



# CPM Management Studio

*CPM Management Studio is the total Workforce Metrics Reporting and Dashboard solution for any and all organisations*

**The challenge for any organisation is the ability to provide its decision makers with the information they require on which to base critical business decisions.**

It is the role of Workforce Metrics to collate and rationalise the plethora of Information available into concise and distinct data models. Workforce Metrics and Analytics sit comfortably between the information collected and generated by operational systems and Management.



A well designed solution will provide ready access to a wide range of Workforce data allowing the business to make informed and considered decisions when dealing with the complex area of Workforce Management.

The system helps answer questions such as-

- 📊 *Where are we losing staff?*
- 📊 *Why have our production costs increased?*
- 📊 *How can we reduce our Leave Liability?*
- 📊 *Which areas of the business are performing?*
- 📊 *What does our workforce look like?*
- 📊 *Where as a business can we improve?*
- 📊 *How have changes to legislation impacted us?*
- 📊 *....and many more .....*

HRIT's **CPM Management Studio<sup>©</sup>** is capable of collecting information from any number of legacy systems and formulating that information into comprehensive data models which can be presented to Management in a simple and easy to interpret format from which considered and objective policy decisions can be made.

**CPM Management Studio<sup>©</sup>** is a specialised Workforce Metric Dashboard and Reporting solution to provide analytical information on a wide range of Workforce issues such as Headcount, Staff Demographics, Full Time Equivalence, Attrition, Retention, Labour Cost, Leave Liability, Absenteeism, Manhours Analysis, to name a few. It has the capability of providing simple and easily interpreted Dashboard results to the executive, whilst also delivering a powerful reporting framework for analysts.

The **CPM Management Studio<sup>®</sup>** system is completely independent of any specific Payroll or Human Resource system. In fact a key aspect of its design is the ability to bring together Workforce Metric information from any number of disparate Payroll and Human Resources systems into a single consistent format. It is already being used in conjunction with **ADP**, **CHRIS21**, **PayGlobal** and **SAP**.

**CPM Management Studio<sup>®</sup>** is the culmination of over 10 years experience of developing and delivering Workforce Management solutions to some of Australasia's leading organisations including Westpac New Zealand, Fletcher Building Holdings, Fisher & Paykel Appliances, Goodman Fielder New Zealand, Australian Unity, Contact Energy, TrustPower .

As a 'shrunk-wrap' solution, HRIT have been able to turn the historically expensive and time consuming task of building and deploying Workforce Metric Dashboard and Reporting systems into a relatively inexpensive and rapid task. Most implementations can be completed within two months.

As a packaged solution, HRIT are continuously investing in the expansion of **CPM Management Studio<sup>®</sup>** capability as it is HRIT's strategic objective to be the foremost provider of Workforce Metric Solutions and Services in Australasia. Where clients have a current maintenance agreement, upgrades are provided as part of the agreement meaning that clients are continually benefiting from HRIT's development programme.

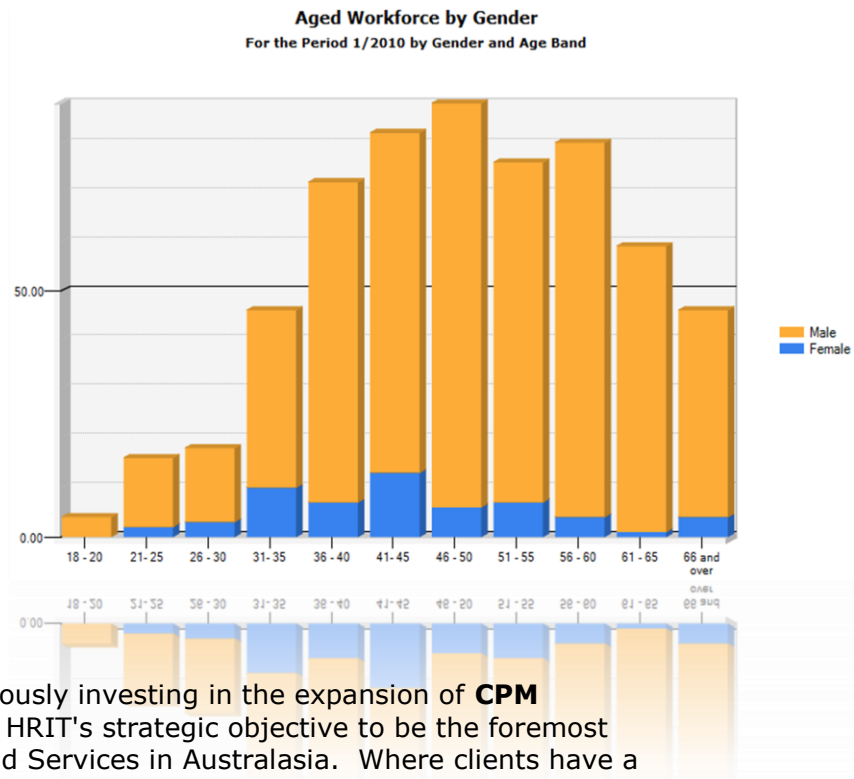
### ***So why CPM Management Studio?***

Many core operational applications, such as Payroll and Human Resource Systems are extremely good at performing their functions, but invariably, many have a weakness when it comes to delivering strategic management information to the business. With the current economic climate it has never been more important to be able to provide timely and accurate Workforce Metric information on all aspects of Labour Cost and Utilisation, Talent Retention and Attraction, Leave Liability tracking, Staff Health and Work Life Balance.

