Is IT Governance Enough?

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The Question

IT security practitioners have long realised that it is essential to align information security with the needs of the business. With the advent of the OECD guidelines on corporate governance and, in the UK, the Turnbull Report, the IT professionals see that "corporate governance and IT governance can no longer be considered separate and distinct disciplines". But does this view merely reinforce this distinction? To address the real business requirement ***is IT governance enough****?*

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Agenda

- Corporate governance, OECD Guidelines and Turnbull?
- Internal Control Structures and Business Objectives
- Work of the IT Governance Institute
- CobiT and ISO/IEC 17799 / BS 7799-2
- The "gaps"
- How BS 7799-2:2002 helps fill the gaps

Corporate governance, OECD Guidelines and Turnbull?

Corporate Governance

How to run your business to meet your mission

- Safeguarding stakeholders' interests
- Ethos
- Processes

OECD Principals for Corporate Governance
- For corporate organisations
- Fairness to stakeholders

Turnbull
- 100 FTSE only (Yellow Book)

Even if not mandatory, gives good advise and guidance

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Internal Control Structures and Business Objectives

Internal Control Requirements

The internal control requirements of the Combined Code

Principle D.2 of the Code states that 'The board should maintain a sound system of internal control to safeguard shareholders' investment and the company's assets'.

Provision D.2.1 states that 'The directors should, at least annually, conduct a review of the effectiveness of the group's system of internal control and should report to shareholders that they have done so. The review should cover all controls, including financial, operational and compliance controls and risk management'.

Provision D.2.2 states that 'Companies which do not have an internal audit function should from time to time review the need for one'.

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Business Objectives

- Customer knows about product
- Customer buys product
- Able to make and deliver product at "right" price/quality
- Etc....

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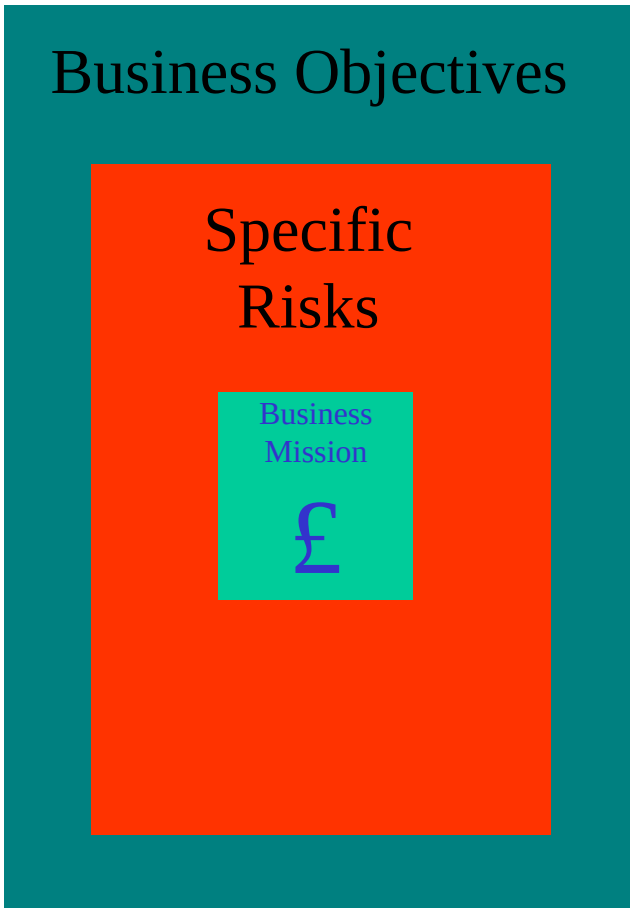
Specific Risks



- Customer buys from competition
- Customer doesn't buy anything
- Cannot supply
- Costs too high for adequate gross margins
- Etc....

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Common Risks

- Acts of God
- Error
- Fraud
- Hacking
- Bad records
- Theft
- Etc....

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Work of the IT Governance Institute

The IT Governance Institute

- "To achieve success in this information economy, enterprise governance and IT governance can no longer be considered separate and distinct disciplines"
- Board Briefing on IT Governance
- Board Briefing on Information Security Governance
- **CobiT (Control Objectives for IT)**

