White paper

# Innate Resource Management Software

# Introduction to Reports

### Presenting project, cost, time and resource information, across the organization

Innate reports can significantly improve the visibility and communication of resource utilization and project progress throughout the organisation. They are very easy to produce and deploy to all interested parties, subject to permissions. This white paper describes the reporting facilities provided by Innate's resource management software.

Each user has a Home Page that is configured to show the information most useful to them. These are a great way to secure support and buy-in to the new system:

- Reports can show everything that each manager needs to know, at the appropriate level of detail.
- Hyperlinks can be used to drill down through work and organizational breakdown structures, so that the causes of resource conflict or project delay can easily be located.

Reports can also be used to support steps through the business process. For example, where project managers request resource at generic skill/team level, they can each have a list of their outstanding requests (and the resource manager responsible for fulfilling them). Each resource manager sees the obverse - all the requests for resource on their team. As the resource requests are fulfilled, the list entries are removed. Another example is in tracking the status of project authorization; each stake holder's home page is updated with their required actions as a project steps through the authorization process.

Reports produced by Innate's resource management software can be incorporated into Share Point services, where that is the preferred means of communication.

The Innate team that implements your system can start you off with a few key reports. However, we recommend that each organisation appoints one person to become fully conversant with the Innate Reports Editor, to configure and publish sets of useful reports for the organisation.

**Purpose of this document**

This document is not a technical guide on how to create, publish and run reports. For that you need to see the Resource management Software Reports User Guide found in the software itself under Help > Contents. The purpose of this guide is to give guidance on:

1. The types of report available.
2. Suggestions on Home Pages for each group of users, i.e. managers, including project, resource, programme and more senior, team leaders and members and the programme office, etc.
3. Use of standard settings to improve communication.
4. Report examples.

## 1 Types of reports

A large number of different reports can be created within Innate resource management software. They are concerned with:

1. Comparing the planned work with the skills capacity, to highlight skills bottlenecks and underutilization.
2. Actual work (from timesheets).
3. Status and process (e.g. missing timesheets, outstanding resource requests, etc).
4. Milestone tracking and variance, that show likely delay to key deliverables.
5. Costs – actual, planned, and billable amounts, including variance analysis, if required.
6. Comparisons (e.g. planned v actual work, baseline or scenario comparisons with the current plan, etc.)

There is a choice of tables or charts, such as histograms and Gantt chart views, each of which can be viewed on demand or printed. All tabular reports can be exported to Excel for printing or data transfer.

The layout and content of each report can be controlled with:

1. Multiple groupings, formats and field display.
2. Appropriate choice of units (days, hours, FTE's etc) and timescales (days, weeks, months etc).
3. Choice of any level of detail.
4. Filtering by project, task and resource category values, etc.
5. Links to the next level in the drill down.

Innate resource management software provides a range of base reports to simplify the development of the required layouts and contents. Innate can also produce bespoke reports should the requirements be beyond the capability of the Reports Editor.

## 2 Home Pages for each group of users

Each user can choose what reports, subject to permissions, should be displayed on their Home Page, Relevant information is brought to their attention immediately, with a direct link to an action where appropriate. The reports are run and displayed automatically when the user logs on or returns. They can also run ad-hoc reports as required.

Below is a list of suggestions for each role supported by the resource management software. Home Pages should generally be restricted to a few key reports, as their processing can delay response times at log in and when returning to the Home Page. Each user can be given a list of reports for selection on their Home Page.

- **Team members** will see for themselves
    - 'What am I doing' Gantt cart that shows each person's planned work over the next 12 weeks, highlighting any forecast conflicts.
    - 'My Timesheets Actuals' showing where their time has been spent over the last 12 weeks.
    - Planned v actual hours for last month. This will check that time is being spent on planned, rather than unplanned, work.

- **Project managers** will see for their projects:

- Milestone variance report (using baselines) for each project, to highlight forecast delays to key dates.
- Outstanding requests for resource on their projects, sorted in start date order, and showing which resource manager has to fulfil the request.
- Baseline plan v actuals for last month grouped by start date, team and resource for each project.
- More sophisticated performance measurement reports using cost/schedule variances or earned value calculations may be warranted.
- Timesheets actuals for the last 12 weeks grouped by project, task and resource.
- Similar for the work planned over next 12 weeks.

- **Programme Managers** will see similar views, but with their projects grouped within each programme that they manage.

- **Resource Managers** will see for their Resources
  - Demand vs. capacity histograms that highlight skills overload and underutilization.
  - Details of the loading on each team member, with links that detail their assigned tasks.
  - Outstanding requests for resource, sorted in start date order, and showing which project manager has made the request.
  - Baseline plan v actuals for last month, grouped by person and project.
  - Timesheets actuals for last 12 weeks for their team, summarised at project level, or in more detail. Could also be summarised by project type e.g. projects, BAU, admin
  - Missing timesheets report

- **Senior Managers and Programme Office** may see similar reports. Most will have a drill down hyperlink to investigate sources of delay or resource conflict:

Where managers combine these roles the lists can be combined to suit.

## *3 Standards*

It is a good idea to set standards as far as you can, so that a report designed for a particular purpose is consistently interpreted by all those who see it, and everyone sees the report in the same form. For example:

1. For a time-phased planning report, use the same:
   - Start date
   - timescales (days, weeks, months, quarters)
   - Units of work (hours, days, FTE etc)

2. For a capacity checking report
   - The colours on the histograms should be consistent.
   - The capacity lines also should be consistent.
   - Always include a remaining availability line, so that the size of overloads and spare capacity can easily be seen.

The Innate resource management software supports the use of standards in two ways:

1. By enabling the administrator or report designer to publish a report to other users, standard settings will apply to the reports and ensure consistency.

2. There are some filters that show different data depending on the user, for example:
   - My projects
   - My resources

