



An inclusive educational model for effective regional

Prof EM Jacobs
development

Rapidly Changing World Impacting Business & Development - Sustainability

- Accelerating Technological Change
- Globally Connected World
- The Knowledge ERA
- Quality of Life
- Regulatory Environment
- Sustainability



The Jobs Landscape in 2022



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

emerging
roles,
global
change
by 2022



Top 10 Emerging

1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. General and Operations Managers
4. Software and Applications Developers and Analysts
5. Sales and Marketing Professionals
6. Big Data Specialists
7. Digital Transformation Specialists
8. New Technology Specialists
9. Organisational Development Specialists
10. Information Technology Services

Source: Future of Jobs Report 2018, World Economic Forum

The Jobs Landscape in 2022



COMMITTED TO
IMPROVING THE STATE
OF THE WORLD

declining
roles,
global
change
by 2022

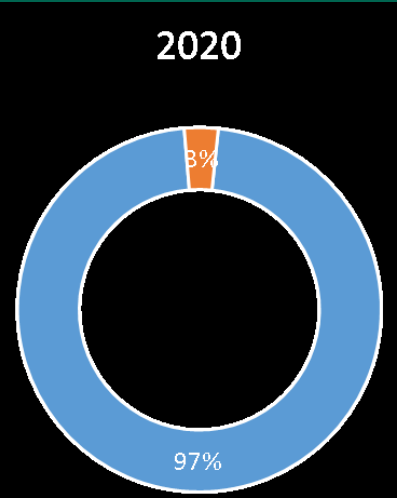
75
Million

Top 10 Declining

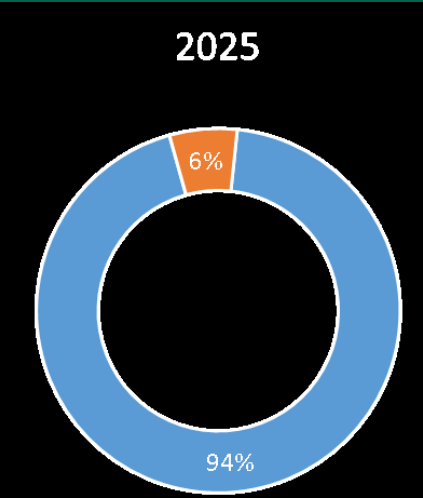
1. Data Entry Clerks
2. Accounting, Bookkeeping and Payroll Clerks
3. Administrative and Executive Secretaries
4. Assembly and Factory Workers
5. Client Information and Customer Service Workers
6. Business Services and Administration Managers
7. Accountants and Auditors
8. Material-Recording and Stock-Keeping Clerks
9. General and Operations Managers
10. Postal Service Clerks

