



Why do IT Projects fail?

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Topics covered

- Just how bad is the failure rate for IT Projects?
- Is the hype true?
- Analysis of why IT Projects Fail
- What do Project Managers think?
- What makes IT Projects Different?
- Do IT projects fail because of IT issues?
- Do IT Project Managers need specific skills?
- Is there a correct leadership style for IT Projects?
- My personal experience
- What can be done?

OUT-LAW News web site 2004

- Britain is wasting billions of pounds every year on unsuccessful IT projects
- Report from Royal Academy of Engineers and British Computer Society
- Estimated £22.6 billion spend on IT Projects in UK and only 16% can be considered truly successful
- “It time for the IT industry to recognise the engineering content of their work and embrace the discipline and professionalism associated with traditional engineering”
- Report advocates
 - Registration for people working on high-consequence systems
 - Employment of disciplines applied on other major projects
 - A need to recognise the importance of proper project management training

KPMG Survey 2005

- Headline “A quarter of the benefits of IT Projects are being lost because of management failures”
- 600 organisations across 22 countries revealed 85% of respondents reported a loss of up to a quarter of targeted benefits across project portfolios
- Nearly half of respondents reported at least one project failure in the past year

Standish Group research

- Referred to as the “CHAOS” reports
- First report in 1994/1995
- Updated in 1999 & 2003
- Have become known as the “CHAOS Chronicles”
- Challenged defined as any project that fails to meet one or more of its schedule, budget or scope targets.

CHOAS results

	Abandoned	Challenged	Successfully completed
1995	31%	53%	16%
1999	28%	46%	26%
2003	15%	51%	34%

CHAOS Reports

- Figures sure to grab headlines
- The word “CHOAS” is very emotive
- To refer to “CHAOS Chronicles” suggests an on going series of disaster projects
- This hype is good for some
- US based survey
- Based on 8,380 projects with 365 respondents


University of Oxford 2003

- UK based web survey
- Based on 421 projects with 421 respondents (be careful of statistics)

	Abandoned	Challenged	Successfully completed
Oxford	9%	75%	16%

Studies Agree ?

	Abandoned	Challenged	Successfully completed
Standish Group 1995	31%	53%	16%
Standish Group 1999	28%	46%	26%
Standish Group 2003	15%	51%	34%
Oxford Study 2003	9%	75%	16%



How does IT sector compare to other sectors?

Sector	% on target	% under budget	% over budget
Aerospace/Defence	50	36	14
Automotive	0	10	90
Chem/Pharma	44	19	38
Electronic/Telecom	36	21	43
Engineering/Cons	24	0	67
Financial Services	19	15	68
IT	27	20	40
Equipment Manuf.	14	0	86
Profess. Services	13	4	83
AVERAGE	27	18	55

Why do IT projects fail?

(Hartman & Ashrafi 2002)

■ Literature Review

- Misunderstanding requirements
- Optimistic schedules and budgets
- Inadequate risk assessment and management
- Inconsistent standards and lack of PM training
- Management resources
- Unclear charter for project
- Lack of communication

■ Research

- Competing objectives
- Lack of link between KPI and business strategy
- Lack of clarity on performance and control metrics
- No link between KPI and metrics
- Little or no alignment among major stakeholders between success criteria, KPIs, project drivers and dynamics of change leading to inappropriate decision making

Why do IT projects fail?

(Coley Consultants 2005)

- Lack of user involvement
- Long or unrealistic timescales
- Poor or no requirements
- Scope creep
- No change control
- Lack of testing

Why do IT projects fail?

(Computer World - Anda Consulting Aug 2003)

- Because no one prevents them from failing
- All issues esp. technical boil down to people
 - A server fails – well fix it or get someone to fix it
 - Bug in software – someone wrote it or made decision to buy
- Advocates failure prevention
 - Significant risk management effort
 - You look to see what will cause the project to fail and what you can do to make sure it doesn't happen

Why do IT projects fail?

(InfoWorld Aug 2004)

- It is in the interest of large consultancies that feed off bad experiences
- Large projects are bad
- Risk Management is key
- Abandoned projects are bad but worst is the projects that deliver fewer features / functions i.e. business benefit is lost

Why do IT projects fail?

(Project Perfect.com.au Oct 2005)

- Poor planning
- Unclear goals and objectives
- Scope creep / Change Control
- Unrealistic time or resource estimates
- Lack of executive support & user involvement
- In appropriate skills

Why do IT projects fail?