Many companies embark on expensive internal Data Warehouse projects to bridge the gap between data and information, as all Payroll and Human Resource Systems collect a huge amount of valuable data. Unfortunately, for many organisations, the cost of developing and delivering an alternative reporting mechanism is prohibitive, leaving the organisation with no alternative other than using the standard reporting in their proprietary systems.

The other major obstacle that needs to be overcome when building a Workforce Metric solution is having a detailed knowledge of Workforce Data and what is both required and possible.

By leveraging off the expertise gained from over 10 years of providing Workforce Metric solutions, HRIT have been able to 'shrunk-wrap' the historically expensive and time consuming task of creating a HR focused Data Warehouse Reporting Solution into a cost effective and simple to use application **CPM Management Studio<sup>®</sup>**.



**CPM Management Studio®** comes packaged with a number of standard Workforce Metric and Reporting Templates covering :-

- 📊 Staff Diveristy
- 📊 Retention and Attrition
- 📊 Leave Liability
- 📊 Labour Cost
- 📊 Labour Utilisation
- 📊 Full Time Equivalence Analysis
- 📊 Leave Trends and History
- 📊 Payroll Trend and Variance Reporting



In addition **CPM Management Studio®** has a sophisticated **Dashboard** which provides a simple snapshot of any number of Metric Results against target values. The Executive and Management have a mechanism to instantly identify areas of the business that are excelling or underperforming. One of the most important features of the Dashboard is the ability to drill down through any Metric Result to identify which areas of the Business are impacting that result. With full history of Dashboard Results, any historical period can be viewed in the Dashboard.

The **CPM Management Studio®** also brings about a culture of transparency through the many methods of drilling into or interrogating the Metrics, whether through the Dashboard or the Metric Models.

### Key features

Some of the features of **CPM Management Studio®** are :-

- 📊 Workforce Dashboard for the presentation of key metric results in a simple to understand format, with added advantage of history and drill down features.
- 📊 The ability for Users to save any number of views for each Report/Chart as personal favourites.
- 📊 The ability to establish Group Standard favourites for predetermined views of any Report/Chart.
- 📊 User selected Date Range Reporting (ie Leave History Reporting/Charting)
- 📊 Interactive comparisons of Month and Period data, ie Current Month against prior Month or same Month last year
- 📊 Online access to all historical Month and Period snapshots
- 📊 Rolling Annual Analysis as well as Year to Date Analysis. This can be for Rolling 12 Monthly Turnover or Rolling Earnings and Manhours Analysis
- 📊 Inbuilt accumulators and formulas to enable reporting on Average Cost per FTE by Month, Period or Year. There is also the ability to Trend the Average Cost per FTE over a Range of Months. As well as Average Cost per FTE there is also the ability to use Average Hourly Rate for Analysis
- 📊 Workforce Modeller to enable Workforce Cost projections through any number of user-defined Model Definitions
- 📊 Comprehensive security model to manage access to information
- 📊 Data driven design allowing for customised Metric definitions, Dashboard accumulators and Reports/Charts
- 📊 Built-in Scheduler which allows for the automated scheduling of Data Imports and Metrics table updating

- Direct connection to external Databases for automated data importing when used with the scheduler
- Automated Data Transposition on import for standardised information
- Built on Microsofts latest Database and Reporting tools



## What CPM Management Studio<sup>©</sup> brings to an organisation

Through the **CPM Management Studio<sup>©</sup>** Reporting and Dashboard framework, businesses are provided with a means of receiving strategic Workforce Metric information almost immediately in a format that is easily understood.

Not only does **CPM Management Studio<sup>©</sup>** provide up-to-date Workforce Metric results, but it also enables historical trending and point in time comparisons. Comparisons can be performed between this Month and last Month or even this Month against the same Month last year. Organisations can now instantly analyse the impact of changes to policy, economic climate or legislation.

Point in time Metrics are hugely valuable, but the real key is the ability track changes, or identify trends.

To help answer these questions, the **CPM Management Studio<sup>©</sup>** has many mechanisms for rationalising the information to gain clarity on these very questions. During the Metric generation process, any number of Grouping or Banding can be applied such as Salary Bands, Age Bands, Service Bands, Leave Liability Bands, etc. These banding options can be applied in any Metric Model.

A simple example of applying a Banding Element to a Metric would be the use of the Age Band in the Staff Attrition Metric. Here the Organisation Attrition Rate may be 18%, but in the Age Band of 21 – 25 may be 42% and in the band 26 – 30 it could be 35%.

This would show a difficulty in retain staff under the age of 30, especially if the average service length of the Leavers under 25 is less then 2 years.

