Expense Planning and Control Performance Blueprint Powered by TM1

Executive summary

This application brief describes a Web-based solution for managing expense projections using IBM Cognos® 8 Business Intelligence and Cognos TM1. Implementing this *Blueprint* can help you make expense decisions in real time and for the future at both divisional and corporate levels. The *IBM Cognos Expense Planning and Control Performance Blueprint Powered by TM1* can use projections from other Blueprints or planning systems and actual history to drive your expense planning processes.

The *Blueprint* and processes described in this document are generic for expenses in any industry and you can configure them to support the complexity of fixed and variable expense requirements for any industry in many countries.

Overview

Expenses are typically a major focus of corporate profit and loss statements. At the corporate level, maximum effort is required to manage expenses and set spending guidelines, while at the divisional level, line managers make expense decisions to improve efficiency and productivity. Forward-looking collaboration must occur so that divisional decisions align with strategic and tactical corporate goals. *The Expense Planning and Control Blueprint Powered by TM1* was created using the collective experience and applied best practices of thousands of IBM customers around the world.

Driver-based planning

Because experts tend to agree that planning, budgeting and forecasting involve too much detail and not enough focus on the key metrics that drive expenses, this *Blueprint* emphasizes and features driver-based planning. Driver-based planning uses common components that typically derive a given expense. For example, you can easily plan office supply expenses by using a volume or driver multiplied by a given rate. So, office supplies equals: headcount (driver) times $15 (rate). This approach is

superior to entering merely estimated expense dollars. The driver-based approach makes clear how expenses are actually determined and enables more rapid adjustments to plans as need be.

Expense plans depend on a number of factors, such as drivers, driver-based rates, seasonality curves and actual history. For example, you may import headcount from the *Workforce Planning Blueprint Powered by TM1* and use it to drive expenses in many areas, such as office supplies, cell phone costs or tuition reimbursement.

Although this *Blueprint* requires minimal user input, it yields a great deal of information. Only two cubes require input:

- Manual Entry: Users enter expenses not captured elsewhere and assign them to a particular account
- Expense Detail: Users choose which driver or profile they wish to use for a particular expense line. Some information in this *Blueprint* is sourced from other Blueprints, or other sources. For example, you can import depreciation expenses from the *Capital Project Planning Blueprint Powered by TM1*, while the Workforce Planning Blueprint Powered by TM1 can feed payroll information.
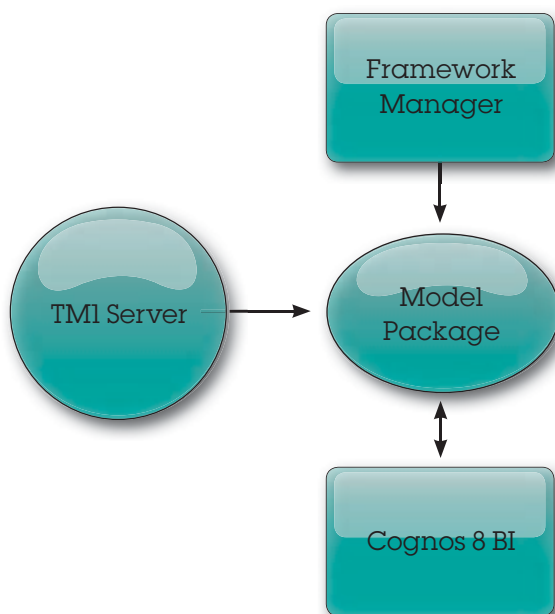
Blueprint objectives

You can use this *Blueprint* to achieve the following planning, budgeting and forecasting objectives:

- Manage expenses based on drivers and historically reliable rates.
- Allocate expenses equitably based on historical patterns or other drivers such as headcount over a certain number of periods.
- Consolidate expenses.
- Use salary and headcount projections as drivers for certain expense accounts in the plan.
- Convert currency.

Blueprint components

The architecture in the following diagram shows the high-level components of the Blueprint.

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The components present information in many forms and you can drill down to more detailed analyses and include up-to-date information from IBM Cognos TM1. Folders, dashboards and reports drive the decision-making process.

Business intelligence model

The business intelligence (BI) model focuses on providing vital information to contributors, managers and executives. Real-time information and the features implemented provide the tools to evaluate performance against existing plans, make decisions with causal effect on plans and corporate strategic initiatives to drive business performance.

