

CC5001

CC3002

**Project Planning and
Project Management**

Post-Implementation Review (PIR)

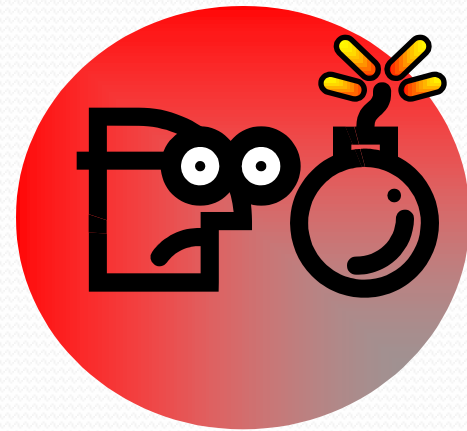
Topics

- Post-implementation review (PIR)
 - What is a PIR?
 - what does a PIR include?
 - Why conduct a PIR?
 - Project failure
 - How PIR results help future projects



Topics

- Why do IT projects sometimes fail?
 - What is meant by project failure?
 - Reasons for IT project failure
 - lessons to be learned



Post-implementation review (PIR)

- What is a PIR?

“A meeting that occurs **after** a system is operational
...to review the **success** of the project”

- Several months after the project finishes...

- not **so long** after that users forget
- not **too soon** as users won't be familiar with the system

Chaffey (2003)

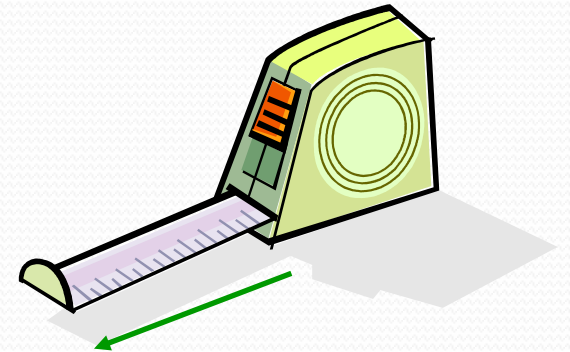
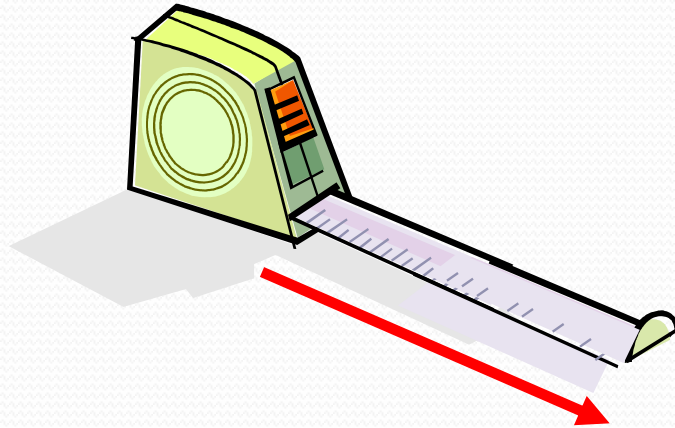
Post-implementation review (PIR)

- Includes:
 - identification of **faults & suggested enhancements**
 - agreement on what needs to go in a **future release**
 - success of project in terms of **budget / timescale**
 - success of system in **meeting objectives**
 - **development practices** that worked well or badly

Chaffey (2003)

Software metrics

- During a PIR, may compare
 - **actual** development times against **estimates**
 - for **all** development activities



Software metrics

- Accurate estimates for development activities are difficult to assess
- Using metrics from **previous projects** can improve the estimation process
- Software metrics also used to measure the quality of software
 - e.g. errors per 1000 lines of code (KLOC)

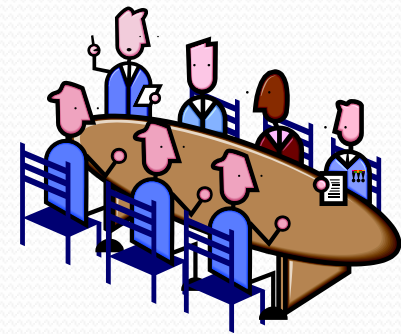
Who conducts a PIR?

- Project manager and development team...
- ...what do they care (now it is over)?
- Improve the process for next time...



