

# Automation Technologies and Jobs

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# Outline

- Presentation in two parts
  - Response of labor markets to new technologies
  - Job quality and impact on workers

## Workers in transition

- Changes in technology necessitate the transition of workers from one role (set of tasks) to another.
- They might also necessitate a job change, but “role turnover” is much more common
- The concern about automation technologies is that *the disruption is bigger than in the past, in terms of the new things that workers need to learn to make the transition.*

## The choice

- But unlike previous technologies, we have a lot more choice how to apply AI
- We could use it to complement human labor, and enhance its productivity and worker wellbeing, or substitute it

## The record

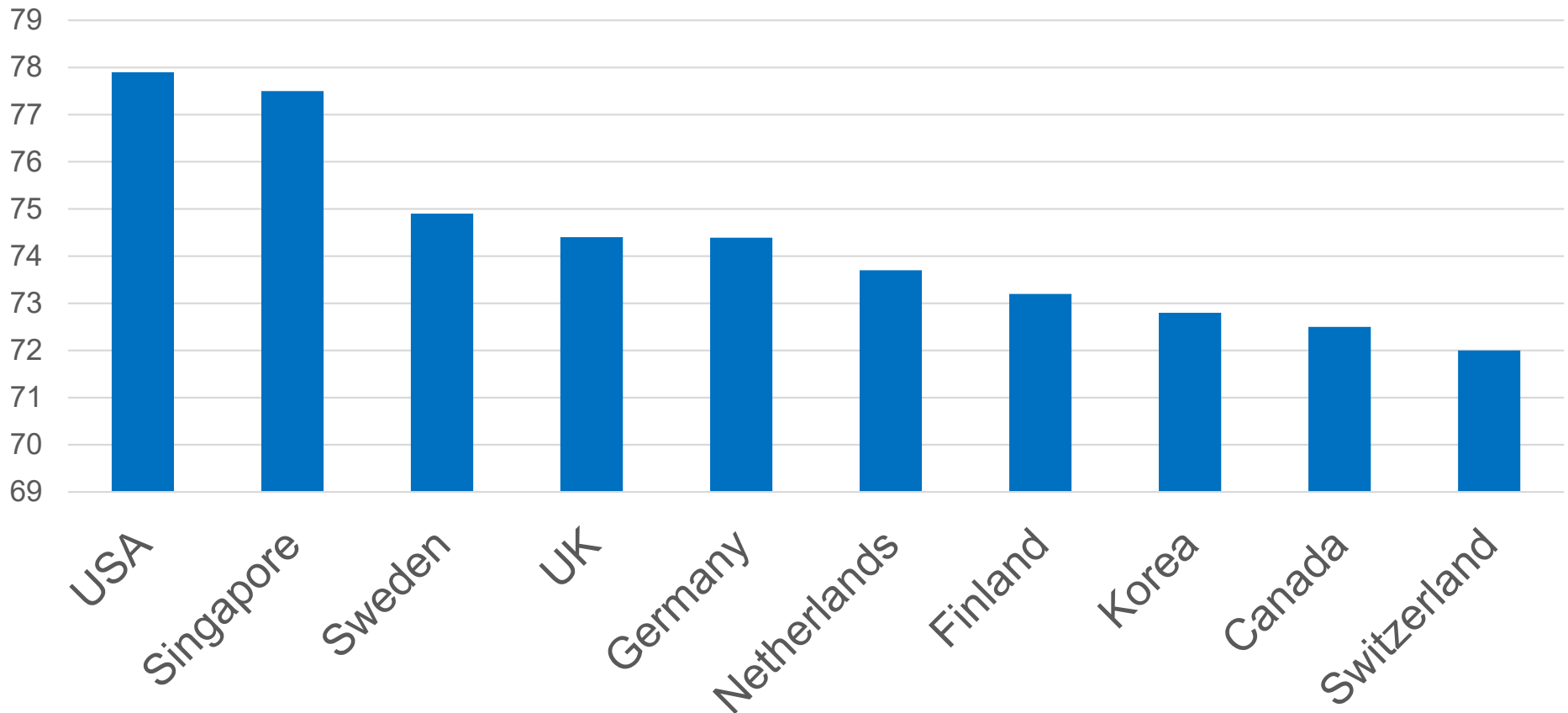
- Results so far are mixed
- Large majority (80% in UK/US) of employers are using it
- Some poor outcomes in the AI era: Inequality is high and not falling, many jobs created for the less skilled are not good, like those in the gig economy, and there is evidence of use of digital technologies for political purposes or in armed conflict

## Resilient labor markets

- Labor markets respond well to AI if they have “resilience”
- Namely, good institutions, advanced digital infrastructure, good demographics, openness to trade and international collaborations, lots of skills and training programs

# Top 10 resilient labor markets

(source: Whiteshield Advisory, Global Labor Resilience Index, 2025)



# Pathways models to resilience

- Two extremes, one focused on workers the other on corporates (entrepreneurship)
- European model, esp. Scandinavian, emphasizes comprehensive social safety nets, universal education access, and stable economic policies, to help workers transition.
- US (and China) model, innovation-driven, prioritizes entrepreneurship, R&D investment, and technological advancement.
- Blended pathway, demonstrated by Singapore, successfully combines features of both



# Choices

- The different pathways illustrate the choices that we have
- In terms of productivity the US type ranks higher, because it emphasizes new technology and entrepreneurship
- In terms of wellbeing, the European model scores higher, because of its welfare programs

