

Introduction

The synthesis aims to address the evolving landscape of digitalization and its impact on older workers in the context of EU public policies. It is rooted in the collaborative efforts of Working Group 4 (WG4), which consists of 50 members from various countries, with 15 active participants contributing to the preparation of this report. The primary objective for 2023 is to create a comprehensive synthesis of knowledge gathered from multiple countries, focusing on the intersection of digitalization and the protection of older workers. WG4 members convene every two months to refine a common strategy, with an emphasis on inclusivity and active engagement. The key questions guiding this synthesis—approved in a meeting in Iasi in March 2023—focus on national digitalization strategies, policies for older workers under digitalization, strategies for their inclusion, and related policy recommendations. The synthesis does not offer a broad overview of digitalization policies but rather delves into the specific impacts of these policies on older workers. It highlights both the formal and informal EU initiatives, analysing how digitalization influences employment, access to healthcare, social inclusion, and digital citizenship for older workers. By concentrating on recent policy developments, the report underscores the importance of adapting EU frameworks to safeguard older employees in the digital age.

Three questions:

1. What are the national digitalisation strategies?
2. What are the features of policies for older workers under digitalisation?
3. What are strategies for inclusion of older workers?

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Countries:

1. Albania,

2. Czechia,
3. Denmark,
4. Estonia,
5. Finland,
6. Greece,
7. Ireland,
8. Luxembourg,
9. Malta,
10. Romania and,
11. Turkey.
12. Ukraine

Summary of country reports:

1. Albania

The future of work is shaped by various factors, and digitization stands out as a key driver of technological change. Digital transformation in Albania has significantly altered the employment landscape, impacting industries, occupations, and skills. While intelligent automation might lead to job losses, it also introduces changes in how people work, particularly affecting individuals aged 40 and above. As Albania embraces digital changes, it brings both promising opportunities and new challenges. Older workers face risks such as increased inequality and social exclusion due to their digital skills gap. Public policies play a crucial role in addressing these challenges, supporting older workers in the digital job market, and ensuring they can harness the benefits of digital transformation. Albania's pursuit of EU integration has accelerated its economic and digital growth. This journey has spurred the implementation of policies enhancing accessibility, infrastructure, and cost-effectiveness. Notably, the National Plan for Sustainable Development of Digital Infrastructure aims to bridge connectivity gaps. By providing free WiFi in public spaces and increasing internet usage, older workers gain improved access to digital resources. Additionally, the "Digital Agenda of Albania, 2022-2026" Strategy focuses on enhancing service quality and incorporating innovative technologies, aiming to integrate older workers into the digital era. Albania faces challenges in digital skills, with only 24% of its population aged 16 to 74 possessing basic digital skills. This shortage of skills poses a significant challenge for older workers, especially older women, who are vital to the workforce and economy. Structural barriers like limited access and digital infrastructure gaps contribute to these disparities. Many older workers lack trust in technology due to not growing up with it. The COVID-19 pandemic forced some older Albanian workers to adopt technology for social interactions, but this adoption has been uneven. When it comes to employment, inadequate IT knowledge, lack of access, and connectivity issues might lead to isolation, particularly in remote areas. Automation and computerization initiatives might further marginalize older employees if their needs aren't considered. For older workers to tap into their potential, they need greater flexibility and support to adapt their professional profiles to the evolving job market's demands. While Albania has established centralized teams for innovative GovTech solutions and has excelled in digital transformation, the inclusion of older workers is often overlooked. There's a lack of specific strategies tailored to the challenges faced by older workers, including education, computer literacy, and income. To address the gap, Albania

should allocate dedicated funding and resources for targeted instruction and support for older workers. Policies should ensure access to digital tools and skills, including devices, education, and training. Local community input and collaboration with local businesses are essential to effectively support older workers in their transition to the digital age. Prioritizing digital inclusion can unlock the potential of older workers and enable them to benefit from the digital era.