Who conducts a PIR?

- Might also include
 - users involved in the development (requirements planning, testing, etc.)
 - manager(s) of user department(s) may now be the “system owner”
 - steering committee members...
...was there one?
 - facilitator?
- May have formed a **user group**



Why conduct a PIR?

- Decide what more needs to be done:
 - in future software releases...
 - to improve usage of the new system...
 - business changes for maximum benefits...



Why conduct a PIR?

- Learn lessons for future projects
- Formalise completion of project
- Evaluate new IS
 - was this project worthwhile
 - did it deliver the **expected** benefits...
 - or **sufficient** benefits
 - was the project a **success** ?

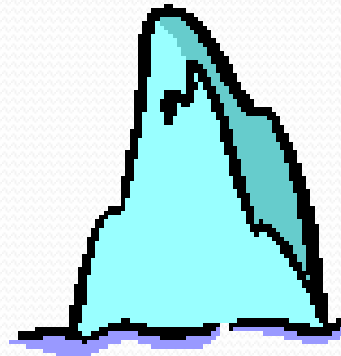
Why do IT projects fail?

- During PIR
 - need to consider project failure (either complete or partial)



Why do IT projects fail?

- “Research suggests that between 50% and 70% of all system development projects fail”



Bosman, McLeod & Tanfield (1992)

Why do IT projects fail?

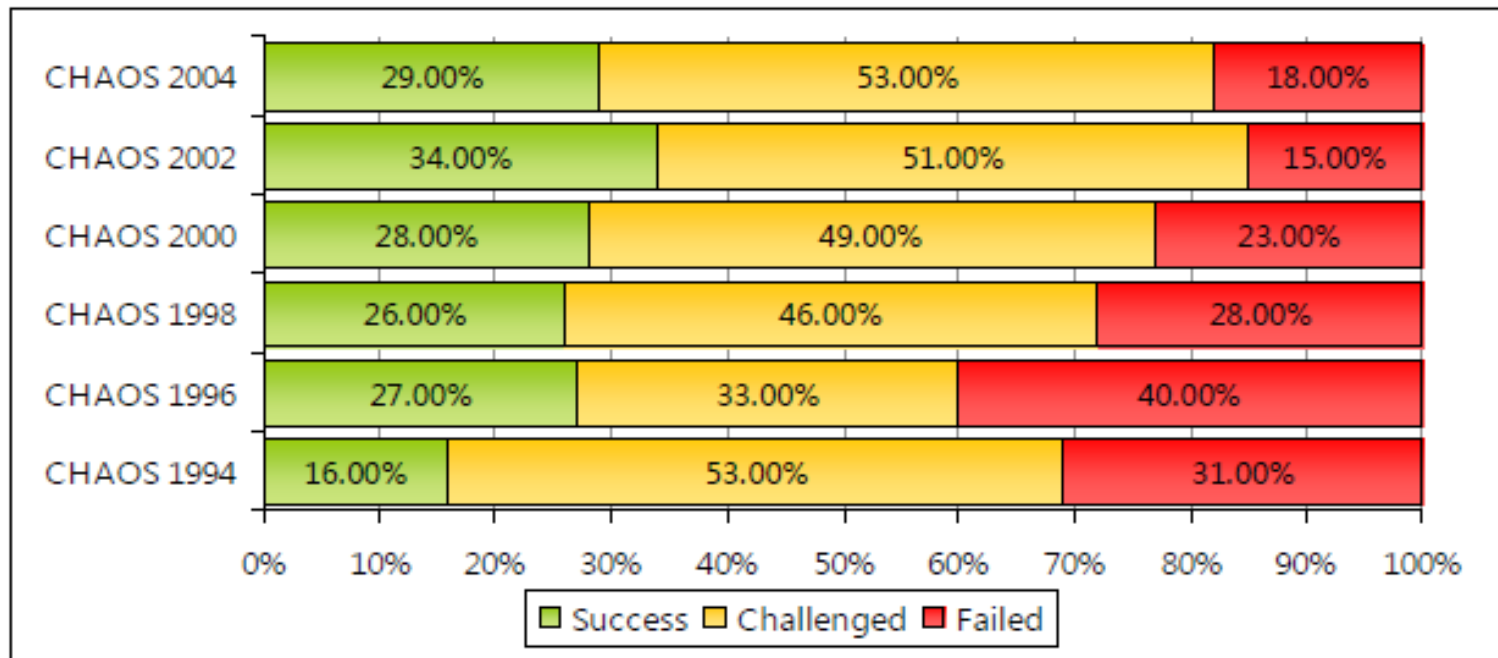


Figure 1: CHAOS success rate over time. (Hartman, 2006)

source: <http://www.mgmiller.co.uk/files/report.pdf>

Why do IT projects fail?