(Dulcian Inc. – Oracle Consulting Firm 2006)

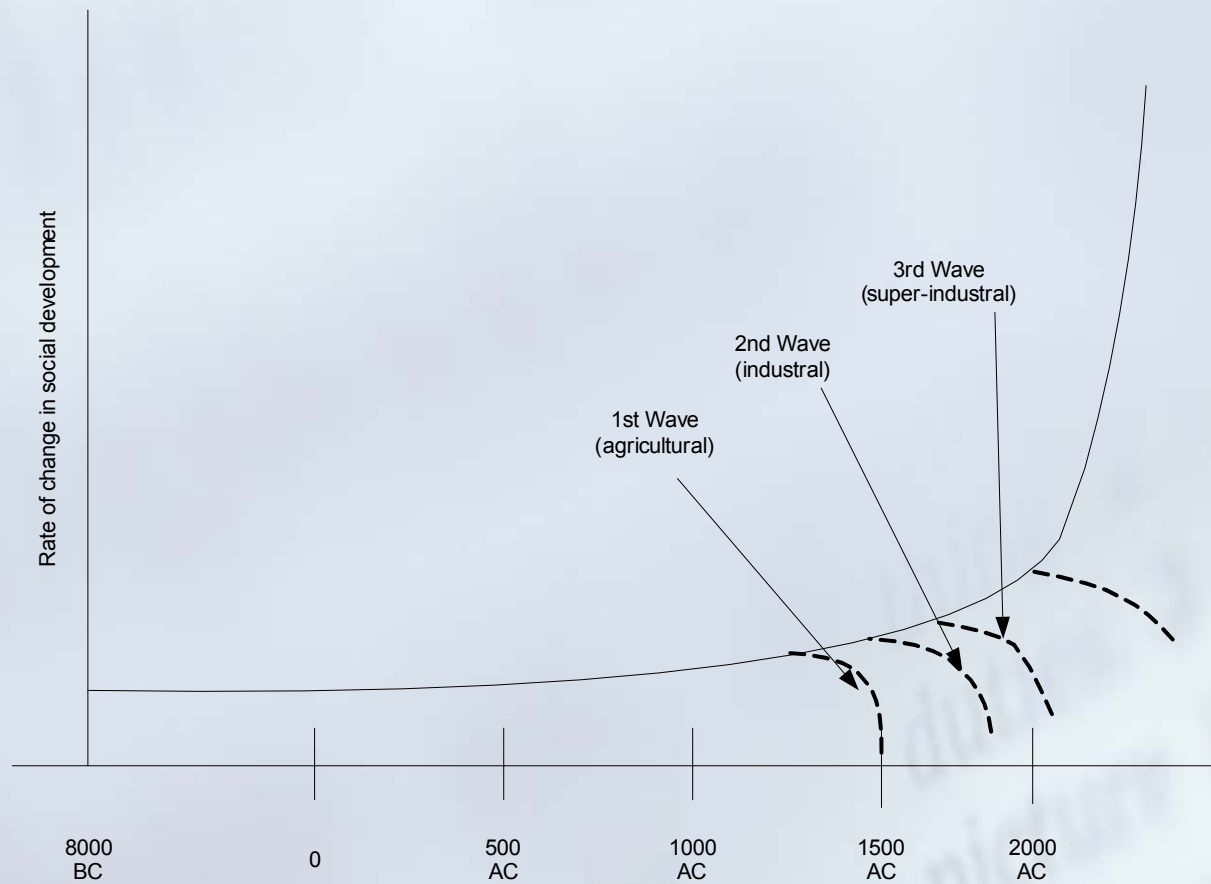
- 10 ways to guarantee failure
 - Don't specify a methodology (any methodology RAD/Waterfall should be tightly integrated with dev tools)
 - Create a plan working back from a drop dead date
 - Don't bother with a data model
 - Use a technical lead that has not built a similar system
 - Hire 40 developers to make coding faster
 - Use the wrong tools for the job
 - Ignore data migration until close to the end
 - Skip testing to save time
 - Make sig. changes in final phases of development
 - Buy a commercial package and customise it A lot
- 3 keys to success
 - Top management support
 - A solid methodology
 - Solid Technical leadership

PM's view of why IT Projects fail

(Oxford Study 2003)

