



Bargaining Tech:

***Using Workers' Collective Power
to Win a Better High-Tech Future***

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Technology: Saviour or Villain?



...or Neither?

- Time to reject “technological determinism.”
- Technology is not an external force.
- Technology is essentially *human*: the compilation of human knowledge about how to work & produce.
- Its effects on people and the planet depend on how technology evolves, and how it is implemented.
- **WHO** makes those choices? And in **WHOSE** interests is technology used?

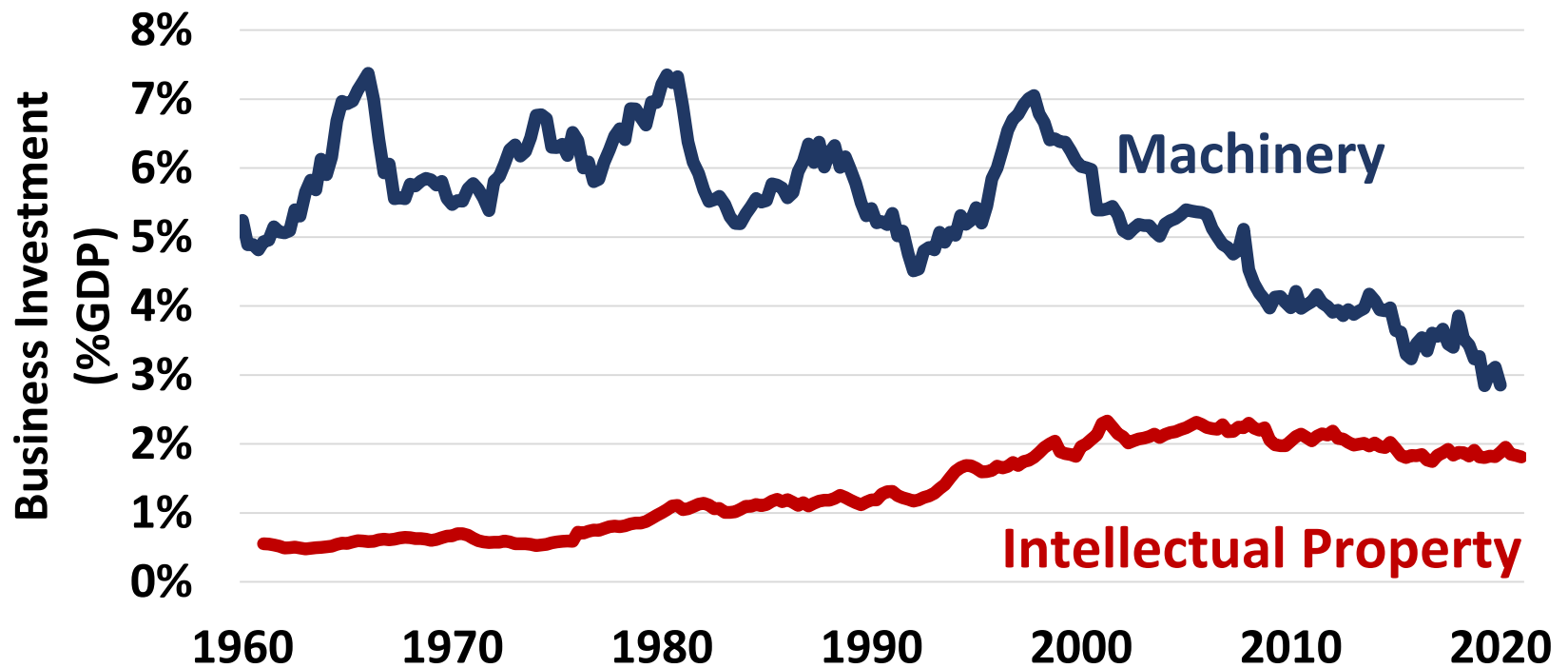


“Workers Will Be Replaced
With Machines”

