

# The future of women at work: Transitions in the age of automation

In the automation age, women face new challenges overlaid on long-established ones. Technology adoption could displace millions from their jobs; many others will need to change the way they work. Globally, 40 million to 160 million women may need to transition between occupations by 2030, often into higher-skilled roles. If they make these transitions, women could find more productive, better paid work; if they don't, they could face a growing wage gap or leaving the labor market. Men and women need to be skilled, mobile, and tech-savvy in the automation age, but women face pervasive barriers. Concerted and creative new solutions are needed to enable women to move forward.

- Men and women tend to cluster in different occupations in both mature and emerging economies, and this shapes how each is likely to be affected by automation. For instance, in many countries, women account for more than 70 percent of workers in healthcare and social assistance, but less than 25 percent of machine operators and craft workers.
- In a scenario where automation unfolds on the scale of past technological disruptions, women and men could face job displacement and potential job gains of a broadly similar magnitude. In the ten countries studied, an average of 20 percent of working women (107 million) could lose their jobs to automation versus 21 percent of men (163 million) by 2030. Rising demand for labor could imply 20 percent more jobs for women, compared with 19 percent for men, assuming their shares of sectors and occupations hold. Entirely new occupations will also be created, but approximately 60 percent of new US occupations have been in male-dominated fields.
- However, the composition of potential job losses and gains for men and women could be different. Service-oriented and clerical support occupations could account for 52 percent of women's job losses, but machine operation and craft work occupations could account for 40 percent of men's losses. Women are well represented in fast-growing healthcare, which could account for 25 percent of potential jobs gained for women, while manufacturing could account for 25 percent of jobs gained for men.
- Worldwide, 40 million to 160 million women—7 to 24 percent of those currently employed—may need to transition across occupations (the wide range reflects different paces of automation). For men, the range is comparable at 8 to 28 percent. If women take advantage of transition opportunities, they could maintain their current share of employment; if they cannot, gender inequality in work could worsen.
- To make these transitions, women will need new skills. In mature economies, only jobs requiring a college or advanced degree may experience net growth in demand. In emerging economies, the many women working in subsistence agriculture with little education may have difficulty securing work in other sectors. Even women remaining in their current jobs will need to refresh their skills; they could be more prone than men to partial automation of their jobs, and will need to learn to work alongside automated systems.
- More women work in lower-paid occupations than men. In mature economies, demand for high-wage labor is expected to grow, while demand for medium- and low-wage labor could shrink. Many emerging economies could experience stronger growth in demand for higher-wage jobs. Enabling women to move up the skills ladder could prepare them for higher-paying jobs and more economic opportunity. However, a potential glut of workers in lower-wage jobs—including men displaced from manufacturing—could put pressure on wages. Some women could leave the labor market entirely.
- Long-established barriers will make it harder for women to make transitions. They have less time to reskill or search for employment because they spend much more time than men on unpaid care work; are less mobile due to physical safety, infrastructure, and legal challenges; and have lower access to digital technology and participation in STEM fields than men. Policy makers and businesses need to step up interventions, some targeted at women, to overcome these barriers. High priorities include more investment in training and transitional support; more provision of childcare and safe and affordable transportation; addressing stereotypes about occupations; boosting women's access to mobile internet and digital skills in emerging economies; and supporting women in STEM professions and entrepreneurship.

# The future of women at work

Navigating transitions could put women on a path to more productive, better-paid work; failing to do so could worsen existing challenges

The overall scale of job losses and gains could be similar for men and women<sup>1</sup>



## Patterns of jobs lost and gained could differ for men and women

Biggest **job losses** (% of 2017 employment for each gender)

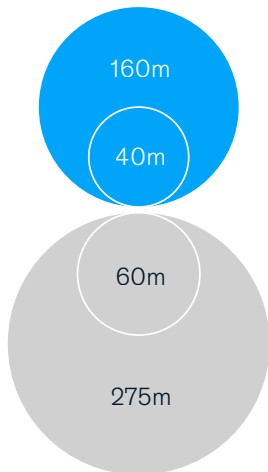


Biggest **job gains** (% of 2017 employment for each gender)



## To capture job opportunities, millions of women could need to make major work transitions by 2030

40 million–160 million women (7–24%) and 60 million–275 million men (8–28%) could need to switch occupations by 2030. If women can navigate these transitions, they could maintain their current share of employment; otherwise gender inequality in work could worsen.



Many women may need higher education attainment or reskilling to stay employed.

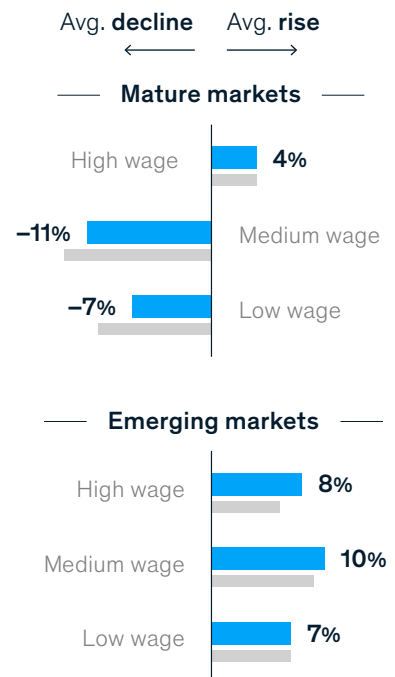
### Mature markets

- College/advanced degree: **More**
- Associate: **Less**
- Secondary education: **Significantly less**
- Lower than secondary education: **Less**

### Emerging markets

- College/advanced degree: **More**
- Associate: **More**
- Secondary education: **Significantly more**
- Lower than secondary education: **Flat/similar**

Navigating the transitions holds the promise of higher wages for women.



Concerted measures and creative new solutions by governments, companies, and individuals are needed in three areas to enable the necessary transitions and overcome long-established barriers

- Invest in training programs and platforms to enable women to develop necessary skills.
- Enable women to balance unpaid and paid work, and develop infrastructure and networks, to boost their labor mobility.
- Raise women's access to technology, their skills to use it, and their share of tech jobs and leadership roles.

<sup>1</sup> Based on analyzing ten countries that account for about 60% of global GDP: Canada, China, France, Germany, Japan, Mexico, India, South Africa, the United Kingdom, and the United States.

Source: McKinsey Global Institute analysis

NOTE: All numbers described are based upon a trend-line scenario of job creation and a midpoint scenario of automation. The range of transitions estimate is based upon both an early and a midpoint scenario of automation. See technical appendix for more details.