

Women and Digitalization – They belong together!

The Current State

Digitalization is the **greatest promise of prosperity and progress** since the beginning of industrialization. Its effects and influences can be felt and seen in all aspects of society. As such, women must have a seat at the decision-making table. This is important for questions regarding social justice and responsible participation, but also to secure Germany's global position as an attractive and competitive location for business and innovation.

Germany has a **shortage of more than 86,000 IT specialists** (Bitkom Fachkräftestudie 2020), and many digital cross-sectional areas, such as bioinformatics, are not included in this figure. It is clear that this shortage will become even greater with the ongoing digital transformation and demographic change. Nevertheless, we still are not able to get girls and women interested in an apprenticeship or a career in digitalization or tech. The systematic and structural hurdles that keep them away from these fields are too great. Germany's share of women in the ICT sector is currently a sad 17%. A number that Germany cannot afford. An inclusive digital transformation of society, the economy, and the state is only possible if gender stereotypes are overcome. Digital solutions must be developed in a joint manner and advance a digital policy which enables digital participation for all members of society. Therefore, Germany needs more women to help shape the digital world; it requires a joint effort to further expand existing initiatives and, if necessary, initiate new projects.

About Us

We are more than 50 leading female representatives from politics, business, culture, science and civil society. We founded the #SheTransformsIT alliance to bring more women into digitalization. Following a kick-off at the German government's Digital Summit in 2020, the initiative is now working across sectors to find solutions and best practices to promote a sustainable shift towards more women in digitalization in education, science, business and society. Politics must provide the necessary framework, but the transformation itself must be driven by us as a society. In order to attract more women to digitalization, it is necessary, not only to create the right conditions, but also to sustainably promote them in educational institutions, in science and in companies.

The Solution

Our goal is to make the issue of women in digitization even more prominent in the next legislative period and next federal government. To this end, we want to enact a digital women's pact with concrete, measurable goals. Getting more women into positions that shape digitalization will only be possible when we unite. This is a task for society as a whole. Targets and voluntary commitments should at best be clearly defined so that progress and success can be evaluated. In addition, our goal is to support ongoing initiatives such as the National Pact for Women in STEM Professions and the Cliché-Free Initiative, in order to leverage synergies.

In preparation for the digital women's pact, #SheTransformsIT has identified the following **10 points**:

10-Point Plan – From the young female coder to the digitally savvy senior citizen.

There are far too many »breaking points« in the life paths of girls and women. Simply said: Women and girls do not come into contact with technology in the same way that boys or men do. As a result, they do not discover their interest for digital technology, lose it later on, or are unaware of the many opportunities and ultimately decide against a digital career path. This must change! Based on the female living environment and important decisions made (e. g., school years, choice of subjects or training, family planning) the initiative #SheTransformsIT advocates the following concrete measures:

1. **Early childhood digital support and teaching that inspires children in the long term**

Mädchen We demand computer science for all: Girls must experience technology and digitalization in a neutral and creative way from an early age. They need to develop their own digital competencies (such as creativity, curiosity, communication and analytical skills, programming, etc.), be encouraged to do so and supported in these skills. Existing projects such as the »House of Little Researchers« foundation can be expanded, and successful concepts can be further transferred into the digital realm. In addition, we call for the introduction of computer science to be introduced across the board. Women and men should be made aware of gender stereotypes in computer science and trained as multipliers for digital topics. In particular, educators and teachers should be encouraged to acquire such additional qualifications.

2. Adapt educational content and material to the needs of digitalization and make them gender-sensitive

Es We call for model projects in schools: Mandatory guidelines for gender-sensitive textbooks are needed. Digital apprenticeships must be made known to girls and perceived as an attractive natural alternative, e. g., by creating and demonstrating role models. In addition, existing school-based and extracurricular mentoring programs with an IT focus and coding initiatives for girls and women should be expanded across the board. If necessary new platforms and initiatives should be created to fill the gap (e. g., based on the MINT clusters from the MINT action plan).

In order for girls to seize opportunities in digitalization, school education must become more digital and varied as soon as possible. The necessary speed and uniform standards can only be achieved with the help of nationwide activities. We see potential for school-based and extracurricular measures for funding at the federal and state levels (e. g. BMBF, KMK). The aim is for all schools to be able to implement good ideas as soon as possible and benefit from successful model projects, e. g. in the area of mono-education – can benefit. To this end, measures must be evaluated, best practices developed and used to create guidelines for schools (e. g., by the BMBF or the nationwide MINT networking office, which brings together all relevant players in STEM education).

