

# JAMES A ROBERTSON AND ASSOCIATES

## EFFECTIVE STRATEGIC BUSINESS SOLUTIONS



### 3. The Critical Requirements for a Successful Information Technology Solution

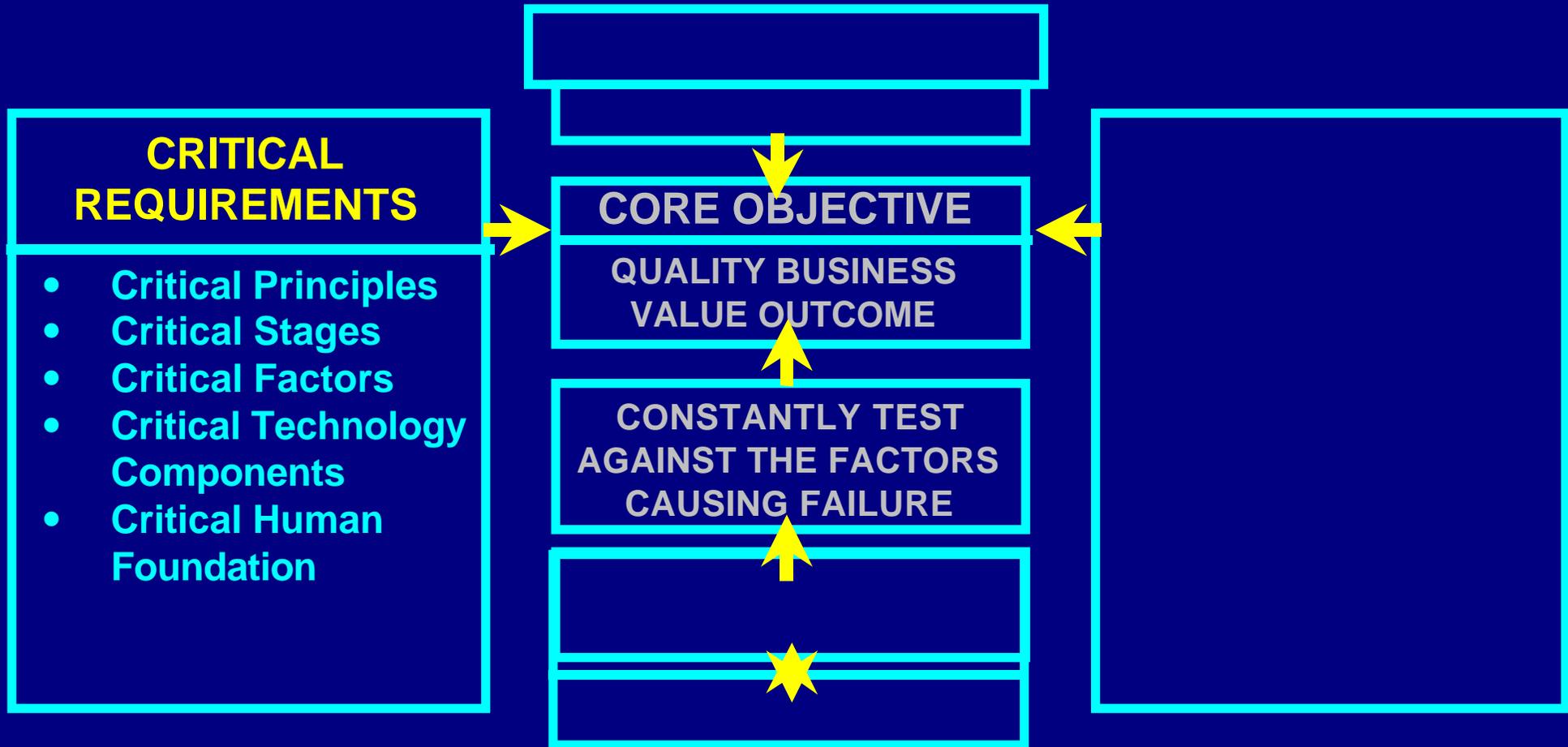
***Why your ERP is NOT delivering and how to FIX it***

***The Critical Factors for Information Technology Investment Success***

***Two Day Course***

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# SOLUTION & COURSE MAP



# THE CRITICAL REQUIREMENTS FOR A SUCCESSFUL SOLUTION



- 1. Critical Principles**
- 2. Critical Stages**
- 3. Critical Factors**
- 4. Critical Technology Components**
- 5. Critical Human Foundation**

