JAMES A ROBERTSON AND ASSOCIATES

EFFECTIVE STRATEGIC BUSINESS SOLUTIONS

Engaging the Board in Strategic Information Technology Decisions

GIBS Board Leadership Programme

Dr James A Robertson PrEng

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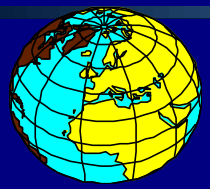
ENGAGING THE BOARD IN STRATEGIC I.T. DECISIONS

QUALIFICATION OF WHAT FOLLOWS

- Information technology CAN be deployed in strategically powerful ways
- I.T. can create material bottom line benefit
- Personal benchmark -- doubled turnover in 12 months and created a revenue stream that was sustained for a decade
- BUT many projects fail to meet expectations
- Where is I.T. going?
- How do you achieve success?

ENGAGING THE BOARD IN STRATEGIC I.T. DECISIONS -- AGENDA

1. I.T. Governance issues -- failure is rife and Board liability is a reality
2. Strategy -- what causes your organization to thrive?
3. Strategic capability -- delivery -- causing the organization to thrive
4. Essential I.T. knowledge for Board members -- what is I.T. -- really?
5. I.T. the harshest judge of governance -- why I.T. will highlight governance issues
6. Executive custody -- how will you know that you have custody of your I.T.?
7. I.T. strategic alignment case studies -- how I.T. decisions can sabotage business



CONTEXT: INFORMATION TECHNOLOGY GOVERNANCE DEFINED BY KING

Governance = Care!

Board is responsible for I.T. Systems

Mervyn King

CONTEXT: INFORMATION TECHNOLOGY GOVERNANCE

1. "This [I.T.] is an area where boards of directors will be named in stockholder suits"

2. "Senior management is not engaged enough in strategic information technology decisions and situations that could put the company at risk."

3. "Information systems could cause the next outbreak of Enron-like corporate scandals."

4. "I.T. is the next corporate disaster waiting to happen"

"Creating an IT Watchdog for the Board by Assembling an I.T. Oversight Committee" presented to the I.T. Governance and Strategy Summit by Professor Rossouw von Solms of Nelson Mandela Metropolitan University quoting Richard Nolan of Harvard Business School in Harvard Business Review

CONTEXT: INFORMATION TECHNOLOGY GOVERNANCE

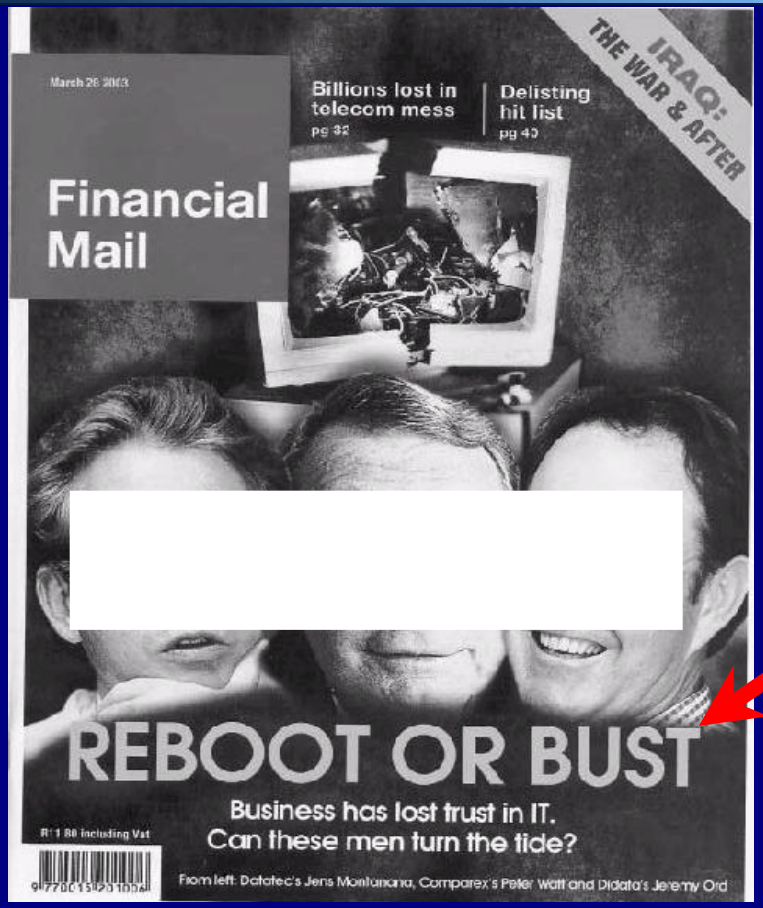
1. I T is now seen as being an integral part of enterprise strategy rather than a mere enabler within organizations

2. Almost all organizations today are absolutely dependent on I.T.

3. Major I.T. Write-Offs
   - After spending seven years and close to half a billion dollars implementing a mainframe E.R.P. system, the Dow Chemicals Co stopped and started over with a client-server version
   - Nike -- $400 million against their supply chain management system
   - Disney -- $878 million against its go.com web portal
   - Kmart -- $195 million against supply chain hardware and software
   - Gateway -- R143 million against I.T. projects no longer fitting its strategy

"Creating an IT Watchdog for the Board by Assembling an I.T. Oversight Committee" by Professor Rossouw von Solms of Nelson Mandela Metropolitan University at the I T Governance and Strategy Summit

CONTEXT: INFORMATION TECHNOLOGY AN INDUSTRY CHARACTERISED BY FAILURE



"19 out of 20 E.R.P. Implementations do NOT deliver what was promised"

Duncan McLeod

CONTEXT: INFORMATION TECHNOLOGY
AN INDUSTRY CHARACTERISED BY FAILURE

1. **Seventy percent of I.T. investments fail TOTALLY**
2. **Another twenty percent fail to fully satisfy the original business requirement**
3. ***"19 out of 20 E.R.P. implementations do not deliver "what was promised"*** **McLeod**
4. **Ninety percent of strategic plans fail**
5. **Seventy percent of B.P.R. investments fail**
6. ***"Most organisations are not making better decisions than they did five years ago."*** **Gartner**

A CRITICAL PRINCIPLE FOR SUCCESS

Engineer Against Failure

Engineers do NOT design bridges to stand up!