Standish project benchmarks over the years

Year	Successful (%)	Challenged (%)	Failed (%)
1994	16	53	31
1996	27	33	40
1998	26	46	28
2000	28	49	23
2004	29	53	18
2006	35	46	19
2009	32	44	24

source: Eveleens and Verhoef (2010)
The Rise and Fall of the Chaos Report Figures
IEEE Software 2010

<http://www.cs.vu.nl/~x/chaos/chaos.pdf>

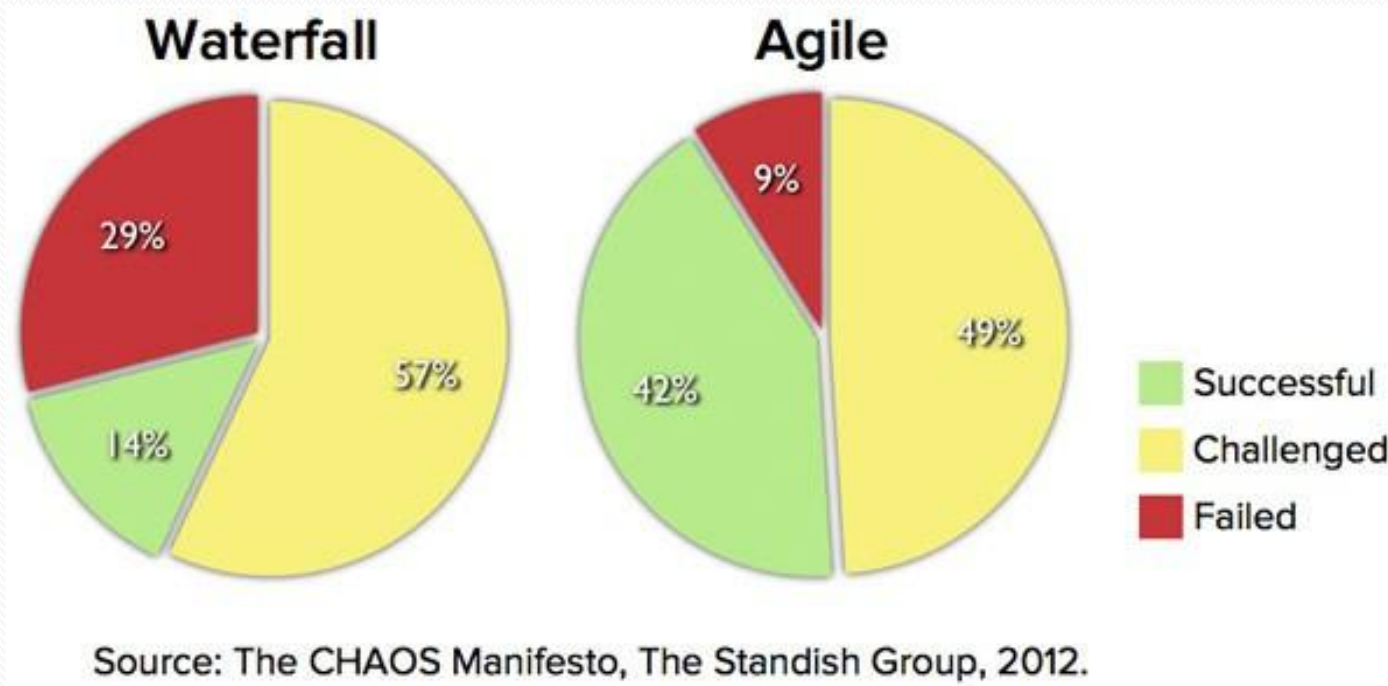
Why do IT projects fail?

