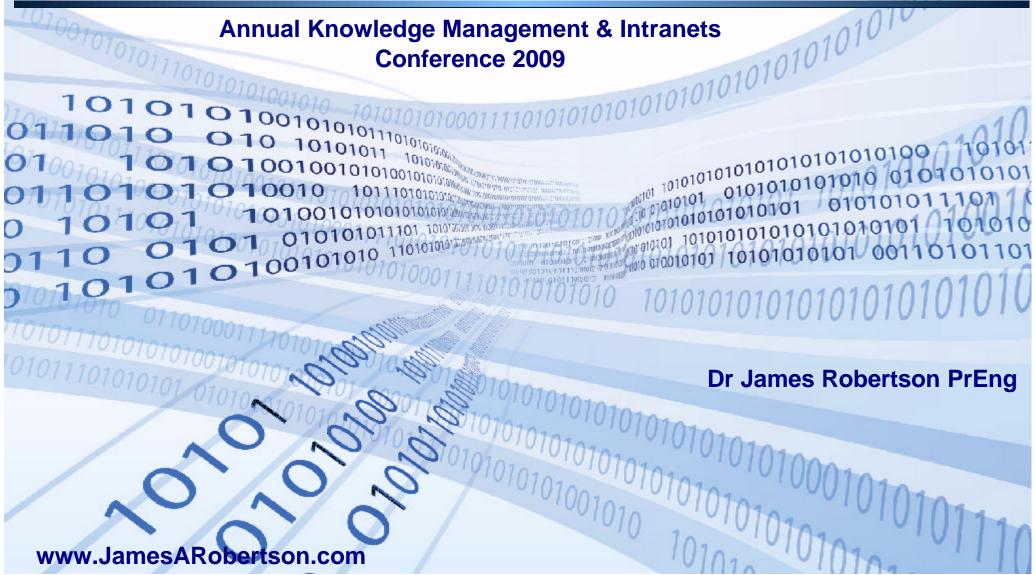
### Insights of Knowledge Management in a Global Recession



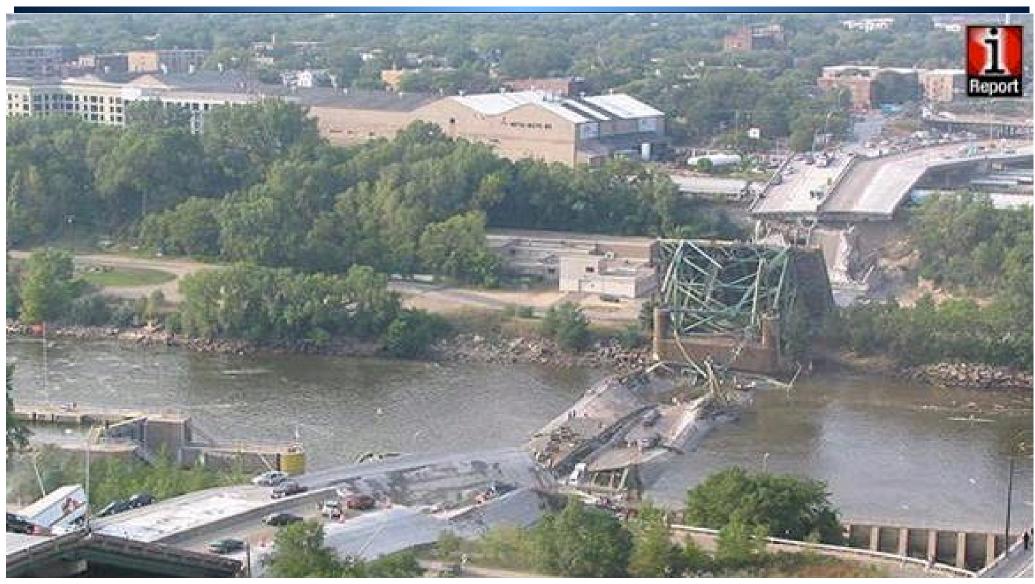






### Engineers do NOT design bridges to stand up





### Engineers design bridges not to fall down





### A visionary Angus Struan Robertson







### An industry characterized by failure





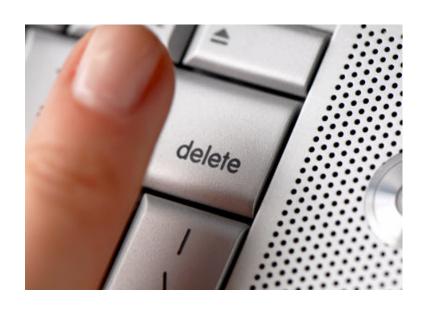
"19 out of 20 E.R.P. Implementations do NOT deliver what was promised"

