

Digitalisation and innovation in human resource management in the global economy

(A project funded by ILO)

Fang Lee Cooke
Monash University
Melbourne, Australia
Fang.cooke@monash.edu



Overview of the presentation

- **Emerging trends of deployment of digital technology, artificial intelligence (AI) and implications for employment and human resource management (HRM)**
- **Aims of the ‘Digitalisation and decent work in Pacific Island Countries’ study**
- **Methods and main findings**
- **Recommendations for the role of key stakeholders**

Emerging trends of digitalisation related to employment and HRM

1. Automation (the use of industrial robots)
2. The use of digital technology to inform human resource management (HRM) practices
3. Positive impact of digitalisation on employment, working conditions, and public service

1. Skill shortage/high labour cost – automation – job losses

- According to the report “A Future That Works: Automation, Employment, and Productivity” published by McKinsey in 2017, automation will affect 1.1 billion employees globally (McKinsey Global Institute, 2017).
- The World Bank finds that emerging and developing economies will be at a higher risk than developed countries, with 77% of jobs at risk of displacement in China, 72% in Thailand, and 69% in India (World Bank, 2016).

2. The use of digital data to inform HRM practices

- Recruitment (e.g. personality, behavioural pattern)
- Performance speed– no slacking, e.g.:
 - Deploying GPS positioning to check mileage covered by street cleaners;
 - Bracelet wearing to detect the lack of movement in 20 minutes and send reminders to get a move
- Dismissal – poor performers out – Amazon’s warehouse-worker tracking system can automatically fire people without a human supervisor's involvement

3. Positive impacts of digital technology on employment, working conditions and public services

Example:

- Improving women's employment opportunity through flexible work arrangements
- Building Smart Cities: 5G robots to enhance safety for police and effectiveness in protecting the general public
- 5G police robots carry out night patrol in dangerous zones, provide real time audio and visual info to the police centre and call for support nearby promptly...

Objectives of the study

- **To identify main challenges for PICs' business, labour market, and employers due to digitalization;**
- **To assess digital readiness of various national and regional actors across PICs (digital strategy and capability of business and public sector organizations);**
- **To identify opportunities to enhance the quality of existing jobs and the type of new jobs that could be created, and consequent need for re-skilling or new skills in PICs;**

Objectives of the study (cont...)

- **To raise stakeholders' awareness and preparedness for the opportunities and impact of digitalisation on business, decent work, labour market and employment;**
- **To provide policy recommendation to nation state governments and other stakeholders;**
- **To facilitate the development of a digital strategy and digital capacity building in and across PICs.**

Research methods

Stakeholders from 11 ILO member States	No. of participants in interviews, survey and focus groups
Government officials in charge of IT, employment and skill development; and government officials responsible for the tourism industry	25
Senior officials of employers' associations, some of whom are business owners or CEOs	27
Trade union senior officials	13
Representatives of vocational training and education institutes	17
Youth organizations	8
Workers (informal interviews)	12
ILO (Pacific Office)	6
Total	108

Selected main findings of the study

Impact on country, industry and business:

- **There is a wide range of differences in the perceived level of digitalisation in the stakeholder's sector and country, internet availability, reliability, and cost being the key challenges for some countries;**
- **Positive impacts of digital technology are more evident in a number of business sectors than in others, e.g. telecom and media, in terms of changing the nature of their businesses and business processes (e.g. on-line recruitment interviews, procurement, and transaction).**

Main findings of the study (cont...)

Impact on workers:

- **Older male workers were seen to be the most affected group because of their low level of digital literacy, or illiteracy, and unwillingness/slowness to learn new (digital) technology;**
- **Populations in certain rural areas and outer islands, and young people from disadvantaged backgrounds are other groups that are perceived to be disadvantaged, due to the lack of access to the Internet;**
- **Women of all ages in rural areas were considered to be quite entrepreneurial in making use of the digital technology to market their products;**