2. Czechia

What are the national digitalisation strategies in the Czech Republic? The Czech Republic has implemented several strategies to promote digitalization across various sectors. The "Digital Czech Republic" strategy aims to transform the country into a digital society by improving digital infrastructure, promoting e-government, enhancing digital skills, and fostering innovation. The "Smart Industry" initiative focuses on digitalizing the manufacturing sector through technologies like Industry 4.0, IoT, and automation to improve productivity and competitiveness. The "Digital State" initiative seeks to improve public services by increasing their accessibility and efficiency through digital means. The "National Cyber Security Strategy" focuses on enhancing cybersecurity measures to protect critical infrastructure and combat cyber threats. **What are the features of policies for older workers under digitalisation in the Czech Republic?** The Czech Republic lacks a comprehensive policy specifically addressing the challenges faced by older workers in the context of digitalization. There is a growing awareness of the need to upskill older workers to keep up with digital changes, but there are limited tailored programs or initiatives. Older workers often face challenges in adapting to new technologies, and there is a need for targeted training programs to enhance their digital literacy. Some general labour market policies may indirectly impact older workers, but there is a gap in dedicated policies addressing their unique needs in the digital workforce. **What are strategies for inclusion of older workers in the Czech Republic?** The Czech government recognizes the importance of active aging and has launched initiatives to promote the inclusion of older workers. Programs focusing on lifelong learning and skills development are encouraged to help older workers stay relevant in the evolving job market. While not exclusively targeted at older workers, general workforce development and reskilling programs aim to ensure workers of all ages are equipped for digital work. There is a growing emphasis on intergenerational cooperation in workplaces to leverage the experience of older workers while benefiting from the skills of younger employees.

3. Denmark

Denmark ranks among global leaders in digitalization and advancing its digital economy. It holds the second-most advanced position in the EU according to the Digital Economy and Society Index (DESI) 2022, with a score well above the EU average. It also topped the global digital competitiveness ranking in 2022. Denmark's digital public sector and service infrastructure development is spearheaded by the Agency for Digital Government. The country's comprehensive "National Strategy for Digitalisation" focuses on collaboration between public, private, and civil society sectors, with visions including cyber security, growth, green transition, and international prominence. Denmark's digitalization approach prioritizes ensuring digital benefits are accessible to everyone, regardless of their digital skills. Guiding principles emphasize inclusion and participation in society for all citizens. The government implements measures to support the elderly, people with disabilities, and immigrants in adapting to digital advancements. To aid digitally challenged citizens, Denmark employs targeted

communication, assistance, and support networks. The Agency for Digital Government's "Network for Digital Inclusion" fosters ideas and initiatives to support this population. Visual materials and animated films highlight the benefits of digital solutions, available in various languages. Denmark's strategies extend beyond government initiatives, involving the private sector to create a digitally inclusive society. Efforts include making digital communication mandatory for interacting with the public sector, emphasizing lifelong digital skills development, and compelling businesses to provide alternative support mechanisms for digitally challenged citizens.

4. Estonia

The digital divide is a significant social and policy challenge in contemporary society, impacting access to technology and digital services (Helsper, 2012; Martin et al., 2016). Increasing longevity and widespread digitalization are common trends in European Union (EU) member states, including Estonia, necessitating effective strategies in economic and social domains (Batut, 2016). Estonia is a leader in digitalization, focusing on building a digital society and digitizing public services both nationally and across borders. Based on the Digital Economy and Society Index 2022, Estonia ranks 9th out of 27 EU member states, with a focus on digital public services, cybersecurity, and improved connectivity. Estonia emphasizes digital inclusion for all citizens, with guiding principles highlighting accessibility and participation. Measures include targeted communication, support networks, and the development of digital skills, particularly for the elderly and those with disabilities. Estonia has invested in digital public services, achieving a high ranking in digital public services according to DESI 2022. The government provides e-learning courses, such as DigiGov Academy, to enhance digital knowledge and skills among civil servants. Estonia's ageing population presents challenges in terms of digitalization, as older individuals may face barriers due to lack of experience and technology alienation. Despite being a digital leader, Estonia aims to bridge the digital divide for older citizens and enhance their internet usage and access to digital services. Public policy plays a vital role in reducing digital exclusion among older individuals, but it requires a focus on the values and needs of this group. Ethical considerations are important in designing digital services, ensuring that they are inclusive and address the unique challenges faced by older populations.

