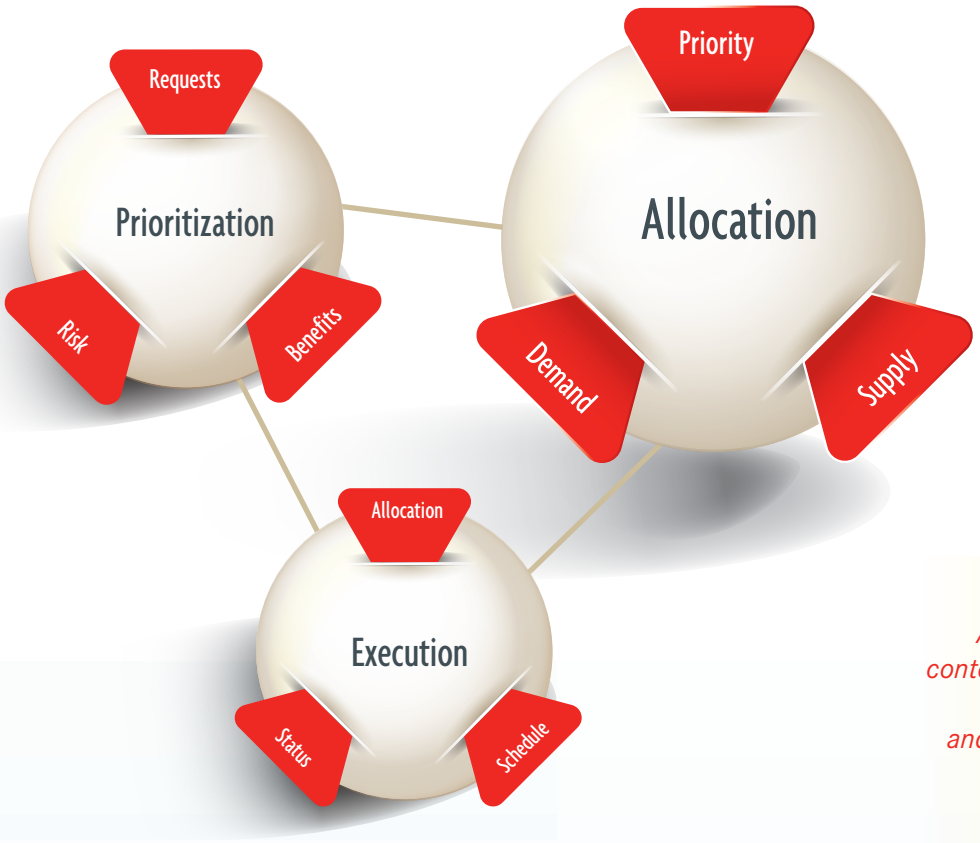
White Paper:

The Principles of ResourceFirst™ PPM

ResourceFirst™

Resource Management is Your Priority



A core principle of ResourceFirst™ PPM contends that without a credible forecasting process in place, portfolio prioritization and execution are limited in what they can provide to an organization. ***This is why resource planning comes first.***

The ResourceFirst™ PPM method puts resource planning at the core of all portfolio analysis. Resource planning is always addressed first because it provides a big initial performance impact, and it provides the basis for determining feasibility throughout portfolio management processes. Whether you manage waterfall or Agile, internal or customer facing, end-product or support initiatives, you cannot be successful if your team is unavailable to perform the work as scheduled.

