# Voices on Digitalisation

What 400 Romanians told us through a crowdsourcing campaign.



# Summary

CRPE carried out the Romanian chapter of the wider Inclusive Digitalisation in the European Union (IDEU): Shape the Digital Transformation in Europe crowdsourcing campaign, part of a process running across six EU Member States. In Romania, over 400 citizens shared their experiences with digitalisation, highlighting issues such as limited digital inclusion, difficult-to-access digital public services, unequal digital education, limited opportunities for older adults, challenges for small businesses, or the gender gap in ICT. Through a two-step process—identifying obstacles and then prioritizing or refining them—CRPE gathered structured citizen input, which was further complemented by stakeholder interviews, public debates, and real-life case studies on digital inclusion.







# **Voices on Digitalisation:**

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The European Union's Digital Decade sets an ambitious vision for Europe's digital transformation by 2030, with targets covering digital skills, business digitalisation, public services, and cuttingedge infrastructure. These ambitions reflect the EU's commitment to a competitive, secure, and inclusive digital society in which citizens have the skills they need, businesses adopt advanced technologies, and public administrations offer accessible, fully digital public services. To implement this common framework, every Member State, including Romania, was required to adopt national roadmaps outlining how they will contribute to the EU-wide goals.

Romania's 2024 Digital Decade Roadmap falls significantly short of the EU's ambitions. Independent assessments, including CRPE's analysis and the 2025 Digital Decade national report, highlight that Romania set notably low targets, particularly in digital skills, business adoption of cloud/Al/big data, and key areas such as digital identity and e-Health, which are missing altogether. These weaknesses are especially problematic given Romania's already deep digital divides: rural communities, older people, and those with lower levels of education remain far below EU digital-skills averages, increasing the risk that the country will fall further behind in a decade defined by rapid technological change.

In this context, understanding the real experiences of citizens becomes essential. To capture these perspectives, CRPE carried out a two-step national crowdsourcing campaign between may and november 2025, that gathered input from over 400 people across Romania. The participants highlighted a wide range of issues: limited digital inclusion, slow or difficult-to-access digital public services, unequal access to technology in schools and too few teachers trained in digital skills, limited learning opportunities for older adults and people left behind, challenges for small businesses in adopting new digital tools or the need to significantly increase women's opportunities and participation in ICT professions.

Crowdsourcing is particularly valuable in policy areas like digitalisation, where people's dayto-day experiences differ significantly by region, age, and socio-economic background. In the first phase of the campaign, citizens were invited to describe, based on their own experiences, the obstacles Romania faces in advancing digitalisation. In the second, CRPE consolidated these issues into categories and asked participants to prioritise or propose new solutions. This citizen input was further complemented through stakeholder interviews, public debates that echoed the same themes, and CRPE's mapping of real-life case studies involving public authorities and CSOs promoting digital inclusion especially in more vulnerable or hard-to-reach communities.

This policy brief presents the main findings of CRPE's crowdsourcing campaign.

# Theme 1.

# Ensuring digital skills are taught from a young age and are promoted in schools



Romania's education system is not preparing students for the digital era. Digital competences are poorly integrated across the curriculum, creating an immediate skills gap. ICILS 2023 shows that Romanian students score well below the international average, especially in computational thinking and problem-solving. These gaps are most visible in rural and vulnerable communities, where both qualified teachers and adequate infrastructure are lacking. Teacher training in ICT remains essential, while infrastructure deficits are severe: only 1 in 5 IT labs in rural areas is properly equipped, and 1 in 3 students lacks an individual device for schoolwork, relying instead on limited school resources (World Vision, 2022).

The program should include digital training via schools, community centers, libraries, NGOs, specifically designed interventions for elderly, rural residents, low-income households, people with disabilities or limited formal education: e.g. subsidized devices, assisted digital support, tailored training, outreach campaigns etc.

1.1 Reform school curricula so as to incorporate digital literacy & basic ICT competencies into formal education (technical, vocational, general)

Among the solutions voted in the crowdsourcing campaign the strongest support on behalf of the citizens went to the solution titled "Integrating the digital component in all school subjects", emphasizing the fact that digital competence should not be confined to ICT classes alone. Citizens clearly want digital literacy embedded across the school curriculum, ensuring that every student — regardless of academic profile — develops functional, applied digital skills. This also implies expectations for updated curricula (especially in Vocational Education and Training though work-based partnerships with companies), new teaching materials, and teacher support mechanisms.

1.2 Institutionalize digital pedagogy trainings for teachers through mandatory initial and continuous training modules for teachers, focused on practical, classroom-anchored strategies

**Teachers in Romania lack methods and guidance for digital pedagogy.** While 91% report occasional ICT use, only 12% employ digital tools systematically for assessments, for example. Participants in the crowdsourcing campaign emphasized not just the technical ability to use devices, but the need for teachers' methodological training, digital classroom management, integrating technology into teaching practices, and designing interactive, student-centered digital learning experiences. Devices alone are insufficient if teachers lack support to use them effectively and confidently.