Source: Future of Jobs Report 2018, World Economic Forum

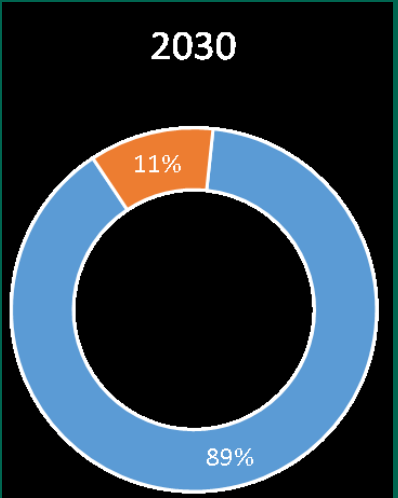
The Global Talent Deficit



Unrealised output due to labour deficit **\$2.1 trillion**



Unrealised output due to labour deficit **\$3.8 trillion**



Unrealised output due to labour deficit **\$8.5 trillion**

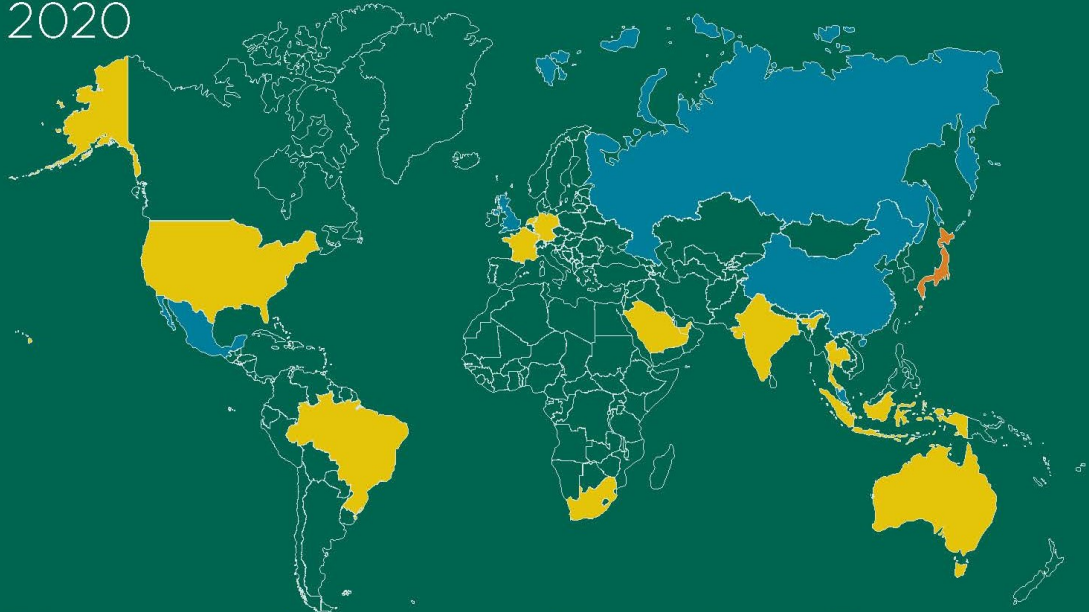
Financial Impact RSA

Financial & Business Sector **\$6.4 bn**

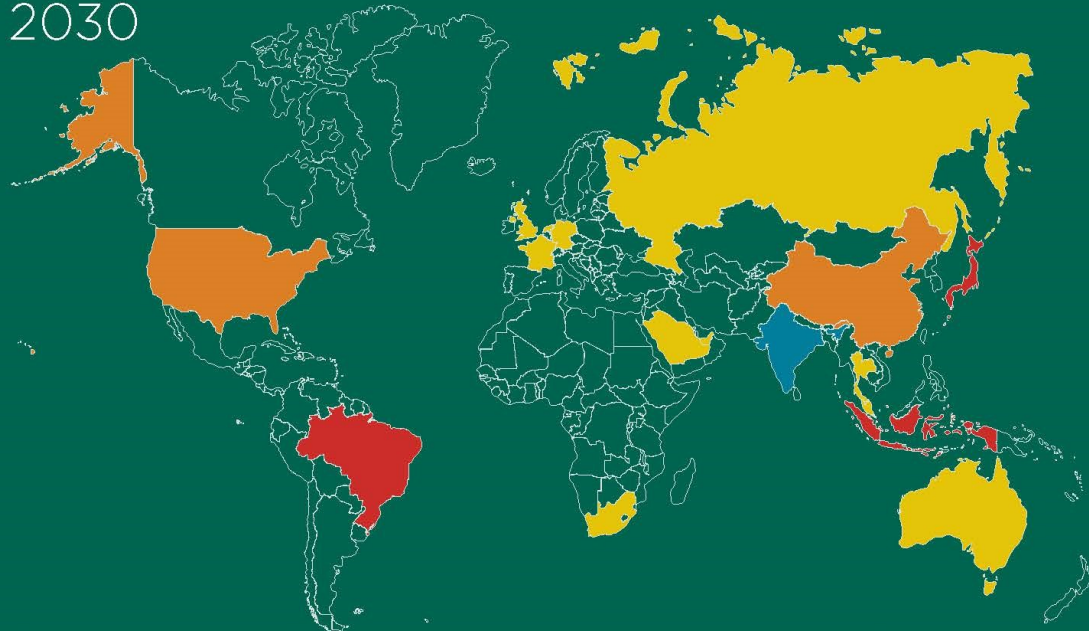
Technology, Media & Telecommunication Sector **\$2.3 bn**

Manufacturing Sector **\$1.6 bn**

Source: Future of Work 2018, Korn Ferry

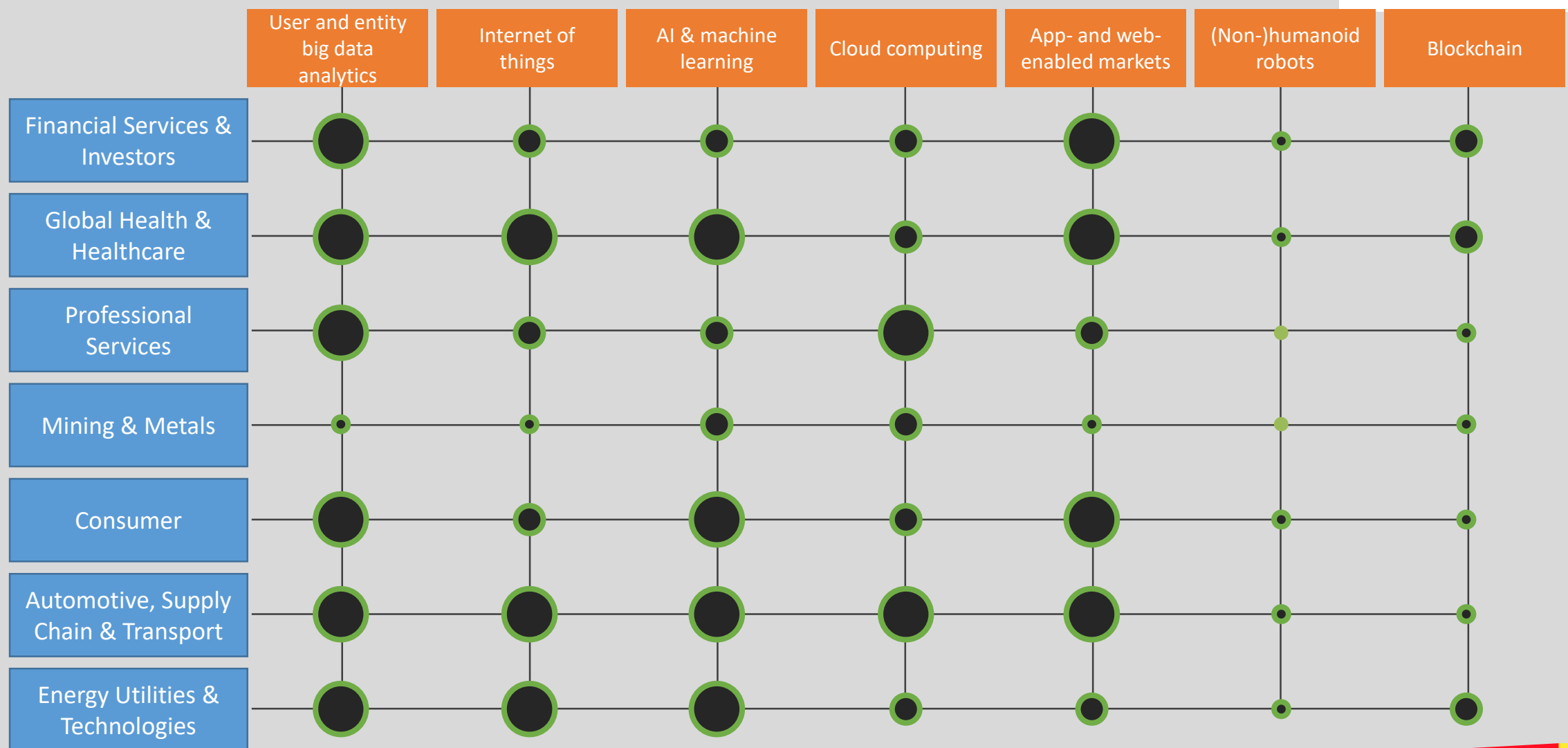


Surplus 0
 Deficit 0 - 6 million
 Significant deficit 6 million - 12 million
 Acute deficit 12 million - 18 million



