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From Access to Impact: Bridging the Gender Gap in AI and Digital Transformation across Central and Eastern European SMEs

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The CEE Her Initiative, powered by GLOBSEC, aims to amplify the voices of women from the CEE region in impactful policymaking debates. The Initiative seeks to foster the creation of a vibrant network that enhances the diversity of perspectives and contributes to tackling urgent challenges. Through this initiative, GLOBSEC strives to advance the broader goal of investing in women leaders, thereby changing narratives and improving policies in the CEE+ region and beyond.

Executive Summary

Artificial Intelligence (AI) and digital technologies are rapidly reshaping the foundations of economic competitiveness, productivity, and geopolitical influence. Yet across Central and Eastern Europe (CEE), a persistent gap remains between their potential and their actual impact on business performance, particularly among the small and medium-sized enterprises (SMEs) that form the backbone of the region's economies.

This report examines how gender shapes digital and AI adoption in SMEs across four CEE countries: Austria, Bulgaria, Czechia, and Slovakia. Drawing on original survey data, desk research, and in-depth interviews with women entrepreneurs, employees, and SME leaders, it identifies a critical "conversion gap" - the inability to translate digital tools into measurable productivity gains, innovation capacity, and competitive advantage. Women remain underrepresented in leadership and decision-making roles where technology strategies are defined, even as they increasingly engage with digital transformation as users and professionals.

Published by GLOBSEC as part of the CEE Her initiative, this report argues that closing the gender gap in digital and AI uptake is not only a matter of inclusion, but a strategic economic imperative. Enabling women's full participation in digital transformation can accelerate innovation, strengthen competitiveness, and reinforce democratic resilience in a volatile global environment.

Gender gaps in digital participation and entrepreneurship are increasingly recognised as a constraint on economic performance. Across the EU, increasing women's participation in ICT to 45% by 2027 could boost EU GDP by €260-600 billion.[1] At the same time, closing gender gaps in entrepreneurship could raise GDP by 6-12%, with an estimated 24.8 million "missing" women entrepreneurs across OECD countries.[2]

For Central and Eastern Europe, where SMEs dominate the economic landscape, the ability to adopt and effectively use digital technologies will be a key determinant of future growth, convergence, and economic security. The four countries examined - Austria, Bulgaria, Czechia, and Slovakia - reflect the region's diversity: from Austria's advanced innovation ecosystem to Bulgaria's emerging digital economy, and from Czechia's industrial strength to Slovakia's high level of technological openness. Despite these different starting points, all face a shared competitiveness challenge: digital uptake is limited in depth and uneven in application, while women continue to be underrepresented in leadership and decision-making roles where strategic technology choices are made.

Future competitiveness will depend on whether governments and businesses can unlock this untapped talent and translate technological change within SMEs into broader economic gains.

€260–600bn

Potential EU GDP boost

If women's share of the EU tech workforce rises to around 45% by 2027.

Source: McKinsey & Company (2023), cited by European Commission, Women in Digital.

24.8 million

'Missing' women entrepreneurs

Across OECD countries — women who would be entrepreneurs if their rate matched men aged 30–49.

Source: OECD / European Commission (2023), The Missing Entrepreneurs.

Only 13%

Women in tech management

Women's share of management roles in Europe's tech sector — falling to just 8% at senior levels.

Source: McKinsey & Company (2023). Women in tech: The best bet to solve Europe's talent shortage.

1 https://digital-strategy.ec.europa.eu/en/policies/women-digital
2 https://www.oecd.org/en/topics/sub-issues/inclusive-entrepreneurship/women-in-inclusive-entrepreneurship.html

Main Findings

1. Conversion gap as the core competitiveness constraint

Across countries, SMEs are increasingly using digital tools, including AI. However, adoption is often shallow, fragmented, and operational rather than strategic. The central challenge lies in translating usage into measurable productivity gains, stronger business models, and enhanced innovation capacity.

2. Women are excluded from decision-making and strategic direction

While women are active users of digital tools and highly engaged in upskilling, they remain underrepresented in ownership, leadership, investment networks, and other decision-making roles where strategic direction, including technological priorities, is set.

3. Structural barriers continue to limit women's progression

Time poverty, unequal care responsibilities, limited access to finance, confidence gaps, interrupted career paths, and restricted networks still hinder women's advancement into higher-value digital roles and entrepreneurship.

4. Weak absorption of support measures

While many countries offer funding instruments, innovation hubs, and training initiatives, SMEs often lack the capacity, time, or tailored guidance to use them effectively. Concerns around cybersecurity, digital trust, and disinformation further slow uptake, with many firms remaining cautious due to perceived cyber risks.

5. Uneven digitalisation risks widening economic fragmentation

Advanced firms and major urban hubs are progressing faster than smaller businesses and regions. Without broader diffusion, digital transformation may deepen productivity gaps and regional disparities.

6. AI creates a narrow window to rebalance the playing field

AI can lower barriers to entry and increase demand for hybrid skill sets that combine technology, communication, strategy, and creativity. This presents a timely opportunity to mobilise underused talent (including women), provided structural constraints are addressed early and effectively.

7. Inclusion is a strategic economic lever, not a social add-on

Women are often excluded from the mixed decision-making networks where business opportunities, capital, and strategic direction are shaped. While women-focused networks can play an important role, they cannot substitute for inclusion in core decision-making spaces.

8. Stable and predictable ecosystems enable digital transformation and risk-taking

Safe, transparent, and predictable business environments - including reliable legal frameworks, coherent tax systems, and trust in institutions - are critical enablers of SME digitalisation. Where these conditions exist, firms are more willing to invest, experiment, and adopt advanced technologies, supporting long-term competitiveness and resilience.

Introduction: The EU Digital and AI Landscape

"I believe small and medium sized businesses deserve much greater attention in this discussion. Digitalisation is often discussed from the perspective of large companies, but the reality of SMEs is different."

Martina Dlabajová, European Parliament rapporteur for the EU 2030 "Path to the Digital Decade"

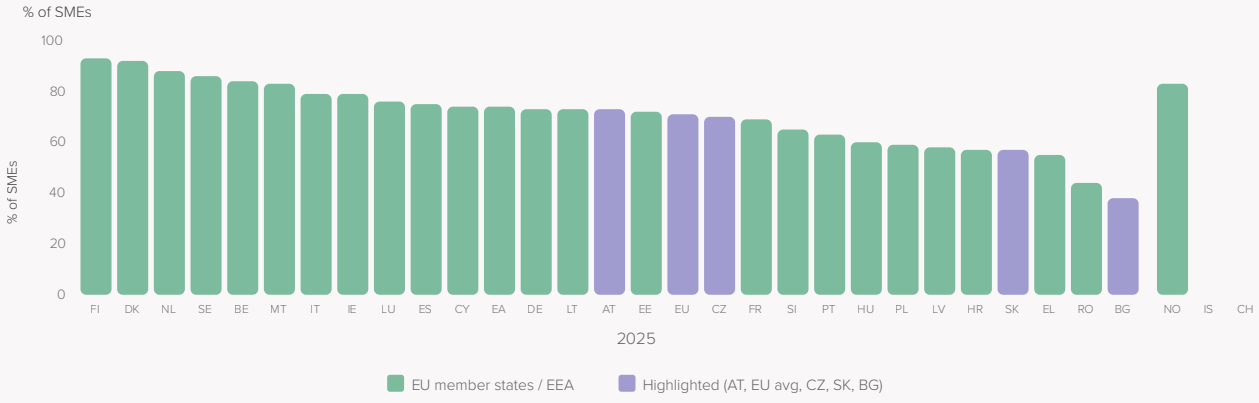
Across the European Union, digital transformation is no longer viewed as a sectoral trend but as a systemic shift shaping industrial development, labour markets, and long-term economic resilience. Under the *Digital Decade 2030* programme, the EU has set ambitious targets for the adoption of advanced technologies, including artificial intelligence, cloud computing, and data-driven solutions, particularly among SMEs.[3] In parallel, the EU AI Act (Regulation (EU) 2024/1689) reflects a broader effort to position Europe as a global leader in trustworthy, human-centric digital transformation.[4] Estimates suggest that sovereign AI alone could contribute more than €480 billion annually to Europe's economy by 2030.[5]

SMEs, representing more than 99% of all EU businesses and employing two-thirds of the workforce, are central to this transformation[6]. Their ability to integrate digital technologies is increasingly critical to economic competitiveness, innovation, and long-term viability.

Empirical evidence shows that higher levels of digital intensity and integration are associated with increased productivity, value added, and employment in SMEs.[7] In this context, digitalisation is not merely a technological upgrade - it is becoming a central driver of competitiveness and growth.

