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# MANAGING FOR SUCCESS
# THE POWER OF <u>REGULAR</u> UPDATES

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# ABSTRACT

Critical path scheduling techniques, supported by efficient scheduling software such as Primavera have long been recognised as a standard component in the overall project management process. So why does project scheduling so often fail to deliver on its promise?

This paper looks at the interaction between the analytical and psychological processes involved in schedule development and control systems to identify the opportunities missed by many project teams to make their schedules work for them. Simple changes in the way schedules are developed, implemented and managed can deliver major increases in the returns from the investment made in the planning / scheduling processes.

The first area of consideration is the various options available to develop and "update" a schedule and how the different information produced can influence the thinking of both project management and project team members.

The second area of consideration is the power of the update process in itself to change project team behaviour and attitudes towards the overall success of a project.

Techniques that can be used by any project team supported by a Primavera schedule are described, including how to ask for progress information to obtain the maximum psychological benefit. These simple techniques create opportunities to significantly enhance the prospects for a successful project outcome.

# INTRODUCTION

Research and observation suggest that one of the key factors that differentiate successful projects from unsuccessful ones is a committed, motivated and directed project team. The 'performing' team seems able to overcome a host of problems that a less committed or directed team find almost impassable. Additionally, many authorities are now suggesting that the "soft" aspects of project management (particularly people management) are at least as important to the delivery of a successful project outcome as the technical issues that have been the traditional focus of project management.

The creation of a 'performing' team requires the input of time, skills and effort from the organisations project management and general management. This process takes time and the effort, for which due allowance needs be allowed in the overall schedule (refer 'The Project Start-Up Conundrum' Patrick Weaver and Lynda Bourne, 2001). This paper will discuss one way the team formation process can be significantly assisted by changing the way the project schedule is developed and implemented.

# DEVELOPING AN EFFECTIVE SCHEDULE

The development of the project schedule occurs during the worst possible stage in the overall project's life. Typically, the schedule has to be developed before the project team is properly formed and before the project team members have much understanding of the overall project, its risks and their working environment. In many cases, this schedule forms a part of the contract, is used for assessing contractual delays and obligations and cannot be easily changed. Even where strict contractual obligations are absent, there is a strong expectation from the project's senior managers and 'clients' that a schedule will be developed and the forecast dates are accurate.

The typical response from project managers to these imperatives has typically fallen into one of two categories: -

- The "planning expert" is called in (either an external consultant or the in-house planners from the PMO, etc) and the expert is asked to prepare a schedule.

- Alternatively, the Project Manager (PM) spends a few very late nights generating the schedule on his/her own (or with minimal assistance).

The resulting schedule can be a very accurate and contractually effective document and (particularly when done by the PM) may prove valuable insights into the overall project. However, the ownership of the schedule is totally vested with its developer and as a consequence, the rest of the project team feel little commitment to it. Experienced planners are often aware of this risk and work to off set the ownership issues and "sell" the plan to the overall project team but this process at best is an attempt to "retrofit" ownership after the event.

## Creating Ownership

The focus of this paper is on 'managing for success' and the effectiveness of regular updates. However, the success of these processes is totally dependant on the schedule being seen as an important, accurate and effective tool by the project team, ie the schedule is "owned" by the project team as a whole, not just the planners. Creating and maintaining this sense of ownership is central to

the "managing for success" strategy.  Many of the techniques and principles that are essential to the update process (and are discussed in detail below) can be applied to the schedule development process together with some that are exclusively development orientated.  The key considerations are: -

- Involve as many people as possible in the creation of the schedule.  In particular, ask for dates and durations from the people responsible for each task.

- Ensure a full review process is carried out (this spreads ownership).

- Deal openly with all comments, questions and objections.

- Ensure all key stakeholders sign off on the agreed schedule (and create a firm baseline).

This process can be carried out in a facilitated workshop ( eg Mosaic's 5-STEPS process developed by Doyle and Weaver) or can be achieved by informal (but carefully structured) discussions facilitated by the project planner.  In either situation the schedule development should follow a sequential process and the team members are involved at each stage.  The key interaction is a "questioning" process where the planner poses a problem, issue or alternative and asks the team to provide the actual input.  The sequence of events generally follows this pattern and ideally each stage is closed off before starting on the next.

- Decompose the overall project scope into discrete tasks that: -
    - Are of an appropriate size.
    - Have a clear start and end (unambiguous).
    - Have a single "owner".

- Define the dependant logic structure for the tasks (ie create the logic network): -
    - Only use real logic (ie what must be completed before this task).
    - Where possible avoid lags and overlaps.
    - If necessary, split or amalgamate tasks to facilitate the creation of a "sensible" network.

- Define the optimum duration and resource requirements for each task
    - Resource levels should be "optimum" for the task.
    - Do not analyse overall time or resource requirements yet! Focus on each task in isolation.