A CRITICAL PRINCIPLE FOR SUCCESS

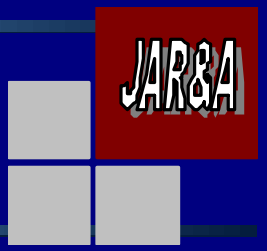
Engineer Against Failure

Engineers do not design bridges to stand up!

They design bridges NOT to fall down!

MANAGEMENT FOR SUCCESS

FOUNDATIONS OF THE APPROACH



1. **Buildings stand up, aircraft fly, ships float, machines work, motor vehicles operate, houses keep out the weather, etc**

2. **Expect the same level of reliability from I.T.**

3. **A successful solution is one that does NOT FAIL**

Reliably -- AND people know how to use them effectively and profitably

Success = getting to "NOT failure"

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STRATEGY DEFINED

WHAT IS STRATEGY?

STRATEGY DEFINED

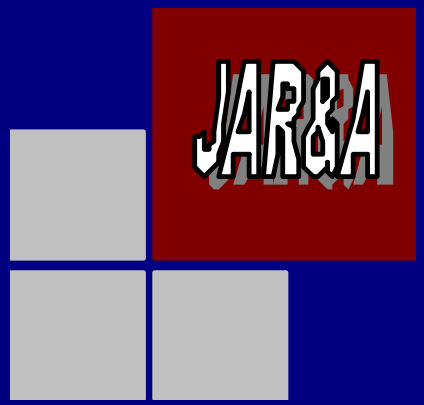
WHAT IS STRATEGY?

1. **The essence of why a business exists and how it thrives**

2. **Vital context to I.T.**

3. **I.T. failure is primarily a failure of corporate strategic capability**

DOING THE RIGHT THINGS



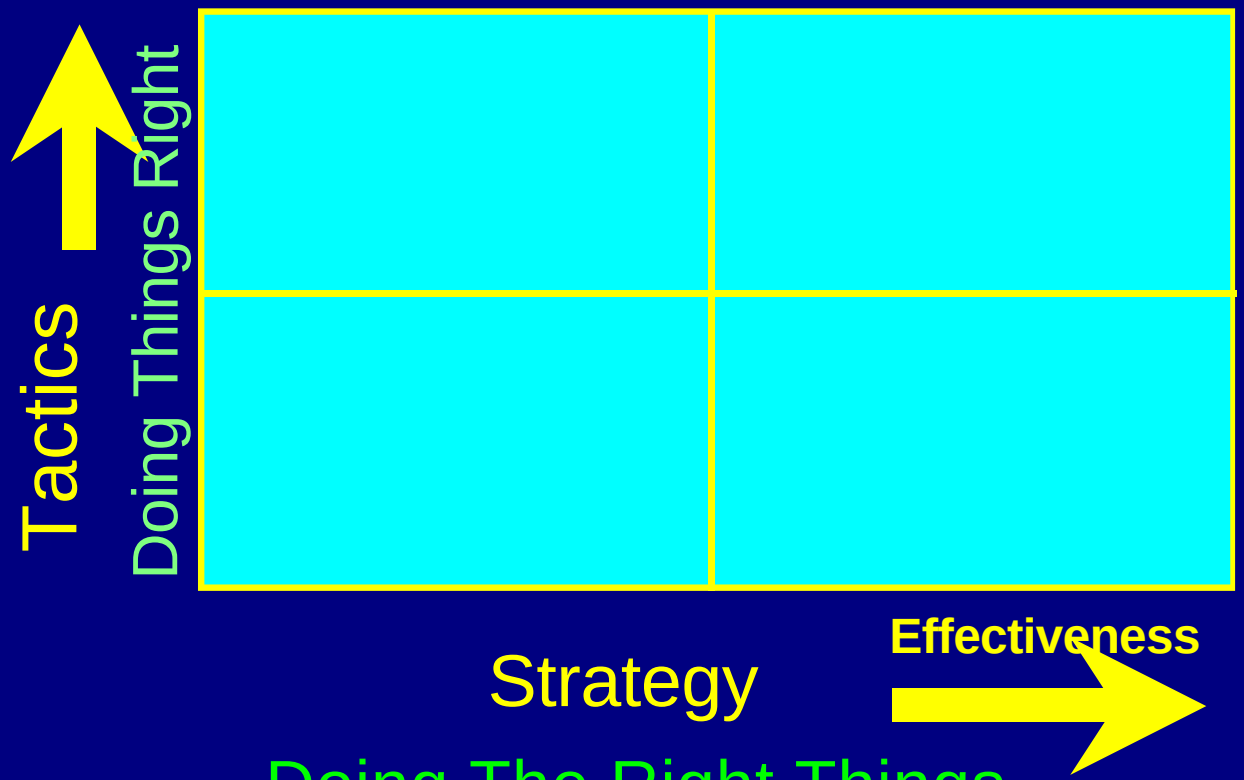
Professor Malcolm McDonald
Cranfield School of Management

