REFLECTIONS ON EDUCATION AND RESEARCH IN GOVERNANCE, AUDITING AND MANAGEMENT OF IT

A story of risk, value, uncertainty, aircraft carriers, racing cars and sailing trips.

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ENTERPRISE GOVERNANCE OF IT

Five domains but really only two subjects

Risk and Value
ENTERPRISE GOVERNANCE OF IT

How are we dealing with Value?

- Process maturity
- Portfolio approach
- Financial transparency of projects
- IT Intensity
- Percentage of new developments
- etc

ITGI, ING and IBM – 2006 – in support of VaIIT
**IT Value Principles**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Results CIO Interviews</th>
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<tr>
<td>IT-enabled investments will be managed as a portfolio of investments.</td>
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<td>IT-enabled investments will include the full scope of activities that are required to achieve business value.</td>
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<td>IT-enabled investments will be managed through their full economic life cycle.</td>
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<td>Value delivery practices will recognize that there are different categories of investments that will be evaluated and managed differently.</td>
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<td>Value delivery practices will define and monitor key metrics and will respond quickly to any changes or deviations.</td>
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<td>Value delivery practices will engage all stakeholders and assign appropriate accountability for the delivery of capabilities and the realization of business benefits.</td>
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<td>Value delivery practices will be continually monitored, evaluated and improved.</td>
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ITGI, ING and IBM – 2006 – in support of ValIT
ENTERPRISE GOVERNANCE OF IT

How are we dealing with Risk and Value?

McKinsey & London School of Economics surveying 100 companies – Oct 2005
How are we dealing with Risk?

**WHAT**
- Assess
- Respond
- Follow up

**WHO**
- Technical
- Supervisory
- Middle Management
- Senior Management
- Executive

**ACTIVITIES**
- React to events
- Collect Risk related Data
- Supply Info for Business Decisions
- Integrate with ERM
- Establish & Maintain a Common Risk View

CIOnet and ISACA – Survey of 56 CIO’s – Aug 2009
ENTERPRISE GOVERNANCE OF IT

How are we dealing with Risk?

CIO/CEO Discussion topics by priority – CIONet and ISACA Survey Aug 2012 of 90 CIO's
## Enterprise Governance of IT

### How are we dealing with Risk?

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<tr>
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<th>Depth</th>
<th>Frequency</th>
<th>Mechanism</th>
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<td>Cost</td>
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<td>Effectiveness</td>
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<td>Agile/Innovation</td>
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<tr>
<td>Risk</td>
<td>Brown</td>
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Heatmap of depth, frequency and mechanisms when CIO’s communicate about IT with Board and Executive

CIO/CEO Discussion topics by priority – CIOMNet and ISACA Survey Aug 2012 of 90 CIO’s
Project failures and budget overruns have a **weak** correlation with
- **Fit with strategy**
- **Reuse of the resources**
- **Commitment of top management**

High-risk IT-projects do well and have a **strong** correlation with
- **Internal Rate of Return is high**
- **Business demand is high**
- **The solution is innovative**
- **Strategic impact is high**

Hope is not a method!

Delivering 85% functionality with a 25% budget overrun, turns an ROI of +15% into and ROI of -30%

Business case estimates should therefore consider past performance
For both risk and value, accept uncertainty and deal with it!
FAILURE IS NOT AN OPTION

- Where to get insights in dealing with uncertainty
- Learn from high reliability organisations (HROs)
- Lessons from the operation of an aircraft carrier
FAILURE IS NOT AN OPTION

1. When in port: Chain of Command

2. When at sea: Delegate one level down
3. When the heat is on: delegate to the team leaders

4. A barely 20yr old seaman decides whether a billion dollar plane lands or not
FAILURE IS NOT AN OPTION

- Cascade instructions/strategy down and translate for the people at that level
- Delegate down in function of the situation
- Promote team work
- Constant coaching, testing, teaching each other
- Continuous communication
Management Practices that Work

What makes companies perform well? To find this holy grail of management studies, a McKinsey team analyzed upward of 100,000 questionnaires to uncover the practices of 400 business units in 230 companies around the world.

The team eventually arrived at one winning combination:

- clear roles for employees (accountability)
- a compelling vision of change (direction), and
- an environment that encourages openness, trust, and challenge (culture).

Nothing else came close in improving organisational performance.
RISK AND VALUE TIPS

IT Audit

ACCOUNTING

INFORMATION TECHNOLOGY

MANAGEMENT

For Auditors and Accountants
Why does a car have brakes?
RISK AND VALUE TIPS

IT Audit

For Business Managers and Executives
RISK AND VALUE

Which cars have the best breaks?
Overcoming a bias against risk

Risk-averse midlevel managers making routine investment decisions can shift an entire company’s risk profile. An organization-wide stance toward risk can help.

Here’s a quick test of your risk appetite. Your investment team has approached you with two variations of the same project: you can either invest $20 million with an expected return of $30 million over three years or you can invest $30 million with an expected return of $40 million over two years. Which would you choose? If you chose the $40 million option, you might be a risk-lover. If you chose the $30 million option, you might be a risk-avoider. Your decision might reflect your risk tolerance or your investment horizon. What about your team members? How consistent are they? And how does this consistency—or lack thereof—affect your organization’s overall risk profile?
RISK AND VALUE
Focus on Enterprise Value

Sir Brian Pitman
Chairman Lloyds TSB

“Between 1983, when I was named chief executive of Lloyds Bank, and 2001, when I retired, Lloyds’s market capitalization grew from £1 billion to £40 billion.”