Measure	1994	1996	1998	2000	2002	2004	2006	2009	2011
Successful	16%	27%	26%	28%	34%	29%	35%	32%	37%
Challenged	53%	33%	46%	49%	51%	53%	46%	44%	42%
Failed	31%	40%	28%	23%	15%	18%	19%	24%	21%

Standish Chaos Reports: 1994 – 2011

Dominguez J, The Curious Case of the CHAOS Report 2009
<http://www.projectsart.co.uk/the-curious-case-of-the-chaos-report-2009.html>

Why do IT projects fail?



Agile projects more successful than Waterfall projects

Why do IT projects fail?

“While we will never be able to examine the actual data on which the Chaos Report is based, we now have research that **refutes its findings**. In summary, this research found the Chaos Report to be **misleading** and **one-sided**.” Samad Aidane, March 2010.

<http://www.guerrillaprojectmanagement.com/the-chaos-report-myth-busters>

Also see:

Standish: Why were Project Failures Up and Cost Overruns Down in 1998?

<http://www.infoq.com/articles/chaos-1998-failure-stats>

Interview: Jim Johnson of the Standish Group

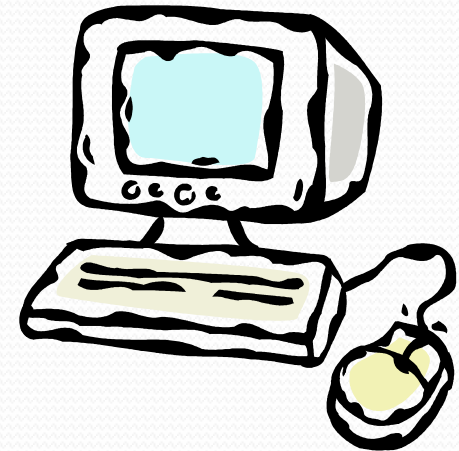
<http://www.infoq.com/articles/Interview-Johnson-Standish-CHAOS>

5 Reasons for IT project failure

1. Technical failure

Poor technical quality

Responsibility of the IT function

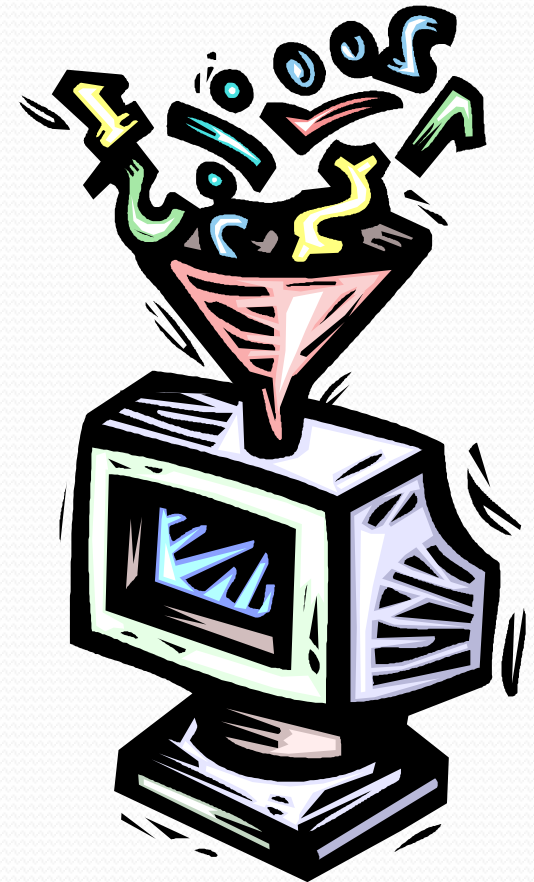


Lyytinen & Hirscheim (1987) - cited in Chaffey (2003)

5 Reasons for IT project failure

2. Data failure

- poor data design
- processing errors
- data management
- poor user procedures
- data quality at input



Lyytinen & Hirscheim (1987) - cited in Chaffey (2003)

5 Reasons for IT project failure

3. User failure

Not using system to maximum capability



Lyytinen & Hirscheim (1987) - cited in Chaffey (2003)

