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ICT Controls and Financial management



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SAQA Recognised Professional Body

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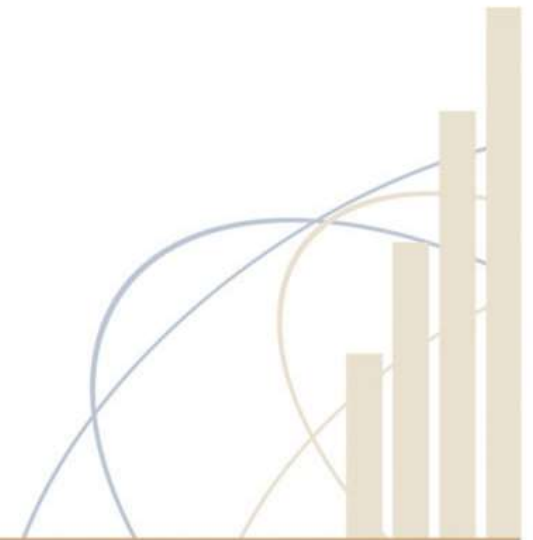
Marie Curie – “Nothing in life is to be feared. It is only to be understood.”

1. Who is responsible for ICT Controls?

- Board (Council)
- Accounting Officer (Municipal Manager)
- Chief Financial Officer / Chief Information Technology Officer
- Every Employee

2. Who is responsible for Financial Management?

- Board (Council)
- Accounting Officer (Municipal Manager)
- Chief Financial Officer
- Every Employee



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1. Who is responsible for ICT Controls?

King V Principle 10: “The governing body governs data, information and technology in a way that enables the organization to sustain and optimize its strategy and objectives.”

Does this absolve the Accounting Officer / Municipal Manager, or any other employee?

What does the policy and delegated responsibilities of your organization direct and when last was it updated?



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2. Who is responsible for Financial Management?

The King IV Code provides for the governing body (Board / Council) to delegate the implementation and execution of approved strategy, through policy and operational plans, to management via the CEO / MM.

The King IV Code further contains recommendations for the governing body (Board / Council) to oversee that key functional areas are headed by competent individuals and are adequately resourced.

Where do you fit in and what are your delegated responsibilities?



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King V - “Risk is about the **effect** of uncertainty on organizational objectives, including the **likelihood** of such events occurring and their **consequences**, both positive and negative, on the achievement of the organization’s **objectives**. As such, risk includes both threats and opportunities.”

Physical – fire, flood

Financial – earnings, assets, debt

Reputation and brand – government relations

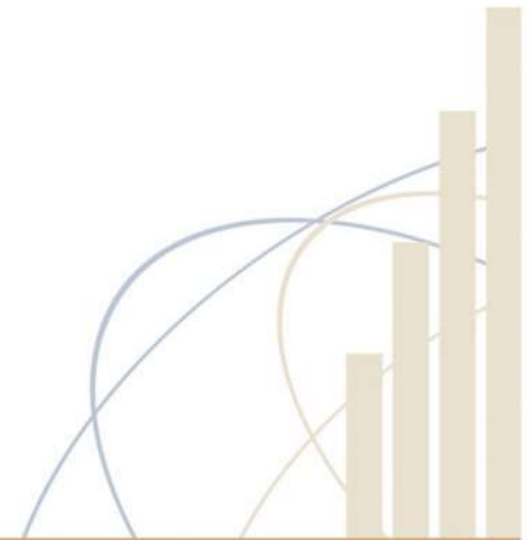
Safety and health – staff and community

Legal – POPIA, unlawful use

Operations – continuity and growth

Environment – data centers

ICT – nerve center / life blood



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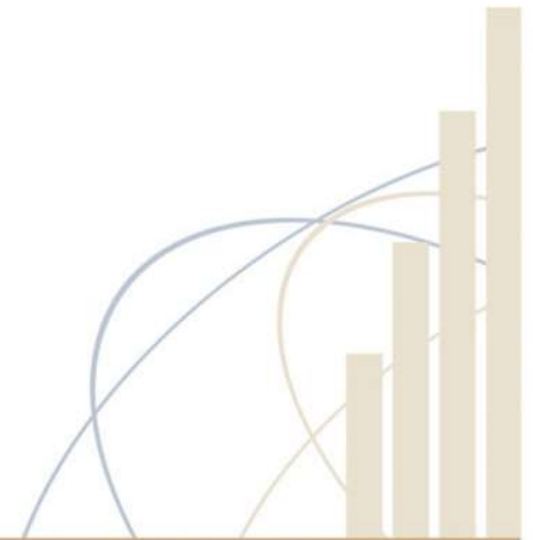
External risk context:

- Geo-political situation
- Local elections
- National / provincial culture
- Social expectations
- Legal and Regulatory requirements
- Economic conditions
- Environmental (weather) changes

Internal risk context:

- Organizational culture
- Organizational structure
- Capacity and resources
- Information systems

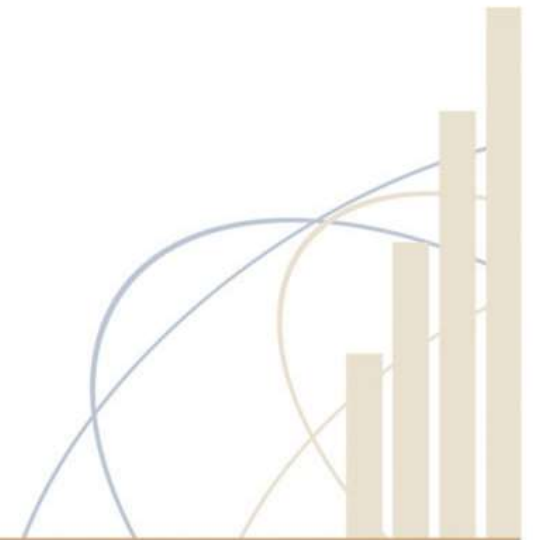
King III – “Enterprise is the taking of risk for reward.”



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Stuart Kippelman (CIO of Platform Specialty Products Corp.) - “The whole reason for risk is to innovate faster, and you do need failure to do it, but you need to fail in a way that leads to new understanding.”

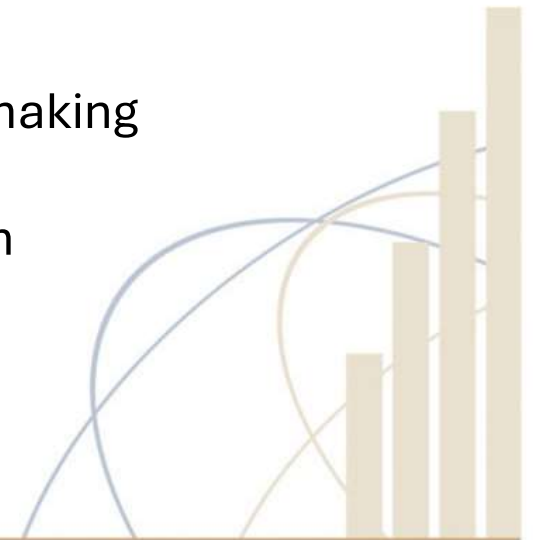
1. Recall a major risk that materialized in your institution / another organization / your area or family.
2. What was the immediate outcome?
3. What were the long-term results?



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Anonymous – “While risk-taking accelerates your business and the potential to benefit from it, solid risk management practice applies the brakes (controls) and returns one to reality.”

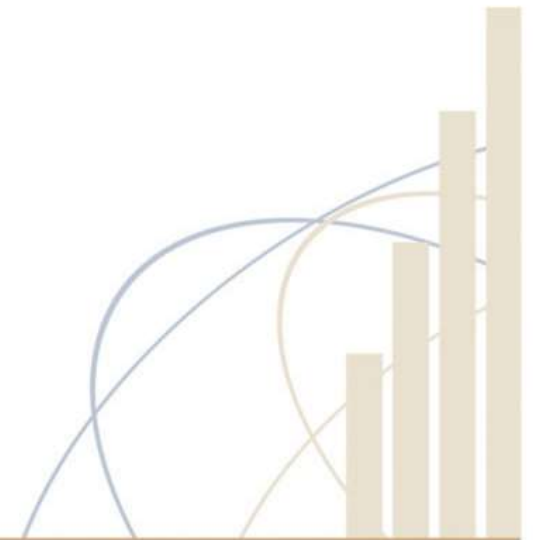
- Risk management introduces a formal system of discipline
- Risk management is founded on continual learning and growth
- Risk management demands accountability
- Risk management introduces awareness in decision-making
- Risk management creates engagement and discussion
- Risk management requires integration into every aspect of the organization



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Bill Gates – “We always overestimate the change that will occur in the next 2 years and underestimate the change that will occur in the next 10.”

- Who could predict the Iran war, the Ebola and Hantavirus crisis, the rise in oil prices and closer to home - Increased petrol prices and interest rates, adverse weather patterns, our recent AI policy disaster and fake / real hacking of leading banks' data?