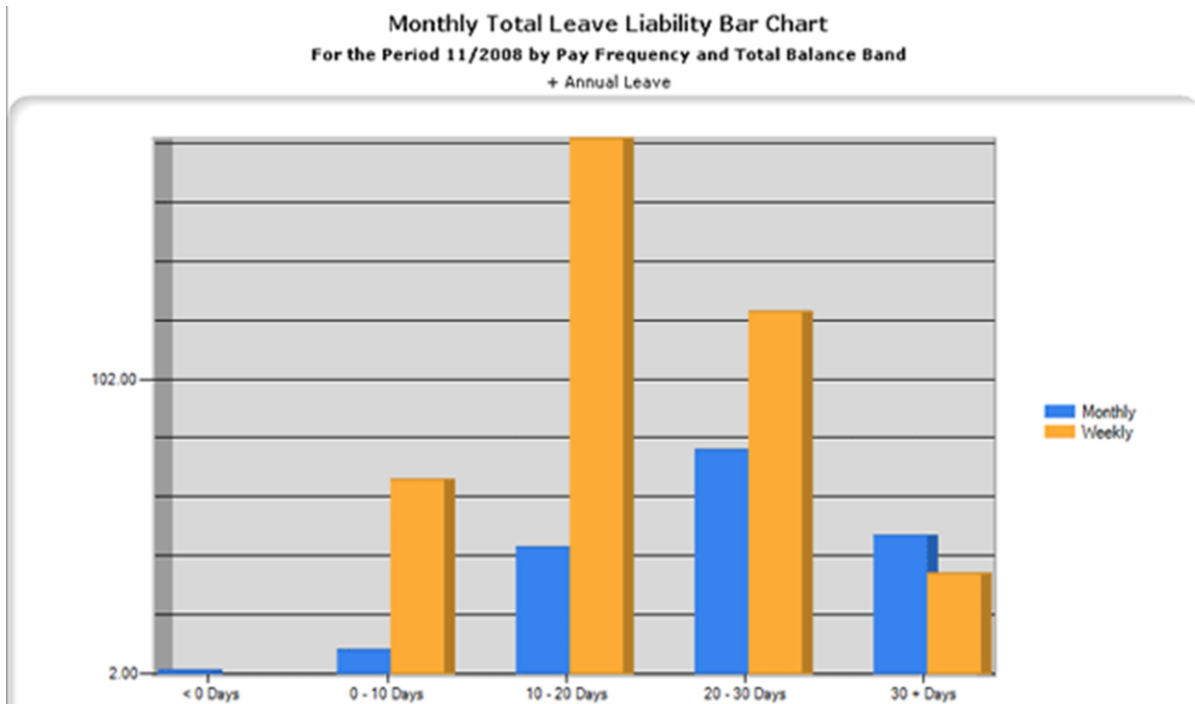
This example shows that it requires a number of Metric elements to really understand the issues, and this is where **CPM Management Studio<sup>©</sup>** really shines, as it has been architected to do exactly this.

What HRIT have achieved with **CPM Management Studio<sup>©</sup>** is to make an extremely complex and costly business need, simple and cost effective. Through the flexible data driven design and template Reports, Charts and Graphs, what would normally be a 6 to 12 month project can quite easily be delivered in less than two months, including the deployment of the Dashboard.

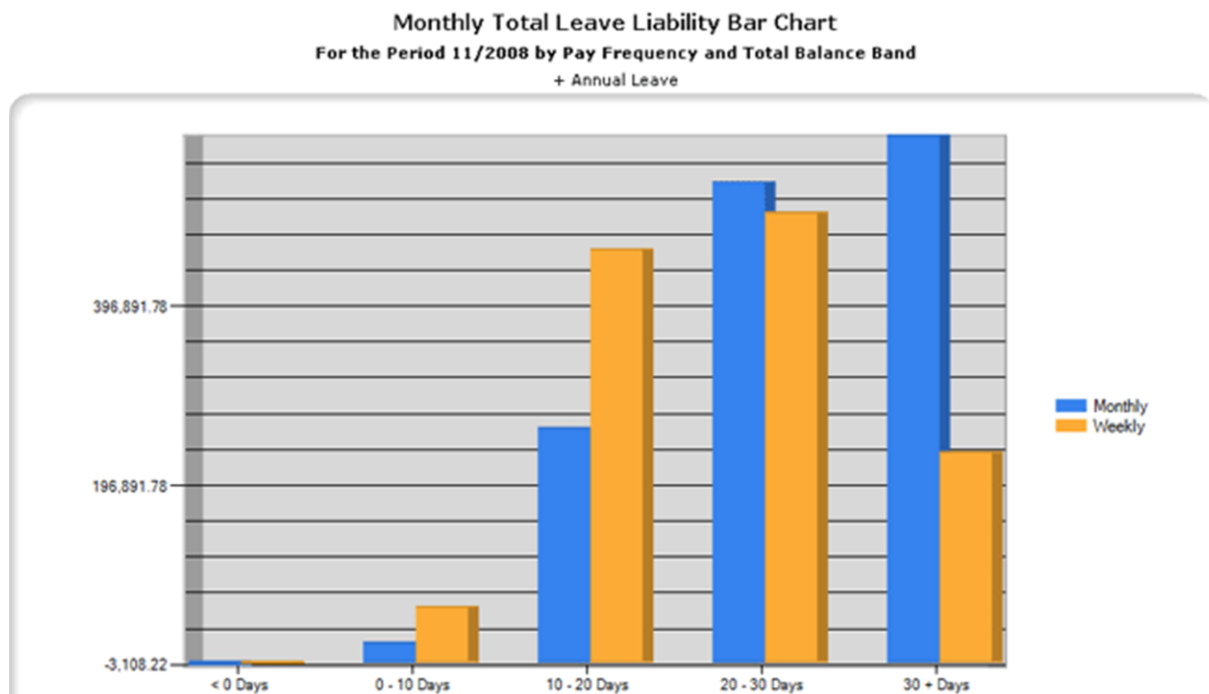
**12 Month Staff Movement Statistics**  
For the Period 1/2010  
+ Fulltime + Parttime

