



# 3<sup>RD</sup> HRDC SUMMIT 2018

*Partnerships revitalising  
work and learning*

## THE 4<sup>TH</sup> INDUSTRIAL REVOLUTION



REPUBLIC OF SOUTH AFRICA

Partnering to innovatively develop SA's human potential



**HRDC**

HUMAN RESOURCE DEVELOPMENT COUNCIL  
of South Africa

# The 4<sup>th</sup> industrial revolution is HERE!

**1<sup>st</sup>  
Industrial  
Revolution**

**1760s-1900**  
Use of steam and  
mechanically  
driven production  
facilities

**2<sup>nd</sup>  
Industrial  
Revolution**

**1900-1970s**  
Electric Power  
driven mass  
production based  
on division of  
labor


**3<sup>rd</sup>  
Industrial  
Revolution**

**1970s to date**  
Extensive use of  
Controls, IT and  
Electronics for an  
**automated and  
high productivity**  
environment

**4<sup>th</sup>  
Industrial  
Revolution**

**Future**  
Smart: based on  
integration of virtual  
and physical  
production systems

**Source: DFKI**



Technology-driven transformation is giving rise to various questions and challenges that neither the public nor the private sector can confront in isolation like:

- How will technology-driven automation eliminate jobs and economic growth, or will the labour force evolve and ultimately catch up with technological change?
- What should be done to bridge the growing skill gap in the global workforce?
- How will we collaborate to create regulatory frameworks to speed up the growth and adoption of this new technologies?

# **4th Industrial Revolution/Future of Work – its negative impacts and opportunities of creating new and sustainable jobs**

- ❑ The fourth industrial revolution has both negative and positive impacts on the economy and it has the potential to destroy jobs. As automation substitutes for labour across the entire economy, the net displacement of workers by machines might exacerbate the economic crisis already faced by our country.

- ❑ The government needs to put relevant programs in place to develop the necessary skills to meet the demands of the fourth industrial revolution. The potential challenges which will be imposed by the fourth industrial revolution require a response that will be coordinated at the right level.
- ❑ The impact of technological, demographic and socio- economic disruptions on business models will be felt in transformations to the employment landscape and skills requirements, resulting in substantial challenges for recruiting, training and managing talent.

# Future Workforce Strategy

During previous industrial revolutions, it often took decades to build the training systems and labour market institutions needed to develop major new skill sets on a large scale.

- *Rethinking education systems*
- *Incentivizing lifelong learning*
- *Cross-industry and public-private collaboration:*

Labour calls upon the Human Resources Development Council to convene a conference to develop a country response to the threats and opportunities posed by the fourth industrial revolution.

Thank you