

RELATIONSHIP PRICING FOR COMMERCIAL BANKING BLUEPRINT



INTRODUCTION

2007 was a challenging year for many bankers, as the sub-prime mortgage crisis sent many of the world's strongest banks into a tailspin. Although mortgage lending was certainly the catalyst—both in terms of delinquencies on mortgages and poor risk management of collateralized debt obligations—the crisis affected all areas of the bank, including commercial banking. The profitability and liquidity impacts of the crisis caused significant bank-wide budget reductions at most banks, which led to massive layoffs and reduced spending on many projects.

The resulting climate at most banks is now one of caution and internal focus. Two major business drivers—aside from economic uncertainty—are organic growth and operational efficiency. Major strategic responses to these drivers include an increased focus on financial and performance management, improved risk mitigation policies, and improved customer acquisition, retention, and cross-selling.

In this climate effective pricing of products and services for customers is critical. With more competitive pricing banks can increase organic growth and drive new customer acquisition and cross-sell opportunities. Pricing deals consistently and uniformly leads to improved efficiency and better predictability, therefore driving better financial management. And pricing at the relationship level—where the bank can understand the total profitability and risk of a customer relationship—improves both overall profitability and risk management.

Unfortunately, most banks fail to experience these benefits because their pricing tool does not include existing relationship information to support pricing activity. In the commercial banking area of most banks—both large and small—deal pricing is done using spreadsheets. Managing a spreadsheet model effectively across tens, hundreds or even thousands of bank personnel is time-consuming and inaccurate. Most spreadsheet models do not include an analysis of a deal-pricing decision on the entire relationship. In addition, these models are generally not well-aligned with the bank's corporate strategy and cannot be changed and aligned centrally.

Commercial banks need the ability to price deals consistently across all activities. They need to ensure that deals are priced profitably, both for the instance of the particular deal in question and for the entire relationship. They need to know that commercial bankers are pricing deals in alignment with corporate strategy, and that pricing models can be updated easily as strategy changes. Finally, they need to package all of these capabilities into a pricing tool that is intuitive and easy for commercial bankers to use.



Figure 1: Relationship Manager Activities

THE COGNOS SOLUTION

The IBM Cognos *Relationship Pricing for Commercial Banking Blueprint* addresses this need. The *Blueprint* provides a quick-start solution that provides discipline and consistency to pricing both credit and non-credit deals, and helps align daily decisions with performance management objectives. It further supports relationship pricing and analysis with the ability to combine existing deals with proposed deals. Equally important is the enhanced ability the *Blueprint* brings to evaluating Risk-adjusted Return on Capital (RAROC) on each scenario.

The *Blueprint* is built using both IBM Cognos 8 Business Intelligence and IBM Cognos 8 Planning. IBM Cognos Planning coordinates plans, budgets and forecasts across your institution so everyone accountable for business results has visibility into how their role supports that company's strategic initiatives and financial goals. IBM Cognos 8 Business Intelligence provides world-class reporting and analysis, allowing you to track your progress against forecasts and plans, and access critical information with ease.

Blueprints pre-populate your IBM Cognos planning environment with common operational drivers and business structures, dramatically reducing the time required to deploy a new performance management process.

This *Blueprint* features intuitive customer reporting capabilities, a robust pricing model for commercial products that includes both deal and relationship profitability, and centralized administration to ensure that commercial bankers price potential deals in the most efficient and profitable manner. More specifically, the solution provides:

- A Commercial Banking Executive dashboard, including revenue, profitability and risk information.
- A Relationship Manager dashboard, displaying book of business, profitability, and proposal information.
- A Relationship Summary report, detailing all of the products and services currently used by a customer.
- A pricing model that includes a relationship summary, pricing capabilities for Credit and Treasury Services / DDA offerings, and deal and relationship profitability analysis capabilities for numerous pricing scenarios.
- A pricing approval form, displaying the deals that require approval and the high-level details of outstanding proposals.

