



White Paper

## **Resource Allocation and Management in a Multi Project Environment**

**Resource and priority conflicts  
are everyday occurrences for  
organizations running multiple  
concurrent projects**

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## **Introduction**

The demand for qualified project managers, processes and tools has increased dramatically in recent times. More organizations have recognized that managing their entire project portfolio, as well as individual projects, is a core competency.

The initial challenges of managing discreet projects have been largely overcome. We are now facing the new challenge of getting a view of the complete portfolio, including projects requested, pending approval, approved and in progress.

The complexity of this picture is compounded when the issue of resources is brought into play. An aging population, chronic skill shortages and cultural differences between the baby boomers, generation x and generation y are creating a more complex resource management environment.

To effectively manage the resource pool means ensuring “key” resources are identified, developed and challenged to ensure on going commitment. “under performers” need to be managed out and the “middle of the roaders” must be kept on the straight and narrow. A bit like herding cats.

So is there a practical approach to resource and priority conflict management for organizations running multiple projects in today’s environment? The answer is a resounding yes.

This paper looks at the current situation with regard to people, process and tools. Next we will highlight the problems that are being encountered by many organizations, the implications arising from those problems and finally payoff for getting it right.

## **The Current Situation**

Most organizations have implemented a project management methodology whether it is based on PMBOK, Prince2 or a home grown derivative. They address the key elements of managing projects in terms of time, budget, schedules, work allocation, issues, risks, scope control and reporting standards. These methodologies/processes are now being extended to address management of the entire program or portfolio of projects. PMI (authors of PMBOK) are releasing “The standard for Program Management” in May 2006.

Project management tools that enable project managers to plan the individual projects are common place today. Many organizations find that the tool functionality does not match the requirements of their Project Management Methodology. For example one of the most widely used tools in the market today does not have the functionality to effectively handle timesheets, issues, risks, and scope control.

Some organizations have moved to tools that enable management of the complete portfolio. There is still resistance to moving down this path due to:

- Low levels of awareness about these tools
- Technical complexity of implementation and operation is beyond the capability of all but the most technically proficient organizations
- Cost of implementation
- Lack of a clear value proposition

The benefit of such tools is becoming more tangible, especially in keeping your “key” resources for longer and weeding out the “under performers”.

The industry itself is growing, from [www.seek.com.au](http://www.seek.com.au) Australian jobs in project management categories as of the 21<sup>st</sup> of March 2006 equal 1874 vacant positions. So finding the right project resources is becoming harder and as is keeping them. There are currently more jobs than people. The likely hood of these positions being filled is approaching zero due to the chronic skills shortage in this area globally.

## The Problem

The Squeaky Wheel  
Gets the Oil

So, organizations today find themselves in a variety of situations revolving around the three axis of process maturity, tool capability and skills availability.

Many organizations are just beginning to realize that they need separate management structures and information systems to deal with line and project activity. Setting up these structures, associated processes and information systems involves agreeing new rules of engagement for assigning project priorities and resources.

The rational management team would take a quantitative approach based on capital rationing and forecast project benefits. For example, say we have a portfolio budget of \$10 million to do projects. The first

step is to rank the projects based on their benefits and time to realization. The next step is to draw a line at the point where the aggregate project budgets consume the \$ 10 million. Step four is to allocate the resources to the projects from the top of the list until we run out of people. Finally, start those projects that we have resources for and put the other in the pipeline.

The real world view is somewhat different to this as there are “qualitative factors” to be considered as well. It is the “qualitative factors” that make this process difficult in terms of priorities and resource allocation.

Not separating the management structures and an agreed method of setting priorities means:

- The persuasive and loud will command resources
- Non strategic projects can get a guernsey
- Undertaking projects at the wrong time or for the wrong reasons
- Qualitative factors rule the day in the absence of good quantitative information
- Short term profit may be impacted
- Long term sustainability of the organization can be undermined

## **The Implications**

Getting it right means:

- Simple and effective resource management
- Better project selection resulting from effective priorities
- Decisions reflect a balance of quantitative and qualitative factors
- Reduce the risk of projects being delayed or deferred
- Improved profitability
- Sustainable business growth

## **The Pay Off**

## **The Problem**

Who is on first, What's on second, I Don't Know is on third...

The lack of reliable resource forecast information inhibits effective resource management and allocation. The key elements of this problem are being able to identify resource availability over the short, medium and long term and having the right mix in the right numbers.

Identifying resource availability sounds simple, given a minimum standard of project planning capability, all that is required is a reliable forecast of differing granularity over differing time frames. For example,

a resource forecast for the next four weekly and three monthly time periods for all projects would provide a sound basis for effective management and allocation. The difficulty is having the ability to see and work with resource information across the entire portfolio. Many of the current project management tools do a good job at the project level but do not have the capability to provide a portfolio wide view of resources.

Most organizations are challenged by getting their resource mix right. For any company running 10 or more projects utilizing 50 plus resources it tends to be a combination of process and information that lets them down. This means resource allocation continues to be a “black art” rather than being based on sound practice and information.

This issue is further exacerbated by employee turnover due to under and over utilization. The under utilized become bored and dispirited. In the worst case they leave but not before the quality and quantity of their output has diminished. The over utilized tend to burn out, become ineffective and leave. The skill shortage means the lead times for finding replacements has a compounding effect further delaying projects. It is apparent that this is a luxury no company can afford.

## **The Implications**

Not being able to forecast resource requirements accurately results in:

- Too many of the wrong resources
- Too few of the right resources
- Increased staff turnover
- Ineffective resource management and allocation
- Poor project planning and execution becomes the standard
- Longer time to market and realization of forecast benefits
- Short term profit may be impacted
- Long term sustainability of the organization can be undermined

## **The Pay Off**

Getting resource forecasting right means:

- Better resource utilization
- Achieving a more balanced resource mix
- Lower Staff turnover
- Decisions reflect a balance of quantitative and qualitative factors
- Reduce the risk of projects being delayed or deferred

- Improved profitability
- Sustainable business growth

## Conclusion

The payoff for getting it right is fairly self evident. If Pareto's Principal<sup>1</sup> holds true for the portfolio, as seems to in most parts of life, then 20% of the projects will deliver 80% of the value to the organization. The benefits to be realized include:

- Faster time to Market
- Earlier realization of forecasted benefits
- More efficient resource allocation and project delivery
- More effective use of scarce project resources
- Better governance by reducing project execution risk

So by getting the structure right and agreement on the rules around setting priorities means we are more likely to get both the project selection and the resource allocation right. This will also reduce the risk of projects being delayed or deferred.

With clarity around priorities in place resource mix and utilization will improve as the focus on resource allocation will increase. Getting resource allocation and management right is a critical success factor for any multi project organization that is running as few as ten concurrent projects with fifty or more resources.

The bottom line is process and tools are interdependent not independent and this is the conclusion more and more organizations are coming to in the area of portfolio management. As a result they are bringing forward tool acquisitions to facilitate faster and better process implementation/improvement projects.

## About bijingo

Bijingo develops and provides b-smart, a comprehensive software as a service project management solution.

Visit us at [www.bijingo.com](http://www.bijingo.com)

## About this White Paper

This white paper is based on customer experience.

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<sup>1</sup> Pareto's Principal refer [http://en.wikipedia.org/wiki/Pareto\\_principle](http://en.wikipedia.org/wiki/Pareto_principle)