022), the Adult Literacy for Life (ALL) Strategy, which includes digital literacy as a core strand, and the Digital Strategy for Schools (2022), which links school-level digitalisation to lifelong learning pathways. These policies are reinforced by the involvement of agencies such as SOLAS and QQI, ensuring strong governance, implementation, and quality assurance mechanisms across sectors

Greece has outlined its vision in the Digital Transformation Bible (2020–2025) and the National Digital Decade Strategic Roadmap (2023–2030). The policy ecosystem addresses upskilling and reskilling through the National Academy for Digital Skills, public-private partnerships via the National Coalition for Digital Skills and Jobs, and digital inclusion initiatives for rural and low-income populations. The central policy guiding digital transformation is the Digital Transformation Bible (2020–2025). It is built around six strategic pillars: connectivity, digital skills, digital governance, digital business, innovation, and cross-sectoral integration. In adult learning, the strategy emphasises continuous skill development, improved digital competencies in public administration, and strengthened collaboration between public authorities and educational institutions to enhance service delivery and inclusivity in digital education. In addition, through the National Digital Decade Strategic Roadmap (2023-2030) the Greek Ministry of Digital Governance has launched a strategic roadmap aligned with the EU's Digital Decade 2030 goals. For lifelong learning, the plan prioritises upskilling and reskilling in high-demand sectors, focusing on digital and green skills. Key initiatives include the “Digital Citizen Learning Sequence”, a five-step online pathway to boost basic digital competencies, and the training of 120,000 teachers by 2025. The strategy also introduces Model Digital Centers to provide inclusive regional access. These actions address persistent issues such as low digital literacy (52.4%) and fragmented inter-ministerial governance.

General Cross Country Conclusion

To conclude, while each country aims to national priorities, there is a significant convergence around: strengthening digital skills across all demographics, investing in infrastructure and digital tools for lifelong learning institutions, integrating AI and emerging technologies responsibly, and aligning with EU Standards such as DigComp, Digital Decade targets, and quality assurance frameworks. This intersection opens up opportunities for policy learning and transnational collaboration, particularly in addressing shared challenges like educator training, rural coverage and equitable digital access.

1.2.3 Existing Methodologies in Digital Transformation

Across the DIGITALLI partner countries, various methodologies have been utilised to implement digital transformation strategies within lifelong learning institutions. They include national training frameworks, digital learning platforms, public-private partnerships, AI integration pilots, and community-based digital inclusion initiatives. While each country applies context-specific approaches, several shared practices are obvious.

Greece employs a mix of structures, national platforms, self-assessment tools and modular learning approaches. Key methodologies include the Digital Skills for Digital Greece Action Plan (2019), aligned with the EU's DigComp, which promotes digital upskilling across basic, intermediate, and advanced levels. Other uses of national platforms could be e-me (collaborative platform), Digital School Portal, Photodentro OER repositories, and Aisopos Digital Scenarios. Other methodologies include an introduction of MOOCs and self-assessment tools for digital competence (via the National Academy for Digital Skills), the adoption of Universal Design principles for accessible learning, the scale-up use of tools during the COVID-19 crisis, like Zoom and the Panhellenic School Network. However, the pedagogical integration of these tools remains uneven.

Cyprus promotes digital transformation through a combination of coalition-led coordination, policy-integrated frameworks, and national action plans, like the Digital Skills and Jobs Coalition, which acts as a multi-stakeholder body implementing the National Action Plan 2021–2025. Other key methodologies include e-government tools to support online learning environments, training for digital pedagogy through state initiatives like *Innovative Schools* and *eSafe Schools*, digital infrastructure upgrades, teacher "coaches", and micro-grants to support school-level innovation, and structured promotion of STEAM pathways and data-informed policy reform. More analytically, the methodologies found in the desk research process are:

1. **Digital Skills and Jobs Coalition:** A multi-stakeholder initiative coordinating ICT training and digital literacy efforts, focusing on vulnerable groups and remote areas and "bridging the gap between supply and demand in the labour market.
2. **National Action Plan for Digital Skills 2021–2025:** Implemented via the coalition, it aims to accelerate the digital transition by improving basic digital and software skills and boosting the number of ICT professionals.
3. **Innovative Schools and eSafe Schools programmes:** These voluntary programmes help individual schools and teachers use digital technologies and integrate them effectively into learning processes. Participating schools receive guidance, support, and modest funding while designating teacher coaches to lead integration.
4. **Teacher training and professional development:** Teachers are supported through designated communities that share and disseminate effective practices, contributing to the institutional embedding of digital tools.
5. **Digital Strategy for Cyprus (2020–2025):** This framework promotes an accessible and inclusive society with the skills and motivation to actively participate in digital communities through e-government and secure ICT infrastructure.
6. **VET-specific digitalisation:** Includes IT courses in adult education centres, CPI-led seminars on robotics and internet safety, and plans for a platform for VET monitoring with job matching, events, and market insights.

