Dynamic Financial Analysis System (DFAS)

The Dynamic Financial Analysis System (DFAS) uses advanced mathematical modeling to provide a rigorous, structured methodology in order to understand the effects of risk on the corporate balance sheet and to make strategic decisions. DFAS provides functionality not previously available, namely, the capability to simultaneously incorporate the effects of different types of risk on both sides of the balance sheet and provide insights as to the optimal activities available to an insurance company over time and under uncertainty.

DFAS begins by generating a dynamic model of the company's balance sheet and income statement over time. Model generation capability is brought by IBM's 'Easy Modeler' asset which has proven its capabilities on numerous occasions in USA and Europe.
This model analyzes the impact of risk on the asset, liability and operational flows, and incorporates real-world financial, regulatory, statutory or other limitations.

"What's the best action I can take today to hedge against the uncertainty"
Such is the question answered by the DFAS by way of a discrete scenario tree to model risks. Although in effect it is extremely difficult to know for certain future market conditions such as: the prime rate for the next year, or the dollar volume of policy sales over the next three years, or the total effect of large anticipated claims, various scenarios can be created that capture the risks associated with these random events and these can then be assembled into an event tree to foresee possible future events and the effects they will have on your company.

Industry/Sectors

DFAS is successful in insurance and financial institutions with capital management requirements (e.g. banks). DFAS may also be implemented by pension fund firms, managed care plan providers or manufacturing firms with large capital budget planning issues.

⊠Financial Services	❑Communication	❑Industrial	❑Distribution	❑Public

Asset Inventory

IBM Business Intelligence (BI)"Innovations" can be made up of 6 types of assets. The inventory of assets available with this "Innovation" have been created by IBM research and consultants but may be linked or combined with a number of other BI innovations.

Asset Type	Dynamic Financial Analysis System Assets
Data Warehouse Management	
Extract / Transform / Load (ETL)	
Data Models	
Display	
Analyze	1) IBM EasyModeler
Services	1) Readiness Assessment 2) Implementation & Customization

IBM Global Services

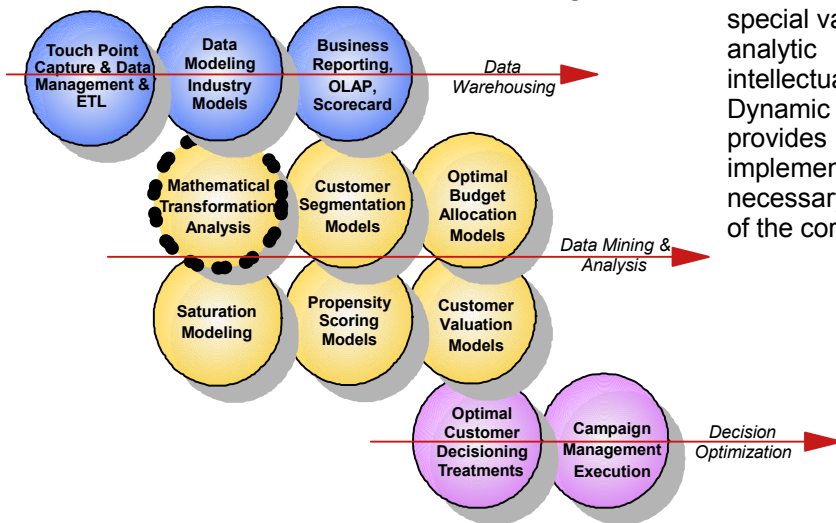An IBM Business Intelligence *Innovation*

7/25/2000

Dynamic Financial Analysis System

Client Issue: Customer Relationship Management (CRM)

IBM's CRM Value Chain is a roadmap for helping our clients maximize their relationship with their customers. When linked together, the pieces of the value chain describe an end-to-end solution that includes data capture from customer touch points, data modeling to store and organize information to support traditional reporting as well as advanced analytics and decision making.

The advanced analytic pieces of the CRM value chain perform mathematical treatment of data or text to reveal customer churn prediction, risk analysis and customer segmentation.

CRM Value Chain for Business Intelligence

The IBM CRM value chain provides special value to our clients through deep analytic consulting and a wealth of intellectual property (assets). The Dynamic Financial Analysis System provides the powerful and rapidly implementable mathematical modeling necessary to estimate risk on both sides of the corporate balance sheet.

DFAS has been implemented…

The successful implementation of DFAS at a large insurance group enabled the following business objectives to be met:

► Provide Insight and guidance on optimal asset allocation
► Analyze the growth of the liability portfolio over the planning horizon
► Explore price-hedged underwriting of bundled property and casualty products
► Analyze asset and liability issues in acquisition scenarios with concurrent focus on meeting business targets
► Ensure the strategic planning model remains consistent with tactical operational models which may be currently in use

Furthermore, the functional requirements set out by the same company enabled high administrative flexibility. The corporate model can thus be altered by IT staff.

Related IBM Software Products

► IBM DB2 Universal Database
► IBM Visual Warehouse
► Makoro CRM Foundation

Related Information

Demo Available

IBM Global Services

An IBM Business Intelligence *Innovation*

7/25/2000