5. Finland

Digital competence involves confident, critical, and responsible engagement with digital technologies for learning, work, and societal participation. It encompasses information literacy, communication, media literacy, digital content creation, safety, problem-solving, and critical thinking. Finland ranks 2nd in the EU's Digital Economy and Society Index (DESI) 2021. The national digital compass (up to 2030) aligns with the EU's Digital Compass and focuses on skills, secure digital infrastructures, business transformation, and public service digitalization. Finland's strategy outlines measures, investments, and coordination to achieve digital goals. The Diginord project (2021-2023) involves Nordic researchers exploring digitalization's impact on older workers. Older workers' response to digitalization varies based on occupation and education. Many experience work task changes due to digitalization, with only a few losing their jobs. Digitalization facilitates remote work but may blur work-life boundaries. Digital technologies are now commonly used across age groups. The Programme on Ageing 2030 focuses on preparing for population ageing extensively and sustainably. Objectives include improving older workers' work ability, functional capacity, wellbeing, and access

to services. Objectives include improving the functional capacity of older working-aged individuals and extending their careers. Solutions for longer careers and age discrimination prevention are explored. Voluntary work's role in society is recognized, benefiting both older people and the public sector. Technology, AI, and robotics enhance older people's well-being, supported by equal access. The European Year of Skills (9 May 2023–8 May 2024) aims to highlight working-age people's skills development. Objectives include promoting investment in training, aligning skills with employers' needs, and attracting skilled individuals. Finland's strategy for including older workers involves state-led apprenticeships. The vocational education and training (VET) system emphasizes a learner-centered, competency-based, and individualized approach. Adult apprenticeships supplement the VET system, providing further training for adults with work experience and prior qualifications. Information regarding the participation in apprenticeships based on age groups and qualification levels is available.

6. Greece

The introduction highlights the focus on digital transformation in Greece, particularly for elderly individuals, to bridge the knowledge and technology gap among this population. The aim is to explore initiatives addressing inequalities and digital literacy gaps among the elderly, emphasizing education, online forums, and digital platforms. The analysis draws on Greece's "Digital Transformation Strategy 2019-2023," European Commission's Digital Economy and Society Index (DESI), and Ministry of Digital Governance data. The COVID-19 pandemic acted as a catalyst for digital advancement in Greece. Despite the absence of specific legislation for elderly digitalization, Greece has taken broader measures to promote digital transformation, enhance digital skills, and provide online services for all citizens, including the elderly. The "Digital Transformation Strategy 2019-2023" focuses on various sectors, aiming for digital skills training and internet access for all citizens. E-government development aims to improve accessibility, and lifelong learning initiatives provide digital skills training for various age groups, including older adults. EU initiatives indirectly contribute to Greece's digitalization efforts. Since 2019, Greece integrated digital skills into education and collaboration with industry to develop digital curriculum frameworks. A digital skills education program tailored for the elderly was introduced in 2022 and implemented in 2023. Open data resources, smart city initiatives, and a dynamic digital transformation policy are key components of Greece's digitalization efforts. The policy emphasizes incentives, transparency, and citizen engagement while the Ministry of Digital Governance coordinates digital transformation actions. Challenges include the lack of European standards in educational programs, fragmented educational actions, absence of comprehensive data, and the need for enhanced accessibility.