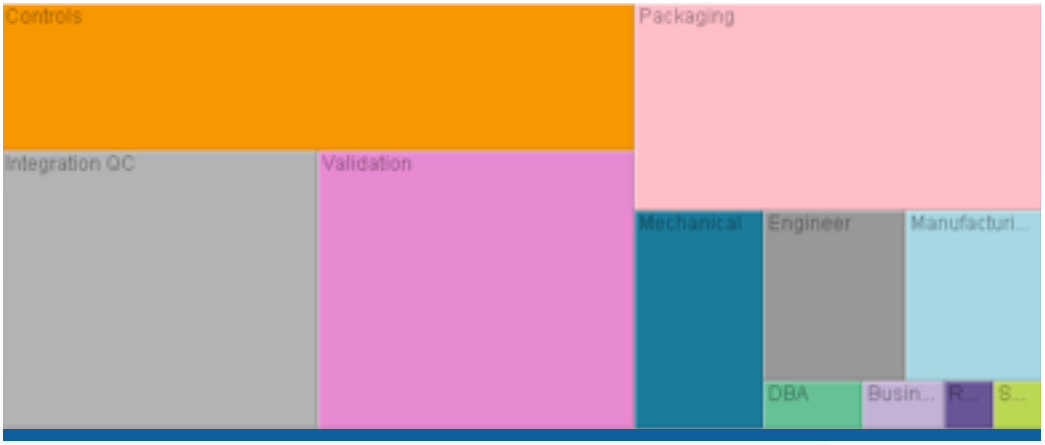
There are three stages to the ResourceFirst™ PPM method:

1. Allocation
2. Prioritization
3. Execution

Allocation

Allocation represents an achievable balance of assignments, taking into account resource supply, resource demand and prioritized work.

The result is a credible forecast that businesses can believe in. To achieve credible resource allocations, there must be agreement between those managing projects (project managers) and those managing people (resource managers) on when skilled resources will be working on initiatives. The allocation process is an iterative cycle that requires some back-and-forth conversation. This can be accomplished via a formal request process or personal communication. The process is repeated frequently because many of the contributing factors to the allocation process are dynamic.



Forecast Distribution by Skill

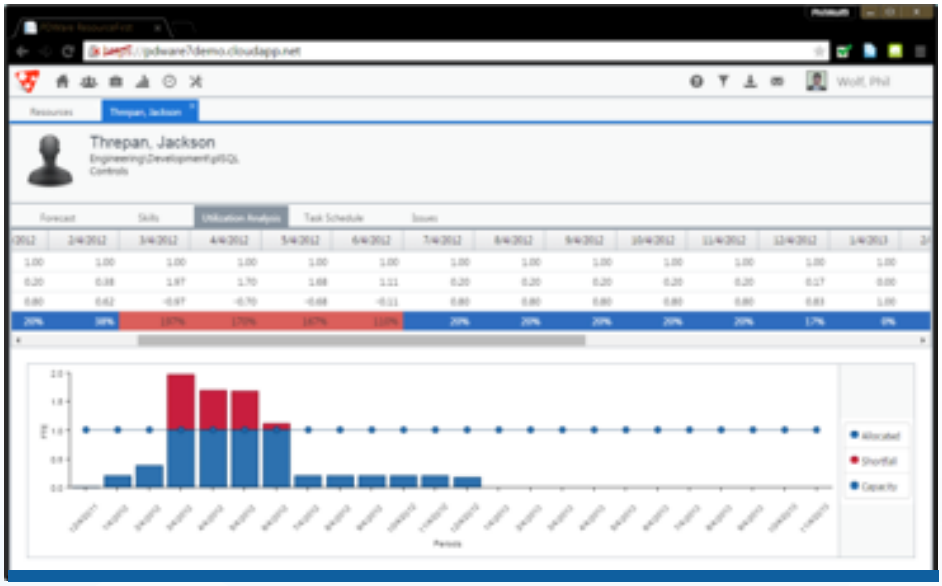
We are constantly re-asking the following questions to get the most current results:

1. How much time is required of a certain skill set?
2. When is the work required to be performed?
3. How does this assignment compare in priority to all other similar assignments?

ResourceFirst™ answers all three questions at once, with a prioritized allocation algorithm which highlights when any of the forecast elements are out-of-sync with the others. Most of the time, demand exceeds supply in some portion of the forecast due to normal changes in staff, schedule and priority.

Unbalanced portions of the forecast, also called shortfall, are very important to portfolio management. Resolving shortfall requires management decisions to be made on assignments, schedules, priority and sometimes staffing. As a result, managers like to see shortfall in a number of different ways – by initiative, by program, by required skill/role, by cost center and more.