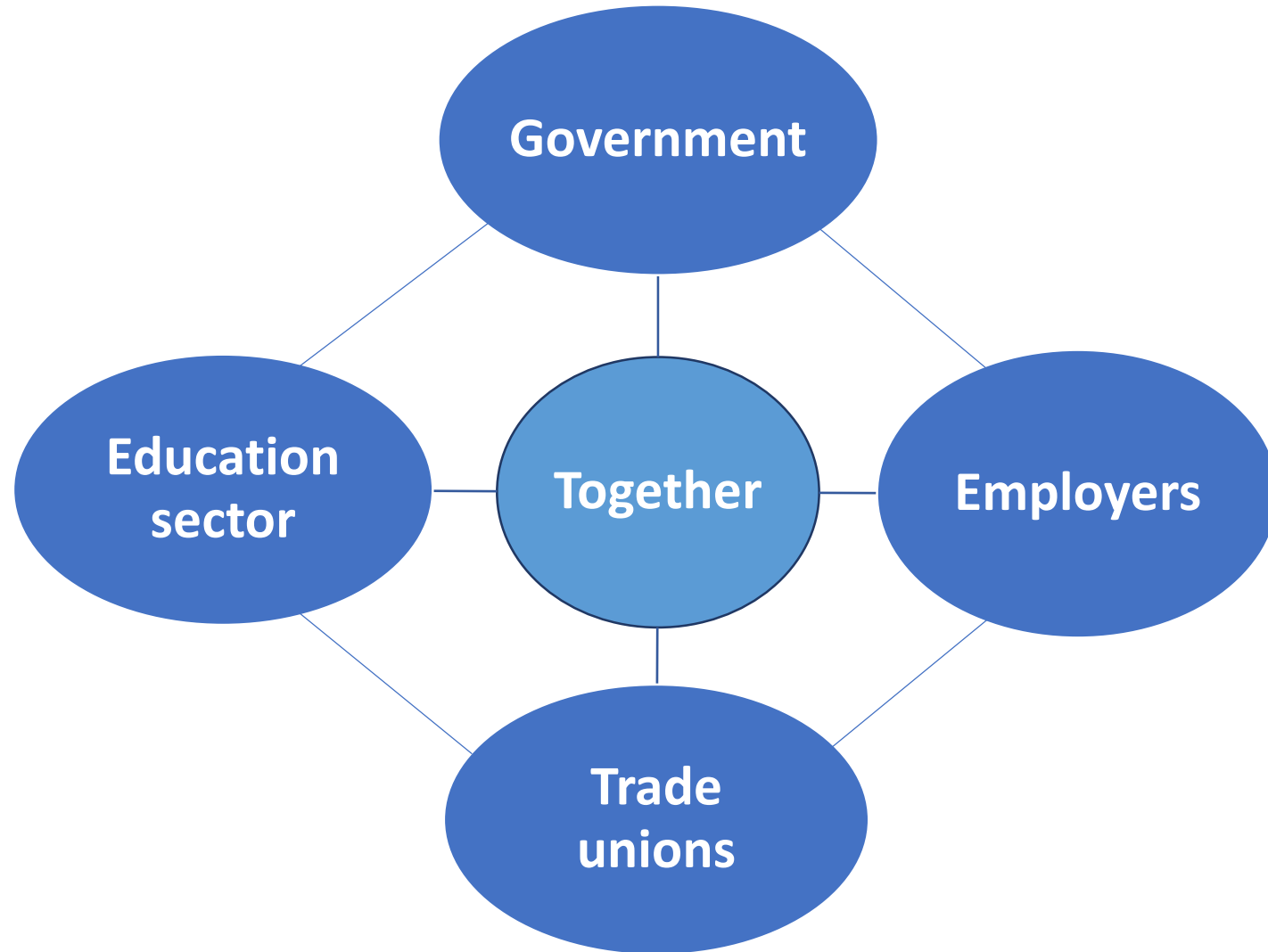
Main findings of the study (cont...)

- **At least half of the government stakeholders reported that their government has not yet developed a digital strategy;**
- **Perceived impacts of digitalisation on union representation are varied across PICs and the industrial sector, ranging from no impact to positive impacts (e.g. adoption of digital technology to communicate with union members);**
- **However, trade union stakeholders admitted that their organisation does not have sufficient digital capacity to position itself to better organise and represent the workers in the digital age;**

Main findings of the study (cont...)

- **Perceived effects of digital technology on employers' associations overall have been quite positive, e.g. better communication and global reach of markets.**
- **Employers' associations more proactive than other stakeholder organisations in raising the digital capacity of their sector.**
- **Compared with other stakeholder organisations, youth organisation stakeholders have few resources, which hampers their ability to do much in this area, other than continuing to call for the government's attention and investment in upskilling the young generation of the labour force.**

Recommendations for key stakeholders



Recommendations for governments

Recommendation 1: Digital policy should be an integral part of the broader social agenda and national development plans.

Recommendation 2: PIC governments should make Internet more accessible, both in availability and affordability, to the public through partnerships with the private sector and mobilisation of philanthropy.

Recommendations for governments (cont...)

Recommendation 3: Governments should prioritise investments in digital infrastructure building, digital education, on-line learning, and developing a life-long learning environment.

Recommendation 4: PIC governments should develop a comprehensive development plan that connect various main initiatives together, such as climate change, green economy, gender programs, youth programs, digitalisation, and decent work, to create synergy, and help them better negotiate with influential international agencies to provide support for national and regional development.

United Nation E-government Development Index, 2018

Country	E-government Development Index	Rank
Cook Islands	—	—
Fiji	0.5348	102
Kiribati	0.3450	153
Marshall Islands	0.3543	149
Palau	0.5024	111
Papua New Guinea	0.2787	171
Samoa	0.4236	128
Solomon Islands	0.2816	169
Tonga	0.5237	109
Tuvalu	0.3779	144
Vanuatu	0.3990	137

Source: United Nations (2018)

Recommendations for the education sector

Recommendation 5: Considerable investments should be made in education to prepare a digitally competent future workforce, including curriculum reform, education workforce development, and digitally-enabled teaching and learning modes, and with specific attention to closing existing gender gaps, gender digital divide.

Recommendation 6: Intelligence-based and gender-responsive career advice schemes should be developed to better align labour market demand and supply.

Recommendations for employers

Recommendation 7: A drive to increase the use of digital technology and artificial intelligence will help businesses increase productivity, including in the farming and fishery sector, and enable PICs to close the productivity gap with more advanced economies.

Recommendation 8: Employers in PICs can be more innovative and consider efficient ways of creating decent jobs through digital technology and socially responsible corporate practices.

Recommendations for trade unions

Recommendation 9: Global digital economy calls for trade unions to adopt a more strategic and inclusive approach to organising, representing and servicing workers in the market place as well as the workplace, and participating in regulatory reform.

Recommendation 10: Trade unions can develop specific communication plans more creatively to engage with the new generation of the workforce, aided by new forms of social media and digital technology.

Resources implications: What skill and other resources do TUs need in the digital world of work? Ideological changes?

Recommendations for key stakeholders collectively

Recommendation 11: There is a pressing need for key stakeholders in PICs to engage in dialogues and discussions regarding the potential of digital transformation in their country and the region more broadly, to improve the chances for businesses, workers and citizens.

Recommendation 12: In particular, efforts should be made by PIC stakeholders to ensure that gender-based and age related inequalities are not further exacerbated.



Thank you!