However, progress remains uneven across Europe. The *European Innovation Scoreboard* 2025 classifies Austria as a "Strong Innovator" (performing above the EU above) and Czechia as a "Moderate Innovator," while Slovakia and Bulgaria remain "Emerging Innovators" (performing below 70% of the EU average).[8] These disparities are also reflected in digital skill levels and technological readiness, as highlighted by the *Digital Economy and Society*

Figure 1: SMEs using AI technologies across selected countries



Source: Eurostat

3 https://digital-strategy.ec.europa.eu/en/policies/digital-decade-policy-programme
4 https://artificialintelligenceact.eu/the-act/
5 https://www.mckinsey.com/capabilities/mckinsey-technology/our-insights/women-in-tech-and-ai-in-europe-can-the-region-close-its-gender-gap
6 https://single-market-economy.ec.europa.eu/smes/sme-strategy-and-sme-friendly-business-conditions/sme-performance-review_en
7 https://www.mdpi.com/2071-1050/15/13/9973
8 https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard_en

Figure 2: Digital maturity and gender equality across report countries

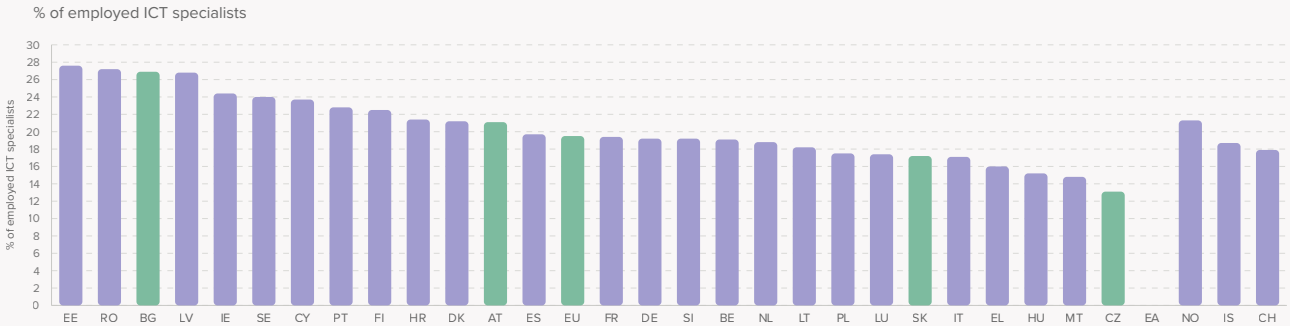
Innovation index: European Innovation Scoreboard 2025, indexed to EU 2018 = 100. Gender Equality Index: EIGE 2025.

Each dot represents one of the four countries covered in this report, positioned by their innovation performance (European Innovation Scoreboard 2025) and gender equality score (EIGE Gender Equality Index 2025). The dashed line marks the EU average for digital innovation

Index (DESI) 2025.[9] Together, these gaps suggest that countries across Central and Eastern Europe are advancing at varying speeds in their transition toward an AI-enabled economy, with important implications for regional convergence and competitiveness.

At the same time, this transformation is not gender neutral. The rise of AI could become a turning point - either unlocking women's full participation in the tech sector, or further reducing women's representation.[10] Currently, women are underrepresented in digital and technological fields across Europe, accounting for roughly one-third of STEM graduates and a minority of ICT specialists.[11]

Figure 3: Women employed as ICT specialists across selected countries



Source: Eurostat

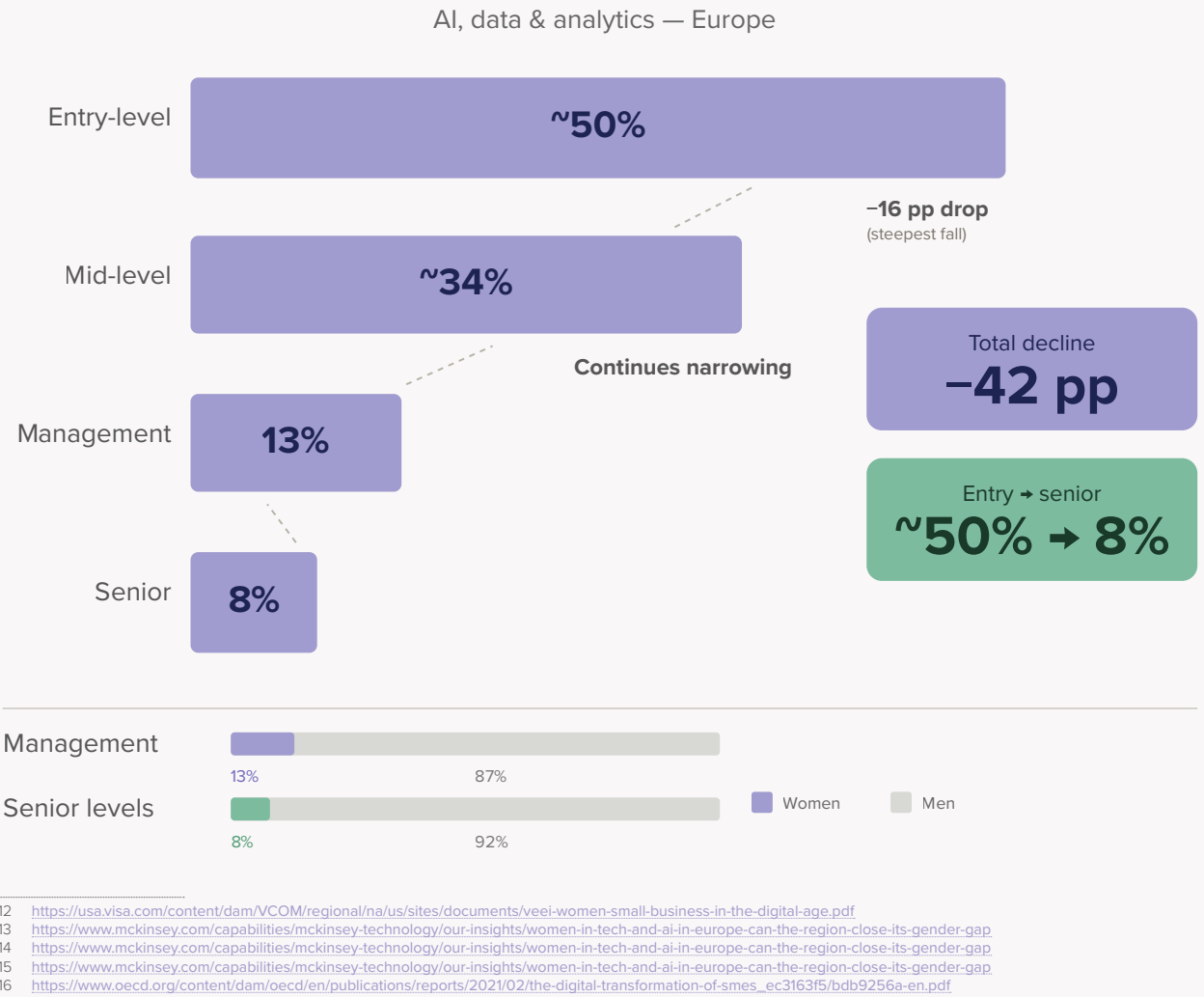
9 https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/c102236e-66b2-11f0-bf4e-01aa75ed71a1/language-en
10 https://www.mckinsey.com/capabilities/mckinsey-technology/our-insights/women-in-tech-and-ai-in-europe-can-the-region-close-its-gender-gap
11 https://digital-strategy.ec.europa.eu/en/policies/women-digital

Beyond education, disparities persist in the labour market and entrepreneurship. Women-led businesses typically receive less funding, face greater barriers to scaling, and exhibit lower levels of digital adoption, reflecting broader disparities in access to resources, networks, and opportunities.[12] At the leadership level, women are still significantly underrepresented in high-growth and technology-driven sectors, particularly in areas related to artificial intelligence and advanced digital innovation.[13] Across Europe, women's representation in AI, data, and analytics declines by 16 percentage points from entry-level to mid- level roles, with the steepest drop occurring at the transition to mid-level leadership. The gap continues to grow further up the hierarchy, with women accounting for just 13% of management roles in tech and only 8% at senior levels.[14]

Although women are a critical part of Europe's tech talent pipeline, they face a **triple challenge: declining representation in AI-related roles, disproportionate exposure to AI-driven job displacement, and persistent barriers to advancement that contribute to attrition at senior levels.**[15] At the policy level, significant attention has been devoted to fostering innovation and advancing AI development. However, emerging evidence suggests that policy approaches often focus on the supply side - supporting innovation creation - while placing less emphasis on the adoption of digital technologies among SMEs, particularly among underrepresented groups and in rural areas.[16]

Ultimately, AI and digital transformation have the potential either to reinforce existing inequalities or to serve as a powerful lever for inclusion, depending on how access to skills, resources, and leadership opportunities is distributed.

Figure 4: The women's leadership pipeline



12 https://usa.visa.com/content/dam/VCOM/regional/na/us/sites/documents/veei-women-small-business-in-the-digital-age.pdf
13 https://www.mckinsey.com/capabilities/mckinsey-technology/our-insights/women-in-tech-and-ai-in-europe-can-the-region-close-its-gender-gap
14 https://www.mckinsey.com/capabilities/mckinsey-technology/our-insights/women-in-tech-and-ai-in-europe-can-the-region-close-its-gender-gap
15 https://www.mckinsey.com/capabilities/mckinsey-technology/our-insights/women-in-tech-and-ai-in-europe-can-the-region-close-its-gender-gap
16 https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/02/the-digital-transformation-of-smes_ec3163f5/bdb9256a-en.pdf

Figure 5: Key statistics on AI economic potential and gender representation in Europe's tech sector.

