



# Our Digital Future

# Seminar 1

The Future Of Public Services and Work in a Digitalised World

NA/EU/CA

Jan 11, 2022



# Our Journey Over the 3 Seminars

**1**

Digitalisation of Public  
Services & Work

Big picture

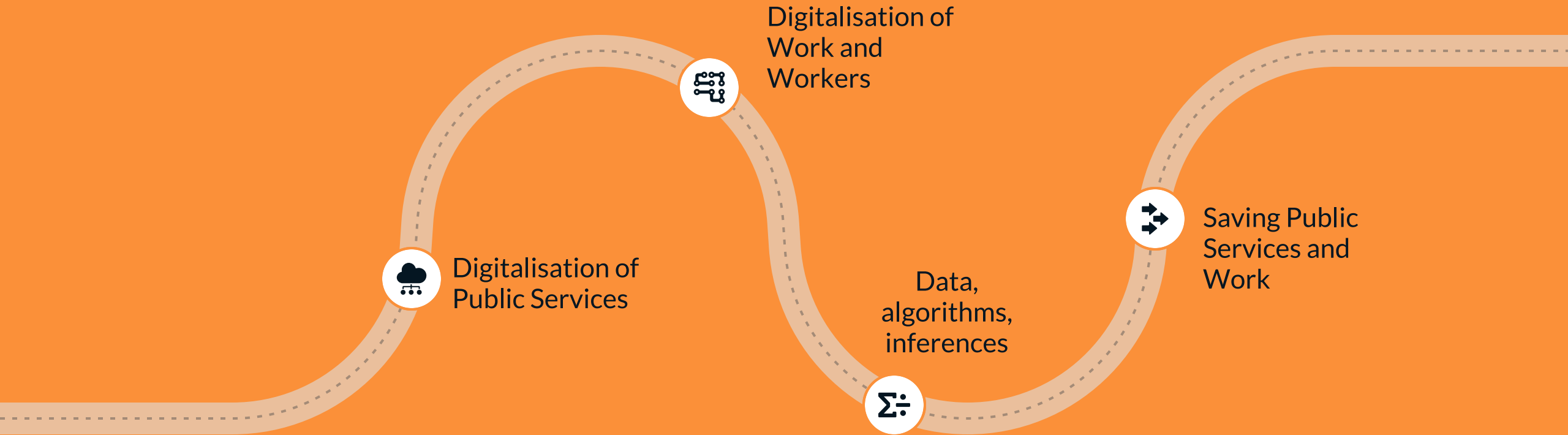
**2**

2 Guides for  
Empowering Workers  
in digitalised workplaces

**3**

Digital Impact  
Framework, Collective  
Bargaining Database &  
UnionTech

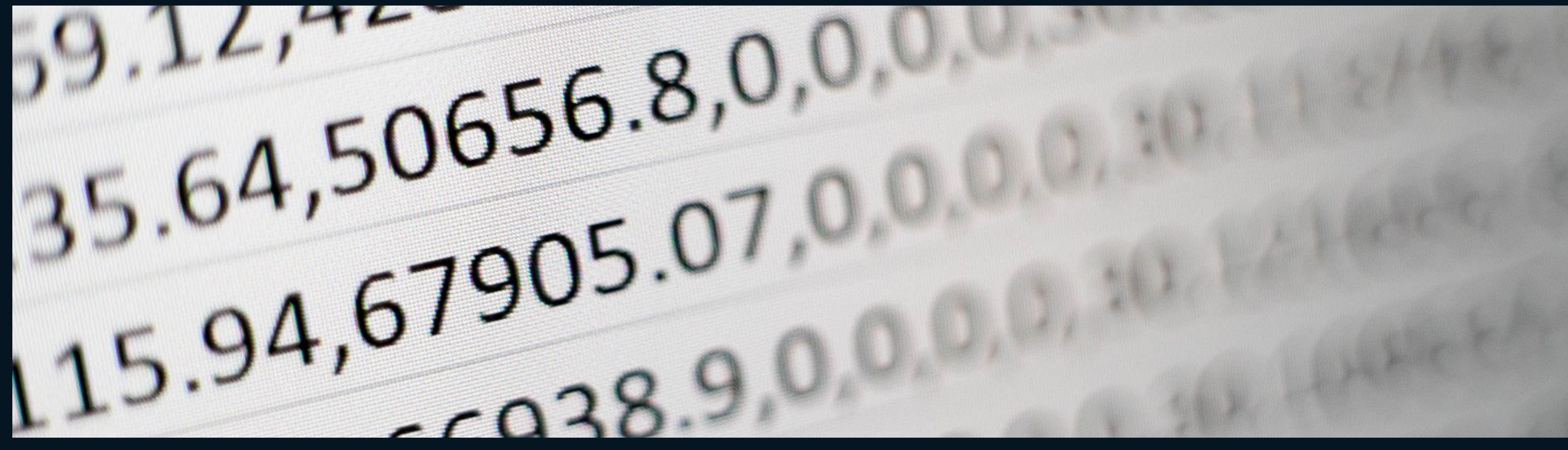
# Our Journey Today



## Section 1

# Digitalisation of Public Services and Work

Procurement, democracy & power



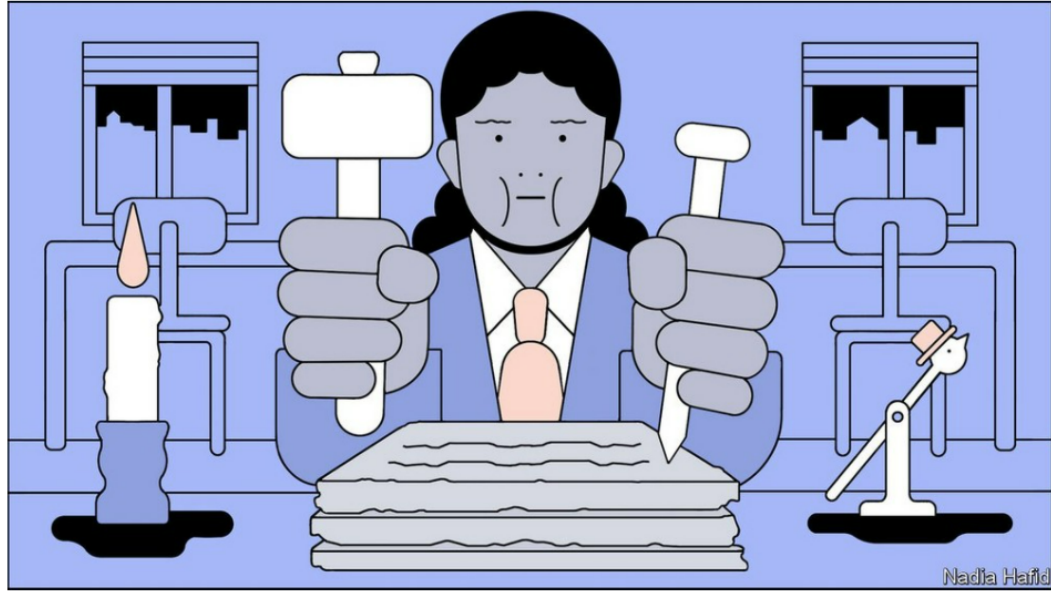


International  
Sep 5th 2020 edition >

Paper travails

# Covid-19 is spurring the digitisation of government

It has accelerated the adoption of online services for everything from welfare to weddings



MAY 11, 2021

# Digitalisation: A Union Action Guide For Public Services, Work and Workers

This report written by Christina J. Colclough sets out the issues that public service unions face as public services and employment becomes digitalised, the actions unions can take and the resources available.

DOWNLOAD

Read this in: EN ES FR

This is the first publication of PSI's 3-year project Our Digital Future - a partnership with FES and EPSU to ensure public service unions and workers understand the challenges digitalisation poses to workers, unions and public services and are empowered to influence them.

This report provides a snapshot of the key digital developments and discussions within international organisations, political bodies and amongst leading experts that are relevant to the core political and thematic work of unions, particularly those with members in public services. While it was written primarily for the affiliated unions of Public Services International, its core learnings and strategies have relevance for the wider labour movement.