Surplus 0
 Deficit 0 - 6 million
 Significant deficit 6 million - 12 million
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Technology Adoption through all sectors



Source: Future of Jobs Report 2018, World Economic Forum

The Future of Jobs Report, 2018

Technological drivers of change:

Ubiquitous high-speed internet

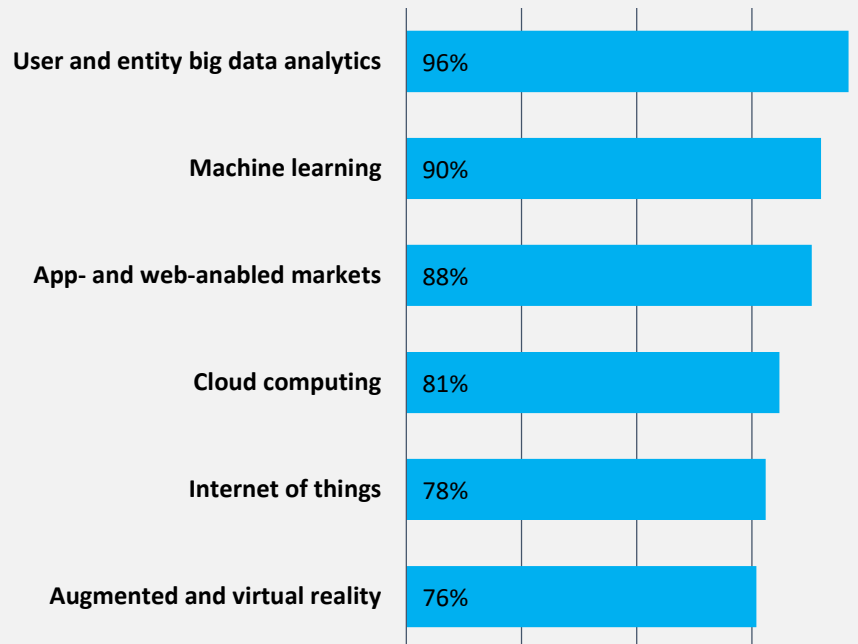
Artificial intelligence

Widespread adoption of big data analytics

Cloud technology

Technology adoption:

(By > 75% of companies surveyed across all industries)



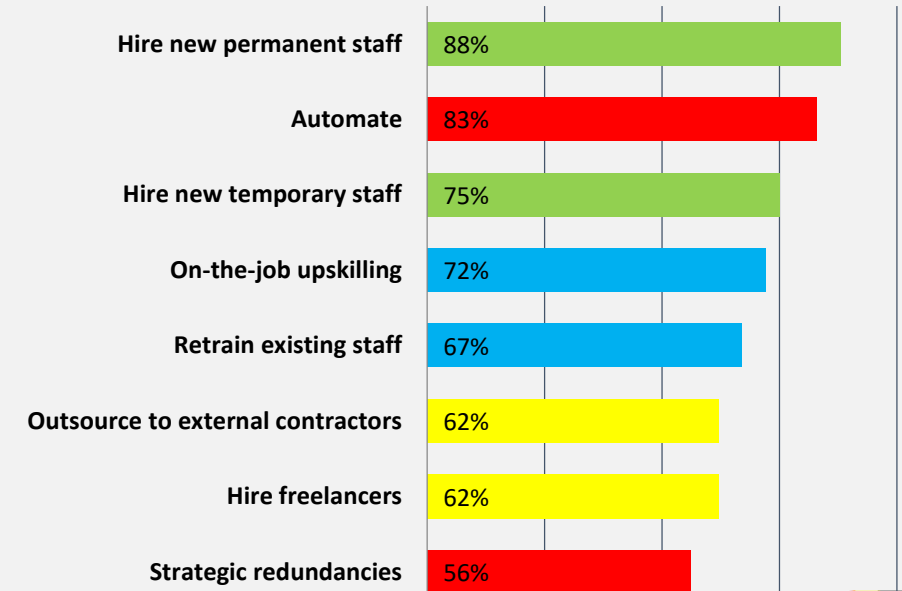
Source: Future of Jobs Report 2018, World Economic Forum



BELGIUM CAMPUS
ITiversity
It's the way we're *wired*



Responses to shifting skills needs:

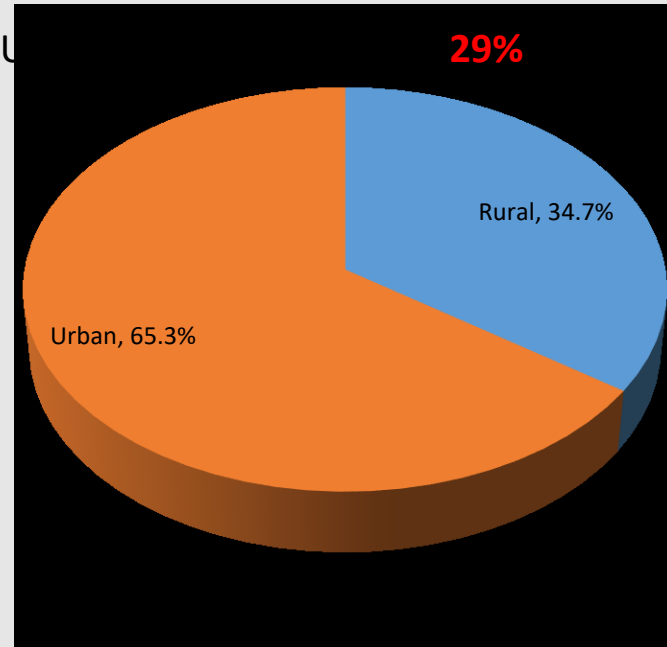


Demographics

Population 55 908 865 persons

Density: 46.1 per sq km

Growth: **1.62% p.a.** **2.38% p.a.** **0.20% p.a.**



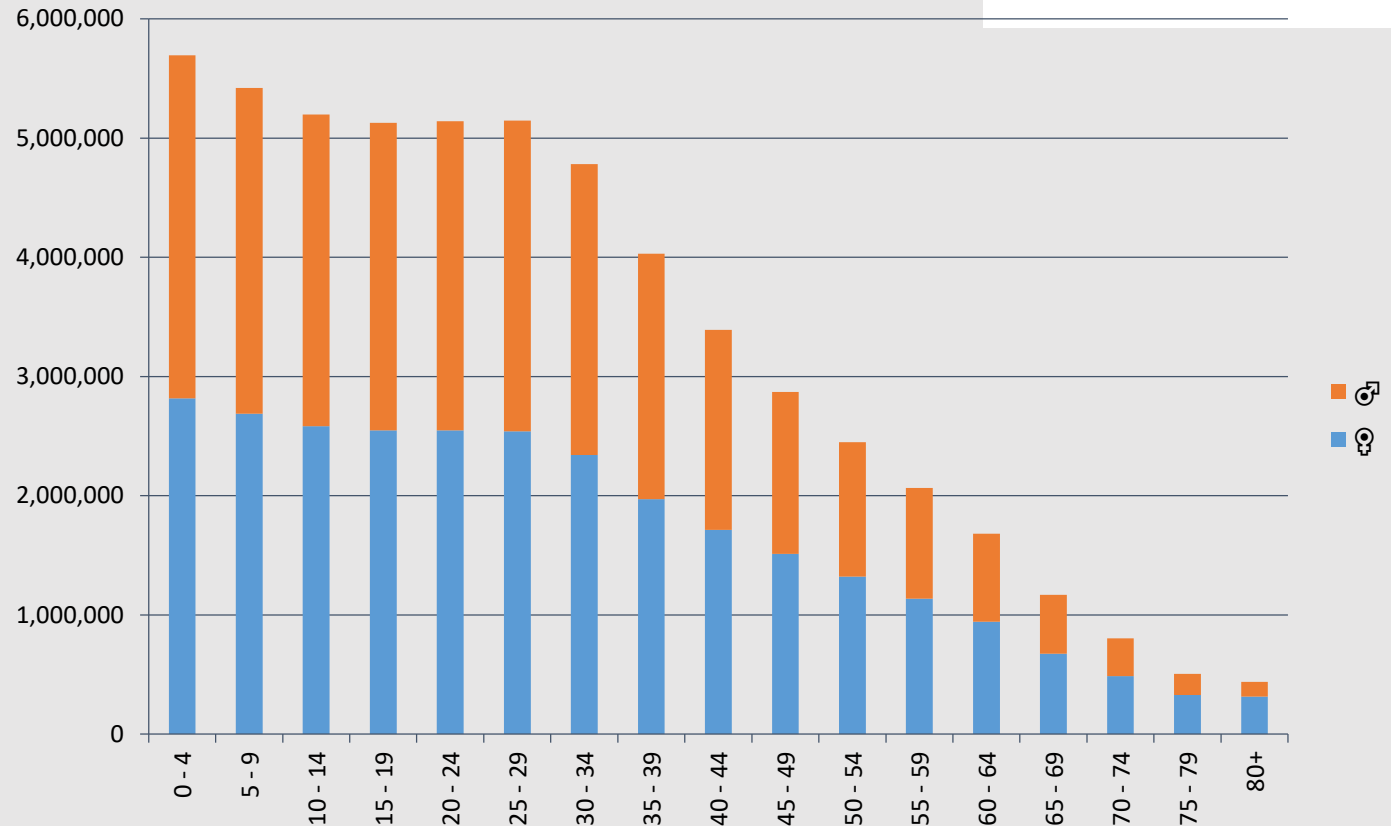
Access to electricity: **86.0%** **94.1%** **71.5%**

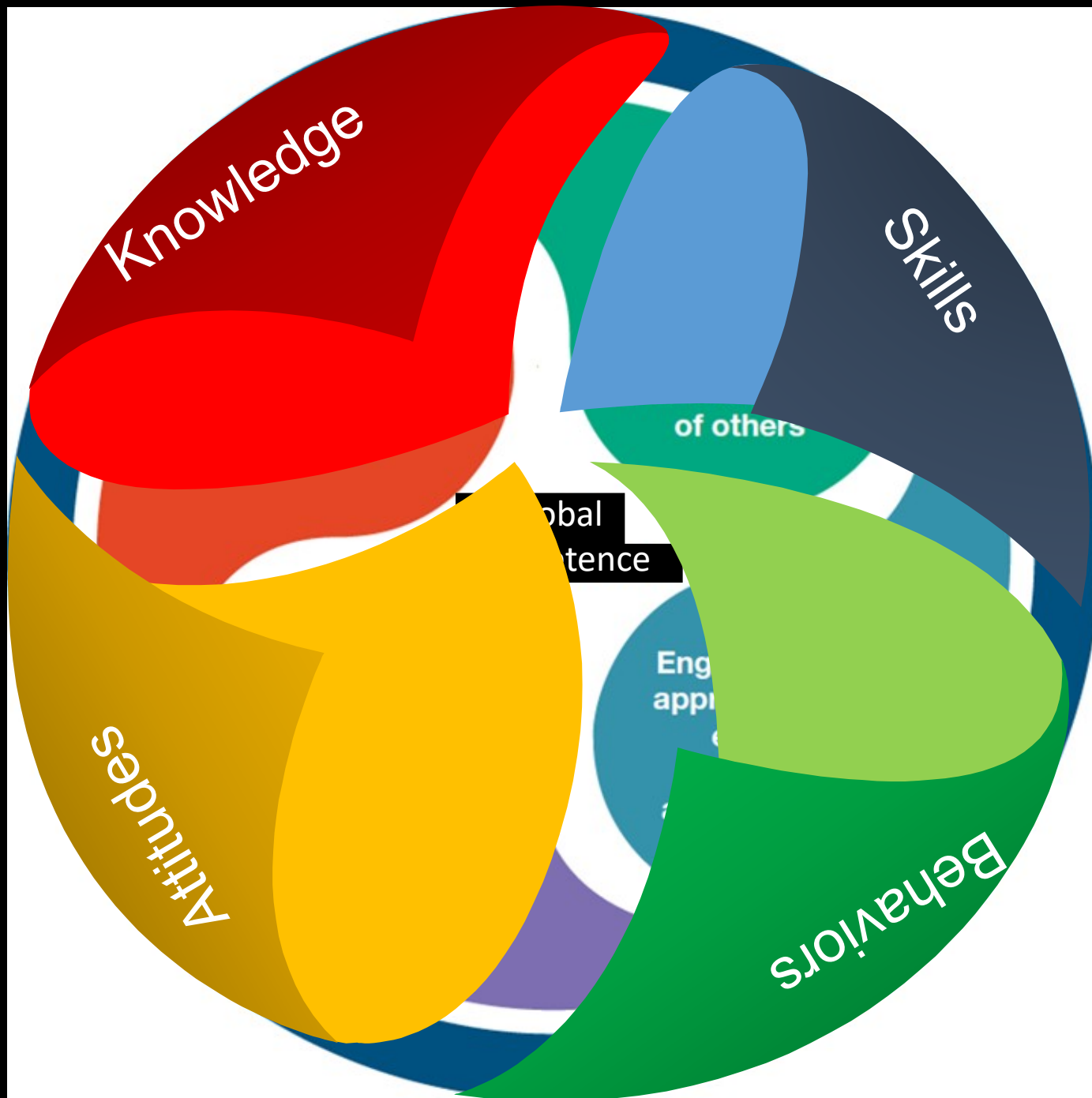
Below poverty line (ZAR 992 - **EUR 60** p.m.): **55.5%** (31.4 million people)