Slovenia utilises a model-driven and quality-focused approach, supported by national evaluations, such as the General implementation of the POKI self-evaluation model (*Let us provide quality education for adults*) for monitoring and improving internal quality in adult learning centres: Slovenia has developed a national quality model titled *Let us provide quality education for adults (POKI)*, which includes steps such as planning of self-evaluation, assessment of results, and evaluation of results of measures. Adult education organisations use it for both formal and non-formal education. Another methodology used is the Digital Teacher Project, which trains 20,000 professionals in digital, sustainability, and financial literacy over 104 hours of training. It is a large-scale national training programme that targets upskilling a minimum of 20,000 educational professionals and managers, with 11 of 13 training days focused on digital competencies and informatics. We can't ignore the ongoing development of digital platforms, such as upgraded e-content repositories and support systems for educators, as well as the MOZAIK KAKOVOSTI collection, which promotes peer learning and showcases best practices in digital adult education.

Ireland's methodologies are deeply embedded in quality assurance systems, training pathways, and edtech innovation pilots:

1. National platforms like eCollege and Skills to Advance offer free digital upskilling in IT, cloud, and cybersecurity sectors. eCollege is a government-funded online learning platform that provides free courses in IT, business, and digital skills and Skills to Advance is a workforce upskilling initiative offering digital literacy programs for employees in various sectors.
2. The use of AI-driven learning analytics and chatbots in higher and further education, VR/AR in vocational education programs (e.g., Pharmacy Technician Education), and CeADAR, Ireland's AI innovation hub, supports AI adoption in education.
3. Institutions such as Trinity College Dublin, Maynooth University, and CMETB apply the QQI quality framework to ensure digital content meets learning standards. CMETB developed a comprehensive learner database assessing the success and impact of FET programmes from induction to completion. Maynooth University and ETBs offer "professional development programmes for staff focused on digital teaching and learning" and blended learning workshops.
4. Targeted webinars (e.g., NALA) and CPD certification programmes to support digital pedagogy.
5. Quality Assurance Mechanisms, like Quality and Qualifications Ireland (QQI), that oversees digital quality standards and publishes evaluative reports (e.g., Quality Assurance in Higher Education) that address the benefits and challenges associated with implementing digital quality assurance.

Austria applies an infrastructure-based model and equity-oriented approach, emphasising inclusive access, digital platforms, and community-based delivery, while supporting disadvantaged groups. There is an investment in broadband access and digital teaching materials for LLIs, which is called Digital Competence Frameworks: Austria uses the DigiKompetenz model, aligned with DigComp, to guide the development of digital skills across sectors. This framework informs curriculum development and adult learning course design. Also, the Digital Action Plan Austria implements the national strategy. It involves systematic

development of basic digital education, using “blended learning models”, particularly within adult education centers, and strengthening “low threshold access to digital tools for disadvantaged groups. Austria also prioritises investments in digital learning infrastructure and broadband access to ensure the availability in all nation, especially in rural and underserved areas. The country also uses modular, stackable training formats such as online microcredentials and short-term certifications to support digital upskilling and re-skilling aligned with labour market needs.

General Cross Country Conclusion

Across the DIGITALLI partner countries - Austria, Cyprus, Slovenia, Ireland, and Greece - there is a clear and growing commitment to executing structured, inclusive, and innovative methodologies to support the digital transformation of lifelong learning institutions. Despite differentiations in national contexts, several common trends are shown.

Most countries adopt methodologies based on national digital competence frameworks, often aligned with DigComp, to guide adult learning programmes and educator development. Countries like Austria and Slovenia apply quality-assurance-driven models (e.g., POKI, microcredentials), while Ireland combines AI and edtech pilots with formal QA systems such as QQI.

A notable differentiator is Greece’s use of open education resources (OER) and multi-platform toolkits developed during COVID-19, in contrast to Cyprus’ coalition-led governance model, where teacher coaches and community dissemination are key implementation drivers.

While each country’s methodologies reflect local needs, other common elements are:

- Adoption of national digital competence frameworks (often based on DigComp)
- Use of self-assessment tools and MOOCs
- Deployment of digital learning platforms for adult learners
- Teacher training schemes tied to national or EU funding
- Emphasis on quality assurance (formal or informal) to guide digital delivery in lifelong learning settings

These methodologies lay the groundwork for transnational exchange of best practices and scalable models to support digital transformation across European adult education. The countries are advancing digital transformation through diverse but converging methods: platform-based delivery, teacher empowerment, learner-centric design, and robust quality systems. These form a solid foundation for shared learning, mutual adaptation, and future scaling of innovative digital education practices across Europe.

1.2.4 Challenges and Barriers to Digitalisation

The results of all countries’ national desk research reveal that despite the strong policy frameworks and EU-aligned strategies across the DIGITALLI partner countries, desk research reveals some persistent challenges and barriers hindering full-scale digital transformation in lifelong learning.

