



# FOURTH INDUSTRIAL REVOLUTION AND THE HRDC

## REPORT BACK



# Our World Today

VUCA

**Volatile**

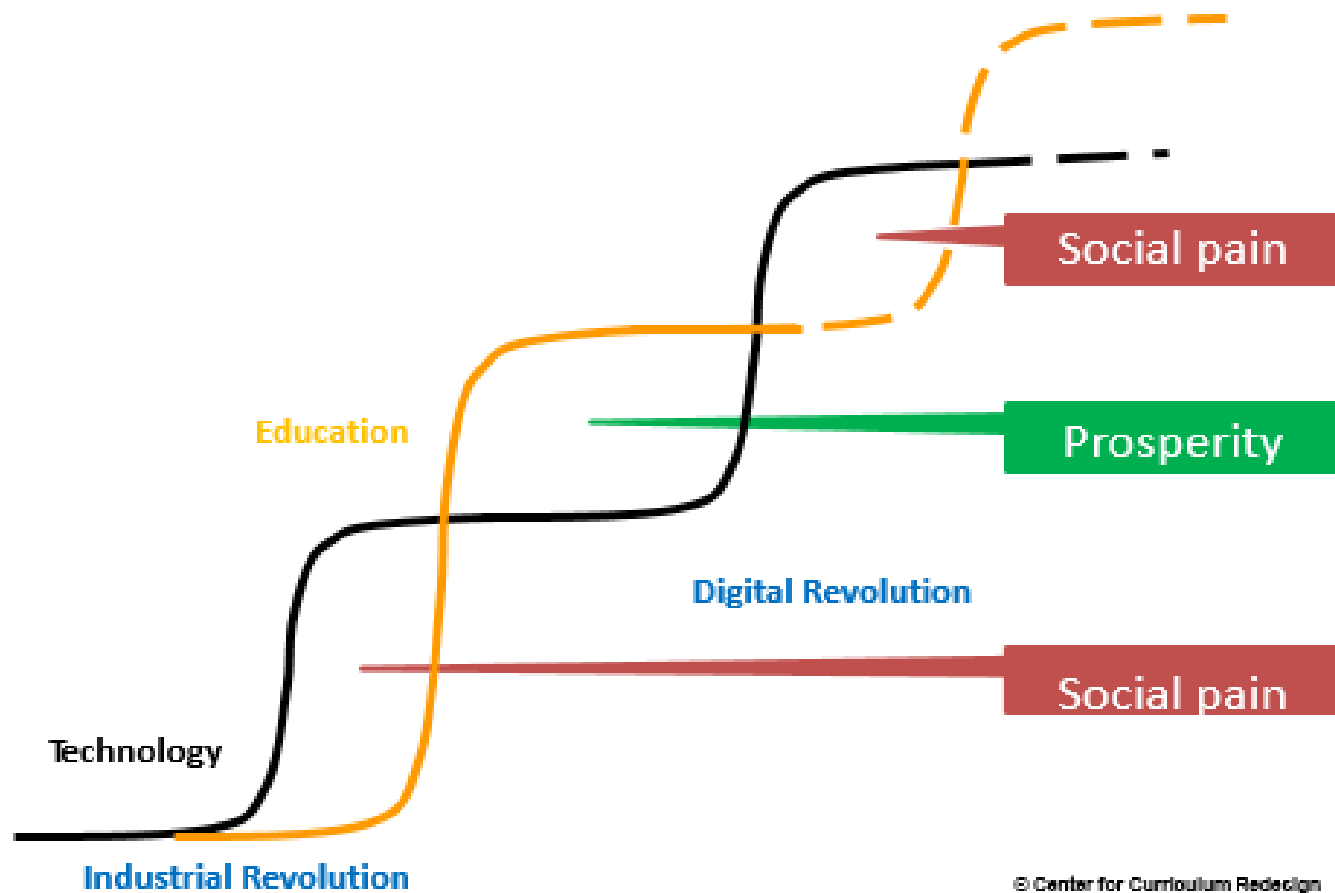
**Uncertain**

**Complex**

**Ambiguous**

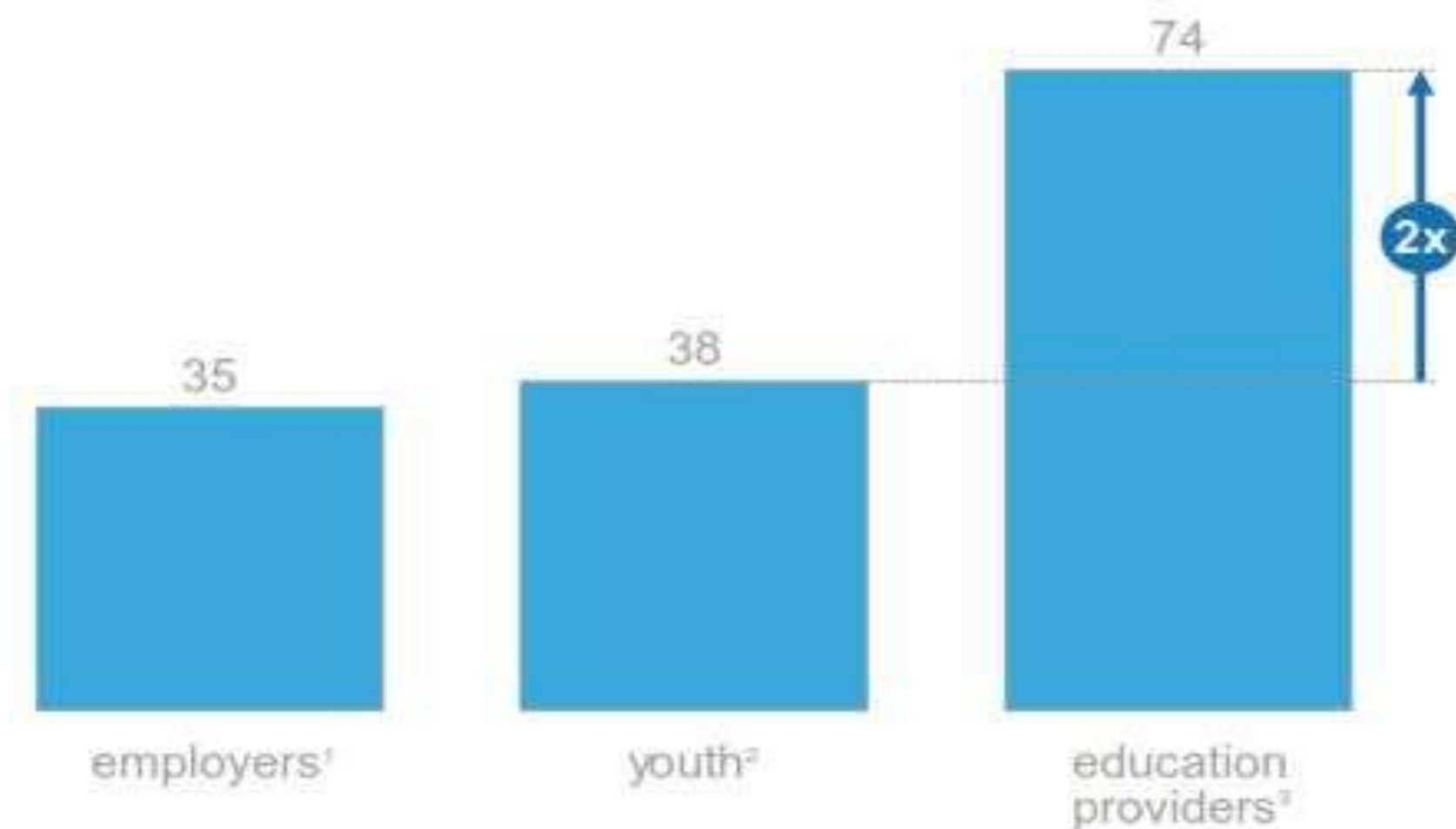


# Race between Changing Life and Education



# Disconnect between employers, youth and educators

Respondents who agree that graduates/new hires are adequately prepared, %



Source: McKinsey

# Automation Impact

Endangered tasks:

- Predictable physical
- Process data
- Collect data

~50% of total working hours



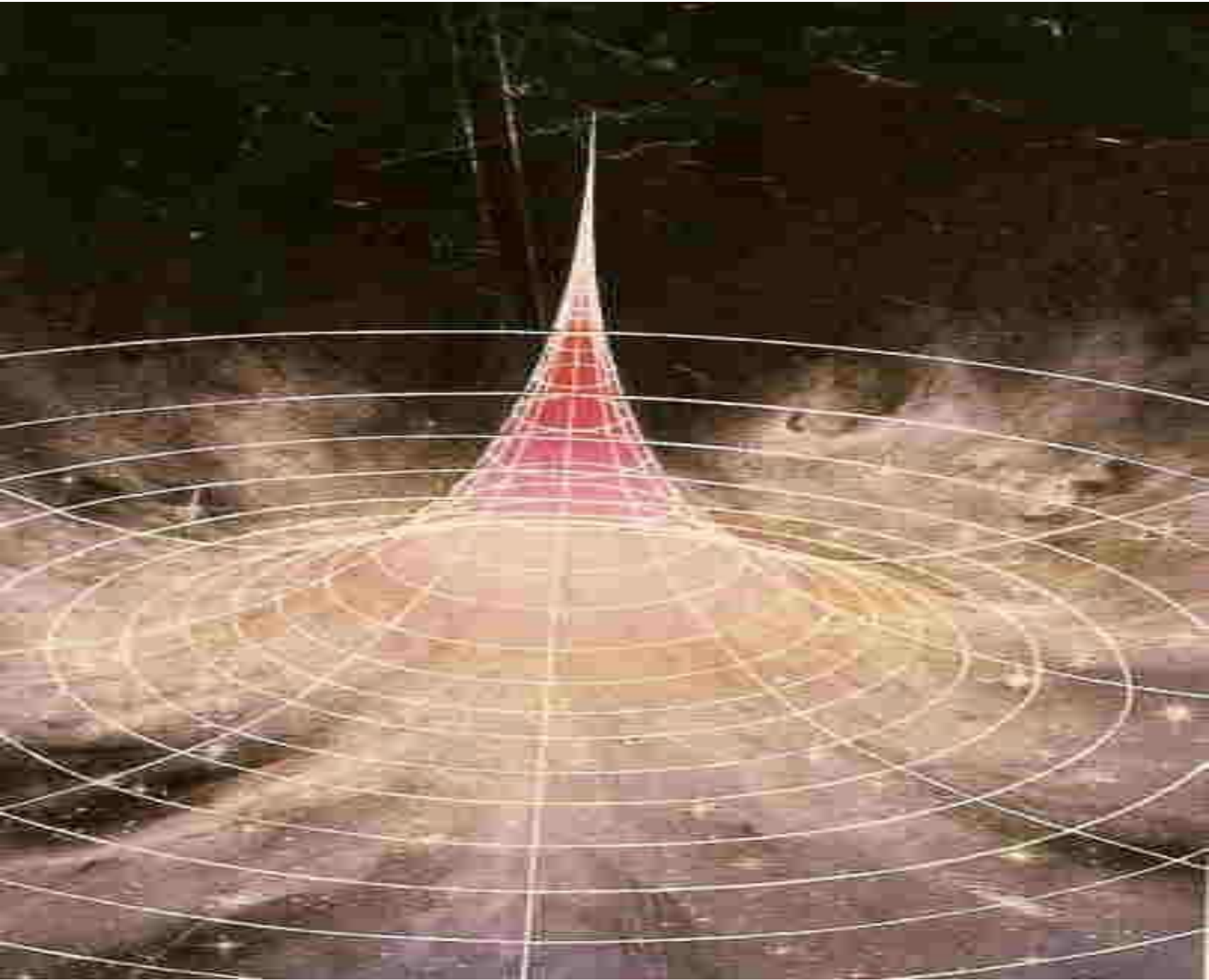
Source: McKinsey

# Emergence of New Jobs

Job	Pay level
<i>App developer</i>	<i>High</i>
<i>Driverless car engineer</i>	<i>High</i>
<i>Cloud computing specialist</i>	<i>High</i>
<i>Big data analyst/data scientist</i>	<i>High</i>
Social media manager	Medium
Sustainability manager	Medium
YouTube content creators	Medium
Millennial generational expert	Medium
Drone operators	Medium
Uber driver	Low

