

INITIATIVE PLANNING



AN IBM COGNOS
PERFORMANCE BLUEPRINT

A WEB-BASED PROCESS FOR MANAGING
LABOR- OR CAPITAL-INTENSIVE
PROJECT PLANNING

VERSION 4.0

INTRODUCTION

This application brief demonstrates best practices for managing labor- or capital-intensive project expenditures using IBM Cognos 8 Planning. Implementing this *Blueprint* will enable forward-looking visibility into expense decisions at both divisional level and corporate levels. The *IBM Cognos Initiative Planning Blueprint* uses projections from other *Blueprints* or planning systems as well as actual history to drive labor or capital expense planning processes. The *Blueprint* and processes described in this document are generic for expenses in any US industry and can be readily configured to support the complexity of labor and capital expense requirements for any industry across many countries.



OVERVIEW

Expenses associated with a labor- or capital-intensive initiative or project can form a large part of a company's expense and capital expenditure base.

The *IBM Cognos Initiative Planning Blueprint* allows project managers to plan from a financial perspective by selecting resources required, determining other project expenses, and forecasting capital expenditures.

For example, a project manager in charge of a Corporate Performance Management (CPM) software implementation can select resources from a dropdown list by function, by resource type (for determining the cost and time spent on the project), and by time period. The *Blueprint* calculates the cost of these resources over the appropriate timeframe. The project manager also determines by year other project costs, which are allocated based on headcount profile. The ability to adjust these costs monthly is provided. Capital expenditures associated with the project can also be input. These in turn feed the *IBM Cognos Capital Project Planning Blueprint* in order to determine depreciation and cash impact. Non-capital expenses such as rentals feed the *IBM Cognos Expense Planning and Control Blueprint*.

The *IBM Cognos Initiative Planning Blueprint* allows for the inclusion of financial benefits like revenue generation or expense reduction along with the month such benefits start. The *Blueprint* calculates the project's Net Present Value and Payback Period. Financial benefits feed the *IBM Cognos Strategic Long Range Planning Blueprint*, enabling executive management to see the impact on revenue and profits over a five-year horizon.

The *IBM Cognos Initiative Planning Blueprint* requires very little input from the user, yet returns a great deal of information.

BLUEPRINT OBJECTIVES

The *IBM Cognos Initiative Planning Blueprint* achieves the following planning objectives:

- Manage resources by assigning them to projects.
- Allocate expenses and capital expenditure to projects.
- Consolidate projects to provide a total company view.

KEY COGNOS PLANNING BENEFITS

- Flexible and powerful model development. The Analyst component of IBM Cognos 8 Planning supports any business planning or customizing of the *IBM Cognos Initiative Planning Blueprint*.
- Web-based deployment of models for process workflow, data collection, and consolidation:
 - Real-time workflow.
 - Real-time consolidation.
 - Real-time browser-based calculations for immediate results.
 - Industry-leading *what-if* features for the most accurate plans, budgets, and forecasts.
- Scalable architecture with proven deployments to thousands of users.
- Easy links to 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.

REPRESENTATIVE WORKFLOW

The *IBM Cognos Initiative Planning Blueprint* is designed for use by project managers as they plan for and evaluate the financial impact of major projects or initiatives. This section of the *Application Brief* describes the basic workflow in which a project manager selects and allocates project resources, allocates other project and capital expenditures, consolidates overall expenses, and monitors return-on-investment projections.

Required Return on Capital

Controlled by the system administrator, this tab allows the project manager to review the corporate return on capital requirements.

	Required Return on Capital
High	14.00%
Medium-High	12.00%
Medium	10.00%
Medium-Low	8.00%
Low	6.00%

Best practice is to require a higher return as project risk increases.

Resource Cost

In this tab, the project manager can review fully loaded resource costs that can be assigned to a given project. The tab covers both internal and external resources for high, medium, and low costs through 2010.