1. Digital divide and unequal access

A consistent challenge across all countries is the **rural-urban digital divide**, as well as disparities in digital access for marginalised groups (e.g. older adults, unemployed learners, migrants):

- **Greece:** Connectivity issues and limited access to advanced tools persist, especially in public education centres and rural areas.
 - Even though equipment exists across public education centres (e.g., interactive boards or computer labs), low bandwidth and connectivity do not allow smooth integration.
 - There is evident fragmentation in terms of the technology used across institutions and between the public and private sectors. Even when education centres are equipped with tools, more advanced, paid versions are not available, limiting the features open to educators to experiment.
- **Slovenia:** Rural broadband and mobile coverage gaps affect the implementation of digital learning programmes.
 - Slovenia performs reasonably well on connectivity, except for fixed and mobile connectivity in rural areas.
- **Ireland:** Rural communities experience uneven access to devices and high-speed internet, impacting learner participation.
 - Institutional barriers include uneven staff training, funding challenges, and inconsistent access to digital infrastructure, especially among smaller, community-based providers. The sustainability of digital investments, data privacy concerns, and the capacity to measure digital learning outcomes are ongoing concerns (Quality and Qualifications Ireland, 2024b).
 - Institutional readiness remains a key issue, as many institutions lack the necessary infrastructure, policies, and expertise to implement AI-driven learning effectively. Accessibility remains a concern, as socioeconomic factors impact learners' access to digital tools and AI-powered resources. Resistance to change is another barrier, with educators and learners sometimes reluctant to embrace AI due to fears of job displacement or unfamiliarity with digital tools.
- **Austria:** Although well-developed digitally, Austria still faces regional disparities and challenges reaching vulnerable populations.
- **Cyprus:** Digital infrastructure has improved, but “remote regions and low-income groups still face barriers to access”.

2. Educator readiness and capacity

A recurring theme is the **insufficient preparedness and confidence of educators** to integrate digital technologies effectively:

- **Greece:** Lack of incentives, heavy workloads, and insufficient pedagogical training in digital tools are recurring issues.
 - Greece refers to the word “technophobia”, which can hinder the adoption of technology and particularly AI. It is often the case now that AI is labelled ‘bad’, particularly from those who lack prior exposure or training.

- **Cyprus:** Teacher involvement in digital transformation is voluntary, and uptake depends heavily on individual motivation and leadership support.
- **Slovenia:** While the *Digital Teacher Project* addresses the issue, teaching practices still have limited digital intensity, especially among older educators.
 - Slovenia has the potential to improve its performance to help achieve the EU's Digital Decade target on basic digital skills, and it demonstrates a very limited dynamic. In 2023, 46.7% of the Slovenian population aged 16-74 had at least basic digital skills, below the EU average (55.6%).
 - Slovenia aims to reach the EU target of 80% basic digital skills by 2030, but with its slow progress, achieving this goal will require significantly intensified efforts.
- **Ireland:** Despite strong CPD (Continuing Professional Development) provision, engagement is still variable, and there is concern about AI integration and digital assessment integrity.
 - University College Cork (UCC) provides a part-time, fully online program. Continuing Professional Development (CPD) in Digital Education Certificate is designed to enhance educators' understanding of digital education theories and methodologies. Participants learn to design learning activities and assessments using digital tools, critically evaluating their applicability to professional practice.
 - Webinars on AI Integration: The National Adult Literacy Agency (NALA) conducted a webinar titled "AI – What is it and how can I use it in my adult literacy and ESOL classroom?" This session aimed to demonstrate how AI can assist in creating lesson plans and designing schemes of work efficiently, providing tutors with practical insights into AI applications in education.
- **Austria:** Need for continuous staff development, particularly for adult educators working in community centres, remains a priority.

3. Institutional readiness and integration

While digital tools exist, **integration at the institutional level** often lacks consistency or strategic depth:

- **Greece:** Using multiple platforms without pedagogical guidance leads to superficial integration.
 - These include issues with infrastructure, time constraints, incentives, and professional development. Regarding infrastructure, most platforms used are not properly exploited pedagogically.
 - They support surface-level interaction, such as exchange of material, but not actual digital collaboration. Even though equipment exists across public education centres (e.g., interactive boards or computer labs), low bandwidth and connectivity do not allow for smooth use and integration.
- **Cyprus:** Many initiatives remain pilot-based or dependent on local leadership, lacking systemic embedding or long-term funding models.
- **Slovenia:** Institutions rely on self-evaluation, but not all are equally resourced or skilled in applying these frameworks.

- These self-evaluations are reported to governing bodies and may involve external institutions like the National Examinations Centre and the Educational Research Institute.
- The School Inspectorate of the Republic of Slovenia conducts external evaluations, focusing on the overall operation and quality assurance of educational programs.
- **Ireland:** While QA systems are robust, there’s still “resistance to change” in some adult learning centres, especially with the introduction of AI and advanced analytics.
 - Quality assurance systems are evolving in response to these changes, with bodies like QQI and ETBI working to embed standards and learner feedback mechanisms across institutions. However, digital infrastructure gaps, a lack of educational training, and disparities in device access continue to present challenges.
- **Austria:** Regional autonomy means implementation quality can vary, and integration of inclusive digital tools remains uneven
 - Austria operates under a federated governance model where education, including adult education, is influenced by both federal policy and regional (state-level) implementation. While national frameworks and funding programmes exist (e.g. Ö-Cert, Digital Skills Initiative), the actual integration of digital tools in lifelong learning institutions varies by region, especially between urban centres and rural areas.
 - Some regions, like Vienna or Salzburg, are well-equipped with digital platforms, skilled staff, and access to national initiatives. Others—notably smaller, rural institutions—often struggle with:
 - Connectivity issues
 - Fewer digital learning resources
 - Limited staff training
 - Less access to peer learning or innovation networks
 - This imbalance in implementation results in varied learner experiences and outcomes across Austria, particularly for older adults, migrants, and learners in remote areas, where digital inclusion remains a challenge.