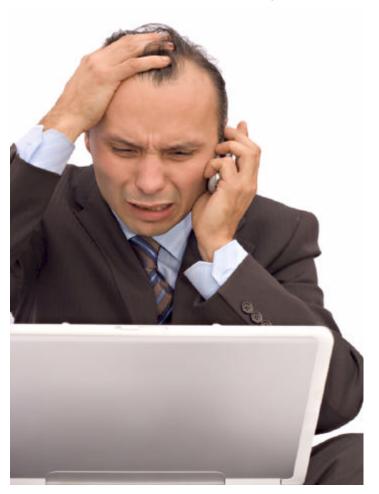
**Duncan McLeod** 

#### **Extreme failures**



- 1. Seven years and half a billion dollars -- international chemicals company
- 2. \$400 million -- multinational shoe corporation
- 3. Multinational entertainment giant -- \$878 million
- 4. Major supermarket chain -- \$195 million





### **Pending disaster**

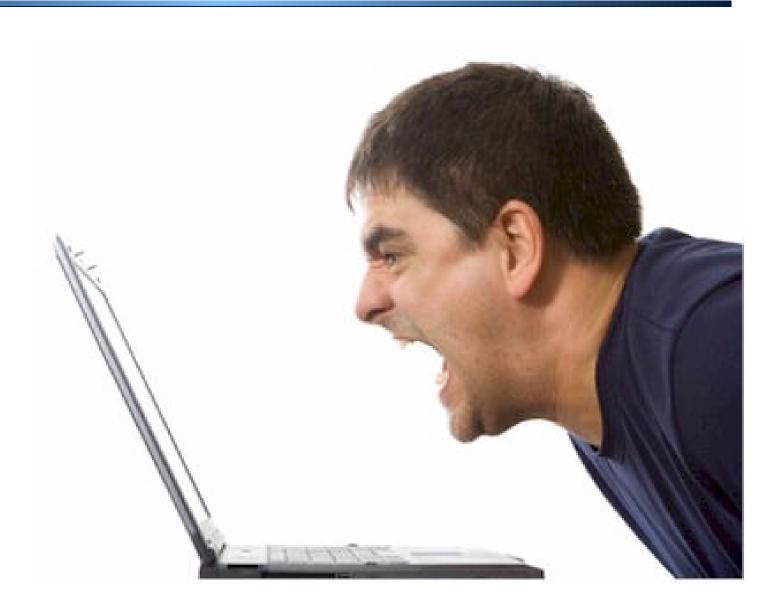


### "I.T. is the next corporate disaster waiting to happen"



### Pending epidemic





### There is a need for a new approach



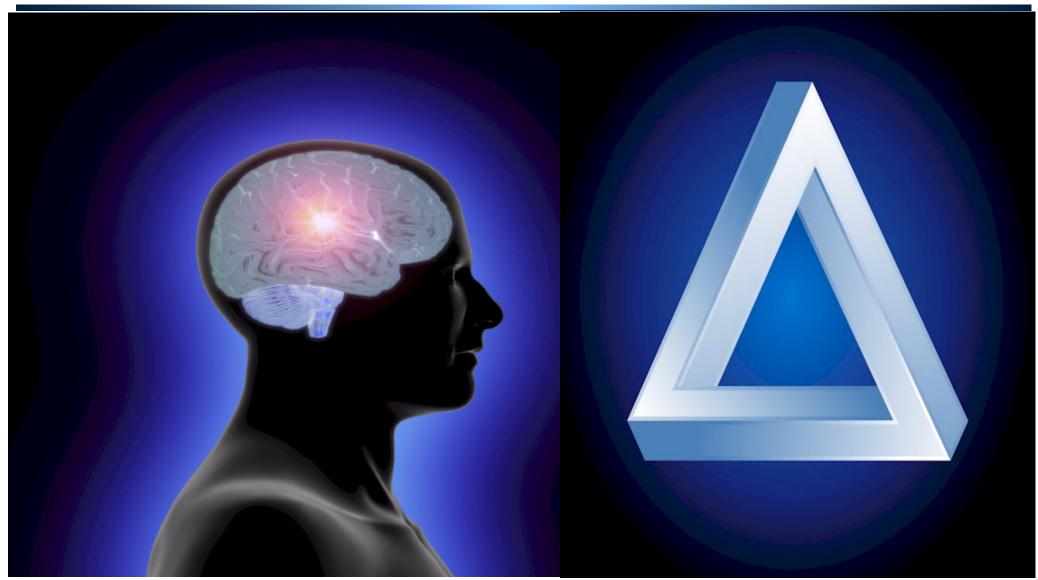


# Engineers do not design bridges to stand up, they design them

not to fall down...

