

**ADDRESS BY MR TAN KOK YAM, CHIEF EXECUTIVE OF SKILLSFUTURE SINGAPORE AND COUNCIL CHAIRMAN OF THE INSTITUTE FOR ADULT LEARNING, SINGAPORE UNIVERSITY OF SOCIAL SCIENCES, AT THE OPENING OF THE DIGITAL FUTURES OF WORK GLOBAL CONFERENCE ON 1 NOVEMBER 2023**

His Excellency, Ambassador Juha Markkanen, Ambassador of Finland to Singapore

Ms Jenny Egermark, Counsellor & Deputy Head of Mission, Embassy of Sweden

Professor Tan Tai Yong, President, Singapore University of Social Sciences

Distinguished guests

Ladies and gentlemen

1. I am delighted to join all of you here this morning.
2. In 2019, a team of 20 social scientists, co-led by Cardiff University and the Singapore University of Social Sciences through the Institute for Adult Learning, began an ambitious study to better understand how, across the globe, Artificial Intelligence or AI has impacted, and will impact, jobs. The team drew on data from more than 500 interviews from more than 10 different countries, to conduct in-depth quantitative analyses.
3. Four years on, this intensive study has catalysed today's event, the Digital Futures of Work Global Conference. I am thankful for all your involvement in this dialogue, because it will be an extremely important and timely dialogue. The scenario before us is unprecedented. And I say so for three reasons.
4. First, it is unprecedented in impact. Modern history is full of examples of how technology, especially automation, improves the lot of not just the user or consumer, but that of the worker. Women's participation in the workforce became a reality only after the introduction of household automation which reduced the time needed in the home or in the kitchen. It was the washing machine that took away the many hours for laundry. Certainly, the husbands did not collectively wake up one day and decided that they too should help in the washing and drying. Spreadsheets and calculators removed the need for armies of data entry clerks, usually women, and allowed them to move to higher value office work. A long time ago in this part of the world, it was simple, affordable home sanitation that replaced the need for nightsoil workers with the need for skilled plumbing.
5. AI however is different from these examples because it does not obviously remove bad undesirable jobs, that are held by an underclass of labourers. As the study itself points out, highly desired jobs like consulting and marketing are being

captured. As an optimist, I remain confident that AI will improve the quality of work over time, as had technologies before it. But I also think we will need to be more deliberate in steering society and economy to that outcome.

6. Second, the scenario is unprecedented in its pace of technological change. AI is strictly not a new technology, but it might as well be every time it is discussed. IBM Deep Blue beat Kasparov in chess in 1997 – this is a game with about 400 possible next moves. Barely twenty years later, Alphago beat Lee – Go is a game with 130,000 possible next moves. The speed of computational advancement has been unrelenting. We should not have been surprised at the advent of Large Language Models or LLM. Individuals, companies and governments will need to adjust to this pace of change, this more dynamic reality.
7. Third, the scenario facing us is unprecedented in scope. I think not a single industry today would daresay that its business is unaffected by AI. In the field of adult education, familiar to many of us, we can try this. Take pictures of a few pages of a book on any subject – pet grooming, digital marketing. Ask the LLM to summarise the content and build a syllabus adopting a pedagogical framework of your choice. Use other software to convert that content into a podcast, a powerpoint deck, and while you are at it, ask for a set of test questions. A LinkedIn connection of mine said he could do this in eight minutes. Would this be the best training material? Depends on the book. Would human educators and curriculum developers be unnecessary in adult education? Not at all. Would it change what they do? Definitely.
8. So, we face a scenario that is unprecedented in its impact, in its pace, and in its scope. But two things are clear. First, as machines learn, humans will need to learn too, including and especially existing workers. How do we acquire that intangible ability to discern and assess quality among the myriad outputs that AI can churn at you? How to deal with the challenges of implementation – data management, change management? And how do we deal with the new problems that need to be addressed, say in regulation or in human-machine interfacing? These are but a subset of the new skills our workforce will have to acquire. In Singapore, under the SkillsFuture movement, we are committed to a collective, national approach to help all our workers learn.
9. Second, we need a global dialogue and exchange of views – global not just in terms of it being cross-national, but also cross-disciplinary and cross-industry. Two days ago, President Tharman at a SkillsFuture event spoke about the three objectives for lifelong learning: to deal with continuous change in technology, to enable a meaningful working life even as that working life lengthens in an ageing workforce; and to build a culture where we advance together as a society. When we speak about AI and its impact on jobs, all three objectives are at play. And we

will need a breadth of perspectives – technologist, educator, employer, employee unionist, researcher, practitioner – to do the subject justice.

10. Therefore, I am truly thankful for today's event. I once again commend the stewardship of Professor Phillip Brown of Cardiff University, and the hard work of the 20-strong research team, that has enabled the dialogue today. Alongside the joint leadership of Cardiff and SUSS IAL, the University of Bristol, and Oxford University's Centre on Skills, Knowledge and Organisational Performance have contributed invaluable as programme partners.

11. I also thank the panellists and participants, for your commitment to be part of this global dialogue. We are honoured to have among us our three diplomatic representatives, from Finland, Sweden and South Korea, and we certainly look forward to deepening our mutual cooperation in this space.

12. Finally, I wish all of you a rich, meaningful exchange today. Thank you.