

The New South Africa Why Engineering Fails



Engineering Manager Conference
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Achieving success



Engineers do NOT design bridges to stand up



Engineers design bridges NOT to fall down



Vision



Angus Struan Robertson

Experiencing failure



Closer to home

The Star



with **BUSINESSREPORT**

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CRUSHED

One worker dead, another missing after three-storey building crumbles to ground



What is NOT an engineering approach?





“Restore the integrity of the number plate to fulfil its true functions which are the vehicle’s ID book and a law enforcement tool.”

NEWS FRIDAY JUN

owners of take up

Mixed messages on new veh

was not subject to wide consultation, was likely to become another eNatis nightmare.

Reacting to the accusations, Jacobs said: “The aim of the new intelligent number plate is to provide Gauteng with a variety of applications, to increase efficiency and effectiveness in all areas of operation, and effective law enforcement.”

Detailing what he classified as advantages, the new system would:

- Restore the integrity of the number plate to fulfil its true functions, which are the vehicle’s ID book and a law enforcement tool.
- Prevent deviation from the set national standards.
- Prevent vehicle crime such as theft, vehicle cloning and the

false issuing of all types of vehicle documents.

- Ensure effective use of plates to spot non-compliant vehicle without inconveniencing compliant vehicles.
- Prevent the issuing of false plates and licence discs to export stolen vehicles, a major challenge for law enforcement agencies.
- Prevent the use of false plates to disguise vehicles used in crimes.
- Prevent the duplication of

John

BY BALDWIN NDABA

Gauteng’s roads MEC has come out in defence of his decision to change Gauteng vehicle number plates, a move said to make speed-trapping easier.

Motorists will have to pay for new plates, starting from January.

Ignatius Jacobs came under attack from the Democratic Alliance when he declared his intention during the presentation of his budget in the Gauteng Legislature on Tuesday.

James Swart, the DA spokesperson on transport, said the system, which Jacobs admitted



Is technology moving so fast you cannot keep up?



People create value



What is strategy?



Strategy



- Doing the right things



Professor Malcolm McDonald

Tactics



- Doing things right



Professor Malcolm McDonald

Strategy versus tactics




Tactics – Doing things right →

Strategy – Doing the right things →

Strategy versus tactics



Tactics – Doing things right →


	 <p>Thrive</p>

Strategy – Doing the right things →

Strategy versus tactics



Tactics – Doing things right →

Strategy – Doing the right things →

Strategy versus tactics



Tactics – Doing things right →



Strategy – Doing the right things →

Strategy versus tactics



Tactics – Doing things right →



Strategy – Doing the right things →

Strategy versus tactics



Tactics – Doing things right →



Strategy – Doing the right things →

What is strategy?

