CONNECTING WOMEN IN DIGITAL

ORGANIZATION BRIEFING TOOLKIT FOR INTERSECTIONAL INCLUSION IN DIGITAL LEADERSHIP

proposed by members of Thematic Working Group 4

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Executive Summary

Digital gender inequality is often observed in both traditional and digital labour markets, which leads to discrimination in the context of gender equality, social exclusion and creates conditions for violations of human rights. After assessing the situation of women in digitalization processes - from the early stages to management positions, it was determined that gender cannot be viewed as the only indicator. To achieve real and lasting changes in the digital sector, it is necessary to go beyond the narrow framework of "women in IT" and focus on the intersectionality factor. Gender does not operate in isolation. The decision of girls and boys not to choose the field of information technology is often determined by the intersection of several factors, such as gender, socioeconomic status, geographical location, maternity and parental status, nationality or disability etc. For this purpose, an organization briefing toolkit was developed, which is expected to contribute to a multidimensional approach to digitalization and technology. The organization briefing toolkit is a comprehensive, action-oriented strategic tool, based on research and expert best practices. The organization's toolkit aims to create an inclusive, equitable and diverse digital future, where no young person is left behind.

I. Introduction

Every person, regardless of gender, has the right to work in the profession of their choice. The International Labour Organization defines work as „any activity undertaken by persons of any sex or age for the production of goods or the provision of services for others or for their own use“ (ILO, 2025). According to research, more than 90% of jobs worldwide have a digital component (United Nations, 2018). Although laws regulate the right to work equally and prohibit discrimination, the growing digital gender gap violates women's right to establish themselves in the desired digital labour market. The term „digital divide“ or „technological divide“ refers to the unequal availability of Information and Communication Technologies (ICT) in society. The uneven distribution of technologies re-enforces social inequalities and creates a persistent information or knowledge gap between people who have access to and use new media (the „haves“) and those who do not (the „have nots “) (Schweitzer, 2025). Inequalities based on factors such as age, education, ethnicity, race, income, social status, and geographic location do not disappear in the digital labour market but rather create even greater barriers. Therefore, we cannot consider “girls and women” as a homogeneous group, as their experiences in the digital society are fundamentally shaped by how gender intersects with these other systemic disadvantages.

One of the main drivers of inequality in the digital labour market is the lack of digital literacy across life stages, which acts as a shifting barrier when gender intersects with age, socioeconomic status, and geographic location. Digital literacy, encompassing both functional technology use and digital safety, is not a uniform challenge for all women. Because technology develops rapidly, the digital literacy gap expands unevenly, disproportionately affecting older women, rural communities, and marginalized

socioeconomic groups. Furthermore, access to relevant education and internship opportunities is heavily shaped by these overlapping disadvantages, creating deeper systemic inequalities in digital content creation.

Traditional stereotypes that portray technology as an exclusively "boys'" domain do not necessarily affect all girls equally. These biases are often further reinforced by cultural background, family income and the level of school resources, which together determine a young person's access to digital tools.

The lack of digital competences is also a multifaceted problem. While academic research highlights areas such as "ICT digital competence of students" and "teacher education, educational technology, digital competence of teachers", a key cross-sectoral finding is that the lack of technological resources, skills and pedagogical competences is greatest in under-funded, rural or marginalised educational settings. Therefore, implementing inclusive, adaptive teaching methods for educators is an important priority. To successfully reduce inequalities in the digital labour market, these educational interventions cannot treat girls as a homogeneous group but must address how gender inequalities are reinforced or modified by the diverse social, economic and cultural realities of students.

Gender discrimination in the digital labour market stems from traditional workplaces, where gender is historically intertwined with race, cultural and ethnic diversity, age, geographical location, abilities, socioeconomic status, creating multi-layered systems of exclusion. This is why the EU Gender Equality Strategy 2026-2030 pays special attention to the digital space and the STEM sector, explicitly adopting an intersectional approach rather than viewing women as a homogenous group.

While the strategy aims to reach 20 million ICT professionals in the EU by 2030, ensuring full gender balance, it is important to note that this balance cannot be achieved without focusing on the most marginalised groups. Therefore, financial incentives and EU funds are allocated to companies that actively invest in the reskilling of women at different stages of life and from diverse social, economic, ethnic and regional backgrounds.

To meaningfully address these intersectoral goals, the European Commission's Connecting Women in Digital (WIDCON) project moves from a blanket narrative of "women in tech" to addressing the specific, overlapping barriers faced by diverse groups of women entering the digital workforce. A key priority is to address the issue of intersectoral algorithmic bias - to ensure that AI tools in human resources processes do not discriminate against women due to the compounding effects of gender, age, ethnicity, education or other interrelated factors.

One of the many tools chosen to achieve the objectives is the development of The Organization Briefing Toolkit. The Organization Briefing Toolkit is developed using a data-driven methodology that combines analytical work and expert experience. The methodology combines data collection and qualitative input from Women in Digital members and experts in sharing good practices. This toolkit is specifically designed to help organisations, including employers, educational institutions and policymakers, implement cross-sectoral gender mainstreaming in the digital workforce. Its main objective is to provide organisations with effective frameworks to identify, analyse and address the cross-cutting barriers faced by different groups of girls and women at different stages of their digital careers.