- Run Time Analysis: -
    - This is the optimum overall schedule duration.
    - Identify any problems and issues.
    - Refer back to the team and "brain storm" solutions to specific problems.
    - Check the results – at the end of this process the shortest practical schedule will have been agreed by the team.

- Now deal with the reality check – analyse the overall resource requirements: -
    - Initially, simply smooth the resource requirements and see if adequate resources can be obtained to achieve the optimum 'Time Analysis' date.
    - Where resources are limited, commence resource levelling and balancing processes, depending on the project, the trade off is between; time, cost, quality, scope and the available resources.
    - As they are identified, refer each problem back to the project team for analysis and resolution.  Where appropriate, involve key external stakeholders in the processes.

- Undertake a risk assessment and build in appropriate mitigation and / or contingency factors[1].
- Finalise the schedule and obtain agreement: -
    - o Baseline the schedule.
    - o Obtain original signatures from all of the key stakeholders.
    - o Present the plan in detail to the project team.
    - o Make the plan matter.

At the end of this process several key outcomes should have been achieved, both within the project team and within the wider stakeholder community. These outcomes should include: -

- The overall scope and "road map" through to completion is clearly defined.
- The project team has a clear understanding of the overall project and their roles and responsibilities.
- Each team member "owns" the scope and duration of the tasks allocated to them.
- External stakeholders (particularly resource owners) have physically "signed off" on their agreement to make adequate resources available to the project.

In an ideal world, all that is required from here on in is for the project team to implement the plan. Unfortunately, this is seldom the case.


# MANAGING FOR SUCCESS


The schedule development processes outlined above a dealt with in more detail in the paper *5-STEPS {Five Steps To Ensure Project Success}* – Doyle and Weaver 1995 (updated 2002)[2]. Whilst this represents an ideal foundation for implementing "Managing for Success" it is not essential to have had this level of interaction between the project team and the schedule development process. All that is required to implement "Managing for Success" is a sensible schedule supported by an effective scheduling tool such as Primavera.

In fact, even when the 5-STEPS processes are implemented to the fullest extent, it is unsafe to assume full ownership of the schedule will continue to exist with all of the team members. The constraints acting against full ownership include: -

- Time constraints – the need to complete the schedule prevented all of the questions and issues being resolved to all of the team member's satisfaction.
- Many team members not being committed to the project during the schedule development process – they come on-board later.
- Confidentiality and contractual issues preventing full disclosure or a "satisfactory" solution from the team member's perspective.

Irrespective of the initial level of commitment to, and ownership of, the schedule, these factors will inevitably erode over time (unless managed). Factors leading to the erosion of "ownership" include: -

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[1] For more on **schedule risk assessment** see: https://mosaicprojects.com.au/PMKI-SCH-015.php

[2] To download, see: https://mosaicprojects.com.au/PDF_Papers/P004_5-STEPS.pdf

- The effluxion of time – as time goes past, people simply feel less committed to an estimate made in the past: -
  - They have better knowledge and more experience now.
  - They forget the factors taken into account in reaching the estimate.
  - The excitement and group "good will" generated during the development process simply fade into distant memory and are forgotten.

- New people inevitably join the project team: -
  - The new members have no intrinsic ownership of a pre-existing schedule.
  - They will bring new and different perspectives to the decisions made.
  - They will dilute the ownership factor simply by being there – in many projects the final team can be four to ten times bigger then the initial group that developed the schedule.
  - Original team members leave the team and are replaced by new people.

- Circumstances change: -
  - Risk events occur (or don't occur).
  - Scope changes are imposed.
  - Business priorities change.
  - External stakeholders change.

- Every schedule loses relevance over time: -
  - Tasks are completed early or late (making planned dates inaccurate).
  - Tasks are worked on out of sequence (assumptions made when establishing the network logic are changed).
  - Ideas and methods evolve and change.
  - The amount of information available to the project team increases.

If nothing is done, the relevance of the schedule decreases and its relevance as a management tool and a team building mechanism evaporates. There are only two ways to keep a "relevant" schedule in place. One is to periodically dump the existing schedule and replace it with a new one; the other is to routinely update the schedule. Both options may be appropriate under particular circumstances, but, the replacement option should only be considered in extreme circumstances. The disadvantages of replacing a schedule include: -

- Potential contractual issues.
- Loss of continuity (changed task numbers, etc).
- Loss of ownership (why bother with a schedule if it is going to be dumped in a few weeks).
- The new schedule is a "clean sheet" past successes and failures are removed and under performing people are "let off".

Properly applied, an effective updating process not only keeps the schedule relevant, it also helps build ownership and fosters team development.

