Driving Socio-Economic Development in the 4th Industrial Revolution: The Role of Business Schools

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Rethinking and re-designing business education in the 4th industrial revolution era

Industry 4.0 presents significant social and economic opportunities and challenges

It is set to disrupt society, business & governments through its innovation

Industry 4.0 is projected to bring disruptive changes to the labour market

Demand for highly skilled labour is projected to increase

Potential job losses, infrastructure, security and data privacy issues are major concerns
Understanding the Fourth Industrial Revolution
How will Industry 4.0 affect the future of work?

<table>
<thead>
<tr>
<th>Technology</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Big data processing and analysis</td>
<td>70%</td>
</tr>
<tr>
<td>Artificial intelligence (e.g., machine learning, natural language processing, computer vision, etc.)</td>
<td>62%</td>
</tr>
<tr>
<td>Internet of Things (IoT)</td>
<td>61%</td>
</tr>
<tr>
<td>Robotics</td>
<td>59%</td>
</tr>
<tr>
<td>3D printing</td>
<td>52%</td>
</tr>
<tr>
<td>Augmented reality (AR)/virtual reality (VR)</td>
<td>46%</td>
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2019 Conference
Measuring the Impact of Business Schools
Creating a win-win situation: Business Schools as enablers of smart businesses

The Jobs Landscape in 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 Specialists

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

Current trends point to the future

Robotic Process Automation

Autonomous warehouse robots

Block chains for real time produce tracking system

Artificial Intelligence tool chatbot for customer service

Machine learning

Cloud computing

Creating a win-win situation: Business schools as trainers of smart technologies

1. New educational curricula and teaching methods
2. Inclusion of digital perspective in business management
3. Partnering with digital pioneers to team-teach technology management
4. Reskilling workers
5. Experiment with MOOCs, digital learning platforms
Europe

- **HEC Paris** online real-time classes (teaches artificial intelligence and virtual reality in its management course)
- France’s **NEOMA Business School** uses AR and VR in its management courses

United States

- **Stanford** University Graduate Student of Business (introduced virtual reality to aid learning)
- **The Wharton School** (integration of MOOCs with other traditional sessions)
- The **MIT** Digital Certifications Project (machine learning to block chain-enabled courses)
Case studies of business schools and smart business education

Asia & Middle East

- **Kuwait University** (introduces smart tech into curriculum)
- **Tsinghua University** in China (AI for online teaching)
- **University of Tsukuba** in Japan (AI for facial recognition and “bullet screens”)
- **Mohammed bin Zayed University of Artificial Intelligence** opening in Abu Dhabi in 2020

Africa

- **African Leadership University** (builds and teaches robotics)
- **University of Pretoria** (established Center for Artificial Intelligence Research)
- **Lagos Business School** (Introduction of Big Data into MBA programme)
Talking points

Business management education in the Industry 4.0

• Curriculum review
• Teaching methods in business schools

Industry engagement in the Industry 4.0 era

• What should businesses do to future-proof their workforces?
Thank you!