Source: World Economic Forum "Future of Jobs"

THE POWER OF EXPONENTIAL TECHNOLOGIES IS  
UNAVOIDABLE



*NOT* Changing is more dangerous





# HRDC AND IR 4.0

## PURPOSE

Unifying force and catalyzing performance

## INTERVENTIONS

### **Set**

Targets

Ensure Accountability

Ensure Responsiveness

Impact Evaluation

## ENVISAGED OUTCOMES

### **Improved**

Access to Education

Access to WIL

Throughput

Access to Labour Market

# COMMISSION OUTCOMES

1. What is the **state of affairs**
  - What building blocks to take advantage of
  - What are the gaps in the pathways
2. Where are the **potential areas** of exploration
  - Where should we put priority
  - How we fast-track existing and start many new initiatives
3. What are the **blind spots**
4. Which aspects of the HRDC strategy do we suggest **strengthening.**

# WHAT IS THE STATE OF AFFAIRS

1. The HRDC has a strategy whose focus on Industrialisation 4.0/5.0 can be strengthened
2. Other departments such as science and technology, Trade and Industry, Basic Education and Higher Education have started reviewing policies and programmes
3. Private sector is perhaps more advanced
4. Labour still needs to systematically assess the potential effects to avoid the unintended effects of the revolution and guide labour response accordingly

More integrated, interdisciplinary, multiple responses are required: policy and market incentives, action oriented joint assessments and planning ; and dialogue

# WHAT ARE THE GAPS

1. Limited **access to connectivity** is a significant binding constraint in our participation to IR 4.0 – Broadband  
*‘Every child must play Pokeman’*
2. More clear **mapping of jobs and skills** that South Africa will prioritise
3. Limited **interdisciplinary training programmes** in South Africa
4. Inadequate coverage of IR 4.0 in the **NDP**

A National Actionable Blueprint would help focus the various sectors and fast-track actions on the 4.0

# WHAT ARE THE BLINDSPOTS

1. What **kind of an Economy** would South Africans like to pursue.
  - What are its philosophical underpinnings and unique characteristics. How do we root our economy in our strengths.
  - Have we optimally exploited our strengths in Ubuntu a special human character that will be more pricey globally
2. **What is/ will be the effect of IR to the South African Labour**

An ongoing systemic research on 4 IR and the Economy is required

# WHAT ARE THE BLINDSPOTS

1. What **kind of an Economy** would South Africans like to pursue.
  - What are its philosophical underpinings and unique characteristics. How do we root our economy in our strengths.
  - Have we optimally exploited our strengths in Ubuntu a special human character that will be more pricey globally
2. **What is/ will be the effect of IR to the South African Labour**
3. Slow **state response** – policies and incentives

An ongoing systemic research on 4 IR and the Economy is required

# RECOMMENDATIONS AND WAY FORWARD

1. Outline a set of Cross-sectoral Action steps at **Macro-level** and **Meso-level** of the Economy and incentivise **micro-level** assessments in specific sectors

<b>MACRO-LEVEL</b>	<b>MESO</b>	<b>MICRO</b>
<ul style="list-style-type: none"><li>- National vision re- IR 4,0</li><li>- Which Jobs and kind of Economy</li><li>- Comprehensive Assessment of Impact</li></ul>	Programmes that connect national strategy and sector-based actions	<ul style="list-style-type: none"><li>- Foundational learning</li><li>- VET and Universities</li></ul>

## PRAGMATIC FIRST STEP.

Relevant organisations (HRDC, DTI, DBE, DHET, Business, NECT, and Labour) to explore and propose the future of jobs in South Africa



“It always seems impossible, until it’s done.”

Nelson Mandela