## The Update Process

Wherever possible all of the information used in the update process must come from the task owner. The schedule development process (refer above) should have created tasks that are unambiguous, of a manageable size and "owned" by one person.

The update process involves: -

- Establishing a baseline (either the initial baseline or as a part of a "re-baseline" process).
- Recording actual progress information (as at a predetermined "data date").
- Rescheduling from the 'Data Date'.
- Editing for Accuracy.
- Reporting.
- Managing trends and variances (problem solving).

Involvement of the task owners in the update process is vital for the creation and maintenance of "ownership" in the schedule. Therefore, irrespective of the ease of gathering the data alone, the planner responsible for processing the update must ask each task owner for the information required. The three basic pieces of data required are: -

- The actual start date for all tasks in progress (and started since the last update).
- The actual finish date for all tasks completed since the last update.
- The amount of time (remaining duration) needed to complete the task (not % complete).

Additional information that may be required includes: -

- Causes of delay (particularly if caused by external factors that may give rise to claims).
- Percentage complete (for valuation purposes).
- Minor logic changes needed to keep the schedule accurate and deal with out of sequence working, etc.

## How Long -v- % Complete

One of the key questions in the update process is "How long do **you** need to finish this task?" This is a totally different question to the one "What % complete are we?"

Asking about % complete simply measures what volume of work has been achieved in the past, this may be useful from the perspective of Earned Value and Cost reporting but has absolutely no relevance to the future. It is common for the last 10% to 20% of a task to take 50% or more of the elapsed duration to finish. Asking the Task owner about % complete simply focuses his/her mind on the past and it is impossible to change what has already happened.

Asking how much more time is needed to complete a task focuses on the future. It is a much harder question to answer and requires consideration of all sorts of issues. Managed properly, the estimate to complete (remaining duration) becomes a fresh commitment from the task owner to the project team as a whole to achieve specific, short term and measurable results. The impact of this commitment is reinforced on the team by the knowledge that their actual performance will be reviewed at the next update.

It is common to see all sorts of questions, problems and issues raised by task owners when confronted with the question "how long" – resolving the issues as they are identified (or adding them to issue logs, etc) brings them out into the open at an early stage and allows management to manage.

## Dealing with Change

Once the schedule has been updated and analysed, two sets of reports are generated. Feedback reports for the task owners highlighting current status against the baseline plan and their work for the next period (or two) and management reports highlighting overall trends and performance. It is not uncommon for issues, opportunities and problems to be identified in these reports. The actions are identical in all three situations: -

- The planner identifies the size and impact of the variance/change.
- Management decides if overt action to change the plan is warranted
  - To lock in gains
  - To mitigate losses
- The problem and options are referred back to the relevant section(s) of the project team for resolution.
- The team, with appropriate assistance and input from external stakeholders, develops one or more solutions.
- Management signs off on the solution (or refers it back for further consideration).
- The planners update the main schedule.

The key ingredient in this process is confronting the team with issues, opportunities and problems and letting them keep ownership of the solution. The planners and managers can (and should) have significant influence on the process providing help, guidance and "questions" but need to work to ensure the team sees the result as "their" outcome.

## Roles and Responsibilities

The model of schedule management proposed in this paper allocates specific roles to various members of the project team and to the various meeting and discussions that occur. Key roles and responsibilities include: -

- Project Planner / Project Office (technical experts and influencers): -
  - To provide guidance and coaching.
  - To provide technical know how.
  - To run the scheduling tool.
  - To produce targeted reports.
- The "Task Owner" (direct responsibility/ownership):-
  - To understand the task.
  - To know when it has started and finished.
  - To know how long tasks in progress will need to complete.
  - To identify logic and other problems impacting on the schedule.

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- Function of the Update Meeting (Task Owner & Planner)
    - To identify actual progress
    - To identify time and logic problems
    - To identify possible solutions
- Function of the Management Meeting (Manager / Planner + relevant task owners)
    - To review progress
    - To agree optimum solutions to problems / opportunities
- Function of Progress Meeting
    - If one is really necessary……..
    - To discuss the implementation of solutions/changes with the whole team.
    - Prior to the meeting all of the other information has been gathered, processed, reported, actioned and distributed.

# MOTIVATION & BEHAVIORAL ASPECTS

Good project management is increasingly being seen as good people management. The old focus on tools and techniques is shifting to a focus on how the technology of project management can work in a collaborative way to assist project teams in delivering successful project outcomes. The technology of project management (schedules, cost reports, scope management, quality, etc) still matter but their importance lies in their role as a communication and motivational vehicles.

Used skilfully in the ways described above, the project schedule works as a powerful tool to motivate, coordinate and direct the project team. The difference from the old way of schedules being prepared by experts and imposed from above is that the direction comes from within the team and as a consequence is far more powerful.