4. Fragmentation of management and coordination gaps

Some countries still struggle with **fragmented responsibilities**, overlapping roles, and a lack of streamlined policy delivery:

- **Greece:** Governance is split between multiple ministries (Education, Digital Governance, Labour), leading to “duplicated efforts” and limited cohesion.
- **Cyprus:** Coordination exists through the Digital Skills and Jobs Coalition, but more robust central implementation mechanisms are still needed.
- **Slovenia:** The recent creation of a dedicated ministry has improved centralisation, but cross-sectoral implementation still requires closer coordination

5. Sustainability and scaling of initiatives

Another shared challenge is ensuring that **pilot projects and innovation programmes become embedded, long-term practices**:

- **Ireland:** Many innovative practices (e.g., VR, AI use) are in early stages or depend on temporary funding like SATLE (Strategic Alignment of Teaching and Learning Enhancement); institutional scaling is still in progress.
 - Funding to drive teaching and learning innovation and enhancement in areas such as Digital transformation. Waterford and Wexford ETB engage in peer reviews and participate in external evaluations through the ETB Network, assessing the quality of their digital learning programs and gaining insights for continuous improvement.
- **Cyprus:** Programmes like eSafe Schools are promising but not yet systematised nationwide.
 - The Innovative Schools and the eSafe Schools programmes are designed to help individual schools and teachers use digital technologies and integrate them effectively into learning processes. Schools in Cyprus can register to participate voluntarily in both programmes, which are offered at the beginning of each academic year. Participating schools are provided with guidance, support, and a modest quantity of funding to implement specific training actions. In addition, teachers from each institution are designated as "teacher coaches." Their role is to serve as essential backers of the school's initiative to use and integrate digital technology into the learning process.
- **Slovenia and Austria:** QA systems support ongoing development, but broader funding and strategic support are needed to scale national-level programmes across all LLIs
 - In both **Slovenia and Austria**, national QA systems play a vital role in supporting the development of digital transformation in lifelong learning. Slovenia employs structured tools like the POKI self-evaluation model, which encourages institutions to plan, implement and assess quality improvements in digital education through participatory processes.
 - Austria emphasises institutional quality by promoting blended learning, modular learning offers and tailored support, particularly through adult education centres.
 - Broader scale progress and transformational effects have yet to materialise despite national-level strategies. In Austria, while quality systems are in place, regional differences in access and digital intensity indicate the need for systemic alignment and targeted investment to achieve uniform progress across LLIs.

1.2.5 Stakeholders' Needs and Implementation Drivers

The digital transformation of lifelong learning institutions across DIGITALLI countries (Cyprus, Slovenia, Ireland, Greece) is influenced by a variety of stakeholder needs and context-specific implementation dynamics. The following analysis presents the key observations, grouped by stakeholder category:

Educators

Across all desk research results, educators require continuous professional development, technical support, and structured integration of digital tools. Greece has national strategies that call for training 120000 teachers by 2025, to improve digital competence through initiatives like the Digital Citizen Learning Sequence and the National Academy of Digital Skills. Teachers in Cyprus receive support via “Teacher coaches” and school-level innovation programmes (“Innovative Schools”, “eSafe Schools”), but national reports emphasise the need for broader participation and systemic embedding. The Digital Teacher Project in Slovenia offers structured training for over 20000 educators, while the POKI model supports effective, quality-focused teaching practices. Irish teachers benefit from blended learning CPDs, TEI mentoring and university-led training (Maynooth, UCC), all aligned with national QA frameworks. Last, Austria offers teachers access to modular microcredentials and regional training support, although urban areas differ from rural areas in terms of opportunities.

Learners

The primary needs for learners include access to digital tools, digital literacy support, and inclusive learning environments. In Greece, only 52,4% of adults have basic digital skills. Strategies focus on improving access via Model Digital Centres and modular online learning. Cypriot National Plans support open access to digital skills content, but implementation gaps persist in rural areas and among low-income groups. Initiatives in Slovenia target learners of all ages, including digital literacy training for 29000 adults and specific programs for the unemployed and elderly. Learners in Ireland benefit from programs like Hi Digital, eCollege, and Skills to Advance, yet rural digital divides and uneven device access remain concerns. Lastly, Austrian community centres offer accessible digital literacy workshops for older adults and migrants, supported by national e-learning platforms. All these narratives indicated that the learners’ needs are acknowledged and being addressed.

Institutions

Institutions face several degrees of digital readiness challenges, including shared needs, infrastructure platform integration, and internal quality assurance.

Greek lifelong learning institutions rely on diverse tools (Moodle, e-me, Digital School), but integration is inconsistent. Cohesive implementation frameworks are in need in national strategy documents. School-level participation in digital programs in Cyprus is often voluntary. That is why creating a more systemic coordination and investment is important to ensure equity in institutional transformation. Institutions in Slovenia are supported by robust internal QA systems such as POKI, MOZAIK KAKOVOSTI, and national standards for digital education and learning. Irish institutions are deeply integrated into QA systems, through QQI, with digital KPIs, learning analytics and student feedback that drive innovation and accountability. Lastly, Austrian national digital education strategies are comprehensive, but decentralised implementation needs stronger alignment and mechanisms that monitor better the outcomes and results expected.