# THE CRITICAL PRINCIPLES FOR SUCCESS



- 1. Create Competitive Advantage (19%)**
- 2. Engineer Against Failure (18%)**
- 3. Improve Decision Making (17%)**
- 4. Measurement Determines Behaviour (16%)**
- 5. People Are Part of the System (12%)**
- 6. Computers Are Dumb and Abstract (10%)**
- 7. Payback Takes Time (8%)**

# THE CRITICAL PRINCIPLES FOR SUCCESS

## People Are Part of the System (12%)



1. People determine the quality of analysis
2. .... design
3. .... implementation
4. .... operation
5. .... input data quality
6. .... interpretation of output
7. .... action

# THE CRITICAL PRINCIPLES FOR SUCCESS

## Computers Are Dumb and Abstract (10%)



1. Computers only add 0's and 1's (binary arithmetic)
2. Only do what they are told
3. Good at automating repetitive tasks which people can do
4. Difficult to understand
5. NOT human and never will be
6. Cannot take one off decisions about things that were not specified during design

# THE CRITICAL PRINCIPLES FOR SUCCESS

## Payback Takes Time (8%)



1. Simple business information system 18 months to do well
2. Large E.R.P. 3 to 5 years
3. Both will cost much more than expected
4. Capitalize the investment and manage accordingly

# MANAGING FOR SUCCESS

## CRITICAL STAGES FOR DEVELOPMENT & PROCURMENT



- |   |   |
|---|---|
| 1. Concept (19%)*                                       | 1. Concept (19%)                                      |
| 2. Architectural (Business) Analysis and Design (28%)*  | 2. Architectural (Business) Analysis and Design (28%) |
| 3. Technical Analysis and Design (9%)                   | 3. <u>Evaluate &amp; Make Buying Decision (9%)</u>    |
| 4. Construction - Front End, Database, Application (4%) | 4. <u>Customization (4%)</u>                          |
| 5. Data Engineering (23%)*                              | 5. Data Engineering (23%)                             |
| 6. Pilot Test and Commission; Implement (11%)           | 6. Pilot Test & Commission; Implement (11%)           |
| 7. Utilize / Operate (6%)                               | 7. Utilize / Operate (6%)                             |
- Build versus buy

\* These 3 = 70%

# 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%)**

# THE CRITICAL TECHNOLOGY COMPONENTS FOR SUCCESS



- 1. Operational and Transaction Processing Systems**
- 2. Automation Systems Including End User Support Systems, Call Centre Systems, Office Automation, etc**
- 3. Soft Information Acquisition Systems**
- 4. Decision Support Systems Including Information Warehouses, Data Mining, Simulations, EIS, OLAP, etc**
- 5. Hardware, Networks, Operating Systems and Database Systems**
- 6. Systems Integration Components and Allied Services**
- 7. Operators. Users, Customers and Decision Makers**