The BI features include:

- Real-time data access
- Dashboards providing key information relevant to business function
- Drill-down from dashboards to answer questions and depict status of expenditures from various perspectives
- Cross-organizational reporting (multi-node reporting)
- Visual aids showing status, impact and evaluation of plan against performance so appropriate action can be taken to achieve goals and strategic initiatives
- Filtering options for further focus on needed information
- Ad-hoc query to slice-and-dice information to answer questions and monitor impact
- Dimensional analysis to analyze impact
- Ability to see which business units have completed planning contribution
- Actual versus target
- Actual versus adjustment
- Depreciation
- Flexible and extensible modeling

These features help you make informed decisions about expense planning and control requests and their relationship to strategic maps and corporate goals.

Workflow

Contributors in business units input various expenses. These are based on specific drivers, prior history or other internal knowledge. Dashboards, reports, ad-hoc queries and analyses are grouped according to business-function levels. Line of business and C-level management want BI tools to help them make informed decisions and adjustments aligned with corporate goals. In keeping with this approach, three categories—C-level management, tactical management and contributor are included in an Expense Planning and Control Blueprint BI implementation.

Some noteworthy features are:

• Reporting for all organization levels (multi-node reporting)
• In-body prompts for selecting areas of interest within the report
• Clickable links to sections of a multi-section report
• Drill-down to further detail

This BI implementation is geared towards business function. At the corporate level, there are dashboard-style reports that focus on business perspectives, provide drill-down features for greater detail and filter to show specific areas of importance such as drivers, timescale profile or manual input. With real-time data, the effect of decisions on goals and strategies can quickly be seen and responded to.

At the manager level, dashboards drillable to details, detailed reports, ad-hoc queries and analyses enable managers to focus on matters of tactical importance. Data and reports are relevant to tactical managers at the business unit level or departmental level. Typically of interest are the expenditure amounts, timescale profile, expenditure classification and information about unique manual expenses of the organization. The BI content readily addresses impacts on financial statements and helps proactive management to meet corporate objectives. With real-time throughput, you can quickly see the impact of changes on financial statements.

For contributors, the focus is on tracking and monitoring these expenses. Contributors want to know about timing, scenario status and tracking against actual data. Available contributor reports relate expenditure requests to the bigger picture and you can monitor them in keeping with corporate goals and strategies.

Executive reporting
Executives need to see how planned expenses fit with corporate goals and how they affect profit objectives. They want to see the data that is the result of expense planning. With real-time data access, they can view the scope of planning for different organizational levels and the degree of completeness from each contributing business unit. With its reports and ad-hoc analysis tools, it is possible to see the corporate financial impacts of their decision-making.

Because executives seldom use the ad-hoc analysis tools, reports provide the information most relevant to them. The executive launch point is the Expense Planning and Control Dashboard, which provides a general overview of key metrics and results and implications against established targets without the need to access the Planning application.

The following screen capture shows the Expense Planning and Control IT dashboard.
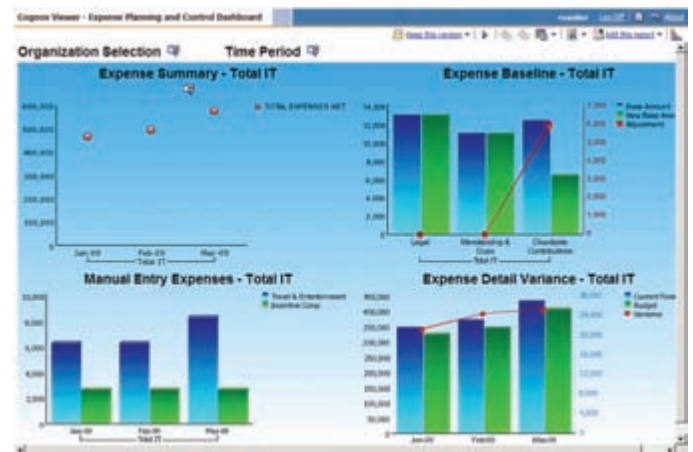
The executive may select a specific timeframe, or organization and scenario or he or she may choose to view the total Expense plan by year. The graph on the top left shows the expense items over time. Hovering your mouse over the dots reveals detailed data. The bar chart at the top right compares base and adjusted base expenses and the associated adjusted amounts for certain expenses. For an executive, this type of report shows a great deal of information about the various baseline expenses and immediate insight to any anomalies.