Grouped under eleven different headings, the report offers a critical overview of

TAGS (3)

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Grouped under eleven different headings, the report offers a critical overview of topical priorities and selected literature. Throughout the report the focus is on 3 key areas:

- the direct effects of digital technologies on public service workers

[PDF](#)

# Available in EN, SP & FR

# What public services?

- 1 **Policing** - predictive policing
- 2 **Social benefits systems** - benefit fraud, abuse prediction
- 3 **Health** - data, COVID responses/tracking systems
- 4 **Utilities** - management & use
- 5 **“Smart” cities** - data-driven spaces
- 6 **Education** - the rise of EdTech - individualised learning, scoring
- 7 **Criminology, law and forensics, and forensic psychology** - bail, sentencing, parole, risk assessments
- 8 Digital identities
- 9 **E-government** - broadly speaking





# Typically through public procurement

- 1 Most (> 90%) digital systems deployed in PS are third party systems (i.e. not developed by the public services)
- 2 Pre-COVID, public procurement accounted for 12% of the GDP in OECD countries and almost 30% in developing countries (OECD 2019).  
Estimated at nearly 9.5 trillion US dollars per annum
- 3 Among 22 OECD-EU countries public procurement increased from 13.7% of GDP in 2019 to 14.9% of GDP in 2020

# Implies....

...the design of digital technologies by private sector actors, and the deployment of said by public services (often in close cooperation with private sector companies). All these technologies produce, extract and generate data. All of these systems deploy algorithms. *No procurement guideline* includes mention of negotiating over data and algorithms

## Which means...

- Private sector control over data
- Private sector analysis of data gets fed back to public services.  
Yet analysis results depend on the eye of the beholder
- Additional use of data by private sector, incl the profiling and selling of said data
- Hollowing out of public service means to regulate
- Increasing dependency on private sector information
- Vicious cycle formed - lack of PS competencies -> dependency on private sector
- Threat to democracy

# **Digitalisation of Work**



USERS: LAST 7 DAYS USING MEDIAN ▾

LOAD TIME VS BOUNCE RATE

⚙️ OPTIONS

75K  
60K  
45K  
30K  
15K  
0

Median Page Load (LUX): 2.056s

Bounce Rate  
7s  
**57.1%**

100 %  
80 %  
60 %  
40 %

START RENDER VS BOUNCE RATE

⚙️ OPTIONS

40K  
32K  
24K  
16K

Median Start Render (LUX): 1.031s

100 %  
80 %  
60 %  
40 %

**Under the promise of increasing productivity and efficiency, the following digital systems are becoming commonplace...**

PAGE

Page

0.7s

1s

0.8s

0.6s

300K 60%

2.4 pvs

60K 24 min



- Automated hiring/firing systems

(candidate vetting, screening, selection)

- Scheduling tools
- Keyboard tapping monitoring
- PC use surveillance

- Word & voice monitoring

evaluating tone of voice, words said, frequency of said words, “success” rate

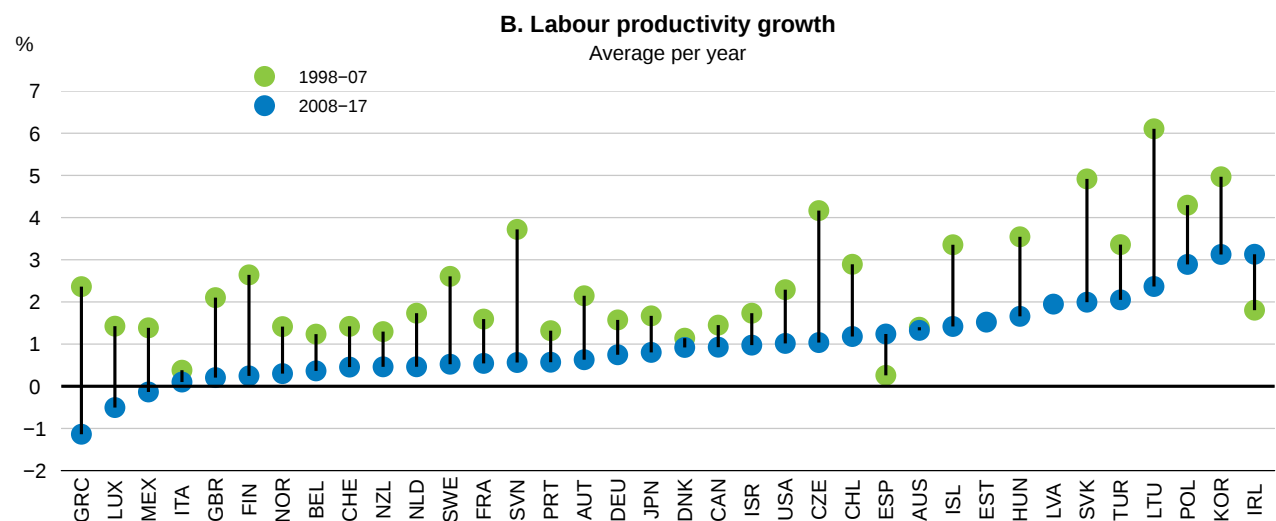
- Workplace sensors
- Productivity/efficiency  
real-time tracking and showing
- Facial recognition
- Location tracking