### What is NOT an engineering approach?





### Software as magic





### Positioning this presentation Information technology can and should add value





### What is strategy?



### **Strategy**



### **Doing the right things**

#### **Tactics**

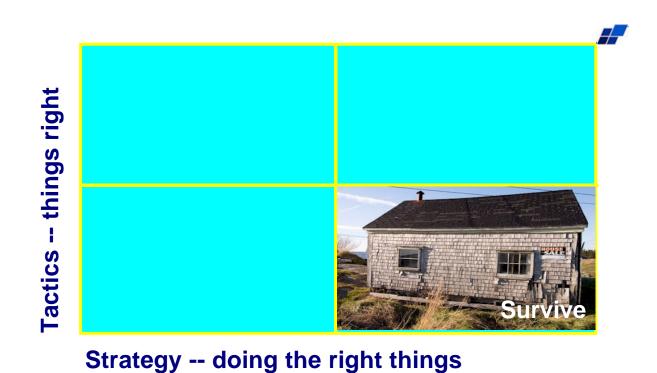


### **Doing things right**



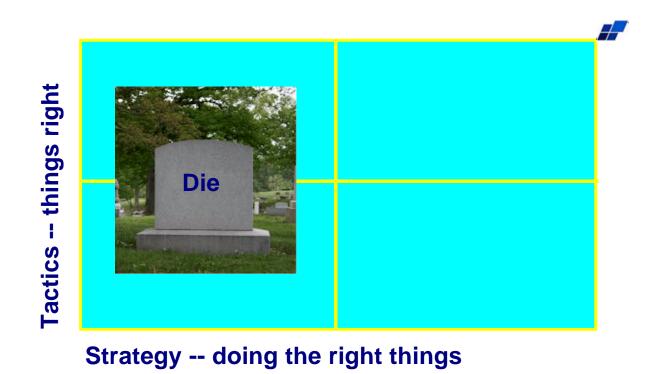






**Professor Malcolm McDonald** 





**Professor Malcolm McDonald** 







**Strategy -- doing the right things** 







**Strategy -- doing the right things** 

## Failure

### Critical factors to manage to prevent failure



- 1. Information technology mythology (30%)
- 65% 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%)
  - People / soft issues (8%)
  - 7. Technology issues (5%)





#### The critical factors for success

(% Relative contribution to success)



- 1. Executive Custody 25%)\*
- 2. Strategic Solution Architecture (18%)
- 3. Strategic Alignment 16%)
  Journey



Outcome

- 5. Project Management (12%)
- 6. Data Engineering (10%)
- 7. Technology Components (5%)



<sup>\*</sup> First 3 = 59%

### What is the essence of capturing knowledge in an electronic environment?



#### Clean up your data





#### The content is the same -- always -- binary code





### 85% of what executives use to make strategic decisions is NOT in your operational databases





### AN INDUSTRY CHARACTERISED BY FAILURE WHY DATA ENGINEERING IS CRITICAL



"Attendees of Gartner's Business Intelligence Summit in London last month were not surprised to hear that most enterprises are still failing to use business intelligence (BI) strategically. Gartner's survey of over 1300 CIOs returned some unimpressive findings about the state of BI implementations: Gartner's vice: president of research summed up the situation nicely by saying: "Most organisations are not making better decisions than they did five years go."

Article published in Computer Business Review Africa May 2005 published by Network Times.

#### **DATA ENGINEERING**



- √ The definition of information content
  - √ in a way that is structurally (taxonomically) fundamentally meaningful to human beings who understand the business
  - ✓ and the translation of this content into structured codes which faithfully and accurately reflect human understanding in a way that the computer can manipulate
  - √ with minimal human intervention
  - ✓ so that the computer system appears to be intelligent.