1. McKinsey & Company. Women in Tech and AI in Europe. Available at: mckinsey.com
2. OECD. The Digital Transformation of SMEs. 2021. Available at: oecd.org

Country Spotlight: Austria

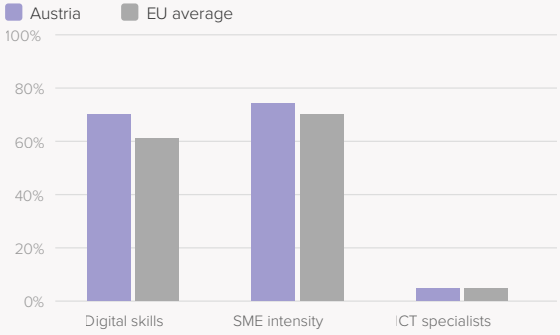
Austria ranks among the EU's more advanced digital economies, performing above average in digital skills, technology integration, and public services, supported by a strong industrial base and a national strategy aligned with the Digital Decade.[17] Yet, a persistent gap remains between the perceived potential of digital transformation and its effective uptake within SMEs, particularly when viewed through gender and regional lenses.

COUNTRY DIGITAL SNAPSHOT

Austria

SHARE OF ALL ENTERPRISES	SME EMPLOYMENT	VALUE ADDED	EDIHS
99.7%	**2.4M**	**56%**	**4**
SMEs in Austria	people employed	generated by SMEs	hubs established

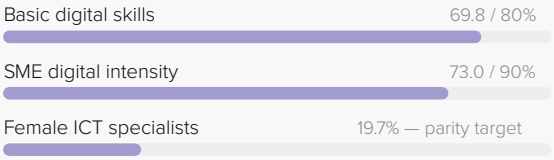
AUSTRIA VS EU — KEY INDICATORS (%)



WOMEN'S PIPELINE IN DIGITAL

Women's share drops from STEM education into the ICT workforce

EU DIGITAL DECADE TARGETS — AUSTRIA'S PROGRESS



ECOSYSTEM GAP

Innovation ecosystem: **High**	Research & AI capacity: **High**
SME digital adoption: **Moderate**	Implementation capacity: **Uneven**

STRUCTURAL BARRIERS FOR WOMEN

Skills gap · Confidence gap · Limited networks · Care responsibilities · Leadership access

GENDER EQUALITY INDEX 2025 — OVERALL 63.4

Health	Money	Time	Power
88.7	**65.3**	**63.3**	**39.9**

EUROPEAN DIGITAL INNOVATION HUBS

In Austria, 4 EDIH projects were selected to accompany and support SMEs and public administration in their digital and AI transformation.

Sources: Eurostat 2025; EC Digital Decade Country Report (Austria); EIGE Gender Equality Index 2025; ÖGUT (2019); Springer (2023); European Digital Innovation Hubs Network.

17 https://digital-strategy.ec.europa.eu/en/factpages/austria-2025-digital-decade-country-report

Trends & Observations

1. **While Austria has expanded access to digital opportunities, and women's participation in digital fields is increasing** (particularly in AI, creative industries, and early-stage entrepreneurship), influence remains unequal. Vienna has emerged as a key hub, with women-focused initiatives and innovation networks providing important entry points into the digital economy. However, participation is still skewed: women are more visible as users and implementers than as founders, owners, or decision-makers shaping strategy and investment. Regional disparities reinforce this divide, with SMEs in peripheral regions facing more limited pathways to engagement and growth.[18]

2. **AI is emerging as a relatively accessible entry point into the digital economy.** Its integration into everyday workflows and user-friendly applications lowers barriers to engagement and can broaden participation, particularly for non-technical profiles and those balancing professional and personal responsibilities.

   However, lifecycle factors, such as care responsibilities and career interruptions, as well as structural obstacles such as inflexible working time models, continue to limit women's ability to keep pace with rapid technological change, constraining progression into leadership roles. Confidence dynamics within SMEs further reinforce this pattern, as women are often less likely to position themselves for leadership in highly technical environments despite having the necessary expertise.[19]

"Digital transformation processes within SMEs continue to be shaped predominantly by men-led decision-making structures. Women contribute to execution, but are less frequently positioned to define strategic direction, reflecting a persistent gap between operational involvement and strategic authority"

Daniela Pieters, Technology expert on diversity in IT, Vienna Business Agency

3. **Austria's digital ecosystem is characterised by a strong supply side,** encompassing research institutions, funding mechanisms, and innovation networks, combined with weaker diffusion of digital technologies across SMEs. This gap spans gender, regional, and generational dimensions. Bridging the divide between policy ambition and practical implementation will require more systemic approaches that address organisational, cultural, and structural barriers simultaneously. This will be critical for maintaining workforce adaptability and economic resilience amid rapid technological change.

Strategic Insight: Austria's Ecosystem Advantage

Austria benefits from a well-developed ecosystem of policy frameworks and targeted programmes supporting digitalisation and gender inclusion. Public instruments such as KMU.DIGITAL provide advisory and financial support for SME digital transformation while AWS funding schemes support innovation and entrepreneurship, including early-stage ventures.[20] Targeted initiatives such as FEMtech[21] focus specifically on strengthening gender equality in research and technology development, complemented by national efforts to improve digital skills across the population, including the Digital Skills Offensive and "Digital Everywhere" programs[22] and private-sector initiatives such as Fund F focusing on investment in women-led startups.[23] In parallel, a dense network of organisations, including Female Founders, She.Digital, Let's Empower Austria, and sector-specific initiatives such as Women in ICT-contributes to awareness-building, mentoring, and community development.[24]

4. **Technology is outpacing the absorption capacity of SMEs.** Digital transformation is increasingly recognised as an organisational and systemic challenge rather than a purely technological one. A key constraint lies in the mismatch between the pace of technological development and the capacity of organisations and individuals to absorb it. As a result, SMEs often struggle

18 https://digital-strategy.ec.europa.eu/en/factpages/austria-2025-digital-decade-country-report
19 Interview with Kristina Maurer, Daniela Pieters from Vienna Business Agency and Tanja Rechenmacher from CANCOM Austria
20 https://www.kmudigital.at; https://www.aws.at
21 https://eige.europa.eu/gender-mainstreaming/toolkits/gear/legislative-policy-backgrounds/austria
22 https://digital-skills-jobs.europa.eu/en/initiatives/national-strategies/austria-digital-skills-offensive.
23 https://www.fund-f.com/
24 https://female-founders.org; https://shedigital.at/netzwerke/; https://shedigital.at/die-it-tag/

to integrate and effectively use new tools, widening the implementation gap.[25]

" Technology is advancing faster than we can help people use it. "

Kristina Maurer, Digital sustainability expert, Vienna Business Agency

5. **Competitiveness increasingly depends on the effective digital transformation of SMEs.** Firms that fail to adapt risk falling behind in productivity, innovation, and market competitiveness. The ability to fully leverage human capital, particularly in knowledge-intensive sectors, is central to innovation performance and growth.

   Against this backdrop, gender inclusion is increasingly understood not only as a social objective, but as a driver of economic resilience. Strengthening SME capacity, in turn, is essential both for inclusion and for maintaining competitiveness within the EU single market, reflecting a broader EU policy shift linking inclusion with economic performance and strategic autonomy.[26]

"Women are not seeking separate networks - they are seeking equal access to the networks where influence and decision-making reside"

Daniela Pieters, Technology expert on diversity in IT, Vienna Business Agency

Country-Specific Recommendations

Digital transformation in many SMEs remains superficial, driven by trends rather than clearly defined use cases, with limited understanding of how to translate AI into meaningful applications. However, its true potential lies in enabling new and more diverse contributions, particularly in areas such as creativity, process design, and communication.[27] Closing leadership gaps in SMEs will be critical to improving AI adoption, innovation quality, and long-term competitiveness.

1. **Strengthen SME capacity as a competitiveness priority**

   Austria should move beyond financing digitalisation toward enabling implementation. Many SMEs still lack the internal capacity and practical guidance needed to turn AI and digital tools into productivity gains. Priority should be given to hands-on advisory support, sector-specific implementation programmes, and expanding the pool of qualified AI and digital experts.

2. **Integrate women into digital leadership and governance**

   Austria should focus not only on women's participation in digitalisation but also on their influence over how it is shaped. Increasing women's representation in strategic decision-making, particularly in AI governance, innovation leadership, and SME transformation, is essential.

   This requires stronger leadership pipelines, visible role models, inclusive governance incentives, and integrated support combining finance, advisory services, training, and pathways into decision-making roles.

3. **Redesign networks as economic infrastructure**

   Austria should treat networks not only as community spaces but as economic infrastructure shaping access to capital, information, and opportunity. Priority should be given to cross-sector networks of SMEs that connect women to decision-making spaces, investors, and business growth opportunities. This should be supported through gender-responsive funding criteria, stronger leadership pipelines, and mixed, decision-oriented networks that bridge existing divides.

4. **Invest in lifelong skills for resilience**

   Austria should expand lifelong learning and re-skilling programmes that keep pace with SME digital transformation, with a particular focus on women returning to the workforce. As AI adoption expands, human-centred capabilities, such as empathy, communication, and interdisciplinary problem-solving, are becoming increasingly critical. These skills are essential for the effective deployment, management, and governance of AI, presenting an opportunity for women not only as implementers but also as leaders28

5. **Position inclusion as a strategic economic lever**

   Inclusion should be embedded into economic and industrial policy as a measurable driver of competitiveness. This includes setting clear targets for women's participation in digital leadership and strengthening incentives for women-led innovation in SMEs. Gender-responsive criteria should be systematically integrated into public funding and digitalisation programmes.

