THE MISSING LINK – RISK IDENTIFICATION

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Sysenex

What is the Problem?

Increasing product and service development program overruns, performance shortfalls and failures

Why?

Missed Risks: program issues that cost $$$$$ to fix, especially late in development, operation

Why do we care?

Problems late in development cost 500-1000 times to address (INCOSE SE Handbook, Chapter 2)
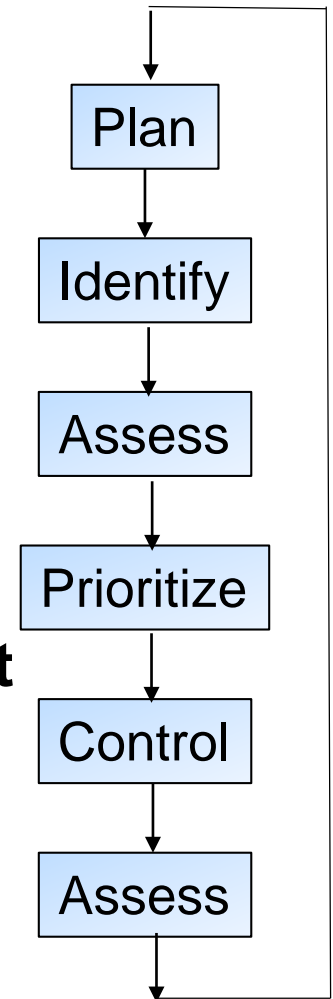
Current Risk Identification

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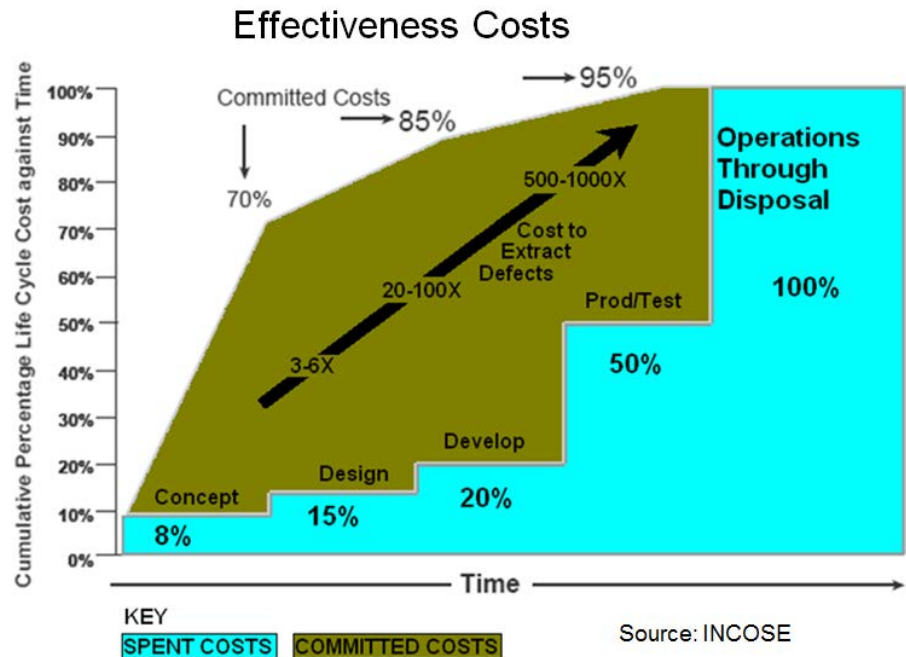
If you improve Risk ID, you improve RM

• **Our industry study found that although *75% of companies had a RM process in place, 51% suffered risk related losses or failures***

Why?

• **The Piecemeal Approach to Risk Management**

• **The Subjectivity of Risk Management**

• **Denial, Fear and Embarrassment About Risk**

Plan → Identify → Assess → Prioritize → Control → Assess

A Better Way

Current Risk ID methods need improvement!