Age Band	Opening	Starters	Leavers	Change	Closing	Average Service	Leavers Service	Attrition%
18 - 20	3	0	0	0	3	1.59		0.00 %
21 - 25	19	1	8	-7	12	2.09	1.68	42.11 %
26 - 30	26	0	9	-9	17	3.55	2.90	34.62 %
31 - 35	48	2	6	-4	44	4.54	2.23	12.50 %
36 - 40	80	3	14	-11	69	6.88	3.39	17.50 %
41 - 45	83	4	10	-6	77	6.36	5.61	12.05 %
46 - 50	106	1	23	-22	84	7.97	6.87	21.70 %
51 - 55	81	3	15	-12	69	10.10	10.41	18.52 %
56 - 60	87	1	15	-14	73	11.36	4.44	17.24 %
61 - 65	59	0	2	-2	57	15.46	10.49	3.39 %
66 and over	37	6	10	-4	33	16.88	16.82	27.03 %
<b>Total</b>	<b>629</b>	<b>21</b>	<b>112</b>	<b>-91</b>	<b>538</b>	<b>8.97</b>	<b>6.48</b>	<b>17.81 %</b>

Following is an example of how viewing the same information using two different collation methods tells two different stories (both charts are created in **CPM Management Studio<sup>©</sup>**)



In the first view of the Annual Leave Liability, it is shown as the Count of Employees, both Waged (yellow) and Salaried (blue) in Total Day Bands from <0 Days through to 30+ Days. Simply looking at the numbers of staff in each Band, it shows most Waged Staff are in the 10-20 Days band and Salaried Staff in the 20-30 Days band. It also shows that even though there are considerably more Waged Staff than Salaried Staff, in the 30+ Days Salaried Staff outnumber Waged Staff.



Now, looking at the same information as the sum of the Liability Cost, it clearly shows the biggest issue facing the company is the Salaried Staff with greater than 30 Days, as while they represent a small group proportionately, in actual liability they constitute the greatest cost.

## Bringing the World together

### ***At the heart of any Workforce Metrics system is its Data Warehouse.***

The foundation upon which **CPM Management Studio<sup>©</sup>** is built is its Data Warehouse Engine which can dynamically import information from any range of systems in varying formats.

The flexibility of the BI Engine seamlessly brings together data from any number of data repositories, whether proprietary Payroll/HR systems, systems located in different countries, or even information found on spreadsheets and other bespoke solutions within a business.

**CPM Management Studio<sup>©</sup>** now presents a real alternative to expensive and risky Global Payroll/HR deployments. Now Global Workforce Reporting can be achieved quickly and easily from existing Systems.

**CPM Management Studio<sup>©</sup>** is already providing Global Workforce Reporting for a number of companies.

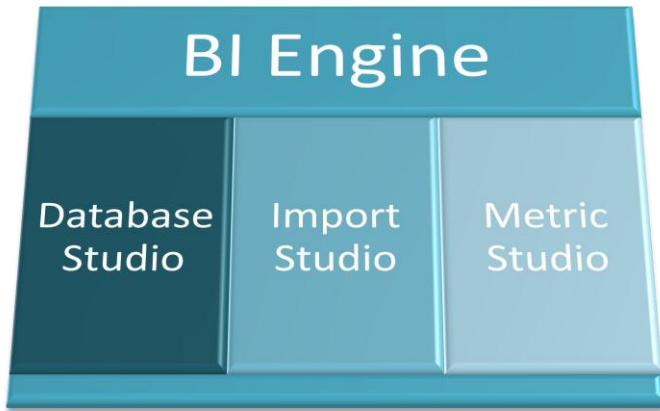
Whilst capable of delivering complex multi-system and multi-country solutions the system is scalable so that it can also deliver for a Company using a Single HRIS platform.

The BI Engine is only part of the entire **CPM Management Studio<sup>©</sup>** solution with the Dashboard and Reporting Studios being other key components. Such is the flexibility and scalability of the system that it is meeting the needs of organisations from 300 employees through to 15,000+.

The BI Engine includes numerous transformation tools allowing information to be rationalised as it is imported. The data mapping can create alternative reportable elements such as translating multiple Termination Reasons into broader groupings of Involuntary or Involuntary, varying definitions of Employment Types into a standardise list where CAS, CA, C can all be mapped to Casual.

Metric Banding tables create other alternative groupings for more usable reporting items like Age Bands, Salary Bands, Service Bands where the requirement may be to report all Employees with less than 1 Years Service, 1-2 Years Service, 2-5 Years, 5-10 Years, 10-20 etc.





