Project Management

John Wiese – 2010
### TOP 10 DEFENCE CONTRACTORS

1. Tenix Defence Pty Ltd $600M
2. Thales (ADI Limited) $594.5M
3. BAE Systems Australia 475.0
4. Australian Aerospace Limited 351.888
5. Raytheon Australia Pty Ltd 325.0
6. Spotless Group Limited 285.0
7. The Boeing Company 2 84.0
8. Australian Submarine Corporation Pty Ltd 255.9
9. Serco Sodexho Defence Services Pty Ltd 132.0
10. Saab Systems Pty Ltd 123.0

Source: Australian Defence Magazine, 2008
Our Competitive Edge

- Project Management and Teaming
- Systems Engineering
  - Requirements analysis
  - Solutions
  - Design, integration and testing
- Specialist Manufacture
- Research and Technical Development
- Software Development
- In Service / Through Life Support
- OUR PEOPLE – Train and Retain!
Why Use Project Management?

Focus, Avoid Crisis & to Make Money!!
What is a Project?

- **Project**
  A temporary endeavor undertaken to create a unique product, service or result.

- **Project Management**
  The application of knowledge, skills, tools and techniques to project activities to meet project requirements.

What are Commercial Projects?

Commercial projects pass these two tests:

1. There is the intent to make a profit.
   Yes you’re in it to make money!

2. There are real budget and schedule constraints.

Simple really, complete the project WITHIN a budget to realise a profit. Do so by KNOWING your real budget and schedule constraints.
Projects (particularly software) ...

Often an uncontrolled flow of resources down a bottomless pit.
Heads roll as Microsoft delays Vista again

MICROSOFT has promoted Steven Sinofsky, a protege of Bill Gates, to run its Windows and Internet unit after development delays caused the world’s biggest software maker to postpone the latest version of its operating system until next year.

Sinofsky will replace Jim Allchin, a 16-year Microsoft veteran, who will retire early next year.

Senior vice-president Will Poole will be removed as head of Windows client and Sinofsky will lead alongside for future Windows development.

Sinofsky’s biggest challenge will be to speed up software releases and take market share from Google’s Internet programs.

“Microsoft’s ability to control the product development process and meet deadlines is seriously broken,” Roger Kay, an analyst at Massachusetts-based Endpoint Technologies Associates, said. Sinofsky is definitely the right flavour of guy to fix this.

“Now the top of the organisation begins to look like professional managers.”

Microsoft has delayed the release of Windows Vista until Vista released.

After that Valentine’s position and the role of the engineering group he runs will be evaluated, Microsoft says.

Vista was already two years late before the most recent hold-up, which will cost Microsoft almost $US900 million ($705 million) in sales in the December quarter, according to Charles DiBona, an analyst at Sanford Bernstein and Co in New York.

The delay will cut more than $US4 billion from sales of computers this year, according to Gartner analyst Charles Smul-Groff, a California researcher.

In September, Ballmer merged the MSN and Windows units, which are worth $US $1.6 billion Office business.

A former technical assistant to Gates, Sinofsky is known for keeping tightly to schedules and for being “nihilistic” in refusing projects if they will delay the product, says Rob Helm, an analyst at Washington-based market researcher, Directions on Microsoft.

“His reputation is that he’s a guy who does what he needs to ship code,” says Michael Gartenberg, an analyst at Jupiter Research in New York.

The retail version of Sinofsky’s biggest challenge will be to speed up software releases and take market share from Google’s Internet programs.

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Joe Wilcox, an analyst at Jupiter Media Metrix, also notes the eight groups, including Sinofsky’s biggest challenge will be to speed up software releases and take market share from Google’s Internet programs.

“One whole project has been handled poorly from day one,” Gartenberg says. “It’s not just the delays, it’s that they also keep cutting features.”

Google beat MSN in introducing products such as PC search and satellite mapping.

Martin Taylor, credited with helping Microsoft beat back the threat of the free Linux operating system, will be brought in to improve marketing for MSN and Windows Live.

David Cole, who ran the MSN unit, will lead governing sales, marketing and business development for Windows Live and MSN.com before a one-year leave of absence.

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RESEARCH SHOWS.....

- **Best organisations can work 11.1 times faster than the worst.**

- Nearly a third of USA projects are cancelled during development

Consider exactly the same specification product for $99 or $1100. Which would you buy?
How? Project Management Processes

PMBOK PM Knowledge Areas:
Project Integration, Scope, Time, Cost, Quality
Human Resources, Communications, Risk, Procurement
TIME = CHANGE = CHALLENGES
New Scope, Staff, Stakeholders, Risks, etc.
Two main options…..

- **PMBOK – Project Management Body of Knowledge.**
  - Proven traditional good practices mixed with innovative ideas emerging in the profession. It is still growing and evolving.

- **PRINCE2™ – Projects in Controlled Environments**
  - It was initially developed in 1989 by the Central Computer and Telecommunications Agency (CCTA) as a UK Government standard for information technology (IT) project management; PRINCE2™ was released in 1996 as a generic project management methodology. Now a De facto standard for project management in the UK.
Competing Demands...
Organise the work to meet these constraints if you want to make a profit!
Tools?

- Documents – Contract, Plans, etc.
- WBS – Work Breakdown Structure
- Resource Profile – MS Excel
- Schedule – MS Project, Primavera
- Budgets – MS Excel
- Progress Measures – Earned Value Management (EVM)
Keeping Projects On Track with EVM

Identify problems, ask WHY, and act early. R&D projects can finish on time, budget and achieve their required outcomes.
Define (Scope)
- Work Breakdown Structure (WBS)

Assign
- Resource assignments make a difference!

Measure
- Graph Data to Identify Trends (EVM)

Manage
- Proactive Decisions - Take Corrective Action

Training programs are not answering “how to execute a plan, including selecting the right people, following up and troubleshooting when progress falters” – Prof F. Hilmer.
WBS - Standard Elements

- Effort / Cost Estimated Based on WBS
- Product Oriented (the critical outcomes)
- Manageable – but detail where detail is needed.

Getting the WBS correct is fundamental to success.
Which Resources?
- Staff and skill mix are important
- Different results from different people

Assigning Responsibility

Time Phase Work
(impact of staff leave)

PEOPLE determine OUTCOMES - Not tools, not process, PEOPLE!
Earned Value Management (EVM)

Staff Hours (capped)

Progress Built Up Based on Milestones

- Avoids Engineers Optimism

- Objective

- Supports “At this moment” status (not waiting for 100% completion)

Trust Engineers but verify progress with objective Milestones.
Tolerances – Objective Intervention
Quickly Focuses Attention On Problems
Highlight Scope Creep
Early Indicator of Progress or Resourcing Issues (EVMs strength)
Supports Informed Decision-Making
Is there a more efficient solution, are there cheaper options, can project scope be reduced, is schedule negotiable?

Give Managers The Opportunity To Manage!
Some people prefer to WING-IT.....
http://www.pmi.org

PRINCE2 Foundation and Practitioner Training 
http://www.prince2.com

Australian Institute of Project Management 
http://www.aipm.com

“Peopleware” Tom DeMarco (ISBN 0-932633-43-9)
QUESTIONS?