# CRITICAL TECHNOLOGY COMPONENTS

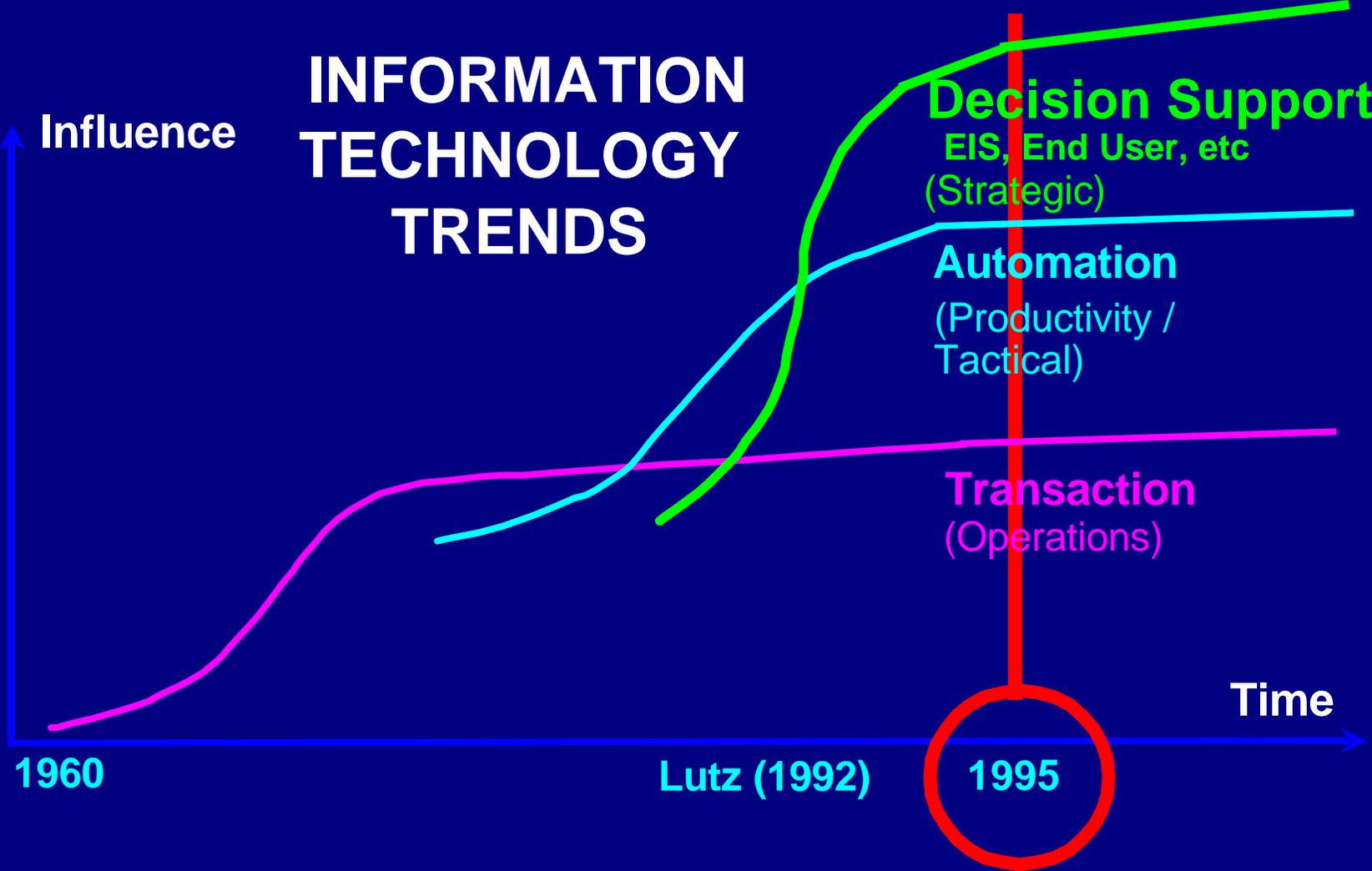
## Soft Information Acquisition Systems



- 1. Market critical success factors**
- 2. On post cards**
- 3. Reference number linked to record**
- 4. Unlocks strategic business intelligence**