### The essence of capturing information Organize your data







#### From chaos to order



### Classification and cataloguing information Examples of coding



Highly sub-optimal	Optimized

10060	I&D skin abscess:simple	Reasor	nCode Description
10061	I&D skin abscess:compl.	C.	ORDER CANCELLED
10120	Foreign body - removal,simple	CC	Order Cancelled Credit Control
11401	0,6 - 1,0cm	CS	Order Cancelled by Consumer
11402	1,1 - 2,0cm	CT	Order Cancelled by Customer
11402		D.	DAMAGED OR DEFECTIVE
	2,1 - 3,0cm	DF	Defective Product
11420	< 0,5cm	DM	Damaged Product
11421	0,6 - 1,0cm	DP	Damaged Packaging
11422	1,1 - 2,0cm	DT	Consumer Complaint
11423	2,1 - 3,0cm	P.	PRICE ERRORS OR DISCONTINUED
11440	< 0,5cm	PD	Discontinued
11441	0,6 - 1,0cm	PI	Incorrect Price
11730	Simple:single		
11731	Simple:second	S.	SUPPLY ISSUES
11732	Simple:each additional	SD	Order Duplication
11750	Removal nail bed	SF	Customer Non-Franchise Holder
11765	Excision nailfold, eg. toe	SI	Incorrectly Supplied
11770	Excision pilonidal cyst;simple	SK	Overstock
12001	< 2,5cm	SL	Late Delivery
12002	2,6 - 7,5cm	SO	Oversupplied
	_,,,,,,,,,,_	<b>Z.</b>	OTHER
		ZN	Not Known

### **Strategic analysis Soft information acquisition systems**



- 1. Market critical success factors
  - On post cards
  - Ideally reference number linked to record
  - Unlocks strategic business intelligence
- 2. Employee / worker critical success factors
  - Post cards or electronic capture points
- 3. Other soft information



Long term consistent usage of the SAME measures is vital to obtaining REAL decision support value

### **Strategic analysis Soft information acquisition systems**



#### **Example**

	Critical Success Factor	First Weight
1	Health: Is my health important? Stay well / Get well soon!	9
2	Professionalism of practitioner; standard of medical care	34
3	Efficiency of clinic operation, pleasant and convenient	20
4	Staff service, caring, competent, etc	21
5	Administration, medical aid claims processing, debtors, etc	10
6	Value for money	6
	TOTAL	100

### **Strategic analysis Soft information acquisition systems**



#### **Example**

	Critical Success Factor	Real Weight?	First Weight
1	Health: Is my health important? Stay well / Get well soon!	35	9
2	Professionalism of practitioner; standard of medical care	20	34
3	Efficiency of clinic operation, pleasant and convenient	15	20
4	Staff service, caring, competent, etc	18	21
5	Administration, medical aid claims processing, debtors, etc	7	10
6	Value for money	5	6
	TOTAL	100	100

### Strategic analysis Soft information management



- 1. Critical competence (knowledge and experience)
  - Accelerated development of all personnel
    - particularly previously disadvantaged personnel
  - Identify soft knowledge and experience that really determines what makes a person successful
    - provide human resource development in these areas
- 2. Other soft information areas



Primarily a matter of designing and utilizing validation codes effectively

### Unlocking value through the downturn



Reduce the things that cause I.T. to consume business value

### Fast moving aircraft technology

"BUT I.T. Is moving SOOOOO fast we struggle to keep up"







### Retain your OS and Office Suite and use the <u>same</u> machines for 6 years+





### Unlocking value through the downturn





### Identify your core strategic drivers and then strengthen them





### Insights of Knowledge Management in a Global Recession



- 1. Data engineering -- classification and coding is the single most critical component of a high value business system implementation
- 2. Executives base decisions on 85% soft information
- 3. Capture soft information in a structured manner
- 4. Clean up your data
- 5. Reimplement your E.R.P. do NOT replace it -- aim for 20 years plus
- 6. You can keep pace with techology -- be practical
- ✓ What is your single most important insight from this presentation?
- √ What is the single most practical action that you can take tomorrow to apply I.T. more effectively?



New insight that does not result in action within 48 hours is wasted

### **Design solutions NOT to fall down**





### James@JamesARobertson.com 083-251-6644



**Acknowledgements and Dedication** 

Clients, associates and staff

Father and mother Angus and Thelma

**Children Alexandra and Struan** 

Fiona, Ingrid, Sandra, Helena, Julie and Maria

To the glory of the Eternal Creator

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

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