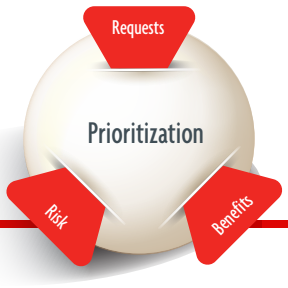
Hopefully shortfall can be resolved within existing capacity, but sometimes the solution requires a change in capacity or skills mix within the organization. Since these changes represent new real costs to the organization, the forecast and the assumptions behind the forecast analysis must be credible and actionable.



Resource Allocation wth Shortfall

Dynamic organizations always have shortfall because schedules, staff and priority are always changing. The challenge is to address the resulting bottlenecks before they impact delivery.

Prioritization



Prioritization is the process of ordering how projects and initiatives enter the portfolio queue.

Depending on the charter of the organization, prioritization may also determine if a project gets delivered at all. The prioritization process can be very simple, or it may require more intensive analysis. At some point the prioritization and allocation processes work together to produce a feasible portfolio of work. For example, most of the time top priority projects will be accepted for delivery. However, constraints in certain skill areas may cause bottlenecks and require a specific combination of projects to get accepted as a group. Without access to resource planning data, this part of the selection process would be impossible.

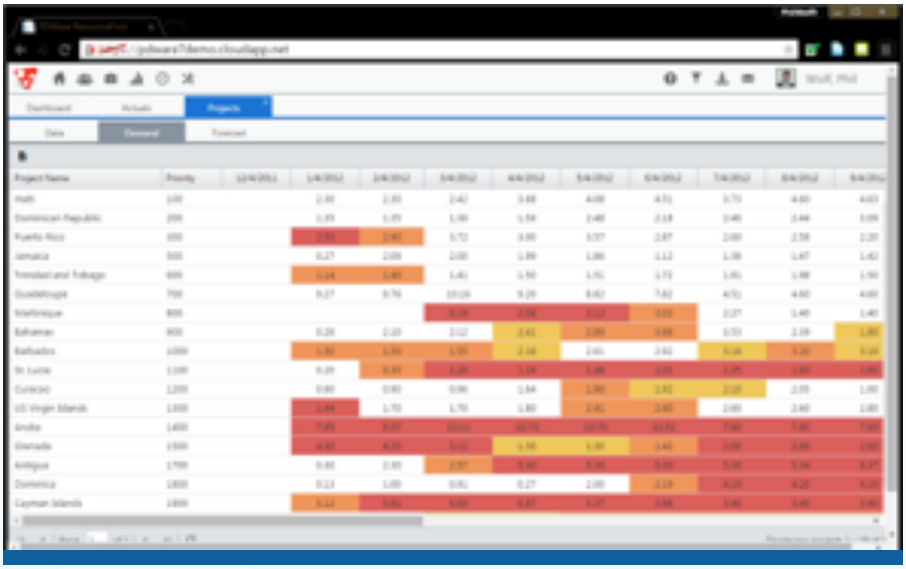
Business Alignment Analysis

Priority is predominantly determined by a combination of Business Alignment, Value and Risk.

Business alignment analysis refers to a scoring model which calculates how well an initiative supports the strategies and objectives of an organization. The analysis is usually performed though a series of qualitative questions that require scaled answers across a predefined range (1-5; 1-10; etc.). An aggregate score is then used to compare projects against each other and rank them.

Value analysis represents the quantitative portion of the scoring model. Some organizations use a complete financial analysis to determine the value of a project, while others will add financial components to the scoring model using a similar sliding scale. Internal projects tend to focus on costs, while customer-facing projects typically have revenue and cost components.

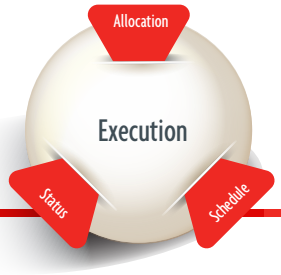
Risk analysis represents factors that might affect the planned outcome of an initiative. All identified risks have an impact level and a likelihood of occurring. Risks can affect the desirability of approving a project since the outcome is a little more uncertain. Uncertainty affects the business alignment and the value of a project, and as a result, may reduce an initiative's priority in the queue.