# CRITICAL TECHNOLOGY COMPONENTS

Some Important Considerations



# CRITICAL TECHNOLOGY COMPONENTS

Some Important Considerations



Choose the right tool for the job e.g. analysis and reporting

Adhoc query  
&  
report writer

EIS tool

Simulation

Spread-  
sheet

Statistical  
Analysis

GIS



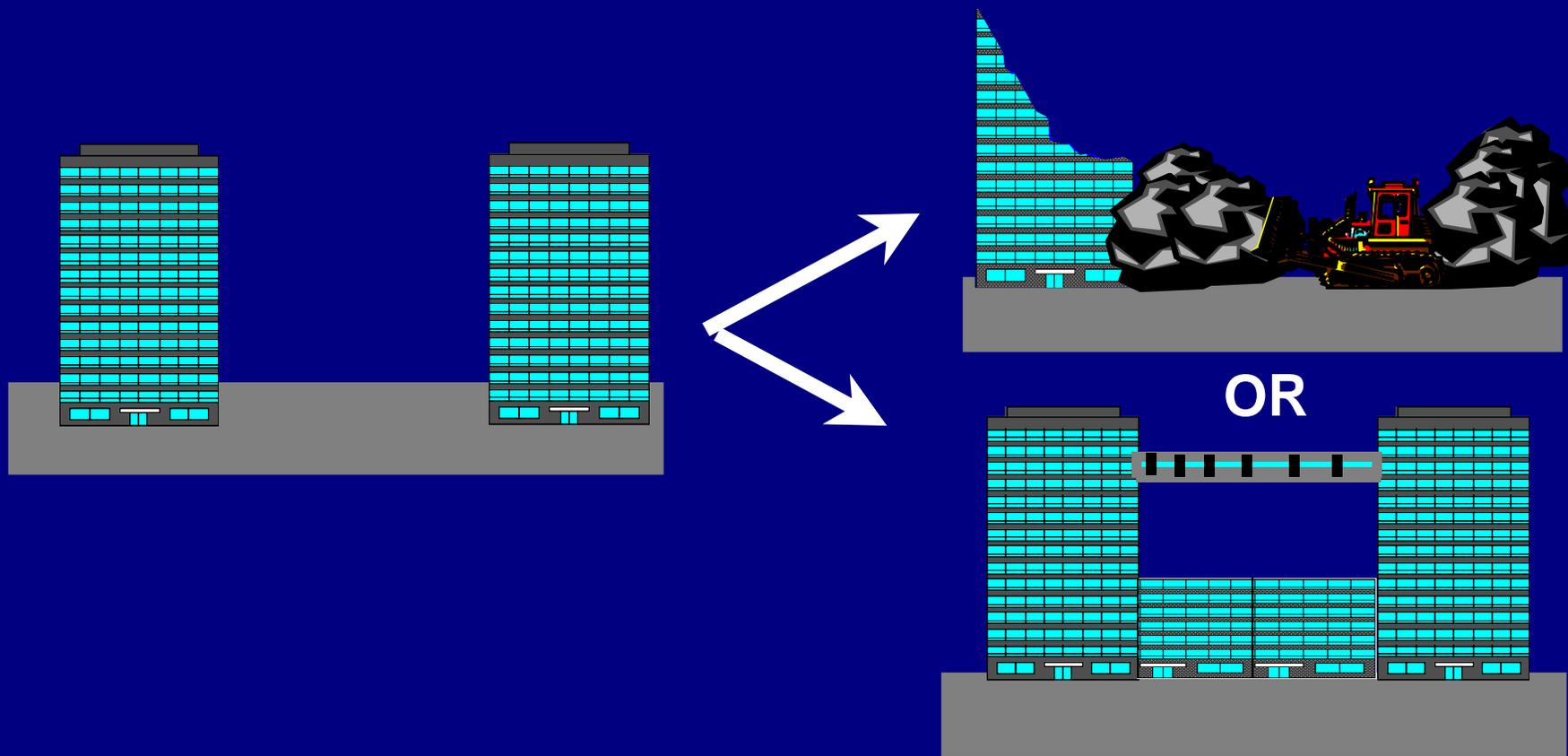
**THERE IS NO  
SINGLE "SILVER  
BULLET"**