25 Interview with Kristina Maurer, digital sustainability expert from Vienna Business Agency
26 Interview with Kristina Maurer and Daniela Pieters, digital economy expert from Vienna Business Agency.
27 Interview with Tanja Rechenmacher, CANCOM Austria expert on AI and security
28 Interview with Tanja Rechenmacher, CANCOM Austria

Country Spotlight: Bulgaria

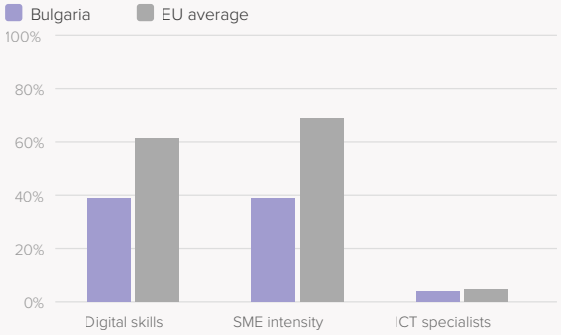
Although Bulgaria has strengthened its position in critical digital technologies by establishing a robust connectivity infrastructure and advancing digital public services, its overall digital competitiveness remains modest.29 The country continues to face structural challenges related to basic digital skills, inclusive digital transformation, cybersecurity preparedness, SME digitalisation, and the use of digital tools to support green growth.

COUNTRY DIGITAL SNAPSHOT

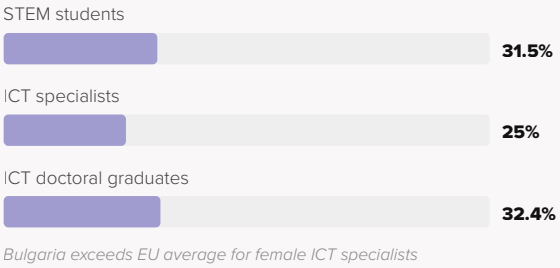
Bulgaria

SHARE OF ALL ENTERPRISES	SME EMPLOYMENT	VALUE ADDED	EDIHS
99.8%	**1.4M**	**63.4%**	**8**
SMEs in Bulgaria	people employed	generated by SMEs	hubs established

BULGARIA VS EU — KEY INDICATORS (%)



WOMEN'S PIPELINE IN DIGITAL



Bulgaria exceeds EU average for female ICT specialists

EU DIGITAL DECADE TARGETS — BULGARIA'S PROGRESS

Basic digital skills	38.3 / 80%
SME digital intensity	38.3 / 90%
Female ICT specialists	25% — parity target

ECOSYSTEM GAP

Innovation ecosystem: **Moderate**	Research & AI capacity: **Moderate**
SME digital adoption: **Low**	Implementation capacity: **Uneven**

STRUCTURAL BARRIERS FOR WOMEN

Skills gap · Insufficient trust · Access to finance · Internal resistance

GENDER EQUALITY INDEX 2025 — OVERALL 58.1

Health	Money	Time	Power
74.7	**83.8**	**65.2**	**25.6**

EUROPEAN DIGITAL INNOVATION HUBS

As part of the PRIDST 2021–2027 programme, 8 EDIHs will be established across Bulgaria to accelerate adoption of AI, digital, and green technologies among SMEs.

Sources: Eurostat 2025; EC Digital Decade Country Report (Bulgaria 2025); EIGE Gender Equality Index 2025; Country Fact Sheet Bulgaria 2025; European Digital Innovation Hubs Network.

29 European Commission (2025). *Digital Decade Country Report: Bulgaria., file:///C:/Users/febadmin/Downloads/Digital_Decade_2025_country_report__Bulgaria_j5fBSyyV8rNmRb-KzHZL8PmG0llM_116927-1.PDF*

Trends & Observations

1. **The Bulgarian digital ecosystem is characterised by fragmentation,** regional concentration, and rural-urban disparities. While progress has been made in digital infrastructure and public services, SMEs continue to face significant barriers, including limited access to finance, shortages of qualified employees, low levels of innovation uptake, and internationalisation. SME contributions to GDP, the share of women-led SMEs, and overall levels of digital transformation in Bulgaria are broadly comparable to other CEE economies.[30] However, accelerating a more inclusive digital transition will be critical to strengthening Bulgaria's long-term competitiveness.
2. **The uptake of digital technologies among Bulgarian SMEs remains limited.** At the same time, awareness of the importance of digital transformation is increasing, particularly among women entrepreneurs across sectors.

> ***" It is a matter of personal preference. Now, there are people who are creative and some say that they do not want to use it because it hampers their natural intellect."***
>
> ***Woman entrepreneur, founder of 4 creative industry companies***

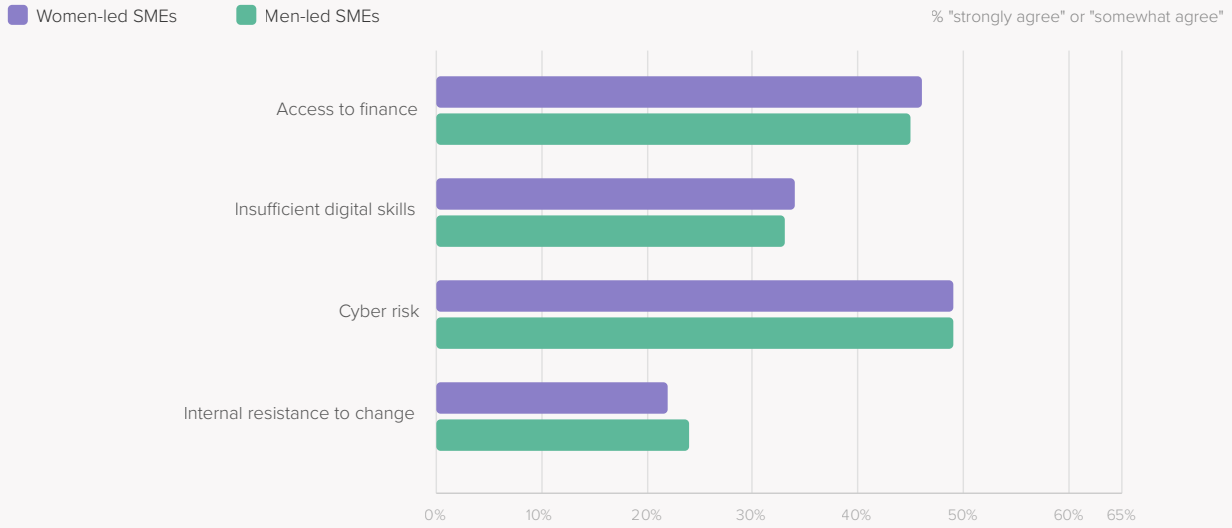
3. **A gender gap is evident both in the use of digital technologies and in perceptions of their value.** Women-led SMEs tend to adopt fewer digital tools than male-led SMEs, and female entrepreneurs are less likely to view these technologies as beneficial. Basic digital skills remain a widespread barrier, further limiting effective participation in digital transformation and reinforcing existing disparities.
4. **Emerging digital technologies such as AI have** the potential to level the playing field for men and women. Digital technologies can help women entrepreneurs overcome specific constraints such as limited access to resources and networks.

Figure 6: Perceived barriers to digital technology adoption among SME leaders - share responding, "strongly agree" or "somewhat agree", by gender. Callout cards show where the intensity of concern (share "strongly agree") diverges.

(Albena Pergelova and Desislava Yordanova's survey of 1,000 Bulgarian SMEs, conducted by telephone in 2023 using NUTS 2 and NACE Rev. 2 quota sampling.)

30 https://www.scirp.org/%28S%28351jmbntvnsjt1aadkposzje%29%29/reference/referencespapers?referenceid=3942581; https://digital-strategy.ec.europa.eu/en/policies/desi-bulgaria; https://publications.jrc.ec.europa.eu/repository/handle/JRC142263

Figure 7: Gender gap in digital technology perception and usage among SME leaders - share of respondents who strongly agree (perception statements) or strongly/somewhat agree (usage statements), by gender.



Where intensity differs — share saying "strongly agree"

Access to finance
Women higher
Women more likely to "strongly agree" (exact % not reported)

Cyber risk
26% Women
21% Men
+5pp gap

Internal resistance to change
21.76% Women
23.35% Men
-1.6pp women lower

Source: Authors' Bulgaria SME survey, 2023 (n = 1,000).

5. **Women's digital inclusion and empowerment are important for strengthening economic and social resilience.** A major challenge remains the lack of digital inclusion of minorities and women living in remote areas in Bulgaria.

"Increasing the participation of women in the digital economy will lead to greater levels of entrepreneurship, a better understanding and adaptability to new technologies, and a wider pool of talents. And with regard to equality, it would give more opportunities to women to reduce social and professional inequalities."