7. Ireland

Ireland ranks highly in digitalization in Europe and sees digital transformation as integral to sustainable development. Despite Ireland's digital prowess, older adults struggle with technology adoption, and lifelong learning is proposed as a solution. Ireland's digital strategy, "Harnessing Digital: The Digital Ireland Framework," aligns with EU ambitions for digital transformation by 2030, with focus areas in Skills, Digital Infrastructure, Business Transformation, and Public Services. Other policy documents elaborate on digitalization's impact on learning, public services, and the economy, encompassing topics in digitalization strategies. Older workers form around 20% of the Irish workforce but are

often underrepresented in policy documents, despite being at risk of digital literacy challenges. Specific policies for older workers' digitalization are absent; the focus is on skills, education, and learning, where digital proficiency plays a role. The "National Positive Ageing Strategy" emphasizes flexible retirement, adapting the work environment, continuous education, and positive perceptions of older employees. While digitalization policies lack these elements, Further Education and Training (FET) emerges as a priority area for older worker inclusion. FET should focus on digital skills training, offered to both employed and unemployed older adults, using tailored methods like one-to-one tuition. Despite recognizing the need for older workers' digital proficiency, the proportion of older workers in FET remains low in Ireland compared to the EU average.

8. Luxembourg

Luxembourg is regarded as progressive in promoting digitalization, with strategies like the National Action Plan for Digital Inclusion and the Electronic Governance 2021-2025 strategy. Despite ranking well in the Digital Economy and Society Index (DESI), its growth in digitalization has been slower, and the country aims to address this. The National Action Plan focuses on digital skills deficits, particularly in groups like the elderly and people with disabilities, aiming to empower individuals in the digital world. The Electronic Governance 2021-2025 strategy prioritizes eGovernment, digital accessibility, user-centered services, and trust in online state services. The Electronic Governance 2021-2025 strategy aims for universal electronic communication with public administration while considering users' skills and needs. Acknowledging a divide between digital natives and older generations, the strategy emphasizes helping seniors benefit from eGovernment services despite potential challenges. Educational campaigns and initiatives, such as the Silver Surfer project, enhance seniors' digital literacy, encouraging active participation and lifelong learning. Initiatives like MyGuichet.lu and Let's simplify together!.lu focus on improving user experience and inclusivity in accessing public services. Luxembourg's Silver Surfer project involves trained older volunteers instructing peers on secure digital technology use, promoting active participation and lifelong learning. The National Focal Point on Ageing coordinates ageing-related activities and fosters international communication, while employment rates for older individuals in Luxembourg remain lower than the EU average. Luxembourg focuses on encouraging long working lives and maintaining work ability through measures like age-friendly working conditions, training programs, and employment incentives. Associations like Perspective 45 promote the role of older workers as mentors and emphasize their experience's value in training and mentoring programs within companies.

9. Malta

Malta ranks 5th in the DESI index due to a successful national digital strategy, strong human capital with high ICT skills, and effective utilization of information technologies and artificial intelligence. The country focuses on e-Government services, high-speed internet connectivity, and digital skills development through education incentives and training programs. The Maltese government promotes cybersecurity and the development of start-ups, research, and digital businesses. Strategies include a focus on digital innovation, eCommerce, eSkill, national cyber security, and overall digital transformation, aiming to maintain the pace of the fourth industrial revolution. Malta promotes active aging and an intergenerational approach in the workplace through a framework agreement between social partners. Recognizing the value of senior professionals, the General Workers' Union supports

the intergenerational approach, combining experience with academic knowledge for business growth. The government aims for longer working lives, implementing age-friendly working arrangements, promoting healthy workplaces, offering flexible retirement schemes, and preventing age discrimination. Policies encourage older persons to engage in part-time work, community programs, and learning, while ensuring equal opportunities for participation in cultural, political, and social activities.

10. Romania

Romania ranks last in the DESI index, highlighting the need for progress in digital competencies and human capital development. The country has a high proportion of women specialists and graduates in ICT. The Authority for the Digitalization of Romania (ADR) manages digital transformation objectives and develops policies, including interoperability of IT systems and European-funded programs. Romania focuses on digital transformation in various sectors through the PNRR, promoting digital skills, connectivity, and support for businesses and public services. Romania has implemented various e-government projects and initiatives like National electronic service, ghiseul.ro, e-justice, and more. ADR has created projects like PSCID and SITUE for digital identification and interoperability, aiming to connect Romanian citizens with EU digital systems. Older Romanian workers are vulnerable to digitalization risks due to lower access and exposure to technology. The National Strategy of Adult Learning 2023-2027 emphasizes digital literacy for retirees through partnerships with Romanian Television and a digital helpline. Entrepreneurship skills training and financial access for older entrepreneurs are limited, and there's a lack of policy focus on services for older workers.