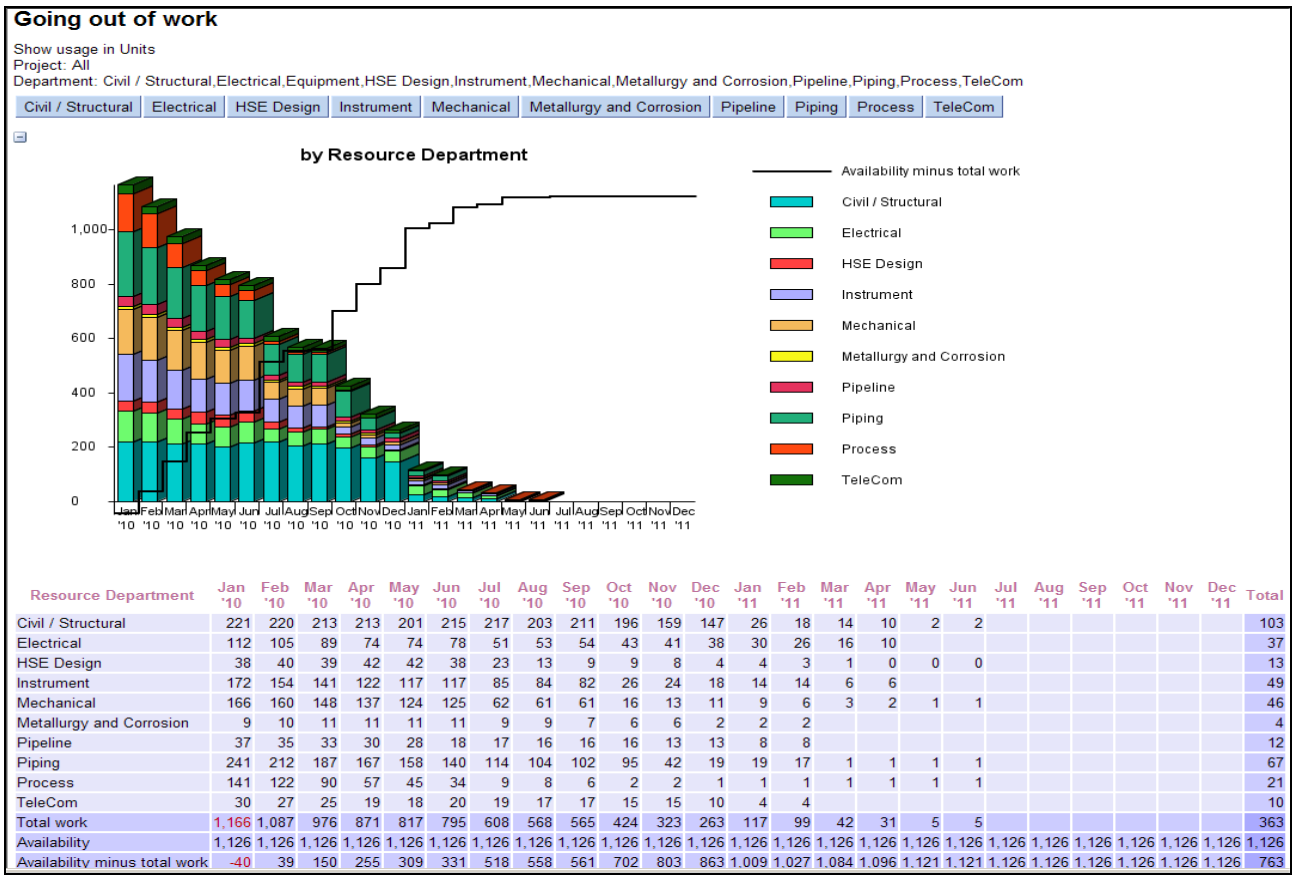
# Report examples

The examples shown below are grouped by the user's role:

## *1 For senior managers*

This sequence shows how Innate reports facilitate drill down through work (WBS) and organisation (OBS) structures, to identify the source of resource conflicts. In this example, the OBS consists of Department > Category > Designation > Resource.

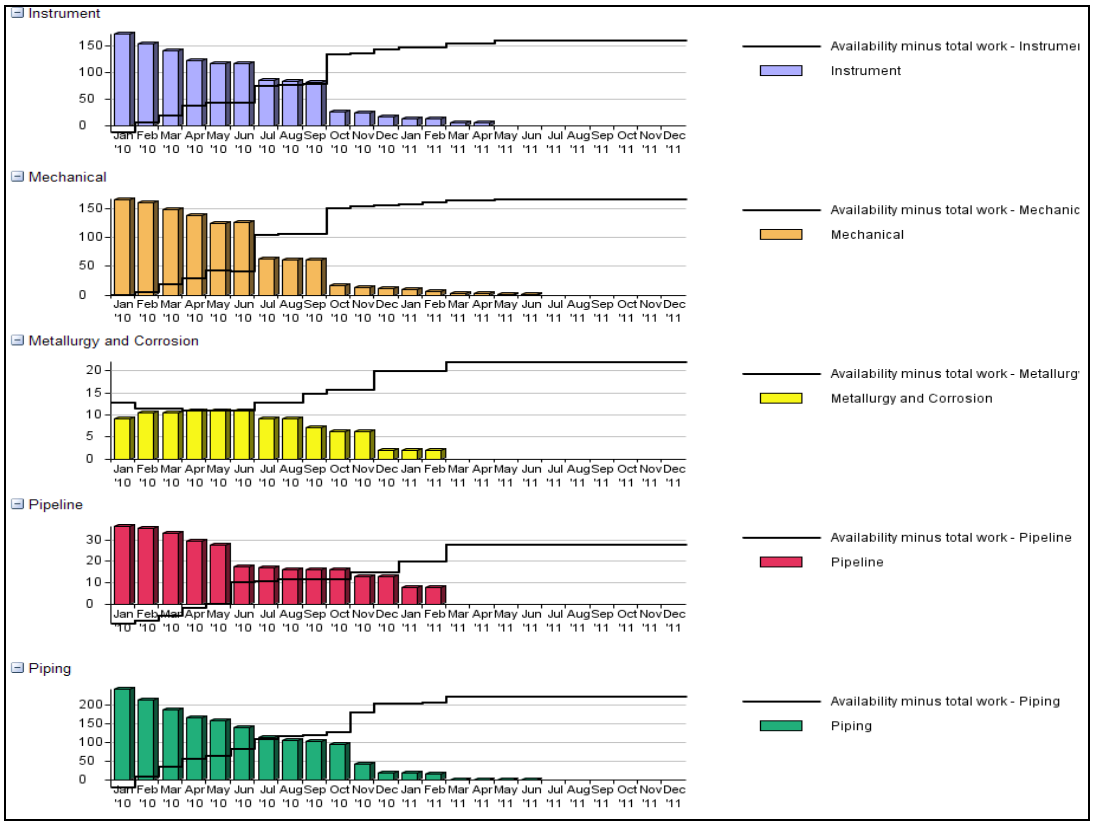
**Going out of work – forward loading report.**