There are 3 key components to the Data Warehouse Engine, the **Database Studio** which manages the configuration and storage of all the Master Data imported by the **Import Studio**, the Import Studio which manages the importing of information from any number of external systems where the source information can be in any manner of formats (direct connection to a SQL Database, Excel Spreadsheets or flat files) and the **Metric Studio** which manages the definition and creation of the Workforce Metrics where Metrics can be created for any number of periods, Weekly, Monthly, Year-to-date or Rolling 12 Month

## Database Studio

*The **Database Studio** manages the configuration and storage of all the Master Data imported by the Import Studio. The Master Data is available for Reporting without needing to be transformed into Metric Data.*

The Database Studio maintains the configuration of all the Master Data sets. The Master Data can be both reported on directly or used to generate Metric Data. The Database Studio has a sophisticated **add-in** feature in which several Master Data sets can be joined together to provide a richer data source from which to generate Metric Data or report on directly. For example, the Employee Details, Employee Salary and Employee Performance may all come in as discrete Imports and at varying frequencies. By creating add-ins for the Salary and Performance Tables, these can be joined to the Employee Details so that any Metric that uses the Employee Details can also include the Current Salary and Performance Rating. This could be useful for Staff Attrition Models as this would enable the viewing of Staff Attrition by Last Performance Rating or Current Salary Band.

## Import Studio

*The **Import Studio** manages the importing of information from any number of external systems. The source information can be in any manner of formats, direct connection to a SQL Database, Excel Spreadsheets or flat files.*

The Import Studio allows for multiple sources and formats to be imported into a single Master Data Set such as an Employee Details Table. Here one Company could be providing Employee Data via a Spreadsheet, another by Flat File whilst another could be coming from a direct link to an external Database. The Import Studio also contains an **Import Scheduler** which enables the automated scheduling of Information uploading. This can happen Daily, Weekly, Monthly or On Request. The time at which the Import is to be scheduled can also be specified. Using the Scheduler, key Management information can be imported on a daily basis without any intervention, providing the business with up-to-date Reporting.

Another aspect of the Import Studio are the **Translation Tables**. These allow for the transformation of multiple definitions and codes into a single concise set of data names. For example numerous definitions of Casual Employment (CA, C, CAS, CASUAL) can all be transformed to a single definition of Casual.

Where some sources of data may not be as rich as others, the Translation Tables can be used to fill gaps in the data.

## Metric Studio

*The **Metric Studio** manages the definition and creation of the Workforce Metrics. Metrics can be created for any number of periods, Weekly, Monthly, Year-to-date or Rolling 12 Month.*

The Metric Studio maintains the configuration of all the Metric Data sets. It also contains information on the frequency that this Metric relates to. Metrics can be generated by Period, Monthly, Year to Date, Rolling 12 Months, or to report on Master Data.

There is a comprehensive **Function Library** from which specific Metric elements can be incorporated in the Metric Data sets. Functions include items such as Staff Service length, Service Length of Leavers, FTE calculations, Voluntary Leavers, Overtime Ratio's etc.

During the building of the Metrics there is also the ability to incorporate Banding Data from a Banding Library. This is where broad grouping may be and can be established for any form of data such as Age Bands, Service Bands, Leave Entitlement Bands.

Using the **Metric Scheduler**, the scheduling of Metric generation can be Weekly, Monthly or On Request. The time at which the Metric is to be scheduled can also be specified.

## Gaining visibility through Reporting and Dashboards



The **Report Studio** manages the on-line viewing and analysis of the information. The Report Studio is built around a library of Report and Chart definitions.

Using the extensive library of Templates **CPM Management Studio**<sup>©</sup> offers an almost limitless number of Charting and Reporting options. Through the Report Manager, the Templates can be linked to any of the Workforce Metric Tables to create distinct Reporting and Charting options. Using a data driven design, each distinct Report or Chart can Filtered, Sliced and Diced on any of the Data elements found in the Metric Table.

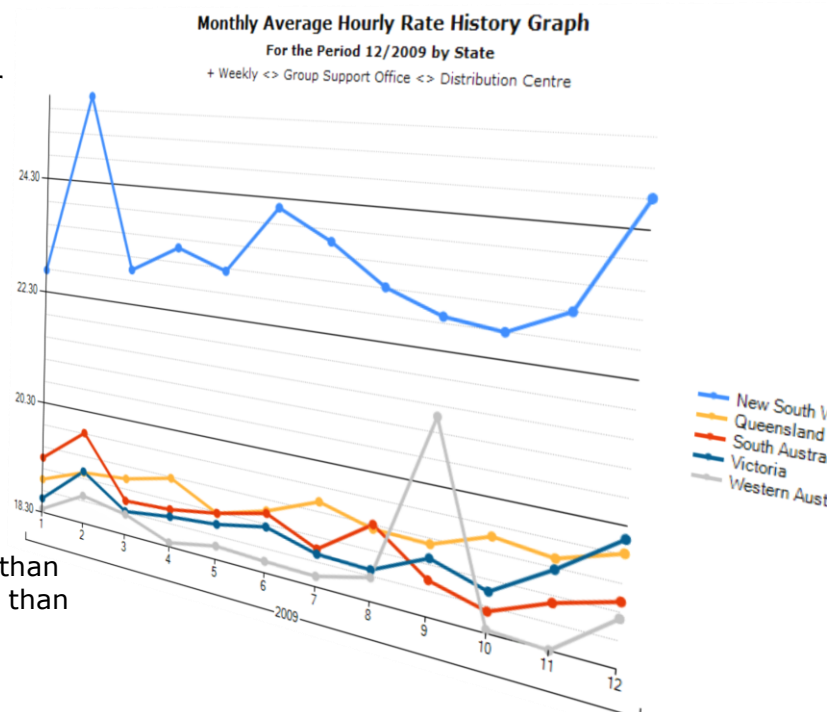
The information reported is also limited to users profile so that they only see the information they have access to.

