Is Your Project Turning into a Black Hole?
Agenda

• Why IT Project Failures Matter and Why We Need to Learn From Them

• What is Project Escalation and Just How Common Is It?

• The CONFIG Case: An Example of Project Escalation and the Factors that Can Cause It

• What is the Process that Leads to Escalation?
Why Project Failures Matter

- They occur frequently
- They are costly
- They can disrupt business
- They can alienate customers
- In extreme cases, they can lead to bankruptcy
Why It’s Important to Learn From Failures

- Those who do not remember the past are condemned to repeat it
- In engineering, there is a history of examining failures
  - Aeronautical and aerospace failures (e.g., Challenger)
  - Nuclear reactor failures (e.g., Three Mile Island)
  - Chemical engineering disasters (e.g., Bhopal)
  - Electrical engineering and power failures (e.g., blackouts)
  - Civil engineering failures (e.g., Tacoma Narrows Bridge)
- How about the rest of us?
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The Essence of Escalation

Some projects never seem to terminate . . . “they become like Moses, condemned to wander till the end of their days without seeing the promised land.” (Keider, 1974)
Research on Escalation

• Research on this phenomenon began in the 1970s

• Several different types of factors may contribute to escalation (Staw and Ross, 1987)
  • Project factors
  • Psychological factors
  • Social factors
  • Organizational factors
Is Project Escalation a Rare Problem or a Common Problem?

Headlines aside, how often does IT project escalation really occur?

The Answer: Conduct a large-scale survey.
Q: Of the last 5 projects with which you have been associated, how many were cases of project escalation?

Frequency of IT Project Escalation

0%  5%  10%  15%  20%  25%  30%

Percent Responding

0  1  2  3  4  5

Number of Escalated Projects

19%  28%  20%  16%  10%  8%
Escalation Projects are Late and Over-Budget

![Bar chart showing the comparison between Escalation projects and Non-escalation projects in terms of budget overruns and duration overruns.]

- Escalation projects are significantly more likely to be over-budget and longer than expected compared to non-escalation projects.

10%
Why IT Project Failures Matter and Why We Need to Learn From Them

What is Project Escalation and Just How Common Is It?

The CONFIG Case: An Example of Project Escalation and the Factors that Can Cause It

What is the Process that Leads to Escalation?
The CONFIG Project:  
A Classic Case of IT Project Escalation

• CompuSys developed an expert system to help its sales reps configure computer hardware.

• Despite substantial user involvement, the system failed to gain acceptance for two reasons:
  • Developers had a poor understanding of the sales process and built CONFIG as a standalone system instead of tightly integrating it with the company’s price quotation system
  • Sales reps had no incentive to use the system

• Finally, after millions of dollars and more than a decade of effort, the project was terminated.
Evidence of Escalation

CONFIG Usage as a Percent of System Quotations

Time (Fiscal Quarters)

Percent
Escalation Factors Identified in the CONFIG Case

- Treating a project as an investment in R&D
- Denial of negative information
- Emotional attachment to the project
- Rivalry between organizational subunits (e.g. Sales vs. Manufacturing)
- Empire building
- Company culture that promoted escalation
- Loose management controls
Key Factors that Promote Escalation

Project Management Factors

- Project Specification
- Project Estimation
- Project Monitoring & Control

Behavioral Factors

- Sunk Cost & Completion Effects
- Mum Effect
- Deaf Effect

Escalation
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Escalation Process Model

**PROJECT SETUP**

**PHASE 1: DRIFTING**
- Ambiguity concerning project charter
- Conflicts about project goal and direction
- Problem Emergence

**PHASE 2: TREATING SYMPTOMS**
- Problems seen as isolated Incidents
- Remedies do not target root causes
- Increased Problem Visibility

**PHASE 3: RATIONALIZING CONTINUATION**
- Experts explain away past troubles
- Alternatives depicted as more problematic
- Imminent Threat to Project Continuation

**PROJECT TERMINATION OR TURNAROUND**
Let’s Apply the Model to an Example

- California DMV’s Database Redevelopment Project
- An attempt to modernize its databases, since the existing legacy system was inflexible and difficult to maintain
- Seen as necessary and important, the project was initially estimated to cost $29 million
Drift

• Viewed purely as a technical project to modernize its obsolete database, the Database Redevelopment (DBR) project is initiated with no real management involvement.

• As a result, mission critical business needs of DMV are not addressed, business benefits are not defined and the project is not linked to DMV’s strategies.

• The project proceeds with an emphasis on the acquisition of new computer hardware and new database software.