39.2% **77.0%**

Below food poverty line (ZAR 441 - **EUR 27** p.m.): **25.2%** (14 million people)

Source: TradingEconomics.com | Statistics SA
World Bank development indicators, 2016





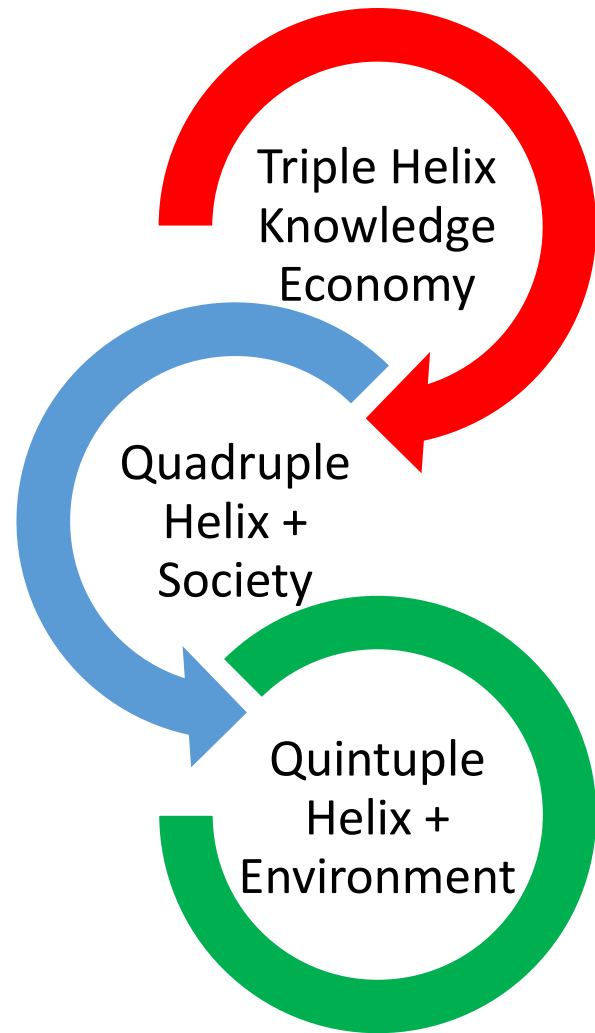
Rapidly Changing World

Building the knowledge, attitudes, skills, and behaviors necessary to thrive in today's interconnected world



- Recognize
- **The need to invest in global competence!**
- Realize
- Communicate