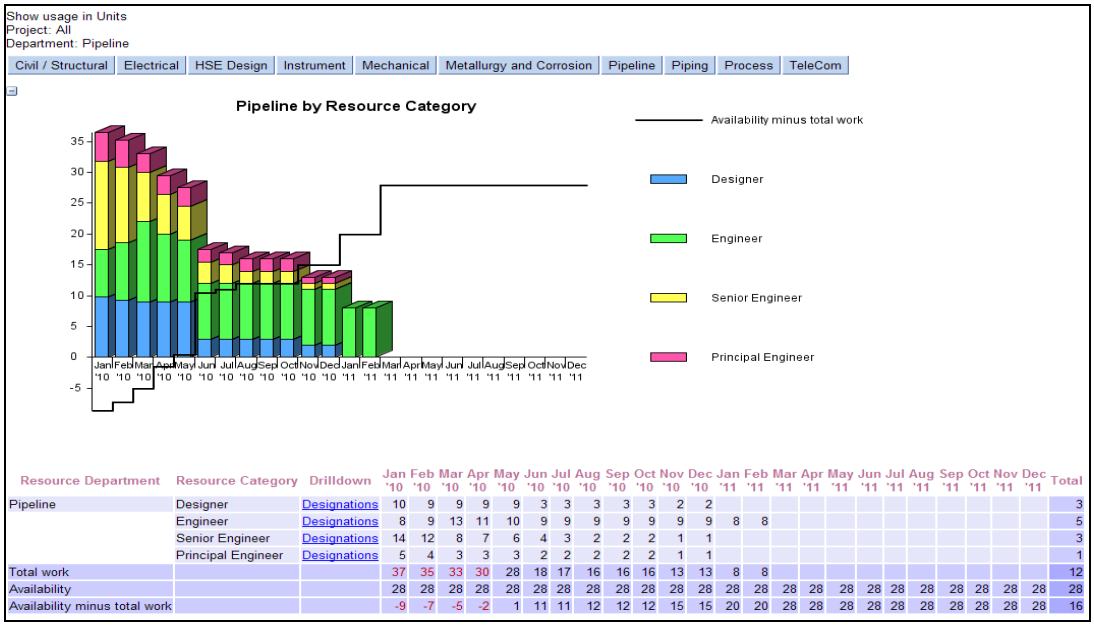

| Resource Department | Jan '10 | Feb '10 | Mar '10 | Apr '10 | May '10 | Jun '10 | Jul '10 | Aug '10 | Sep '10 | Oct '10 | Nov '10 | Dec '10 | Jan '11 | Feb '11 | Mar '11 | Apr '11 | May '11 | Jun '11 | Jul '11 | Aug '11 | Sep '11 | Oct '11 | Nov '11 | Dec '11 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Civil / Structural | 221 | 220 | 213 | 213 | 201 | 215 | 217 | 203 | 211 | 196 | 159 | 147 | 26 | 18 | 14 | 10 | 2 | 2 | | | | | | | 103 |
| Electrical | 112 | 105 | 89 | 74 | 74 | 78 | 51 | 53 | 54 | 43 | 41 | 38 | 30 | 26 | 16 | 10 | | | | | | | | | 37 |
| HSE Design | 38 | 40 | 39 | 42 | 42 | 38 | 23 | 13 | 9 | 9 | 8 | 4 | 4 | 3 | 1 | 0 | 0 | 0 | | | | | | | 13 |
| Instrument | 172 | 154 | 141 | 122 | 117 | 117 | 85 | 84 | 82 | 26 | 24 | 18 | 14 | 14 | 6 | 6 | | | | | | | | | 49 |
| Mechanical | 166 | 160 | 148 | 137 | 124 | 125 | 62 | 61 | 61 | 16 | 13 | 11 | 9 | 6 | 3 | 2 | 1 | 1 | | | | | | | 46 |
| Metallurgy and Corrosion | 9 | 10 | 11 | 11 | 11 | 11 | 9 | 9 | 7 | 6 | 6 | 2 | 2 | 2 | | | | | | | | | | | 4 |
| Pipeline | 37 | 35 | 33 | 30 | 28 | 18 | 17 | 16 | 16 | 16 | 13 | 13 | 8 | 8 | | | | | | | | | | | 12 |
| Piping | 241 | 212 | 187 | 167 | 158 | 140 | 114 | 104 | 102 | 95 | 42 | 19 | 19 | 17 | 1 | 1 | 1 | 1 | | | | | | | 67 |
| Process | 141 | 122 | 90 | 57 | 45 | 34 | 9 | 8 | 6 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 21 |
| TeleCom | 30 | 27 | 25 | 19 | 18 | 20 | 19 | 17 | 17 | 15 | 15 | 10 | 4 | 4 | | | | | | | | | | | 10 |
| Total work | 1,166 | 1,087 | 976 | 871 | 817 | 795 | 608 | 568 | 565 | 424 | 323 | 263 | 117 | 99 | 42 | 31 | 5 | 5 | | | | | | | 363 |
| Availability | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 |
| Availability minus total work | -40 | 39 | 150 | 255 | 309 | 331 | 518 | 558 | 561 | 702 | 803 | 863 | 1,009 | 1,027 | 1,084 | 1,096 | 1,121 | 1,121 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 1,126 | 763 |

This report shows the forward loading for an Engineering division as the stacked histogram and the line 'Availability minus total work' represents the total spare capacity across the Engineering Division of 1200 people. The buttons allow you to drill down through the organizational structure.

A right hand mouse click produces separate charts for each Department:




Several Departments show overloads and in particular Pipeline shows an Overload across Jan-April. This can be further investigated using the Pipeline button

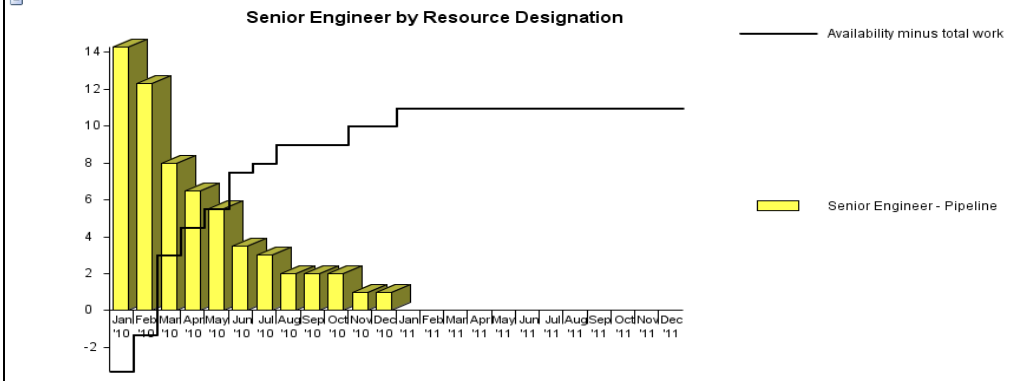



| Resource Department | Resource Category | Drilldown | Jan '10 | Feb '10 | Mar '10 | Apr '10 | May '10 | Jun '10 | Jul '10 | Aug '10 | Sep '10 | Oct '10 | Nov '10 | Dec '10 | Jan '11 | Feb '11 | Mar '11 | Apr '11 | May '11 | Jun '11 | Jul '11 | Aug '11 | Sep '11 | Oct '11 | Nov '11 | Dec '11 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pipeline | Designer | Designations | 10 | 9 | 9 | 9 | 9 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | | | | | | | | | | | | | 3 |
| | Engineer | Designations | 8 | 9 | 13 | 11 | 10 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 8 | 8 | | | | | | | | | | | 5 |
| | Senior Engineer | Designations | 14 | 12 | 8 | 7 | 6 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | | | | | | | | | | | | | 3 |
| | Principal Engineer | Designations | 5 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | | | | | | | | | | | | | 1 |
| Total work | | | 37 | 35 | 33 | 30 | 28 | 18 | 17 | 16 | 16 | 16 | 13 | 13 | 8 | 8 | | | | | | | | | | | 12 |
| Availability | | | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| Availability minus total work | | | -9 | -7 | -5 | -2 | 1 | 11 | 11 | 12 | 12 | 12 | 15 | 15 | 20 | 20 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 16 |

The Availability minus total work line shows that there is an overload for the next 4 months. Clicking on the Designation link against the Senior Engineer category, produces a chart for the next level down the OBS.

Show usage in Units
Project: All
Department: Pipeline
Category: Senior Engineer

Civil / Structural | Electrical | HSE Design | Instrument | Mechanical | Metallurgy and Corrosion | Pipeline | Piping | Process | TeleCom




| Resource Category | Resource Designation | Drilldown | Jan '10 | Feb '10 | Mar '10 | Apr '10 | May '10 | Jun '10 | Jul '10 | Aug '10 | Sep '10 | Oct '10 | Nov '10 | Dec '10 | Jan '11 | Feb '11 | Mar '11 | Apr '11 | May '11 | Jun '11 | Jul '11 | Aug '11 | Sep '11 | Oct '11 | Nov '11 | Dec '11 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Senior Engineer | Senior Engineer - Pipeline | Resources | 14 | 12 | 8 | 7 | 6 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | | | | | | | | | | | | | 3 |
| Total work | | | 14 | 12 | 8 | 7 | 6 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | | | | | | | | | | | | | 3 |
| Availability | | | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Availability minus total work | | | -3 | -1 | 3 | 5 | 6 | 8 | 8 | 9 | 9 | 9 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 8 |

Clicking on the Resources link in the Drill down column shows the detailed loading by resource and project. for the selected designation.