DOING THINGS RIGHT

Professor Malcolm McDonald
Cranfield School of Management

STRATEGY vs TACTICS : A DEFINITION

Professor Malcolm McDonald



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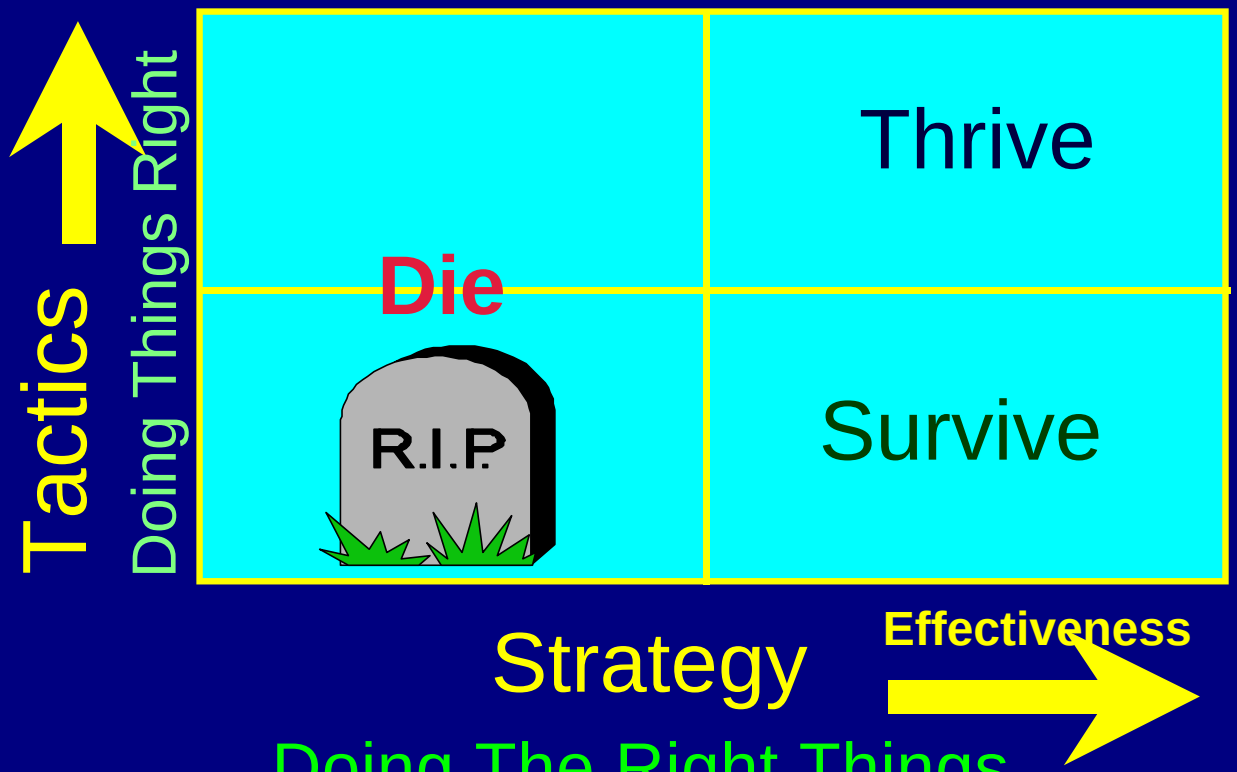

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STRATEGY DEFINED

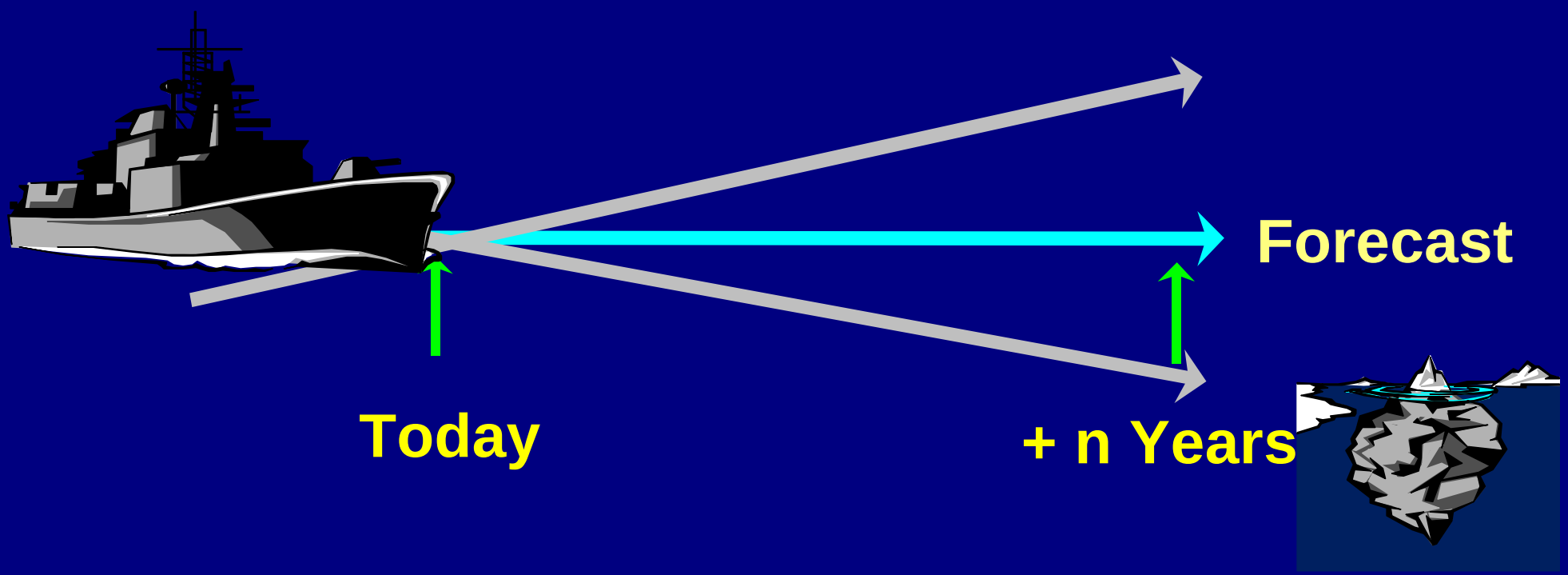
WHAT IS YOUR ORGANIZATION's STRATEGY?

What is the essence of why your organization exists and how it thrives?