## 1.3 Prioritize investments in upgrading school IT labs, especially in rural areas

#### Romanian youth encounter significant infrastructural barriers regarding ICT access in schools.

This is particularly acute in rural settings, where only 1 in 5 computer laboratories are adequately equipped, and 1 in 3 students lack access to a personal school device, necessitating total reliance on school infrastructure. This proposed investment is strongly validated, having been ranked as the second most voted solution in our crowd-sourcing campaign and representing the most frequently cited concern.

# Theme 2.

## Digital skills & literacy, with a focus on the digital inclusion of vulnerable and disadvantaged groups (older people, rural populations, low-income, disadvantaged social groups)

2.1. Create community digital hubs in libraries, schools, or cultural centers, especially in rural areas where citizens can learn digital skills, access devices and public services and receive personalized support

The community digital hubs are essential, providing a foundational space for all age groups, from young adults to senior citizens, to access and improve their digital skills. These centers can host diverse lessons, spanning everything from basic smartphone usage, identify online disinformation or scam campaigns to advanced programming and coding. We should transform existing infrastructure like libraries, schools, and cultural centers into dedicated digital support hubs, equipping them with modern technology and reliable internet access. In these spaces, adults and seniors can receive direct, practical assistance to learn new skills and troubleshoot daily issues.

It is therefore crucial that local public authorities prioritize the proper development and adequate funding for these initiatives. The good news is that over the last few years, Romania has seen the rise of many successful community digital centers, which have generated excellent case studies, particularly in supporting digital skills for adults or elderly people. Specific examples of these achievements are detailed in a recent CRPE report.

2.2 Develop a lifelong digital learning strategy that provides structured training pathways for adults and seniors, delivered through nationally accredited programmes, universities, CSOs and schools operating outside regular schedules.

This strategy must be grounded in a clear analysis of who the digitally vulnerable groups are, using existing national statistics, data from the 2030 Digital Decade Roadmap, DESI 2025 country report or other national reports. These sources show that adults, people working in agriculture or self-employment, rural residents, and disadvantaged communities are among the most exposed to digital exclusion. Yet the current 2030 Roadmap includes no dedicated measures for supporting them, focusing almost exclusively on the public sector. Establishing a national programme for digital literacy and inclusion for adults, especially in rural areas and among disadvantaged groups, is both necessary and feasible.

2.3 Supporting free and accessible classes for seniors and adults to enhance digital literacy

This action complements Priority 2.1, as the majority of these classes can be delivered effectively through existing community centers and libraries, often via partnerships between CSOs and local public authorities. Crucially, the funding and long-term sustainability of these programs must be a clear priority for local public authorities. Currently, most existing classes are primarily managed by the private sector, with limited successful public models documented, apart from those integrated within a sample of EU-funded projects or managed through social assistance departments.

# Theme 3.

## Enhancing the quality and accessibility of E-services at national level



Enhancing both the quality and accessibility of digital public services is a core objective of the Digital Decade 2030 and one of the most frequently mentioned requirement in our crowdsourcing campaign. This effort requires more than reaching the target of 100% E-services: it demands intuitive and clear platforms, step-by-step user guidance, dedicated support desks, and maintaining accessible offline or assisted channels for people without internet access or digital skills.

## 3.1 Continue digitalizing public services to meet the 100% E-services objective and apply user-centric design principles

Romania has committed to ensuring full access to online public services by 2030, but this goal remains far from reality. Moreover, simply creating E-services is not enough if they are difficult to navigate or fail to incorporate user feedback and real user experience. Digital platforms must be easily accessible, intuitive, and built around citizens' needs. Without user-centric design, even well-developed systems risk low adoption and may fail to reduce the digital divide.

## 3.2 Monitor, evaluate, and adjust digital public service platforms

Authorities should systematically collect data on usage rates, user profiles, challenges encountered, and overall satisfaction. Feedback from beneficiaries must feed into regular updates, ensuring that both national and local digital public services remain relevant, responsive, and effective.

## 3.3 Develop practical guides and train public officials to assist citizens

Clear, step-by-step guidance materials should be created to help people navigate digital services. In parallel, public officials, especially those in customer-facing roles, should be trained to support individuals who struggle with digital tools, ensuring that no one is left behind in the transition to e-governance. Assistance in using the digital platforms should be easily available for the citizens, especially at the local level where the interactions are more frequent.