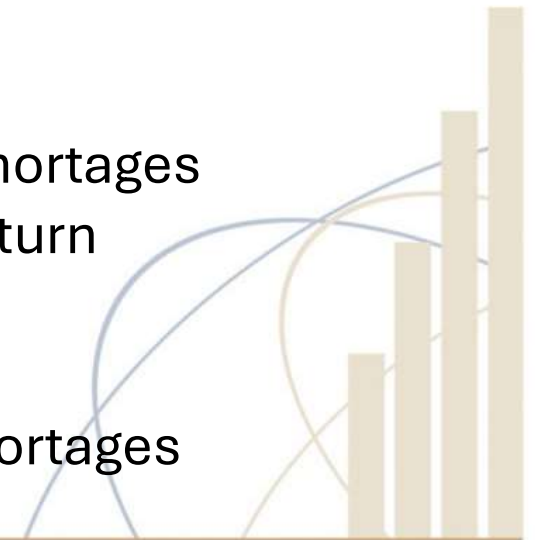
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World Economic Forum:

- Extreme weather
- Biodiversity loss
- Natural resource shortages
- Mis / Dis-information
- Inequality and polarization
- Mis / Dis-information
- Extreme weather
- State-based armed conflict
- Societal Polarization
- Cyber espionage / warfare

South Africa:

- Energy supply shortages
- Unemployment
- Water supply shortages
- Poverty / inequality
- Economic downturn
- Energy supply shortages
- Economic downturn
- Unemployment
- State fragility
- Water supply shortages



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Types of risk responses:

Avoid – Do not embark on certain activities

Treat – Reduce the risk through controls to mitigate the impact

Transfer – Outsource or insure the risk

Terminate – Stop the risk-associated activity

Optimize – Capture the opportunity to improve

Common risk response mistakes:

Identified but not responded / inappropriate response

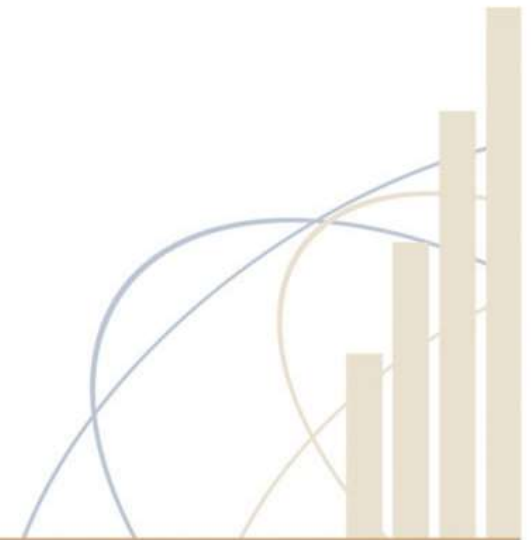
Responsibilities allocated but not executed

No specific timeline for objectives

No appreciation of the value of the risk response

Vague / general reporting – performance reporting

Ignoring red flags



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Eden Ratliff (ICMA) – **Fraud risk hides in operations**, *PM Magazine*, 2026

- Embezzlement, procurement manipulation, utility billing fraud, cyber attacks, vendor payment fraud, theft of public funds

Why: Over-reliance on a clean audit report
Vague staff / performance reports
Trusted and long-tenured employees
Dated policies and procedures

“Audits are not intended to be fraud risk assessments, as management is solely responsible for establishing and maintaining internal controls... Policies often exist on paper but do not reflect the current technology... Risk evolves faster than oversight mechanisms, regulations and technology...”

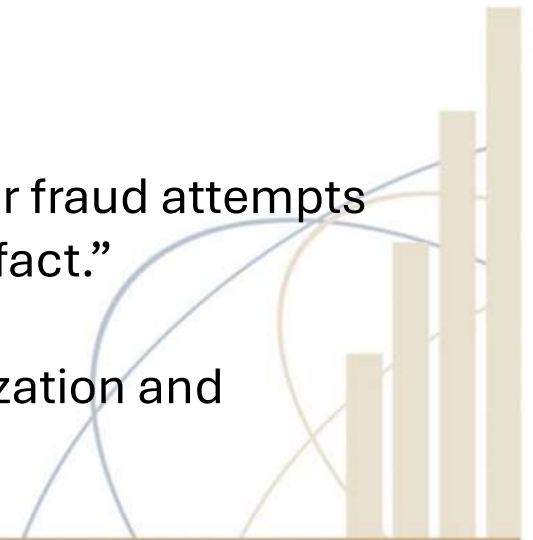
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Solutions: Segregation of duties (Register of system authorization)
System of access permission (Aligned with job changes)
Vendor management (Shell companies, invoices, checking of banking details and changes, ownership)
Manual approvals / overrides (Audit history / logs / reviews)
Limited / insufficient data analysis
Cybersecurity gaps (Training / dry runs)
Job rotation (Long term concealment)

“Public trust is built on prevention, not recovery.”