THE TIME DEPENDENCY OF STRATEGY

Professor Malcolm McDonald

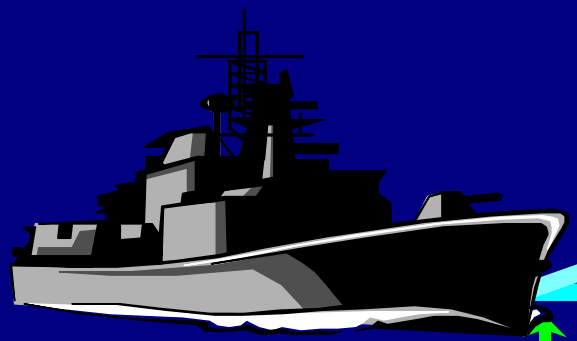
NOT A FORECAST



THE TIME DEPENDENCY OF STRATEGY

Professor Malcolm McDonald

NOT AN OBJECTIVE



Objective

Forecast

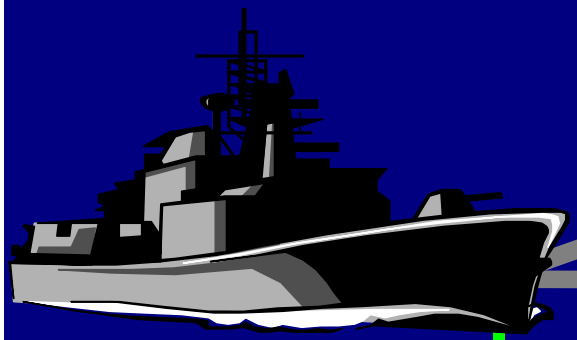
Today

+ n Years

THE TIME DEPENDENCY OF STRATEGY

Professor Malcolm McDonald

STRATEGIC PLAN =
THE PATH TO COMPETITIVE ADVANTAGE



Objective

Strategic Plan

Forecast

Today

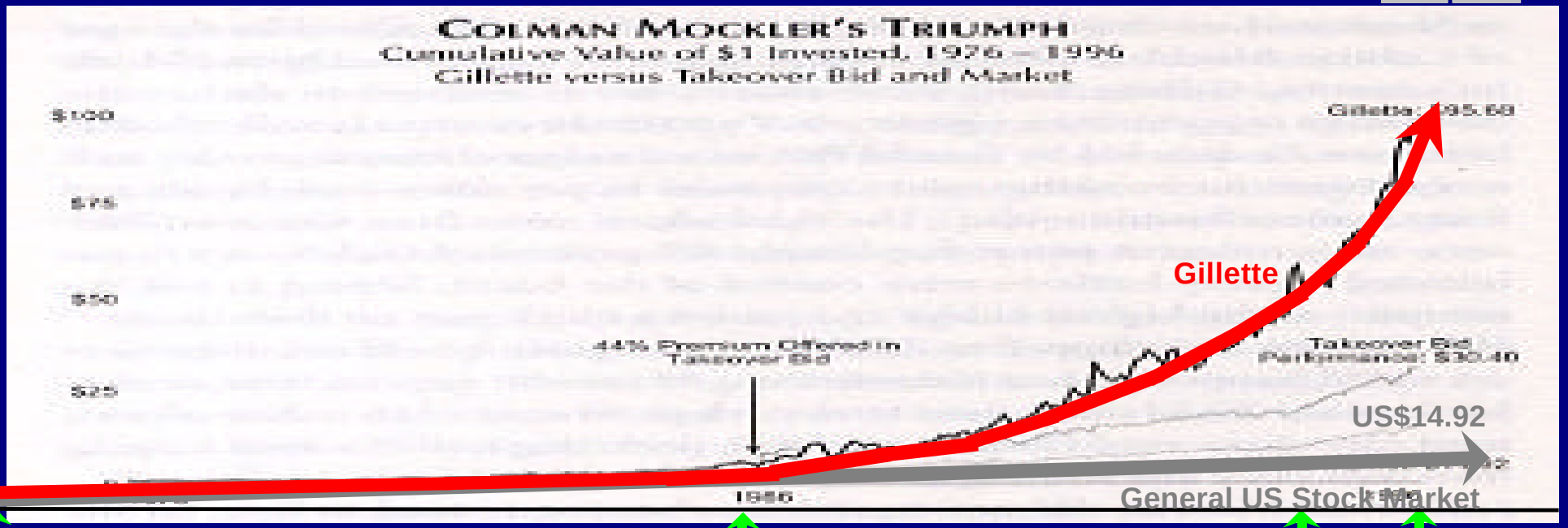
A realistic trajectory of continuous improvement within business constraints