All Reports and Charts are designed to be used by users of any ability. Any data field can be used in the Report or Chart content, or applied as a Filter to create a more specialised view, whether for an Overtime Analysis, Costs by a Department, Leave taken by a single Employee or Leavers by Gender.

Complex requests for information can now be delivered in minutes through the simple selection of a few fields and the application of a couple of filters. One of the unique features of the **CPM Management Studio**<sup>©</sup> Reporting Engine is the ability to save each combination of Field Selections and Filters as a 'Favourite'. Using Favourites regular requests can be generated each month by the single click of a mouse. All Favourites saved by a user are also organised onto a single Favourites Menu to give each user a simple access point for all of their regular Reports and Charts.

**CPM Management Studio**<sup>©</sup> offers a number of transformation and banding options when generating the Metric Tables and building the Reports/ Charts.

The Banding features allow for user-defined groupings such as Age Bands or Salary Bands for use in Diversity and Attrition Analysis, or Days Banding for grouping of Days Taken for the Year, or number of Days Leave owing. As well as being used as a Reportable Item the Banding elements can also be used as filters. This provides the opportunity to easily create Reports or Charts based on exception Reporting, ie Staff with more than 30 Days Annual Leave owing, or those who have Taken more than 10 Days Sick Leave in a Year or worked more than 30 Hours overtime in a Month.



The Banding Data Elements can be used in conjunction with any other Data Element contained in the Metric Table.

Never has it been easier to identify where the Leave Liability issues are, or which areas of the business are facing Ageing Workforce challenges, the Age brackets where attrition is high.

A number of specialised Templates are also included which offer comprehensive Workforce Reporting options such as the Staff Attrition Template which includes the Opening Balance for the start of the Reporting Period, the number of Starters and Leavers within the Reporting period, the Nett Change for the reporting Period, the Average Service Length of All Staff for the dissection, the Average Service Length of the Leavers for the Dissection and the % Attrition Rate for the Reporting Period. In this example the Attrition Figures are being shown for user defined Age Bands.

Pay Period Trend Report									
For the Period 4-11/2008 compared against 3-11/2008									
Sub Type	4-11/08 Amount	3-11/08 Amount	Variance Amount	4-11/08 Hours	3-11/08 Hours	Variance Hours	4-11/08 FTE	3-11/08 FTE	Vari FTE
Absence	21,669.54	23,371.56	-1,702.02	1,087.28	1,163.14	-75.86	33.06	36.82	-3.76
Claimable	20,566.59	7,002.64	13,563.95	0.00	0.00	0.00	0.00	0.00	0.00
Hourly	5,472.24	5,107.66	364.58	0.00	0.00	0.00	0.00	0.00	0.00
Ordinary	339,657.04	338,235.10	1,421.94	18,930.47	18,752.11	178.36	466.19	463.20	3.00
Overtime	38,721.32	39,012.84	-291.52	1,410.90	1,420.01	-9.11	34.97	35.26	-0.30
Provision	47,609.19	47,234.15	375.04	0.00	0.00	0.00	0.00	0.00	0.00
Total	473,695.92	459,963.95	13,731.97	21,428.65	21,335.26	93.39	534.22	535.28	-1.06

With all reporting being delivered by Reporting Services there is the ability to export any Report or Chart to Excel, PDF, TIFF or CSV formats.



The **Dashboard** delivers a summary of all key Workforce Metrics in a simple consolidated view measuring performance against benchmark targets.

CPM Management Studio<sup>©</sup> 's Dashboard brings together all of the key Workforce Metric results into a single consolidated view. With comparisons against agreed business benchmarks, it is easy, in a single glance, to observe which key Workforce Indicators are falling outside the target parameters.

Through the **Dashboard Studio** any number of user-defined Dashboard Indicators can be established. Access to each of the Dashboard indicators can be varied by user profiles. Access to information being displayed within the Dashboard is also limited to a users access profile so that they only see what is relevant to them.