11. Turkey

Turkey has launched the e-Transformation Strategy to enhance digitalization in public services and administrative processes, aiming to improve accessibility and efficiency. The country ranks 48th in the Network Readiness Index (NRI) 2022, with strengths in people-related aspects and room for improvement in impact-related aspects. Initiatives like e-Government (e-Devlet), e-Health (e-Pulse), National Broadband Strategy, Industry 4.0, and cybersecurity aim to promote digital transformation in various sectors. Smart city initiatives integrate digital technologies for enhanced urban services, including transportation, energy management, waste management, and citizen engagement. Turkey lacks a comprehensive policy for digitalization and older workers, but some efforts address challenges faced by the elderly in the context of work and digitalization. The Ministry of Family and Social Services organized a "Digital Transformation Symposium for the Disabled and Elderly" to enhance abilities and participation in active business life. The "Aging Vision Document" aims to strengthen lifelong learning, improve employment opportunities, and economic security for the elderly. While there is no specific focus on older workers and digitalization in existing plans and strategies, the "National Action Plan for the Rights of the Elderly 2023-2025" is being prepared. Turkey has initiated Digital and Financial Literacy Trainings for the Elderly to promote active and healthy aging, providing training to over 1,500 elderly individuals. Turkish law prohibits discrimination based on age, allowing age differentiation in recruitment and employment processes if directly related to job requirements and reasonable. A Parliamentary Research Commission report emphasizes increasing digital literacy, designing age-friendly digital services, and ensuring ethical and safe digital environments for the

elderly. Specific risk, harm reduction, and intervention guidelines should be established for vulnerable elderly groups to ensure their inclusion and use of alternative communication methods.

National Approaches to Digitalization and Inclusion of Older Workers

The country report presents a comparative analysis of the strategies employed by Albania, Czechia, Denmark, Estonia, Finland, Greece, Ireland, Luxembourg, Malta, Romania, and Turkey in addressing digitalization and its impact on older workers. Each country brings a unique perspective to digital transformation, with a variety of approaches aimed at integrating older workers into the digital economy and workforce. Some nations have prioritized comprehensive national digitalization strategies that encompass all sectors of the economy, focusing on developing the infrastructure necessary for widespread digital adoption. Other countries have implemented policies tailored specifically to address the challenges older workers face when adapting to new technologies, with an emphasis on closing the digital skills gap. Key strategies across these countries include promoting lifelong learning opportunities to ensure older workers can continuously update their digital competencies. Many also emphasize intergenerational cooperation, fostering environments where younger and older workers can exchange knowledge and skills. Digital literacy programs, designed to enhance the ability of older workers to navigate digital tools, are common, as is a focus on improving accessibility to digital services, ensuring that older populations are not left behind in the digital revolution. Countries also recognize the unique value that older workers bring to the workforce, particularly in terms of experience and knowledge, and have crafted policies to retain these workers while helping them adapt to the changing nature of work in a digitalized world. Through a blend of skill development, infrastructure enhancement, and intergenerational collaboration, these countries are working to ensure that older workers can thrive in the digital age.