Although the *Relationship Pricing for Commercial Banking Blueprint* reflects best practices in commercial banking relationship pricing, it is meant to be used as a starting point for a bank's relationship pricing solution. Some banks will use the *Blueprint* as-is without significant modification, whereas others will enhance it to meet specific business needs. The *Blueprint* is built to accommodate this customization, but is robust enough to be used by some institutions without modification.

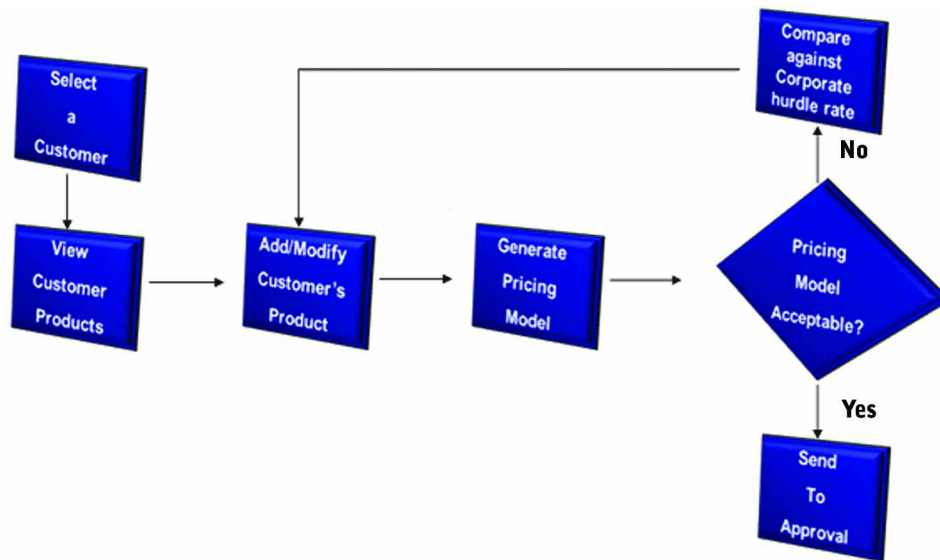
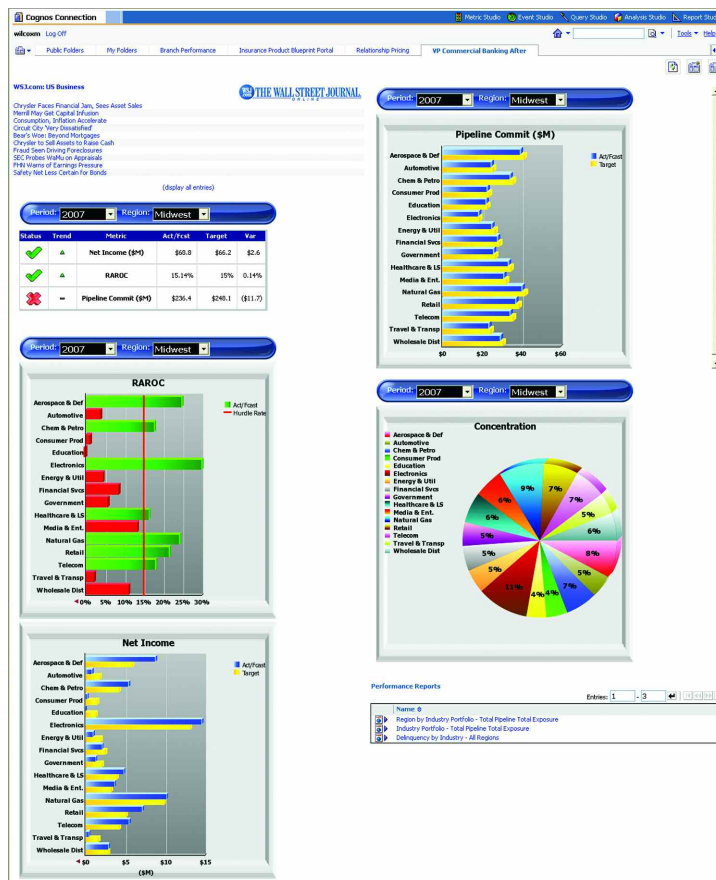