Required Return on Capital	Resource Cost	Project Overview	FTE-Headcount Allocation	FTE-Cost Calculation	Capital Expenditure	Annual Pro
Fully Loaded Cost	Permanent - Full Time			2005		
	Bdgt High Internal	Bdgt High External	Bdgt Med Internal	Bdgt Med External	Bdgt Low Internal	Bdgt Low External
Accounting Manager	350,000		291,667		243,056	
Administrative Assistant	200,000		166,667		138,889	
Business Analyst	300,000		250,000		208,333	
Business Development Manager	325,000		270,833		225,694	
Business Solutions Manager	300,000		250,000		208,333	
Business Systems Delivery Specialist	275,000		229,167		190,972	
Business Systems User Specification	250,000		208,333		173,611	
Computer Support Technician	225,000		187,500		156,250	
Database Administrator	300,000		250,000		208,333	
Financial Analyst	300,000		250,000		208,333	
IT Architect	275,000		229,167		190,972	

Required Return on Capital	Resource Cost	Project Overview	FTE-Headcount Allocation	FTE-Cost Calculation	Capital Expenditure	Annual Pro
Fully Loaded Cost	Permanent - Full Time			2005		
		Bdgt Med Internal	Bdgt Med External	Bdgt Low Internal	Bdgt Low External	
Accounting Manager	Permanent - Part Time	291,667		243,056		
Administrative Assistant	Graduate	166,667		138,889		
Business Analyst	Offshore	250,000		208,333		
Business Development Manager	Consultant	270,833		225,694		
Business Solutions Manager	Contractor	250,000		208,333		
Business Systems Delivery Specialist		229,167		190,972		
Business Systems User Specification		208,333		173,611		
Computer Support Technician		187,500		156,250		
Database Administrator		250,000		208,333		
Financial Analyst		250,000		208,333		
IT Architect		229,167		190,972		

Required Return on Capital	Resource Cost	Project Overview	FTE-Headcount Allocation	FTE-Cost Calculation	Capital Expenditure	Annual Pro
Fully Loaded Cost	Permanent - Full Time			2005		
	Bdgt High Internal	Bdgt High External	2005	Bdgt Low Internal	Bdgt Low External	
Accounting Manager	350,000		2006	243,056		
Administrative Assistant	200,000		2007	138,889		
Business Analyst	300,000		2008	208,333		
Business Development Manager	325,000		2009	225,694		
Business Solutions Manager	300,000		2010	208,333		
Business Systems Delivery Specialist	275,000		229,167	190,972		
Business Systems User Specification	250,000		208,333	173,611		
Computer Support Technician	225,000		187,500	156,250		
Database Administrator	300,000		250,000	208,333		
Financial Analyst	300,000		250,000	208,333		
IT Architect	275,000		229,167	190,972		

Controlled by the system administrator, resource costs are displayed as read-only information to the project manager.

Project Overview

This tab is the starting point for project data entry. It also displays summary results from project details entered on other tabs in the *Blueprint*. From this tab, the project manager is able to define and revise key project parameters such as start- and end-milestones, project delays, risk levels, linkage to corporate strategy, and financial goals.

	Original	Revised
PROJECT OVERVIEW		
Project Description	CPM Implementation	CPM Implementation
Project Start Period-Year	JAN 05	JAN 05
Project End Period-Year	JUN 06	JUN 06
(Advance)/Delay		1
New Project Start Period-Year	JAN 05	FEB 05
New Project End Period-Year	JUN 06	JUL 06
Warning		
Duration	17 months	17 months
Risk	Low	Low
Required Return on Capital	6.00%	6.00%
Priority	High	High
Strategy Map	Contain Costs	Contain Costs
PROJECT IMPACT		
Base Monthly Revenue Impact		
Base Monthly Expense Impact	75,000	75,000
Impact Start Period-Year	JUN 06	JUN 06
New Impact Start Period-Year	JUN 06	JUL 06
Annual Growth	5.00%	5.00%
PROJECT METRICS		
Total Project Exoenses	2,215,587	2,221,267
Total Project Capital Expenditure	1,100,000	1,100,000
Total Revenue Impact		
Total Expense Impact	4,963,500	4,882,806
Project NPV	751,219	682,825
No of Months to Payback From Project Start	55	54
No of Months to Payback From Project End	38	37