Show usage in Units
Project: All
Skill: Senior Engineer - Pipeline (primary)
Department: Pipeline
Category: Senior Engineer

Civil / Structural | Electrical | HSE Design | Instrument | Mechanical | Metallurgy and Corrosion | Pipeline | Piping | Process | TeleCom

| Resource Designation | Resource | Project Job No. | Jan '10 | Feb '10 | Mar '10 | Apr '10 | May '10 | Jun '10 | Jul '10 | Aug '10 | Sep '10 | Oct '10 | Nov '10 | Dec '10 | Jan '11 | Feb '11 | Mar '11 | Apr '11 | May '11 | Jun '11 | Jul '11 | Aug '11 | Sep '11 | Oct '11 | Nov '11 | Dec '11 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Senior Engineer - Pipeline | Senior Engineer - Pipeline | J-1312E | 1 | 0 | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | | PI-09001 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | 0 |
| | Adrian Cotton | J-131O | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | 0 |
| | Demarcus Glover | J-131O | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | 0 |
| | Elsie Chan | F-03040 | 1 | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | | F-09035 | 1 | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | Hayden Parrish | J-132 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | 0 |
| | Hershel Erickson | J-131O | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | 0 |
| | Lyle Simms | F-03030 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | Lynwood Rose | J-131O | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | 1 |
| | Marissa Stein | J-131O | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | 0 |
| | Rickie Montes | J-131G | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | 0 |
| | Sydney Carroll | F-03026 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | | F-03037 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | Wilson Lara | J-131O | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | 0 |
| Total work | | | 14 | 12 | 8 | 7 | 6 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | | | | | | | | | | | | | 3 |
| Availability | | | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Availability minus total work | | | -3 | -1 | 3 | 5 | 6 | 8 | 8 | 9 | 9 | 9 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 8 |

Such drill downs are not restricted to predefined breakdown structures; similar sequences that initially select type of work or a particular project can easily be provided.

## 2 For resource managers

### Resource utilization

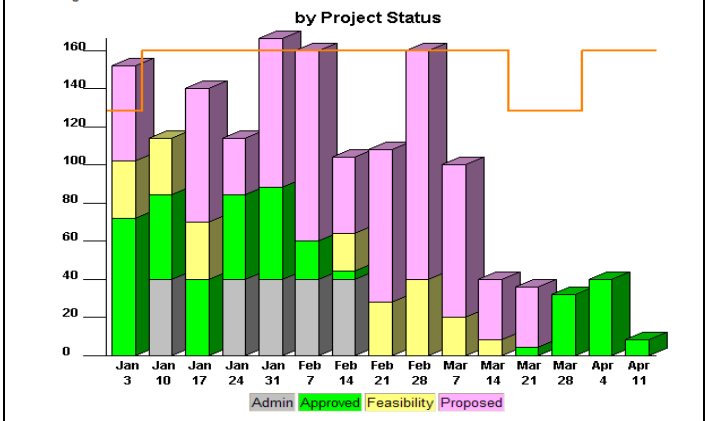
Show usage in Hours
Page 1 of 1

| Skill | | Jan 3 | Jan 10 | Jan 17 | Jan 24 | Jan 31 | Feb 7 | Feb 14 | Feb 21 | Feb 28 | Mar 7 | Mar 14 | Mar 21 | Mar 28 | Apr 4 | Apr 11 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNTANT | Work: | | | | 32 | 40 | | | | | | 32 | | | | 40 | 144 |
| | Overallocation: | | | | | | | | | | | | | | | | |
| ANALYST | Work: | 152 | 114 | 140 | 114 | 166 | 160 | 104 | 108 | 160 | 100 | 40 | 36 | 32 | 40 | 8 | 1,474 |
| | Overallocation: | 24 | | | | 6 | | | | | | | | | | | |
| DOCUMENTER | Work: | 60 | 60 | 70 | 40 | 24 | 40 | 40 | 32 | | | | 48 | 80 | 32 | | 526 |
| | Overallocation: | | | | | | | | | | | | | 16 | | | |
| PROGRAMMER | Work: | 80 | 40 | 80 | 84 | 68 | 60 | 52 | 64 | 104 | 96 | 56 | 36 | 56 | 24 | 20 | 920 |
| | Overallocation: | | | | | | | | | | | | | | | | |
| TECHNICIAN | Work: | 32 | 48 | 30 | 24 | 32 | 70 | 12 | | 30 | 60 | 40 | 60 | 36 | 32 | 80 | 586 |
| | Overallocation: | | | | | | | | | | | | | | | | |
| TESTER | Work: | | 2 | 60 | 34 | | | 8 | | | 24 | 8 | 8 | 32 | 48 | | 224 |
| | Overallocation: | | | | | | | | | | | | | | | | |
| Page total | Work: | 324 | 264 | 380 | 328 | 330 | 330 | 216 | 204 | 294 | 280 | 176 | 188 | 236 | 176 | 148 | 3,874 |
| | Overallocation: | | | | | | | | | | | | | | | | |

This report summarizes forecast bottlenecks for each skill set and the overall resource pool.

**Pipeline Usage**

Show usage in Hours




| Project Status | Jan 3 | Jan 10 | Jan 17 | Jan 24 | Jan 31 | Feb 7 | Feb 14 | Feb 21 | Feb 28 | Mar 7 | Mar 14 | Mar 21 | Mar 28 | Apr 4 | Apr 11 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Admin | | 40 | | 40 | 40 | 40 | 40 | | | | | | | | | 200 |
| Approved | 72 | 44 | 40 | 44 | 48 | 20 | 4 | | | | | 4 | 32 | 40 | 8 | 356 |
| Feasibility | 30 | 30 | 30 | | | | 20 | 28 | 40 | 20 | 8 | | | | | 206 |
| Proposed | 50 | | 70 | 30 | 78 | 100 | 40 | 80 | 120 | 80 | 32 | 32 | | | | 712 |
| Availability minus total work | -24 | 46 | 20 | 46 | -6 | | 56 | 52 | | 60 | 120 | 92 | 96 | 120 | 152 | 830 |

This is a pipeline report that compares the resource demand with capacity in a team of 4 Analysts, according to project status.

**My Staff Usage**

Show usage in Hours

| Skill | Resource | | Jan 3 | Jan 10 | Jan 17 | Jan 24 | Jan 31 | Feb 7 | Feb 14 | Feb 21 | Feb 28 | Mar 7 | Mar 14 | Mar 21 | Mar 28 | Apr 4 | Apr 11 | Task Usage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANALYST | ANALYST | Work: | | | 40 | | 24 | 40 | 60 | 68 | 80 | 60 | 32 | 32 | | | | View |
| | | Overallocation: | | | 40 | | 24 | 40 | 60 | 68 | 80 | 60 | 32 | 32 | | | | |
| | Kris King | Work: | 60 | 44 | 40 | 44 | 48 | 20 | 44 | | | | | 4 | | | | View |
| | | Overallocation: | 28 | 4 | | 4 | 8 | | 4 | | | | | | | | | |
| | Larry Lamb | Work: | 50 | 30 | 30 | 30 | 30 | 30 | | 40 | 40 | | | | 32 | 40 | 8 | View |
| | | Overallocation: | 18 | | | | | | | | | | | | | | | |
| | Nat Nolan | Work: | 30 | 40 | 30 | 40 | 64 | 70 | | | | | | | | | | View |
| | | Overallocation: | | | | | 24 | 30 | | | | | | | | | | |
| | Pat Pringle | Work: | 12 | | | | | | | | 40 | 40 | 8 | | | | | View |
| | | Overallocation: | | | | | | | | | | | | | | | | |
| Total | | Work: | 152 | 114 | 140 | 114 | 166 | 160 | 104 | 108 | 160 | 100 | 40 | 36 | 32 | 40 | 8 | |
| | | Overallocation: | 24 | | | | 6 | | | | | | | | | | | |

Shows how the work for Analysts has been divided across the team. Clicking the View link for ANALYST shows the outstanding requests for Analysts, as below.