Prioritized Project Demand with Shortfall Highlights

A core principle of ResourceFirst™ PPM is that priority has a direct impact on feasibility. When using a prioritized allocation model, high priority projects will receive resource assignments first and receive the first chance at highly coveted skill sets.

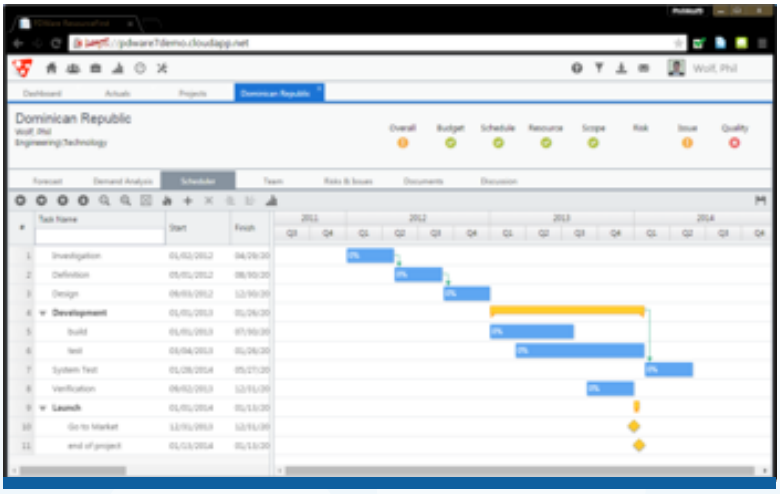
Execution



Execution represents the delivery and tracking stage for the active projects.

Before delivery can begin, an initiative or project should be slotted and rationalized within the portfolio. This provides the project with a start date and definitive resource allocations. Major work items should not begin unless resources are available to complete the initiative, or at a minimum, complete the opening phase of a waterfall-style project. This is another feasibility analysis that requires resource planning to come first.

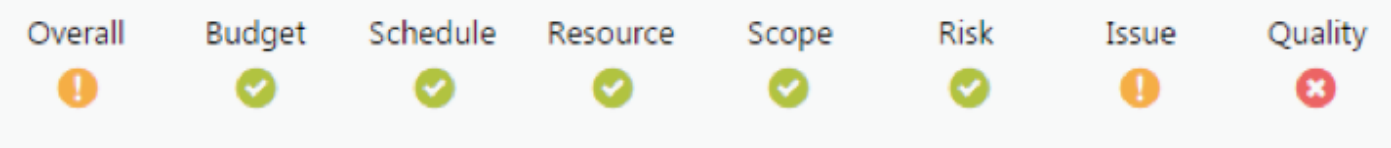
For most organizations, delivery begins with the finalization of the project plan, including defined phase gates and milestones. Work breakdown structures are developed under major phases if necessary. Resources are assigned to the appropriate work level and scheduled to work within their allocations. Over-allocated assignments should be identified and managed by shifting task dates, reassigning resources and possibly changing project allocations.



Traditional Gantt Chart

There are several common methods for tracking project status. As work is completed, project managers should mark tasks with a percent complete based on the status of the deliverable. If key dates change, those elements should be updated by the project manager as well. It is helpful to baseline a project on the start date and at each key phase date in order to monitor the shifting of phases and milestones. Frequently, a status report is run at each gate review to show how the project is tracking against the original expectations.

Many organizations track time in addition to work completion. Timesheets may be used to track hours against project work or even against task assignments. Resource actuals can be helpful to compare against work expectations and audit the forecasting process. If actual work is exceeding or falling short of original estimates, the estimating guidelines should be adjusted accordingly over time. Sometimes the variances are severe enough to require formal documentation of a new schedule risk. Actual hours can also be used to derive the true labor cost of an initiative.



