



Why Workplace Automation Can Dampen Social Equity — and How Decision Makers Can Promote Fair Outcomes

Erin L. Borry, University of Alabama at Birmingham

The advance of technology is evident in many aspects of daily life in the United States. Cell phones are essentially mini-computers, and citizens' interactions with government these days often take place on the Internet — for example, when people file taxes and renew their auto registrations. Technological advances are also apparent in the workplace, where computers do the work humans once did, providing increased efficiency and reducing costs.

However, workplace automation could have drastic, negative impacts on equity — an important issue for American democracy. Ideally, government is efficient, effective, and economical. Government spends public dollars raised through taxes and should make decisions that further the public interest. In the late 1960s, social equity moved to the fore of research on governmental services. Beyond making wise policy and financial choices, governments should also make efforts to advance fair and just outcomes. Those concerned with equity ask whether government choices serve the interests of those who most need public support. Unlike the principle of equality, which requires that everyone be treated the same, the principle of social equity requires that people be treated according to their needs. Some groups may need more government assistance than others to reduce overall social disadvantage.

Equal Employment Opportunity in the Age of Automation

Most employers in the United States must abide by Equal Employment Opportunity laws, including Title VII of the Civil Rights Act of 1964 and the Equal Employment Opportunity Act of 1972, among others. Employers are not permitted to discriminate against applicants or employees based on their sex, color, race, religion, age, national origin, or disability status. Originally, equal employment opportunity laws were a response to the discriminatory practices that persisted in the United States well into the 20th century. They aim to advance social equity by preventing differential treatment based on personal identifying characteristics. Despite such efforts, however, occupation segregation still occurs — when certain positions or jobs are filled with certain kinds of people, such as women or people of color.

Workplace automation raises further equity issues, because it is more likely to occur in some industries than in others. Research indicates that occupations such as transportation, office and administrative support, and production are particularly threatened. My study with Heather Getha-Taylor of the University of Kansas uses data from the Equal Employment Opportunity Commission to consider who fills positions of these types within state and local governments. By comparing overall rates of female and nonwhite employment in various industries to such rates within specific job types threatened by automation, we find that female and nonwhite employees are generally overrepresented in occupations threatened by automation.

For instance, in the streets and highways industry at the state and local levels, women are overrepresented in administrative support and paraprofessional positions. Women fill these jobs at rates much higher than their presence in the streets and highways workforce. If many such jobs are going to be lost as the work involved is partially automated, women are much more likely to face job loss or other negative consequences. Although existing Equal Employment Opportunity laws work to prevent discrimination, diversify the workplace, and advance social equity, automation may mitigate or even completely reverse previous accomplishments — unless decision makers take care to consider the potentially inequitable effects of automation.

What Can Organizations Do?

While our study focuses on state and local governments, automation can and has affected work in all settings: private, nonprofit, and governmental. As decisions about automation are made in all these settings, here are some recommendations based on our research findings:

- Human Resources Departments should know what their workforce looks like demographically, strive to make it as representative and diverse as possible and look for ways to reduce occupational segregation.
- Key decision-makers must exercise care when making personnel decisions related to automation. They should ask themselves whether automation will affect specific groups of employees more than others and consider how alternative choices about automation might impact the composition of their workforce.
- Skills can be cultivated, including those that are not automatable. Social and interpersonal skills, for example, should be cultivated and valued in the workforce. Similarly, as automated work spreads, there will be many opportunities to train people to take new technology jobs.

Organizations, especially public service organizations, should always work to advance social equity and diversity in their workplaces. However, managerial decisions seemingly made solely to further new workplace efficiencies could in practice work against diversity and equity. Without careful planning, current trends could produce more efficient automated workforces that turn out to be much whiter and more male than intended.

Thoughtful choices about automation can help to avert negative outcomes and ensure steady progress toward social equity in U.S. companies, government agencies, and nonprofit offices. By taking strides to improve the workplace standing of historically disadvantaged individuals and lessen the magnitude of occupational segregation, organizations can reduce the likelihood that automation impacts specific types of people. For example, organizations invest in efforts to diversify their current workforce. Recruitment should be inclusive and not rely on word-of-mouth advertisement. Employees should be developed so they have opportunities to advance within organizations, and such development opportunities should be especially directed toward women and people of color.

As these examples suggest, very often there are alternative possible ways to deploy automated processes in workplaces, so it makes good sense for innovative managers to weigh additional social considerations as new technologies are put in place. If wise choices are made, American workplaces can advance efficiency and social equity at the same time.

Read more in Erin L. Borry and Heather Getha-Taylor, “Automation in the Public Sector: Efficiency at the Expense of Equity?,” *Public Integrity* 21, no.1 (2019): 6-21.