Woman entrepreneur from Bulgaria

6. Unclear expectations about what new technologies can realistically deliver, combined with low confidence, further constrain uptake by SMEs.[31]

"Emerging technologies such as AI, automation, or digital platforms can have a democratizing effect in relation to having equal opportunities for all entrepreneurs"

Gergana Ivanova, founder and partner of in The Smarts advertising agency

7. **Emerging digital technologies, including AI, have the potential to level the playing field** between men and women. They can help women entrepreneurs overcome obstacles such as limited access to resources and networks.

"I think that recently we have seen a leap in confidence from purely technological roles to more leadership positions in the field of digitalization [for women]."

Woman entrepreneur from the energy sector

8. **Women's digital inclusion and empowerment are vital to strengthening economic and social resilience.** However, significant gaps remain, particularly for women and minorities in remote regions, where access is more limited.

31 Interview with a woman entrepreneur from the accounting sector

"Definitely, I believe that this can be democratizing in relation to having equal opportunities for all and really here to depend entirely on intellect, on the willingness of people to use AI to implement it in their work."

A woman entrepreneur in the creative industries

Country-Specific Recommendations

1. **Targeted support for SME digital adoption**

   Introduce targeted financial instruments designed to support SME investment in digital technologies, including dedicated windows for women-led businesses. Lack of access to finance is a key barrier, especially for women-led SMEs. Targeted instruments should prioritise the adoption of e-commerce, cloud computing, CRM, and advanced technologies.

2. **Gender-responsive digital skills and confidence building**

   Expand national and regional digital skills programmes with a gender responsive focus, combining technical training with confidence building and practical business applications. While women demonstrate comparable digital skills overall, they are less likely to perceive digital technologies as sources of competitive advantage or innovation. Addressing this perception gap is critical to preventing a widening gender divide.

3. **Promote AI and Emerging Technologies as Opportunity Equalizers**

   Integrate practical AI and emerging technology pilots into SME support programmes, emphasising their role in lowering entry barriers, addressing skills shortages, and enabling business model innovation. Both survey and interview evidence suggest that AI has the potential to level the playing field by reducing dependence on scarce technical expertise while expanding access to innovation.

4. **Strengthen cybersecurity readiness for SMEs**

   Develop accessible, low-cost cybersecurity readiness packages for SMEs, including audits, advisory services, and training. Tailored communication should target women-led firms, as **cyber risk is often perceived as a major barrier to digital adoption.** Addressing these concerns can remove a key psychological and operational constraint to technology uptake.

5. **Improve monitoring and gender disaggregated data**

   Systematically collect and use gender disaggregated data on SME digital adoption, innovation outcomes, and access to support programmes to inform evidence-based policymaking. Existing gender gaps in technology use and perception underscore the need for better monitoring to ensure that national digital strategies and funding instruments deliver inclusive outcomes.

   Implementing these recommendations will accelerate SME digital transformation, narrow gender gaps in technology adoption and innovation, strengthen regional inclusion, and enhance Bulgaria's progress toward its Digital Decade 2030 targets, while enhancing overall economic and social resilience.

Figure 8: Use of digital technologies by men- led and women- led SMEs

Percentage of SMEs using each digital technology

Digital Technology	Men-led SMEs	Women-led SMEs	Gap (Men – Women)
Internet of Things	84.43%	82.64%	+1.79 pp
Enterprise resource planning (ERP) systems	54.99%	51.34%	+3.65 pp
E-commerce	31.47%	25.43%	+6.04 pp
Social media	51.10%	48.66%	+2.44 pp
CRM	50.93%	48.17%	+2.76 pp
Cloud computing	53.81%	48.66%	+5.15 pp
Computer-aided design (CAD)	21.83%	14.43%	+7.40 pp
Big data & data analytics	28.60%	25.18%	+3.42 pp
Augmented & virtual reality	13.71%	13.69%	+0.02 pp
AI and machine learning	10.49%	8.56%	+1.93 pp
Additive manufacturing (e.g., 3D printing)	7.45%	5.38%	+2.07 pp
Robots and drones	10.66%	5.62%	+5.04 pp
Blockchain	3.72%	2.20%	+1.52 pp

pp = percentage points

(Source: Authors' Bulgaria SME survey, 2023 (n = 1,000))

Country Spotlight: Czechia

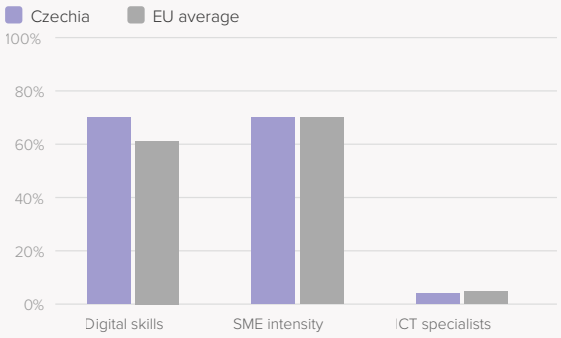
Czechia's digital trajectory is defined by a structural paradox - strong human capital and industrial capacity coexist with weak diffusion of advanced digital technologies across its SME base. Many Czech SMEs are embedded in European production networks as subcontractors, where digitalisation is often externally driven and compliance-oriented rather than strategically deployed.32 While this integration supports export performance, it can reduce incentives for independent innovation and limit the development of internal digital capabilities among smaller firms.33 As a result, digital adoption often focuses on optimising existing processes rather than enabling structural upgrading, hampering long-term competitiveness.

COUNTRY DIGITAL SNAPSHOT

Czechia

SHARE OF ALL ENTERPRISES	SME EMPLOYMENT	VALUE ADDED	EDIHS
99.9%	**2.6M**	**54.6%**	**6**
SMEs in Czechia	people employed	generated by SMEs	hubs established

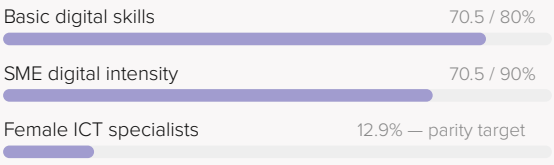
CZECHIA VS EU — KEY INDICATORS (%)



WOMEN'S PIPELINE IN DIGITAL

Women trail EU average at every pipeline stage

EU DIGITAL DECADE TARGETS — CZECHIA'S PROGRESS



ECOSYSTEM GAP

Innovation ecosystem	Research & AI capacity
High	**High**
SME digital adoption	Implementation capacity
Moderate	**Strong**

STRUCTURAL BARRIERS FOR WOMEN

Skills gap · Confidence gap · Limited networks · Care responsibilities · Leadership access

GENDER EQUALITY INDEX 2025 — OVERALL 53.2

Health	Money	Time	Power
82.6	**75.6**	**57.6**	**20.3**

EUROPEAN DIGITAL INNOVATION HUBS

Czechia's 6 EDIHs are well distributed across the country, providing SMEs with access to digital skills development, innovation support, and practical implementation services.

Sources: Eurostat 2025; EC Digital Decade Country Report (Czechia 2024); EIGE Gender Equality Index 2025; GLOBSEC 2024; EC Country Fact Sheet 2025; European Digital Innovation Hubs Network.

32 https://www.eurofound.europa.eu
33 https://static1.squarespace.com/static/5e38081524fc0a1ce06915fc/t/62beb2cfd7dad10f166ef768/1656664789727/Country+report_CZ.pdf

Trends & Observations

1. Czechia exhibits the features of a **digital middle trap**. Firms broadly recognise the importance of digitalisation, yet adoption remains cautious, incremental, and largely focused on productivity improvements.[34] This reflects a combination of limited internal capabilities, constrained access to finance, and uncertainty around return on investment.[35] In practice, it also points to a lack of awareness and strategic orientation: many SMEs do not have a clear understanding of how digital technologies can be integrated into business models beyond incremental efficiency gains.[36]

"If you give a workshop called 'how to digitize a company,' no one comes. But if you say 'how to use AI to sell your products online,' everyone comes."

Pavel Přikryl, co-founder of Opero Club

Digitalisation is typically externally driven. SMEs integrated into value chains often adopt technologies to meet the digital standards of larger firms rather than to pursue internal strategic objectives or the development of independent innovation capacity.[37] This compliance-driven model creates a dependency, limiting firms' ability to move up value chains and capture higher value-added activities.[38]

2. The Czech economy combines a **strong innovation supply side with weak diffusion.** Research capacity, policy frameworks, and innovation ecosystems are well developed, yet their impact on SMEs remains uneven.[39] This is particularly visible in the concentration of digital capabilities in specific sectors and regions, where leading firms and hubs do not sufficiently translate into broader SME transformation.

3. **Czechia's untapped talent lies beyond the training room.** Evidence from digital skills initiatives indicates strong demand for upskilling among women, suggesting that the challenge lies less in motivation and more in the accessibility and design of training pathways and support systems.[40] While women are underrepresented in entrepreneurship overall, they are often overrepresented in learning and upskilling environments, pointing to a disconnect between skills acquisition and progression into leadership and business ownership.

"If we want broader participation, we need to speak about digitalisation and AI in a clear, practical way, without unnecessarily complex language."

Martina Dlabajová, Founder and CEO of Seven Partners, Member of the European Parliament for the Czech Republic 2014-2024

Women should not only implement digital change in practice but also play a much greater role in shaping strategy, priorities, and investment decisions inside SMEs. Digital technologies lower barriers to market entry by enabling women to build brands, sell services, and develop projects online at lower cost, while also increasing flexibility and supporting work-family balance.[42] However, these gains remain conditional as without access to education, confidence, and decision-making opportunities, the potential for digitalisation to level the playing field will be only partially realised.