We present a new, radical approach to risk identification
- **supported by 10+ years of research, analysis**

- **Unlike most other PM processes, RM does not require a risk baseline to be developed**

- **Due, in part, to the belief that each program has unique risks**

- **This is false, according to our research**

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The Risk Identification Analysis

- **Over 500 programs, their risks and outcomes were analyzed**

- **The same risks kept coming up, over and over**

- **Although risk specifics vary by program, the *underlying causes are the same***

- **218 common risks identified**

- **Risk weighting based on risk frequency, severity**

Other Analysis Conclusions

- **Program complexity and program risk relationship**

  - Program factors that affected risk relationships
  - Program cost, schedule, # of personnel, # of technologies, influencing factors

- **Complete evaluation for each risk – 2 parts**

  - The risk line item
  - Program status of the risk *at this time*
    - Objective criteria developed for each risk

A Better Way

From 218 Risks - Selected Risks

Technical

Requirements Definition
•Interface Definition and Control
•Common Mode/Cascading Failures
•Quality
•Safety
•Logistics Supportability
•Technology Maturity
•Failure Analysis
•Models and Simulations
•Data Quality
•Software Module Maturity
•Software Integration Maturity
•Experience Required to Implement HW Module
•HS Methodology and Process Maturity
•Change Management Process
•Producibility
•Testing Planning
•COTS/GOTS/Reuse Experience

Organizational

•Organizational Management
•Organizational Interest in Personnel Motivation
• Processes
•Organizational Culture
•Organizational Experience
•Organizational Business/Mission Benefit

Operational

•System Operational Problems
•Obsolescence Management Process
•Personnel Training and Experience
•Human Error
•Near Miss Consideration
•User Acceptance
•User Satisfaction
•System Availability
•System Failure Contingencies

Enterprise

Enterprise Experience
•Enterprise Reputation
•Enterprise Management Processes
•Enterprise Security Processes
•Enterprise Contingency Planning

Management

Management Experience
•Resources and Commitment
•Overall Program Staffing
•Personnel Experience
•Turnover Rate
•Personnel Morale
•Subcontractor Management
•Supplier Management

External

•Funding
•Regulatory
•Legal
•Labor Market
•Customer Experience
•Customer Interaction

Program Risk ID Tool

Program Risk ID embodies analysis results

Plan → Identify → Assess → Prioritize → Control → Assess
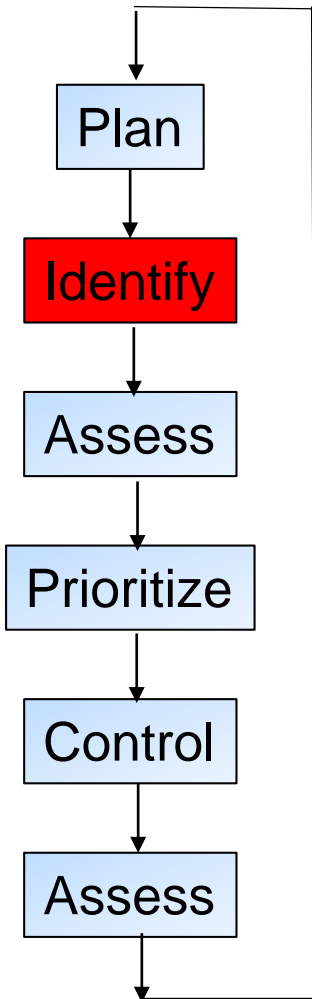
- **Web-based SaaS**

- **Includes 218 risks and their risk levels**

- **Relates program complexity**

- **Enables metric-based risk analysis**

- **Enables risk trending through time**

- **Enables objective risk comparison across programs**

Program Risk ID Tool

Program Risk ID Risk Example

Risk Title	Risk Levels	Application Notes
Current Total Personnel Turnover Rate	**5** – The current total personnel turnover rate is 48% or more per year.	- Consider the age distribution in your workforce--a narrow age distribution creates a risk. - Program staff turnover, versus historical norms, versus the program staff turnover plan >10% difference per year is a red flag. - Excessive staff turnover significantly lowers productivity below planned, and causes schedule slippage.
	4 - The current total personnel turnover rate is between 24% and 47% per year.	
	3 - The current total personnel turnover rate is between 12% and 23% per year.	
	2 - The current total personnel turnover rate is between 6% and 11% per year.	
	1 - The current total personnel turnover rate is 5% or less per year.	
	N/A	

www.programriskid.com

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