# CRITICAL TECHNOLOGY COMPONENTS

## Some Important Considerations



### ALTERNATIVE TO THE I.T. DEMOLITION SYNDROME

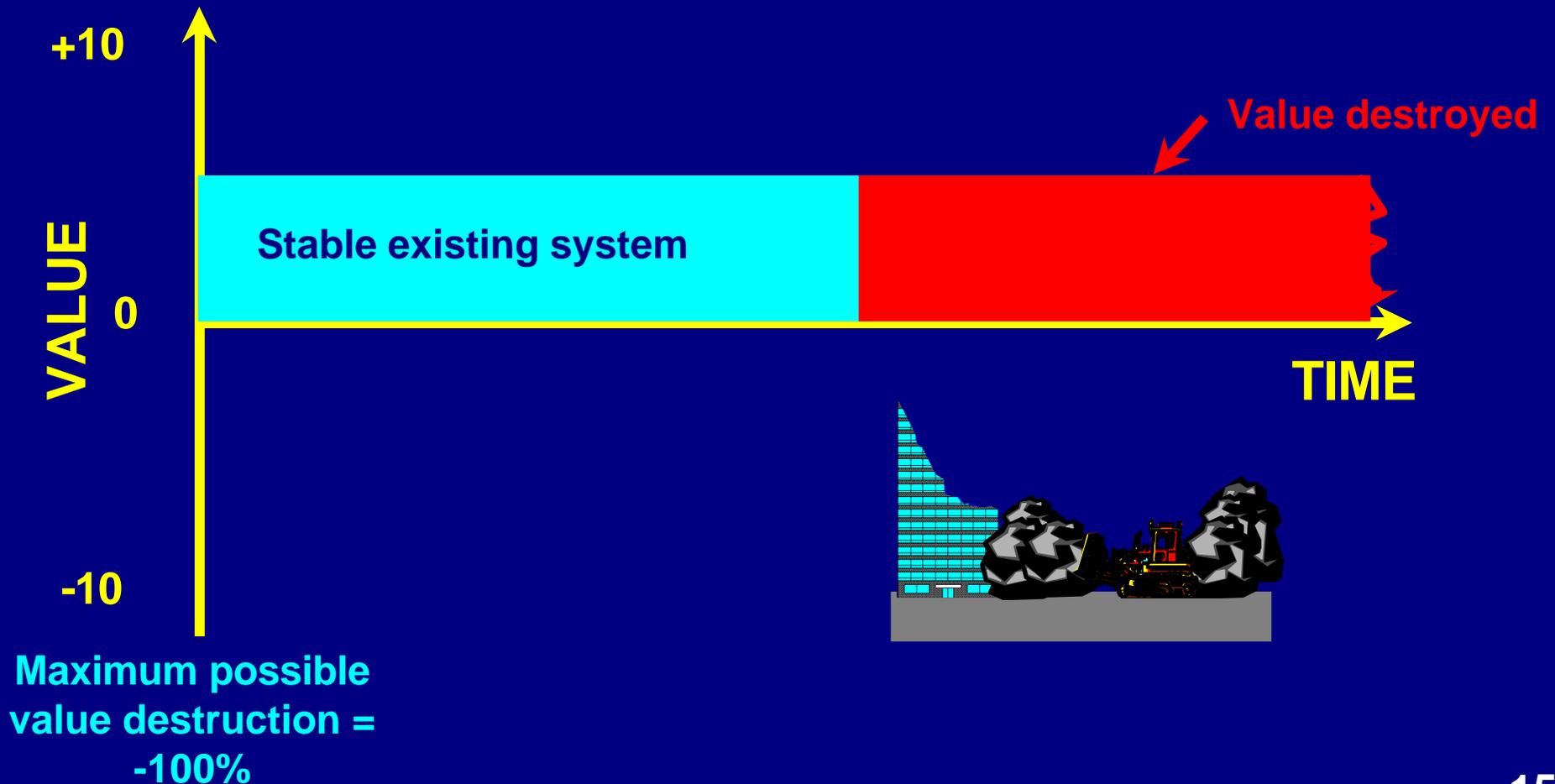


# ESSENTIAL TECHNOLOGY KNOWLEDGE

## SYSTEM TRANSITION -- EVOLUTION VERSUS DEMOLITION



### VALUE PROFILE: TERMINATION OF EXISTING SYSTEM

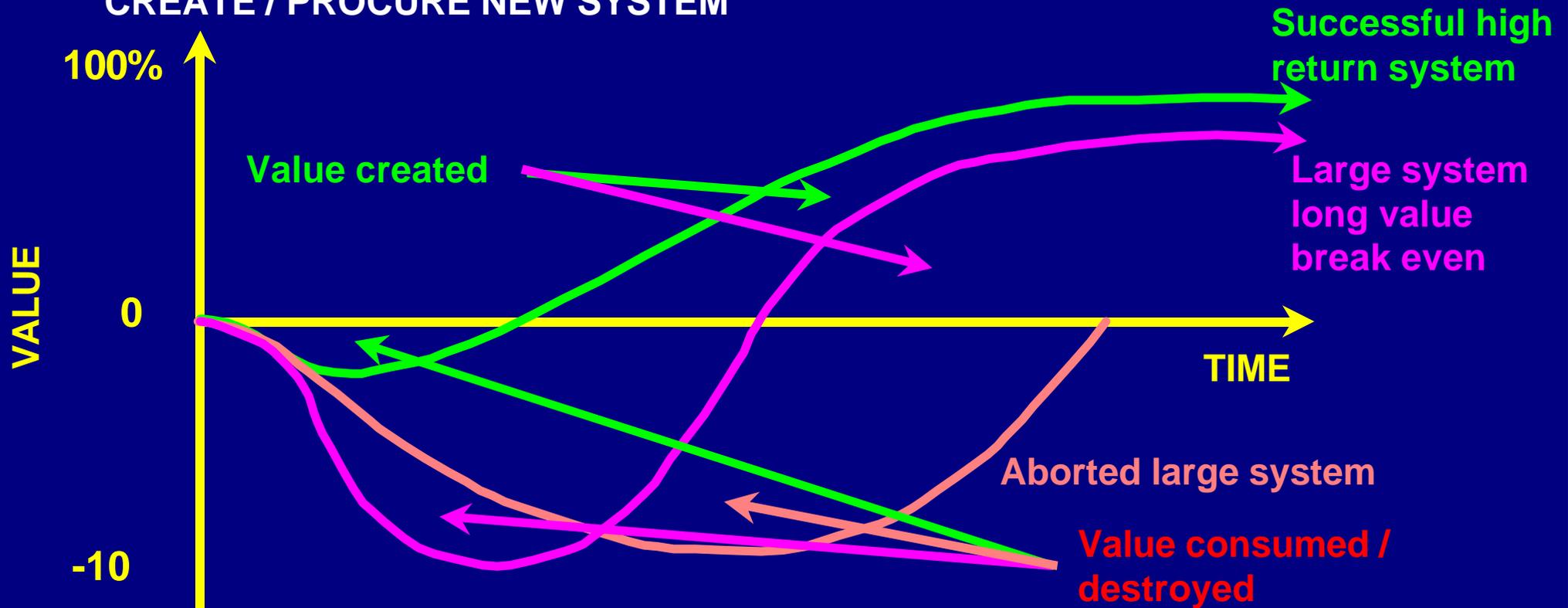


