

# Integrated Financial Forecasting and Planning Performance Blueprint Powered by TM1



## Introduction

This application brief illustrates a Web-based application for managing integrated financial statements. The *IBM Cognos Integrated Financial Forecasting and Planning Performance Blueprint Powered by TM1* enables operations to focus on plans while affording finance and senior management the visibility to ensure that operational plans are in synch with corporate objectives. The *Blueprint* establishes the targets and metrics used to measure organizational success. Response to changing business conditions is usually expressed as an updated forecast. As forecasts change, integrated financial statements can be instantly updated to see the effect on key financial objectives such as DSO and cash flow per share.

## Integrated Financial Forecasting and Planning Blueprint Powered TM1 Overview

Throughout a corporation during the planning cycle, there will be models supporting different types of planning processes, such as sales planning, headcount planning and capital planning. These models collect data at the micro level. Integrated financial statements make up the macro level model for consolidating and analyzing the results of the micro planning processes. At a corporate level, the results of the planning process should be validated against the strategic objectives of the corporation and provide predictability into the long range plan.

The overall process is characterized by the need to:

- Establish relationships between profit metrics and cash flow requirements.
- Synchronize operational plans with integrated financial statements to understand their impacts on the balance sheet and cash flow.
- Model alternative business scenarios quickly to make optimal investment decisions.

The process begins with setting financial objectives expressed as financial targets or goals to establish operational plans, budgets and forecasts. Objectives are discussed and finalized, then expressed as a set of tangible targets in the form of financial statements—initially an income statement. Revenue targets are modeled based on agreed-upon financial objectives, then measured against profitability objectives to identify margin requirements. Resources can now be properly allocated throughout the company.

As income statements are finalized, they're tied to other financial statements that include the balance sheet and cash flow. Accounts receivable, accounts payable and major capital expenditures are modeled to analyze key metrics. Best-in-class companies iterate scenarios between the income statement, balance sheet and cash flow to ensure that an integrated view of all statements and objects are considered when planning for the upcoming fiscal year.

When integrated financial statements are validated, they are used as targets to build corporate operational plans, which are then linked back to integrated financial statements to validate targets. Changes to plans or targets are reflected in integrated financials to increase the probability of attaining these financial goals.

The minimal requirement for most corporations includes a complete set of financial statements consisting of an income statement, balance sheet, cash flow and key ratios and metrics. The statements must be integrated, so that any change in underlying assumptions ripples through all of them: days sales outstanding (DSO) assumptions affect the balance sheet along with cash position; revenue plan assumptions affect balance sheet and cash flow and so on. Because such targets are frequently iterated, accuracy is necessary and integration of these statements must be assured.

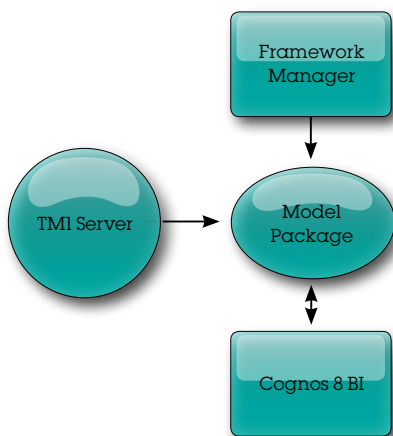
In high-performance companies, financial statements are the baseline for measuring results and are dynamic documents in constant use, not mere reports collecting dust on a shelf. The *Integrated Financial Forecasting and Planning Blueprint Powered by TMI Blueprint* helps your company use your financial statements to improve business outcomes and optimize performance.

### Blueprint objectives and architecture

The *Integrated Financial Forecasting and Planning Blueprint Powered by TMI* achieves a number of the objectives of integrated financial planning:

- Connects operational plans to the financial statements
- Provides the basis for strategic and operational plan and forecasts
- Validates bottom up plans against strategic objectives

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



### Business intelligence model

The business intelligence (BI) components of the *Blueprint* focus on providing vital information to executives. Real-time information provides the tools to evaluate performance against existing plans, make decisions with causal effect on plans and incorporate strategic initiatives to drive business performance.

The benefits of the BI model include:

- Real-time data access
- Dashboards that provide key information relevant to business function
- Drill-down from dashboards to answer questions and depict status from various perspectives
- Cross-organizational reporting (multi-node reporting)
- Visual aids showing status of the plan versus performance for evaluation and understanding of its impact
- 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
- Actual versus budget and forecast
- Flexible and extensible modeling

These features help you make informed decisions about integrated financial statements and their relationship to strategic maps and corporate goals.