• Recognizing that they lack adequate project management capabilities in-house, DMV initiates a request for proposal (RFP) process to hire a consultant to serve as co-project manager.
Result of Drift: Problem Emergence

- Fifteen months into the project, technical problems relating to performance and system architecture emerge.

- Two years into the project, after a string of problems, the California Office of IT (OIT) returns a major project report to DMV stating that it “fails to provide the specific information needed to evaluate the status of the project.”

- Five months later, OIT returns a special project report to DMV noting a host of problems including: (1) inaccurate status reporting, (2) lack of demonstrable benefits relative to costs, and (3) failure to implement a pilot project and (4) proceeding with the full implementation without OIT’s approval.
Treating Symptoms

- In spite of the negative feedback from OIT, DMV leadership presses on with the DBR project without making any major changes in terms of goals or direction.

- DMV’s relationship with Ernst & Young is not working and the contract is terminated by mutual agreement. DMV temporarily assumes responsibility for project management.

- DMV contracts with Tandem to provide project leadership
Result of Treating Symptoms: Increased Problem Visibility

- A compliance review criticizes DMV noting that the project is behind schedule and that the prototype under-performs.

- Lower and mid level staff express doubts concerning the viability of the project to the new DMV director Frank Zolin.

- The director of the data center shares his concerns with Zolin, expressing that the project is “a turkey.”

- Tandem Integrated Engineering Services (TIES) is hired to review the DBR project.

- The estimated completion date for the project is pushed back 3.5 years and the estimated cost is revised to $57 million, twice the initial estimate.
Rationalized Continuation

• Despite increased problem visibility, DMV director Zolin remains committed to the previously chosen course of action.

• Based on the TIES review, Tandem initiates work on a new project plan and proposes to work with assistance from EDS in order to keep the project on schedule and within budget.

• DMV’s Teale Data Center develops an alternative project proposal that would bring the DBR project in-house, but the DMV director Zolin rejects this alternative.

• Zolin rationalizes his decision to continue with the previously chosen course of action: “we had already committed 35 or 40 million into the project, we already had the hardware… I’d be the first person to say, I probably wasted 6 to 12 million tax dollars trying to save that first investment.”
Result of Rationalized Continuation: Imminent Threat

- Six years into the project, Tandem and EDS estimate the cost to complete the DBR project under the new plan at $185 million.

- The sharp increase in projected costs clash with the budget realities of DMV and Zolin realizes that taking the heat for terminating the project at this point would be better than continuing to press forward.

- Finally, after six long years of the DBR project, Zolin decides to pull the plug on the project.
Is Your Project Drifting?

1. The project has been going on for some time without consensus among key stakeholders regarding the objective(s) of the project. True/False

2. The project has been going on for some time without agreement regarding how best to achieve the project objective(s). True/False

3. Although considerable time and money has already been spent on the project, there appear to be few, if any, deliverables to date. True/False

4. Work continues on the project in spite of a vague or ambiguous project charter. True/False

5. Conflicts regarding the goals and direction of the project remain unresolved. True/False
Are You Tackling Underlying Causes of Problems or Just Symptoms?

1. Project-related problems are being addressed in a superficial way. True/False

2. As soon as one problem is addressed another one emerges. True/False

3. Each problem that occurs is described as isolated from other problems and is treated independently. True/False

4. Actions taken to solve problems constitute minor adjustments or “quick fixes.” True/False

5. Problems are seen as being addressable without any need to review or reconsider the current project goals or direction. True/False
Are You Rationalizing Continuation?

1. Proponents of the project keep coming up with new reasons for why the project must be completed. True/False

2. Experts have been enlisted ostensibly to “evaluate” the project but may be motivated to advocate for continuing the project. True/False

3. A growing number of people outside the project are now raising doubts about the wisdom of continuing the project. True/False

4. As projected expenditures rise, experts portray alternative solutions and project abandonment as even more costly or problematic to pursue. True/False

5. Despite growing recognition that the project is in a troubled state, the prevailing assumption is that pressing ahead will eventually bring the project out of the woods. True/False
Stop Drifting

- Freeze or Reduce Headcount in the Project Temporarily
- Get a Small, Good Team to Reassess and Re-Plan
- Make a Clear Go/No-Go Decision
Stop Treating Symptoms

• Break the Habit of Solving Problems by Throwing Money at Them
• Stop any Futile Attempts to Fix the Project One Symptom at a Time
• Put Your Best People on the Project and Resolve the Root Causes
Stop Rationalizing Continuation

• Cultivate Suspicion Towards New Rationales for Projects
• Bring in Outside Expertise for a Review
• Halt the Project Temporarily
• Create Transparency and Visibility for a Broader Set of Stakeholders
• Conduct a Series of Hearings
Questions

?