"We have almost a 50/50 men to women ratio in our platform, even though overall representation of women as business owners is closer to 65/35. That means women are much more active in learning and development."

Pavel Přikryl, co-founder and director of Opero Prague (Opero Club) and DoToho!

4. **SME resilience now depends on digital capability and trust.** Firms that fail to integrate digital technologies are more vulnerable to shocks and less able to adapt to changing market conditions. At the system level, uneven adoption reduces flexibility, slows innovation cycles, and weakens overall competitiveness. Digital transformation also intersects with broader societal resilience. Cybersecurity is an increasingly salient challenge for Czech SMEs. Flash Eurobarometer 496 found that 38% of Czech SMEs experienced at least one type of cybercrime in 2021, compared to an EU average of 28%. Concerns about online banking hacks (39% vs. 32% EU) and phishing attacks (38% vs.

34 https://www.eurofound.europa.eu
35 https://www.eurofound.europa.eu
36 https://static1.squarespace.com/static/5e38081524fc0a1ce06915fc/t/62beb2cfd7dad10f166ef768/1656664789727/Country+report_CZ.pdf
37 https://www.eurofound.europa.eu
38 https://static1.squarespace.com/static/5e38081524fc0a1ce06915fc/t/62beb2cfd7dad10f166ef768/1656664789727/Country+report_CZ.pdf
39 https://digital-strategy.ec.europa.eu/en/factpages/czech-republic-2025-digital-decade-country-report
40 https://www.czechitas.cz
41 https://interreg-danube.eu/storage/media/01J9EE7KGX4PDENJJ3D57P81HR.pdf
42 Interview with Martina Dlabajová, MEP

31% EU) are similarly elevated. When incidents occur, 51% of Czech firms report significant time losses (compared with 35% across the EU), and 31% incur repair and recovery costs.[43] At the societal level, insufficient digital skills can undermine democratic processes. AI, if misused, has the potential to generate and amplify large volumes of misinformation[44].

"Increasing women's digital skills contributes to "greater independence, better orientation in information, and more active participation in public life"

Martina Dlabajová

Country-Specific Recommendations

Czechia's future competitiveness will depend not on the availability of digital technologies, but on their widespread and effective use across the economy. The country has the skills, industrial base, and policy alignment required for digital transformation. However, these strengths are not yet fully translated into inclusive, economy-wide outcomes.

1. **Move from access to implementation**

   Shift policy focus from the availability of digital tools to their effective application, with targeted advisory and implementation support for SMEs, particularly in AI and data-driven use cases. Policy and training initiatives should be framed around practical business applications, such as sales, operations, and customer engagement, rather than abstract digitalisation concepts.

2. **Treat gender inclusion as economic policy**

   Position women's participation in digital sectors as a core competitiveness issue. This requires strengthening pathways into leadership and providing targeted support for women-led SMEs. Measures should also address structural barriers to finance and reflect non-linear career paths. Policies should explicitly close the gap between women's strong engagement in learning and their underrepresentation in leadership and decision-making roles.

3. **Address structural labour market constraints**

   Improve childcare availability, support flexible work models, and enable continuous upskilling to reduce career interruptions and strengthen workforce participation. Support should reflect the realities of SMEs and individuals balancing professional and family responsibilities. In a context of labour shortages and technological competition, underutilised talent stifles productivity, weakens resilience, and hinders long-term growth.[45]

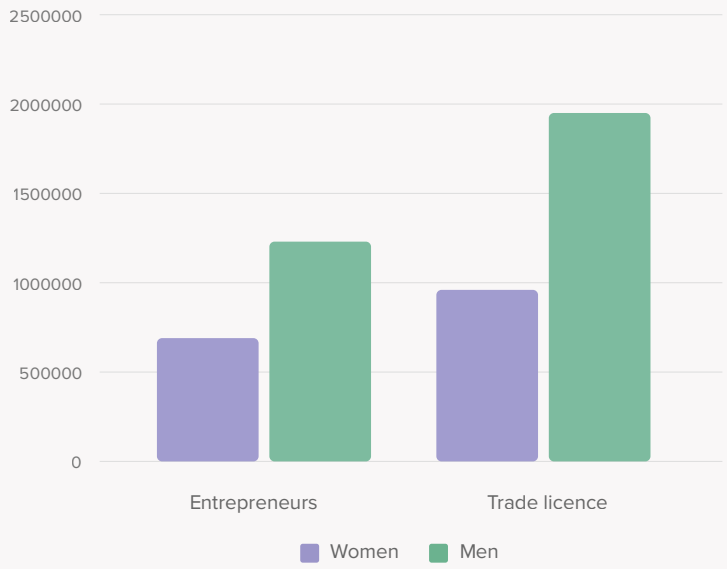
4. **Strengthen SME position in value chains**

   Support SMEs in moving from subcontracting roles to higher value-added activities through innovation incentives, partnerships, and knowledge transfer. Policy measures, particularly those targeting gender gaps, should prioritise practical, SME-oriented training in AI, digital marketing, and data use, alongside mentoring and network development.

5. **Embed inclusion into resilience strategy**

   Frame digital inclusion as a driver of economic resilience and democratic stability, ensuring broader participation in technological transformation. Meanwhile, digital and media literacy should be prioritised in the education system to mitigate risks associated with AI misuse, misinformation, and societal vulnerability. Beyond economic outcomes, digital empowerment has broader societal benefits, reinforcing the need to treat inclusion as a systemic resilience objective.

Figure 9: Number of natural persons doing business and trade licenses by gender, 2024[41]



43 https://europa.eu/eurobarometer/surveys/detail/3222
44 Interview with Pavel Přikryl, co-founder of Opero Club
45 https://static1.squarespace.com/static/5e38081524fc0a1ce06915fc/t/62beb2cfd7dad10f166ef768/1656664789727/Country+report_CZ.pdf; https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/05/gender-equality-in-the-czech-republic_152cb31a/c5a3086f-en.pdf

Country Spotlight: Slovakia

Slovakia presents a revealing contrast between perception and underlying reality. Survey results suggest relatively low barriers to digital transformation, including limited recognition of gender-specific challenges. However, interviews point to deeper structural and behavioural constraints. This divergence indicates that many barriers are not absent but normalised, making the disconnect between perception and reality a defining feature of the Slovak case.

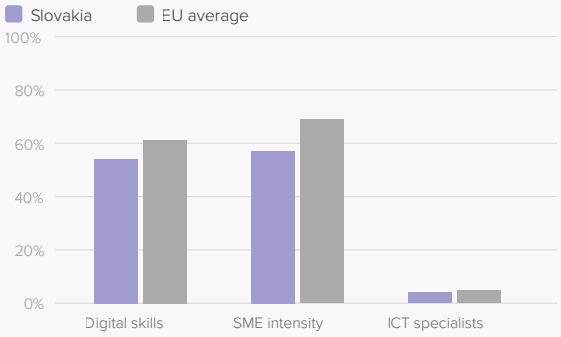
Slovakia also combines a high level of trust in AI-driven decision-making (73% compared to 53% across the EU)46 with low participation in lifelong learning, highlighting a mismatch between technological openness and the capacity to adapt.

COUNTRY DIGITAL SNAPSHOT

Slovakia

SHARE OF ALL ENTERPRISES	SME EMPLOYMENT	VALUE ADDED	EDIHS
99.9%	**1.2M**	**53.6%**	**5**
SMEs in Slovakia	people employed	generated by SMEs	hubs established

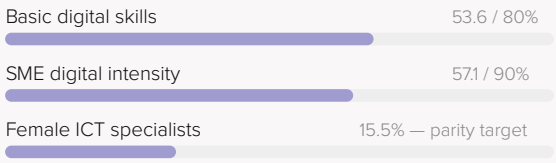
SLOVAKIA VS EU — KEY INDICATORS (%)



WOMEN'S PIPELINE IN DIGITAL

Women above EU avg for ICT specialists but below in STEM

EU DIGITAL DECADE TARGETS — SLOVAKIA'S PROGRESS



ECOSYSTEM GAP

Innovation ecosystem: **Moderate**	Research & AI capacity: **Moderate**
SME digital adoption: **Low**	Implementation capacity: **Uneven**

STRUCTURAL BARRIERS FOR WOMEN

Skills gap · Confidence gap · Limited networks · Care responsibilities · Leadership access

GENDER EQUALITY INDEX 2025 — OVERALL 57.2

Health	Money	Time	Power
82.8	**83.6**	**64.5**	**22.9**

EUROPEAN DIGITAL INNOVATION HUBS

Slovakia's 5 EDIHs, located in Bratislava and Košice, offer SMEs access to training, testing, and advisory services to support digital and AI adoption.

Sources: Eurostat 2025; EC Digital Decade Country Report (Slovakia 2025); EIGE Gender Equality Index 2025; Education and training monitor 2025; Košice IT Valley Analysis; European Digital Innovation Hubs Network.