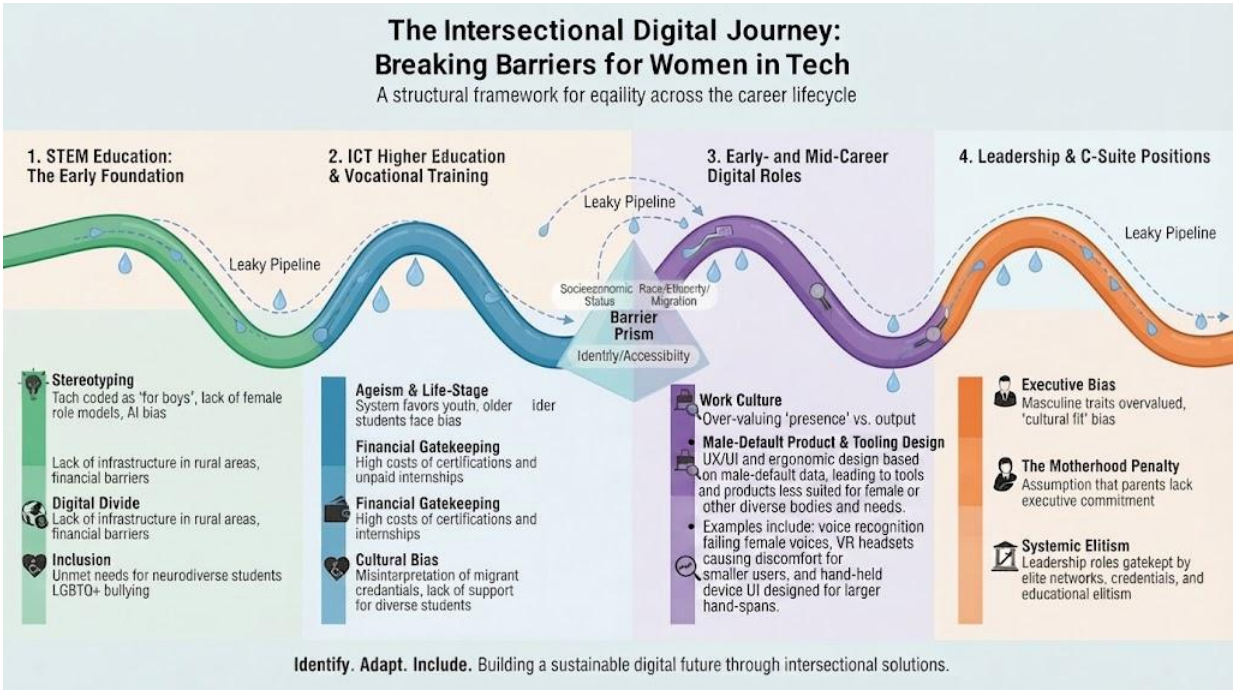
II. Context, objectives and identified problems

According to the principle of intersectionality within the EU gender equality strategy, progress in the digital sector is not pursued through a one-size-fits-all approach, but rather by addressing the specific, intersecting barriers faced by diverse groups of women and girls. These include considerations of **age and early childhood education, race, ethnicity and migration background, socioeconomic status, geographical location, maternity and parental status, disability and accessibility, as well as sexual orientation and gender identity.**

The intersectional framework of this toolkit is structured around four sequential pillars:

1. STEM Education
2. ICT Higher Education & Vocational Training
3. Early- and Mid-Career Digital Roles
4. Leadership & C-Suite Positions

Once these unique systemic barriers are identified, actionable, expert-based solutions and organizational recommendations are presented in the subsequent sections of this document.



1. STEM Education

Early STEM (Science, Technology, Engineering and Mathematics) education is the first step in the digital process. The aim is to present the main factors influencing the engagement of girls and diverse groups in STEM fields from an early age, identify the barriers that arise, and provide good practices and solutions for organizational activities. Based on the data provided by experts, the following problems were identified.

1.1. Gender Stereotypes & Representation:

- Technology and technical sciences are associated with boys from an early age. Girls are less encouraged to engage with technical games or sciences, leading them to lose interest in STEM very early (between the ages of 10 and 16).

- There is a severe lack of female role models in textbooks, children's books, the family environment, and the professional sector. This is reinforced by AI image-generation tools, which dominantly depict men when prompted for STEM-related imagery.

1.2. Socioeconomic & Regional Divide:

- Socioeconomic status acts as a foundation for other systemic barriers. Children from poor families suffer from digital poverty, lacking the devices, internet connectivity, and opportunities to explore technology at home.
- In less advantaged socioeconomic backgrounds, there is a lack of long-term support to pursue complex STEM studies, as immediate financial stability or short-term professional programs are prioritized over long-term education.
- Rural and peripheral regions lack crucial STEM infrastructure (such as laboratories and specialized teachers) and opportunities to connect with industry representatives. In some small regional schools, core subjects like physics, chemistry, or computer science are not offered at all in the upper grades.

1.3. Cultural & Ethnic Diversity:

- Systemic bias, cultural stereotypes, and the underrepresentation of Black and other ethnic minority women among STEM educators and speakers create a profound sense of isolation for minority students.
- Migrant families often face language barriers, unfamiliarity with local education systems, and the devaluation of qualifications acquired abroad. Consequently, their language difficulties are frequently misinterpreted as a lack of technical skills.

1.4. Inclusion, Neurodiversity & Accessibility:

- STEM concepts are often dismissed as „too complex“ for preschool education. Furthermore, educators lack training in STEM-adapted methodologies, meaning neurodiverse talent is frequently overlooked.
- STEM laboratories, digital tools, and online learning platforms are rarely designed to meet accessibility standards for students with disabilities.
- Transgender and non-binary students experience exclusion, bullying, and administrative barriers (e.g., deadnaming or incorrect pronouns in school systems), which negatively impacts their attendance and engagement. This is compounded by a lack of clear guidance for schools and teacher training regarding sexual orientation and gender identity.

2. ICT Higher Education & Vocational Training

ICT Higher Education & Vocational Training (universities and colleges) is a crucial link in shaping the future talents of the digital and technology sector. The aim is to identify systemic barriers faced by students and young professionals and propose structural solutions for organizations and academic institutions. Based on the data provided by experts, the following problems were identified.