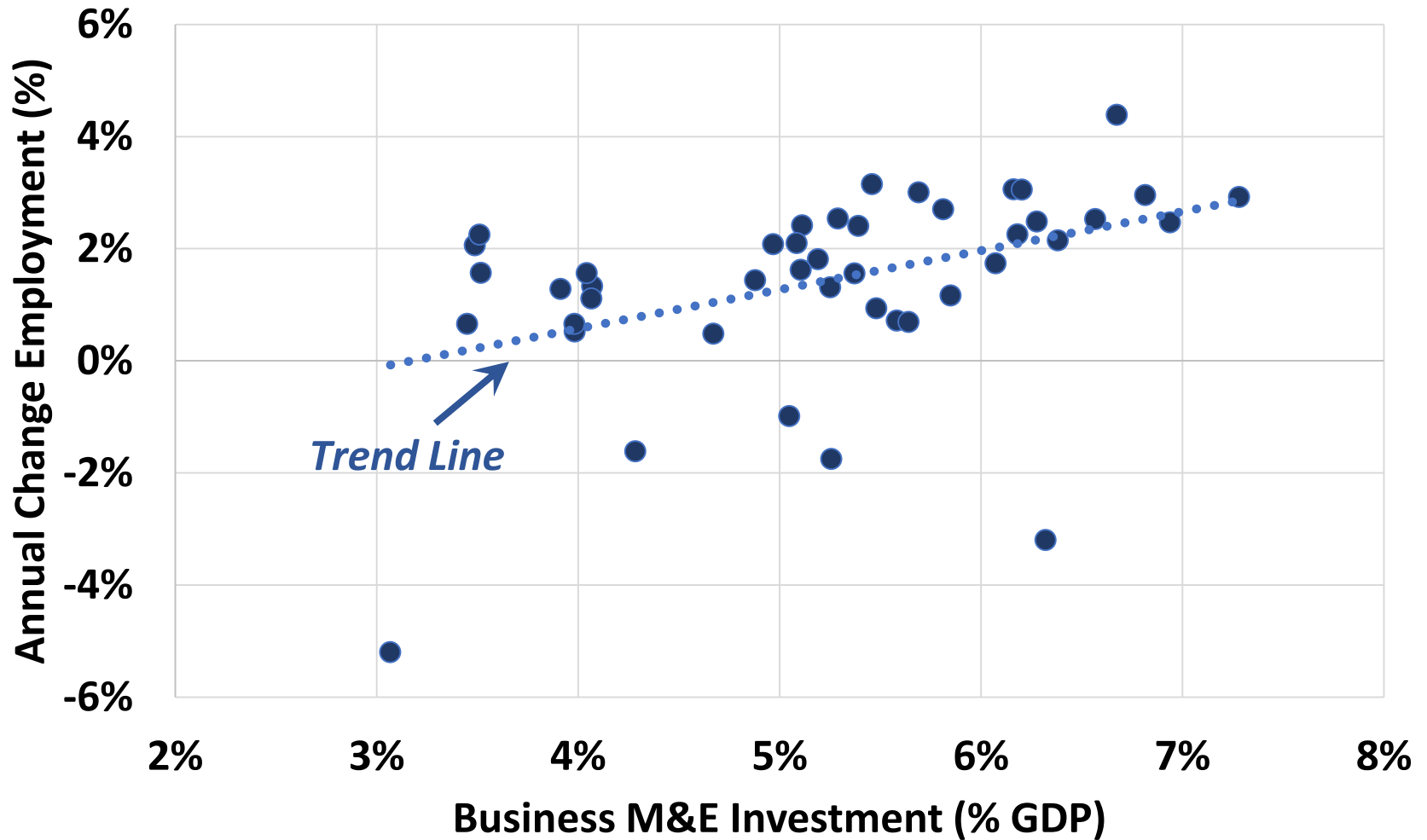
Statistical Evidence

- Employers can use machines to replace some direct jobs at point of final production: equivalent output with less labour.
- Offsetting factors:
 - Indirect jobs to develop the tools.
 - New jobs & industries enabled by the new technology.
 - Growth in total output.
 - Shorter working hours.
- No visible negative impact on total employment.
- But disruption & dislocation occurs in some industries and occupations.
- Overall pace of tech investment is slowing down, not speeding up.