# ESSENTIAL TECHNOLOGY KNOWLEDGE

## SYSTEM TRANSITION -- EVOLUTION VERSUS DEMOLITION



### POSSIBLE VALUE PROFILES FOR CREATE / PROCURE NEW SYSTEM



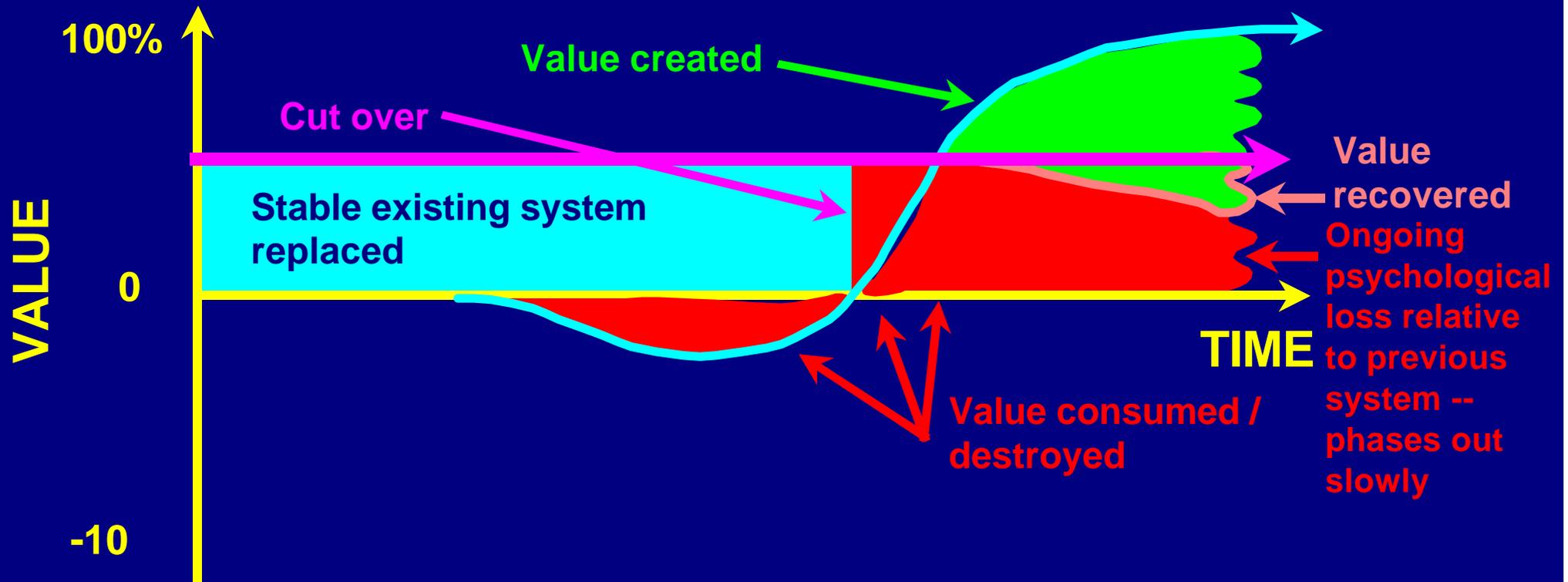
REMEMBER: 70% fail outright, further 20% fail to meet original requirement