2.1. Ageism & Life-Stage Barriers (Retraining & Career Changes):

- Digital education systems are heavily oriented toward linear, youth-focused academic tracks. Older individuals lack flexible integration options, and adults entering the sector are wrongly expected to already possess foundational ICT skills.

- Intensive study programs, bootcamps, or demanding tech career shifts often directly coincide with the peak of women's biological fertility and family formation stages, creating severe work-life-study conflicts.
- Older women (e.g., ages 30–45) switching to ICT face corporate assumptions that their knowledge is outdated. Their prior professional experience is frequently undervalued, and they encounter discrimination rooted in age or childcare stereotypes.
- A male-dominated, patriarchal ICT culture perpetuates exclusion and harmful stereotypes (e.g., „girls are not cut out for tech“). This atmosphere is further strained by informal „no ask, no tell“ environments that force individuals to self-censor, undermining psychological safety.

2.2. Race, Ethnicity & Migrant Integration Barriers:

- Educators and lecturers are frequently unequipped to support students from diverse cultural backgrounds, which can reinforce racial and ethnic stereotypes. Culturally biased expectations can lead to young people of color being actively discouraged from pursuing ICT paths.
- Newly arrived youth struggle to navigate unfamiliar local education systems due to language barriers, heavy bureaucracy, and a lack of academic guidance, putting them at high risk of choosing the wrong specialization.
- The refusal to recognize foreign diplomas and professional credentials forces migrants to sometimes hide their education during interviews to avoid immediate negative biases. Furthermore, ICT and cybersecurity career paths remain poorly visible within migrant communities.

2.3. Socioeconomic Disadvantage & Regional Divide:

- Children and youth from low socioeconomic backgrounds start at a massive disadvantage. They lack access to personal computers, reliable internet, and early digital literacy.
- Financial barriers - such as expensive professional certifications and unpaid internships - block gifted, low-income talent. Family pressure to generate immediate income often forces young women to choose short, low-skilled vocational tracks over more promising, long-term higher education in ICT.
- Regions outside major cities suffer from a severe lack of digital education, innovation ecosystems, and tech job density. Rural youth struggle to find in-person mentors or visit tech companies. This logistical burden (long commutes or expensive city housing) creates a double challenge for women balancing family care duties.

2.4. Accessibility, Health & Neurodiversity:

- Physical campus spaces, digital learning platforms, and UX software are rarely optimized for students and professionals with disabilities. This technical exclusion is compounded by corporate fears and biases regarding the perceived „lower productivity“ of disabled individuals.
- Standard corporate interview structures and evaluation processes fail to accommodate neurodivergent individuals (e.g., those on the autism spectrum), shutting out highly capable technical talent.
- Prolonged ICT work induces specific physical strains (e.g., carpal tunnel syndrome, arthritis, repetitive strain injuries). Managers often operate under the illusion that 100% remote work signals „lower efficiency“ which restricts the flexible working arrangements needed to manage these health issues.

2.5. LGBTQ+ & Gender Identity Inclusion:

- Academic institutions often lack the training to support LGBTQ+ students properly and tailored digital literacy programs for these groups are missing.
- Transgender and gender non-binary individuals face rigid administrative barriers in databases and school systems (e.g., deadnaming). They encounter frequent rejection or bias in customer-facing or public roles, driven by a lack of diversity training among managers.

3. Early and mid-career digital roles

The toolkit aims to present the key systemic, organisational and technological challenges faced by women in early and mid-career digital roles. The purpose of the document is to help managers and human resources (HR) professionals identify intersectional barriers and implement best practices to ensure equality in the digital sector. Based on the data provided by experts, the following problems were identified.

3.1. Career Progression & Life-Stage Barriers:

- Younger women face disproportionately high demands to prove their competence and are frequently relegated to "junior" positions despite possessing the required skill set. Consequently, they are routinely passed over for high-visibility, strategically vital projects.
- Women entering or shifting careers within the tech sector between the ages of 30 and 45 encounter systemic bias, including false assumptions that their technological literacy is outdated or that they lack the agility for new roles.

- The mid-career phase heavily coincides with family planning. Women face discriminatory assumptions regarding their productivity due to potential childcare duties. Furthermore, returning from maternity leave is exceptionally difficult due to the rapid pace of tech evolution and a widespread lack of structured organizational reintegration support, which fuels the „leaky pipeline“ effect.

3.2. Recruitment Bias & Cultural Isolation:

- Deeply ingrained corporate and algorithmic biases persist throughout hiring and promotion cycles, preventing objective talent evaluation.
- Women from racialized and ethnic minority backgrounds are acutely underrepresented in digital and leadership roles. They face exclusion from informal corporate networks and are frequently targeted only for operational, execution-focused roles rather than strategic positions.
- Tech organizations frequently fail to recognize qualifications and diplomas acquired abroad. This systemic issue forces migrant women to hide their foreign education during interviews to avoid bias, a problem compounded by a lack of local professional networks and market literacy.

3.3. Flexibility, Presenteeism & Remote Work Culture:

- Many organizations maintain a stagnant corporate culture where working overtime physically in the office is equated with „loyalty“ and merit. This severely disadvantages women utilizing flexible or remote arrangements to balance professional and family responsibilities.
- High-level technology opportunities, capital, and innovation hubs remain heavily concentrated in major metropolitan areas. For women living in rural or peripheral

regions, the resulting logistical burdens - such as long commutes or expensive urban relocation—create a double barrier when coupled with domestic care obligations.