Business's Flagging Innovation Effort

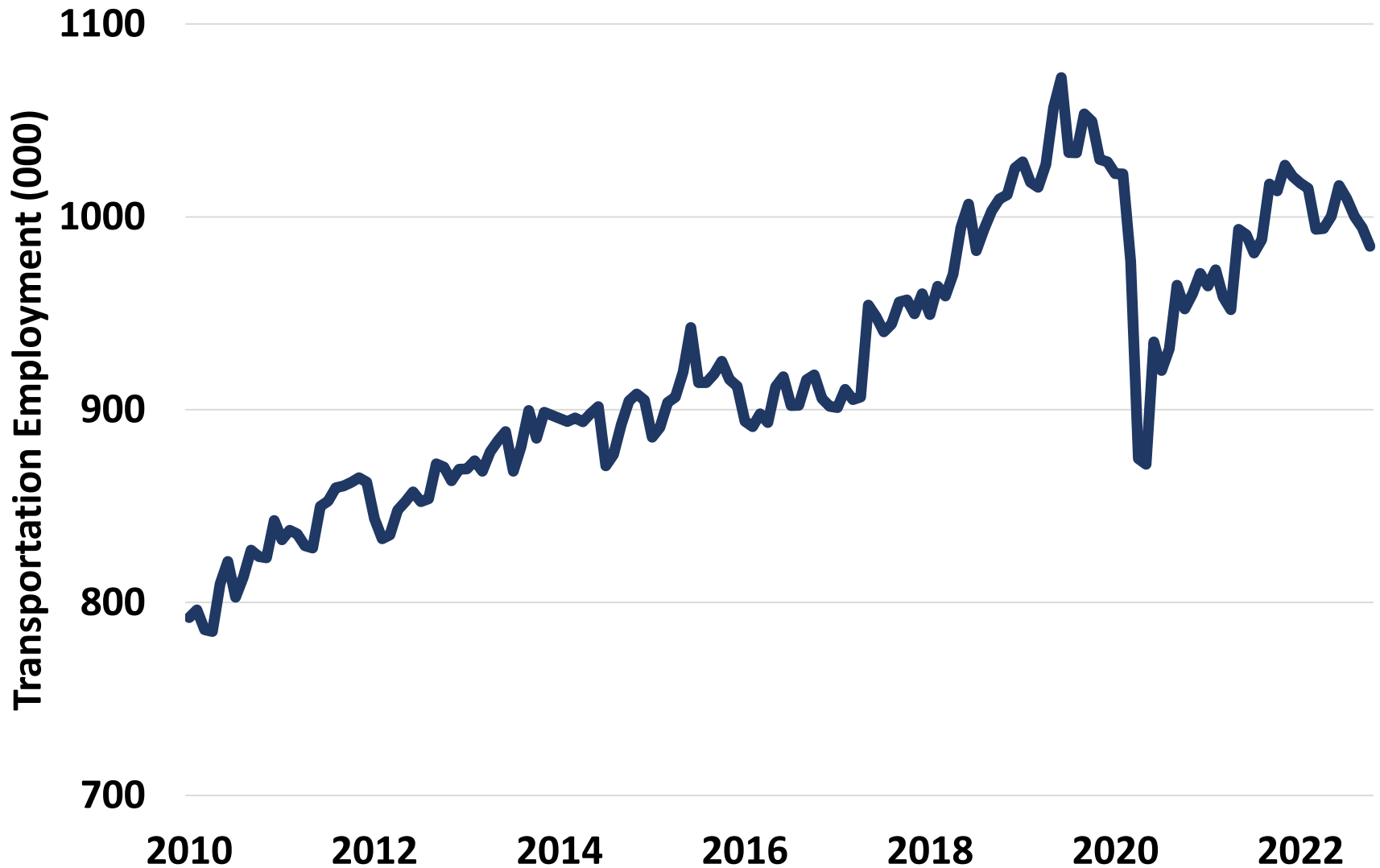


Machinery Investment and Job-Creation





Transportation Jobs in Canada



Jobs of the Future: Twelve Fastest-Growing Occupations, 2018-2028

Occupation	New Jobs (000)	Occupation	New Jobs (000)
Nurses	102.8	ECE educators & assistants	30.2
Nursing aides & orderlies	92.9	Computer programmers & media designers	32.1
ICT analysts & consultants	52.7	Light duty cleaners	29.7
Food attendants & helpers	46.2	Transport truck drivers	29.5
Social & community services	38.7	GPs and physicians	28.2
Elementary & kindergarten teachers	33.1	Cashiers	27.2



Countervailing Factors that Slow Automation

- Regulatory approval.
- Capital cost.
- Management capacity.
- Infrastructure requirements.
- Safety.
- Consumer acceptance.
- Insurance.