Show usage in Hours
Page 1 of 1

| Resource | Project | Task | Resource Skill | Manage Work | Jan 3 | Jan 10 | Jan 17 | Jan 24 | Jan 31 | Feb 7 | Feb 14 | Feb 21 | Feb 28 | Mar 7 | Mar 14 | Mar 21 | Mar 28 | Apr 4 | Apr 11 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANALYST | Draft Plan | Functional specification | ANALYST | Edit | | | | | | | 20 | 12 | | | | | | | | 32 |
| | | Circulate draft | ANALYST | Edit | | | | | | | | 16 | 8 | | | | | | | 24 |
| | | Review meeting | ANALYST | Edit | | | | | | | | | 8 | | | | | | | 8 |
| | | Modify document | ANALYST | Edit | | | | | | | | | 24 | | | | | | | 24 |
| | | Design specification (1) | ANALYST | Edit | | | | | | | | | | 20 | 8 | | | | | 28 |
| | Mexico | Requirements Outline | ANALYST | Edit | | | 40 | | | | | | | | | | | | | 40 |
| | | Interview users | ANALYST | Edit | | | | | 24 | | | | | | | | | | | 24 |
| | | Draft Requirements | ANALYST | Edit | | | | | | 24 | | | | | | | | | | 24 |
| | | Review and Finalise requirements | ANALYST | Edit | | | | | | 16 | 8 | | | | | | | | | 24 |
| | | Initial Design | ANALYST | Edit | | | | | | | 32 | 40 | 40 | 40 | 8 | | | | | 160 |
| | | Final Design | ANALYST | Edit | | | | | | | | | | | 16 | 32 | | | | 48 |
| Total | | | | | | | 40 | | 24 | 40 | 60 | 68 | 80 | 60 | 32 | 32 | | | | 436 |

## *3 For project and programme managers*

### Gantt Chart

| Program | Project | | Q1 2005 | | | Q2 2005 | | | Q3 2005 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
| Availability | | 460 | 400 | 400 | 420 | 420 | 400 | 440 | 420 | 440 |
| BAU | Innate | | | | | | | | | |
| BAU | Mexico | | | | | | | | | |
| Client Projects | Admin | | | | | | | | | |
| Client Projects | Feasibility study for ABC Corp | | | | | | | | | |
| Client Projects | New 1 | | | | | | | | | |
| Client Projects | New CRM system | | | | | | | | | |
| Client Projects | Project B | | | | | | | | | |
| Client Projects | Project C | | | | | | | | | |
| Client Projects | Support invoicing system | | | | | | | | | |
| Marketing | Project A | | | | | | | | | |
| Marketing | Project D | | | | | | | | | |
| Total ACCOUNTANT | | | 6 | 3 | 4 | 12 | | | | |
| Total ANALYST | | 46 | 84.3 | 91 | 33.5 | 7.8 | 31.5 | | | |
| Total DOCUMENTER | | 6.3 | 29.8 | 16 | 9 | 5.5 | 6.8 | | | |
| Total PROGRAMMER | | 23 | 38 | 32 | 29 | 6 | | | | |
| Total TECHNICIAN | | 4.3 | 16.8 | 14.3 | 14.3 | 15.8 | 3.8 | | | |
| Total TESTER | | | 12 | 1 | 10 | | 4 | | | |
| Total | | 79.5 | 186.8 | 157.3 | 99.8 | 47 | 46 | | | |

This Gantt chart view shows projects grouped by programme and coloured by priority. The table beneath highlights resource bottlenecks (in red). An interactive Gantt chart view enables groups of projects to be highlighted and moved as a collection to reduce unacceptable resource overloads. Such what if… analysis is best done within a scenario rather than on the live data.