46 https://europa.eu/eurobarometer/surveys/detail/3222

Trends & Observations

1. **SMEs face structural constraints related to leadership mindset,** internal capacity, and incentives. While the use of AI is becoming more common, strategic adoption remains limited. Small businesses do not require general awareness; they need practical guidance on how to implement specific tools.[47] Slovakia's challenge lies not in the absence of support, but in its ineffective delivery, with nearly half of women entrepreneurs unaware of available support mechanisms.[48] Opportunities exist, but they often fail to reach those who need them most, reflecting fragmentation, weak targeting, and limited alignment with SME realities.[49] Digitalisation is no longer optional - firms that fail to adapt risk falling behind.[50]

"The limiting factor for SME digitalization is often not only access to tools or skills, but leadership mindset. The digital transformation should be viewed as a core driver of competitiveness, rather than an optional add-on"

Lucia Katriňáková, Project Manager, SAPIE

2. Though there is a recognisable **regional concentration of digital ecosystems,** participation remains heavily urban-centred. For example, in Košice - the country's second-largest tech hub - women represent approximately 19% of the tech workforce.[51] However, engagement with AI and digital transformation among women in SMEs in rural areas has lagged. Expanding access beyond urban hubs is essential, particularly as flexible digital work could help unlock underutilised economic potential and strengthen broader societal resilience.

3. **New types of job** roles and professions are emerging as companies increasingly seek digital experts to design and implement processes - often in flexible, advisory capacities.[52] AI is expected to significantly reshape the labour market: 17% of skills may become largely AI-driven, 72% will involve humans-AI collaboration, and 11% will remain primarily human-led.[53] These shifts may create opportunities for women, particularly as purely technical skills become less differentiating and demand grows for strategic thinking, leadership, and creativity.[54]

" When it comes specifically to the use of AI, many women have moved beyond experimentation, but remain at the level of personal use rather than applying these tools strategically."

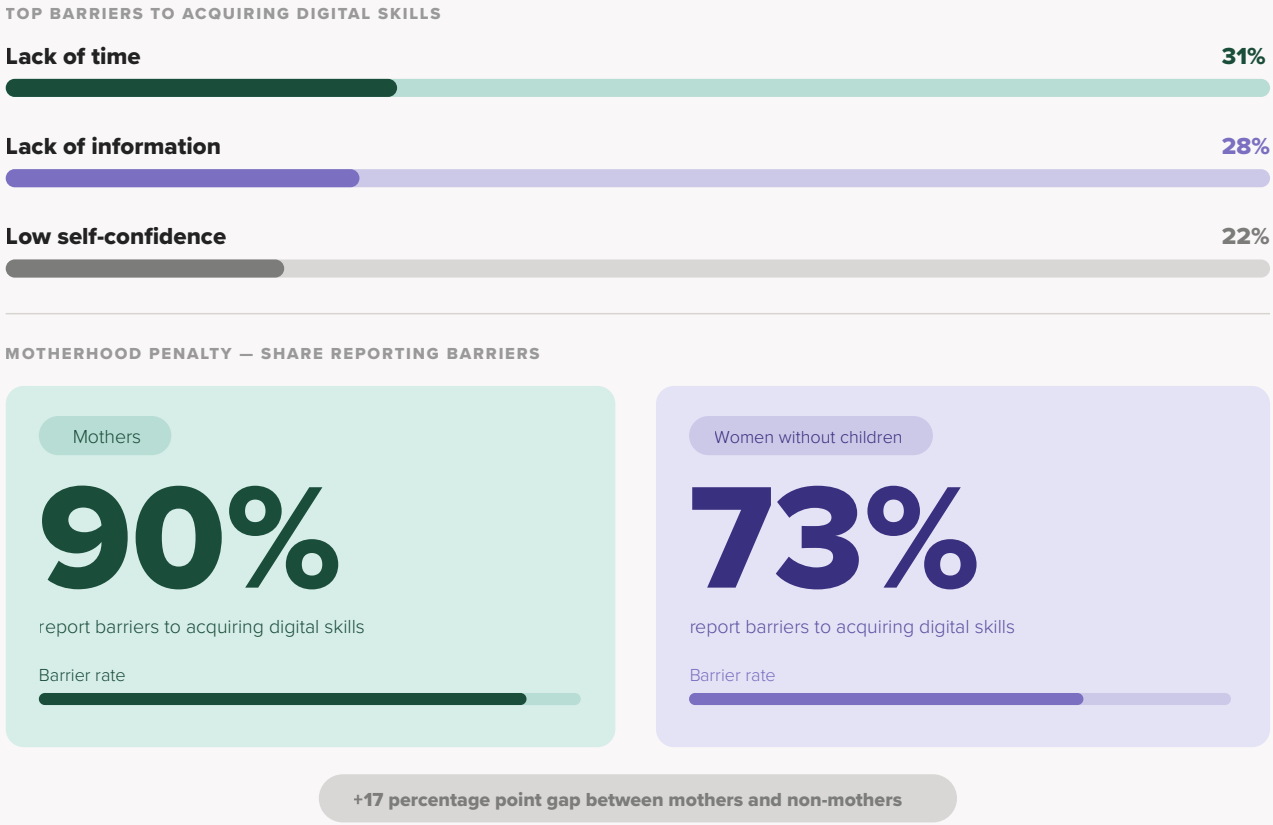
Lenka Hlinkova, CIO of Female Algorithm

4. **Language could be a barrier to AI education and engagement.** Much of the available training, resources, and learning materials are delivered in English and often rely on highly technical terminology, creating an immediate entry barrier. For many users, access to content in Slovak is essential; without it, even initial engagement becomes difficult[55].

5. **Barriers to digital adoption are multi-dimensional and mutually reinforcing.** Nearly half of women entrepreneurs report using digital technologies in their businesses, primarily for operational functions.[56] At the same time, 89% have attempted to acquire digital skills, yet 82% encountered obstacles.[57][58] This suggests that the issue is not a lack of motivation, but persistent impediments that limit progress. These includes language barriers, perceived accessibility, and confidence gaps. For example, women may be less likely to put forward innovative ideas if they feel they do not fully belong[59]. Time constraints are also critical; upskilling often comes at the expense of personal commitments[60]. Employer-supported training and greater time flexibility can therefore generate clear benefits for both individuals and firms[61].

   Survey results by Košice IT Valley reinforce these findings: lack of time is the most frequently cited barrier (31%), followed by lack of information (28%) and low

47 Interview with Lenka Hlinková, Founder of Female Algorithm
48 https://interreg-danube.eu/storage/media/01J9EHQC0A1ZDEW07SGJHJJTQ0.pdf
49 Interview with Lucia Katriňáková, Project Manager, SAPIE
50 Interview with Mária Šurimová, Head of Operations, Košice IT Valley
51 https://d185dc51-5429-431b-9607-093475fab984.filesusr.com/ugd/9ff2bb_732d6d1af94145bda40279a3a0bb659f.pdf
52 Interview with Lucia Katriňáková, SAPIE
53 https://www.mckinsey.com/~/media/mckinsey/mckinsey%20global%20institute/our%20research/agents%20robots%20and%20us%20skill%20partnerships%20in%20the%20age%20of%20ai/agents-robots-and-us-skill-partnerships-in-the-age-of-ai.pdf
54 Interview with Lenka Hlinková, Female Algorithm
55 Interview with Lucia Katriňáková, SAPIE
56 https://www.mckinsey.com/~/media/mckinsey/mckinsey%20global%20institute/our%20research/agents%20robots%20and%20us%20skill%20partnerships%20in%20the%20age%20of%20ai/agents-robots-and-us-skill-partnerships-in-the-age-of-ai.pdf
57 https://www.kosiceitvalley.sk/wp-content/uploads/2025/02/WOMEN_IN_TECH.pdf
58 Interview with Mária Šurimová, Košice IT Valley
59 Interview with Lenka Hlinková, Female Algorithm
60 Interview with Lenka Hlinková
61 Interview with Lucia Katriňáková, SAPIE



Source: Košice IT Valley. Women in Tech. 2025. Available at: kosiceitvalley.sk

self-confidence (22%).[62] These constraints are particularly acute for mothers: 90% report obstacles to acquiring digital skills, compared to 73% of women without children.[63].

6. As in other countries, women are catching up in AI adoption but remain underrepresented in technical and decision-making roles. **Their limited presence in decision-making processes risks embedding bias in AI systems and narrowing the range of perspectives shaping innovation.** This elevates gender imbalance from a social concern to a structural risk affecting innovation quality, market outcomes, and public trust.[64].

   Underutilised female talent in AI development reduces the quality of digital solutions for Slovak society. At the same time, **increasing the number of women-led tech companies could shift innovation toward more user-centred and inclusive outcomes, rather than focusing solely on speed and profit[65].**

Don't be afraid to look for opportunities. Don't be afraid to tell your superior managers that you want to learn new skills, and how it can be beneficial for the company."

Lucia Katriňáková, Project Manager, SAPIE

When discussing AI with women, we are moving more into resilience- related topics than into technical roles, such as development. Women are frequently involved in product or project management, UX/UI design, data privacy, rather than building the models and the core architectural layers[66]. In this way, the discussion shifts from development toward broader questions of resilience, highlighting a perspective that is critical for building stronger, more resilient economies and shaping future governance systems.

"Success will be reached when women in technology are no longer framed as an exception or policy target, but as a fully integrated and unremarkable part of the ecosystem."