3.4. Accessibility, Neurodiversity & Workplace Health:

- Physical offices and essential digital UX/UI collaboration tools remain poorly adapted to universal accessibility standards, creating unnecessary friction for professionals with disabilities.
- Corporate cultures still erroneously view disability as a direct driver of operational costs or a barrier to productivity. Companies frequently engage in tokenism, hiring only individuals with mild disabilities to fulfil legal quotas without providing genuine career advancement.
- Prolonged technical and screen-based work induces specific physical ailments (e.g., carpal tunnel syndrome, repetitive strain injuries, and arthritis) that statistically and severely impact women in tech roles.

3.5. Financial Barriers & Network Inaccessibility:

- The high cost of advanced digital training, professional certifications, and the prevalence of unpaid internships act as financial barriers that exclude gifted, less affluent talent from entering mid-career roles.
- Women face severe exclusion from influential professional and investor networks, particularly in regional business cultures driven by personal connections. This directly restricts their access to capital and funding required to launch independent tech ventures.

3.6. Psychological Safety, DEI & Gender Identity:

- A persistent lack of psychological safety forces marginalized employees to self-censor. This is often driven by informal „no ask, no tell“ corporate subcultures that mask everyday discrimination.
- Transgender and gender non-binary individuals face hostile workplace cultures, rigid administrative barriers within corporate systems (such as deadnaming in IT directories), and systemic exclusion from customer-facing or public-facing roles.

4. Leadership & C-Suite Positions

As the world becomes fully digital, ensuring gender balance at the decision-making level is becoming a critical success factor. Ensuring sustainable change requires leadership accountability, inclusive education programs, equal access to digital skills, and building a culture of belonging in the workplace. The aim of this collection is to review the key systemic and cultural challenges women face in reaching the highest levels of leadership in the digital world, and to provide organizations with practical recommendations for promoting inclusion and equality. Based on the data provided by experts, the following problems were identified.

4.1. C-Suite Progression, Executive Stereotypes & The Glass Ceiling:

- Many organizations still maintain a stereotypical, traditional view of executive authority. Expressly masculine leadership traits (e.g., individualistic assertiveness) are consistently overvalued, while collaborative, empathetic, and inclusive leadership styles statistically favoured by women are dismissed as organizational weaknesses.

- While the pipeline of women in middle management is expanding, transition to the C-suite and Board level remains blocked by opaque, unstructured selection processes, corporate bias, and exclusion from informal, male-dominated executive networks.
- Younger female executives and professionals face deep-seated skepticism regarding their authority. They are held to disproportionately higher competence standards, and when they speak with confidence, their assertiveness is frequently misinterpreted as „arrogance".

4.2. The Motherhood Penalty & Executive Availability Bias:

- Executive culture heavily enforces a toxic „24/7" availability bias. The „motherhood penalty" operates on the systemic assumption that women with childcare responsibilities are less committed to their roles or incapable of sustaining these high-demand executive schedules.
- Taking parental leave is frequently treated as a „career endpoint" or an irreversible pause in trajectory. Upon return, women are routinely locked out of high-visibility strategic projects, driving executive-level turnover.
- A lack of balanced flexibility creates cultural friction between parents and child-free employees, as the latter are unfairly expected to shoulder constant overtime to compensate for systemic understaffing.

4.3. Intersectional Gatekeeping, Corporate Fit & Race:

- The institutional practice of evaluating executive candidates based on „cultural fit" frequently acts as a subconscious vehicle for discrimination. Candidates who do not conform to dominant social norms, traditional speech styles, or legacy corporate grooming standards are systematically filtered out.

- Women from racial and ethnic minorities face profound structural neglect and a sense of „invisibility“, leading to significantly slower career advancement and severe underrepresentation at the executive and board levels.

4.4. Socioeconomic Gatekeeping & Elitism:

- C-suite pipelines are heavily gatekept by elitism. Leadership opportunities, executive coaching, and strategic backing are disproportionately reserved for individuals who have graduated from specific prestigious universities or possess pre-existing elite social and financial connections.
- The exorbitant cost of high-level industry certifications, advanced digital training, and elite professional networking events creates an insurmountable barrier for gifted, lower-income talent.

4.5. Transnational, Regional & Remote Mobility Barriers:

- Visa dependencies and temporary work permits create legal volatility, causing companies to avoid appointing highly qualified immigrant women to stable executive roles. This is worsened by the non-recognition of international degrees and a lack of localized strategic networks.
- Senior professionals working remotely are frequently treated as „invisible“ or less efficient by traditional boards, making them significantly less likely to be considered for executive promotions.
- High-tier digital leadership networks, capital, and corporate headquarters remain densely concentrated in major tech hubs. Women in rural regions face poor infrastructure and severe logistical constraints when balancing regional life with executive corporate expectations.