# ESSENTIAL TECHNOLOGY KNOWLEDGE

## SYSTEM TRANSITION -- EVOLUTION VERSUS DEMOLITION



### VALUE PROFILE: REPLACEMENT OF EXISTING SYSTEM

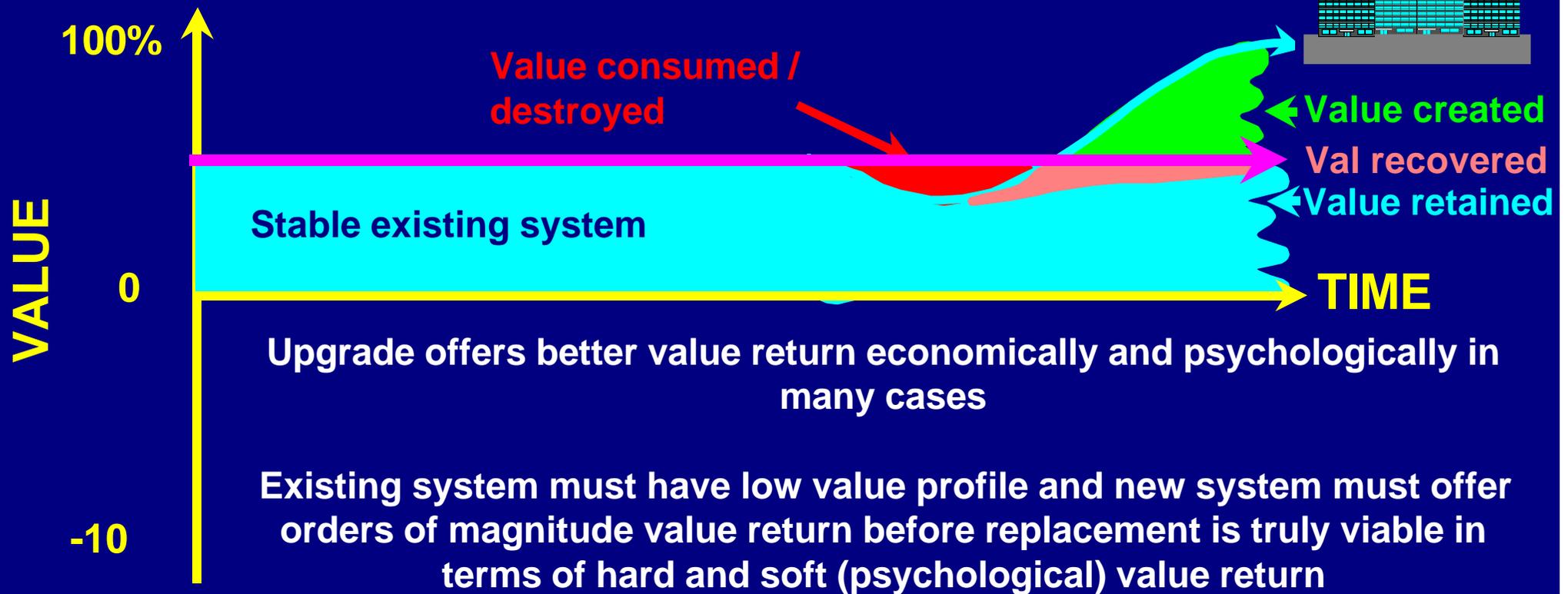


# ESSENTIAL TECHNOLOGY KNOWLEDGE

## SYSTEM TRANSITION -- EVOLUTION VERSUS DEMOLITION



### VALUE PROFILE: UPGRADE OF EXISTING SYSTEM



# ESSENTIAL TECHNOLOGY KNOWLEDGE

## SYSTEM REPLACEMENT DRIVERS



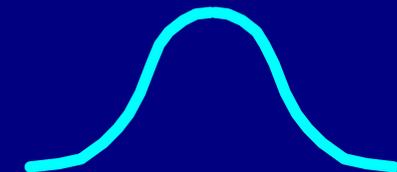
1. Badly designed
2. Badly built
3. Badly implemented
4. Badly maintained
5. Obsolete technology
6. Dramatic real business change where others have gone before
7. Other - fashion / don't understand / mythology / don't want to look stupid / confusion / etc