The bar chart at the lower left half of the dashboard shows planned manual spending for the current and next year. Hovering your mouse over each of the bars reveals the actual numbers projected. The bar chart at the lower right represents total expense for Current Forecast and Budget and the variance between these.

Gathering more detail about actual or target is similarly facilitated by viewing individual reports. Additionally, the ad-hoc section of this dashboard allows access to views both up and down the organization hierarchy. Using the dashboard as the launch point provides a quick executive summary of important metrics at all organization levels. The executive can focus on higher-level data and determine the impact on organizational strategies or goals along with financial impacts of executive decision making. With real-time data access, executives can see the consolidated results of expense planning and control goals and can clearly see when a business unit has completed its expense plan.

Management reporting

Using this *Blueprint*, managers can make informed decisions that affect corporate objectives A manager's task of ensuring that departments or organization levels contribute to corporate guidelines can include managing specific expenses, adjusting expense requests and monitoring these against actual data throughout the year. The BI component provides a number of tools for reporting, analyzing and querying the data. The reports that follow display more detail data. Selectable filters enable the manager to focus attention on specific expenses or business units.
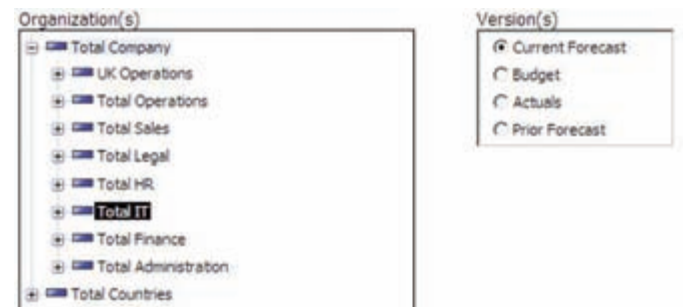
This example shows the Expense Baseline report in greater detail for his/her organization
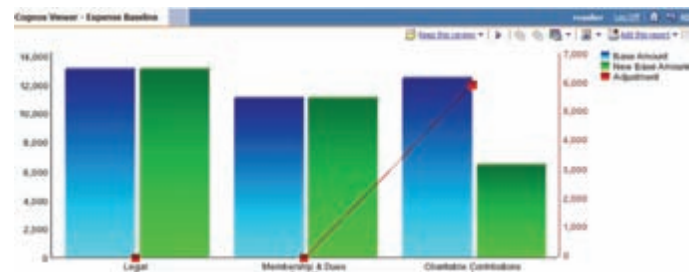
The IT Manager Report provides precisely the information needed. The f exibility to choose to report for all of his or her organization and to focus on specific aspects greatly enhances information-driven decisions and actions. This example clearly shows the distinction between base and new base amounts and the adjustments to the base. With real-time data access, as planning contributors input or modify their expenses, changes to this report are immediately available. Managers who might need to adjust and approve the expenditure requests can readily see the status of requests and consolidated results.
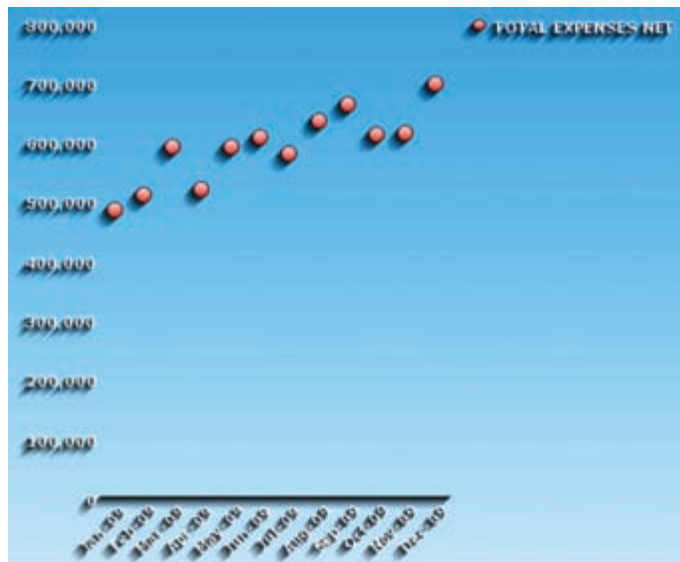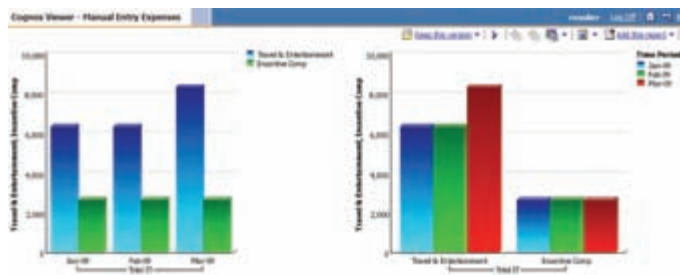
Additional reports include:

• Manual Entry Expenses
• Expense Detail Variance
• Drill through Details
• Expense Summary

These reports also have various selectable filters so the manager has multiple views of the data.

Contributor reporting

The BI implementation on top of IBM Cognos 8 TM1 offers planning contributors reports for reviewing and monitoring their contributions. Beyond the bare details of their expenses, contributors can see how these affect the broader company objectives. Utilizing the BI filtering features, contributors can see all information they might need.

Although IBM Cognos 8 TM1 contributors have access to the details of expense planning, the BI model has the advantage of providing deep detail without the risk of inadvertent data modifications. An added advantage is the ability to see how these roll up to parent and corporate consolidated levels.

BI summary

There is a cost-benefit tradeoff in reviewing expenses that is part of the bigger picture of business performance. The BI model provides information to managers and executives so that they can make informed decisions that drive stronger business performance. Viewing the details captured by planning contributors from all business units and geographic locations, the *Blueprint* delivers information for operational, tactical and strategic decisions that drive stronger business performance and a sharper competitive edge.

Planning model

The planning model of this *Blueprint* is powered by Cognos TM1 9.5. A typical business planning model, its process workf ow, data collection and consolidation are Web-based and you can customize it as needed. The key features of the planning model are:

• Real-time consolidation
• Real-time calculations in the browser for immediate results
• Industry leading what-if features, including user-created sandboxes for the most accurate plans, budgets and forecasts
• Scalable architecture with proven deployments to a large number of users.
• Easy import of financial and operational plans facilitating cross-enterprise collaboration
• Ensured accuracy of plans using form-based planning with selection boxes to drive application logic and calculations

Expense Baseline

The first cube, Expense Baseline, is the starting point for expense planning. Data entry begins with a base amount usually established using historical data. You may adjust the amount up or down by a fixed dollar amount or a percent adjustment. For example, you might have entered a one-time expense adjustment, such as $1,000.00, for the "Telephone (Excl Cell and desk)" expense line, but then a 3-percent increase is forecast for the year. Because the model enables you to plan two years ahead, once your full-year budget is calculated, adjustments for the following year can be made. The Expense Detail cube provides an opportunity to select a profile upon which to allocate full-year amounts across time periods.


Manual Entry

The Manual Entry cube manages expense items that may not lend themselves to driver-based calculations, seasonality profiles or are in addition to those items.

On line 4 in the screen capture, there is an entry for Sales Training that will be added to Professional Fees in the previous cube. This entry will hit the expense account selected in the second (Expense Account) column. The selection in this column and the dollar amount for this entry are entered into the appropriate time period.
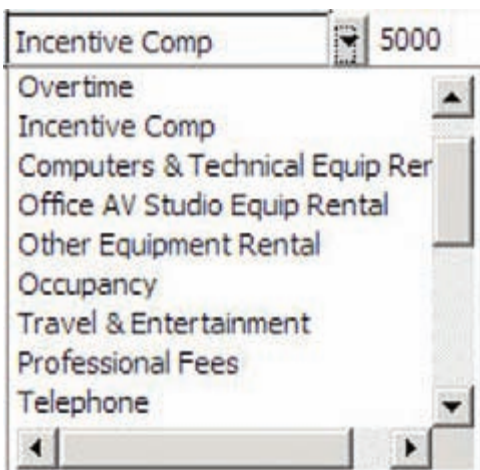
The only selection in this cube is the appropriate Expense Account.