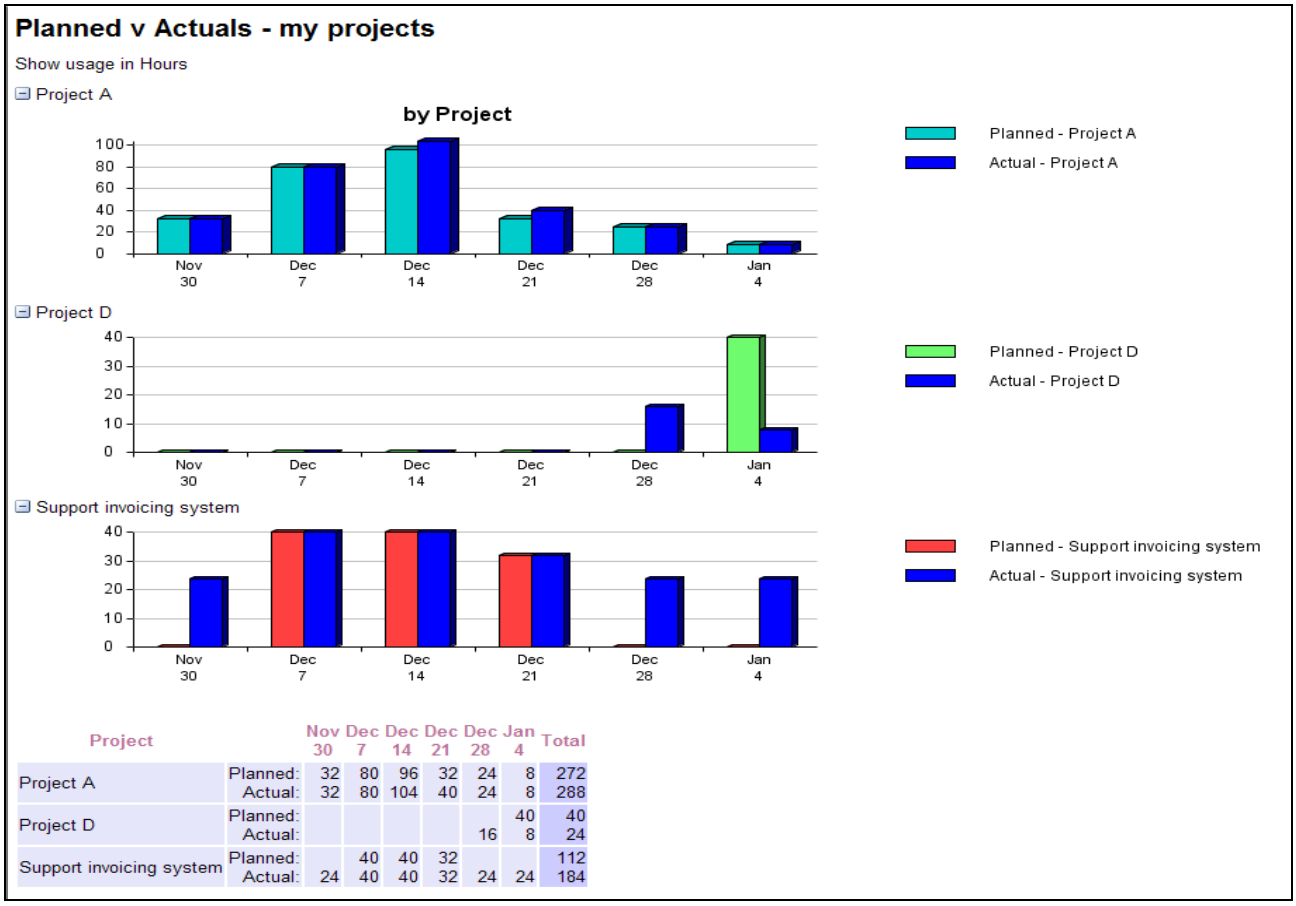
### Milestone tracking

**Project Milestone Report**

| Program | Project | Milestone | Forecast date | Committed date | Variance (days) |
|---|---|---|---|---|---|
| Client Projects | System Redesign | Design | 17/01/2005 | 13/01/2005 | 4 |
| | | Develop | 28/01/2005 | 25/01/2005 | 3 |
| | | Testing | 07/02/2005 | 31/01/2005 | 7 |

This example tracks project milestones and highlights those that are forecast to run late.

### Planned vs Actuals




| Project | | Nov 30 | Dec 7 | Dec 14 | Dec 21 | Dec 28 | Jan 4 | Total |
|---|---|---|---|---|---|---|---|---|
| Project A | Planned: | 32 | 80 | 96 | 32 | 24 | 8 | 272 |
| | Actual: | 32 | 80 | 104 | 40 | 24 | 8 | 288 |
| Project D | Planned: | | | | | | 40 | 40 |
| | Actual: | | | | | 16 | 8 | 24 |
| Support invoicing system | Planned: | | 40 | 40 | 32 | | | 112 |
| | Actual: | 24 | 40 | 40 | 32 | 24 | 24 | 184 |

This report compares planned effort with that actually spent, booked via timesheets.

### Unassigned tasks

**My Projects Unassigned Tasks**

Show usage in Full-Time Equivalents

| Project | Resource | Jan 3 | Jan 10 | Jan 17 | Jan 24 | Jan 31 | Feb 7 | Feb 14 | Feb 21 | Feb 28 | Mar 7 | Mar 14 | Mar 21 | Mar 28 | Apr 4 | Apr 11 | Apr 18 | Apr 25 | May 2 | May 9 | May 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mexico | ACCOUNTANT | | | | 0.8 | 1 | | | | | | | | | | | | | | | |
| | ANALYST | | | 1 | | 0.6 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1 | | | | | | | | |
| | DOCUMENTER | | | | | 0.4 | 0.4 | | | | | | | | | | | | | | |
| | PROGRAMMER | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.4 | | | | | | | | | |
| | TECHNICIAN | | | | 0.6 | | | | | | | | | | | | | | | | |
| | TESTER | | | 1 | 0.6 | | | | | | | | | | | | | | | | |
| Total | | | | 3 | 3 | 3 | 2.4 | 2 | 2 | 2 | 2 | 1 | 1 | | | | | | | | |
| New CRM system | TECHNICIAN | | | | | 0.6 | 0.8 | | | | | | | | | | | | | | |
| Total | | | | | | 0.6 | 0.8 | | | | | | | | | | | | | | |

This report shows the outstanding requests for resource so that the project manager can chase those that are urgent. As real people are assigned, the entry is removed from the list.

### Project details

**My projects**

Show usage in Full-Time Equivalents

| Program | Priority | Project | Resource Skill | Jan 3 | Jan 10 | Jan 17 | Jan 24 | Jan 31 | Feb 7 | Feb 14 | Feb 21 | Feb 28 | Mar 7 | Mar 14 | Mar 21 | Mar 28 | Apr 4 | Apr 11 | Apr 18 | Apr 25 | May 2 | May 9 | May 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BAU | 1 | Mexico | ACCOUNTANT | | | | 0.8 | 1 | | | | | | | | | | | | | | | |
| | | | ANALYST | | | 1 | | 0.6 | 1 | 1 | 1 | 1 | 1 | 0.6 | 1 | | | | | | | | |
| | | | DOCUMENTER | | | | | 0.4 | 0.4 | | | | | | | | | | | | | | |
| | | | PROGRAMMER | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0.4 | | | | | | | | | |
| | | | TECHNICIAN | | | | 0.6 | | | | | | | | | | | | | | | | |
| | | | TESTER | | | 1 | 0.6 | | | | | | | | | | | | | | | | |
| Total | | | | | | 3 | 3 | 3 | 2.4 | 2 | 2 | 2 | 2 | 1 | 1 | | | | | | | | |
| Client Projects | 1 | New CRM system | ANALYST | 1.6 | | 0.8 | 0.8 | 1.4 | 1.5 | | | | | | | | | | | | | | |
| | | | TECHNICIAN | | | | | 0.6 | 0.8 | | | | | | | | | | | | | | |
| | | Project C | ANALYST | 1 | 0.6 | 1 | 1 | 0.7 | | | | | | | 0.1 | 1 | 1 | 0.2 | | | | | |
| | | | PROGRAMMER | | | | | | | | 0.2 | 0.4 | | | 0.1 | 0.5 | 0.6 | 0.5 | | | | | |
| | | | TECHNICIAN | 0.4 | 0.7 | 0.6 | | 0.2 | 1 | 0.3 | | 0.6 | 0.9 | | 0.6 | 0.4 | | | 0.4 | | | | |
| | 2 | Project B | ANALYST | 1.3 | 0.5 | | 0.1 | 0.5 | 0.5 | 0.1 | | | | | | | | | | | | | |
| | | | PROGRAMMER | 1.3 | 1 | 1 | 1.1 | 0.7 | 0.5 | 0.1 | | | | | | | | | | | | | |
| | 3 | Feasibility study for ABC Corp | ANALYST | 0.9 | 0.8 | 0.8 | | | | | | | | | | | | | | | | | |
| | | Support invoicing system | PROGRAMMER | 1.3 | | | | | | | | | | | | | | | | | | | |
| Total | | | | 7.6 | 3.6 | 4.1 | 3.0 | 4.1 | 4.3 | 0.5 | 0.2 | 1.0 | 0.9 | | 0.9 | 1.9 | 1.6 | 0.7 | 0.4 | | | | |
| Marketing | 2 | New 1 | ANALYST | | | | | | | | 1 | 1 | | | | | | | | | | | |
| | | | PROGRAMMER | | | | | | | | | 0.2 | 1 | 1 | 1 | 1.3 | | | | | | | |
| | | | TECHNICIAN | | | | | | | | | | | | | | | 1 | 1 | | | | |
| | | | TESTER | | | | | | | | | | | | | 1 | 1.2 | | | | | | |
| | 4 | Project D | ACCOUNTANT | | | | | | | | | | | 0.8 | | | | 1 | 1 | 0.4 | | | |
| | | | ANALYST | | | | | | | | | 1 | 1 | 0.2 | | | | | | | | | |
| | | | DOCUMENTER | 1.3 | 1 | 1.6 | 1 | 0.2 | 0.6 | 1 | 0.8 | | | | 1.3 | 1.3 | 0.8 | | | | 1 | | |
| | | | PROGRAMMER | | | | | | | 0.2 | 0.4 | 1 | 0.4 | | | | | | | | | | |
| | | | TECHNICIAN | | | | | | | | | | | | 0.3 | 0.8 | | 1 | 1 | 0.4 | | | |
| | | | TESTER | | | | | | | 0.2 | | | 0.6 | 0.2 | 0.3 | | | | | | 1 | | |
| Total | | | | 1.3 | 1 | 1.6 | 1 | 0.2 | 0.6 | 1.4 | 2.2 | 3.2 | 3 | 2.2 | 2.8 | 4.3 | 2 | 3 | 3 | 0.8 | 2 | | |
| Page total | | | | 8.9 | 4.6 | 8.7 | 7.0 | 7.3 | 7.3 | 3.9 | 4.4 | 6.2 | 5.9 | 3.2 | 4.6 | 6.1 | 3.6 | 3.7 | 3.4 | 0.8 | 2 | | |

An example of how resource management information can be grouped, by program and priority.