The common drivers of Digital Transformation across all countries are:

1. National digitalisation strategies
 - a. **Greece’s Digital Transformation Bible (2020–2025)** outlines six strategic pillars—connectivity, digital skills, e-governance, digital business, innovation,

and sectoral integration. It frames lifelong learning as essential to the upskilling of the workforce and modernisation of public services

- b. **Slovenia’s Digital Slovenia 2030** strategy provides a long-term, inclusive, and human-centric vision aligned with the European Digital Decade. It connects adult education to national digital objectives, including Smart Society 5.0 and AI integration. However, policymakers also face barriers in implementation, such as institutional resistance to change, ensuring inclusivity, and adapting regulatory frameworks to support AI and micro-credentialing (Institute of International and European Affairs, 2024).
 - c. **Ireland’s Harnessing Digital (2022)** is tightly integrated with the National AI Strategy and Adult Literacy for Life (ALL) Strategy, ensuring coherence across digital infrastructure, literacy, and workforce readiness.
2. EU funding instruments
 - a. **The Recovery and Resilience Facility (RRF)** provides funding for equipment, connectivity, digital skills training, and public administration reform:
 - **Greece** allocated €6.4 billion for 450 digital transformation projects, including the *Digital Citizens’ Academy* and school connectivity schemes.
 - **Slovenia** invests 21% of its RRF in digitalisation, including €144 million in skills development and €260 million in e-governance projects.
 - b. **Erasmus+** funds innovation projects and international partnerships in adult education, such as Greece’s *TRANSFORM Project* and Slovenia’s digital inclusion initiatives.
 - c. **European Social Fund Plus (ESF+)** supports inclusion-oriented digital skills programmes, such as those targeting the unemployed or learners with fewer opportunities in Ireland and Cyprus.
 3. Development of digital learning platforms and national competence frameworks aligned with DigComp.
 - a. **Austria and Slovenia** use their nationalised versions of DigComp (e.g., Digi. Kompetenz in Austria) as the foundation for course design and digital literacy benchmarking.
 - b. In **Greece**, the *Digital Skills for Digital Greece* plan and *National Academy for Digital Skills* align with DigComp to provide modular learning and self-assessment tools across basic, intermediate, and advanced levels.
 - c. Countries also deploy **national platforms** to scale access:
 - *eCollege* (Ireland)
 - *Digital School* and *Photodentro* (Greece)
 - *Digital Campus Austria* (Austria)
 - *eSafe Schools* and *DLT Strategy Platforms* (Cyprus)
 4. Emphasis on digital inclusion and lifelong learning as strategic priorities
 - a. **Austria and Ireland** run community-based programmes targeting older adults and migrants with basic ICT training and low-threshold learning offers.
 - b. **Greece and Slovenia** provide subsidised device access, regional digital centres, and support for low-income and unemployed individuals.
 - c. **Cyprus** supports “equity in participation” through school-level digital initiatives in remote areas and targeted outreach to learners with fewer opportunities.

5. National-level training programs and multi-stakeholder coordination bodies
 - a. **Cyprus** and **Greece** have established National Coalitions for Digital Skills and Jobs, coordinating training offers, stakeholder engagement, and policy dialogue.
 - b. **Ireland's** coordination between SOLAS, ETBI, and QQI ensures coherence between policy development, funding distribution, and QA standards.
 - c. **Slovenia's** Ministry of Digital Transformation leads cross-sector projects, supported by inter-ministerial working groups.

2. Consultation Research

2.1. Consultation Discussions

2.1.1. Information

The DIGITALLI project's consultation activities were carried out in each partner country (Austria, Cyprus, Slovenia, Ireland, and Greece) following a commonly agreed-upon methodological framework. The goal was to gather qualitative, stakeholder-based insights to complement the desk research findings and deepen the understanding of challenges, the readiness, and all drivers related to digital transformation in lifelong learning institutions.

Participant Recruitment and Profile

Participants were selected using purposeful sampling, with the aim of including individuals with direct experience in adult education, digital pedagogy, or policy implementation. Each partner identified key actors from their national adult education ecosystem through internal networks, institutional referrals, and targeted outreach.

The consultation included 31 participants across the five countries. Each national team consisted of 4 to 7 individuals. Ireland had 7 participants, self-employed trainers working in adult learning, including areas such as mental health, creative arts, and holistic education, Greece had 5 participants, adult educators with diverse experience in both public and private institutions, Cyprus had five as well, educators, admin staff, and digital learning professionals in lifelong learning institutions, Slovenia consulted with 7 participants, two institutional heads and five adult educators representing adult education centres and municipal stakeholders and, lastly, Austria conducted the consultation discussion with 7 participants, six educators and one administrative manager.

The participant profiles included:

- Adult educators and trainers in both formal and non-formal learning contexts
- Institutional directors and managers of lifelong learning centres and VET providers
- Education policy professionals from public agencies or ministries
- Digital education officers and training coordinators
- Stakeholders with experience in implementing or supporting digital tools or AI in learning environments

Participants came from various backgrounds and experiences, from early-career professionals to senior experts, with backgrounds in vocational training, community education, online learning design, and adult literacy programmes.