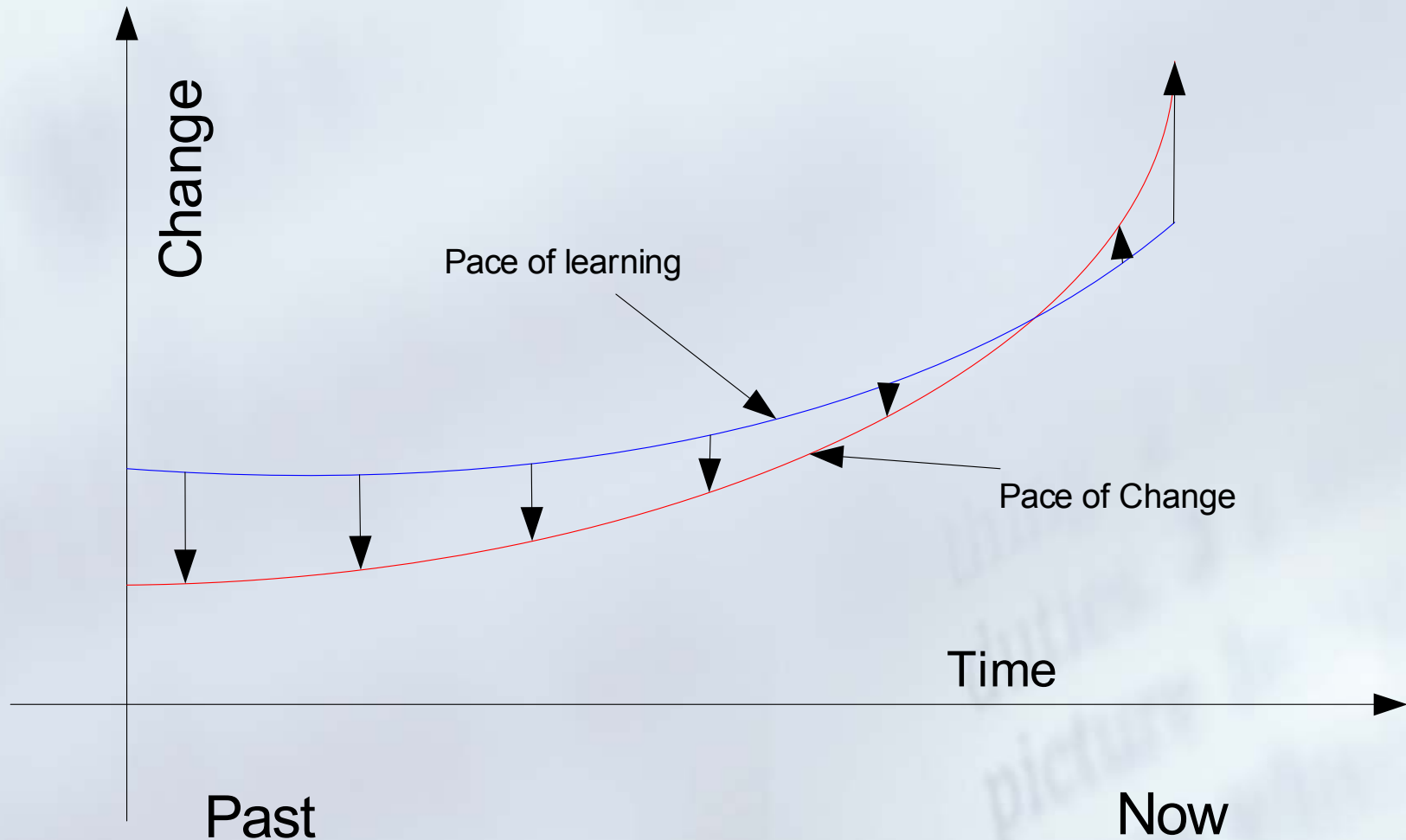
- Lack of Top Mgmt commitment
- Misunderstanding of scope/objectives/requirements
- Lack of end user involvement
- Changing scope/requirements
- Poor planning/estimating
- Inadequate project management
- Failure to manage end user experience
- Conflict among stakeholders
- Change in senior mgmt owners
- ~~Lack of adequate change control~~
- Shortage of knowledge/skill in project team
- Improper definitions of roles/responsibilities
- Artificial deadlines
- ~~Specifications not frozen~~
- Radically redesigned business process/task
- Employment of new technology

Are IT Projects different?



Pace of Change vs Pace of Learning

Obeng – PM Today Oct 2006



Are IT Project different?