Mária Šurimová, Operations Manager, Košice IT Valley

62 https://www.kosiceitvalley.sk/wp-content/uploads/2025/02/WOMEN_IN_TECH.pdf
63 https://www.kosiceitvalley.sk/wp-content/uploads/2025/02/WOMEN_IN_TECH.pdf
64 Interview with Mária Šurimová, Košice IT Valley
65 Interview with Lenka Hlinková, Female Algorithm
66 Interview with Lucia Katriňáková, SAPIE

Country-Specific Recommendations

The central challenge for Slovakia is not whether SMEs engage with digital tools, but whether they can scale, deepen, and effectively govern their use while mobilising the full potential of the workforce. Addressing this gap - particularly by enabling women to move from participation to influence - will be critical for strengthening Slovakia's productivity and competitiveness in an increasingly digital European economy.

1. **Build a stable and trust-based business environment**

   Successful SME digitalisation depends not only on technological support, but also on a stable and predictable business environment. Business-friendly ecosystem stays on predictable regulations, simple administrative requirements, digital innovation and technology and it encourages investors, and builds trust[67].

2. **Shift from access to implementation and conversion**

   Policy should move beyond expanding access to digital tools toward enabling SMEs to translate digital adoption into measurable business outcomes. Slovakia should prioritise firm-level implementation support, including automation audits, use-case development, and embedded advisory services that directly address how digital tools can be applied within specific business contexts.

3. **Redesign support delivery to address targeting and absorption gaps**

   Existing support systems should be streamlined and redesigned to improve targeting, particularly for SMEs and women who are currently outside established innovation networks. This includes simplifying entry points, strengthening proactive outreach through regional innovation actors, and improving integration between training, advisory, and financing instruments. Policy should focus not only on offering support, but on ensuring that it is clearly communicated, accessible, and effectively absorbed, especially by SMEs with limited internal capacity.

4. **Treat time and capacity constraints as structural barriers to transformation**

   Time restrictions should be addressed as a structural barrier to digital transformation rather than an individual limitation. Slovakia should introduce incentives for employer-supported training time, integrate digital upskilling into return-to-work schemes, and better align flexible work arrangements with skills development. Addressing time poverty is essential to ensure that digital transition does not disproportionately benefit those with existing capacity while excluding a significant share of the workforce from higher-value roles.

5. **Enable women's progression from participation to decision-making**

   Policy should shift towards enabling women´s progression into decision-making, entrepreneurship, and system design. This includes targeted support for women in leadership roles and women-led firms, improved access to financing, and gender-responsive innovation frameworks. As digital and AI systems increasingly shape economic and societal outcomes, limited diversity in their design and governance raises the risk of biased or incomplete solutions, with implications for inclusive policymaking, market performance, public trust, and institutional legitimacy. **In this context, gender equality is not only a matter of inclusion, but also of innovation quality, economic resilience, and democratic governance.**

6. **Strengthen regional ecosystems to unlock underutilised talent and resilience**

   Policy should prioritise the development of effective regional ecosystems that combine training, firm-level advisory support, and stronger linkages between national programmes, innovation actors, and businesses, particularly those not currently engaged in innovation networks. Flexible and advisory roles in an AI-driven economy, where hybrid skill sets create new entry points, offer significant potential to integrate underutilised talent across regions and life stages. Expanding digital adoption beyond urban centres is critical not only for competitiveness, but also for reducing regional disparities and strengthening overall economic resilience.

67 Interview with Lucia Katriňáková, SAPIE/Survey results

Actor-Specific Recommendations

The central strategic insight is clear: **the quality of digital transformation matters as much as its speed.** A model that is uneven, exclusionary, or narrowly concentrated risks undermining both competitiveness and democratic resilience. Conversely, a model that expands participation, strengthens SME capacity, and integrates underutilised talent can drive inclusive growth, innovation, and long-term stability.

For Europe this represents a strategic opportunity. As AI reshapes the economy, there is a window to turn disruption into inclusion by investing in AI-driven reskilling as a new entry point for women and other underrepresented groups into high-value roles in the digital economy.

The following recommendations respond directly to the structural constraints identified across the region, linking each policy priority to specific system-level gaps in SME digital transformation. Together, they provide a roadmap for unlocking underutilised potential by bridging gender gaps in AI and digital adoption across SMEs in Austria, Bulgaria, Czechia, and Slovakia. These recommendations are transferrable across the EU and can serve as a blueprint for Member States facing similar challenges.

For Policymakers (National & EU Level)

Public intervention should shift from expanding access to digital tools toward enabling their effective use, while positioning digitalisation and AI adoption as core national priorities for competitiveness and economic security - not solely as areas supported by EU funding.

- Treat **digitalisation and AI adoption as national strategic priorities,** supported by dedicated funding and coordinated policy action across SME support and public sector transformation
- Introduce **AI and digital vouchers** linked to concrete business use cases and measurable productivity gains
- Integrate **advisory, training, and financing into a single, coherent support pipeline** to reduce fragmentation and improve uptake
- Invest in developing a **certified pool of digital and AI advisors for SMEs,** aligned with market needs and accessible across regions
- Incentivise **employer-supported, paid training time** through tax benefits or co-financing schemes
- Embed **gender-responsive criteria** into innovation and digital funding programmes to support women's participation in leadership and entrepreneurship

For Businesses (SMEs & Corporates)

Businesses should treat digital transformation as a strategic priority, integrating technology adoption with workforce development and leadership-level accountability to ensure measurable business impact.

- Assign responsibility for **digital transformation** at the leadership level, rather than limiting it to IT departments
- Embed paid time for **upskilling within working hours** to accelerate adoption of AI and digital tools
- Invest in practical, **role-specific AI training** linked to core business functions (e.g. sales, operations, automation)
- Establish **structured sponsorship and mentorship systems** to support the progression of underrepresented talent, including women
- Ensure **intentional inclusion of underrepresented groups in decision-making** and agenda-setting processes, particularly in digital and AI-related initiatives

For Ecosystem Actors (EDIHs, Chambers, Hubs, Associations)

Ecosystem actors should move beyond awareness-raising toward implementation, acting as connectors between SMEs, technology providers, and financing instruments.

- Provide **hands-on advisory support** focused on integrating AI and digital tools into business processes
- Develop **integrated service models** combining advisory, training, and access to finance
- Build a **pool of qualified digital and AI experts** capable of supporting SMEs both operationally and strategically across sectors and regions, including outside major innovation hubs
- Expand **regional outreach** beyond capital cities through local partnerships
- Facilitate access to **mixed, decision-making networks** where business opportunities and investments are shaped

For Women Professionals and Entrepreneurs

Women are already actively engaging with digital tools and upskilling; targeted actions can help translate this engagement into leadership, business growth, and influence over digital transformation.

- Prioritise the **application of digital and AI tools in business contexts,** moving from individual use to strategic integration
- Proactively seek opportunities to **engage in AI-related work, decision-making processes, experimentation, and innovation initiatives**
- Actively enter **decision-making networks and leadership spaces** beyond support-based communities
- **Develop cooperative networks of mentors and sponsors** within organisations and professional ecosystems to support progression into leadership roles
- Leverage **flexible and remote work opportunities** to access roles across regions and sectors
- Engage in **continuous, practical upskilling,** focusing on emerging hybrid roles that combine technology, strategy, and communication

Methodology

The report focuses on four CEE countries: Austria, Bulgaria, Czechia, and Slovakia. Primary data was collected between February and March 2026 through surveys and semi-structured interviews, complemented by secondary statistical data and a review of existing research.

In Bulgaria and Slovakia, the analysis draws on a mixed-methods approach, combining quantitative survey data with qualitative interviews to capture both measurable trends and deeper contextual insights into women's participation in the digital economy. In Austria and Czechia, meanwhile, the analysis relies primarily on qualitative interviews and desk research.

Bulgarian SME Survey Methodology

- Telephone survey conducted in 2023 among **1,000 SMEs** in Bulgaria using **quota sampling.**
- Sample split:
  - **50% microenterprises – 50% small and medium-sized firms**
  - Minimum **7% medium-sized enterprises**
- At least **50% of firms in each quota** were undergoing digital transformation, defined as using **4+ of 14 selected digital technologies.**
- Average firm age: **19 years;** nearly **60% single-owner firms**

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Slovakia Sample. The survey sample includes 25 respondents from the Slovak SME ecosystem. While not statistically representative, it provides directional insights into barriers affecting women's participation in digital and AI-related activities and is interpreted as indicative of broader structural dynamics. Respondents represent a range of seniority levels, from non-managerial staff to founders and senior leaders. The majority are drawn from small and medium-sized enterprises, with particularly strong representation from the education/training and technology/IT sectors.

Interviews

For this report, the research team interviewed 13 practitioners and public officials across the four countries between February and April 2026.

AT

Kristina Maurer, Digital humanism expert from Vienna Business Agency

Daniela Pieters, Digital economy expert from Vienna Business Agency.

Tanja Rechenmacher, CANCOM Austria expert on AI and security

BG

Gergana Ivanova, founder and partner of in The Smarts advertising agency

4 anonymised entrepreneurs from consulting, accounting and creative industries

CZ

Martina Dlabajová, Founder and CEO of Seven Partners, Member of the European Parliament for the Czech Republic 2014-2024, European Parliament rapporteur for the EU 2030 "Path to the Digital Decade"

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SK

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