3. Making digital training, education and jobs more attractive for women

We call for content to be geared towards women: Computer science degree programs interdisciplinary orientation and better promotion of cross-cutting subjects attract more women for example to: bioinformatics, social informatics or medical informatics. Conversely, digital topics must be included in other courses in order to demonstrate their high relevance. In addition, digital study courses and continuing education should be exclusively developed for women. Furthermore, scholarships should be offered specifically for women in IT or IT-related courses of study and training should be offered (also by means of support and employer sponsored programs).

Networking of female students with companies should be further expanded. In addition, there is a need for more mentoring programs in IT and IT-related subjects as well as entrepreneurship centers for women. The model of trial studies for getting to know universities and companies (e. g. Niedersachsen-Technikum) can serve as a model for other universities. Universities should teach female graduates basic IT skills and offer job application training to encourage them to apply for jobs and reduce thresholds. For example, they should have basic IT skills that will be required for the job.

4. Promote and support women in digital science

We call for more women at universities: On the one hand, female role models must become more visible in disciplines relevant to digitalization. On the other hand, we need to get more women into science from the very beginning. In order to appoint more women to professorships in computer science, we need to support them early on in their studies. More women should be appointed to professorships in teacher education especially at the interface of digitalization and education.

These professorships should be better financed in order to close the gender data gap. The federal and state program for female professors has already contributed to this and should be continued. Female STEM professors serve as role models and teachers also contribute to increasing the attractiveness of STEM courses for young women. The BMBF funding priority »Innovative Women in Focus« can be seen as a model project. Last but not least, research funding programs should increase the proportion of women on the application team by making it a fixed award criterion.

5. Successfully consolidate women into digital jobs

We demand modern workplaces: to ensure that women (and men) feel comfortable returning to their digital / IT Job, it is vital that they feel supported by their employers when starting a family. Therefore, companies must change their culture and create a better working environment for parents. Parents need flexible, high-quality childcare for infants and young children. We also need flexible work schedules for the entire workforce and at every level, in order support the compatibility of family and career. In this context, it is necessary that these flexible working models be supported by tax incentives (e. g., making home office and childcare costs tax deductible).

6. Strengthen female digital founders

We call for awarding bodies with equal representation and more women in VC funds: Female digital founders must become more visible in order to be role models. In particular, the state must provide better financial support for startups with female founders and mixed teams. Public programs should have their own funding guidelines for startups that strive for diversity. At the same time, there needs to be more female investors in venture capital funds. Self-mandated reporting for venture capital funds regarding the number of funded startups by and with women, makes such investments more transparent for everyone.

7. **Develop and promote women as digital experts in all walks of life**

We call for better lateral entry: More information needs to be available regarding further personal development in the digital sector. We demand more financial support for women entering the IT sector. We call for improved training and continuing education offers for computer science teachers with low entry thresholds. Corresponding activities, which are included in the national continuing education strategy or with the national education platform and digitalization for further education should be further supported. Particularly, better lateral entry also means that the Qualification Opportunities Act must be evaluated in respect to women in digital professions and, if necessary, adapted.

8. **Bring women in digitalization into the public eye and combat gender discrimination in the media**

We call for more visible role models: This can only be achieved through the increased portrayal of digital women in the media. Concretely, this means on national and international panels, as well as in advertising. At the same time, women must be protected against online hostilities and media algorithms must be checked and reviewed for gender discrimination. Especially in tech advertising, gender stereotyping must disappear.

9. **More diversity in the procurement processes**

We call for more women in the procurement practice: in the public procurement of digital products and AI systems selection criteria should be product-related and gender-neutral. Public body committees who decide on the awarding of contracts should be diverse in nature. In addition, guidelines should be developed to provide orientation for the administration. Similar to companies, public administration must also ensure gender-equitable external presentation.

10. **Digital policy by women – thereby integration of (digital) policy measures in all departments and topics**

We call for women and digital policy to be considered together: The regulatory framework for Germany's digital transformation and key digital projects must be shaped by women, and thus female politicians and employees in the public administration. Progressive projects to promote women in digitalization must be holistically anchored in economic, labor market, financial and education policy. This requires a firm interlinking of (digital) policy measures in all ministries and subject areas. Digital expertise is needed everywhere: Small companies on the countryside, hidden champions in the SME sector, large DAX corporations, in

the mayor's office, and in the Federal Ministry. The promotion of women in digitalization must be anchored in all ministries (federal as well as state) and become part of everyday practice. Instead of creating niche departments, we call for female empowerment and sensitivity for equal opportunities be anchored and considered in all areas. This must be continued in education ministries at the state level, as this is where key decisions are made.