+ n Years

Fundamentally an exponential curve

FROM GOOD TO GREAT

THE EXPONENTIAL TRAJECTORY OF GOOD TO GREAT



1975
Colman Mockler Appointed CEO

1986
Hostile takeover thwarted

1991
Mockler retires

1996
End Study

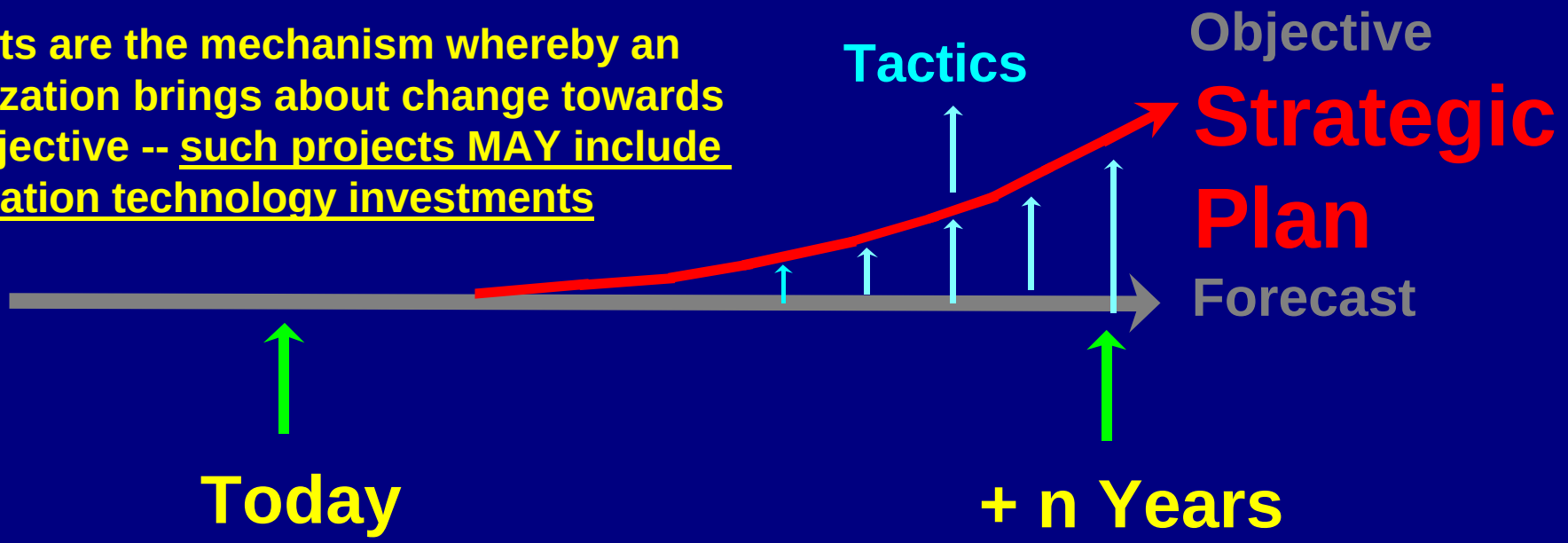
THE TIME DEPENDENCY OF STRATEGY

Professor Malcolm McDonald

Strategic plans must be future focused

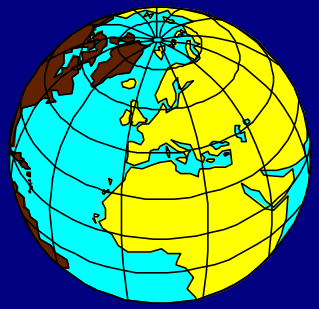
Design your I.T. solutions for the future - NOT the past

Projects are the mechanism whereby an organization brings about change towards the objective -- such projects MAY include information technology investments



THE CORE OBJECTIVE -- DIFFERENTATION

Create Competitive Advantage



ECONOMIC TRENDS : HISTORICAL DIFFERENTIATORS

- 60's Production
- 70's Sales
- 80's Finance
- The 90's and 2000's
  - Excess supply
  - Single division cannot solve
  - A boom is unlikely!!
- Strategic Issues are Vital

Implies a Holistic, Integrated Business Approach Including Effective I.T.

THE CORE OBJECTIVE -- DIFFERENTATION

Create Competitive Advantage

ECONOMIC TRENDS : WHERE ARE WE NOW?

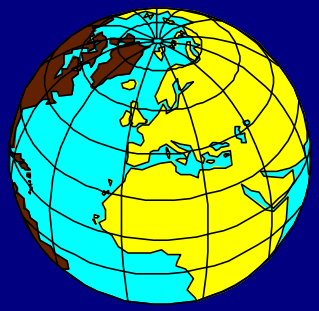
- Sixty years after World War II we live in an age like no other
- The differentiators of past decades are necessisties for survival
- How will corporations differentiate themselves and grow in the next ten years?
- Notwithstanding the 70% outright failure rate of I.T. investments)

Implies a Holistic, Integrated Business Approach Including Effective I.T.

THE CORE OBJECTIVE -- DIFFERENTATION

Create Competitive Advantage

THE KEY DIFFERENTIATORS IN 2000 AND BEYOND



- Market Focused Strategy
- Utilization of the Human Resource
- Effective Management Decision Making

World Competitiveness Report; McDonald & Others

Requires Information To Make The Right Decisions

STRATEGY DEFINED

SO --- WHAT IS STRATEGY?

1. STRATEGIC CONSTANTS
   - The reason the organization exists
   - Strategic value proposition - what is the essential value we deliver?
   - Strategic driving force - what propels us?
   - Values - how do we conduct ourselves?
   - What we will NOT do

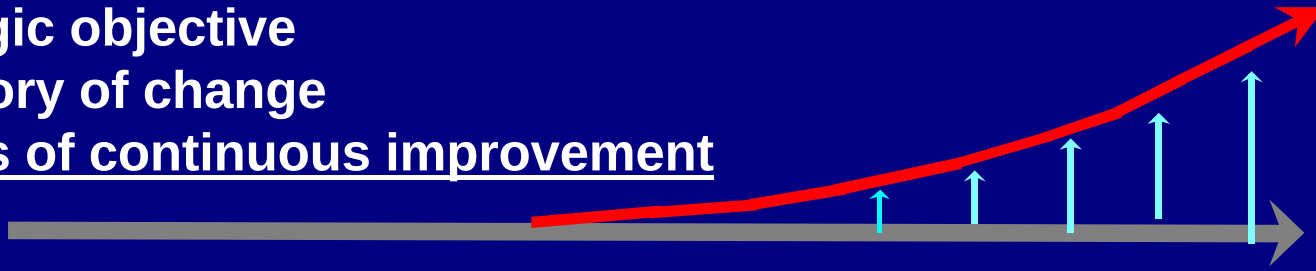
2. STRATEGIC VARIABLES - CHANGE INCREMENTALLY
   - Strategic vision - where are we going?
   - Strategic objective - what we are aiming to achieve?
   - Strategic / competitive environment - SWOT, differentiators, alienators, market factors, etc

Core strategy is constant (Porter, Robert)

STRATEGY DEFINED

SO --- WHAT IS STRATEGY?

3. **STRATEGIC PLAN**
   - Specific, detailed projects and activities designed to achieve the strategic objective
   - Maps out a trajectory of change
   - Living plan -- basis of continuous improvement



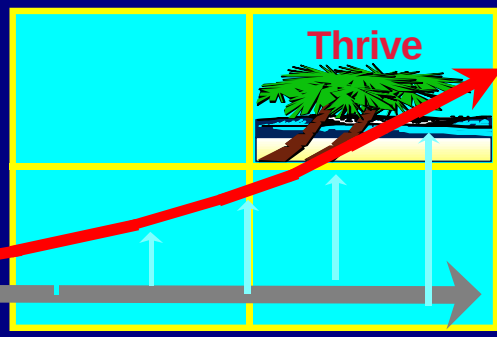
4. **STRATEGY IS NOT**
   - NOT Strategems - wheeling or dealing or manipulation
   - NOT a way of doing things or a method or a way of running projects or operating a business
   - Should NOT change every year
   - NOT three days at a conference venue once a year

STRATEGY DEFINED

SO --- WHAT IS STRATEGY?