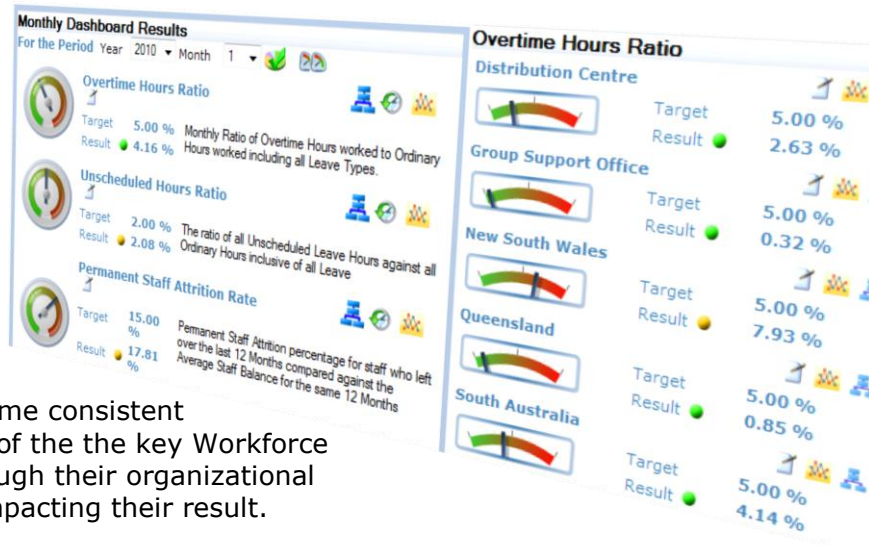
What makes the Dashboard flexible and customisable for each client is the sophisticated Dashboard Accumulator modeller, Any number of Dashboard accumulators can be defined for each Metric result set.

The Accumulator Modeller can be used to create any number of focused Key Performance Results like filtering out the Annual Leave Balances for Permanent Staff from a Leave Liability Metric to deliver a Dashboard Indicator of the Average Balance for Permanent Staff. Another example could be the selection of Service Length for Permanent Staff from the Staff Attrition Metric to provide the Average Service Length of Permanent Staff, or maybe the Service Length of Leavers to provide the Average Service Length of Leavers.

Also, in defining a Dashboard Indicator, accumulators from two totally different Metric Tables can be used to create the Dashboard Result. An example may be to use the Permanent Full Time FTE's Paid for a Month from a Monthly Manhours Metric compared to the Permanent Full Time Head Count from a Monthly Staff Headcount to derive the Ratio of Permanent Full Time FTE's paid to the Permanent Full Time Headcount.

Through the Dashboard there is access to Dashboard history as well as the ability to drill down through the organisation on any Metric result. Access to information when drilling down through the Dashboard is also access controlled so that users only see what is applicable to them.

This ability to drill down through Dashboard creates an environment of transparency and consistency. All layers of Management are presented with the same consistent results with the same standard definition of the the key Workforce Performance Measure. Drilling down through their organizational tree Managers can also identify what is impacting their result.



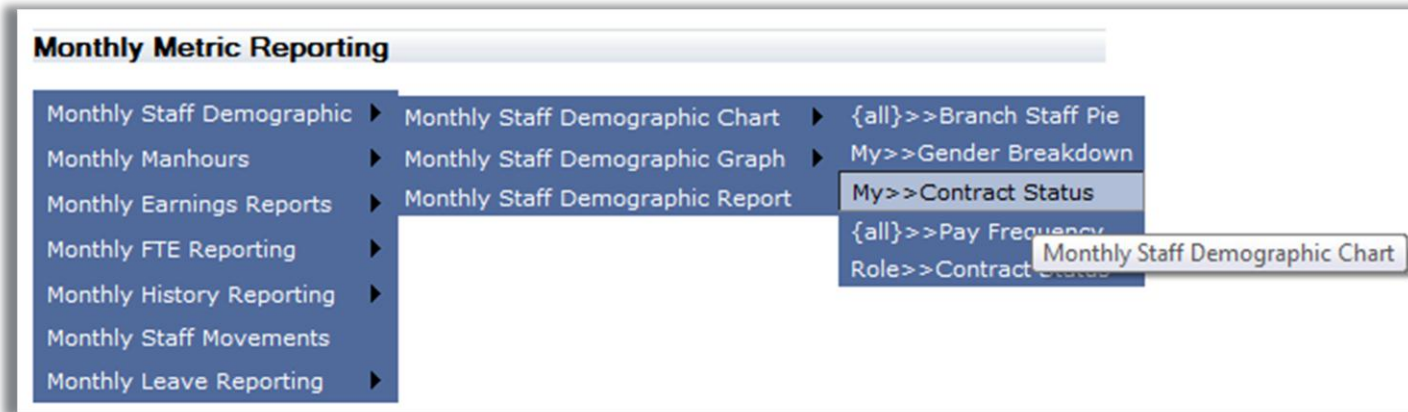
There is also a quick, one click display of the last two years results as a Trend Line graph.

Setting of Target Results can be set globally or specified for each layer of the business. Dashboard Target history is also available where Budgets or Targets can be set for each month of the year. Examples of where varying Targets might be used would be where an overall Attrition Target of 15% is applied for the entire company with the exception of the Contact/Call Centre which has an acknowledge retention issue for which a specific target of 25% is set.

## CPM Management Studio<sup>©</sup> Reporting Features

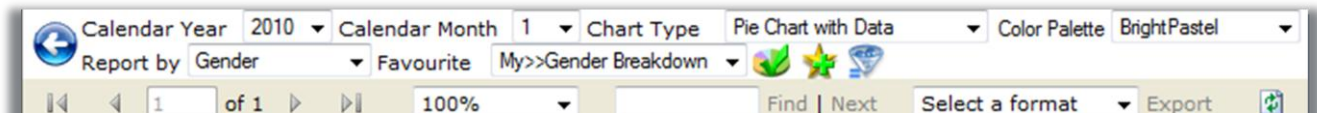
### Profile Driven Menu of Available Reports

The system uses Report Profiles which are assigned to Users. The profile determines the Reports/Graphs/Charts available for that user. The Reports are then selected from a friendly dropdown Menu as shown below.