The project manager enters the following data elements in order to start the project:

- Project description.
- Project start period.
- Project end period.
- Risk.
- Priority.
- Strategy map: Addresses the question, “Where does the project fit within company strategy?”
- Base monthly revenue impact: If project is revenue-related, the amount of revenue in today’s dollars generated if the project were currently in place.
- Base monthly expense impact: If project is cost-related the amount in today’s dollars that would be saved if the project were currently in place.
- Delay: Allows project manager to advance or delay project (all inputs in the application will be changed accordingly) and see impact. A warning is issued if project delay moves end-period beyond December 2010.

Data elements derived from inputs in the *Blueprint* are:

- Total project expenses.
- Total project capital expenditure.
- Total revenue impact or total expense impact through 2010.
- Project Net Present Value.
- Number of months to payback from project start.
- Number of months to payback from project end.

FTE-Headcount Allocation

Required Return on Capital Resource Cost Project Overview FTE-Headcount Allocation FTE-Cost Calculation Capital Expenditure Annual Project Expenses											
Original		COGNOS CPM Implementatic									
1	Role	Task	Resource Type	Status	FTE	Start Period-Yr	End Period-Yr	JAN 05	FEB 05	MAR 05	APR 05
1	Administrative Assistant		Bdgt Med Internal	Permanent - Full Time	0.25	JAN 05	JUN 06				
2	IT Configuration Manager		Bdgt High Internal	Permanent - Full Time	1.00	FEB 05	MAR 05		1.00	1.00	
3	Business Analyst		Bdgt Med Internal	Permanent - Full Time	1.00	JAN 05	JUN 06	1.00	1.00	1.00	1.00
4	Database Administrator		Bdgt Med Internal	Permanent - Full Time	0.10	JAN 05	JUN 06	0.10	0.10	0.10	0.10
5	Financial Analyst		Bdgt Med Internal	Permanent - Full Time	1.00	JAN 05	JUN 06	1.00	1.00	1.00	1.00
6	Technical Support Specialist		Bdgt High External	Consultant	0.20	JAN 05	JAN 05		0.20		
7	Business Systems User Specification		Bdgt Low Internal	Permanent - Full Time	1.00	JAN 05	FEB 05	1.00	1.00		
8	Business Systems User Specification		Bdgt Low Internal	Permanent - Full Time	1.00	JUN 05	JUL 05				
9	Financial Analyst		Bdgt High External	Consultant	2.00	JAN 05	JUN 06	2.00	2.00	2.00	2.00

The project manager enters from the dropdown selections Role, Resource Type, Status, FTE (the amount of time to be spent for this particular activity), Start Period, and End Period. The project manager can also enter Task as freeform text.

From this information, the application assigns the FTE allocation to appropriate months. Warnings are issued if the Start Period or End Period are not within the project time frame set in the Project Overview tab. The effect of project Delay on the Project Overview tab may be viewed.

Required Return on Capital Resource Cost Project Overview FTE-Headcount Allocation FTE-Cost Calculation Capital Expenditure Annual Project Expenses											
Revised		COGNOS CPM Implementatic									
1	Role	Task	Resource Type	Status	FTE	New Start Period-Yr	New End Period-Yr	JAN 05	FEB 05		
1	Administrative Assistant		Bdgt Med Internal	Permanent - Full Time	0.25	FEB 05	JUL 06				0.25
2	IT Configuration Manager		Bdgt High Internal	Permanent - Full Time	1.00	MAR 05	APR 05				
3	Business Analyst		Bdgt Med Internal	Permanent - Full Time	1.00	FEB 05	JUL 06				1.00
4	Database Administrator		Bdgt Med Internal	Permanent - Full Time	0.10	FEB 05	JUL 06				0.10
5	Financial Analyst		Bdgt Med Internal	Permanent - Full Time	1.00	FEB 05	JUL 06				1.00
6	Technical Support Specialist		Bdgt High External	Consultant	0.20	FEB 05	FEB 05				0.20
7	Business Systems User Specification		Bdgt Low Internal	Permanent - Full Time	1.00	FEB 05	MAR 05				1.00
8	Business Systems User Specification		Bdgt Low Internal	Permanent - Full Time	1.00	JUL 05	AUG 05				
9	Financial Analyst		Bdgt High External	Consultant	2.00	FEB 05	JUL 06				2.00

