Scheduling in a Defence Environment

Patrick Weaver PMP, FAICD, FCIOB. patw@mosaicprojects.com.au

Scheduling in a Defence Environment



Agenda

- The Usefulness of Scheduling
- · The 'State of Play'
- Emerging Trends
- Conclusions



This Section - Usefulness

- Schedules: define / underpin / support
 - Most project management functions
- Primary uses of a schedule
- Threats to the schedule's usefulness
 - 'Contracts'
 - Excessive detail and attempts to 'control'

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Schedules are 'good for'

- Developing and testing the optimum delivery strategy for a project
 - Sequencing the WBS 'work packages'
 - Coordinating & optimising the flow of work
- Providing a valid time baseline for
 - Earned Value
 - Earned Schedule

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Schedules are 'good for'

- Assisting in day-to-day decision making
 - Resolving dilemmas
 - Evaluating the consequences of change
 - Testing ideas
 - Communicating strategy & setting objectives
- OR at least
 'good schedules are good for...'

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Schedules are 'not good for'

- Accurately predicting end dates
 - Schedules do not 'scale' remaining durations based on performance to date
 - Earned Schedule solves this problem
- Controlling work at the 'coal face'
 - You need people to do this
- Measuring productive efficiency
 - Earned Value does this



Scheduling's 'Client'

- The Project Manager should be the primary user of schedule information
 - To decide on the project's strategy
 - To coordinate workflows and balance resource demands
 - To test decisions and resolve dilemmas
- Uses that distract from this primary purposes damage the project

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Damaging Influence #1

- Making a detailed schedule into a 'contract document'
 - This distorts the schedule as parties manipulate data to 'political' ends
 - Adding links to 'lock in' anticipated delays
 - · Manipulating the location of the 'Critical Path'
 - Prevents sensible changes as 'reality' unfolds
 - Changes de-value the 'credibility' of the unaltered schedule jeopardising 'claims'

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Damaging Influence #1

- Many contracts prohibit or restrict changes to the schedule
- Making the 'best of a bad job':
 - See the 'Delay and Disruption Protocol1'
 - Separate the 'real' schedule from the contract version
 - Recognise 'float' is an artificial construct of CPM²
 - 1. See: http://www.eotprotocol.com (Free download)
 - 2. See 'Float Is It Real?': http://www.mosaicprojects.com.au/Resources_Papers_043.html

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Damaging Influence #2

- Excessive detail Schedules may have:
- Adequate detail for a collaborative 'coordinated' approach to scheduling OR
- Finite detail to 'control' the work?
- 'Project Control Systems cannot <u>control</u> anything' (they can only provide guidance)



Damaging Influence #2

- Excessive detail
 - Hides useful information and slows information flows
 - Prevents the easy testing of ideas by 'what if' changes
 - At best shows where people are 'failing' to meet the program (even if it is wrong)
 - Does not improve 'accuracy'³

3. See 'The cost of Time': http://www.mosaicprojects.com.au/Resources_Papers_009.html

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Damaging Influence #2

- The human brain can manage around 7 pieces of data at one time (typically between 5 and 9)
- Command and Control is an outdated philosophy (McGregor 1960)
 - The only purpose for excessive detail is to attempt to control the uncontrollable



Summary

- A focus on 'using' the schedule should emphasise
 - Collaboration
 - Coordination
 - The ability to adapt to changing circumstances
 - Supporting the PM Team
- But this needs 'alliance' type contracting

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This Section - State of Play

- PMI's Practice Standard for Scheduling
- The Scheduling Excellence Initiative
- Scheduling Certifications
- Scheduling Interest Groups

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PMI's Contributions

- The 'Practice Standard for Scheduling'⁴
 - Places scheduling in the context of the PMBOK Guide 3rd Edition
 - Describes 'good scheduling practice' (Ch. 3)
 - Defines the components needed for any schedule (ch. 4)
 - Offers a 'conformance scoring' system for evaluating schedules (Ch. 5)

4. To order: http://www.mosaicprojects.com.au/Books.html

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PMI's Contributions

- College of Scheduling and the Scheduling Excellence Initiative (SEI)⁵
- SEI is working on the 'Scheduling Enhancement Series' (SES)
 - A multi-volume reference for scheduling:
 - Concepts
 - Methodologies
 - Best Practices

5. See: http://www.pmicos.org

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Certifications

- AACE's 'Planning & Scheduling Professional Certification'⁶
 - 7 Hr examination
 - 8 Years scheduling experience
- PMI's Scheduling Credential
 - Under development⁷

6. See: http://www.aacei.org/certification/certExplained.shtml 7. See: http://www.mosaicprojects.com.au/Planning.html

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Local Groups

- AIPM / DIPMC initiated: Planning & Scheduling Community of Practice (PSCP). Contact: mmiller@sms.com.au
- Proposed PMI COS 'Campus' in association with the PMI Canberra Chapter. Contact: canberra@pmichapters-australia.org.au



This Section - Emerging Trends

- The great scheduling debate:
 - Command and control or
 - Collaboration
- Murray Woolf's new book:⁸
 - The ideas around 'momentology'
 - The primary source of delays
- A recognition of the 'scheduling problem'

8. To see more: http://www.mosaicprojects.com.au/Books.html

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This Section - Conclusions

- Scheduling is in a mess:
 - Chronic shortage of schedulers
 - Too much focus on the tools
 - The 'art of planning' largely lost
 - Too much focus on data and 'the claim'

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Conclusions

- The trends are positive:
- The new Practice Standard for Scheduling
- SEI and SES developing best practices and guidelines
- Practical certifications coming
- · We can now rate the technical competence of a schedule

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Conclusions

- · Still to come:
 - Rating the 'usefulness' of the schedule
 - Working local SIGs and 'Campuses'
- The challenge: Recognising scheduling is a modelling process to aid decision making (not a controls process) and



Conclusions

- Accepting "Every model is wrong, but some models are useful" G. Box 1979
 - Scheduling is a modelling process that helps communicate and coordinate ideas about what might happen in the future
 - It is not a cartographic process mapping what already exists
- After 50 Years⁹ we still have a long way to go.

9. See 'A Brief History of Scheduling': http://www.mosaicprojects.com.au/Resources_Papers_042.html

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Questions Please



Patrick Weaver PMP

Email: patw@mosaicprojects.com.au

Tel: 03 9696 8684

Web: www.mosaicprojects.com.au

Download this paper from the 'Breaking News' section of the Mosaic site

The 'Papers & Resources' section of the Mosaic site has:

- Direct links to all of the project management associations
- A large number of free PM papers and useful scheduling references

The 'Planning' section of the Mosaic site has the latest information on the PMI Standards, SEI and the proposed Scheduling Credential