Probability of Computerization

Occupation	Prob.	Occupation	Prob.
Commercial pilots	55%	Transportation attendants	75%
Transit & railroad police	57%	Heavy truck drivers	79%
Transportation & distribution managers	59%	Railroad brake / signal / switch operators	83%
Motorboat operators	62%	Railroad conductors	83%
Bus drivers	67%	Industrial truck drivers	93%
Postal mail carriers	68%	Locomotive engineers	96%
Light truck & delivery drivers	69%	Driver sales workers	98%
Aircraft mechanics	71%	Shipping & receiving clerks	98%
Bus & truck mechanics	73%	Cargo & freight agents	99%

Source: Frey and Osborne (2016).

A silver lining:

Probability of computerising real estate agents = 98%!

A Sleeper Issue:

Digital Surveillance & Discipline

- Technology makes it cheaper and easier to monitor, discipline, and even discharge labour.
- Examples:
 - CCTV, GPS, work pace monitoring, discipline and discharge apps.
- These offend the privacy and dignity of workers.
- They shift employers' labour extraction strategies to “sticks” rather than “carrots”.
 - Help to explain wage stagnation.

Bottom Line: It Depends On Who's In Charge

- Technology is neither the villain nor the saviour.
- Fundamental indeterminacy: New technologies can enhance or undermine working life.
- Net impacts depend on:
 - The direction of innovative effort.
 - The implementation of new ideas in actual workplaces.
- Goal: Manage and regulate tech change to get more benefits, less costs.
- Collective bargaining is one key tool for doing that.



Bargaining Tech:

**Strategies for Shaping Technological
Change to Benefit Workers**

BY JIM STANFORD AND KATHY BENNETT

JUNE 2021



Bargaining Tech: Methodology

- Review of efforts by Canadian unions to shape technological change in their workplaces.
- Surveyed 40 unions, IR databases, published reports & studies.
- Identified 350 technology-related provisions in collective agreements.
- Organized these into 12 broad themes.
- Also: Compendium of legislation and major tribunal decisions.

Major Themes in Union Technology Bargaining

Definition and Significance of Technological Change

Notice of Technological Change

Technology Committees and Consultation

Commitment to Negotiate

Adjustment and Job Security

Severance Pay

Other Compensation Issues

Training

Technology-Specific Health and Safety Issues

Surveillance and Monitoring

Working From Home

Other Technology Provisions

Constructive Engagement

- General finding: unions are actively and constructively engaged in shaping technological change.
- No evidence of trying to “stop” or “ban” new technology.
 - Only 1 instance: an *employer* ban!
- Some influence over tech occurs through regular bread-and-butter contract provisions.
 - Severance, job protection, some OHS, wages.
- Some requires custom language.
 - WFH, surveillance, some OHS.

Putting Working Time Back on the Agenda

- Shorter working hours is one way to capture benefits for workers from higher productivity.
- It complements other goals of the labour movement, too:
 - Work-life balance.
 - Sustainability.
- We found **NO** examples of contract language tying shorter working time to new technology.
- Canadians like the idea: unions should put it back on the agenda.