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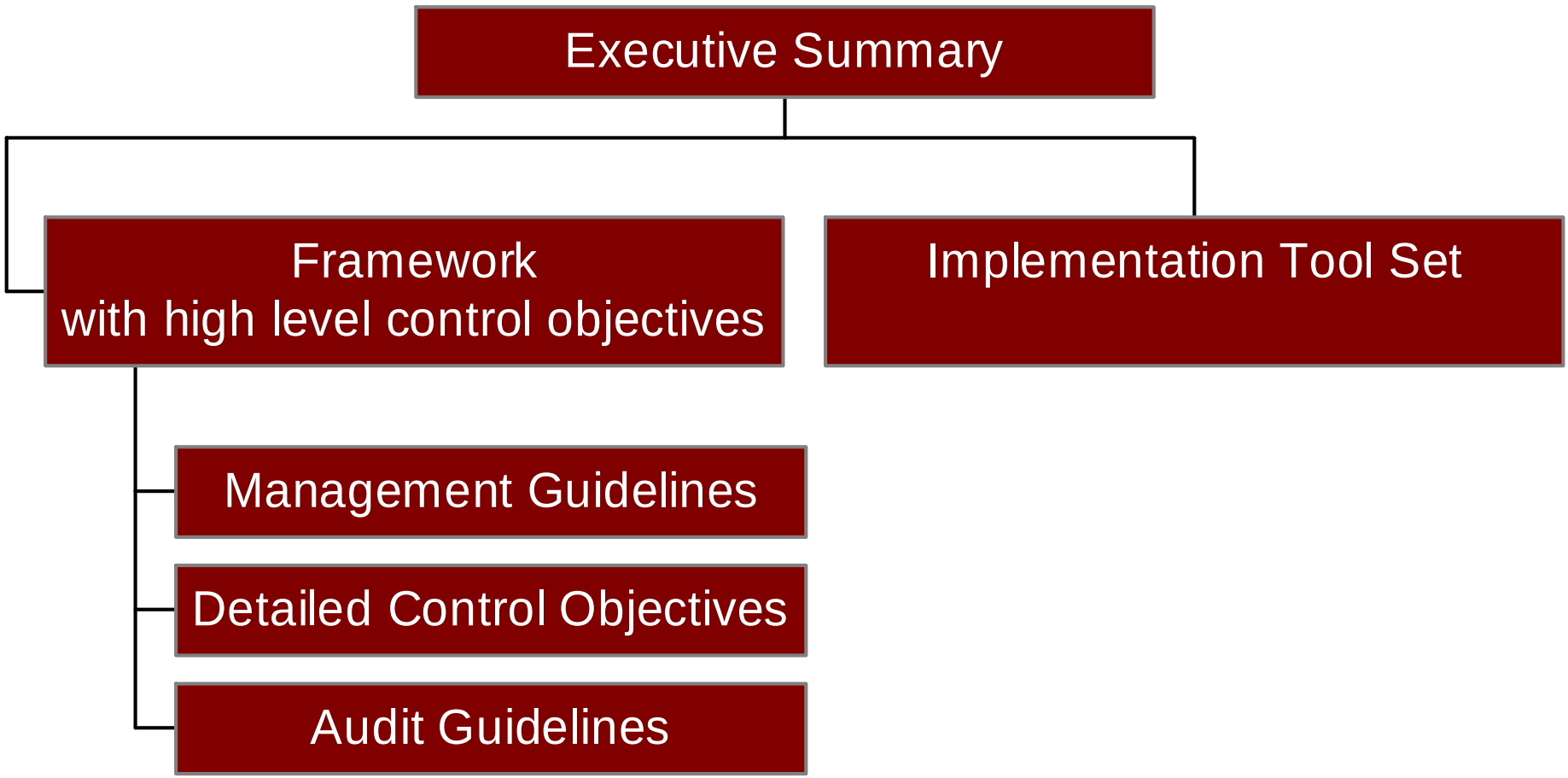
CobiT and ISO/IEC 17799 / BS 7799-2

CobiT

- Code of practice, like 17799
- Wider brief
  - *Planning and organisation*
  - *Acquisition and implementation*
  - *Delivery and support*
  - *Monitoring*
- Embraces “Plan, Do, Check, Control”
- 3rd Edition, a family of products

CobiT



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COBIT & 17799/7799-2

Some more detail

- Can't be certified to COBIT
- Can be certified to BS 7799-2

Concise ISMS specification

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Nothing Covers Everything

- **Good reason for why BS 7799-2:2002 integrates with other management system standards**

- **But there are still gaps**

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The “Gaps"

Biases and Not Enough

- Confidentiality
- Integrity
- Platform Security
- Business Applications
- IT risks
- Business Context
- Prevention
- Detection