Figure 2: Relationship Pricing for Commercial Banking Workflow

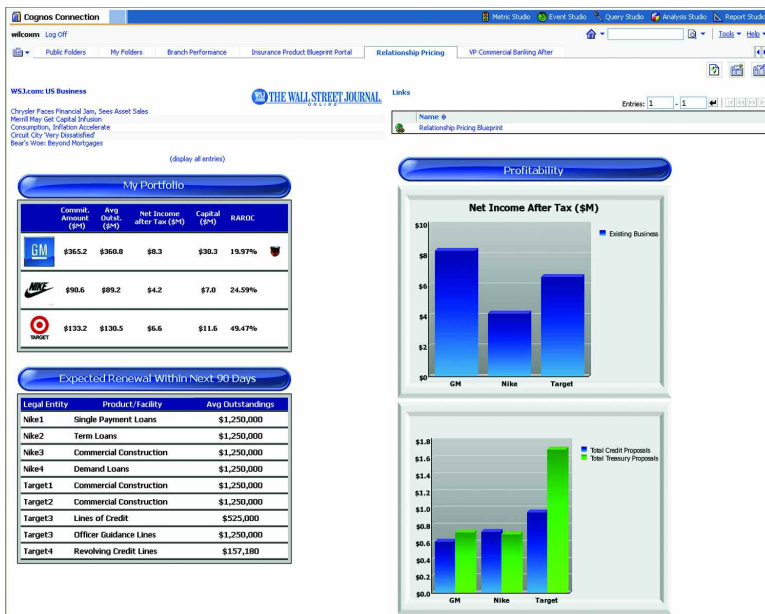
Users of the *Relationship Pricing for Commercial Banking Blueprint* will include relationship managers (RMs) or lenders, district or regional managers, credit officers, and more. The following scenario depicts how relationship managers within a commercial bank could take a best practices approach to pricing potential deals.

The solution enables these individuals to conduct their pricing activity at the product/facility level by customer, with multiple pricing alternatives to ultimately decide on a price that is economically sound and meets or exceeds the bank's defined earnings hurdle rates. The solution also provides a real time profitability calculator to quickly evaluate new business pricing scenarios and their profitability impact at the facility, product, and the overall relationship level.

Relationship managers could start by accessing the Commercial Banking dashboard, pictured below. This dashboard provides an executive-level look into the commercial bank, including pipeline, profitability, and risk information.



This dashboard features a Relationship Pricing tab that RMs can select to get a view of their personal book of business. This dashboard, shown below, provides RMs with a look at customer profitability, upcoming business to be renewed, and a snapshot of outstanding proposals.



After reviewing their book of business, relationship managers can then concentrate on one of the opportunities within the pipeline. This opportunity may be a renewal or it may be a completely new opportunity.

In either case, the RM is likely to review the products owned by the customer currently. This information is displayed on the Product Summary report, shown below. This report provides key performance metric information at the holding company level and at the subsidiary level by product.



Product Summary

Legal Entity GM1

Product	Commitment Amount	Avg Outstandings	Total Revenue	Net Income after Tax	Capital	RAROC	Hurdle Rate
Asset Based Lending Lines	\$1,250,000	\$700,000	\$52,500	\$15,750	\$82,000	0.2%	
Commercial IRB Loans	\$650,000	\$650,000	\$110,327	\$22,050	\$42,004	0.5%	15.0%
Controlled Disbursement	\$0	\$0	\$436,500	\$24,960	\$5,463	4.6%	25.0%
Deposit Reconciliation	\$0	\$0	\$70,000	\$12,000	\$14,000	0.9%	
Retail Lock Box	\$0	\$0	\$835,000	\$179,928	\$14,403	66.6%	25.0%