Recommendations

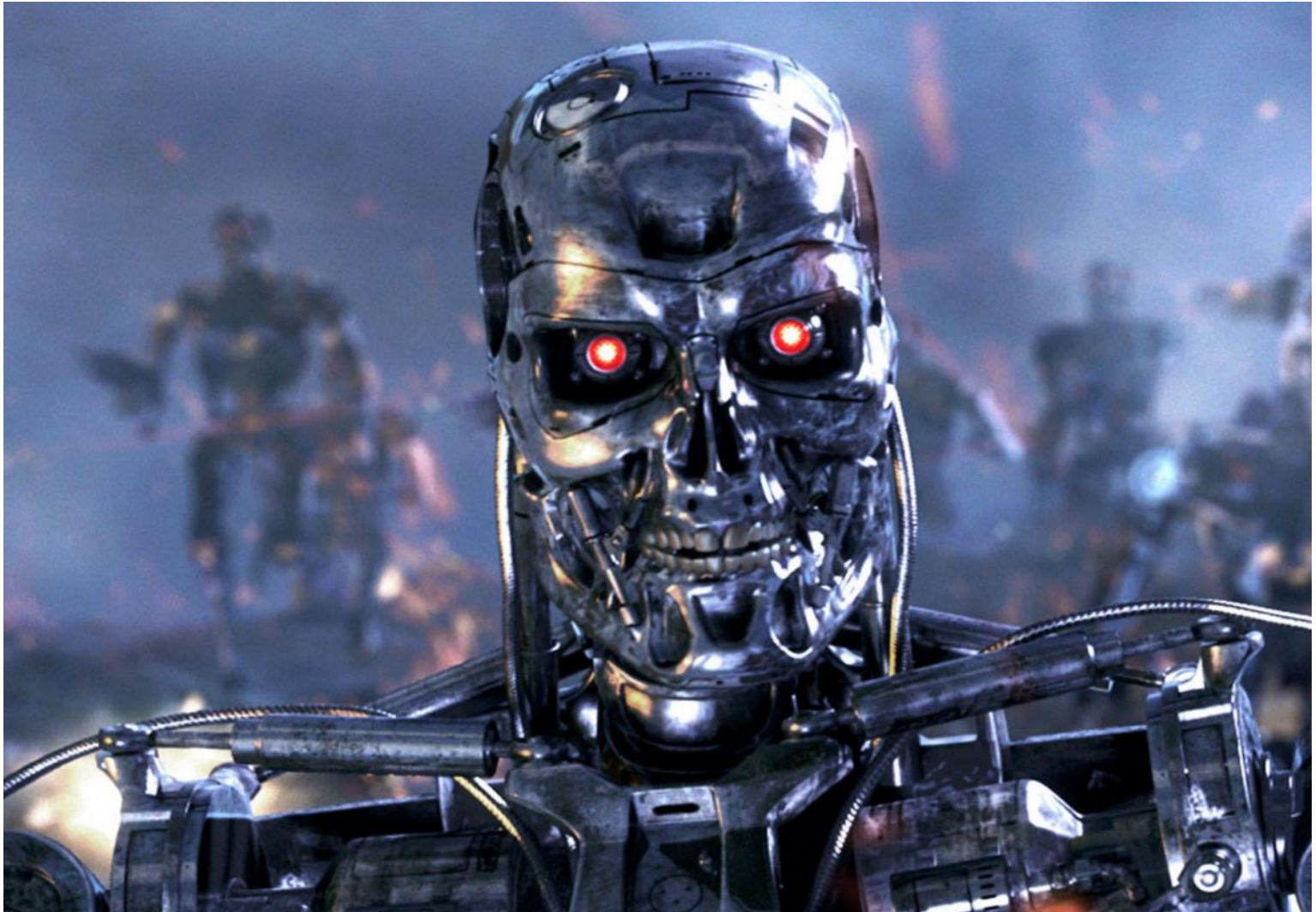
To Government:

1. Support collective bargaining through labour law reforms.
2. Consider statutory measures to promote regular dialogue over tech inside firms.
3. Use buying power to demand best practices from publicly-subsidized businesses.

To Unions:

1. Build early warning capacity to anticipate tech change and bargain its terms.
2. Stronger networks between locals, workplaces, unions.
3. Put shorter work time back on the bargaining agenda.

Putting Technology in Its Place



Putting Technology in Its Place

- Every technical application has a social / political / regulatory context, that impacts its use.
- Machines are not in charge (yet!).
- We make choices about how technology is implemented and managed, and how the costs and benefits are shared.
 - Collective bargaining allows workers to fight for better choices!

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Thank You!

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