## *4 Other reports from the resource management software*

### Timesheets reports

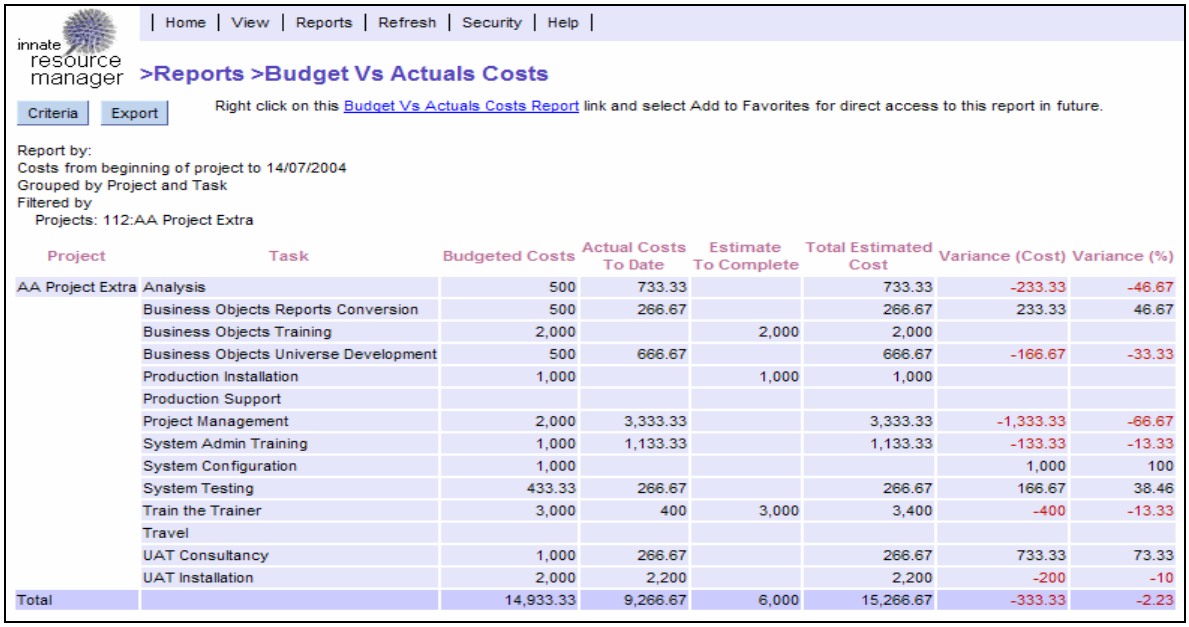
| Project | Task | Resource | Dec 6 | Dec 13 | Dec 20 | Dec 27 | Jan 3 | Jan 10 | Jan 17 | Jan 24 | Jan 31 | Feb 7 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Project A | Circulate draft | Ann Brown | 16 | 8 | | | | | | | | | 24 |
| | Design documentation | Will Williams | 32 | | | | | | | | | | 32 |
| | Design specification (1) | Ann Brown | | | 32 | | | | | | | | 32 |
| | Design specification (2) | Bill Green | | 24 | | | | | | | | | 24 |
| | Designer review | Ann Brown | | | | 24 | | | | | | | 24 |
| | Functional specification | Ann Brown | 24 | | | | | | | | | | 24 |
| | Modify document | Ann Brown | | 32 | | | | | | | | | 32 |
| | Quality edit | Will Williams | | | 8 | | | | | | | | 8 |
| | Technical edit | Will Williams | | | 8 | | | | | | | | 8 |
| | Write documentation | Will Williams | 8 | 40 | | | | | | | | | 48 |
| Total | | | 80 | 104 | 48 | 24 | | | | | | | 256 |
| Project B | Circulate draft | Kris King | | 8 | | | | | | | | | 8 |
| | Code | Kris King | | | 40 | 32 | | | | | | | 72 |
| | | Sam Smith | | | 16 | 40 | 16 | | | | | | 72 |
| | Design documentation | Bill Green | 40 | | 32 | | | | | | | | 72 |
| | | Pat Pringle | 40 | | | | | | | | | | 40 |
| | Design specification | Will Williams | | | 24 | | | | | | | | 24 |
| | Functional specification | Kris King | 36 | | | | | | | | | | 36 |
| | Modify document | Kris King | 4 | 16 | | | | | | | | | 20 |
| | Technical edit | Bill Green | | | | 16 | | | | | | | 16 |
| | | Pat Pringle | | | | 32 | | | | | | | 32 |
| | Write documentation | Pat Pringle | | 40 | 40 | 8 | | | | | | | 88 |
| Total | | | 120 | 64 | 152 | 128 | 16 | | | | | | 480 |

This example shows a timesheet report that has hours grouped by project and task. Resource managers can have reports that group the hours by departments, teams or skills, etc.

## Cost Reports

| Project | Resource | | Nov 29 | Dec 6 | Dec 13 | Dec 20 | Dec 27 | Total |
|---|---|---|---|---|---|---|---|---|
| Feasibility study for ABC Corp | Larry Lamb | Hours: | 24 | 24 | 24 | 16 | 24 | 112 |
| | | Internal Cost: | 600 | 600 | 600 | 400 | 600 | 2,800 |
| | | Internal Rate: | 25 | 25 | 25 | 25 | 25 | 25 |
| | | Billing Cost: | | | | | | |
| | | Billing Rate: | | | | | | |
| Total | | Hours: | 24 | 24 | 24 | 16 | 24 | 112 |
| | | Internal Cost: | 600 | 600 | 600 | 400 | 600 | 2,800 |
| | | Internal Rate: | 25 | 25 | 25 | 25 | 25 | 25 |
| | | Billing Cost: | | | | | | |
| | | Billing Rate: | | | | | | |
| New CRM system | Larry Lamb | Hours: | 16 | 16 | 16 | 24 | 16 | 88 |
| | | Internal Cost: | 400 | 400 | 400 | 600 | 400 | 2,200 |
| | | Internal Rate: | 25 | 25 | 25 | 25 | 25 | 25 |
| | | Billing Cost: | 560 | 560 | 560 | 840 | 560 | 3,080 |
| | | Billing Rate: | 35 | 35 | 35 | 35 | 35 | 35 |
| | Nat Nolan | Hours: | 40 | 40 | 40 | 32 | 24 | 176 |
| | | Internal Cost: | 880 | 880 | 880 | 704 | 528 | 3,872 |
| | | Internal Rate: | 22 | 22 | 22 | 22 | 22 | 22 |
| | | Billing Cost: | 1,200 | 1,200 | 1,200 | 960 | 720 | 5,280 |
| | | Billing Rate: | 30 | 30 | 30 | 30 | 30 | 30 |
| Total | | Hours: | 56 | 56 | 56 | 56 | 40 | 264 |
| | | Internal Cost: | 1,280 | 1,280 | 1,280 | 1,304 | 928 | 6,072 |
| | | Internal Rate: | 22.86 | 22.86 | 22.86 | 23.29 | 23.20 | 23 |
| | | Billing Cost: | 1,760 | 1,760 | 1,760 | 1,800 | 1,280 | 8,360 |
| | | Billing Rate: | 31.43 | 31.43 | 31.43 | 32.14 | 32 | 31.67 |