FTE-Cost Calculation

Required Return on Capital Resource Cost Project Overview FTE-Headcount Allocation FTE-Cost Calculation Capital Expenditure Annual Project Expenses											
Original		COGNOS CPM Implementatic									
1	Role	Task	Resource Type	Status	Start Period-Yr	End Period-Yr	JAN 05	FEB 05	MAR 05		
1	Administrative Assistant		Bdgt Med Internal	Permanent - Full Time	JAN 05	JUN 06	3,472.22	3,472.22	3,472.22		
2	IT Configuration Manager		Bdgt High Internal	Permanent - Full Time	FEB 05	MAR 05		22,916.67	22,916.67		
3	Business Analyst		Bdgt Med Internal	Permanent - Full Time	JAN 05	JUN 06	20,833.33	20,833.33	20,833.33		
4	Database Administrator		Bdgt Med Internal	Permanent - Full Time	JAN 05	JUN 06	2,083.33	2,083.33	2,083.33		
5	Financial Analyst		Bdgt Med Internal	Permanent - Full Time	JAN 05	JUN 06	20,833.33	20,833.33	20,833.33		
6	Technical Support Specialist		Bdgt High External	Consultant	JAN 05	JAN 05	5,041.15				
7	Business Systems User Specification		Bdgt Low Internal	Permanent - Full Time	JAN 05	FEB 05	14,467.59	14,467.59			
8	Business Systems User Specification		Bdgt Low Internal	Permanent - Full Time	JUN 05	JUL 05					
9	Financial Analyst		Bdgt High External	Consultant	JAN 05	JUN 06	60,699.59	60,699.59	60,699.59		

From the information entered in the previous tab, the *Blueprint* calculates the fully loaded monthly resource cost.

Required Return on Capital		Resource Cost		Project Overview		FTE-Headcount Allocation		FTE-Cost Calculation		Capital Expenditure		Annual Project Expenses	
Revised		COGNOS CPM Implementatic		Cost									
	Role	Task	Resource Type	Status	Start Period-Yr	End Period-Yr	JAN 05	FEB 05	MAR 05	APR 05			
1	Administrative Assistant		Bdgt Med Internal	Permanent - Full Time	JAN 05	JUN 06		3,472.22	3,472.22	3,472.22			
2	IT Configuration Manager		Bdgt High Internal	Permanent - Full Time	FEB 05	MAR 05			22,916.67	22,916.67			
3	Business Analyst		Bdgt Med Internal	Permanent - Full Time	JAN 05	JUN 06	20,833.33	20,833.33	20,833.33				
4	Database Administrator		Bdgt Med Internal	Permanent - Full Time	JAN 05	JUN 06	2,083.33	2,083.33	2,083.33				
5	Financial Analyst		Bdgt Med Internal	Permanent - Full Time	JAN 05	JUN 06	20,833.33	20,833.33	20,833.33				
6	Technical Support Specialist		Bdgt High External	Consultant	JAN 05	JAN 05	5,041.15						
7	Business Systems User Specification		Bdgt Low Internal	Permanent - Full Time	JAN 05	FEB 05	14,467.59		14,467.59				
8	Business Systems User Specification		Bdgt Low Internal	Permanent - Full Time	JUN 05	JUL 05							
9	Financial Analyst		Bdgt High External	Consultant	JAN 05	JUN 06		60,699.59	60,699.59	60,699.59			

The effect of the project Delay from the Project Overview tab can be seen (not shown).

Capital Expenditure

There are two views of capital expenditure. One is used for labor-intensive projects like a software implementation and the other for capital-intensive projects like construction.