The BI model presents information in many forms, with the capability to drill down to more detailed analyses and include up-to-date information from IBM Cognos enterprise planning software. Folders, dashboards and reports are provided to drive the decision-making process. Some noteworthy features are:

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

## Workflow

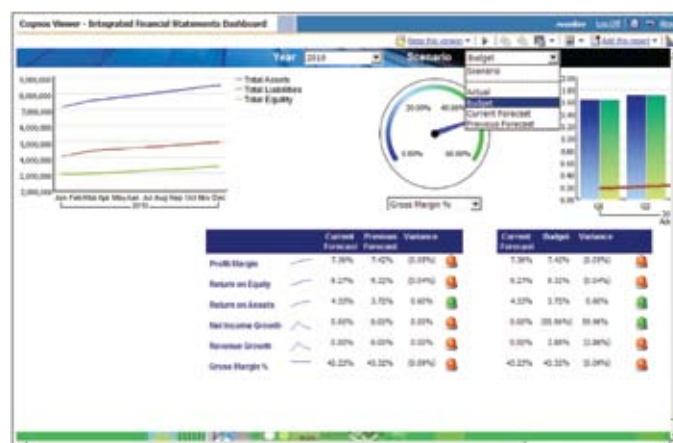
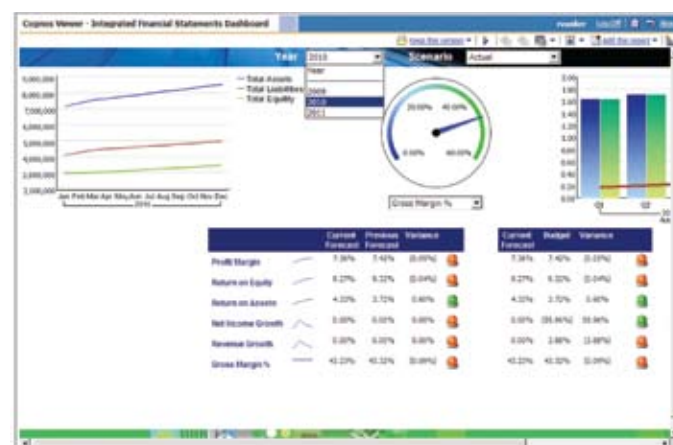
In a typical workflow, after a company has set its strategic objectives, the rest of the organization uses the targets to create tactical operational plans for the upcoming year. These operational plans are typically driver-based and linked to key business factors such as number of units sold, product mix and so on. After plans are reviewed and approved, they are tied back to integrated financial statements to ensure they meet corporate objectives.

With interactive scenario analysis and team input, company resources and plans often shift to meet financial objectives. Throughout the process, operational plans must be continually translated into a set of financial numbers.

Financial goals and objectives might need adjusting as operations provides a clearer picture of what is achievable with the resources at hand. The association between integrated financial and operational plans leads to alignment and commitment to reach corporate objectives.

## Executive reporting

For an executive, the dashboard report shows a great deal of information about his or her company and provides immediate information about any anomalies. Executives can select the time period, version or both as shown in the following images. This report also shows major performance indicators.



Users may also refer to specific reports and or charts for further information.

For example, they can refer to an income statement chart similar to the chart in the following example.



Users can also view a balance sheet.

The screenshot displays the 'Balance Sheet' in Cognex Viewer. The table shows the balance sheet for the year 2010, categorized into Assets and Liabilities. The data is as follows:

Category	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
<b>ASSETS</b>													
Cash and cash equivalents	1,793,311	2,091,280	2,769,876	2,402,038	2,644,246	2,270,876	2,819,808	2,754,409	2,977,907	2,234,244	3,441,228	3,728,880	3,971,000
Accounts receivable	876,282	947,871	460,345	469,021	466,174	491,870	518,200	510,527	511,960	540,254	531,246	562,090	554,871
Inventory	695,352	595,538	213,971	264,000	218,200	214,880	228,174	223,577	218,020	230,024	227,836	240,246	227,294
Property, plant and equipment - net	5,839,200	5,839,200	5,839,200	5,839,200	5,839,200	5,839,200	5,839,200	5,839,200	5,839,200	5,839,200	5,839,200	5,839,200	5,839,200
Accumulated depreciation	(738,743)	(790,846)	(880,886)	(971,007)	(871,176)	(1,031,245)	(1,081,264)	(1,161,000)	(1,237,077)	(1,280,881)	(1,348,220)	(1,410,786)	(1,478,870)
Property, plant and equipment - net	4,369,259	4,259,191	4,148,542	4,208,023	4,208,024	4,208,024	4,208,024	4,208,024	4,208,024	4,208,024	4,208,024	4,208,024	4,208,024
<b>Total Assets</b>	7,291,205	7,102,424	7,089,739	7,089,032	7,089,032	7,089,032	7,089,032	7,089,032	7,089,032	7,089,032	7,089,032	7,089,032	7,089,032
<b>LIABILITIES</b>													
Accounts payable	238,838	(21,872)	209,805	103,887	146,708	174,888	200,814	182,020	174,877	212,569	183,234	220,716	162,587
Accounts payable - related	23,767	14,828	18,818	16,341	18,201	18,889	18,889	18,788	18,412	17,112	11,888	18,818	17,719
Accounts payable - unrelated	215,071	(36,700)	190,987	87,546	128,507	156,000	182,000	163,232	156,465	195,457	171,346	201,898	144,868
Interest payable	104,889	110,559	127,460	128,088	111,338	121,884	128,864	110,527	121,880	120,869	121,880	128,869	130,320
Income taxes payable	1,150,254	1,122,884	1,147,884	1,162,024	1,162,024	1,162,024	1,162,024	1,162,024	1,162,024	1,162,024	1,162,024	1,162,024	1,162,024
Short-term debt	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Long-term debt	2,324,000	2,324,000	2,324,000	2,324,000	2,324,000	2,324,000	2,324,000	2,324,000	2,324,000	2,324,000	2,324,000	2,324,000	2,324,000

Information about direct and indirect cash flow is also displayed in the Cash Flow Direct and Cash Flow Indirect reports.

The screenshot displays the 'Cashflow Direct' report in Cognex Viewer. The table shows the cash flow for the year 2010, categorized into Cash Flows from Operating Activities, Cash Flows from Investing Activities, and Cash Flows from Financing Activities. The data is as follows:

Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>												
Cash received from customers	38,382	38,310	367,431	275,898	338,475	286,511	348,938	327,176	358,756	1,138,089	116,892	384,887
Cash paid to suppliers and employees	36,814	(45,245)	(111,412)	(245,176)	(209,429)	(245,535)	(232,722)	(248,040)	(248,395)	(224,345)	(245,846)	(176,202)
Interest paid (net of amount capitalized)	0	0	0	0	0	0	0	0	0	0	0	0
Income taxes paid	0	0	0	0	0	0	0	0	0	0	0	0
Net cash provided by operating activities	(79,432)	(27,135)	(149,981)	(179,278)	(120,954)	(169,024)	(122,212)	(169,212)	(169,212)	169,212	(169,212)	169,212
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>												
Capital expenditures	0	0	0	0	0	0	0	0	0	0	0	0
Net cash provided by investing activities	0	0	0	0	0	0	0	0	0	0	0	0
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>												
Net borrowings under line of credit agreement	0	0	0	0	0	0	0	0	0	0	0	0
Net payments to related parties	0	0	0	0	0	0	0	0	0	0	0	0
Net cash provided by financing activities	0	0	0	0	0	0	0	0	0	0	0	0
<b>Net cash provided by operating activities</b>	(79,432)	(27,135)	(149,981)	(179,278)	(120,954)	(169,024)	(122,212)	(169,212)	(169,212)	169,212	(169,212)	169,212

The screenshot displays the 'Cashflow Indirect' report in Cognex Viewer. The table shows the cash flow for the year 2010, categorized into Cash Flows from Operating Activities, Cash Flows from Investing Activities, and Cash Flows from Financing Activities. The data is as follows:


Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>												
Net income	38,382	41,034	45,786	46,272	52,559	56,341	60,128	63,715	67,294	70,879	74,462	78,047
<b>ADJUSTMENTS TO NET INCOME</b>												
Depreciation and amortization	94,840	94,840	94,840	94,840	94,840	94,840	94,840	94,840	94,840	94,840	94,840	94,840
<b>CHANGE IN ASSETS AND LIABILITIES</b>												
Increase/decrease in receivables	(241,282)	(91,882)	30,189	(41,740)	7,882	(42,889)	6,118	(35,002)	(41,020)	171,028	(884,802)	11,827
Decrease/increase in payables	(227,376)	38,112	20,882	(24,246)	2,937	(33,849)	3,271	(33,849)	(33,849)	3,786	(24,000)	4,382
Decrease/increase in interest payable	104,889	110,559	127,460	128,088	111,338	121,884	128,864	110,527	121,880	120,869	121,880	130,320
Decrease/increase in income taxes payable	28,844	38,881	32,112	38,175	35,369	36,381	36,463	37,617	38,312	38,468	38,588	38,718
Decrease/increase in short-term debt	0	0	0	0	0	0	0	0	0	0	0	0
Decrease/increase in long-term debt	0	0	0	0	0	0	0	0	0	0	0	0
Total adjustments	(112,689)	(24,994)	189,759	(12,944)	47,885	(42,889)	5,687	(41,450)	(41,450)	209,691	(829,894)	158,952
Net cash provided by operating activities	(79,432)	(27,135)	(149,981)	(179,278)	(120,954)	(169,024)	(122,212)	(169,212)	(169,212)	169,212	(169,212)	169,212
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>												
Capital expenditures	0	0	0	0	0	0	0	0	0	0	0	0
Net cash provided by investing activities	0	0	0	0	0	0	0	0	0	0	0	0
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>												
Net borrowings under line of credit agreement	0	0	0	0	0	0	0	0	0	0	0	0
Net payments to related parties	0	0	0	0	0	0	0	0	0	0	0	0
Net cash provided by financing activities	0	0	0	0	0	0	0	0	0	0	0	0
<b>Net cash provided by operating activities</b>	(79,432)	(27,135)	(149,981)	(179,278)	(120,954)	(169,024)	(122,212)	(169,212)	(169,212)	169,212	(169,212)	169,212



Planning model

The planning model of the *Integrated Financial Forecasting and Planning Blueprint Powered byTM1* provides Web-based deployment of process workflow, data collection and consolidation. In addition, you can customize this model as needed. Its benefits include:

- Flexible Blueprint development using IBM Cognos TM1
- Web-based deployment of models for data collection and consolidation
- Real-time workflow
- Real-time consolidation
- Real-time browser-based calculations to yield immediate results
- Scalable architecture
- Capability to execute form-based planning using selection boxes to drive application logic and calculations
- Sandboxing to create personal scenarios for what-if analysis

Workflow

Executives can see the workflow status of the application and are co-owners of that information, able to make edits as required. Workflow status changes, calculations and aggregations occur in real-time as users save information, enabling frequent planning iterations. Before data is entered, the plan is designated as  **Not Started**.

Once a plan is saved, it becomes a  **Work In Progress** and remains accessible for further editing. When an item is submitted, the plan is  **Locked** and no more changes can be made. The locked state indicates that the plan is ready for review. A reviewer can review the plan in any state, but can only reject a locked plan item. When a locked plan is rejected, it reverts to a work in progress, making it editable once again for plan owners. The following screen capture depicts workflow for a Corporate Financial contributor.

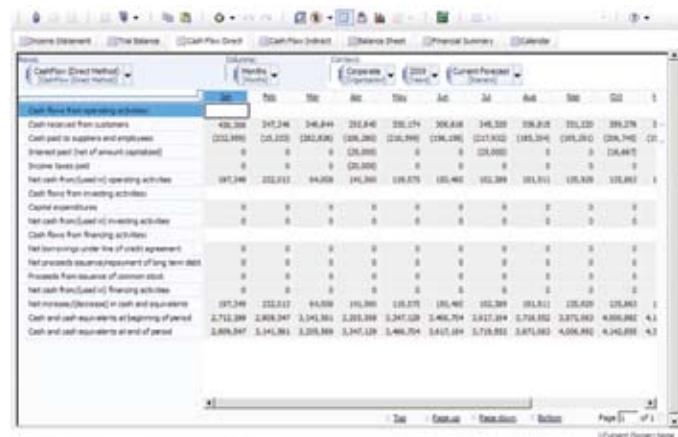




[illegible]

