

Statement of Thomas A. Kochan, Massachusetts Institute of Technology
Roundtable on Automation and the Future of Work: Federal Policy Responses

House Committee on Education and the Workforce

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I am honored to offer thoughts on the key public policy issues needing attention as the workforce and economy prepare for and adapt to changing technologies that will influence the future of work.

America needs a new, proactive, and integrated labor and employment policy to ensure that workers have the skills and the opportunities needed to help shape future technologies in ways that work for the overall economy and that enhance their careers and economic security.¹ The time to develop the new policies is now, before technologies become widespread; waiting until new technologies are at the workplace door is too late to ensure the workforce is prepared and empowered to participate in ways needed. The strategy I will outline here has three key components: (1) updating labor law to provide workers an effective voice in the earliest stage of technological design processes, (2) investing in training and workforce development to ensure workers have the mix of skills needed to complement and use advanced technologies throughout their careers, and (3) ensuring those adversely affected by technological changes are treated fairly so as to not create another chasm between the “winners and losers” in the innovations to come—a lesson we should learn from our failures in dealing with globalization that are now all too apparent.

Worker Voice in Integrating Technology and Work Systems

Today the dominant way technologies are developed and deployed is through a *sequential* process in which a vendor or inventor develops a new technology or organizational platform separate from and prior to considering the effects it will have on work processes and jobs.² Or worse, technical specialists assume the goal of the technology should be to eliminate human labor rather than to make work more efficient, safe, and satisfying.

Leaving workers and considerations of work design out of early stage technology design processes has led to disastrous consequences in the past and continues to do so today. General Motors took this sequential approach in the 1980s and spent \$50 billion trying to automate its way to being competitive with Japanese firms such as Toyota but failed because Toyota took a more *integrated* approach by introducing new technologies in tandem with reforming work practices and giving workers a voice in offering ideas about how to integrate new technologies into in their workplaces. They followed the principle that “it is workers who give wisdom to the machines.” While GM and other US auto makers have largely learned this lesson the hard way and now do a better job at integrating technology and work systems, fast forward to today. Tesla has repeated this mistake to its own dismay—its stated goal of

¹ The ideas summarized here are developed further in Thomas Kochan and Lee Dyer, “Robots won’t steal our jobs if we put workers at the center of the AI revolution.” *The Conversation* <https://theconversation.com/robots-wont-steal-our-jobs-if-we-put-workers-at-center-of-ai-revolution-82474>.

² This point is further developed in Antonis Christidis Axel Miller, and Thomas Kochan, “Engaging the Workforce in Digital Transformation.” <https://www.mercer.com/our-thinking/career/engaging-the-workforce-in-digital-transformation.html>.

completely automating its assembly plant failed and now it is struggling to bring more workers into its assembly process to get its cars out the door.

Current labor policies do not support or encourage the more integrated design processes that are needed. The National Labor Relations Act (NLRA) needs to be updated to ensure that workers have access to the information on future technologies and can participate. The current law is ambiguous over whether workers and their unions can require employers to provide information about future technological plans or engage in joint consultation or decision-making over such plans. Shifting majorities of the NLRB have ruled differently on whether or not these are mandatory or non-mandatory subjects of bargaining and, of course, non-union workers have no mechanism for participating in this process. Labor law needs to be updated to provide all workers who so request the right to participate in early stage design processes. Indeed some unions are seeking to do this. UNITE-HERE, for example, recently reached agreements with some of the large casinos in Las Vegas that provide for both advance notice and joint discussion of technological changes in the planning stage to allow the parties to integrate technological innovations with the changes in work processes in a timely and integrated fashion. Unionized auto companies such as Ford, GM, and Fiat-Chrysler have joint committees that are expected to share information on future production plans and are now working together to adapt their job structures and training programs to meet the needs of the future. Amending labor law to encourage this integrated design and implementation strategy would be a good place to start what will inevitably be a long process of updating labor law to support efforts of labor and management to work together in shaping the future of work.

Advanced and Continuous Training

For workers to be prepared to “give wisdom to the new machines,” they will need to be well trained long before these technologies hit the workplace. Life-long-learning has to translated from rhetoric to reality for the workforce of the future. Unfortunately, recent evidence shows that private sector firms are investing less in training today than in the past. Indeed underinvestment in training is a longstanding problem that reflects the inherent market failure that occurs if each individual firm is left to make its own training investment decisions only to have their newly trained workers poached by competitors that do not make equivalent investments. The solution to such market failures is for government and/or labor unions to work with multiple employers in a regional labor market to share in the costs and benefits of continuous training. This should become the cornerstone principle for a new workforce development policy. The Department of Labor should be provided the funds and the mandate to develop regional training consortia in collaboration with community colleges and universities, employers, and worker representatives. Public funding for workforce development should be conditional on meeting what we know from research and experience is needed to make these collaboratives successful.³

Avoiding another Winners and Losers Scenario

Today America is paying the price of not attending to those workers and communities most adversely affected by globalization—we have seen the economic, social, and political consequences of allowing a deep chasm to separate those who gain the benefits from trade and those who have absorbed its costs.

³ See Thomas Kochan, David Finegold, and Paul Osterman, “Who can fill the middle skills gap?” *Harvard Business Review*, December 2012. <https://hbr.org/2012/12/who-can-fix-the-middle-skills-gap>

We cannot afford to let the same thing happen with respect to future technological change. Some workers will be displaced and the job losses are likely to be disproportionately concentrated on lower income workers, older workers, and possibly on women and people of color. Yet our adjustment policies are inadequate. Simple solutions offered by some high tech entrepreneurs such as a universal basic income are too expensive to be realistic and ignore the central role work plays in fostering human dignity, psychological wellbeing, and motivation.

There is no “one sized shoe” that will fit all displacement/adjustment situations. Instead the Secretary of Labor should have the funding and authorization to provide workforce and community funding grants that are matched by private sector and local dollars to compensate and aid individuals and communities most adversely affected by job losses. Experimental and demonstration projects should allow states or localities to design and test options for things as varied as temporary wage insurance, bridges to Medicare and Social Security, severance payments, and training subsidies linked to skills and jobs in high demand in the community.

In summary, now is the time for policy makers and private institutions to begin what will need to be an on-going process of updating workforce development and labor policies and private sector practices to prepare for and shape the future of technology and the work of the future. I applaud the members of this Committee for initiating the dialogue needed to invent the future of work and I look forward to working with you to turn this vision for the future into reality for all members of the workforce.