# Theme 4.

## Advancing equity, gender balance, and inclusion in ICT



Women represent only 26% of ICT specialists in Romania (Eurostat, 2024), a gap that begins early in education, where girls are less encouraged to pursue STEM subjects, and continues throughout their careers due to stereotypes, limited access to mentoring, and the scarcity of visible female **role models.** This underrepresentation weakens innovation, reduces diversity in the tech sector, and reinforces broader societal inequalities. Romania also ranks second-lowest in the EU in gender equality (EIGE, 2022), and has the largest gender gap in labour market participation, further reflecting structural barriers faced by women. At the EU level, the situation is even more alarming, with women representing only 19, 4% of ICT specialists.

One of the EU's Digital Decade 2030 targets is to improve gender convergence in ICT and move toward a genderbalanced digital workforce. Romania must take targeted, proactive steps to close this gap, but, unfortunately, the 2030 Roadmap includes no specific measure targeting this objective.

#### 4.1 Launch national campaigns encouraging girls to pursue STEM

This includes funding scholarships, innovation competitions, and mentoring programmes that challenge gender stereotypes in both education and employment. Early and sustained interventions are essential for building confidence and interest among girls and young women. These interventions are, at the time being, prioritized especially by the private and not-for-profit sectors, with few public projects in the area.

#### 4.2 Develop leadership and career advancement programmes for women in ICT

Structured initiatives, such as leadership academies, peer networks, and professional development programmes, should support women's progression in the tech sector, reduce attrition, and help build a more inclusive and competitive digital workforce.



# Theme 5.

# Strengthening the ICT workforce: Increasing the number of specialists and improving retention



To align with the Digital Decade 2030 goals, Romania must increase its pool of ICT specialists and establish robust conditions for long-term workforce retention. However, the current trajectory is concerning. Under a baseline scenario, Romania is only expected to reach 2.8% ICT specialists by 2030, significantly below the projected 5.0% EU average, mirroring the current employment rate of 2.8% (vs. the EU average of 4.6% in 2024). This deficit is reinforced by substantially lower tertiary graduation rates (22.5% vs. the EU average of 43.1%) and insufficient numbers of STEM graduates (18.6 per 1,000 vs. the EU average of 23), with existing IT jobs heavily concentrated due to regional disparities.

Addressing this shortfall requires coordinated action between education, industry, and public authorities to ensure new educational and employment opportunities are accessible across all regions, not just major urban centers.

#### 5.1 Build strong partnerships between the education system and the ICT industry

Enhanced collaboration between universities, vocational schools, and tech companies can help modernize curricula, integrate real labour-market needs, and create clear pathways to employment. Measures include dual education programmes, structured internships, industry-led workshops, and co-designed university modules that prepare graduates for immediate entry into the ICT sector.

#### 5.2 Expand continuous training, reskilling, and upskilling opportunities

Adults already active in the labour market should have access to flexible, accredited programmes enabling entry into ICT careers. Nationally supported reskilling schemes, offered free or subsidized, can be delivered through partnerships between public authorities, universities, and tech companies. Courses should be available in parttime, online, and hybrid formats to accommodate diverse learning needs and encourage career transitions into digital roles.

### 5.3 Reduce regional disparities and support ICT development outside major cities

Romania should stimulate the growth of regional tech ecosystems by supporting local innovation hubs, expanding digital infrastructure, and incentivizing companies to invest outside major urban centres. Creating regional training centres, job-placement networks, and targeted support programmes in less developed areas will help ensure that ICT career opportunities and the specialists who fill them are more evenly distributed across the country.

# Theme 6.

## **Revise and strengthen Digital Governance and the National Digital Roadmap**



An independent analysis carried out by CRPE reveals that Romania's roadmap is marked by lim-ited ambition, with targets consistently below EU objectives, indicators that lack coherence, and measures that often fail to address digital priorities directly. Governance is weak and leadership diffuse. Rather than presenting a coherent national strategy. many actions merely repackage pre-existing EU-funded projects originally designed for other purposes.

## 6.1 Revise and Strengthen the National Digital Roadmap

The current national plan is undermined by limited ambition, weak governance, unclear responsibilities, and the fragmentation or recycling of existing projects. Consequently, the national strategy must be fundamentally redesigned during the 2026 milestone review. This redesign must establish clear, ambitious targets (aligned with EU benchmarks), include defined interim milestones and measurable indicators. outline a clear governance structure, and adhere to a credible implementation calendar. These requirements are derived directly from the CRPE analysis.



# Methodology

The Romanian chapter of the <u>IDEU crowdsourcing campaign</u> followed a two-phase methodology. Phase 1 focused on identifying key problems in Romania's digital transformation through an online questionnaire completed by 315 participants. Based on the issues they raised, CRPE formulated 23 potential solutions, which were then evaluated in Phase 2 by 93 participants, who prioritized and refined the proposed actions. The ranking is available online. The crowdsourced input was complemented by eight in-depth interviews with relevant stakeholders, including public authorities, civil society organizations, and enterprises. These findings were complemented by two separate analytical reports: one on digital inclusion, and another assessing Romania's National Roadmap for the Digital Decade.

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