5 Reasons for IT project failure

4. Organisational failure

System works

...but does not meet organisation's needs

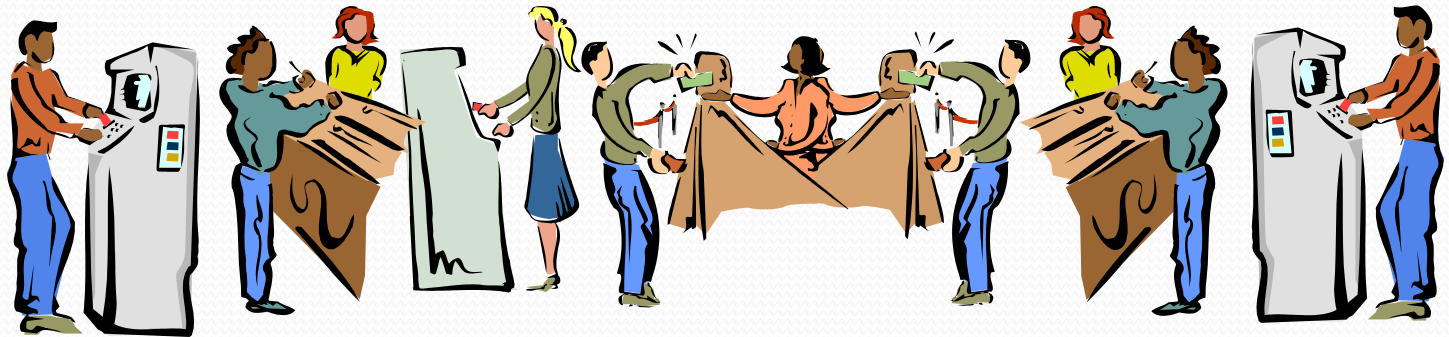


Lyytinen & Hirscheim (1987) - cited in Chaffey (2003)

5 Reasons for IT project failure

5. Failure in the business environment

- System not adaptable to changing business environment
- System not coping with volume/speed of transactions



Lyytinen & Hirscheim (1987) - cited in Chaffey (2003)

Definitions of IT project failure

Lyytinen & Hirscheim (1987): 4 views of “failure”

1. Correspondence failure

IS delivered but does not meet its original objectives



cited in Beynon-Davies (2002)

Definitions of IT project failure

Lyytinen & Hirscheim (1987): 4 views of “failure”

2. Process failure

Either development has not produced a workable IS
...or project runs over cost/time budget



cited in Beynon-Davies (2002)

Definitions of IT project failure

Lyytinen & Hirscheim (1987): 4 views of “failure”

3. Interaction failure

Heavily used = success

Hardly used = failure



cited in Beynon-Davies (2002)

Definitions of IT project failure

Lyytinen & Hirscheim (1987): 4 views of “failure”

4. Expectation failure

IS fails to meet a specific stakeholder's expectations



cited in Beynon-Davies (2002)

More Reasons for IT project failure

Ten deadly sins - Collins & Bicknell, 1998

1. Over-ambition

Trying to do ***too much***



More Reasons for IT project failure

Ten deadly sins - Collins & Bicknell, 1998

2. Pride

Computer manager unwilling to admit ignorance



More Reasons for IT project failure

Ten deadly sins - Collins & Bicknell, 1998

3. Presumption

Belief that computerisation is always a “Good Thing”



More Reasons for IT project failure

Ten deadly sins - Collins & Bicknell, 1998

4. Pusillanimity (*lacking courage and resolution, timid*)
Senior managers unwilling to make a key decision as they don't know about IT



More Reasons for IT project failure

Ten deadly sins - Collins & Bicknell, 1998

5. Credulity

Believing supplier's promises



More Reasons for IT project failure

Ten deadly sins - Collins & Bicknell, 1998

6. Consultancy

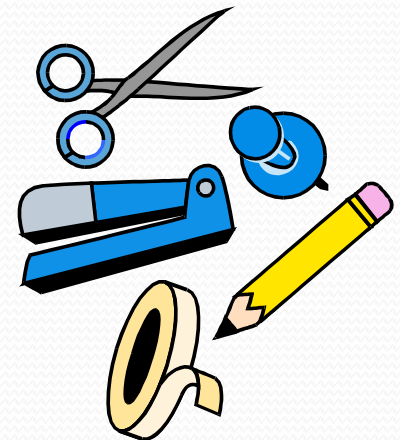
Reliance on consultants who are charging big £££

