Skills for a
“just digital transition”
Agenda

1. The future of work

2. The rise of the Non-Standard Employment (NSE)

3. The digital world of work: land of opportunities or exploitation

4. Policy options for a “just digital transition”
Globalization

Technology

Demography

Climate Change

The Future of Work
Robot density in manufacturing
Number of multipurpose industrial robots per 1,000 person employed in the manufacturing sector

Source: ILO Trend Econometric Model November, 2016; World Robotics Industrial Robots Database, International Federation of Robotics
The impact of technology on the quality and quantity of jobs

• Future automation is unlikely to destroy complete occupations but will rather change the **types and number of tasks** in most occupations:

  • World Bank: less than 20% of jobs are predicted to disappear completely;

  • McKinsey Global Institute: estimated that by 2030, in about 60% of occupations, at least one-third of constituent activities could be automated
KEY FACTS ABOUT NON-STANDARD EMPLOYMENT

TYPES OF WORK

- Temporary employment
- Multi-party employment relationship
- Part-time and on-call work
- Disguised employment or dependent self-employment
## Potential challenges of NSE workers

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employment security</strong></td>
<td>Transitions from temporary to permanent employment are limited, typically ranging from a yearly rate of under 10% to around 50%.</td>
</tr>
<tr>
<td><strong>Earnings</strong></td>
<td>For temporary employment, studies indicate that wage penalties can reach up to 30%.</td>
</tr>
<tr>
<td><strong>Hours</strong></td>
<td>NSE workers typically have limited control over when they work, with implications for work–life balance, but also for income security, given that pay is uncertain.</td>
</tr>
<tr>
<td><strong>Social security</strong></td>
<td>Some workers may be excluded by law from social security, or they may not reach minimum thresholds with respect to the duration of employment, working time or earnings.</td>
</tr>
<tr>
<td><strong>Training</strong></td>
<td>Workers in NSE are less likely to receive on-the-job training, which can have negative repercussions on career development.</td>
</tr>
<tr>
<td><strong>Representation</strong></td>
<td>Workers in NSE may lack access to freedom of association and collective bargaining rights.</td>
</tr>
</tbody>
</table>
New technologies are bringing opportunities and challenges to working lives

Figure: Indexes of autonomy and intensity in relation to working outside the employer’s premises and frequency of use of ICT

The digital labour platforms

• **Jobs**: employment through digital labour platforms remains small – estimates range from 0.5% of the labour force in the United States (Farrell and Greig, 2016) to 5% in Europe (European Parliament, 2017).

• **Trends**: 89% of crowdworkers surveyed by the ILO reported that they would like to be doing more crowdwork than they are currently doing.

• **Earnings**: The ILO survey found that earnings varied depending on the platform and the country (from US$2 to US$4.4 per hour).

• **Social protection**: In the case of the crowdworkers, only 55% report that they have access to health coverage – and only 24% make contributions to their health insurance. The proportions are even lower with respect to pensions: only 25% have access to a pension scheme, and only 15% make contributions towards a pension.
What to expect in the future?

• The **overall effects of technological change** are likely to be context-specific, differing among countries, sectors and occupations. They will depend on a number of factors including:

  o the **institutional set-up** that influences the opportunity costs of automation

  o the **capacity of the workforce to adjust** to the new, robot-based work environment

  o the potential for worker **mobility across sectors and locations**
Policies are needed to ensure a “just transition”

- Key policy questions:

  ✓ How to share **technological gains** (“technological dividends”) in terms of jobs and income?

  ✓ How to re-design **labour market systems** that can address the diverse personal, individual shocks that workers face throughout their working lives including the need for life-long learning and personal development?

  ✓ How do **education and training systems** need to be transformed to equip the workforce with the skills and competencies required in the future?
Skills most valued by employers

Socio-emotional: 51%
Advanced-cognitive: 29%
Technical: 16%
Basic-cognitive: 4%

Skills policies and systems for a future workforce

• *Basic education* remains the foundation for future employability and further learning

• Facilitating the *school-to-work transition*

• The future of work will require *lifelong learning* and agile, flexible training systems

• Need for *increased and diversified funding* of lifelong learning

• Better *utilization and recognition of skills* for inclusive labour markets
Gracias

Álvaro Ramírez
ramirez-bogantes@ilo.org
OIT San José, Costa Rica