Determine relative weight

Score historic, current, forecast and objective on hi - lo score basis

0 = could not be worse anywhere in the world

10 = could not be better



# THE CRITICAL HUMAN FOUNDATION FOR SUCCESS



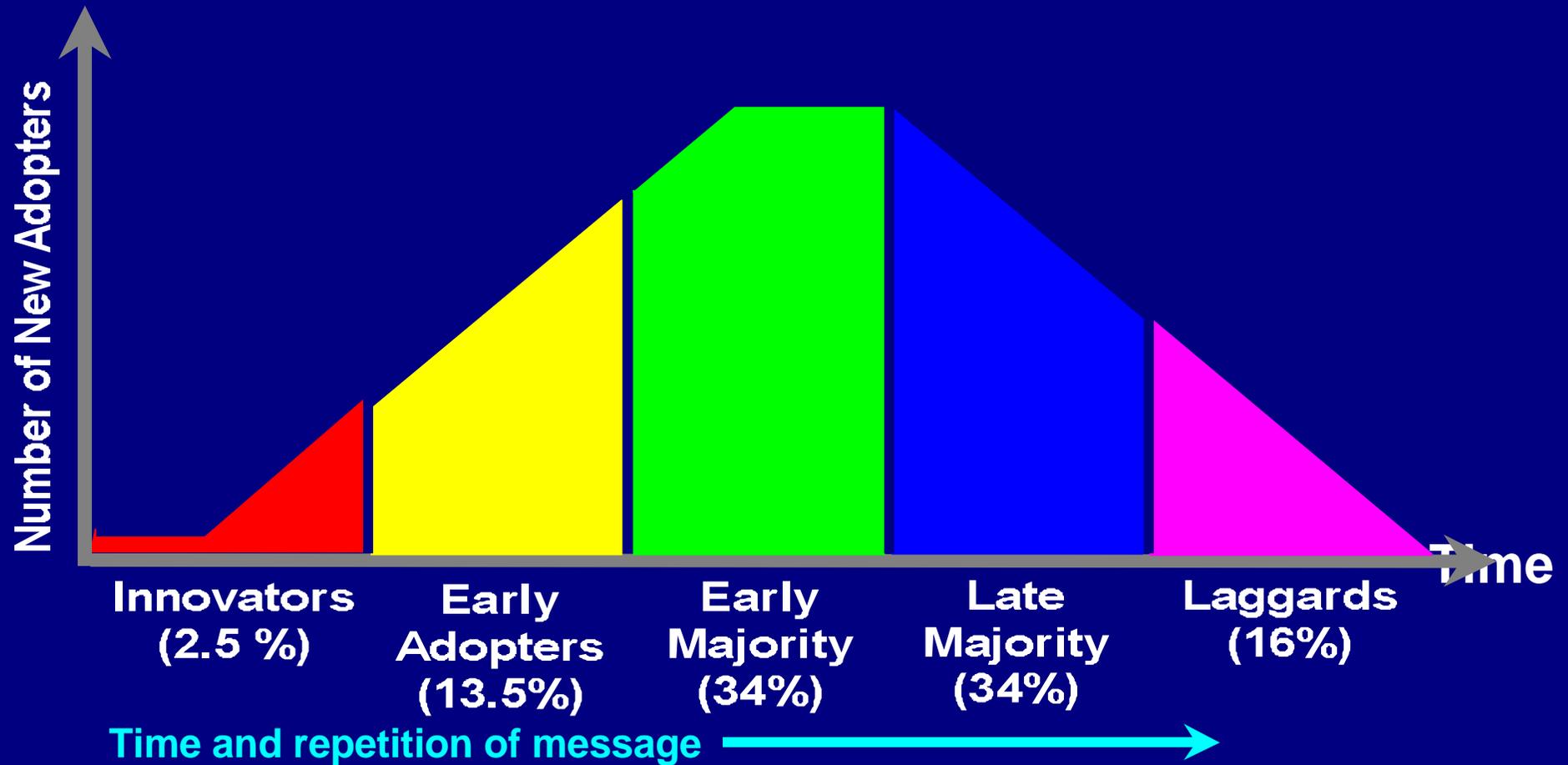
- 1. Business Competence (Knowledge and Experience)**
- 2. Technology Competence (Knowledge and Experience)**
- 3. Personality Profiles and Related Human Traits**
- 4. Solution Knowledge**
- 5. Solution Experience**
- 6. Communication**
- 7. Other Human Factors**

# THE CRITICAL HUMAN FOUNDATION

## Communication



### Diffusion of Innovation



# THE CRITICAL REQUIREMENTS FOR A SUCCESSFUL SOLUTION



- 1. All interact to impact the outcome of any information technology project or programme**
  - 2. It is vital that they are ALL taken into account**
  - 3. In a systematic structured way as part of a formal solution development approach**
- Refer the next presentation

# THE CRITICAL REQUIREMENTS FOR A SUCCESSFUL SOLUTION



## QUESTIONS?

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

*Please remember the evaluation forms*