Legal Entity GM2

Product	Commitment Amount	Avg Outstandings	Total Revenue	Net Income after Tax	Capital	RAROC	Hurdle Rate
Asset Based Lending Lines	\$1,000,000	\$750,000	\$52,500	\$15,750	\$82,000	0.2%	
Builder Lines of Credit	\$650,000	\$650,000	\$93,676	\$18,247	\$42,004	0.4%	15.0%
Deposit/Disbursement Reporting	\$0	\$0	\$75,000	\$12,000	\$14,000	0.9%	
Keymaster Data Entry	\$0	\$0	\$436,500	\$25,252	\$5,556	4.5%	25.0%
Retail Lock Box	\$0	\$0	\$824,000	\$144,048	\$15,362	37.5%	25.0%

Legal Entity GM3

Product	Commitment Amount	Avg Outstandings	Total Revenue	Net Income after Tax	Capital	RAROC	Hurdle Rate
Commercial IRB Loans	\$650,000	\$650,000	\$110,327	\$22,050	\$42,004	0.5%	15.0%
Controlled Disbursement	\$0	\$0	\$528,150	\$39,624	\$26,463	5.3%	25.0%
Revolving Credit Lines	\$1,222,000	\$916,500	\$64,155	\$19,247	\$100,204	0.2%	
Trade Letters of Credit - Issue / Advise / Confirm	\$1,250,000	\$1,250,000	\$178,402	\$47,190	\$70,902	0.7%	15.0%
Wholesale Lockbox	\$0	\$0	\$916,040	\$87,978	\$21,661	17.4%	25.0%

Once RMs have reviewed the existing products used by a customer, they can now launch the Relationship Pricing model.

The Relationship Pricing model has four tabs that represent a key portion of the model's capabilities. The first is the Product Summary tab. This tab is another representation of what products a customer is using across the various departments. This tab goes into significant detail on commitment and outstandings, revenue, capital, and profitability information.

It is in this tab that RMs can view the product pricing proposals that have been approved or exceed internally set earnings hurdle rate to allow them to make an official offer to the customer. Of note, RMs can deselect products as needed. This would be done if the RM is renewing or replacing an existing product in a pricing proposal.

	Deselect	Product / Facility	Commitment Amount	Average Outstandings	Total Revenue	Net Income after Tax	Capital	RAROC	Hurdle Rate	Approval Needed	Approval Requested
5110957		Commercial Real Estate	19,000,000	19,000,000	1,260,000	320,000	1,400,000	22.86%			
5203944		Asset Based Lending Lines	1,250,000	700,000	52,300	15,750	82,000	19.21%			
5227291	Yes	Retail Lock Box	0	0	310,000	25,000	12,000	208.33%			
5958199		Deposit Reconciliation	0	0	70,000	12,000	14,000	85.71%			
Legal Entity GM1			20,250,000	19,700,000	1,692,500	372,750	1,508,000	24.72%			
Total Selected Existing			20,250,000	19,700,000	1,382,500	347,750	1,496,000	23.25%			
Proposed Product								0.00%			
Credit								0.00%			
Credit 1		Commercial Construction	1,250,000	1,250,000	185,823	31,395	70,239	14.89%	15.00%	Yes	Yes
Credit 2		Lines of Credit	525,000	525,000	94,213	16,120	29,513	13.65%	15.00%	Yes	Yes
Credit 3		Commercial IRB Loans	650,000	650,000	110,327	22,050	42,004	17.50%	15.00%		
Credit 4			0	0	0	0	0	0.00%			
Credit 5			0	0	0	0	0	0.00%			
Total Credit			2,425,000	2,425,000	390,364	69,555	141,757	15.18%			
Treasury Services								0.00%			
Treasury 6		Retail Lock Box	0	0	525,000	154,828	2,403	1,289.41%	25.00%		
Treasury 7		Controlled Disbursement	0	0	436,500	24,960	5,463	152.30%	25.00%		
Treasury 8		Commercial Checking	0	1,500,000	119,250	50,212	0	0.00%			
Treasury 9			0	0	0	0	0	0.00%			
Treasury 10			0	0	0	0	0	0.00%			
Treasury 11			0	0	0	0	0	0.00%			
Treasury 12			0	0	0	0	0	0.00%			
Treasury 13			0	0	0	0	0	0.00%			
Treasury 14			0	0	0	0	0	0.00%			
Treasury 15			0	0	0	0	0	0.00%			
Total Treasury Services			0	1,500,000	1,080,750	230,100	7,866	611.59%			
Total Proposed			2,425,000	3,925,000	1,471,114	299,655	149,623	45.28%			
Total Relationship			22,675,000	23,625,000	2,853,614	647,405	1,645,623	15.22%			