“Leaders are judged by whether controls exist, not by whether fraud attempts occurred or whether consequences were managed after the fact.”

“What leaders do not know can truly harm them, their organization and employees, and the community we serve.”



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Blackspace Technologies: “Connectivity is now a boardroom issue, not an IT afterthought.”

- Connectivity has become the difference between a business that merely survives and one that thrives and scales / expands:
 - Fibre lines go down
 - Mobile network is out
 - Power lines were stolen
 - Server “crashed”
- Uptime equals productivity, safeguarding assets, customer experience, revenue generation, uninterrupted logistics, business expansion.
- Resilient infrastructure is only half the battle, systems reliability online, extending to customers and employees regardless of data balance, removes real economic and psychological barriers to create a thriving community / economy.

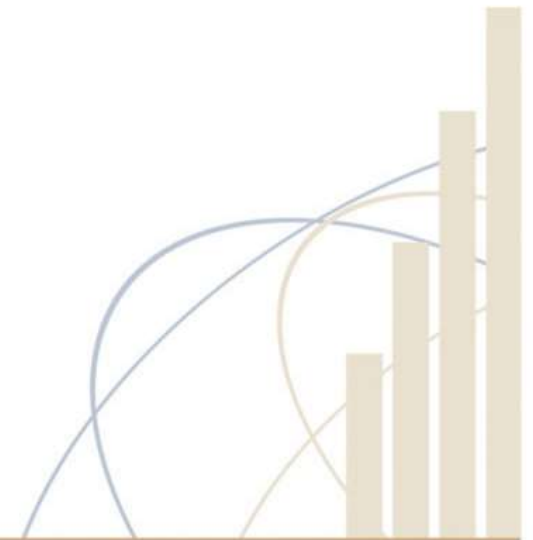
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Cyber security in South Africa:

Threats – 40% hacking and 41% ransomware
Linked to extortion
Insurance, Financial institutions, IT industry, government

How - Drive-by shooting / Shotgun approach
Targeted attacks / Big game hunting
Industrial espionage
Geo-political attacks
Retaliation / Revenge

Source: IoDSA (2025)



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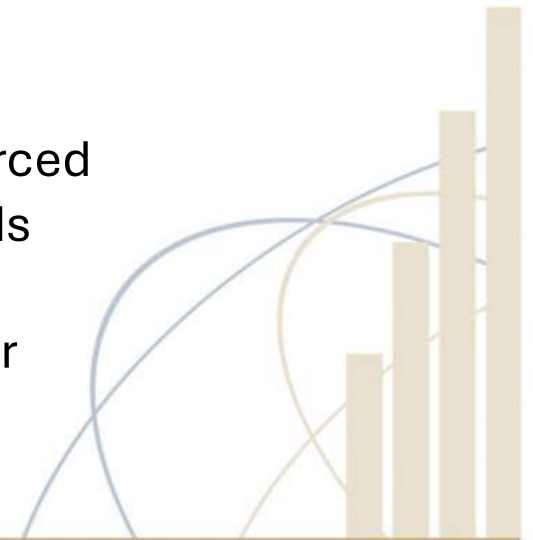
Opportunity = Modus Operandi

- 3rd party breaches
- System / technology providers
- Phishing
- Brute force attacks
- Unprotected mail / attachments
- Known vulnerabilities – outdated patches
- General / common fire wall rules
- Open ports / links
- Passwords

Example: **p@SS/w0rD2026** - your password will be brute forced by an average home computer in less than 2 seconds

Example: Common software available online to “check” if your password has been compromised... it just has!

Source: IoDSA (2025)

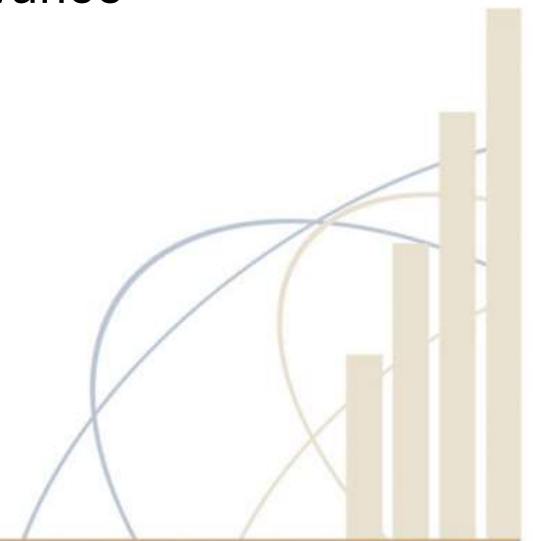


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NOT IF – BUT WHEN:

- Create a policy and action plan
- Develop SOP's to handle incidents
- Define the communication channels
- Keep the contact details readily available
- Select the crisis response team and practice
- Know your data – regular reviews, analysis, archiving
- Don't take decisions in a crisis – prepare responses in advance
- Prepare for all aspects of a data breach
- **DO NOT PANIC – ACTIVATE THE PLAN**

Source: IoDSA (2025)



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Artificial Intelligence – or not so intelligent?