4.6. Disability, Universal Design & Health Equity:

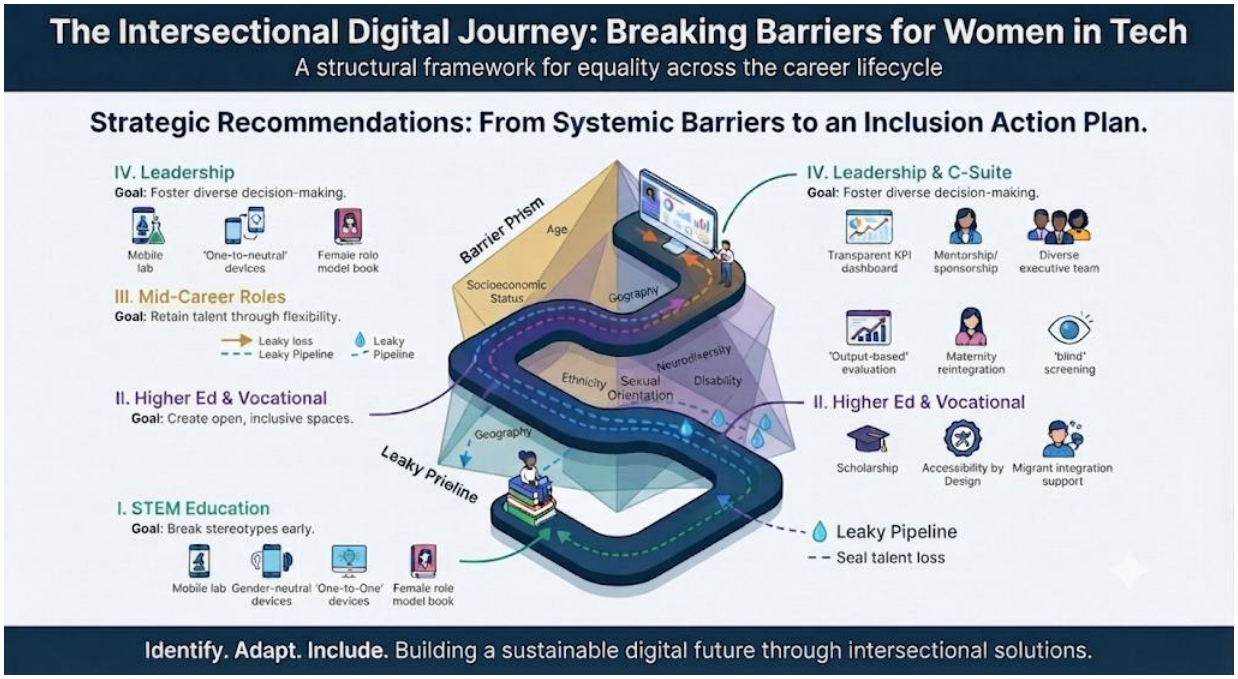
- Executive culture harbours a severe, ableist prejudice that individuals with disabilities cannot operate as highly productive, strategic leaders, leading to their exclusion from C-suite consideration.
- Enterprise digital tools, leadership dashboards, business intelligence platforms, and physical boardroom environments are rarely designed to meet universal accessibility standards.
- Extended technical and screen-intensive work drives specific physical ailments (e.g., carpal tunnel syndrome, repetitive strain injuries, and arthritis) that statistically and severely impact women, requiring flexible physical accommodations that corporate boards rarely prioritize.

4.7. LGBTQ+ Executive Safety & Systems Bias:

- A persistent lack of psychological safety in conservative or male-dominated corporate environments forces LGBTQ+ professionals to hide their identities out of fear of executive career stagnation or overt discrimination.
- Transgender and non-binary individuals face rigid administrative barriers in enterprise human resources systems, databases, and payroll platforms designed strictly on a binary gender model. This lack of institutional literacy extends to managerial hostility, particularly in high-visibility or customer-facing executive roles.

II. Suggestions and recommendations for all groups

This section presents a set of strategic proposals and recommendations to implement cross-sectoral gender mainstreaming across the digital ecosystem – from early childhood education to higher education and the digital workforce. The main objective of these recommendations is to address the structural, overlapping barriers that prevent diverse groups of girls and women from equally accessing, thriving and leading in STEM and ICT. Rather than treating women as a homogenous group, this toolkit addresses the complex disadvantages that exist where gender intersects with age, socioeconomic status, geography, ethnicity, migrant background, neurodiversity and physical ability. These recommendations provide educational institutions, policymakers and corporate employers with a data - driven, actionable roadmap to transform systemic inequalities into a truly inclusive, diverse and equitable digital future.



1. STEM Education

The main goal is to break stereotypes before they are formed and ensure equal access to technology for all girls, regardless of their origin or place of residence. The aim of the recommendations at this stage is to break down gender and social stereotypes at an early age and ensure that technologies become equally accessible and attractive to every child at the basic education level. It is particularly important to ensure that neither the place of residence (rural vs. big city), nor the income of the parents, nor the language barrier or cultural background prevent a child from discovering and developing their digital potential from the very first steps in the education system.

1.1. Age & Early Childhood

- **Early Intervention:** STEM education must begin in kindergarten, before elementary school, when gender stereotypes are not yet fully formed.
- **Age - Appropriate Teaching:** find creative, interesting, and easy-to-understand ways (according to age) to convey the essence of STEM without giving up technological content or solutions.
- **Gamification:** use games that help spark children's imaginations and purposefully explain what STEM is.

1.2. Race, Ethnicity & Migration Background

- **Language & Inclusion Support:** create bridging programs that connect language support with STEM terminology for students from diverse backgrounds.
- **Support for Migrant Girls:** integrate targeted mentoring programs specifically for girls from migrant families/backgrounds, helping them adapt, build resilience, and successfully transition into the education system.
- **Cross-Cultural Knowledge Sharing:** encourage children to share different ways of logical thinking and solving mathematical problems brought from education systems in other countries, broadening the horizons of the entire class.

1.3. Socioeconomic Status

- **Digital Equity & Device Policy:** implement a „One-to-One Device Policy" where the municipality or school provides the same digital equipment to all children (prohibiting personal devices in the classroom to avoid socioeconomic discrimination), or enforce clear, equitable guidelines on Bring Your Own Device (BYOD) systems.

- **Classroom Integration Guidelines:** provide teachers and assistants with clear written guidelines and best practices on managing classrooms with diverse ethnic or socioeconomic backgrounds, ensuring students are not isolated or grouped solely by status.

1.4. Geographical Location

- **Regional Accessibility:** create mobile labs that travel to remote areas and regional STEM hubs, and fund transportation/participation costs for girls from rural areas to attend high-level STEM programs in cities.
- **Early Career Exposure:** implement the early introduction of digital careers in schools across all regions.

1.5. Disability & Accessibility (including Neurodiversity)

- **Neurodiversity:** implement specialized programs focused on developing the STEM talents of neurodiverse individuals.