Guiding Questions Used During the Consultation

A standard set of guiding questions was used across all countries to ensure comparability. These questions focused on the real-world experiences of stakeholders about digital transformation and AI in adult learning. The key questions included:

1. What is your context's current situation regarding using digital tools and AI in adult education institutions?
2. What barriers do you perceive in implementing digital technologies in adult learning (e.g., skills, infrastructure, institutional readiness)?
3. What factors or policies support the digitalisation process in your institution or country?
4. What are the training needs of educators or staff in using digital tools or AI?
5. How do learners respond to digital learning environments—what are their needs or challenges?
6. What would be needed to ensure sustainable, effective digital transformation in your organisation or education system?

These questions allowed for open discussion while also aligning closely with the thematic structure of the desk research (status, policies, methodologies, stakeholder needs, implementation drivers)

2.1.2. Results

The consultation discussions conducted across the five DIGITALLI partner countries (Austria, Cyprus, Slovenia, Ireland, and Greece) revealed several shared concerns, challenges, and reflections from stakeholders involved in adult education and digital transformation. Thematic analysis of the consultation data led to the identification of several key themes, grouped below by topic.

1. Digital Infrastructure and Access

Stakeholders across countries reported uneven access to reliable internet, devices, and digital platforms, especially in rural or low-income areas. While infrastructure has improved post-pandemic, challenges persist in ensuring all adult learners can participate meaningfully in online or blended learning.

In Greece and Slovenia, educators noted that “*connectivity issues and platform fragmentation*” disrupt learning consistency.

In Cyprus and Ireland, institutions report difficulties maintaining “*up-to-date equipment and digital environments*,” particularly in community centres.

Austria stakeholders expressed concern for digital inclusion among older learners and migrants, who often lack access or digital confidence.

Stakeholders widely acknowledged progress in digital infrastructure post-COVID, but uneven connectivity and equipment quality remain pressing challenges.

- “*We reach 100 Mbps at best. But we need to be equipped with faster fibre connections.*” – Educator, Greece

- *“Ministries provide some foundational tools to build school websites, some free tools which after a point require payment.”* – Educator, Greece
- In **Slovenia**, while fibre expansion is ongoing, some adult centres in remote areas “still experience slow internet speeds,” limiting platform functionality.
- In **Ireland**, rural centres note “limited access to devices for disadvantaged learners,” and that “connectivity is a barrier to blended learning models.”
- In **Austria**, educators reported that while “tools like Moodle, Zoom, and iMooX are widely used,” their advanced features are often underutilised. Rural institutions face “infrastructure gaps, outdated systems, and limited IT support”

2. Educator Training and Support Needs

All countries identified a need for targeted professional development for adult educators. Stakeholders emphasised the importance of hands-on training, peer support, and incentives for continuous skill development.

Slovenia educators praised the *Digital Teacher Project*, but noted it must be “ongoing and embedded, not one-off.”

In Greece, participants highlighted the lack of training time and institutional incentives: *“Professional development needs to be recognised and supported structurally.”*

Cyprus and Ireland stakeholders called for better access to *training in AI and emerging tools*, such as prompt engineering, chatbots, and adaptive learning platforms.

Austrian participants emphasised “the need for AI literacy and ongoing EBmooc expansion.” Many still rely on “peer support and self-directed learning” due to limited formal upskilling opportunities

Some of the strongest quotes to support these results:

- *“This is a nice journey... all this... but it needs a lot of time. You invest in it.”* – Educator, Greece
- *“Lack of incentives in the public sector is an inhibiting factor, as well as educators’ professional development.”* – Educator, Greece
- Slovenian educators expressed that while the *Digital Teacher Project* offers substantial training hours, “*not all institutions provide enough time or follow-up support.*”
- In Ireland, CPD is available, but one teacher noted: *“Digital tools are evolving faster than our training can keep up with.”*

3. Learner Needs and Digital Readiness

Adult learners face a mix of motivation, skill, and access challenges. Many learners, especially older adults or those with lower literacy, lack the confidence or experience to navigate digital learning independently.

In Ireland, stakeholders highlighted learner anxiety around digital assessments and AI tools.

Greek and Cypriot educators reported that learners often struggle to engage beyond surface-level platform use, especially when self-directed learning is required.

In Slovenia, facilitators observed increased engagement when platforms were integrated with clear guidance and human support.

Austrian educators shared that “older learners and rural participants often lack digital basics,” despite free workshops like *Digital Überall*

Educators across countries reported difficulties engaging adult learners with limited digital experience or confidence, especially in independent and remote learning contexts.

- “Students don’t know how to use the platform beyond uploading and downloading files. There’s no interaction.” – Educator, Greece.
- “We don’t have learners who are used to AI yet. They ask if it’s cheating.” – Educator, Ireland.
- In Slovenia, one facilitator shared: “Learners with lower literacy need human scaffolding before digital tools can support them.”

Cypriot participants noted that learners in rural areas “often lack both devices and the confidence to use them.”

4. Institutional Challenges and Management of Change

Institutional readiness emerged as a core theme. While many organisations have introduced digital tools, strategic integration and pedagogical planning are often lacking.

In Greece, institutions were said to be “technically equipped but pedagogically underutilised.”