A need for joining forces From Triple to quintuple Helix

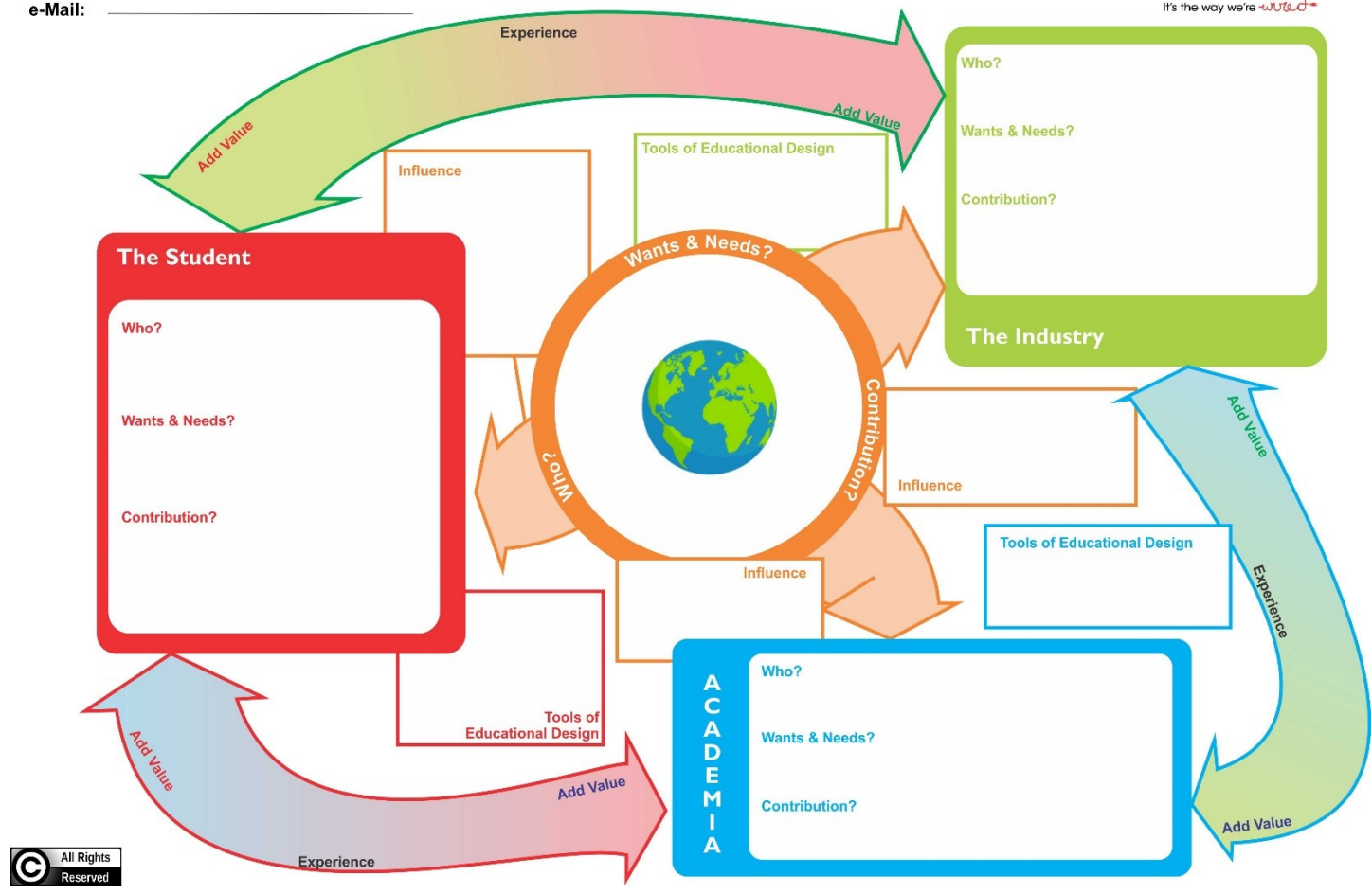


How to manage
the dynamics of
co-creative collaboration?



Interactive mapping of the ecosystem

Name & Surname: _____
 Institution: _____
 e-Mail: _____





Faculty of
Information
Technology
BELGIUM
CAMPUS
ITIVERSITY

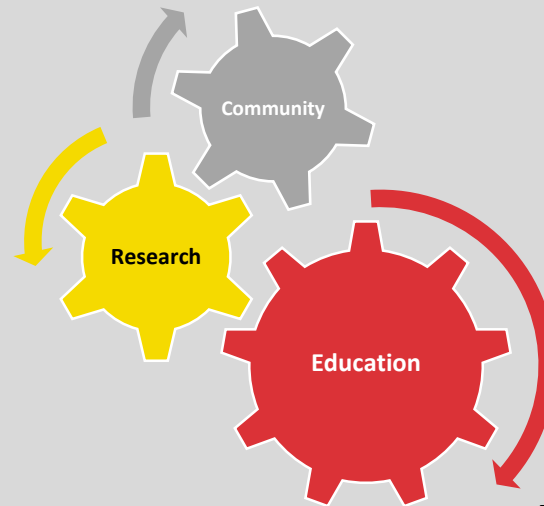
BC ITiversity's Answer to Regional Skills development

Link Global – Act Local

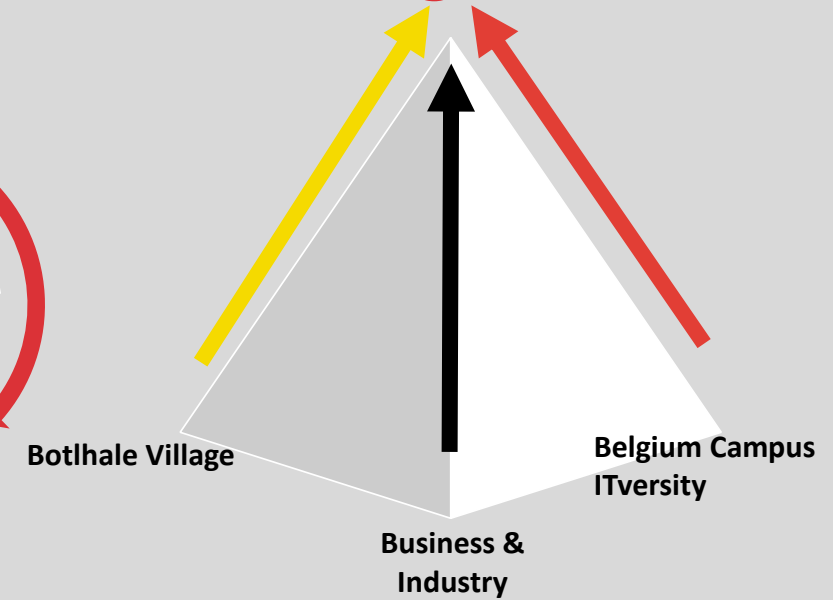
Nurturing Entrepreneurial Mindsets & Behaviours