Challenge	Mean Score for distinctiveness (1=low, 5=high)
Mastering rapidly changing technology	3.5
Controlling complexity of interconnections	3.13
Overcoming business/user resistance	3.06
Specifying what is required with the right level of detail	2.59
Overcoming business/user resistance	2.72
Controlling change to requirements	2.49
Undertaking Org. changes	2.48
Obtaining clarity of objectives/scope	2.45
Controlling changes to requirements	2.43
Estimating time and cost accurately	2.41
Knowing in advance what will count as success	2.29
Managing organisational politics	2.08
Managing multiple agendas and timetables	1.95
Monitoring progress effectively	1.94
Managing contractors/sub-contractors	1.92
Dealing with personalities and egos	1.83
Managing industrial relations	1.8

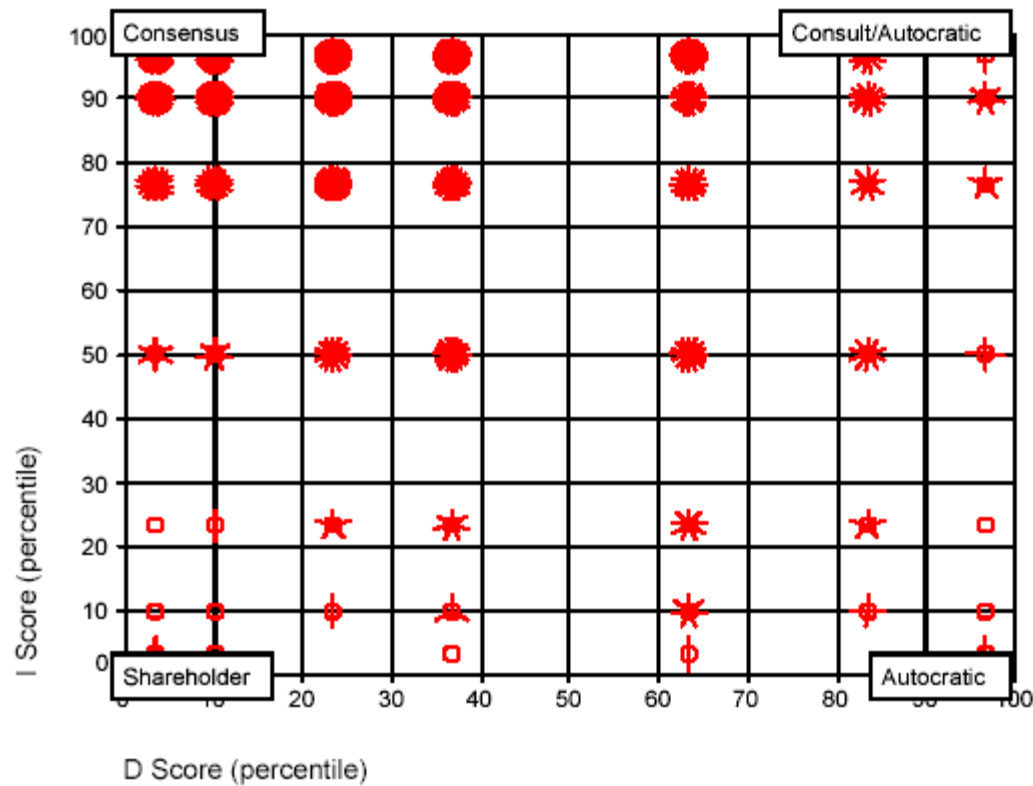
Are IT Projects different?

Projects	Rank
Eurofighter	1
London congestion charging	2
West coast mainline	3
Microsoft .Net	4
Canary Wharf	5
BMW's new mini	6
Nectar launch	7
Harry Potter movie	8

Project Managers characteristic

Characteristics	Ranking
Commercial awareness	1
Confidence	2
Preparedness to take risk	3
Understanding of IT	4
Integrity	5
Goal-orientation	6
Written communication	7
Attention to detail	8
Planning	9
Problem solving	10
Enthusiasm	11
Preparedness to work in a team	12
Delegation	13
Prior success	14
Leadership	15
Energy	16
Stakeholder management	17
Conflict resolution	18
Time management	19
Securing resources	20
Ability to manage change	21
Oral communication	22
Initiative	23
Perspective	24
Understanding business processes	25

Leadership style of IT PM's



I Score represents information collection (low to high), D Score represents decision-making (collective to individual)

A personal view

- Pace of change on technologies is daunting
- You can't manage what you don't understand
- For complex IT projects the PM should have subject knowledge, appropriate experience and formal training – not an easy combination to find.
- Come clean with your team, you must gain trust – but don't assume they are on your side.
- Take a pure PM approach
 - Strict change control
 - Serious Risk Management
 - Basic PM techniques
- As a contract PM you are often not involved in pre-sales i.e. no input to risks/estimates
- Fixed price contracts with caveats DON'T WORK. But this must be balanced with need to win the business.
- There is a Sales/Delivery disconnect
- Large projects never work- create a programme of projects and split into manageable chunks of no more than a few months.