This example details the hours booked, their cost and billable rates and calculates the actual costs and billable amounts.




| Project | Task | Budgeted Costs | Actual Costs To Date | Estimate To Complete | Total Estimated Cost | Variance (Cost) | Variance (%) |
|---|---|---|---|---|---|---|---|
| AA Project Extra | Analysis | 500 | 733.33 | | 733.33 | -233.33 | -46.67 |
| | Business Objects Reports Conversion | 500 | 266.67 | | 266.67 | 233.33 | 46.67 |
| | Business Objects Training | 2,000 | | 2,000 | 2,000 | | |
| | Business Objects Universe Development | 500 | 666.67 | | 666.67 | -166.67 | -33.33 |
| | Production Installation | 1,000 | | 1,000 | 1,000 | | |
| | Production Support | | | | | | |
| | Project Management | 2,000 | 3,333.33 | | 3,333.33 | -1,333.33 | -66.67 |
| | System Admin Training | 1,000 | 1,133.33 | | 1,133.33 | -133.33 | -13.33 |
| | System Configuration | 1,000 | | | | 1,000 | 100 |
| | System Testing | 433.33 | 266.67 | | 266.67 | 166.67 | 38.46 |
| | Train the Trainer | 3,000 | 400 | 3,000 | 3,400 | -400 | -13.33 |
| | Travel | | | | | | |
| | UAT Consultancy | 1,000 | 266.67 | | 266.67 | 733.33 | 73.33 |
| | UAT Installation | 2,000 | 2,200 | | 2,200 | -200 | -10 |
| Total | | 14,933.33 | 9,266.67 | 6,000 | 15,266.67 | -333.33 | -2.23 |

An example of how cost variances can be reported

## Comparison reports

| Project | Resource | | Nov 22 | Nov 29 | Dec 6 | Dec 13 | Dec 20 | Dec 27 | Jan 3 | Jan 10 | Jan 17 | Jan 24 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Feasibility study for ABC Corp | Larry Lamb | Current Plan: | | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | | 210 |
| | | Actual: | | 24 | 24 | 24 | 16 | 24 | | | | | 112 |
| | Nat Nolan | Current Plan: | | | | | | | | | 30 | | 30 |
| | | Actual: | | | | | | | | | | | |
| Total | | Current Plan: | | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | 240 |
| | | Actual: | | 24 | 24 | 24 | 16 | 24 | | | | | 112 |
| New CRM system | TECHNICIAN | Current Plan: | | | | | | | | | | | |
| | | Actual: | | | | | | | | | | | |
| | Larry Lamb | Current Plan: | | 20 | 20 | 20 | 20 | 20 | 20 | | 30 | 30 | 180 |
| | | Actual: | | 16 | 16 | 16 | 24 | 16 | | | | | 88 |
| | Nat Nolan | Current Plan: | | 30 | 30 | 30 | 30 | 30 | 30 | | | | 180 |
| | | Actual: | | 40 | 40 | 40 | 32 | 24 | | | | | 176 |
| Total | | Current Plan: | | 50 | 50 | 50 | 50 | 50 | 50 | | 30 | 30 | 360 |
| | | Actual: | | 56 | 56 | 56 | 56 | 40 | | | | | 264 |

This compares the planned hours from the current plan with the actual hours booked using Innate Timesheets. You can make multiple comparisons of planned work from any baselined plan or scenario with each other, the current plan, or actual time booked.

| Project Client | Project | | Nov 29 | Dec 6 | Dec 13 | Dec 20 | Dec 27 | Jan 3 | Jan 10 | Jan 17 | Jan 24 | Jan 31 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ABC Co | Feasibility study for ABC Corp | Planned Work: | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | | 240 |
| | | Planned Internal Cost: | 750 | 750 | 750 | 750 | 750 | 750 | 750 | 660 | | | 5,910 |
| | | Planned Billing Cost: | | | | | | | | | | | |
| | | Actual Work: | 24 | 24 | 24 | 16 | 24 | | | | | | 112 |
| | | Actual Internal Cost: | 600 | 600 | 600 | 400 | 600 | | | | | | 2,800 |
| | | Actual Billing Cost: | | | | | | | | | | | |
| Total | | Planned Work: | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | | | 240 |
| | | Planned Internal Cost: | 750 | 750 | 750 | 750 | 750 | 750 | 750 | 660 | | | 5,910 |
| | | Planned Billing Cost: | | | | | | | | | | | |
| | | Actual Work: | 24 | 24 | 24 | 16 | 24 | | | | | | 112 |
| | | Actual Internal Cost: | 600 | 600 | 600 | 400 | 600 | | | | | | 2,800 |
| | | Actual Billing Cost: | | | | | | | | | | | |
| Innate | New CRM system | Planned Work: | 50 | 50 | 50 | 50 | 50 | 50 | | 30 | 30 | 78 | 438 |
| | | Planned Internal Cost: | 1,160 | 1,160 | 1,160 | 1,160 | 1,160 | 1,160 | | 750 | 750 | 1,806 | 10,266 |
| | | Planned Billing Cost: | 1,600 | 1,600 | 1,600 | 1,600 | 1,600 | 1,600 | | 1,050 | 1,050 | 2,490 | 14,190 |
| | | Actual Work: | 56 | 56 | 56 | 56 | 40 | | | | | | 264 |
| | | Actual Internal Cost: | 1,280 | 1,280 | 1,280 | 1,304 | 928 | | | | | | 6,072 |
| | | Actual Billing Cost: | 1,760 | 1,760 | 1,760 | 1,800 | 1,280 | | | | | | 8,360 |
| Total | | Planned Work: | 50 | 50 | 50 | 50 | 50 | 50 | | 30 | 30 | 78 | 438 |
| | | Planned Internal Cost: | 1,160 | 1,160 | 1,160 | 1,160 | 1,160 | 1,160 | | 750 | 750 | 1,806 | 10,266 |
| | | Planned Billing Cost: | 1,600 | 1,600 | 1,600 | 1,600 | 1,600 | 1,600 | | 1,050 | 1,050 | 2,490 | 14,190 |
| | | Actual Work: | 56 | 56 | 56 | 56 | 40 | | | | | | 264 |
| | | Actual Internal Cost: | 1,280 | 1,280 | 1,280 | 1,304 | 928 | | | | | | 6,072 |
| | | Actual Billing Cost: | 1,760 | 1,760 | 1,760 | 1,800 | 1,280 | | | | | | 8,360 |

This detailed report compares planned and actual work and their costs.

## About the Author

Barry Muir is Managing Director of Innate Management Systems Ltd, a resource management software author that has been trading for more than 17 years. You can see more details of the Innate software and implementation approach at www.innate.co.uk