As changes are made, they are highlighted in blue along with any cells affected by the change. Any change to this cube affects expenses automatically in subsequent cubes.
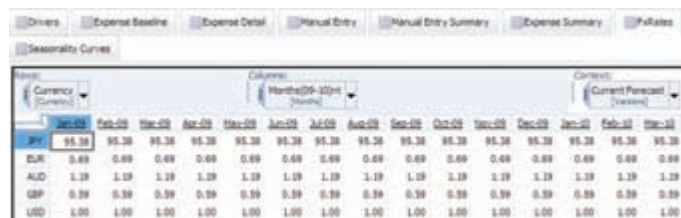
Expense Detail
The Expense Detail cube is what you use to select a desired driver or profile for a selected expense item. Fields in gray are non-editable. They provide information or are linked from other cubes or sources. Fields in white are editable and—in this cube—you can use them to select the desired driver or profile populated using management-approved methods. Users, however, may select from any of the available choices. The number and nature of choices available are determined by the Blueprint administrator prior to deployment.
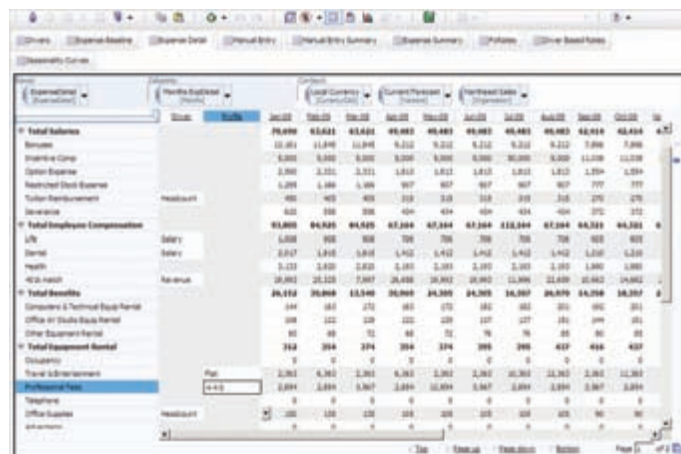
In this screen capture, the "Professional Fees" entry is spreading the amount calculated in the Expense Baseline cube, based on the profile selected: 4-4-5 ($35,000 spread on a 4-4-5- basis). Notice that the amount in May increased by $10,000 dollars indicated as a "Sales Training" expense in the Manual Entry cube. By making a few simple selections and entering minimal data, you can produce an entire expense model.

Note that, up to this point, expenses have been calculated in the local currency of the cost center or department. In the Expense Detail cube, expenses are converted into the corporate standard. Converted expenses are brought forward to the Expense Summary cube. In this *Blueprint*, the default corporate standard is U.S. dollars, but the standard can be any currency.

The choices made on the Expense Detail cube were:

Driver: Profile:

Expense Summary

In the first three cubes, decisions were made regarding the expense amounts and how they are calculated. In the Expense Summary, expense lines are consolidated from the detail level to facilitate planning and comparisons for different departments. In the following screen capture, the focus is "Current Forecast" expenses for the "Northeast Sales" department.

In the following screen capture, this same cube is reoriented to show "Current Forecast" for "Total Salaries" for a number of different cost centers. Reorientation is as simple as a dragging the "Cost Centers" drop-down box to the rows.

The remaining cubes in this Blueprint drive calculations or store actual data for the proper calculation or allocation of expenses. They may be left as read-only or hidden entirely from users. They are included here for informational purposes only.

Drivers

The Expense Detail Cube uses drivers, which are stored by month, cost center and version. The selection made in the Expense Detail cube causes the appropriate driver to be calculated properly in real-time.

Corporate Driver and Driver Based Rates

Corporate drivers may be determined centrally by finance. No choice is offered to the user. Corporate Drivers feed the Driver Based Calc cube. This cube is not shown in Contributor.

Certain Driver Based Rates are stored by month, expense type, driver, version and cost center. They are selected in the Expense Detail cube, which causes the appropriate rate to be linked to the Driver Based Calc cube.

Based on the driver chosen in the Expense Detail cube, the appropriate driver (volume) and rate \ calculate the driver-based expense for that line item. The calculated expense appears in the Expense Detail cube.

Seasonality Curves

The Seasonality Curves cube contains the profile information selected on the Expense Detail cube. Based on the choice made, the appropriate profile is linked into the Expense Detail cube.

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