The overall process builds on the foundation of "ownership". Ownership of the project schedule is vested in the project team from the beginning. As the project evolves, the schedule and ownership of the schedule evolve with the project and stays with the team. This process is reinforced by the knowledge that the schedule data is accurate and current (ie it's "real" data) and the performance of the team is being measured against their own benchmarks.

## The Underlaying Psychology

The processes described in this paper work based on two well-known phenomenon, Heisenberg's Uncertainty Principle and Motivational Theory.

Heisenberg stated that any activity that involves the human mind observing something, especially one that includes the use of instrumentation, the process of making the observation will have an influence on the process being observed. Whilst the Heisenberg effect was raised as an issue in the physical sciences, its principles flow easily into the world of management sciences. The simple act of

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observing project team performance against the schedule will of its self change the behaviour of the team.  The art of the project planner is to ensure the change is beneficial to the overall project.

Motivational theory is more complex.  This paper is based on the presumption that most project team members are motivated by the "higher" factors in the various hierarchies of need.  The key drivers lay in the areas of self-esteem, self-actualisation and the desire to achieve personal growth and responsibility (Maslow / Herzberg[3]).  Against this background, team members will want to succeed (and be seen to be successful by their peers) when presented with a "fair" measurement system.

Work by Malcolm Roberts (primarily in the coal mining industry) has identified a number of these factors from a practical perspective: -

- People will adapt their behaviour to succeed if they perceive success is being measured in a fair and open way.
- As a consequence, the measurement system drives behaviour.
- Changing people's behaviour creates new experiences that in turn create new attitudes.
- Over time, the new attitudes consolidate into a new culture.

Robert's work[1] was primarily focussed on productivity and bonus payment systems but also used schedules as a routine part of the projects he was involved in to change the corporate culture in a number of Australian and USA mines.


## Making the Schedule "Fair"

The key element in all of the above is the attitude of the project team to the schedule. A proactive, positive attitude to the schedule is developed and maintained by ensuring the following: -

- The schedule is seen to be "fair and reasonable", this is achieved by: -
  - Involving the team in its development including the setting of task durations and resource assignments.
  - Involving the team in its updating and the maintenance of schedule logic, estimates to complete, etc.
  - Consulting with the team on a regular and routine basis during its development, during the update process and during any required changes
  - Agreeing "catch up" and other strategies with the team.
- Keeping the schedule as an "open and accountable" document, this is achieved by: -
  - Ensuring all data is analysed correctly
  - Progress and variances are reported accurately
  - All team members receive concise, timely and accurate reports
- The schedule is seen as an important document, this is achieved by: -
  - Management using the schedule to run the project (if it is not in the schedule it does not happen!!)
  - External influences (disruptions) are monitored and actioned

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3    For more on **motivation theories** see:
     https://mosaicprojects.com.au/Mag_Articles/SA1032_The_Evolution_of_Motivation.pdf

o   Supplying inaccurate update data is known to be unacceptable behaviour.

The major risk to this process comes from management either not using the schedule to mange the project (if it is irrelevant to them, why should the team bother?) or using the schedule as a weapon against the team.

The processes described in this paper will inevitably highlight problems.  If senior management uses these new insights to "beat up" the project team, all they will achieve is a change in behaviour whereby bad news is not reported until it is too late; problems will be hidden rather than resolved.

If bad news (identified as early as possible) is used as a positive opportunity to manage for success, the importance of the schedule is reinforced and the overall benefits to the project maximised. The key processes are: -

- Actively encourage accurate reporting and discourage the "hiding" of problems.
- Use the schedule update process to: -
    o   Identify and size the problem.
    o   Brainstorm various solutions.
    o   Test and optimise the best solution.
    o   Adapt the schedule to include the changes.
    o   Keep the team motivated and working to the new direction.

It is impossible for management to influence and/or resolve problems they do not know about and problems cannot solve themselves.  By encouraging the team to identify and resolve problems through the vehicle of the schedule overall project outcomes can be significantly enhanced.


# CONCLUSION


Applying the processes and principles discussed in this paper, in particular the use of regular updates, can change the project schedule from a relatively static document used for external reporting into a powerful and dynamic tool that can: -

- Help motivate and direct the project team.
- Help identify and resolve problems early (before too much damage is done).
- Provide a key communication path to the whole project team.

The key requirements are: -

- Proper and effective management support.
- A "low key" project office (or planners) that supports ownership by the project team.
- An effective and accurate scheduling system such as P3e or Team Play.

Introducing the changes required to make "Managing for Success" successful can often be viewed as a project in its self.  The project will require knowledge acquisition, training and support but can, when successfully completed deliver significant returns on the monies invested.

### References

1.  **Modern Management Systems for Higher Margins – Leading Organisational Change Successfully Using Systems to Drive Behaviour.** Malcolm Roberts, 1998.

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