More Reasons for IT project failure

Ten deadly sins - Collins & Bicknell, 1998

7. Tailored software

Insisting on bespoke development or tailoring package solutions

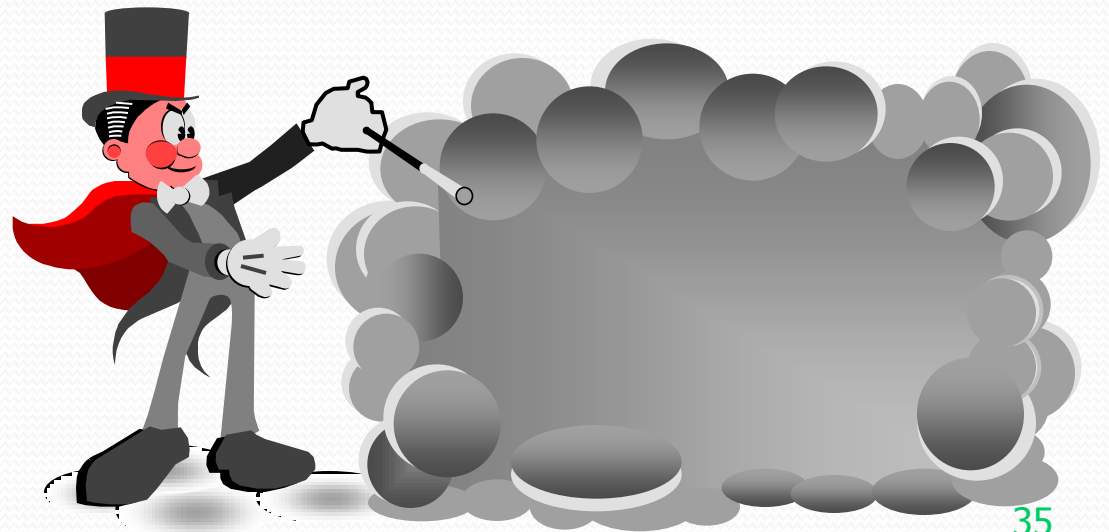


More Reasons for IT project failure

Ten deadly sins - Collins & Bicknell, 1998

8. Concealment

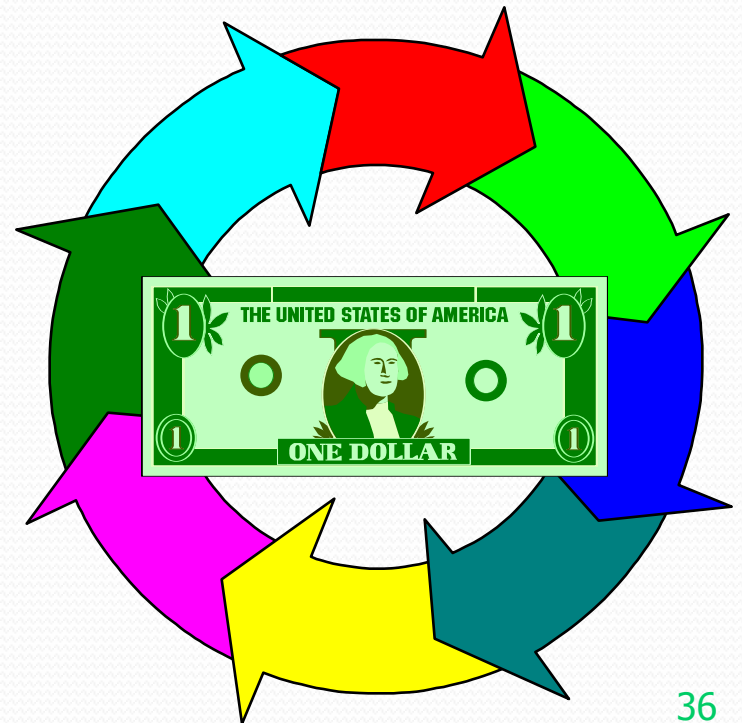
Hiding the project problems



More Reasons for IT project failure

Ten deadly sins - Collins & Bicknell, 1998

9. Buck-passing
Blame somebody else



More Reasons for IT project failure

Ten deadly sins - Collins & Bicknell, 1998

10. Lawyers

Believing they can sue the supplier if it goes wrong



Project failure

Top tips for project managers – project failure

A selection from a light-hearted analysis of project problems

- ⇒ Projects with **realistic** budgets and timetables **don't get approved**
- ⇒ Nothing is **impossible** for the person who **doesn't have to do it**
- ⇒ Activity in the early stages should be dedicated to **finding the correct questions**
- ⇒ A failing project has **benefits** which are always spoken of in the **future tense**
- ⇒ A user is somebody who **rejects** the system because it's **what he asked for**
- ⇒ Projects don't fail in the end; they **fail at conception**
- ⇒ The difference between project **success** and **failure** is a good PR company