The Credit Pricing tab allows RMs to price up to five different proposals for a prospective deal. Within each proposal, RMs also have the ability to create several different scenarios. Within a given scenario and proposal, RMs can input the key deal pricing information, such as commitment amount, tenor, commitment fee rate, and payment terms. In addition, RMs can input either the customer rate or the spread. The model will automatically calculate the value that is not input by RMs. The cost of funds is provided, and can be changed centrally, but not by RMs.

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Product/Facility	Commercial Construction	Commercial Construction	Commercial Construction		
Commitment Amount	1,250,000	1,250,000	1,250,000	0	0
Average Outstandings	1,250,000	1,250,000	1,250,000	0	0
Tenor	36	36	36		
Collateral Indicator	Secured	Secured	Unsecured		
Commitment Fee Rate	7.00%	7.00%	7.00%	0.00%	0.00%
Loan Fees	15,000	15,000	15,000	0	0
Risk Rating	2	2	2		
Payment Terms	Equal Payments	Equal Payments	Equal Payments		
Spread	2.00%	1.80%	2.25%	0.00%	0.00%
Customer Rate	5.95%	5.75%	6.20%	0.00%	0.00%
Cost of Funds Rate	3.95%	3.95%	3.95%	0.00%	0.00%
Re-Pricing Frequency (Months)	6	12	12		
Pricing Index	Prime	Prime	Prime		
Origination Costs	2,500	2,500	1,800	0	0
Servicing Costs	1,800	1,800	1,800	0	0
Industry	Automotive	Automotive	Automotive		
WARNING					

Similarly, the proposed deal may include Treasury Services or DDA products in addition to credit products (or even without credit products). As with credit pricing, RMs can create multiple proposals and scenarios for Treasury Services or DDA products. Again, RMs can enter key deal information. Information such as account opening costs and servicing unit costs are provided for RMs and cannot be changed.

Product Summary		Credit Pricing		Treasury Services/DDA Pricing		Relationship Analysis							
Legal Entity GM1		Treasury Proposal 6		Scenario 1		Scenario 2		Scenario 3		Scenario 4		Scenario 5	
Product/Facility	Retail Lock Box	Retail Lock Box	Retail Lock Box	Retail Lock Box	Retail Lock Box								
Treasury Services Fees	10,125	10,500	8,750	0	0								
Number of Items (Monthly)	8,100	7,000	5,000	0	0								
Treasury Services Unit Price	1.25	1.50	1.75	0.00	0.00								
Account Opening Costs	1,650	1,650	1,650	0	0								
Servicing Costs	7,695	6,650	4,750	0	0								
Servicing Unit Costs	0.95	0.95	0.95	0.00	0.00								
Contractual Term	36	48	60	0	0								
Industry	Financial Services	Financial Services	Financial Services	Financial Services	Financial Services								
On Account Analysis													
Average Compensating Balance	0	0	0	0	0								
Monthly Service Charge	0	0	0	0	0								
Operating Costs	0	0	0	0	0								
Earnings Credit Rate	0.00%	0.00%	0.00%	0.00%	0.00%								
Earnings Credit	0	0	0	0	0								
Cost of Funds Rate	0.00%	0.00%	0.00%	0.00%	0.00%								
Funding Credit	0	0	0	0	0								
Net Funding Credit on DDA	0	0	0	0	0								

The final tab, Relationship Analysis, allows RMs to analyze any proposals and scenarios within the proposals to determine the effect on the profitability of the relationship. This tab reflects both credit proposals and Treasury Services / DDA proposals. Profitability can be reflected ROA, RAROC, or any profitability measure that the bank prefers. The bank can also input a hurdle rate that a proposal can be compared against. Finally, RMs can choose which pricing proposal and scenario to select for a particular deal.