5. STRATEGY IS

- **Multifaceted, complex, abstract, holistic**
- **Requires cognitive thinking to define, describe and translate into action**



- **Describes the essence of the market forces that impact the business and how the business interacts with the market in order to succeed and plans to interact with the market in the future**

- **Strategy impacts every facet of the organisation**

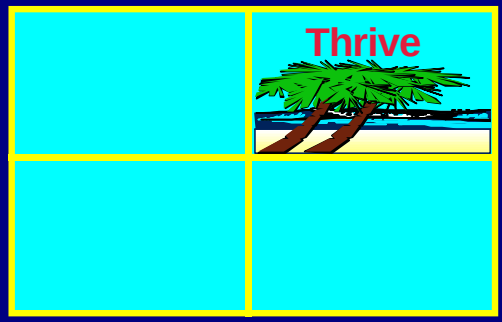
The essence of why an organization exists and how it thrives

STRATEGIC ALIGNMENT

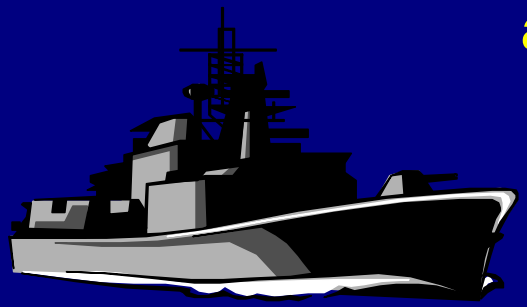
Defined

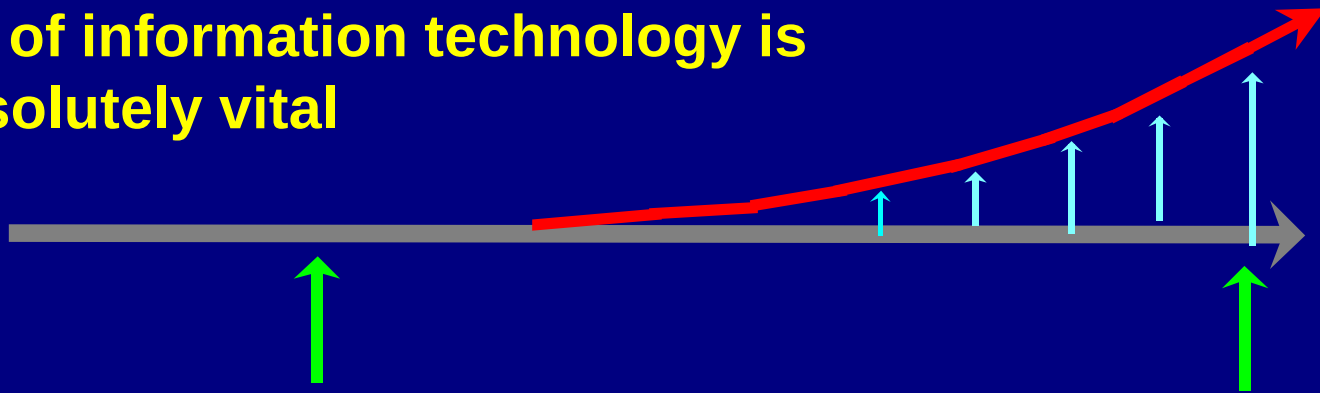
1. If you don't know where you are going, any road will get you there!

2. Strategic alignment is about defining where the business wants to go and then aligning all activities to support the business to reach that destination



Strategic alignment of information technology is absolutely vital





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ESSENTIAL BUSINESS KNOWLEDGE

ESSENTIAL COMPONENTS OF STRATEGY

1. Core economic driver
2. Core human resource driver
3. Core market differentiator / value proposition / sales or marketing method
4. Core customer / market / user
5. Core asset / product / natural resource / size / growth
6. Core technology / capability / know-how / distribution
7. Essential reason the organisation exists (generally NOT profit)
8. Core values
9. Other

STRATEGIC MAPPING

Mapping and Managing the Strategic Environment and Objectives

CORE STRATEGIC PARAMETERS

Strategy and strategic drivers, also what NOT done

4. EXTERNAL STRATEGIC ENV

Horizon, medium term, short term, immediate incl threats, opp's, etc

5. INTERNAL STRATEGIC ENV

Strengths, weaknesses Operation, Systems, Managers, Staff, Workers

5.n Systems

Manual, mechanical, computerized, etc

1. SHAREHOLDER CSF'S

CORE STRATEGIC OBJECTIVES

Maximize value creation minimize value consumption

7. CORPORATE STRATEGIC GOVERNANCE

2. MARKET AND PRODUCT FACT

MAF, CSF, product fact, Market portfolio, etc Countered by alienators

3. SUPPLIER FACTORS

Supplier relationship and other supplier factors

6. STRAT CAPABILITY

(The Solution Map)

Ess Q's, realisation (value), StratProc, Crit Fct Success Mgmt of failure factors, etc

Technology is a small part of the entire cognitive picture of why an organization exists and how it thrives

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THE ESSENCE OF STRATEGIC CAPABILITY IN THE I.T. CONTEXT

1. Clear, concise definition of why the organization exists and how it thrives
2. Concise prioritized definition of the core strategic drivers
3. Concise prioritized definition of how the organization interacts with shareholders / owners, customers / markets, suppliers, external and internal environment
4. Effective management of projects to deliver the expected business value outcome on time and on budget
5. Effective management of factors causing failure
6. Executive custody -- strategic governance -- ensure doing the right things
7. Overall strategic efficiency -- doing right things? -- now do them well