Cyprus and Austria stakeholders noted that digital policies exist but are “not always reflected in practice.”

Ireland participants identified resistance to change, with staff expressing concerns about workload, digital fatigue, and unclear guidelines for AI use.

In Austria, staff cited “underused systems” and “unclear implementation plans” for AI as major gaps

Institutions are technically equipped in most countries, but stakeholders point to a lack of pedagogical integration, coordination, and vision.

- “We have smart boards and platforms, but we don’t use them as part of a structured learning model. They’re just there.” – Educator, Greece
- In Cyprus, stakeholders noted: “Each school or centre decides its own path, which means outcomes vary a lot.”
- A Slovenian adult centre manager said: “We have tools, but we still lack a national framework that defines what quality digital learning should look like.”

5. Emerging Technologies: AI and Automation

There was a general sense of curiosity and caution around AI tools. While some educators see potential personalisation and efficiency, many feel unprepared and concerned about data privacy, ethics, and job displacement.

- In Slovenia and Ireland, early adopters are using AI for lesson planning and learner support, but only in small-scale pilots.
- Greek and Cypriot educators requested “clear ethical guidelines, policy direction, and training in responsible AI use.”
- Austrian participants said AI tools like ChatGPT are “being used experimentally,” but “without ethical guidelines or structured training,” institutions remain cautious.

A Greek educator shared: *“We need to learn how to use AI properly and responsibly, not just fear it.”* While in Slovenia, one stakeholder reflected: *“AI is promising, but teachers need space and support to explore it safely.”* Irish participants expressed concern over “reliability, ethics, and potential job impacts” of AI. Cyprus participants requested *“AI use cases specific to adult education”* and *“legal clarity aligned with the EU AI Act.”*

6. Implementation Drivers and Enablers

Several enabling factors were identified that help sustain digital transformation:

National training programmes (e.g., *Digital Teacher Project*, *Digital Academy*) were widely praised.

Collaborative practices, such as peer mentoring and communities of practice, were identified as highly effective.

EU and national funding programmes (e.g., Erasmus+, RRF) are critical in sustaining momentum and providing resources.

General Summary and Conclusions for Consultation Research

The consultation results across the DIGITALLI partner countries paint a detailed picture of progress and persisting challenges in the digital transformation of lifelong learning institutions. While national contexts differ, the voices of stakeholders reveal similar needs, shared frustrations, and a collective aspiration to deliver more inclusive and future-ready adult education.

One of the most important and highlighted themes is the mismatch between policy and everyday implementation. Digital transformation strategies exist in every partner country, and significant investments have been made in infrastructure, platforms, and digital resources. However, stakeholders across all regions expressed concern that these tools are often underutilised or implemented without a clear pedagogical vision. Institutions may have smart boards, Moodle access, or online portals, but a Greek educator said, *“We don’t use them as part of a structured learning model. They’re just there.”*

Educators' readiness is a repeated concern throughout all countries' reports. While countries like Slovenia and Ireland have rolled out structured CPD frameworks and teacher training programmes, participants noted that professional development needs to be ongoing and practical. Educators call for dedicated time, peer-led mentoring, and support for experimenting with digital tools, without fear of judgment or failure. As one Irish participant reflected, *“Digital tools are evolving faster than our training can keep up with.”*

The digital divide remains a significant challenge for learners. Access to devices, stable internet, and user-friendly learning environments is still unequal, particularly in rural or low-income settings. Moreover, learners with low literacy or limited exposure to technology require more than just tools—they need scaffolding, support, and personalised guidance. This is valid for older adults, migrants, and unemployed people, who are often the focus of lifelong learning but are least prepared to navigate digital platforms independently.

A powerful theme emerging from all countries is hesitation and uncertainty around AI. Stakeholders show curiosity about its potential for automation and personalisation, but also express ethical and practical concerns. Many educators feel unprepared to use AI responsibly or confidently. As one participant in Greece noted, *“We need to learn how to use AI properly and responsibly, not just fear it or misuse it.”*

Despite these concerns, the consultations also revealed encouraging signs of bottom-up innovation. Educators across countries shared examples of grassroots success, where they had taken ownership of digital tools, experimented with AI for planning, or supported colleagues through informal mentoring. Programs like Ireland’s Hi Digital, Slovenia’s Digital Teacher Project, and Greece’s Digital Citizen Learning Sequence were valuable. Still, all participants agreed that systemic follow-up and long-term commitment are needed to preserve speed.

Participants also recognised that digital transformation cannot independently be seen as a technical upgrade—it is a cultural and pedagogical change. It requires clear leadership, inclusive planning, and alignment between national goals and institutional realities. As one educator from Cyprus put it: *“We need digital tools, yes—but also digital thinking, from the top to the classroom.”*

3. Discussion

The desk and consultation research across the DIGITALLI partner countries reveal a complex and developing picture of digital transformation in lifelong learning institutions. While national contexts vary, patterns around shared ambitions, systemic gaps, and arising opportunities define the current phase of digitalisation in adult education.

3.1 Policy Convergence with European Priorities

All five countries have developed national strategies that align closely with the EU's Digital Decade 2030 targets, particularly the goal of ensuring **80%** of citizens have basic digital skills. Frameworks like DigComp are widely adopted or adapted (e.g., DigComp 2.3 AT in Austria),

and strategies such as Greece’s Digital Transformation Bible, Ireland’s Harnessing Digital, and Slovenia’s Digital Slovenia 2030 demonstrate strong alignment with EU objectives.