Capital Expenditure 1

Required Return on Capital		Resource Cost		Project Overview		FTE-Headcount Allocation		FTE-Cost Calc	
Original		COGNOS CPM Implementatic							
	Expenditure Description	Asset Class	Amount	Purchase Month	In Service Month				
1	Servers	Computer Equipment	100,000	FEB 05	JUN 06				
2	Software	Computer Software	1,000,000	JAN 05	JUN 06				
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									

The first view allows the project manager to enter freeform text for Expenditure Description, Asset Class, Amount, Purchase Month, and In-Service Month from dropdown boxes. In-Service Month can precede the project's end in phased projects. However—warnings are issued if Purchase Month or In-Service Month exceed the project time frame set within Project Overview.

The effect of the Delay entered on the Project Overview tab can be viewed (not shown).

Capital Expenditure 2

Required Return on Capital		Resource Cost		Project Overview		FTE-Headcount Allocation		FTE-Cost Calculation		Capital Investment Expenditure	
Headquarters Extension		Original									
1	Expenditure Description	Asset Class	Budget Amount	Purchase Month	In Service Month	Warning					
1	Adjacent Land	Land	1,000,000	OCT 05	SEP 06						
2	Building Contractor - Foundations	Building	250,000	NOV 05	SEP 06						
3	Building Contractor - Shell - Phase 1	Building	250,000	DEC 05	SEP 06						
4	Building Contractor - Shell - Phase 2	Building	250,000	JAN 06	SEP 06						
5	Building Contractor - Shell - Phase 2	Building	250,000	FEB 06	SEP 06						

The second view is similar, in that it allows for the same data inputs, but is intended for capital projects—such as construction—where all the investment comes into service at project’s end. In this case, the In-Service Period is defined by the Project End Period from the Project Overview tab. The effect of any Delay entered in the Project Overview tab can be viewed (not shown). Warning messages are issued if the Purchase Month precedes Project Start Date or follows Project End Date.

Annual Project Expenses

Required Return on Capital		Resource Cost		Project Overview		FTE-Headcount Allocation		FTE-Cost Calculation		Capital Expenditure		Annual Project Expenses	
Original		COGNOS CPM Implementatic											
	2005	2006	2007	2008	2009	2010							
Computers & Technical Equip Rental	100,000	50,000											
Office AV Studio Equip Rental		10,000											
Other Equipment Rental	50,000	25,000											
Total Equipment Rental	150,000	85,000											
Travel & Entertainment	75,000	30,000											
Professional Fees													
Telephone	20,000	10,000											
Office Supplies	10,000	5,000											
Other	25,000	15,000											
Total Other Project Expenses	130,000	60,000											

This tab allows the project manager to input annual direct project costs, which are then prorated across the project timeframe based on FTE Allocation.

Expense Adjustment

Resource Cost		Project Overview		FTE-Headcount Allocation		FTE-Cost Calculation		Capital Expenditure		Annual Project Expenses		Expense Adjustment	
Original		COGNOS CPM Implementatic											
1	Expense Category	Amount	Original Period-Year										
1	Computers & Technical Equip Rental	20,000	JUN 06										
2	Other Equipment Rental	10,000	MAR 05										
3	Travel & Entertainment	5,000	APR 05										

This tab allows the project manager to make monthly expense adjustments.