1.6. Sexual Orientation & Gender Identity

- **Curriculum & Role Models:** integrate diverse female role models into school curricula and use books/materials that highlight women's achievements in STEM, ICT, and cybersecurity to break down gender stereotypes.

1.7. General Capacity Building (Teachers and community)

- **Teacher Training:** train teachers to recognize and reduce unconscious gender bias, and develop flexible, modular learning pathways for adults working in early childhood education settings.

- **Community Engagement:** encourage schools to actively invite speakers from diverse backgrounds and create community-based STEM centres at the local level.

2. ICT Higher Education & Vocational Training

The goal of the recommendations at this stage is to remove systemic barriers at the academic level and ensure that higher and professional IT education becomes an accessible and fair springboard to the labour market for all groups of students. Transform higher education and vocational schools from rigid (strict) traditional „selection filters" into open, inclusive spaces that value real competencies and help students successfully launch their careers regardless of their background, identity, or physical abilities.

2.1. Race, Ethnicity & Migration Background

- **Support for International Talent:** create specific support and mentoring programs for international students and staff to help them understand key skills and the local context, without presuming prior knowledge.
- **EU-Wide Qualification Recognition:** simplify and accelerate the recognition (accreditation) of foreign qualifications, diplomas, and competencies at the EU level. Create EU-wide talent integration platforms focused on digital roles, using successful migrant role models as ambassadors.

2.2. Socioeconomic Status

- **Fair Internships:** completely abandon unpaid internships and transform them into paid positions, making them accessible to everyone regardless of their parents' financial situation.

2.3. Disability & Accessibility

- **Accessible Public Infrastructure:** ensure digital education resources become public infrastructure, guaranteeing equal access for all. Implement the mandatory principle of „Accessibility by Design" in digital platforms and mandate regular accessibility audits.
- **Support for Women with Disabilities:** create special scholarship and university programs for women with disabilities. Ensure that leadership positions held by people with disabilities have real scope, authority, and resources, not just a title.

2.4. Sexual Orientation & Gender Identity

- **Inclusive Infrastructure:** require all educational institutions receiving public (including EU) funding to implement inclusive administrative systems (such as name/pronoun recognition, HR adaptation to non-binary identities) and ensure access to gender-neutral facilities.

2.5. Market Transition

- **Graduate Retention & Market Transition:** activate targeted programs (internships, shadowing, industry projects) to help graduated female STEM students directly transition into the labour market, reducing the risk of them dropping out immediately after graduation. Track where talent is lost at a strategic level.

3. Early and Mid-Career Digital Roles

Early and mid-career stages are the periods of greatest risk of talent loss, when initial barriers turn into insurmountable career obstacles. The cross-sectoral framework of this stage is designed to address the complex realities of modern life: how motherhood and fatherhood interact with corporate visibility (requiring a shift from hours worked to performance

measurement), how age and generation shape digital skills development (requiring reverse mentoring and prioritizing AI empowerment for younger workers), and how the socio-economic environment limits horizontal mobility (requiring a skills-based, diploma-independent approach to employment). The goal of the recommendations at this stage is to stop the loss of talent, help them survive and grow in the IT sector as new, overlapping social challenges arise in their lives.

3.1. Age & Mid-Career Inclusion

- **Anonymized Screening:** apply name-blind screening and anonymize age in selection processes to eliminate bias. Consider using neutral AI digital avatars for initial candidate assessments.
- **Lifelong Learning:** Make lifelong learning a structural pillar of the digital economy by providing tax incentives for companies that invest in it.
- **Reverse Mentoring:** Implement reverse mentoring programs where younger, digitally savvy employees work with older managers to bridge skills and experience gaps.
- **AI Empowerment for Junior Staff:** ensure that female employees in junior specialist positions receive priority training to work with AI tools, transforming and elevating their roles rather than eliminating them.

3.2. Race, Ethnicity & Migration Background

- **Anonymized Screening:** apply name-blind screening and anonymize age in selection processes to eliminate bias. Consider using neutral AI digital avatars for initial candidate assessments.

3.3. Socioeconomic Status

- **Skills-Based Hiring:** eliminate formal university degree requirements in job descriptions where they are not strictly necessary. Focus on real competencies using "school-blind screening" (blind portfolio reviews) to assess actual digital skills rather than institutional prestige.

3.4. Geographical Location

- **Decentralization:** decentralize the digital economy by investing in regional infrastructure and creating funded local women's digital hubs in smaller towns and municipalities.

3.5. Maternity & Parental Status

- **Maternity & Career Break Integration:** create special adaptation programs for women returning from maternity or career breaks (including technical refreshers, AI tool adoption, and flexible integration periods). Legally and culturally protect career progression after care breaks.
- **Work-Life Balance & Output-Based Evaluation:** measure actual work outcomes and output rather than hours worked. Limit after-hours work requests, and provide inclusive parental leave for both parents.
- **Remote & Hybrid Work Equality:** guarantee flexible and hybrid working arrangements. Ensure hybrid leadership models so that remote workers are not discriminated against regarding promotions, visibility, or voice in strategic meetings.

3.6. Disability & Accessibility

- **Workplace Adaptability & Ergonomics:** provide dedicated budgets for workplace adaptation, for period-friendly toilets, other spaces, accessibility, and ergonomics, including people with disabilities directly in the design of internal processes.

3.7. Sexual Orientation & Gender Identity

- **Support Networks & Safe Spaces:** officially support, fund, and encourage LGBTQ+ employee networks, conduct awareness campaigns, and create dedicated safe spaces for LGBTQ+ women and transgender individuals.

3.8. Workplace Culture & Safety

- **Inclusive Language:** normalize the use of gender-neutral language at official events, presentations, and internal communications.
- **Anti-Discrimination & Safety:** introduce mandatory anti-discrimination training and inclusion seminars for all employees. Maintain zero tolerance for abuse, harassment, or discrimination, and implement role rotation where necessary.