Policy documents consistently emphasise digital upskilling, inclusive access, and institutional innovation. However, implementation is uneven, especially when transforming strategy into practice at a local level. As shown in both desk and consultation research, regional differences, inconsistent institutional readiness, and fragmented support structures often dilute the intended impact of these otherwise well-structured national policies.

3.2 Digital Infrastructure and Institutional Readiness

Infrastructure development has progressed across all countries, with platforms like eCollege (Ireland), Digital School and e-me (Greece), and Digital Campus Austria providing national-level access points for digital learning. Nevertheless, both research streams identified persistent gaps, especially in rural and underserved areas. In Austria, for instance, *“urban adult education centers tend to have more advanced e-learning platforms and staff expertise, whereas smaller rural institutions may face connectivity or resource constraints”*.

Institutions often report limited capacity to maintain or fully leverage existing digital tools, largely due to insufficient IT support, digital pedagogical skills, or sustained funding. One Irish participant noted, *“We have platforms, but using them well across all providers still depends too much on individual leadership and enthusiasm.”*

3.3 Educator Competence and Professional Development

A recurring theme is the need for ongoing, practical, and supported professional development for educators. Programmes like EBmooc in Austria, Digital Teacher Project in Slovenia, and CPD offerings in Ireland and Cyprus have been pivotal, but uptake and impact remain inconsistent. Many educators across countries still rely on peer learning, self-directed exploration, or ad hoc support.

Consultation participants across all five countries presented this gap. A Greek educator shared: *“This is a nice journey... but it needs a lot of time. You invest in it.”* Similarly, Austrian participants highlighted the lack of formal AI training opportunities and dependence on peer support. There is general agreement that CPD needs to be structured, incentivised, and embedded into institutional culture.

3.4 Learner Needs and Digital Inclusion

Both research strands reveal that digital inclusion remains a central challenge. Older adults, migrants, unemployed individuals, and those in remote areas continue to face barriers to access and digital confidence. In Austria, 60% of older adults lack basic digital skills, and while initiatives like *Digital Überall* provide essential outreach, demand often exceeds supply.

Educators in all countries report that learners often struggle to engage deeply with online platforms. As one Greek educator said, *“Students don’t know how to use the platform beyond uploading and downloading files.”* Ensuring equitable digital transformation requires more than

infrastructure—it demands targeted support for learners, especially those furthest from digital access and confidence.

3.5 Quality Assurance and Strategic Alignment

Countries like Ireland and Slovenia have embedded digital learning into national QA systems (e.g., QQI, POKI), while Austria’s Ö-Cert framework now includes digital learning criteria. These systems help ensure that digitalisation is not just about access, but also pedagogical quality, learner experience, and outcomes.

However, scaling good practices across all providers remains difficult even in countries with strong QA systems. As noted in Austria’s consultation, *“Platforms like Moodle are there, but their pedagogical potential remains underdeveloped.”* QA tools are most effective when accompanied by funding, training, and leadership support, which varies significantly between urban and rural institutions.

3.6 The Emerging Role of AI

AI is beginning to enter the adult education landscape, but stakeholders across all countries expressed cautious optimism mixed with concern. While tools like ChatGPT are being piloted for lesson planning or content creation, ethical frameworks, formal training, and strategic direction are lacking.

As one Slovenian educator noted: *“AI is promising, but teachers need space and support to explore it safely.”* The potential of AI to personalise learning, automate tasks, and support inclusion is acknowledged, but its meaningful adoption will depend on responsible rollout, upskilling, and trust-building.

4. Conclusions

The findings from both desk and consultation research highlight a sector in transition—from emergency-driven digitalisation during the pandemic to a more strategic, structured, and sustainable model for lifelong learning. Across Austria, Cyprus, Slovenia, Ireland, and Greece, there is strong policy alignment, widespread infrastructure investment, and growing institutional awareness of the importance of digital transformation.

Yet this is far from complete. Four significant conclusions can be drawn:

1. Implementation must bridge national vision and local realities. Regional disparities, infrastructure gaps, and staffing constraints prevent the full realisation of digitalisation goals, especially in rural or underfunded areas.
2. Educator training is the core of transformation. Without empowered, confident, and well-supported adult educators, digital tools and platforms can’t fulfill their role. CPD must be institutionalised and continuously updated to keep pace with emerging technologies like AI.

3. Equity must be at the heart of digital strategy. Reaching vulnerable learners—older adults, low-skilled workers, migrants—requires proactive inclusion policies, targeted outreach, and learner-centred platform design.
4. Quality assurance and AI-readiness need strengthening. Strong national QA systems should be expanded to include clear digital and AI-integrated education criteria, supported by strong evaluation frameworks and ethical precautions.

The DIGITALLI countries are well-positioned to lead this next phase of transformation. By connecting policy ambition with institutional support, educator empowerment, and learner inclusion, lifelong learning systems across Europe can become digitally advanced and socially just. As one Austrian participant concluded: *“AI is here to stay. The question is whether we’re ready—not just technologically, but pedagogically and ethically.”*

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