

Benefits of resource management software – How can they be realised?

For individual projects, the objective is to deliver the expected output from the project on time, within cost and to the quality expected. However, for those that manage multiple projects, resource management software must be relied upon to do a lot more:

1. Check the skills capacity to take on new work as it arrives, considering resource commitments to current projects and business as usual work.
2. Ensure that projects are given the correct priority and that groups of related projects can be managed as a collection.
3. Respond to changes in scope and priority of individual projects by rebalancing the workload, within resource, skill, cost and other constraints. Here, what if analysis to assess the commercial and resource consequences of alternative courses of action becomes very helpful.

So, if these are the objectives, how can such software deliver such benefits consistently?

Resource management software achieves its objectives quite simply, by providing pertinent information that the key stakeholders have confidence in. So, in looking at how the benefits of such software can be achieved, the starting point is to look at how credible information can be delivered to the key stakeholders.

Good reporting requires both good data and an effective means of processing and presenting it as relevant information. Whilst the means of providing the information is important, creating and maintaining good data is fundamental to the successful use of resource management software; unless the project data is complete, consistent and current, the software risks never gaining credibility. It is these aspects that this paper focuses on.

Resource management data – what needs to be stored

To achieve its objectives, project management software needs to manage the following types of data:

- Resources
 - Skills & other attributes
 - Calendars & availability
- Projects
 - How to classify and categorise projects for reporting and performance analysis across groups or collections of projects.
 - Agreed targets such as finish date, budget, etc
 - Key performance indicators, to track cost and schedule variances, forecast at completion. etc.

- Tasks – describing the activities required to produce each key deliverable, which are normally labelled as milestone tasks.
- Assignments – time phased estimates of the work required to achieve each task, for each skill or individual.
- Time tracking – timesheet data that shows the actual effort expended.
- Cost rates, by individual or grade, so that actual costs and the value of work done can be compared with the budget.
- Plus, for billable work, billable rates and expenses.

Keeping this lot complete, consistent & current is not simple.

1 Data requirements for the complete picture

Where resource or skill bottlenecks can impact the performance on individual projects, the resource management software needs to have a complete picture of the work that is planned for all resources. This needs to include not only resource assignments on projects, but estimates for non project work, such as operational tasks or business as usual work. If the resource management software does not have these, including estimates or allowances for support type tasks that cannot be planned, then the true picture of resource bottlenecks will not be visible and some of the resource commitments will not be fulfilled. A lot of heavy duty software is too onerous for the more simple tasks, which is why it is so common to find spreadsheets used alongside Microsoft Project – a situation that cannot provide the complete picture.

2 The importance of data consistency and how to achieve it

One of the long term goals of project organisations is to improve the accuracy of future estimates, by analysis of past performance across similar projects. This requires a consistent structure to project plans, so that, for example, the accuracy of estimates for the design phase across similar projects can easily be compared, for each type of project. The best way of achieving this is by using project templates for each type of project, as a logical starting point to the project plan.

Generally the project office has responsibility for establishing and maintaining project templates. They require buy in from project managers if they are to be used for all projects, which is a pre-requisite for data consistency. The first step is to classify the different types of projects, so that a list of relevant templates can be created. As a minimum, they should contain lists of key phases and tasks, but, where possible, they can contain default work estimates, for the project manager to review and modify.

3 Keeping all project data up to date.

Resource management software has two aspects to this. First, timesheets must be submitted within agreed timeframes, and then project managers must provide progress updates at the agreed dates. These require a disciplined updating process that must be rigorously adhered to by all project managers. The potential benefit is great, as comparing actual effort and progress achieved against the project budget gives effective performance measurement and early warning of the impact of poor performance. Variance Analysis and earned value measurement describe these aspects and good project management software will provide relevant KPI reports, often colour coded, to draw management attention to the problem areas, in time for corrective action to have the desired impact.

Conclusion

If the objectives of resource management software are simple, achieving them is not. The key benefit is in relevant and timely management information, but for this to be credible the underlying data must be complete, consistent and current. Achieving this requires a combination of effective resource management software and good business processes that are well policed by the project office.

About the Author

Barry Muir is managing director of Innate, a resource management software vendor that has been trading for more than 15 years. You can see more details of Innate and its software products at www.innate.co.uk