- Employees and even your children are already using AI
- Policy or not – time to develop and approve?

What AI can do for you:

- Full stack of artefacts – architecture, design, interfaces, test plans, automation scripts, coding ≠ ready for use

Lessons from AI:

- AI only gives you what you ask for, not what you should have asked for
- It is not a replacement for traditional software
- Experience matters – role of “prompt masters”
- AI does not know / cannot learn client-specific context
- Need to teach AI to consider edge cases, regulatory context, architectural constraints, volume projections
- AI creates faster, humans avoid disaster
- The last 20% is still 80% of the work

Source: BBD (2026)



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Artificial Intelligence – or not so intelligent?

AI eliminates:

Slow handovers
Repeated reviews
Loss of context

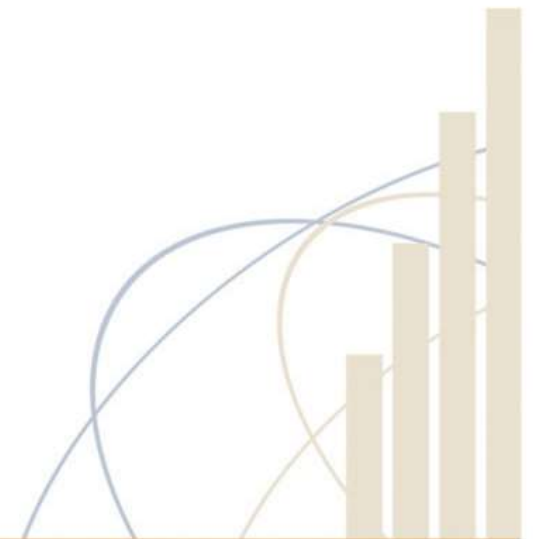
Misaligned expectations
Design drift / scope creep

Enterprise engineering is more than code, and still requires:

Governance
Security
Billing
Maintainability
Training
Organisation context
Human context and cues

Integration
Observability
Deployment
Roll-out
Ownership models
Creative testers

Source: BBD (2026)



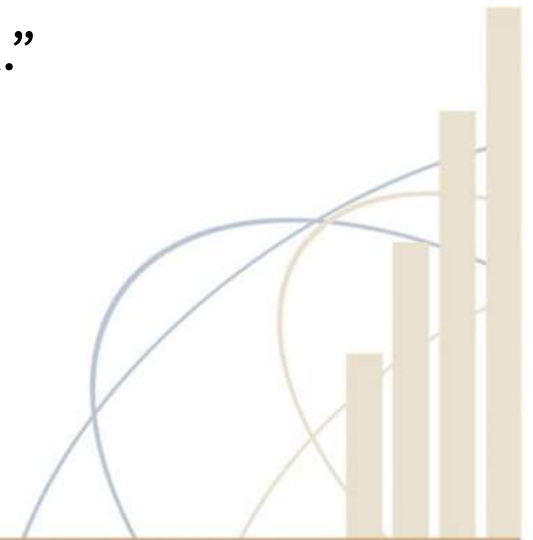
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BBD: “The constraints of real financial environments with compliance, oversight, stability and risk at the forefront of importance simply cannot be shortcut with automation.”

Warren Buffet: “Risk comes from not knowing what you are dealing with.”

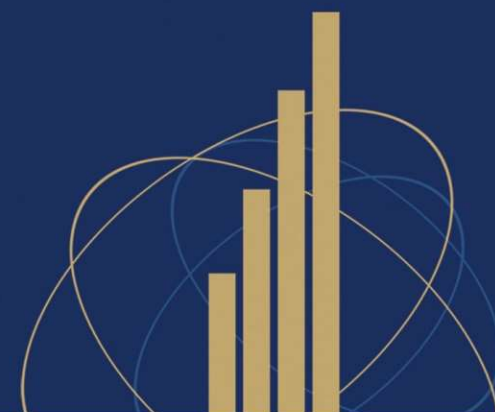
Mark Zuckerberg: The biggest risk is not taking any risk.”

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Thank You!



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