Research questions – summary

1. What are the national digitalisation strategies?

Albania, in its pursuit of EU integration, has introduced key policies such as the National Plan for Sustainable Development of Digital Infrastructure and the Digital Agenda of Albania 2022-2026, both of which are designed to enhance accessibility and foster innovation across sectors. These initiatives reflect Albania's commitment to digital growth, with a particular focus on bridging digital divides and incorporating new technologies into public services. Czechia has implemented a robust digital strategy with initiatives like "Digital Czech Republic," "Smart Industry," "Digital State," and the "National Cyber Security Strategy." These policies aim to improve the country's digital infrastructure, enhance the digital skills of its population, and secure essential public services, fostering a digital environment that supports both industry and governance. Denmark emphasizes the inclusive benefits of digitalization for all citizens, prioritizing accessibility, participation, and the integration of technology to improve public services and enhance overall well-being. By ensuring that digital advancements are accessible to all, Denmark aims to promote greater social inclusion through its digital policies. Estonia is recognized as a leader in digital transformation, with a strong focus on the digitalization of public services and cybersecurity. The country places particular emphasis on ensuring accessibility and enhancing digital skills, especially for older citizens, as part of its comprehensive approach to maintaining a secure and inclusive digital society. Finland has achieved high levels of digital competence through a strategy that focuses on improving skills, building secure infrastructures, fostering business transformation, and advancing public service digitalization. By adopting a holistic approach, Finland ensures that its digital initiatives support both economic growth and societal well-being. Greece, through its "Digital Transformation Strategy 2019-2023," is working to improve

accessibility and enhance digital skills training for its citizens. The strategy also promotes the development of e-government services, aiming to create a more connected and efficient public sector. Ireland's "Digital Ireland Framework" is focused on promoting digital skills, strengthening infrastructure, and improving public services. While these initiatives are broad, specific attention is given to the skills development of older workers, ensuring they remain competitive in a rapidly changing digital landscape. Luxembourg prioritizes digital inclusion through its "National Action Plan for Digital Inclusion" and the "Electronic Governance 2021-2025" strategy. These policies aim to address the digital divide, ensuring that all citizens, regardless of age or background, have access to the benefits of digital transformation. Malta promotes digital inclusion through various initiatives, including its e-Government services, digital skills programs, and cybersecurity measures. Notably, the "Silver Surfer" project aims to enhance the digital literacy of older adults, ensuring that they are equipped to participate in the digital economy. Romania is making strides in digital transformation by focusing on digital skills development, interoperability of systems, and the enhancement of public services. Initiatives such as e-Government reflect the country's commitment to improving digital accessibility and efficiency across sectors. Turkey, through its e-Transformation Strategy, is advancing digitalization in public services and addressing the inclusion of older workers in the digital age. The country has organized symposiums and training programs aimed at improving the digital skills of older citizens, ensuring they are not left behind in this era of technological change.

In conclusion, the countries examined in this report—Albania, Czechia, Denmark, Estonia, Finland, Greece, Ireland, Luxembourg, Malta, Romania, and Turkey—each demonstrate unique approaches to digitalization and the inclusion of older workers. While some nations emphasize comprehensive digital strategies that focus on infrastructure, cybersecurity, and public services, others concentrate on bridging the digital divide, particularly for older citizens. Policies across these countries highlight the importance of digital skills development, accessibility to digital tools, and the recognition of older workers' contributions in a rapidly evolving digital economy. Despite varying levels of progress, all countries recognize that digital inclusion is essential to ensuring social equity and economic sustainability. As digitalization continues to transform industries and reshape the workforce, targeted policies and initiatives will be critical in supporting older workers' adaptation to the new digital landscape. Collaboration between governments, businesses, and local communities will play a pivotal role in enabling older workers to thrive in the digital age, ensuring that they can actively participate in and benefit from the opportunities brought by digital transformation.

2. What are the features of policies for older workers under digitalisation?

Across Europe, countries are addressing the challenges posed by digitalization, with a particular focus on older workers, who often face difficulties due to digital skills gaps. However, the extent and focus of these policies vary significantly across nations. In Albania, older workers struggle with adapting to the digital age due to gaps in digital skills. There is a growing need for policies that can help them navigate the evolving job market and ensure they are not left behind in the process of digital transformation. Czechia has yet to develop a comprehensive policy specifically targeting older workers in the context of digitalization. Current policies tend to focus on broader labour market issues, leaving a gap in addressing the unique needs of older employees as they adapt to digital shifts. Denmark stands out for its emphasis on intergenerational cooperation and the recognition of older workers' valuable experience. Danish policies focus on lifelong learning and skills development, encouraging older employees to continue contributing to the workforce through upskilling and reskilling. Estonia acknowledges the digital divide affecting its older population and has taken steps to address this through digital skills training. The country promotes active aging and seeks to increase older workers'