  - Inability of testing big systems & the unknown vulnerability

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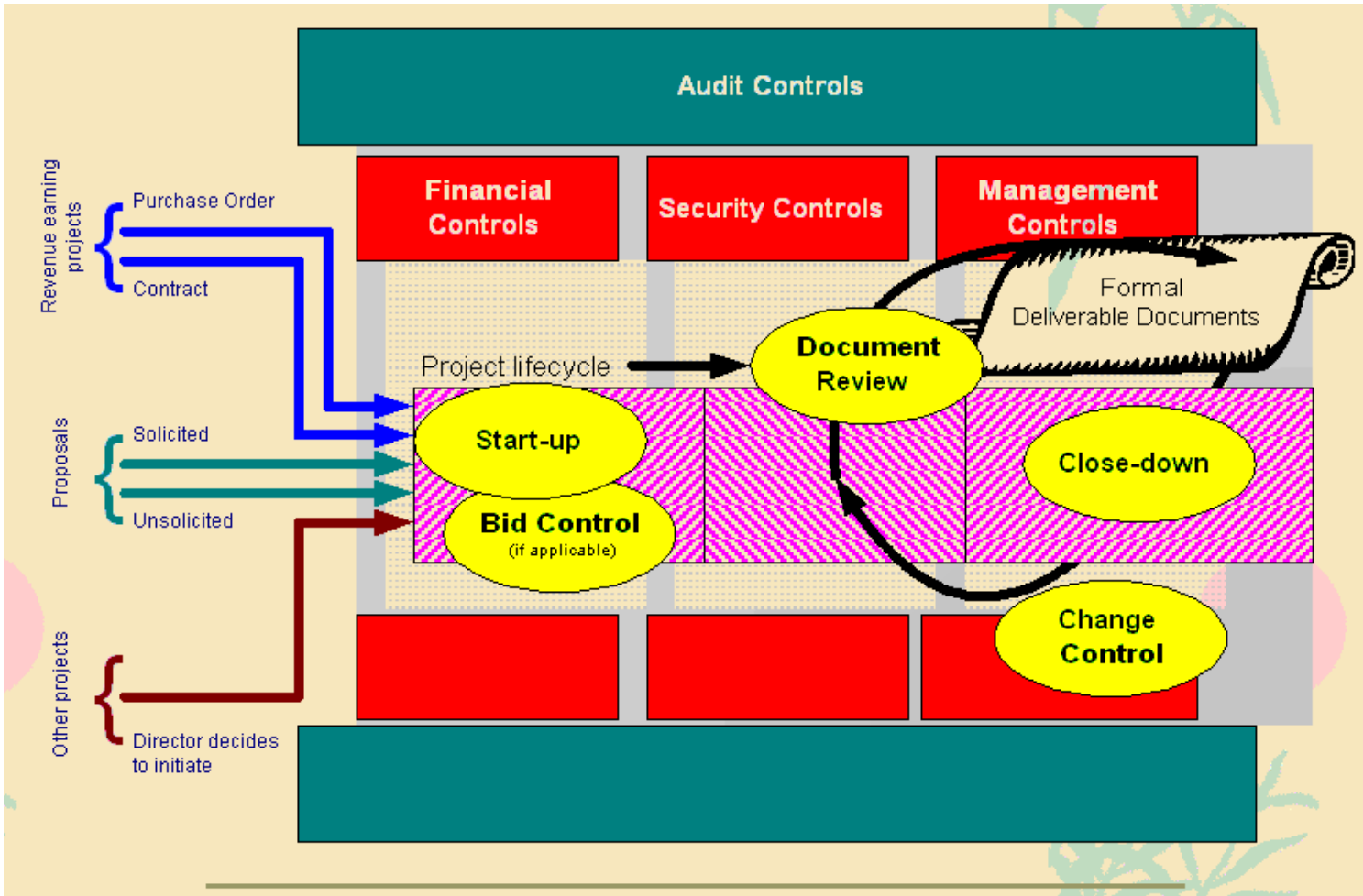
How BS 7799-2 fills the gaps

Get the I(S)MS Structure Right



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Standards are Just a Perspective

GAMMA

MANAGEMENT REQUIREMENTS

3.1 General

The organisation shall establish and maintain a documented ISMS. This shall address the assets to be protected, the organisation's approach to risk management, the control objectives and controls, and the degree of assurance required.