## Cash Flow Tabs

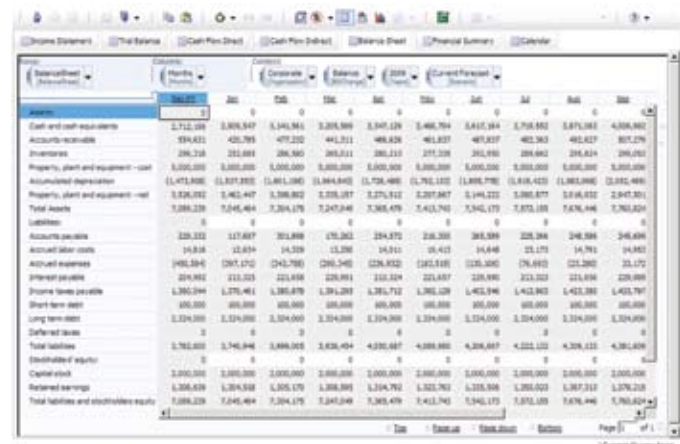
The *Blueprint* supports both the direct and indirect methods of cash flow reporting. The Cash Flow Direct tab displays the cash receipts and payments and the Cash Flow Indirect tab shows the impact of cash change to Balance Sheet Accounts. Neither of these tabs require input. They are immediately updated when changes are made to the Income Statement or Assumptions tabs.



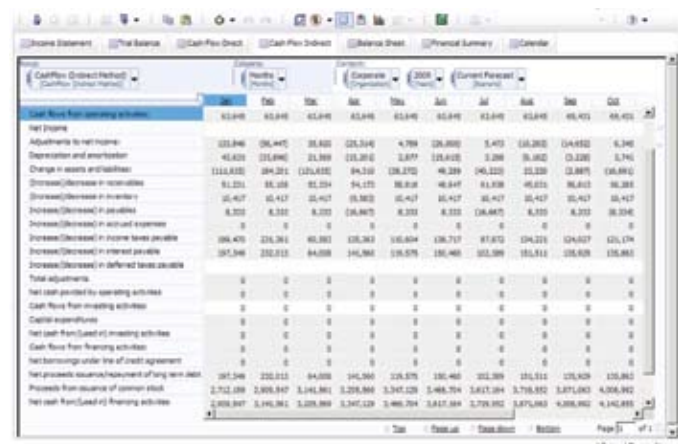
The screenshot shows the 'Cash Flow Direct Method' tab. It displays a table with columns for months (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec) and a 'Total' column. The rows include various cash flow items such as 'Cash flow from operating activities', 'Cash received from customers', 'Cash paid to suppliers and employees', 'Interest paid (net of amount capitalized)', 'Income taxes paid', 'Net cash from/(used in) operating activities', 'Cash flow from investing activities', 'Capital expenditures', 'Net cash from/(used in) investing activities', 'Cash flow from financing activities', 'Net borrowings under line of credit agreement', 'Net proceeds from issuance of long-term debt', 'Proceeds from issuance of common stock', 'Net cash from/(used in) financing activities', 'Net increase/(decrease) in cash and equivalents', 'Cash and cash equivalents at beginning of period', and 'Cash and cash equivalents at end of period'.

## Balance Sheet

Financial analysts can immediately see changes in assumptions and the income statement on the Balance Sheet Tab. This impact on the financial position of the corporation might require repeated iterations if analysts are not satisfied with the result. After the analysts are satisfied with the targets, these can be aligned with the overall strategic objectives and goals.



The screenshot shows the 'Balance Sheet' tab. It displays a table with columns for months (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec) and a 'Total' column. The rows include various balance sheet items such as 'Assets', 'Cash and cash equivalents', 'Accounts receivable', 'Inventories', 'Prepaid expenses and other assets', 'Property, plant and equipment - cost', 'Accumulated depreciation', 'Total Assets', 'Liabilities', 'Accounts payable', 'Accrued labor costs', 'Accrued expenses', 'Interest payable', 'Income taxes payable', 'Short-term debt', 'Long-term debt', 'Deferred taxes', 'Total Liabilities', 'Stockholders' equity', 'Common stock', 'Retained earnings', and 'Total Liabilities and stockholders equity'.