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   McLeod
4. **Ninety percent of strategic plans fail**
5. **Seventy percent of B.P.R. investments fail**
6. ***"Most organisations are not making better decisions than they did five years ago."***
   Gartner

Recap

ESSENTIAL TECHNOLOGY KNOWLEDGE

I.T. KNOWLEDGE FOR INFORMED DECISIONS

1. Computers Are Adding Machines (On / Off Switches)
2. Databases Are Warehouses
3. Automation Software Products Are Like Machines
4. Networks Are A Postal Service
5. Graphics is A Presentation Or Navigation Aid - Versus Text
6. Validation Codes Are the Primary Way Computers Know About Your Business
7. People and Business Strategy Determine the Value Delivered

ESSENTIAL BUSINESS KNOWLEDGE

BUSINESS KNOWLEDGE FOR INFORMED I.T. DECISIONS

1. Every organisation has a fundamental reason it exists -- strategy
2. Money is only a medium of exchange and measurement of perceived value by people
3. Only humans create, destroy and determine value
4. Ways of being create or destroy value
5. Ways of doing create or destroy value
6. Service or supply to others creates exchangeable value
7. The rest -- technology, assets, etc

ESSENTIAL TECHNOLOGY KNOWLEDGE

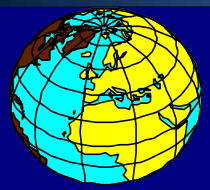
I.T. INVESTMENT DRIVERS

1. Fashion / corporate peer pressure / fear / vendor driven obsolete
2. Truly obsolete / worn out
3. Badly maintained / not sustainable
4. Stabilization / consolidation of existing infrastructure and capability
5. Increased capacity to support growth
6. Productivity / efficiency opportunities -- do more with what you have
7. **Strategic efficiency and innovation**

CAUSES OF INFORMATION TECHNOLOGY INVESTMENT FAILURE

65%

1. Information technology mythology (30%) ← Manage at ALL levels Reality checks
2. Lack of executive custody and inappropriate policies (20%)
3. Lack of strategic alignment (15%)
4. Lack of an engineering approach (12%)
5. Poor data engineering (10%)
6. People / soft issues (8%)
7. Technology issues (5%)



INFORMATION TECHNOLOGY PITFALLS

1. Excessive unqualified ethusiasm
2. Fashion
3. Business ignorance by technologists
4. Technology ignorance by business leaders
5. Abdication of responsibility by business
6. Sales driven I.T. service providers
7. Lack of ethics and accountability

WHAT IS SABOTAGE?

- A conscious or unconscious response to unwanted or threatening change that results in actions that hinder, delay, obstruct, damage or wreck a change initiative
- Coming late, leaving early, “too busy" ...
- "Project hero" -- “my way so you clone me no matter how inefficient for the computer system”
- Fear of unemployment, pride, holding on to personal investment in the legacy, etc
- Frequently difficult to identify
- Requires clear leadership and constructive actions and psychology

Natural and almost inevitable at some level unless effectively managed

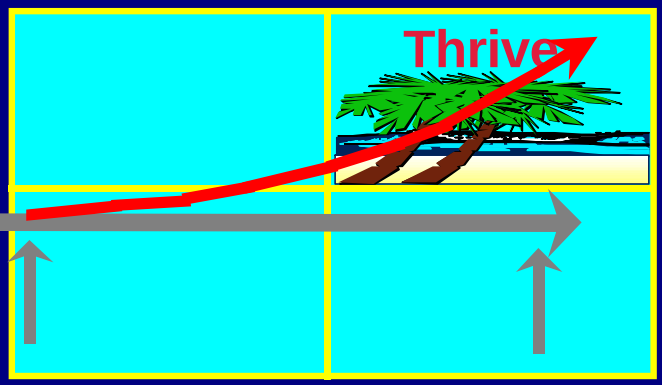
I.T. is ALL about PEOPLE!

MANAGING FOR SUCCESS

MANAGEMENT COMPONENTS (% FOR SUCCESS)

59%

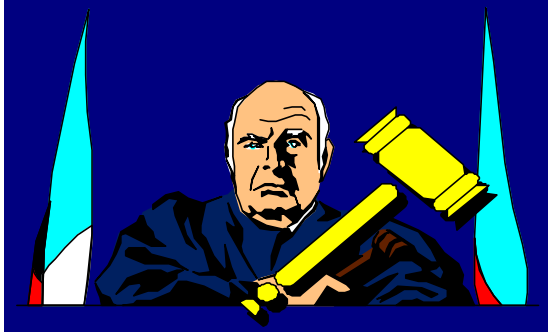
1. 25% -- Executive Custody and Policy
2. 18% -- Strategic Architecture
3. 16%-- Strategic Alignment
4. 14% -- Business Integration and Optimization
5. 12% -- Project Schedule, Budget and Resource Management
6. 10% -- Data Engineering and Information Management
7. 5%-- Technology Components



The first three require quality EXECUTIVE decisions and limited time

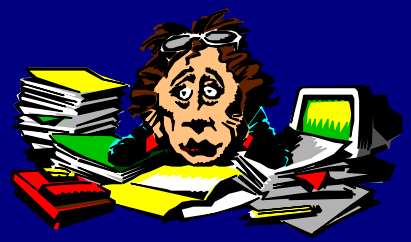
WHERE IN THE WORLD IS I.T. GOING?

WHERE SHOULD YOU FOCUS YOUR ATTENTION?



1. Dramatic failures, litigation and legislation (5%)
2. Software company shake outs (6%)
3. Long software product life spans (7%)
4. Less is more (10%)
5. Executives take custody (20%)
6. Emphasis shifts to decision support (22%)
7. Corporate level solution innovation (30%)

Radical redefinition of the industry



Leading edge technology mothballed

A challenging and exciting place to be

Run of the mill technology worlds most successful aircraft

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THE HARSHEST JUDGE OF GOVERNANCE

1. Bad I.T. decisions can wreck your business
2. I.T. Strategy is a BUSINESS responsibility
3. I.T. Strategy is NOT about technology policy it is about business initiative
4. Definition of strategy should be a concise, high intensity, business executive activity
5. I.T. is a collection of tools and tools should work all the time
6. I.T. will harshly judge executives who abdicate responsibility
7. There is a huge opportunity for creative thinking to define concise ways for I.T. to add REAL VALUE in your organization!

