Beyond automation

The future of technology, work, and workers

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Reassessing the robots apocalypse
Three concepts that are changing the automation debate

1. The distinction between tasks and jobs
2. Technical feasibility is not the same as adoption
3. Technology can create jobs, as well as automate them
Some big questions beyond automation

1. How do we ensure our economy grows good jobs, where workers work alongside and with technology?

2. How can we harness technology to reduce economic inequality and race and gender bias?

3. What role should public policy, workers, and communities play in shaping our future?

4. And what is the responsibility of employers in answering these questions – in particular, what is the role of the tech sector?
The gap between productivity and a typical worker’s compensation has increased dramatically since 1973

1948–1973:
- Productivity: 96.7%
- Hourly compensation: 91.3%

1973–2016:
- Productivity: 73.7%
- Hourly compensation: 12.3%

Economic Policy Institute
Job quality and equity
What can technology do?

• Can change the amount of work (job creation and destruction)
• Can change the content of work (upskilling, deskilling)
• Can change the distribution of work (by race, gender, immigration status, age)
• Can affect the quality of work (wages, health and safety)
• Can be used to reorganize work (subcontracting, gig work)
• Can change how work is controlled (electronic monitoring, scheduling)
Some examples

- The shift from long-distance to short-distance trucking
- Job quality at meal-kit warehouses
- Algorithmic management in e-commerce warehouses
Technology and equity

1. Employment in occupations at risk of automation or deskilling/upskilling

2. Bias in algorithms used in hiring, scheduling, monitoring, and performance evaluation

3. Employment in customer-facing occupations where consumers electronically rate workers
The policy challenge
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<tr>
<th>Category</th>
<th>Description</th>
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<tr>
<td>Labor standards</td>
<td>Strengthen labor standards on existing and new jobs, including the right to organize</td>
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<tr>
<td>Data and algorithm rights</td>
<td>Establish worker rights around the use of data, surveillance, and algorithmic control</td>
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<td>Equity</td>
<td>Prioritize equity by race, gender, immigration status, and age</td>
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<td>Education and training</td>
<td>Keep workers in their jobs and invest in their ongoing skill development</td>
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<td>Safety net</td>
<td>Guarantee economic security and stability</td>
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<td>Governance</td>
<td>Integrate workers in decision making about workplace technology</td>
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<td>Gain sharing</td>
<td>Broadly distribute productivity gains from technology</td>
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1. Workers should know about the data being gathered on them, and the purpose and impact of algorithms being used

2. Workers should have the ability to negotiate over, and redress harms from, the use of data and algorithms in their workplaces

3. Government oversight is necessary to ensure that employers are accountable in their use of these new technologies

A first stab at data and algorithm rights for workers
Thank you