Product Summary		Credit Pricing		Treasury Services/DDA Pricing		Relationship Analysis							
Legal Entity GM1		Treasury Proposal 6		Scenario 1		Scenario 2		Scenario 3		Scenario 4		Scenario 5	
Total Existing	Selected	Product/Facility	Commitment Amount	Average Outstandings	Total Revenue	Net Income after Tax	Capital	ROA	RAROC	Hurdle Rate	Selected		
		Commercial Construction	20,250,000	19,700,000	1,382,500	347,750	1,496,000	1.77%	23.25%				
Credit Proposal 1	Scenario 1	Commercial Construction	1,250,000	1,250,000	185,823	31,385	70,239	2.51%	14.89%	15.00%	Yes		
	Scenario 2	Commercial Construction	1,250,000	1,250,000	178,404	26,130	70,302	2.09%	12.28%	15.00%			
	Scenario 3	Commercial Construction	1,250,000	1,250,000	196,533	31,479	81,504	2.52%	12.87%	15.00%			
	Selected	Commercial Construction	1,250,000	1,250,000	185,823	31,385	70,239	2.51%	14.89%	15.00%	Yes		
Credit Proposal 2	Scenario 1	Lines of Credit	525,000	525,000	94,213	15,120	29,513	3.07%	13.95%	15.00%	Yes		
	Scenario 2	Lines of Credit	525,000	250,000	79,610	15,311	33,926	6.12%	11.28%	15.00%			
	Selected	Lines of Credit	525,000	525,000	94,213	15,120	29,513	3.07%	13.65%	15.00%	Yes		
Credit Proposal 3	Scenario 1	Commercial IRB Loans	650,000	650,000	98,915	18,405	36,199	2.83%	16.95%	15.00%	Yes		
	Scenario 2	Commercial IRB Loans	650,000	650,000	96,030	16,308	36,540	2.51%	14.88%	15.00%			
	Scenario 3	Commercial IRB Loans	650,000	650,000	110,327	22,050	42,004	3.39%	17.50%	15.00%	Yes		
	Selected	Commercial IRB Loans	650,000	650,000	110,327	22,050	42,004	3.39%	17.50%	15.00%	Yes		
	Scenario 1	Retail Lock Box	0	0	364,500	55,730	3,894	0.00%	477.61%	25.00%			
	Scenario 2	Retail Lock Box	0	0	504,000	119,047	3,362	0.00%	895.18%	25.00%			
Treasury Proposal 6	Scenario 3	Retail Lock Box	0	0	525,000	154,928	2,403	0.00%	1,289.41%	25.00%	Yes		
	Selected	Retail Lock Box	0	0	525,000	154,928	2,403	0.00%	1,289.41%	25.00%	Yes		
Treasury Proposal 7	Scenario 1	Controlled Disbursement	0	0	436,500	24,960	5,463	0.00%	152.30%	25.00%	Yes		
	Scenario 2	Controlled Disbursement	0	0	314,100	(7,800)	4,475	0.00%	(58.10%)	25.00%			
	Scenario 3	Controlled Disbursement	0	0	261,000	(7,215)	3,734	0.00%	(64.41%)	25.00%			
	Selected	Controlled Disbursement	0	0	436,500	24,960	5,463	0.00%	152.30%	25.00%	Yes		
Treasury Proposal 8	Scenario 1	Commercial Checking	0	1,000,000	79,500	32,175	0	3.22%	0.00%		Yes		
	Scenario 2	Commercial Checking	0	1,500,000	119,250	50,212	0	3.35%	0.00%		Yes		
	Selected	Commercial Checking	0	1,500,000	119,250	50,212	0	3.35%	0.00%		Yes		

Once RMs have selected a proposal for the customer, there is one additional step that might need to be taken. Depending on the size of the deal—or other parameters specified by the bank—the proposed pricing may need to be approved. The approval form for this step is shown below. Note that this for is not for deal approval, it is only for deal pricing approval.