## Resulting in the following harms

- Work intensification - working time - pace of work
- Discrimination/bias in who gets an opportunity, who is denied
- Mental health, physical health pressures
- Deskilling and job loss - contingent work forms on the rise
- Lower wages, economic insecurity, less mobility
- Suppression of organising
- Loss of autonomy and dignity
- Loss of privacy

**And the commodification of workers**

# Yet a Defacto Decline in Labour Productivity Growth



OECD 2019: Digitalisation and productivity: a story of complementarities

## Labor productivity rate falls at the fastest pace since 1960

[cnbc.com/2021/12/07/labor-productivity-rate-falls-at-the-fastest-pace-since-1960.html](https://www.cnbc.com/2021/12/07/labor-productivity-rate-falls-at-the-fastest-pace-since-1960.html)

December 7, 2021

Published Tue, Dec 7 2021 10:35 AM EST Updated Tue, Dec 7 2021 11:20 AM EST

### Key Points

- Labor productivity declined 5.2% from the previous three-month period, worse than the Dow Jones estimate for a drop of 5%.
- That was the biggest quarterly decline since the second quarter of 1960.

Labor productivity fell at the fastest rate in more than 60 years in the third quarter, according to a Labor Department report Tuesday.

A measure of output versus energy, nonfarm business sector productivity declined 5.2% from the previous three-month period, worse than the Dow Jones estimate for a drop of 5%, and the worst since the second quarter of 1960. The slide happened as output increased 1.8% while hours worked rose 7.4%.

On a year-over-year basis, productivity fell 0.6%, which itself was the biggest decline since the second quarter of 1993.







**Its a question  
of power**

## Section 2

# Concepts we need to know

# Data

**“Data are individual facts, statistics, or items of information, often numeric. In a more technical sense, data are a set of values of qualitative or quantitative variables about one or more persons or objects”**”

# Algorithms

*Algorithms are like a recipe. They know what they are making (the dish). They have data (ingredients) and they are instructed in what to do, and in what order (the recipe)*

**“a set of rules, in computer programming code, for solving a problem or performing a task.”**



# Inferences

**“The act of deducing or concluding (something) from the data,,**

**Profiles**



# The flow is....

- 1 Data is combined into data sets
  - 2 Data sets are fed into algorithms
  - 3 Algorithms are designed to fulfill a particular goal
- 
- 4 Large amounts of data are used to create “inferences” - profiles
  - 5 Algorithmic inferences are also profiles - combining vast amounts of variables.

### Section 3

# Saving Public Services and Decent Work

BETTER DAYS ARE COMING BETTER DAYS ARE COMING  
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BETTER DAYS ARE COMING HANG IN THERE  
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BETTER DAYS ARE COMING BETTER DAYS ARE COMING



# Requires

- Understanding of data & algorithms in a work context
- Innovative union responses, policies and collective bargaining
  - Tapping into the potential of digital tech - but responsibly
- Union transformation



# Seminar 2

The data lifecycle at work & co-governing those digital systems.  
Empowering workers!

Jan 18, 2022