



The Role of Engineering and Engineers in Reducing Inequality in South Africa

Inequality toward being an expert, manager, owner or CEO

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#YPIMBIZO



Presentation Overview

- What is an Expert, Manager, Business Owner or CEO?
- What is Your Goal?
- Becoming an Expert
 - Challenges and
 - Possible Solutions
- Becoming a Manager, Business Owner or CEO
 - Challenges and
 - Possible Solutions
- Closing the Gap...
- My 7 Point Plan



Introduction



Let's Define....

1. Expert = A person who is very knowledgeable about or skilful in a particular area.

Strong Technical Skills, Ability to research and develop, international exposure or experience on complex projects, independent, responsible and accountable, a Team Player with other specialist or experts on project teams etc

2. Manager = a person responsible for controlling or administering an organization or group of staff.

Strong Technical background, People Manager, Project and Commercial Management,

3. Business Owner or CEO = The title of CEO is typically given to someone by the board of directors. Owner as a job title is earned by sole proprietors and entrepreneurs who have total ownership of the business.

- Strong communication skills
- Building relationships
- Realistic optimism
- Understanding
- Listening skills
- Willingness to take calculated risks
- Ability to learn from the past
- Reading people and adapting to necessary management styles



What is your Goal?

1. Do you want to become a Specialist/Expert or Manager/Business Owner/CEO?
2. Where do you see yourself in 5, 10 and 15 years ?



Have an appropriate Development Plan that is measured on a regular basis!



Expert or Specialist



Expert or Specialist

Challenges

- **Do not fully understand the different disciplines** e.g. Building Structures, Clean Rooms, Geotechnical Engineering, Geometric Design etc
- Candidates generally are **not certain in which area** they would like to specialise in until after work a few years of working
- Often not provided or do not have **opportunities to work on complex projects** or problems
- Limitation in **broadening skills** in a certain area E.g. Masters, PHD, CPD courses etc
- **Favouritism** - Some candidates are side-lined when compared to other young engineers within their organisation.
- **Brain drain** – limited senior experts available in the industry or within organisation to provide effective technical mentorship in specific areas such as Pavement Design, Geotechnical Engineering etc

Solutions

- Identify an **External Mentor** that has been in the industry to help guide your career development
- Identify an **Internal Mentor** that has been in the industry to help guide your career development
- **Self-Study** in the field you want to specialise – Webinars, Journal articles and papers, conferences etc
- Be involved in the **Technical Division** within your industry body Such as the Transport Division within SAICE and other international associations
- Research and Identify a well-recognised institute to **further your studies** in the specialist area (UCT, Stellenbosch, UKZN etc)
- Discuss and agree on a **development plan** with your internal mentor and company to support/co-support your further studies
- With you manager or supervisor **identify complex projects** within your discipline to gain on the job training
- **Professional registration** is a key credential of any specialist or expert
- **Network** with like minded specialists and broaden your knowledge and skills

Invest in your
own future !
It is not only the
responsibility of
your employer.

**Manager,
Business
Owner or CEO**



Manager, Business Owner or CEO

Challenges

1. The minority (Across Race, Gender, Age) often **compete with larger firms** or more established businesses unless they are part of a company enterprise development programme or partnership during the tender stages
2. **Limited Knowledge** about the industry (Procurement, tendering, service markets, service offerings etc) and Business Operations (business start-up requirements, staff management, staff development, relationships, marketing, finances, legal, Infrastructure, software etc)
3. **Limited relationships with key players** in the industry.
4. **Limited training and development programmes** to fast-track an individual's development around the business management and operations =
5. **Lack of mentorship** within organisation on project management, business operations, client relationships etc
6. Strick or Minimum **Requirements for certain roles** within the organisation – Young Engineers often do not have the opportunity to perform business related tasks.
7. Many companies **support the development of EME/QSE** through their enterprise development programmes
8. **Limited formal development programmes** for business owners/CEOs at the industry level



Solutions

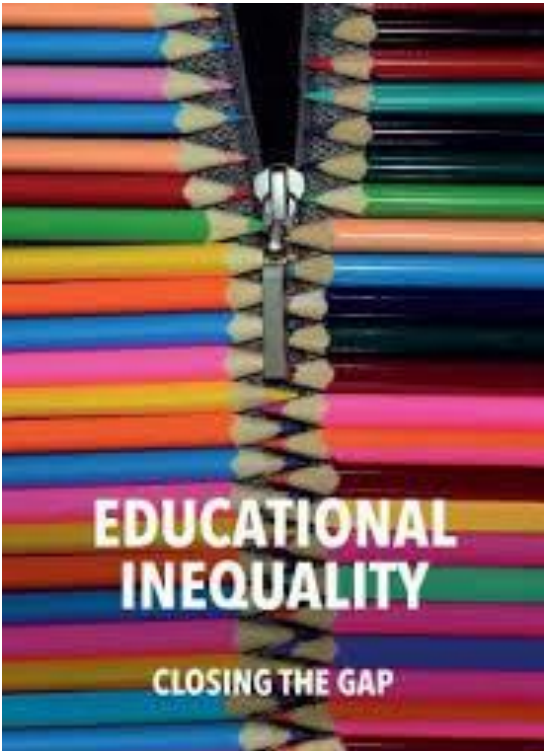
- Public and Private Sector have created platforms for **established business to partner with new business** to help them develop to become independent industry contributors. Some companies have created enterprise development programmes to help such companies develop
- While developing your technical skills, improving your **Business Knowledge** about Business Management, Financial Management, Procurement Requirements, people management is important in operating a successful team, business or corporation
- Various companies or institutes have **development programmes** to create effective managers. These include Leadership/Management Development Programmes, CESA School of Business
- Getting involved in **industry bodies**, networking events. These include platforms such as CESA, SAICE, WISA, IMESA etc



Close the Gap



Closing the Gap....



Plan & Execute



My 7 Point Plan

- Find your **Long-Term Goal**
- Find yourself **Mentors** (Internal, External, Business Mentor etc.)
- **Self-Teach** (Webinars, Online courses, Advanced Studies)
- Get **Actively Involved** (SAICE, SAIEE, WISA, IMESA etc.)
- **Network** and build meaningful and honest Relationships
- **Invest in yourself** (Personal Development)
- **Work Hard, Be dedicated** and you shall Succeed



Thank You!