participation in the digital economy by enhancing their digital competencies. In Finland, the Diginord project explores the impact of digitalization on older workers, shedding light on the changing nature of tasks and the growing need for reskilling. Finland's approach emphasizes preparing older workers for the evolving demands of a digitized workplace. While Greece lacks specific legislation focused on the digitalization of older workers, it promotes digital skills training and accessibility through various national strategies. The government's broader initiatives aim to improve access to digital tools for all citizens, including older workers. In Ireland, policies centre around lifelong learning and skills development for older workers, though they do not directly tackle the challenges posed by digitalization. The focus is more on general skill acquisition rather than targeted digital competencies for older employees. Luxembourg has made strides in promoting digital literacy among its older population, implementing programs like the Silver Surfer project to encourage active participation in the digital world. The country prioritizes reducing the digital divide for seniors. Similarly, in Malta, initiatives such as the Silver Surfer project help older workers improve their digital skills. In addition, the country promotes age-friendly working conditions, creating an environment where older workers are encouraged to remain active participants in the workforce. Romania has focused on digital skills development for retirees, collaborating with media outlets to offer training and support. The country's overall digital transformation strategy also includes measures aimed at enhancing digital literacy for older citizens. Finally, Turkey does not have a comprehensive policy specifically for older workers under digitalization, but it has made efforts through symposiums and training programs to address the digital challenges faced by the elderly.

While all countries recognize the importance of supporting older workers in the digital era, the approach and focus of their policies vary. Some nations, like Denmark and Estonia, emphasize intergenerational cooperation and digital skills training, while others, such as Ireland and Greece, focus more broadly on lifelong learning and accessibility. Countries like Luxembourg and Malta are actively promoting digital literacy among seniors, and Finland's Diginord project highlights the need for reskilling older workers as tasks evolve. There remains a clear need for more targeted policies in many countries, particularly those that focus on the unique challenges older workers face in adapting to digital transformation. Bridging the digital skills gap and providing access to relevant training and resources will be essential in ensuring that older workers can continue to contribute meaningfully in a rapidly digitizing world.

3. What are strategies for inclusion of older workers?

Across Europe, countries are grappling with the need to support older workers in adapting to the digital transformation of the workforce. While some nations have developed comprehensive strategies, others are still in the early stages of addressing the digital skills gap and ensuring older workers remain relevant and included in the evolving job market. In Albania, the key to addressing the digital gap for older workers lies in offering flexibility and support. The country recognizes the need for older workers to adapt to the shifting demands of the digital age, and policies should focus on enabling these workers to adjust to the evolving job market. Czechia currently lacks a dedicated strategy focused on the inclusion of older workers under digitalization. However, there is an evident need for upskilling and targeted training to better prepare older workers for the challenges brought by digital transformation. Denmark is a leader in promoting intergenerational cooperation. The country

emphasizes the sharing of experience and skills between generations and seeks to create an enhanced work environment where older workers are valued and supported in maintaining their productivity. In Estonia, the focus is on improving the work ability and well-being of older workers. Programs such as the Programme on Ageing 2030 are designed to enhance the employability and health of older employees, ensuring their continued participation in the workforce. Finland places a strong emphasis on lifelong learning, including the development of digital skills. The country promotes apprenticeships for older workers, which not only improve employability but also ensure that they remain competitive in the digital economy. Greece emphasizes lifelong learning and online forums as essential tools to bridge the digital literacy gap among older individuals. The focus is on education and training to enable older workers to gain the skills they need for the modern workforce. Ireland encourages lifelong learning and active participation among older workers, though specific policies aimed at addressing the digitalization challenges faced by this group are limited. The country recognizes the importance of continuous learning but lacks targeted measures for digital skills. In Luxembourg, older volunteers play a significant role in instructing their peers in digital skills. The country promotes age-friendly working conditions and offers training programs to ensure that older workers can remain engaged in the workforce. Malta focuses on promoting active aging through various initiatives, including digital literacy and skills training programs for the elderly. The country seeks to ensure that older workers can keep up with technological advancements and remain active contributors to the economy. Romania offers a combination of digital and financial literacy training for older adults. The country aims to enhance older workers' abilities to participate in business life, ensuring they can actively engage in the economy despite technological changes.