The screenshot shows the 'Cash Flow Indirect Method' tab. It displays a table with columns for months (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec) and a 'Total' column. The rows include various cash flow items such as 'Cash flow from operating activities', 'Net income', 'Adjustments to net income', 'Depreciation and amortization', 'Change in assets and liabilities', 'Increase/(decrease) in receivables', 'Increase/(decrease) in inventory', 'Increase/(decrease) in payables', 'Increase/(decrease) in accrued expenses', 'Increase/(decrease) in income taxes payable', 'Increase/(decrease) in interest payable', 'Increase/(decrease) in deferred taxes payable', 'Total adjustments', 'Net cash provided by operating activities', 'Cash flow from investing activities', 'Capital expenditures', 'Net cash from/(used in) investing activities', 'Cash flow from financing activities', 'Net borrowings under line of credit agreement', 'Net proceeds from issuance of long-term debt', 'Proceeds from issuance of common stock', 'Net cash from/(used in) financing activities', 'Net increase/(decrease) in cash and equivalents', 'Cash and cash equivalents at beginning of period', and 'Cash and cash equivalents at end of period'.



## Financial Summary

On the Financial Summary tab, you can see the effect of your changes on key ratios.

	Q1	Q2	Q3	Q4	Total Year
Return on Assets	0.07	0.08	0.09	0.10	0.08
Return on Equity	0.15	0.16	0.17	0.18	0.16
Debt to Equity Ratio	0.50	0.50	0.50	0.50	0.50
Current Ratio	1.50	1.50	1.50	1.50	1.50
Quick Ratio	1.00	1.00	1.00	1.00	1.00
Net Working Capital Ratio	0.20	0.20	0.20	0.20	0.20
Return on Assets	0.07	0.08	0.09	0.10	0.08
Return on Equity	0.15	0.16	0.17	0.18	0.16
Debt to Equity Ratio	0.50	0.50	0.50	0.50	0.50
Current Ratio	1.50	1.50	1.50	1.50	1.50
Quick Ratio	1.00	1.00	1.00	1.00	1.00
Net Working Capital Ratio	0.20	0.20	0.20	0.20	0.20

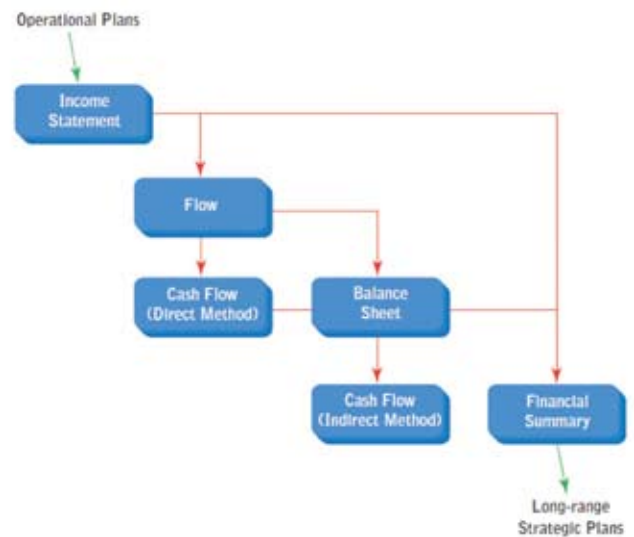
## Calendar

This tab may be hidden from the user. Its primary function is to drive the calculations for certain assumptions. For example, “Days Sales Outstanding” would use these to determine monthly receivable ending balances.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Year
2010	31	28	31	30	31	30	31	31	30	31	30	31	365
2011	31	28	31	30	31	30	31	31	30	31	30	31	365
2012	31	29	31	30	31	30	31	31	30	31	30	31	366

## Flowchart

The following flowchart illustrates how this *Blueprint* fits into the company planning process.



## About the IBM Cognos Innovation Center for Performance Management

The IBM Cognos Innovation Center was established in North America and Europe to advance the understanding of proven planning and performance management techniques, technologies, and practices. The Innovation Center is dedicated to transforming routine performance management practices into “next practices” that help companies

- cut costs
- streamline processes
- boost productivity
- enable rapid response to opportunity
- increase management visibility

Staffed globally by experts in planning, technology, and performance and strategy management, the Innovation Center partners with more than 600 IBM Cognos customers, academicians, industry leaders, and others seeking to accelerate adoption, reduce risk, and maximize the impact of technology-enabled performance management practices.

## About IBM Cognos BI and Performance Management:

IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices, and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions.

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