4. Leadership & C-Suite Positions

The recommendations in this phase aim to break the glass ceiling in the technology sector, ensure transparent career progression and transform top management to include leaders of diverse backgrounds and identities. The main aim is to ensure that the C-Suite is not only accessible to a single, privileged group of women. It is important to open up leadership positions to women from different cultural backgrounds, different age groups and those with specific physical or health needs, as only such diversity ensures true innovation in the digital economy.

4.1. Age & Mid-Career Leadership

- **Mid-Career & Age Inclusion:** promote intergenerational learning and create accelerated leadership/digital skills programs for women aged 30 to 45. Track exit reasons specifically for women aged 35–50.

4.2. Race, Ethnicity & Migration Background

- **Career Model Redefinition:** redefine career models by valuing non-traditional, transferable, and multicultural experiences (e.g., business/technical language skills) as key drivers of company innovation.

4.3. Disability & Accessibility

- **Authority for Leaders with Disabilities:** Ensuring that leadership positions held by people with disabilities have real power, resources and influence, and are not just a formal title.

4.4. Governance & Transparency

- **Fair Selection Criteria:** establish clear, transparent, and measurable evaluation criteria and KPIs before selections begin. Use independent evaluation committees and ensure gender balance in candidate shortlists for management positions.
- **Diversity Data Transparency:** require tech companies across the EU to record, track, and publish diversity data in promotion and executive leadership chains.
- **Mentorship & Sponsorship:** assign women executive-level sponsors and mentors who actively help them navigate organizational politics, access high-visibility projects, and gain leadership exposure.
- **Early Career Exposure:** implement the early introduction of digital careers in schools across all regions.

III. Recommended action plan for organizations

This recommended action plan is designed to transform theoretical principles of intersectionality and gender equality into concrete, every day and measurable actions for organizations. In today's technology and digital sector, it is not enough to declare abstract values - companies and institutions need a clear, structured guide that allows them to transform their internal systems so that they no longer create invisible barriers to a diverse pool of talent. This action plan aims to enable organizations to become innovative, resilient and equitable leaders of the digital economy of the future by implementing this plan.



1. Data Collection, Audit & Analytics:

1.1. Holistic Data Tracking: regularly collect and analyze disaggregated data by gender, race, age, socioeconomic status, and region to identify the real causes of exclusion and career bottlenecks.

1.2. HR Analytics Integration: implement advanced HR analytics tools to monitor specific indicators within digital divisions, including the gender pay gap, employee turnover rates, and the distribution of women across different career tiers.

1.3. Annual Data Transparency: publish anonymized internal diversity data annually to monitor long-term selection, promotion, and retention trends.

1.4. Intersectional Assessment: assess the organizational environment holistically, recognizing that different groups of women face overlapping, distinct levels of structural barriers.

2. Training, Mentoring & Workplace Culture:

2.1. Staff & Educator Training: implement mandatory training programs on combating unconscious bias, building intercultural competence, and fostering psychological safety for all staff and educators.

2.2. Reciprocal & Reverse Mentoring: implement reverse and intergenerational mentoring programs where younger or minority employees share digital insights and cultural expertise with management, and vice versa.

2.3. Strategic Project Allocation: audit how high-visibility and strategic projects are assigned, ensuring that early-career women and minority employees are not overlooked.

2.4. Long-Term Partnerships: develop sustainable relationships between industry, schools, and local community organizations to ensure mentoring and internships directly reach the most vulnerable groups.

3. Flexibility & Accessibility:

3.1. Inclusion by Design & Ergonomics: ensure all internal digital tools are accessible to people with disabilities („Accessibility by Design") and that dedicated budgets for ergonomic care are implemented.

3.2. Flexible & Remote Work Equity: provide realistic, equitable hybrid and remote work options so that location or physical disability does not limit career growth. Support employees during parental leave and develop structured return-to-work programs.

4. Accountability, Governance & Rewards:

4.3. Measurable Leadership Targets: set clear, intersectional diversity indicators and inclusion targets within the annual performance goals of the board and management teams.

4.4. Diverse Selection Panels: ensure that committees responsible for hiring and awarding promotions are structurally diverse, thereby reducing subjectivity and unconscious bias.

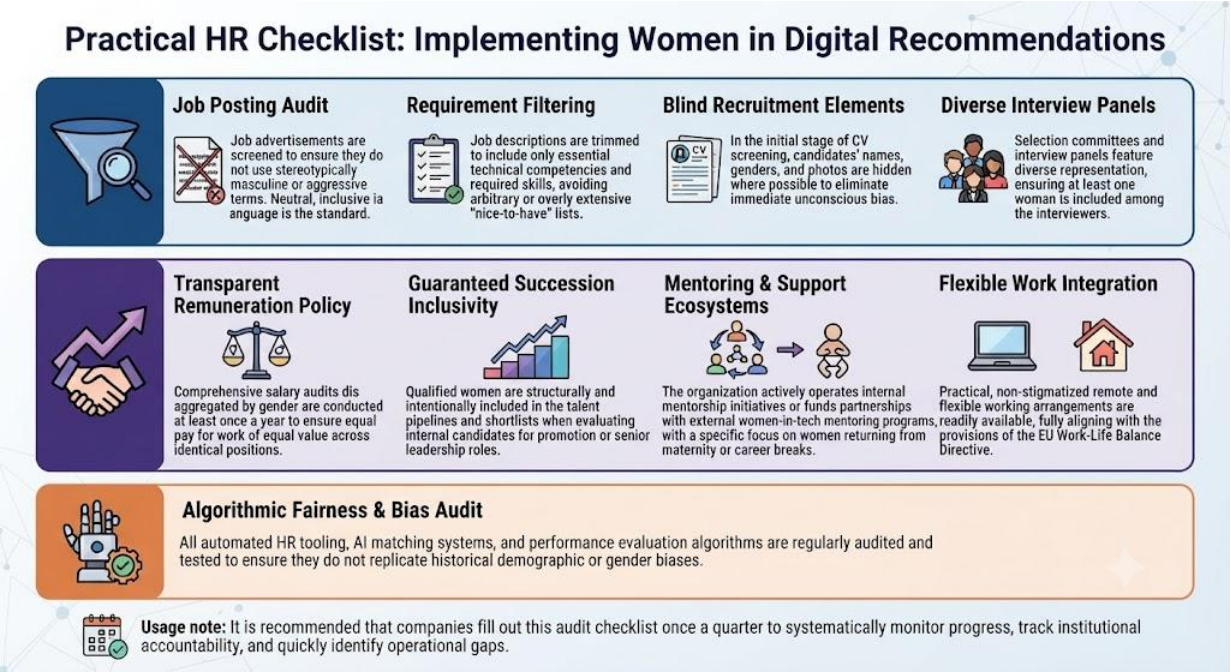
4.5. Linking Results to Compensation: directly link managers' performance evaluations, accountability metrics, and financial incentives (bonuses) to the successful achievement of inclusion and psychological safety goals within their teams.