### Report Tool Bar

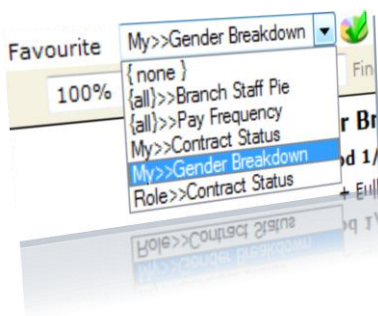
For all Reports and Charts/Graphs, the system uses a simple and intuitive tool bar that enables the user to specify the content for their report

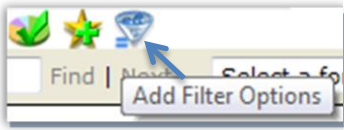


By default, each Model defaults to the current Period. In the example above, it is a Monthly Model which has defaulted to the current Year of **2010** and Month **1**.

### User Favourites

In any Report or Chart, each user can save any number of Favourites. This is where a user has applied a series of selections and filters to create a specific view. The user can save all the applied selections as a specified 'favourite' which can be applied to any future or past period. The Favourites list appears on the standard Reporting Tool Bar.



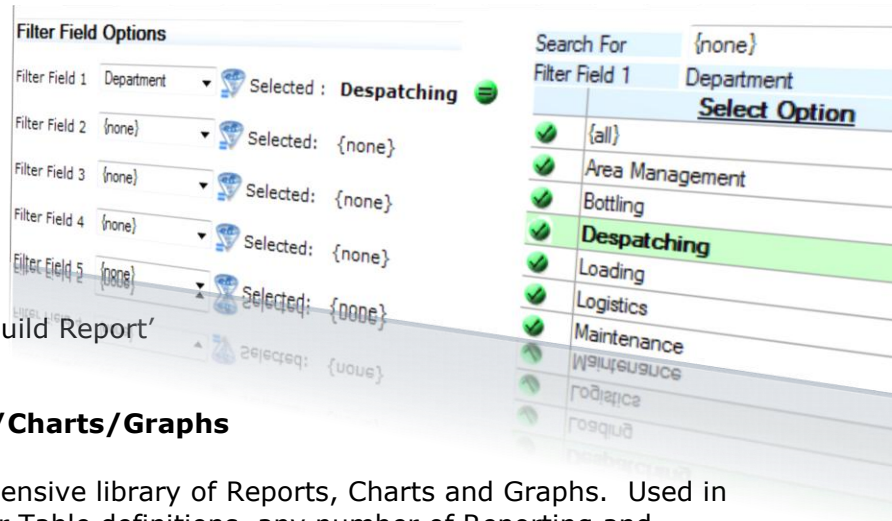


## Simple Filtering

From the main tool bar the user can apply up to 10 filters for a specified Model.

On clicking on the Filter Button, the Filter summary form is displayed for which any field in the Metric Source can be filtered. The following example shows the *Department* filter of **Despatching** being applied.

After the required filters have been applied, the user simply clicks on the 'Build Report' button to generate the Report or Chart.



## Comprehensive Library of Reports/Charts/Graphs

The system is supplied with a comprehensive library of Reports, Charts and Graphs. Used in combination with the Metric and Master Table definitions, any number of Reporting and Chartings options can be configured. The current Report Library includes -

- 📊 Date Range History Area Graph
- 📊 Date Range History Line Graph
- 📊 Date Range History Stacked Bar Graph
- 📊 Date Range Pie Chart (with optional Data Table)
- 📊 Date Range Report
- 📊 General Pie Chart (with optional Data Table)
- 📊 General Stacked Bar Chart
- 📊 Leave Liability Report
- 📊 Period Area Chart
- 📊 Period Bar Chart
- 📊 Period Bar Chart with Sum/Average/Count options
- 📊 Monthly History Bar Chart
- 📊 Monthly History Line Graph
- 📊 Monthly History % Line Graph
- 📊 Monthly History Report
- 📊 Monthly History Stacked Bar Chart
- 📊 Monthly Trend Report
- 📊 Period Leave Liability Report
- 📊 Period Leave Liability Trend Report
- 📊 Period Line Graph
- 📊 Period Line Graph with Sum/Average/Count options
- 📊 Period Staff Movement Statistics
- 📊 Period Trend Report
- 📊 Period Modeller Report

## Flexible definition of new Reports/Charts/Graphs

The system uses a sophisticated Reporting Engine which enables end users to attach any of the Report Library options to any of the **Metric Studio** or **Database Studio** schematics. This completely data driven configuration provides for limitless alternative Metric Reporting options, and more importantly without any programmatic intervention.

**Technical Requirements**

Database *SQL Server SQL Server 2005/ 2008/2008 R2  
SQL Server 2005/2008/2008 R2 Reporting Services*

Web Server *Windows Server2003  
IIS Web Services 6  
ASP.NET 2.0, 3.5 or 4.0*

Development Environment *Microsoft Visual Studio 2008 and 2010*

Browser requirements *MS Explorer 7 or greater*

For more information and Video demos, visit HRIT's Website

**[www.hrit.co.nz](http://www.hrit.co.nz)**