Turkey focuses on digital literacy training for the elderly, working to improve their access to alternative communication methods. The country's goal is to ensure older workers are not excluded from the benefits of digitalization, fostering inclusion through training and support.

Across these countries, there is a growing recognition of the need to support older workers as they face the challenges of digital transformation. Nations like Denmark, Estonia, and Finland are leading the way with policies that emphasize intergenerational cooperation, lifelong learning, and targeted skills development. In contrast, countries like Czechia and Ireland are still in the process of addressing these challenges more directly. What becomes clear is that flexibility, reskilling, and targeted digital literacy programs are essential for ensuring that older workers remain active and valuable contributors to the workforce. By fostering inclusive policies that address the digital divide and encourage ongoing learning, countries can ensure that older workers are not left behind in the rapidly evolving digital economy.

Best Practices for Digitalization and Older Workers in Europe

Estonia stands out as one of the most advanced countries when it comes to national digitalization strategies. Its comprehensive approach includes a focus on digital public services, cybersecurity, and connectivity, making it a leader in this space. Estonia's dedication to accessibility, particularly for older citizens, is evident in its emphasis on digital skills training, lifelong learning, and active aging. These initiatives are aimed at closing the digital divide for older individuals, ensuring they can fully participate in the digital age. Estonia's commitment to these efforts sets a high standard for digitalization strategies

across Europe. Denmark demonstrates exemplary policies when it comes to supporting older workers in the digital age. The country places a strong emphasis on intergenerational cooperation, recognizing the value that older workers bring through their experience and expertise. Denmark is also committed to creating age-friendly work environments and enhancing the well-being and productivity of older employees. Lifelong learning and skills development are central to the country's approach, ensuring that older workers can continue to grow and adapt to new technological challenges. Denmark's focus on these areas makes it a leader in policies designed to benefit older workers. Finland excels in the area of inclusion strategies for older workers, particularly through its innovative approaches to digitalization. The Diginord project is a prime example, as it specifically explores how digitalization affects older workers, demonstrating Finland's proactive stance. The country promotes apprenticeships for older workers, fostering intergenerational cooperation and creating opportunities for skill development at all ages. Lifelong learning is a key priority in Finland's strategy, and the country's initiatives provide older workers with the tools they need to remain active and relevant in the modern workforce.

Conclusion

In conclusion, the countries examined – Albania, Czechia, Denmark, Estonia, Finland, Greece, Ireland, Luxembourg, Malta, Romania, and Turkey – adopt diverse approaches to digitalization, policies for older workers, and strategies for inclusion. While each country tailors its approach to fit its own unique context, all of them aim to harness the benefits of digitalization for their populations, particularly older citizens. These efforts demonstrate several key trends. Firstly, countries implement varied strategies to address digitalization and the inclusion of older workers, with some specifically targeting the challenges that older individuals face in a digitalized economy, while others focus on more general labor market reforms. Secondly, the empowerment of older workers through lifelong learning and skills development emerges as a crucial factor across all the examined countries. This focus on continuous learning enables older workers to adapt to the rapidly changing demands of the digital era. Thirdly, the strategies for inclusion vary, but they all aim to enhance digital skills and accessibility, promote active aging, and create age-friendly work environments. These initiatives contribute to a more inclusive digital society by ensuring that older individuals remain active participants in the workforce and wider society. Finally, these countries' efforts highlight the importance of continuous adaptation and collaboration to ensure that older workers remain engaged, skilled, and valued contributors in the evolving digital workforce. Their commitment to advancing technological capabilities, while also addressing the specific needs of older workers, reflects a future-focused approach to digital inclusion that can serve as a model for other nations.