IV. Practical HR Checklist: Implementing Women in Digital

Recommendations and action plans outline long - term direction and strategic goals what the company should do, but they often remain "on the shelves" as theoretical documents. Therefore, to move from theory to practice, specific actions are accompanied by Practical HR Checklist, based on which companies are obliged to strive for progress and prevent HR processes from returning to old, biased habits.

This Practical HR Checklist is an essential tool for translating strategic visions into the daily operational reality of a company. It is intended for:

- Human Resources (HR) managers and specialists - as a daily work tool to review selection, assessment and remuneration policies.
- C-Suite and boards of directors - as a quarterly accountability report that allows you to see the real dynamics of the company's social responsibility and talent retention.
- Recruiters and department heads - as a practical guide on how to correctly form teams and evaluate candidates without personal bias.



1. Talent Acquisition & Selection

1.1. **Job Posting Audit:** job advertisements are screened to ensure they do not use stereotypically masculine or aggressive terms. Neutral, inclusive language is the standard.

1.2. **Requirement Filtering:** job descriptions are trimmed to include only essential technical competencies and required skills, avoiding arbitrary or overly extensive „nice-to-have" lists that statistically discourage qualified female applicants.

1.3. **Blind Recruitment Elements:** in the initial stage of CV screening, candidates' names, genders, and photos are hidden where possible to eliminate immediate unconscious bias.

1.4. **Diverse Interview Panels:** selection committees and interview panels feature diverse representation, ensuring at least one woman is included among the interviewers (especially when hiring for highly technical roles).

2. Career Growth & Organizational Culture

2.1. Transparent Remuneration Policy: comprehensive salary audits disaggregated by gender are conducted at least once a year (Gender Pay Gap assessment) to ensure equal pay for work of equal value across identical positions.

2.2. Guaranteed Succession Inclusivity: qualified women are structurally and intentionally included in the talent pipelines and shortlists when evaluating internal candidates for promotion or senior leadership roles.

2.3. Mentoring & Support Ecosystems: the organization actively operates internal mentorship initiatives or funds partnerships with external women-in-tech mentoring programs (with a specific focus on women returning from maternity or career breaks).

2.4. Flexible Work Integration: practical, non-stigmatized remote and flexible working arrangements are readily available, fully aligning with the provisions of the EU Work-Life Balance Directive to support equitable caregiving and personal responsibilities.

3. Technology & Innovation

3.1. Algorithmic Fairness & Bias Audit: all automated HR tooling, AI matching systems, and performance evaluation algorithms are regularly audited and tested to ensure they do not replicate historical demographic or gender biases.

The main reasons why it is worth completing this checklist every quarter and redesigning your HR processes:

- **Direct impact on financial results:** studies show that companies at the top of gender and cultural diversity are up to 25-35% more likely to reach the top quartile of market profitability.
- **Diversity directly correlates with innovation:** different experiences in the team prevent groupthink and allow you to create better, more universal technological products adapted to the global market.
- **Algorithm security and ethics:** in the digital age, when artificial intelligence and automated solutions shape our everyday lives, homogeneity (uniformity) of teams becomes a risk. If technologies and AI models are developed by only one demographic group, systems automatically inherit and replicate societal biases. Following this set of tools ensures that the AI being developed is ethical, safe and objective, which protects companies from reputational and legal crises.
- **Talent Attracting and Retaining (ESG & Sustainability):** today's employees, especially the younger generation, are choosing employers based on their real social responsibility (ESG criteria). A company that ignores maternity integration, does not apply a transparent salary policy or does not ensure accessibility for people with disabilities is simply losing the battle for talent. This measure will not only help you hire people, but also drastically reduce costly employee turnover rates.

Conclusions

The Organization Briefing Toolkit from early STEM education guidelines to a quarterly HR checklist is a strategic investment in the future of the digital economy, sustainability and organisational resilience. When we talk about the intersectional inclusion of women in the digital sector, we are talking about a key factor in the competitiveness of businesses and countries. With the European Union and its regions facing a drastic shortage of ICT talent, ignoring the diverse potential of women regardless of age, ethnicity, socioeconomic background or physical ability is simply economically irresponsible.

Proponents of the Toolkit

The Organization Briefing Toolkit was generated in the Connecting Women in Digital (WIDCON) project, during Thematic Working Group 4 (TWG4) at the expert leadership empowerment meetings dedicated to better intersectional inclusion in digital leadership.

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