Project Expense/Capital Summary

FTE-Cost Calculation	Capital Expenditure	Annual Project Expenses	Expense Adjustment	Project Expense/Capital Summary	Net Impact Calculation							
Original	Plan	COGNOS CPM Implementatic										
	JAN 05	FEB 05	MAR 05	APR 05	MAY 05	JUN 05	JUL 05	AUG 05	SEP 05	OCT 05	NOV 05	DEC 05
PROJECT EXPENSES												
Permanent - Full Time	61,690	84,606	70,139	47,222	47,222	61,690	61,690	47,222	47,222	47,222	47,222	47,222
Permanent - Part Time												
Graduate												
Offshore												
Consultant	65,741	60,700	60,700	60,700	60,700	60,700	60,700	60,700	60,700	60,700	60,700	60,700
Contractor												
Temporary												
Total Labor Costs	127,431	145,306	130,838	107,922	107,922	122,389	122,389	107,922	107,922	107,922	107,922	107,922
Computers & Technical Equip Rental	9,503	10,873	9,161	7,449	7,449	9,161	9,161	7,449	7,449	7,449	7,449	7,449
Office AV Studio Equip Rental												
Other Equipment Rental	4,752	5,437	14,580	3,724	3,724	4,580	4,580	3,724	3,724	3,724	3,724	3,724
Total Equipment Rental	14,255	16,310	23,741	11,173	11,173	13,741	13,741	11,173	11,173	11,173	11,173	11,173
Travel & Entertainment	7,128	8,155	6,871	10,586	5,586	6,871	6,871	5,586	5,586	5,586	5,586	5,586
Professional Fees												
Telephone	1,901	2,175	1,832	1,490	1,490	1,832	1,832	1,490	1,490	1,490	1,490	1,490
Office Supplies	950	1,087	916	745	745	916	916	745	745	745	745	745
Legal	6	6	5	4	4	5	5	4	4	4	4	4
Patents	6	6	5	4	4	5	5	4	4	4	4	4
Other	2,376	2,718	2,290	1,862	1,862	2,290	2,290	1,862	1,862	1,862	1,862	1,862
Total Other Project Expenses	12,366	14,148	11,920	14,692	9,692	11,920	11,920	9,692	9,692	9,692	9,692	9,692
TOTAL PROJECT EXPENSES	154,051	175,764	166,500	133,787	128,787	148,051	148,051	128,787	128,787	128,787	128,787	128,787
CAPITAL EXPENDITURE												
Land												
Building												
Machinery & Equipment - 20 Years												
Machinery & Equipment - 15 Years												
Machinery & Equipment - 10 Years												
Machinery & Equipment - 05 Years												
Computer Equipment		100,000										
Computer Software	1,000,000											
Furniture & Fixtures												
Autos/Trucks/Forklifts												

This tab summarizes the financial impact of the data entered.

Net Impact Calculation

FTE-Cost Calculation	Capital Expenditure	Annual Project Expenses	Expense Adjustment	Project Expense/Capital Summary	Net Impact Calculation				
Original	COGNOS CPM Implementatic								
	JAN 06	FEB 06	MAR 06	APR 06	MAY 06	JUN 06	JUL 06	AUG 06	SEP 06
Base Revenue Impact									
Base Expense Impact						75,000			
Revenue Including Growth									
Expense Including Growth						80,695	81,023	81,354	81,685
Project Expense	137,777	137,777	137,777	137,777	137,777	157,777			
Capital Expense									
Net Cash Flow	(137,777)	(137,777)	(137,777)	(137,777)	(137,777)	(77,083)	81,023	81,354	81,685
Cumulative Net Cash Flow	(2,936,701)	(3,074,478)	(3,212,255)	(3,350,032)	(3,487,810)	(3,564,892)	(3,483,869)	(3,402,515)	(3,320,830)
Net Present Value	(129,128)	(128,485)	(127,846)	(127,210)	(126,577)	(70,464)	73,698	73,630	73,562
Payback Period									

In this tab, the project manager evaluates the project's financial impact based on the latest revisions to the project plan. Here, Expense Impact and Growth have been taken from the Project Overview tab and used to calculate the new expense for the period savings start and all subsequent periods. It also calculates the Present Values of cash flows to determine Net Present Value and calculates cumulative project costs and expense impact to calculate in turn the Payback period.

About Cognos, an IBM company

Cognos, an IBM company, is the world leader in business intelligence and performance management solutions. It provides world-class enterprise planning and BI software and services to help companies plan, understand and manage financial and operational performance. Cognos was acquired by IBM in February 2008. For more information, visit <http://www.cognos.com>.

For more information

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**ABOUT THE COGNOS INNOVATION CENTER
FOR PERFORMANCE MANAGEMENT**

The Cognos Innovation Center is dedicated to transforming routine performance management practices into “next practices” that help cut costs, minimize risk, streamline processes, boost productivity, enable rapid response to opportunity, and increase management visibility.