Internal nexus:
DNA of institution

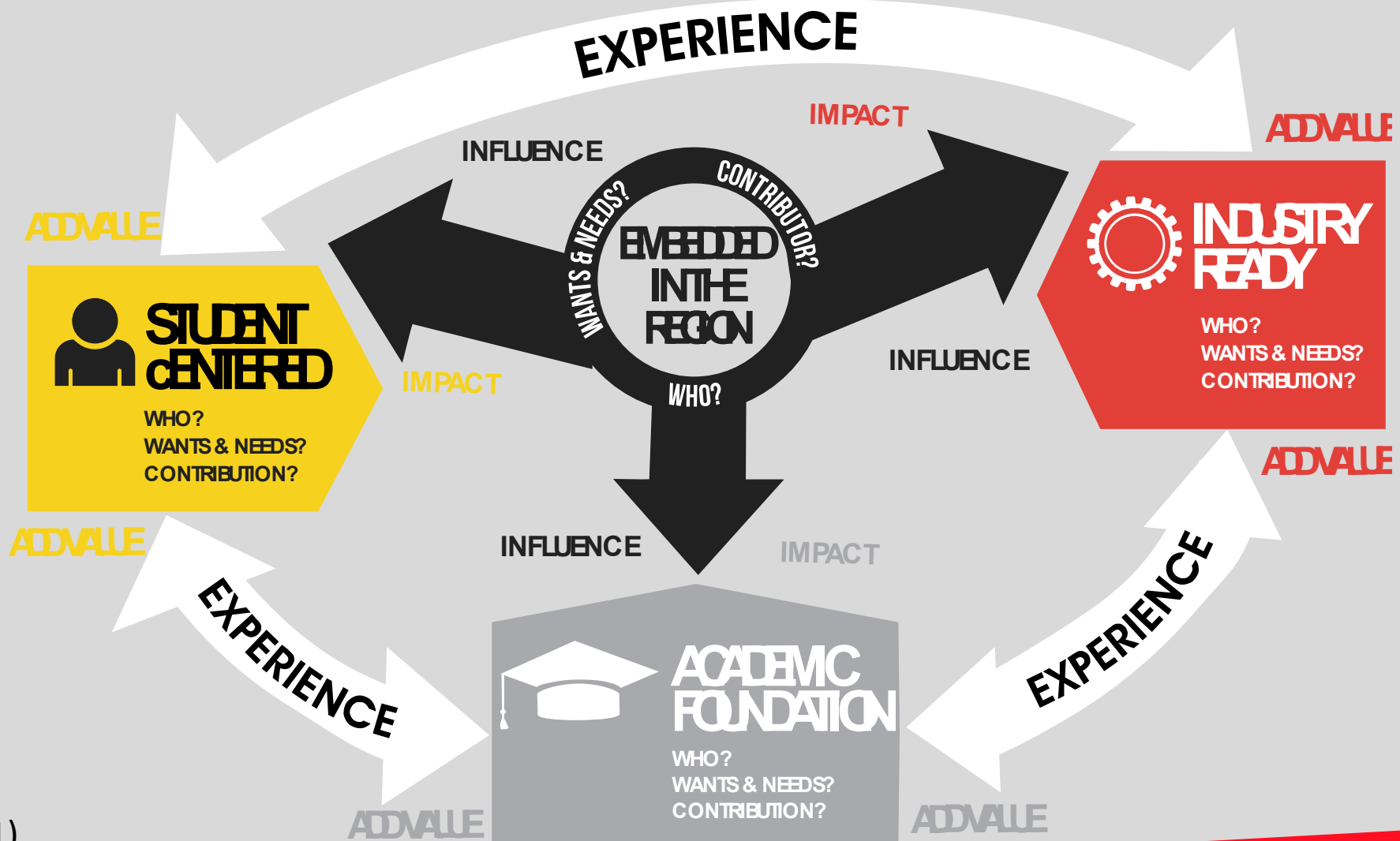


Knowledge Valorisation



Link Global – Act Local

Participative development (2011)



Jacobs, E.M. (2011)

Link Global – Act Local

Knowledge & Skills Development

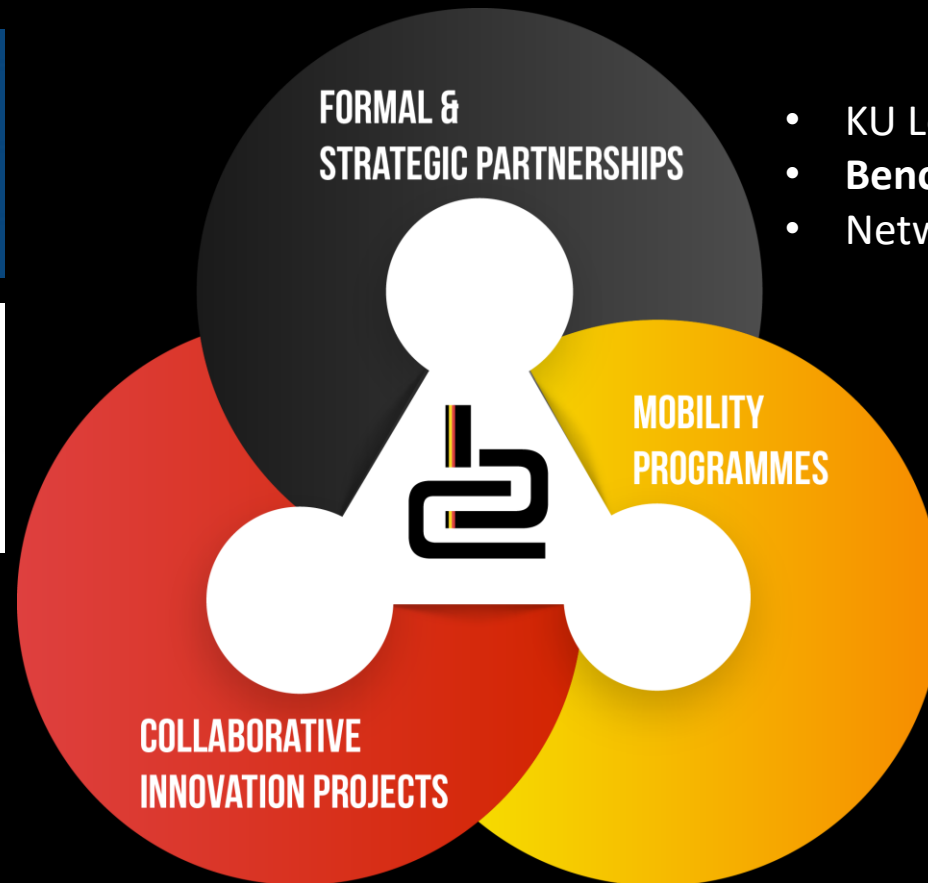
Key elements

- Action-based learning
- Student-to-student learning
- Co-creative and collaborative skills
- Rapid prototyping
- Student engagement
- Industry internships

