#### **JAMES A ROBERTSON AND ASSOCIATES**

### Effective Strategic Business Solutions



5. Programme and Project Schedule, Budget and Resource Management and Solution Specification -- Project Management

The Critical Factors for Information Technology Investment Success

Two Day Course

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#### PROJECT MANAGEMENT



- Large body of knowledge and experience with regard to project management -- PMBOK -- so WHY so much failure?:
  - Lack of strategic capability and specification -- management / governance context
  - Abstractness
  - Business is changing itself
  - Business must deliver the outcome
  - Detail of specification

## FUNDAMENTAL PRINCIPLES OF PROJECT MANAGEMENT



- 1. SUCCESS goal is success (business outcome)
- 2. COMMITMENT between business and project team (the business is changing itself)
- 3. TRADEOFF product scope quality grade time to produce cost to complete mutually consistent
- 4. UNITY OF COMMAND single channel from executive for decisions affecting the project (project and business teams)
- 5. CULTURAL ENVIRONMENT management provide environment

## FUNDAMENTAL PRINCIPLES OF PROJECT MANAGEMENT



- 6. PROCESS efficient and effective policies and procedures including roles and responsibilities, delegation of authority, processes for managing scope of work, including changes, maintenance of quality and schedule and cost control
- 7. LIFE CYCLE plan first and then do

What is required to bring business information technology investments fully into this framework?

#### **OBENG'S FOUR PROJECT TYPES**



- 1. FOG not sure what is to be achieved or how the project is to be carried out
- 2. QUEST high certainty about what is required but not sure how to achieve it
- 3. MOVIE high certainty about how the project is to be carried out but not sure what is to be delivered
- 4. PAINT BY NUMBERS high degree of certainty about what is to be done and how to achieve it

Many information technology projects are type 1 - fog - what is required to move them towards 4 - paint by numbers?

# KERZNER'S FIVE LEVELS OF PROJECT MANAGEMENT MATURITY



- 1. Common language
- **2.** Common processes
- 3. Singular methodology
- 4. Benchmarking
- **5.** Continuous improvement

What is required to move your organization to level five with regard to I.T. investments?

#### **COMPLEXITY**



- 1. Business is extremely complex
- 2. What, why, when, how, etc
- 3. Simple to use systems accurately model REAL complexity
- 4. Internally "simple" systems that do NOT accurately reflect real complexity are DIFFICULT to use
- 5. Internally "complex" systems that reflect reality are EASY to use

Optimise system complexity versus ease of use - Be Real

# DEVELOPING A ROBUST SPECIFICATION PROGRESSIVE ELABORATION



Understanding of the solution develops progressively (Standard project management approach)

Needs includes value proposition

Delivered business outcome delivering planned value

**Decreasing fuzziness** 

Increasing information and understanding

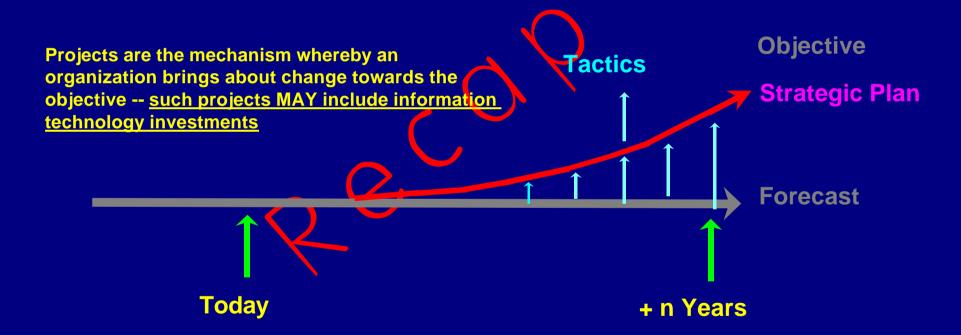
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#### THE TIME DEPENDENCY OF STRATEGY



Strategic plans must be future focused

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

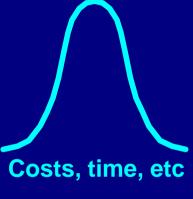


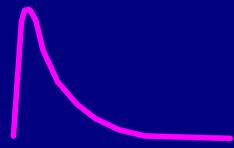
after Professor Malcolm McDonald

## DEVELOPING A ROBUST SPECIFICATION IMPORTANT ESTIMATING PRINCIPLES



- 1. Most estimating focusses on determining a single value
- 2. Most things are more or less distributed according to a Gaussian (Normal) statistical distribution
- 3. Different people have different knowledge and experience and therefore different opinions on costs, benefits, value, etc
- 4. We don't know what we don't know
- 5. Need a robust and time efficient estimating approach that harnesses collective knowledge and experience