Project Success



Top Ten Reasons for Success

- ✓ 1. User Involvement
- ✓ 2. Executive Management Support
- ✓ 3. Clear Business Objectives
- ✓ 4. Optimizing Scope
- ✓ 5. Agile Process
- ✓ 6. Project Manager Expertise
- ✓ 7. Financial Management
- ✓ 8. Skilled Resources
- ✓ 9. Formal Methodology
- ✓ 10. Standard Tools and Infrastructure

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Project Success

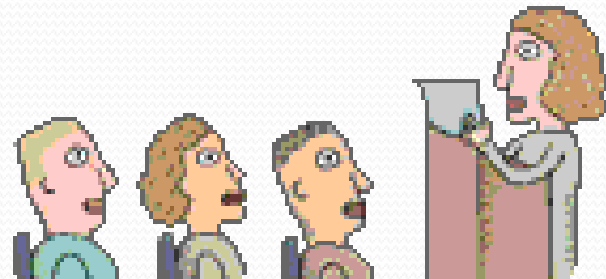
Live up to the label - P.R.O.J.E.C.T.

- **P** Planned
- **R** Rational
- **O** Objectives &
- **J** Justified
- **E** Expectations
- **C** Coordinated &
- **T** Team Driven

<http://www.projectkickstart.com/downloads/IT-project-success.cfm>

How PIR helps future projects

- Learn from what has been done:
 - avoid failure in the future
 - employ techniques found to be useful
 - reinforce good practice



Summary

Post-implementation review

Identify **faults** in system

Consider possible **enhancements**

Agree on features for a **future release**

Evaluate success of project **budget / timescale**

How well does the system **meet objectives** ?

Evaluate **development practices** that were used

Use of **software metrics** – actual versus estimate

Why projects **fail**

Overall - **evaluate...learn...improve**



Any questions?

Further reading

- Aidane S, (2010) <http://www.guerrillaprojectmanagement.com/the-chaos-report-myth-busters>
- Beynon-Davies, P. 2002, *Information systems*, Palgrave
- Chaffey, D. 2003, *Business Information Systems*, 2nd edition, FT Prentice Hall
- Collins, T. & Bicknell, D. 1998, *Crash - Learning from the world's worst computer disasters*, Simon & Schuster
- Dominguez J (2009, 2013) <http://www.projectsart.co.uk/the-curious-case-of-the-chaos-report-2009.html> (accessed 8 April 2013)
- Lyytinen, K. Robey, D. (1999). Learning Failure in Information Systems Development: *Info Systems J.* 9, 85-101
- Lyytinen, K. and Hirscheim, R. (1987): Information Systems Failures a survey and classification of the empirical literature in *Oxford Surveys in Information Technology* (4), Zorkoczy P. (ed) p. 257-309, Oxford University Press
- http://www.computerweekly.com/blogs/tony_collins/2009/02/top-tips-for-project-managers.html (accessed 8 April 2013)

Further reading

- The Challenges of Complex IT Projects, Royal Academy of Engineering and British Computer Society,
http://www.raeng.org.uk/news/publications/list/reports/Complex_IT_Projects.pdf
(accessed 8 April 2013)
- Bosman R, McLeod G and Tanfield J (1992) The Influence of Project Method Fit on the Success of System Development Methodology Usage
- <http://www.galorath.com/wp/2009-standish-chaos-report-software-going-downhill.php>
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- Eveleens J L and Verhoef C (2010), The Rise and Fall of the Chaos Report Figures, IEEE Software 2010, <http://www.cs.vu.nl/~x/chaos/chaos.pdf>
- <http://www.mgmiller.co.uk/files/report.pdf> (accessed 8 April 2013)
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