Continuous synergy & dynamic exchange

- Teaching
- R&D
- Knowledge valorisation
- Societal engagement
- Regional development

Link Global – Act Local Engineering across cultures



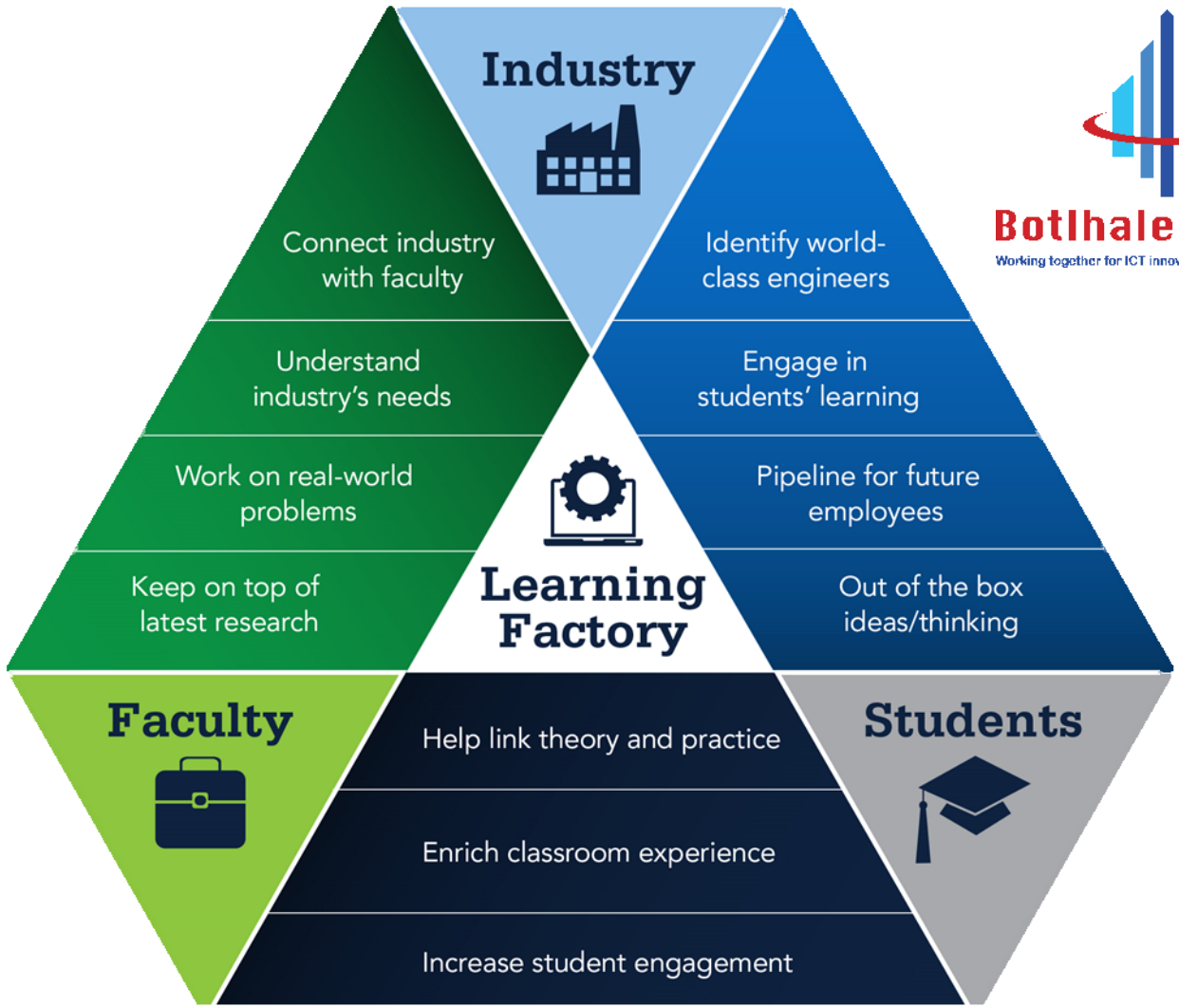
- KU Leuven, Penn State University, UCLL, PXL
- **Benchmarking & Curriculum Development**
- Networks: Pascal, UIIN, GUNI

- International minor (6 months)
- International weeks
- Erasmus+, Erasmus Mundus, VLIR UOS
- Internships
- Virtual engagement & mobility

- Innovation Projects
- Multi-Disciplinary Teams
- Tender> Proof of Concept> Scope of Work> Project Deliverables

Link Global – Act Local

Learning Factories: The Path to Industry 4.0



Link Global – Act Local

Learning Factories: The Path to Industry 4.0



RENEWABLE ENERGY



agriculture



SMART CITIES



education



mobile health



AVIATION



Link Global – Act Local

Responsible Partnering in Knowledge valorisation

University

- Knowledge
- Rigorous academic content

Partner University (local/international)

- Multidisciplinary
- Different culture



Industry partner (international)

- Access to appropriate skills (inclusive special needs)
- Competitive
- Product/service development
- Exploitation
- Return of Investment

Global competence
Skilled-apt graduates

(Pre-)Startups
IP, products and services

Results – 100% employment

- Curriculum fosters the development of Entrepreneurial Mind-Sets and Behaviours
- Agile curriculum influenced by all stakeholders
- Student-centred
 - **40% of students on bursaries**
 - Positive transformation (disadvantaged – disabled)
- Unique opportunities for disabled students (inclusive the deaf)
- Sought after highly-skilled candidates (upper LSM)





Question

s?



 info@belgiumcampus.ac.za

 +27 10 593 5368

 +27 (0) 12 543-1617

 PO Box 60327,
Karenpark 0118,
South Africa

 @BelgiumCampusSA

 @BelgiumCampus

 /Belgium Campus

 Tshwane Campus
138 Berg Avenue
Heatherdale, Pretoria

 Ekurhuleni Campus
45A Long Street
Kempston Park

 Nelson Mandela Bay Campus
6 Uitenhage Road
North End, Port Elizabeth,