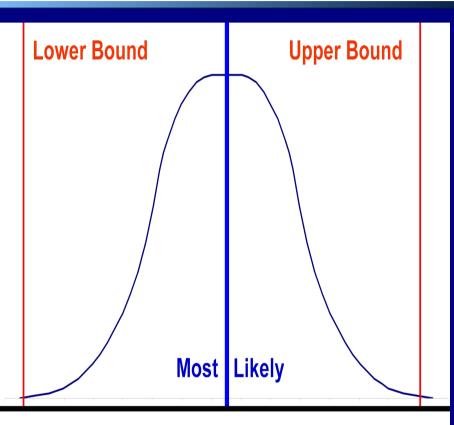


Value tends to be skewed LOW -- takes effort

## DEVELOPING A ROBUST SPECIFICATION IMPORTANT ESTIMATING PRINCIPLES



- 1. Use for time, cost, manpower, etc
- 2. Lower bound = lowest anyone thinks is achievable (minus 3 standard deviation)
- 3. Upper bound = highest anyone thinks is possible (plus 3 standard dev)
- 4. Most likely is numeric average
- 5. When set an objective recognise gaussian statistics
  - most likely = 50% probability
  - minus 0.5 standard dev 30%
  - minus 1 standard dev 16% = lower third
  - minus 2 standard dev 2%

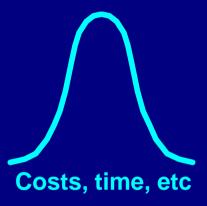


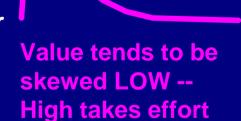
## DEVELOPING A ROBUST SPECIFICATION IMPORTANT ESTIMATING PRINCIPLES



- 1. A project objective LESS than the most likely value requires a solid committment to cost containment and clear focus on how this is going to be achieved
- 2. Attempting to achieve the lower bound is unrealistic
- 3. The upper bound assumes a reliable and comprehensive estimate AND a clear and effective cost containment method of management
- 4. The lower the number in terms of the range the higher the probability it will be exceeded
- 5. Value attainment is VERY challenging







## DEVELOPING A ROBUST SPECIFICATION EVALUATING THE ESSENTIAL QUESTIONS



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?

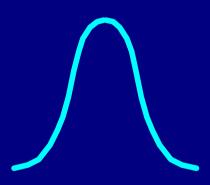


7. Am I willing and able to hold the service providers and vendors accountable?

# DEVELOPING A ROBUST SPECIFICATION EVALUATING THE ESSENTIAL QUESTIONS



- 1. NOT as easy as "yes" or "no"
- Rate on scale of 0 to 10
  - 0 = NOT AT ALL
  - 10 = Absolute certainty
  - 5 = Not sure maybe / maybe not
- 3. May settle for less than 10
  - A measure of risk
  - Conscious, contracted executive / management decision





#### THE CRITICAL FACTORS FOR SUCCESS



- 1. Executive Custody (25%)
- 2. Strategic Solution Architect (18%)
- 3. Clear Strategic Perspective and Alignment (16%)
- 4. Business Integration and Optimization (14%)
- 5. Programme Schedule, Budget and Resource Management (12%)
- 6. Data Engineering (10%)
- 7. Technology Components (5%)

# Provides structure of the project plan

#### **ACTIVITY SEGMENTATION AND FINE GRANULARITY**



- 1. Programme (multiple projects)
- 2. Sub-Programme (groups of related projects)
- 3. Master Project
- 4. Projects (a specific package with clear deliverable)
- 5. Sub-Projects (sub-categorization of projects)
- 6. Sub-Sub-Project
- 7. Phases
- 8. Parts
- 9. Tasks (repeatable work packages)
- 10. Activities (the point at which all work is executed)

Consistency is much more important than nomenclature

Consistency in terms of depth, level of detail, standard packages and approach, is vital at this level

#### **PROJECT MANAGEMENT**



- → The approach outlined in this presentation is a vital technical component of ensuring a successful outcome
- → It requires the full context and structure defined in the previous presentations

#### **PROJECT MANAGEMENT**



## QUESTIONS?

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

Please remember the evaluation forms