“Getting people to concentrate on things that really create value for the company demands something else: the transformation of their beliefs.”

Harvard Business Review Apr 2003
RISK AND VALUE

Invest in Enterprise Governance of IT

- Provide strategic direction for IT to maintain/create shareholder value
- State compliance expectations to mitigate IT related risks

Board objectives for IT

- Translate the direction into IT strategy and policy
- Define organisational structure and responsibilities

CEO objectives for IT

- Translate IT strategy into plans
- Build the enterprise IT architecture
- Deliver business benefits (cost optimisation, innovation, risk reduction)

IT Performance Report

- Compare and evaluate
- Redirect where necessary

IT Performance Report

- Verify results
- Correct where necessary
- Report progress

- Report results
- Continuously improve
RISK AND VALUE TIPS

For IT management and professionals
RISK AND VALUE

Focus on Effectiveness

Effective?

IT Alignment = IT fully understanding business priorities and has adequate staff to respond to those needs

IT Effectiveness = getting projects done as specified, on budget and on schedule

Aligned?

From a Bain survey, polling technology and business executives at 450 publicly-traded companies on IT Alignment and IT Effectiveness and what the effect is on Growth and IT Spend. (From CIO Insight, September 2007)
WHAT WITH RESEARCH?

Birth place of enterprise governance of IT

Leadership for multi-disciplinary research

IT Audit

ACCOUNTING

INFORMATION TECHNOLOGY

MANAGEMENT
High-impact Cost IT Processes
- Define a strategic IT plan (P01).
- Manage the IT investment (P05).
- Communicate management aims and direction (P06).
- Assess and manage IT risks (P09).
- Identify automated solutions (A11).
- Acquire and maintain application software (A12).
- Acquire and maintain technology infrastructure (A13).

High-impact Val IT Processes
- Define and implement processes (VG2).
- Establish effective governance monitoring (VG5).
- Continuously improve value management practices (VG6).
- Establish strategic direction and target investment mix (PM1).
- Update operational IT portfolios (IM7).

High-impact IT Goals
- Align the IT strategy to the business strategy (IT_Corp5).
- Provide service offerings and service levels in line with business requirements (IT_User1).
- Acquire, develop and maintain IT skills that respond to the IT strategy (IT_Fut1).
- Ensure that IT demonstrates continuous improvement and readiness for future change (IT_Fut3).

High-Impact IT Goals
- Improve IT’s cost-efficiency (IT_Corp5).
- Align the IT strategy to the business strategy (IT_Corp5).
- Translate business functional and control requirements into effective and efficient automated solutions (IT_User3).
- Accomplish proper use of applications, information and technology solutions (IT_User4).
- Provide IT agility (in responding to changing business needs) (IT_Oper4).
- Seamlessly integrate applications and technology solutions into business processes (IT_Oper5).
- Acquire, develop and maintain IT skills that respond to the IT strategy (IT_Fut1).
- Ensure that IT demonstrates continuous improvement and readiness for future change (IT_Fut3).

High-impact Business Goals
- Achieve cost optimisation of service delivery (B_Cust4).
- Obtain reliable and useful information for strategic decision making (B_Cust6).
- Improve and maintain business process functionality (B_Int1).
- Improve and maintain operational and staff productivity (B_Int2).
- Enable and manage business change (B_Int3).
- Optimise business process costs (B_Int5).

See the accompanying Research Report from the IT Governance Institute and the University of Antwerp Management School.
Cluster correlations simplified and summarised

**IT PROCESSES**
- Define a strategic IT plan
- Manage the IT investment
- Communicate management aims and direction
- Assess and manage IT risks
- Identify automated solutions
- Acquire & maintain applications and infrastructure
- Portfolio and investment management

**IT GOALS**
- Align the IT strategy to the business strategy
- Provide service offerings and levels in line with business reqmnts
- IT skills that respond to the IT strategy
- Continuous improvement and readiness for future change

**BUSINESS GOALS**
- Cost optimisation of service delivery and business processes
- Obtain reliable and useful information for strategic decision-making
- Improve and maintain business process functionality and operational productivity
- Enable and manage business change
LEVERAGING ISACA RESEARCH

- Define a strategic IT plan
- Manage the IT investment
- Communicate management aims and direction
- Assess and manage IT risks
- Identify and prioritize opportunities
- Acquire and maintain applications and infrastructure
- Portfolio and investment management

- Align the IT strategy to the business strategy
- Provide service offerings and levels in line with business requirements
- Skills that respond to the IT strategy
- Continuous improvement and readiness for future change

- Cost optimization of service delivery and business processes
- Drive tangible and useful information for strategic decision-making
- Improve and maintain business process functionality and operational productivity
- Enable and manage business change

➢ Better information on ROI of practices in IT
➢ Knowing-Doing Gap
➢ High Tech --> High Touch
**Kubernán** (gr): to steer a ship – the process of continually orienting and adjusting

“Managing an uncertain journey to an uncertain destination”
...others build windmills.

When the wind blows, some will build walls ...