Approval Form

Legal Entity GM1

Product	Commitment Amount	Avg Outstandings	Total Revenue	Net Income after Tax	Capital	RAROC	Approval Needed
	\$68,025,000	\$66,375,000	\$8,513,092	\$1,816,576	\$4,948,868	25.9%	
Asset Based Lending Lines	\$1,250,000	\$700,000	\$52,500	\$15,750	\$82,000	0.2%	
Commercial Construction	\$1,250,000	\$1,250,000	\$185,823	\$31,385	\$70,239	0.4%	<input type="checkbox"/>
Commercial IRB Loans	\$650,000	\$650,000	\$110,327	\$22,050	\$42,004	0.5%	
Commercial Real Estate	\$19,000,000	\$19,000,000	\$1,260,000	\$320,000	\$1,400,000	0.2%	<input type="checkbox"/>
Controlled Disbursement	\$0	\$0	\$436,500	\$24,960	\$5,463	4.6%	
Deposit Reconciliation	\$0	\$0	\$70,000	\$12,000	\$14,000	0.9%	
Lines of Credit	\$525,000	\$525,000	\$94,213	\$16,120	\$29,513	0.5%	<input type="checkbox"/>
Retail Lock Box	\$0	\$0	\$835,000	\$179,928	\$14,403	66.6%	

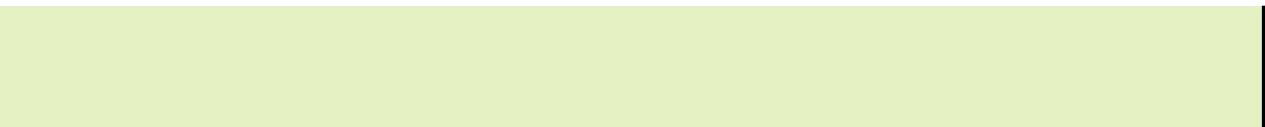
This business value guide illustrates just a few ways that banks can increase profitability through more effective deal pricing. For more information please download the IBM *Cognos Relationship Pricing for Commercial Banking Blueprint* implementation guide at <http://www.cognos.com/innovationcenter/>. It contains valuable additional information functionality for areas such as:

- Credit Pricing
- Treasury Services/DDA Pricing
- Relationship Analysis
- Credit and Treasury Calculations
- Credit and Operational Risk Factors
- Corporate and Treasury Assumptions
- Hurdle Rates
- Cost of Funds
- Products Summary

SUMMARY

The IBM Cognos *Relationship Planning for Commercial Banking Blueprint* is quick-start solution that combines a best practice approach for leveraging both IBM Cognos 8 Business Intelligence and Planning solutions in a financial services environment. It is the culmination of what we've learned from working with the market leaders in banking, including all of the top 10 banks in the US and 9 of the top ten banks in Europe. The *Blueprint* was developed by the Cognos Innovation Center for Performance Management and is available at no cost to customers.

This *Blueprint* was designed to help your organization accelerate the realization of performance management. It provides the tools, disciplines, and industry best-practices that help financial institutions remain abreast of the latest operational metrics and business practices, while leveraging your existing investments in profitability planning and risk management. Additional *Blueprints* for financial services organizations include ones for risk-adjusted profitability, branch performance, and customer segment performance. For more information on IBM Cognos performance management solutions for financial services please visit www.cognos.com/banking.



ABOUT THE COGNOS INNOVATION CENTER FOR PERFORMANCE MANAGEMENT

The 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 cut costs, streamline processes, boost productivity, enable rapid response to opportunity, and increase management visibility.

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

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>.