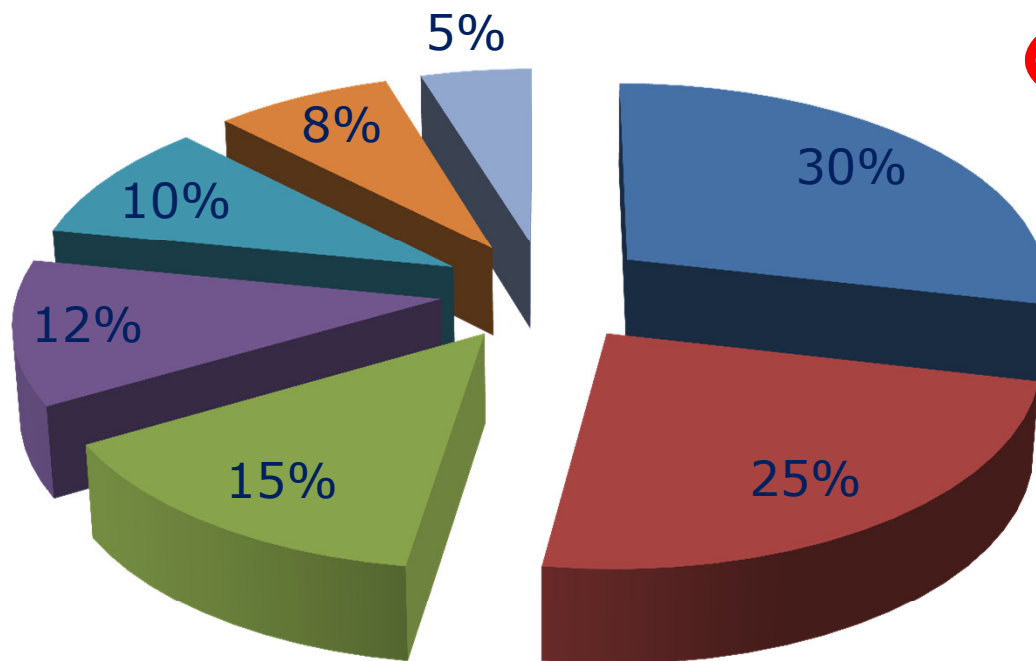


- The essence of why an organization exists and how it thrives





Factors causing technology failure



1. Mythology -- 30%

2. Lack of executive custody -- 25%

3. Poor strategic alignment - 15%

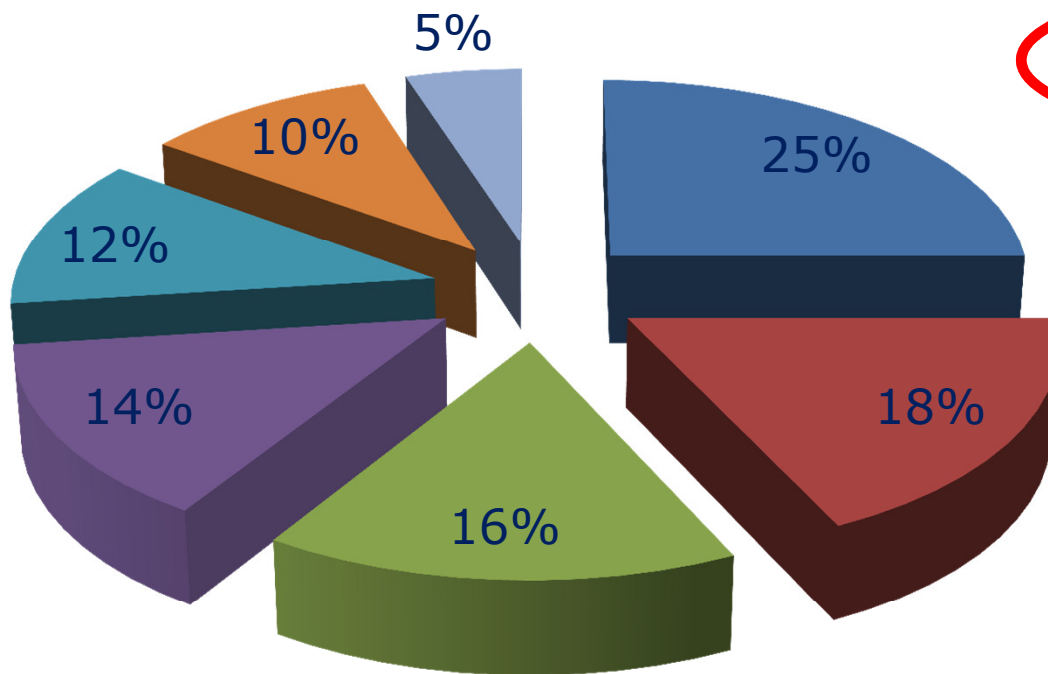
4. Lack of an engineering approach -- 12%

5. Poor data engineering -- 10%

6. People issues -- 8%

7. Technology issues -- 5%

The critical factors for success



1. Executive custody -- 25%

2. Strategic architecture -- 18%

3. Strategic alignment -- 16%

4. Business integration -- 14%

5. Project management -- 12%

6. Information management -- 10%

7. Technology -- 5%

Engineering is about people -- REALLY



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1. Effective engineering is about profitable use of technology
 2. People who use engineering deliverables create value
 3. Technology is NOT magic
 4. Knowledge and experience are critical for successful development and deployment of technology
 5. It takes solid base line engineering exposure before age five to produce an engineer
 6. It takes forty to fifty years to produce an engineer able to effectively lead high value projects

Call to action



1. What is your single most important insight from this presentation?
2. What is the single most practical action that you can take tomorrow to apply I.T. more effectively?

If you do not act within 48 hours you probably never will – act TODAY! 😊



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Design solutions like bridges ... To last



Psalm 136:5 "To Him who by wisdom made the heavens, for His mercy endures forever;"

Questions?



**Acknowledgement and
dedication**

Clients, associates and staff

**Father and mother Angus and
Thelma**

Children Alexandra and Struan

To the glory of the Eternal Creator



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Finding the missing pieces of your I.T. and strategy puzzles