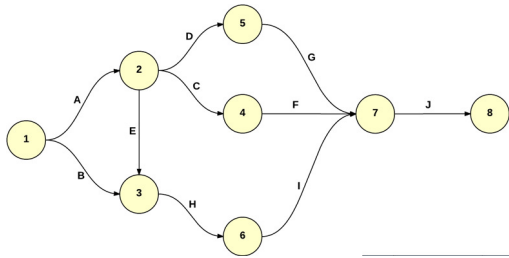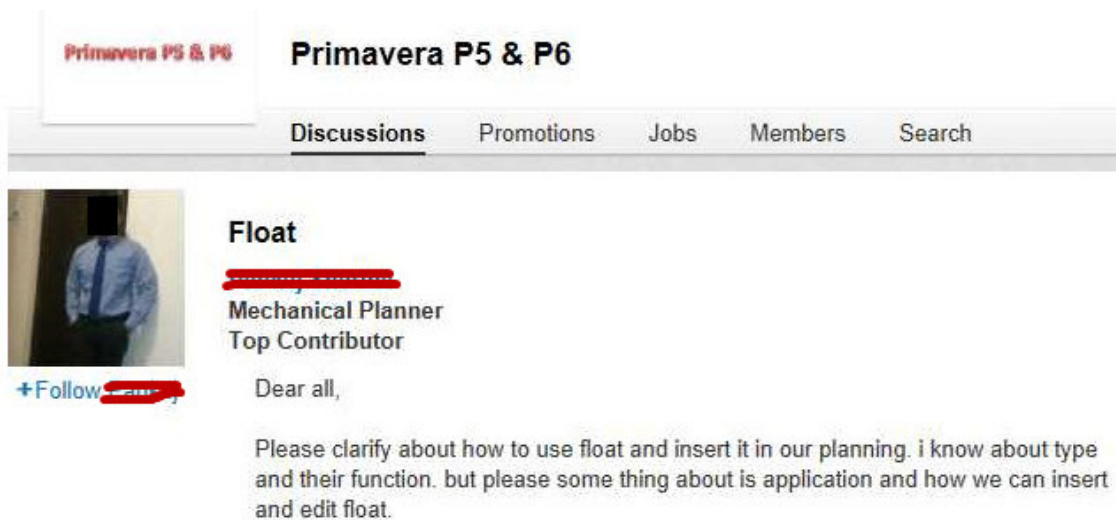# The problem with CPM

Projects are routinely finishing late. Whilst many have no effective schedule controls a significant proportion do outlay significant amounts of money on scheduling software and people to operate the computer systems and still finish late. The simple fact is most schedulers have no effect on the management of the projects they are working on - they are either there to comply with client specifications or to gather data for the 'inevitable' claims or both.

The problem with scheduling and CPM is not the technology, it's the people - virtually anyone can learn to use software in a few hours. But being able to push some buttons to make some use of the tool and understanding the basic fundamentals of scheduling are two very different things as demonstrated by this Linked-In posting:

Give the cost of a set of P6 is typically around $3000 to $5000 per seat, employing a planner who has absolutely no concept of the way 'float' is calculated - the very basics of CPM scheduling - highlights a chronic problem[1]. I don't know of any other 'professional discipline' where people are employed to 'push buttons' on software without having any concept of the objectives the software they are 'trained to use' was created to achieve.

The root cause of this problem is virtually no-one is training planners and schedulers in the knowledge and skills they require to be effective:

- A basic knowledge of CPM scheduling and other planning techniques, and
- The skills of listening, effective communication, constructive questioning and creative thinking/problem solving.

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[1] For more on *Calculating and Using Float* see: https://www.mosaicprojects.com.au/PDF-Gen/Schedule_Float.pdf

www.mosaicprojects.com.au

Teach someone these two skill sets, add a sheet of paper and a HB pencil and you can start developing useful schedules - the software is secondary (and you can always find a technician to push the buttons for you). The ability to model disparate concepts and ideas into a cohesive plan of action that is fully understood and agreed by all of the key players in the project has very little to do with technology and everything to do with stakeholder engagement skills[2].

Certainly, a good planning team needs one or two technicians in support roles to make the software behave and help the real planners do their work with the project participants. Unfortunately, the planning world has become dominated by 'power-fools' (to use Doc Dochtermann's term) focused on creating massive schedules that showcase the technology in preference to useful information.

The question and challenge facing the people responsible for the management of projects is to work out how we can get planning re-focused on creating useful information that people actually use because they want to use the information to help make their projects successful?

One useful idea to resurface is an article by Dan Patterson, **Planning By Consensus**. A useful book focused on a similar approach is the CIOB's **Guide to Good Practice in the Management of Time in Major Projects** published by Wiley Blackwell[3]. More basic information is available in the free resources on my website[4].

Similarly, requiring a demonstrated knowledge of basic planning and scheduling would be sensible. There are a range of certifications available including the PMI-SP[5], AACEi PSP, and the 'Guild of Project Controls' qualifications[6]. To date less than 5000 people world-wide have bothered to become qualified despite the certifications being available for over 5 years. I would suggest the primary reason for this lack of interest is that employers are happy to employ software jockeys with the level of scheduling knowledge demonstrated by the Linked-In question above. Qualifications are not the same as competency, but they do demonstrate the holder has some basic knowledge of the practice of scheduling.

Unfortunately, the fundamental conundrum remains that very few managers and clients have been exposed to 'good planning and scheduling', therefore they don't know what they are missing and as a consequence are reluctant to invest in the right people with the skill set needed to develop useful schedules that contribute to project success.

This is compounded by the excessive focus by HR departments and job advertisements on 'tools skills' over planning and scheduling skills; meaning most people attracted into the 'profession' are interested in running complex computer software and have little or no interest or ability to engage effectively with people and build effective consensus driven schedules that people want to use.

What is the point in employing a person who can run a tool if they don't understand its fundamental purpose and cannot engage effectively with stakeholders to create a useful schedule? As I've been saying for more than a decade, useful schedules are useful because they are used!

Resolving these conundrums will require a major effort - this is under way in several different forums but the inertia of the 'status quo' and embedded vested interests will make achieving meaningful change difficult at best.

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2   For more on **The Roles and Attributes of a Scheduler** see:
     https://www.mosaicprojects.com.au/PDF-Gen/Attributes_of_a_Scheduler.pdf

3   For more on **The Guide** see: https://mosaicprojects.com.au/shop-guide-to-good-practice.php

4   Mosaic's **Scheduling Good Practice**: https://mosaicprojects.com.au/PMKI-SCH-010.php

5   For **PMI-SP training** see: https://www.planning-controls.com.au/

6   For more on **The Guild** see: http://www.planningplanet.com/guild

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