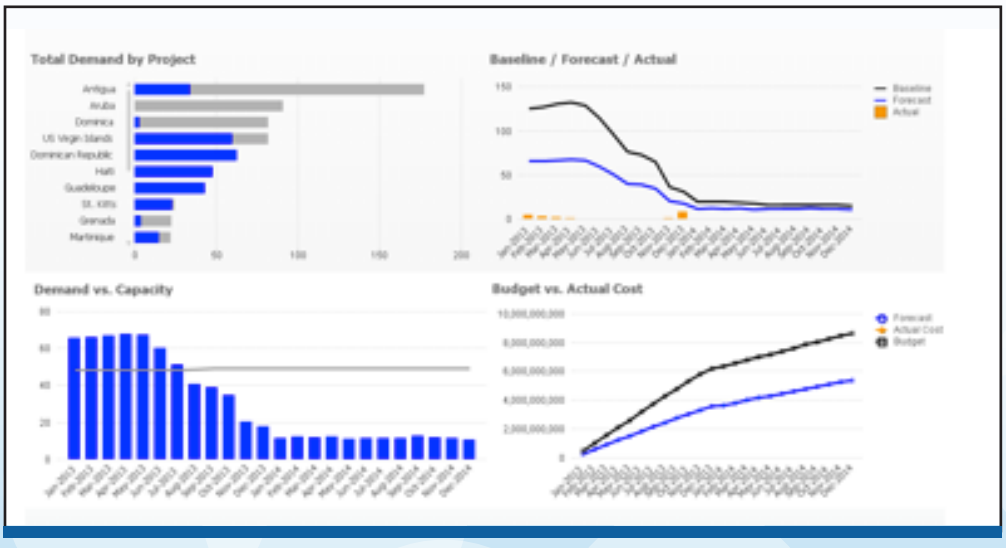
Project status, actuals and other tracking information can be communicated using Key Project Indicators (or KPI). KPI gauges provide a rapid scorecard-type overview into the health of a project. KPI gauges are either calculated from official project status data or flagged by the project manager during the status tracking process.

Output from the execution (also known as "delivery") process is usually in the form of completed plans and deliverables. Occasionally, new ideas and unplanned deliverables are spawned from the work. In this case, new project requests are then funneled back into the request queue and prioritized accordingly.

ResourceFirst™ PPM requires distribution of reporting data to the right people at the right time. **A modern PPM process has at least three kinds of information flow:**

1. Dashboards
2. Printed reports
3. Real-time notifications

Dashboards offer a responsive look into project and resource data using charts and graphs that are easily filtered or drilled into for further investigation. Grid style reports and exports to MS Excel are best for printing. Real-time notifications let team members and managers know when action is required.



Responsive Executive Dashboard

Implementation

Implementation of ResourceFirst™ PPM will help organizations operate more efficiently if the following principles are embraced early on:

Resource planning is the key to portfolio management. Implementing a formal resource allocation process first provides the foundation for other portfolio management stages. There are no shortcuts to credible resource planning data.

Prioritization is dynamic. The process for ranking projects can be simple or complex, but it must be easy to re-rank projects when conditions change. Prioritized allocation requires an understanding of the most important projects and the least important projects. High priority projects without clean resource allocations are a frequent cause of delivery failure.

Project execution in an organization with mature resource planning is infinitely easier. Once projects are slotted and resources are allocated, the focus turns to managing critical end dates and ensuring that work assignments are scheduled within the availability windows. Gate reviews should never conclude without a re-evaluation of assignments for the next phase or sub-project.

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About the author

Phil Wolf is the SVP of Enterprise Product Sales, Portfolio Decisionware Inc. (PDWare) and an industry thought leader with 24 years of enterprise software experience.

This document is a collection of ideas and concepts assembled and organized from the client engagement experience of PDWare and its employees.

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is resource planning and portfolio management software (PPM) that helps organizations improve operations through a combination of resource forecasting, capacity planning, time tracking, status reporting and financial analysis. ResourceFirst is available for cloud and on-premise installations, providing first-line managers, executives, PMOs and EPPMOs the agility to meet fluctuating work priorities, capacity and demand.

PDWare customers include Medtronic, BD, Cablevision, Regeneron, SIG, Motorola, Philips, Stryker and Tektronix.

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