3.2 Establishing a management framework

The following steps shall be undertaken to identify and document the control objectives and controls

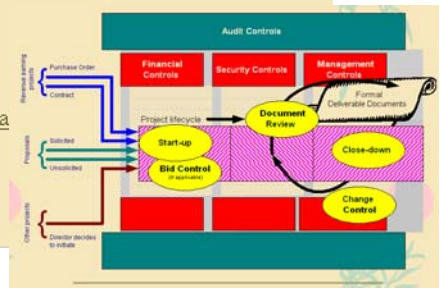
- The information security policy shall be defined.
- The scope of the ISMS shall be defined. The boundaries shall be defined in terms of the characteristics of the organisation, its location, assets and technology.
- An appropriate risk assessment shall be undertaken. The risk assessment shall identify the threats to assets, vulnerabilities and impacts on the

GAMMA

INTRODUCTION

From an information security perspective, there are a number of concerns that fall out immediately from our business risk ana vulnerabilities that could exploited by various threats, which if successful, could result in:

- direct financial loss
- loss of reputation



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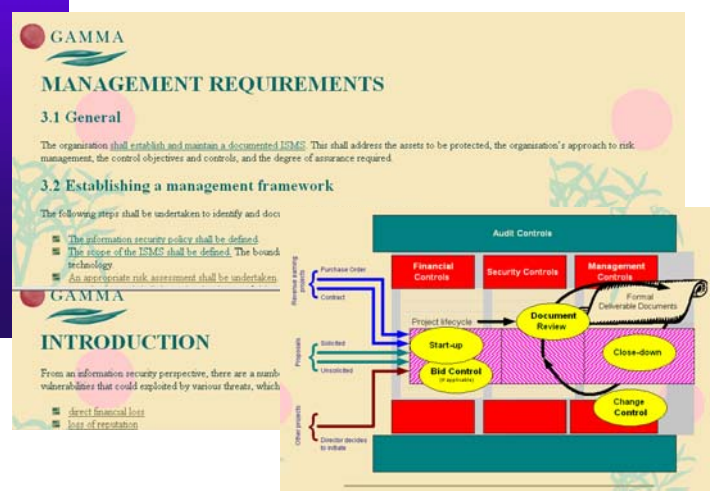
Controls/Risks are Many-Many



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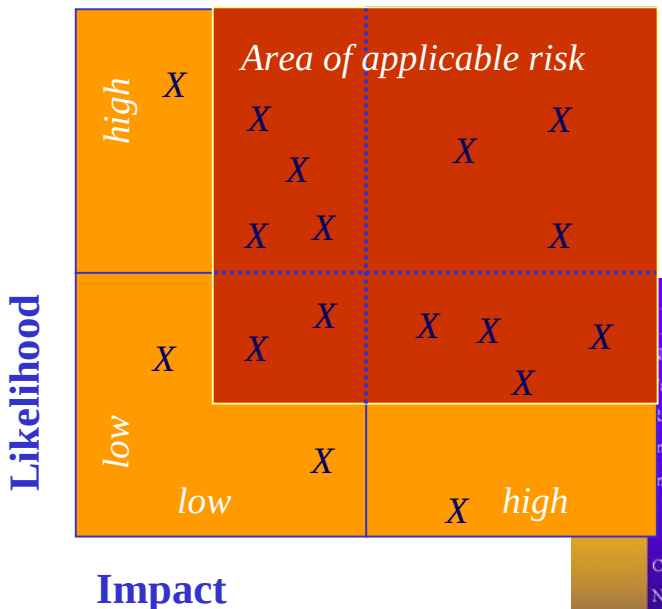
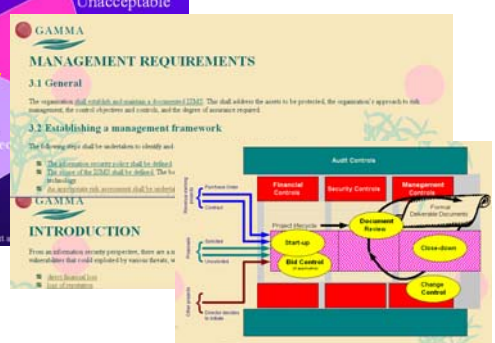
Know When There is a Problem

- E.g.when non-applicable risks become applicable!