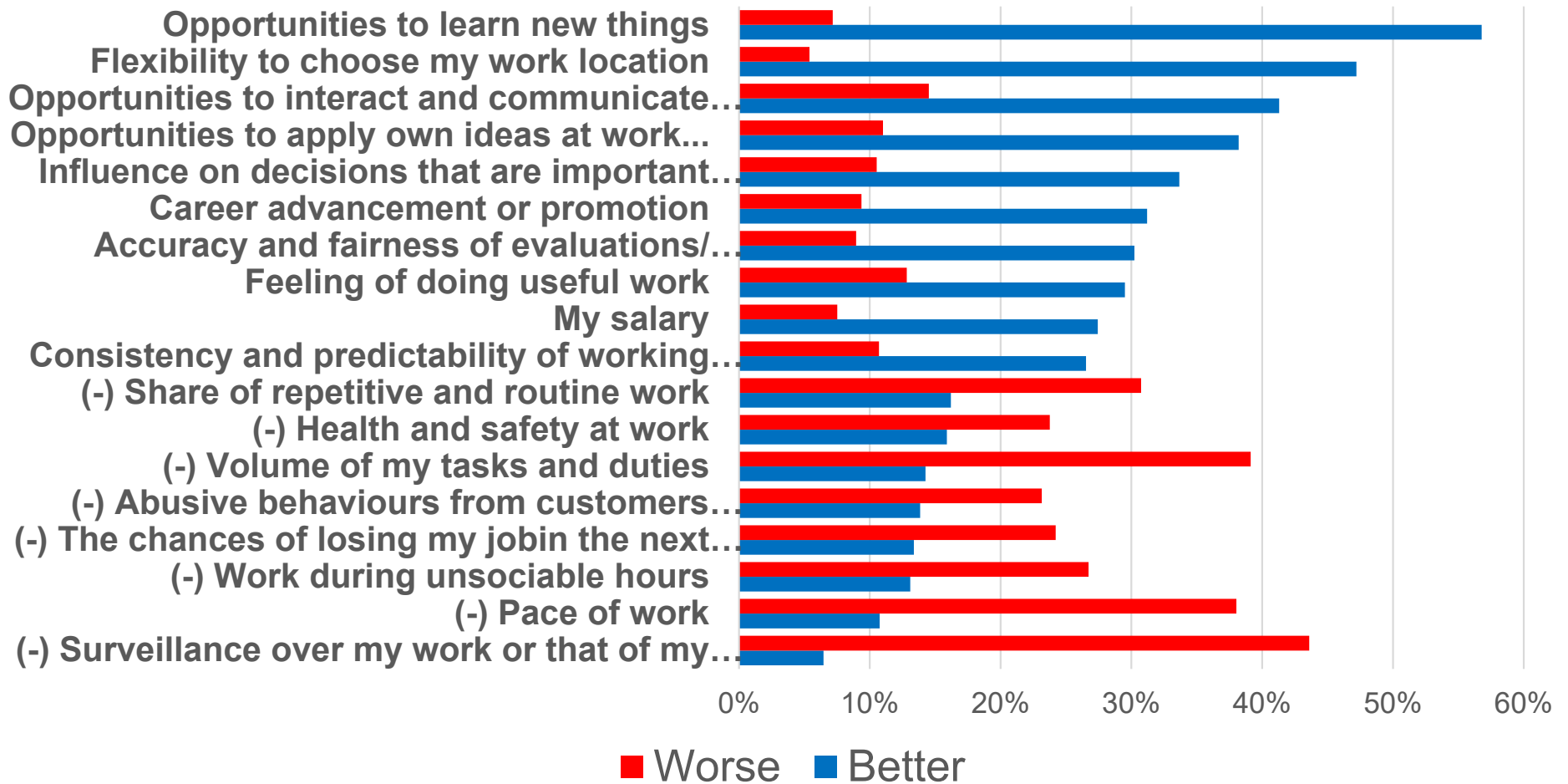
# Good jobs and the business model

- In a long study just completed at the Institute for the Future of Work, we emphasize the need for both wellbeing and productivity
- Pay more attention to the G in ESG! How do you do it?
- Modern business governance requires better communication and more transparency to the workforce, treating workers as stakeholders
- Workers place a lot of importance to good social relations with colleagues and line managers. They want to know what's going on.
- More autonomy with role selection within their company division, to improve the quality of the match between their talents and the company needs – workers know their talents better than anyone

# Training

- Provision of training that the worker owns, e.g., via the company's intranet – 75 hours a year or more has proved beneficial for the company in the US (McKinsey Global Institute)
- Government sponsored programs have proved successful in Europe
- Fewer and more flexible hours arrangements. 4-day week is increasing in popularity
- These are features of “good jobs,” which improve both worker wellbeing and productivity

***In the last three years, has technology changed everyday work experience in any of the following***



# Will there still be jobs to do?

## Jobs versus skills

- Technology has never been a reason for ending work
- It has been a reason for restructuring work, usually for the better
- Once the right institutional structures are in place, jobs will be created, if we want them
- We should not be asking, where are the jobs going to come from? Ask instead, **what skills will I need to work effectively?**

## Skills for the future

- Employers' survey by management consultants (Manpower Group and McKinsey, independently) and work that we did in the UK using job vacancy data (Adzuna), suggest the following as the technical skills that will grow in demand
  - IT skills and data processing
  - Operations and logistics
  - Engineers

## Ever-present skills

- But many more jobs than the hi-tech ones are always asking for “soft skills”
  - Communicating with supervisors, peers, or subordinates
  - Reliability and self-discipline, creativity, critical thinking
  - Leadership and managing others
  - Advanced communication and negotiation skills
  - Building up a good customer base

## Tech and communication skills

- Data analytics and engineering are essential – this is how AI works
- But once you have the data and do the research, you need to communicate the results, and you need to build and maintain your customer base
- A lot of AI applications are aimed at improving market efficiency – how to reach the customer faster and in a more targeted way – not just how to cut production costs



**Thank you for your attention!**