THE HARSHEST JUDGE OF GOVERNANCE

1. **Computers are dumb and abstract -- they ONLY do what a human being tells them**

2. **They will never exceed the abstract, intuitive (gut) decision making capability and leadership of a group of human beings who collectively have centuries of knowledge and experience i.e. the board**

3. **If you get an I.T. project wrong it will simply NOT deliver -- no matter how much you talk it up -- engineer against failure**

ENGAGING THE BOARD IN STRATEGIC I.T. DECISIONS -- AGENDA

1. I.T. Governance issues -- failure is rife and Board liability is a reality
2. Strategy -- what causes your organization to thrive?
3. Strategic capability -- delivery -- causing the organization to thrive
4. Essential I.T. knowledge for Board members -- what is I.T. -- really?
5. I.T. the harshest judge of governance -- why I.T. will highlight governance issues
6. **Executive custody -- how will you know that you have custody of your I.T.?**
7. **I.T. strategic alignment case studies -- how I.T. decisions can sabotage business**

EXECUTIVE INVOLVEMENT

How involved should executive management be in I.T. Strategy?

EXECUTIVE INVOLVEMENT

How involved should executive management be in I.T. Strategy?

How involved should executive management be in business strategy?

EXECUTIVE INVOLVEMENT

How involved should executive management be in I.T. Strategy?

How involved should executive management be in business strategy?

Executive Custody is an attitude, a state of mind, NOT a large amount of work

COMPONENTS OF ACHIEVING EXECUTIVE CUSTODY

1. **Leadership -- 50%**
2. **Engagement -- 30%**
3. **Prove it works -- 5%**
4. **Make it work -- 15%**

I.T. is ALL about PEOPLE!

Executive Custody is an attitude, a state of mind, NOT a large amount of work

CRITICAL EXECUTIVE QUESTIONS

Questions Every Executive Should Answer Before Saying "YES"

1. Do I have a clear definition of the value proposition that I own now and can communicate to the rest of the organization?
2. Do I have a clear definition of how the outcome will be accomplished?
3. Is there real acceptance of the real effort and investment required?
4. Is there real business commitment?
5. Am I (CEO / sponsoring executive) willing to be held accountable?
6. Am I willing and able to hold the responsible executive / manager accountable?
7. Am I willing and able to hold the service providers and vendors accountable?

WHAT IS EXCELLENCE?

THE CRITICAL COMPONENTS OF CORPORATE EXCELLENCE

1. Leadership (Strategic and Operational) -- 28%
2. Governance and Custody -- 20%
3. Strategic Definition -- 18%
4. Strategic Capability -- 16%
5. Standards and Policies -- 8%
6. Systems, Methods, Tools, etc -- 6%
7. Continuous Improvement -- 4%

I.T. is ALL about PEOPLE!

CRITICAL FOCUS AREAS FOR EXECUTIVE CUSTODY

1. Creating and delivering value to customers
2. Differentiating from competitors
3. Motivating and leading personnel
4. Meeting and exceeding owner expectations
5. Building exceptional partnerships with suppliers
6. Integrating and optimizing the business
7. Day to day operational efficiency and effectiveness ← 5%?

MANAGING FOR SUCCESS

CRITICAL COMPONENTS OF EXECUTIVE CUSTODY

1. CEO leadership, clarity, purposefulness, empowerment of subordinates, etc
2. Availability, effectiveness and efficiency of executives
3. Executive team role clarity, commitment, team work, constancy of purpose, etc
4. Business optimization
5. Strategic solution architecture
6. Technology and technical capability
7. Other aspects required to achieve executive custody = ownership "plus"

EXECUTIVE CUSTODY

Role of executives in Strategic Leadership

A key responsibility of executives is innovation that will generate high bottom line value outcomes

that is Strategic outcomes

Executives therefore define the role of information technology in creating sustainable competitive advantage

HOW TO STRATEGICALLY POSITION I.T.

THE ESSENCE OF I.T. INVESTMENT SUCCESS

1. Determine why your organization exists and how it thrives -- one sentence -- and then core drivers and strategic map
2. Determine where I.T. is getting in the way
3. Modify accordingly
4. Determine where I.T. can be used by BUSINESS PEOPLE as a tool to assist the business in its endeavours to thrive
5. Procure or modify accordingly
6. Communicate a clear intention -- leadership
7. Make it work -- this is a business action

Clear, concise, intuitive, cognitive thinking, communication and action by business executives -- the rest is grind by the business including the I.T. team

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ENGAGING THE BOARD IN STRATEGIC I.T. DECISIONS

CASE STUDIES

1. Fertilizer manufacture to custom recipe on credit coupled with a “no customization” E.R.P. policy

2. Short turnaround service promise coupled with manual printout and entry in the warehouse

3. Service beyond the call of duty coupled to a consultant who says “that is an unfair question” (about what is the essential driver of the business)

ENGAGING THE BOARD IN STRATEGIC I.T. DECISIONS

CASE STUDIES

All these failures could have been prevented by any executive with a clear understanding of the strategy of the business noticing that there was something that did not fit and acting appropriately

I.T. IS JUST LIKE ANY OTHER PART OF THE BUSINESS

Manage strategically -- what is the essence of why the business exists and how it thrives?

CALL TO ACTION

1. What are the (three) most important insights you gained from this lecture?
2. What are the (three) most important actions you propose arising from this lecture?
3. What is your single most significant long term goal arising from this lecture?

Write it down

If you gain an insight into something new and do not take some action within 48 hours the chances are you never will

Justin Cohen citing Bill Gates

ACKNOWLEDGEMENTS AND DEDICATION

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This presentation is dedicated to
The glory of the Eternal Creator
who is the source and reason for our existence

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

ENGAGING THE BOARD IN STRATEGIC I.T. DECISIONS

QUESTIONS ?

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