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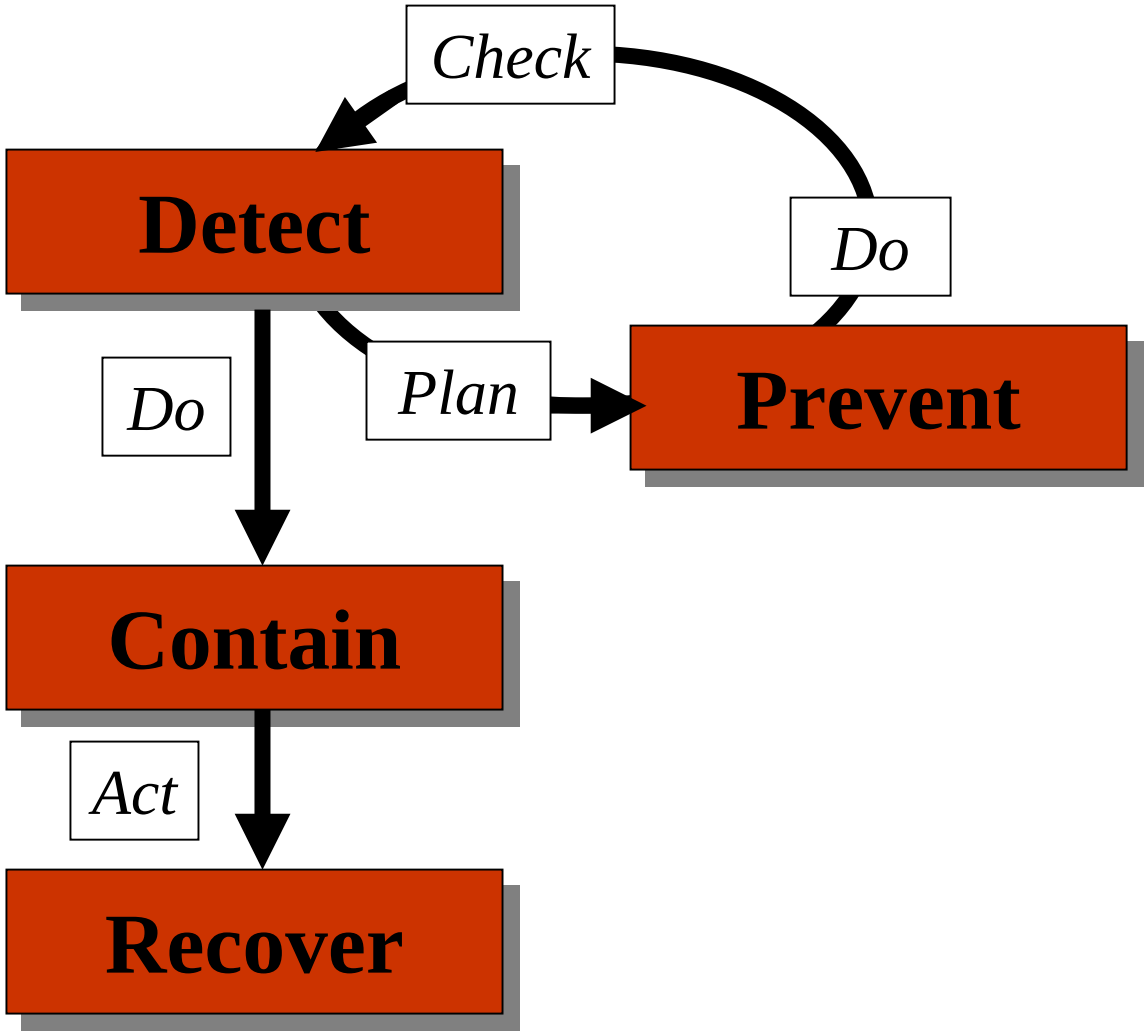
Take a Fresh Look at PDCA



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Ask the Right Questions

- "How worried are you if a hacker gets into the system?"
- "How concerned would you be if competitor X got hold of your trade secret Y?"
- "Would you be more or less concerned if there were in excess of £L million of unpaid invoices overdue by M months?"

Ask the Right Questions

- "How worried are you if a hacker gets into the system?"
- "How concerned would got hold of your trade s
- "Would you be more or were in excess of £L mi overdue by M months?"

- If office dead, what do we do now?
- Our recovery plan fails!
- If big error (fraud), who finds it?
- Can customer find website?
- Information on website OK?
- Our sales are way off - why?

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Pay Attention to Applications

- Work out what controls you need in the business applications
- Then work out how platform security can help
- I(S)MS metrics:
  - *How long does it take to find out the problem?*
  - *Is there sufficient time to fix it?*

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Summary

Summary

- Rather than educate the Board (ITGovInst approach), teach IT the business priorities
  - *Risk questions in overall business context*
  - *Emphasis on how do you know its wrong*
  - *Applications before platforms*
- BS7799-2:2002 – the kernel on which to build
  - *Risk-based management standard*
  - *Concise PDCA-based specification with guidance*
  - *Certifiable*
  - *Integrates well with other standards*

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The Answer to the Question

Better to teach the business priorities to the information technologists, and consider security from the application perspective. The big ones (Bearings, Enron, …) are all application issues. ***There should only be corporate governance.*** *"This" governance and "that" governance merely clouds the issue. Internal Controls are the processes that implement the mission. Controlling everything is impossible and too expensive. Who can ever think of all the risks anyway. Therefore we need risk analysis to establish priorities. PDCA then takes over* ***and BS 7799-2:2002 is a good place to start****.*

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