

SAP SEM - Strategic Enterprise Management



SAP SEM and Business Analytics

서경웅

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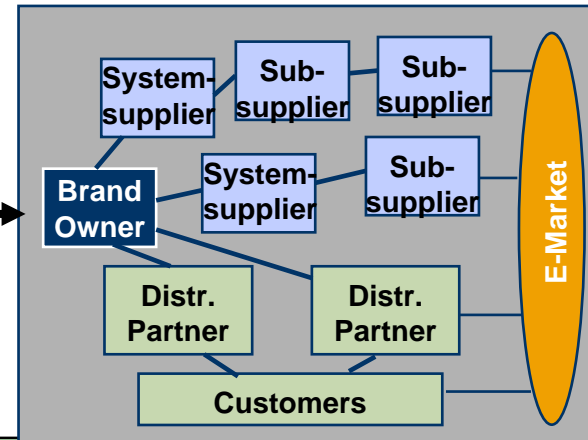
- **Challenges and Approaches in Enterprise Management**
- **The Solution: mySAP Financials Strategic Enterprise Management (SEM)**
- **Availability of Strategic and Enterprise Management (SEM)**
- **SEM Case Studies**

Challenges in Collaborative Network Management...



Management

Value Network Management



- What are the main factors driving the business ?
- How can we measure the performance of the business?
- How can we link relative performance to resource consumption ?

Performance Measurement and Consolidation

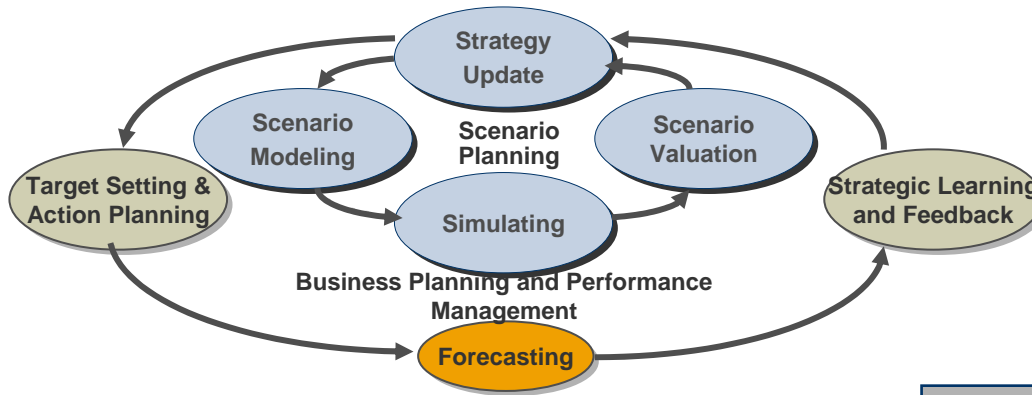
- How can we continuously update our strategy ?
- How can we adjust the operations efficiently to strategy updates ?

Strategy Management

- How can we better identify new business opportunities ?
- How can we faster commercialize new business opportunities ?
- How can we accelerate and integrate planning processes ?

Business Planning and Simulation

...require new Management Processes



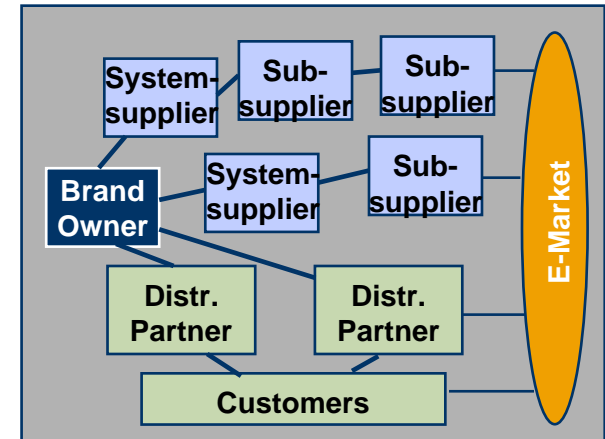
- **Rolling forecasting**
- **Performance measurement**
- **Strategy management**
- **Focus on future business scenarios**
- **Continuous strategy checks**
- **Business network consolidation**

Instead of:

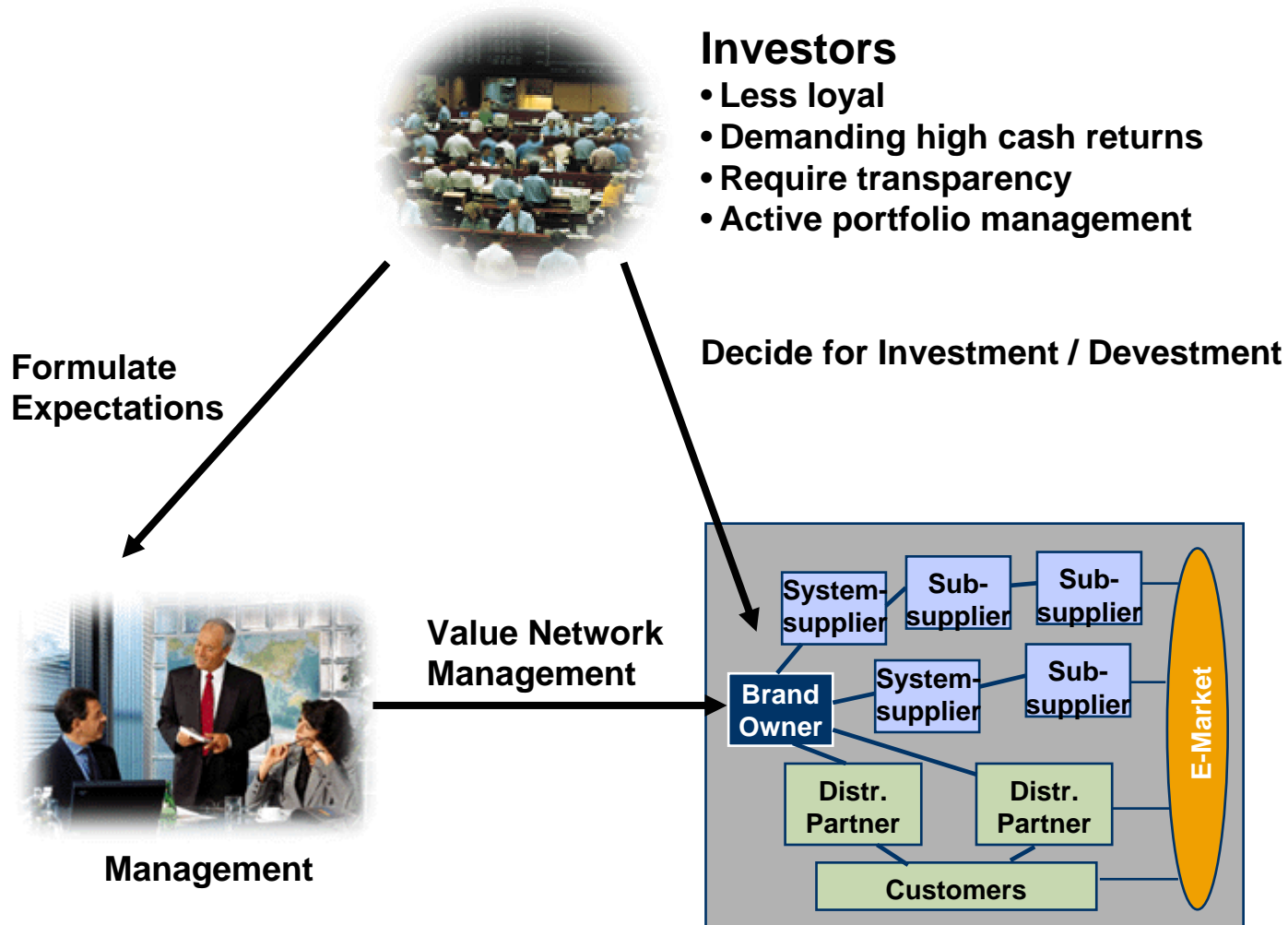
- Rigid yearly budgeting cycles
- Spreadsheet reports
- Meeting the budget
- Focussing on actuals vs. Plan analysis only
- Static strategic plans



Management

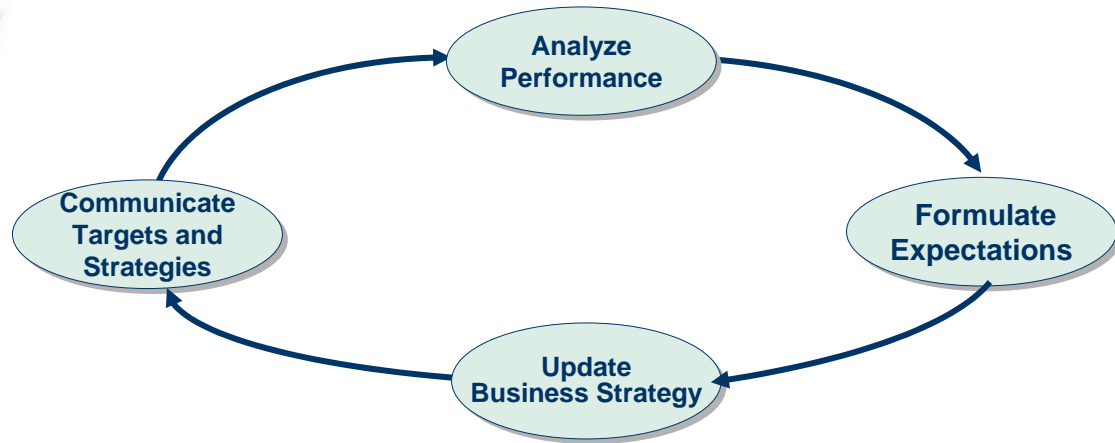


Increasing Importance of Capital Markets...



...require active Investor Relationship Management

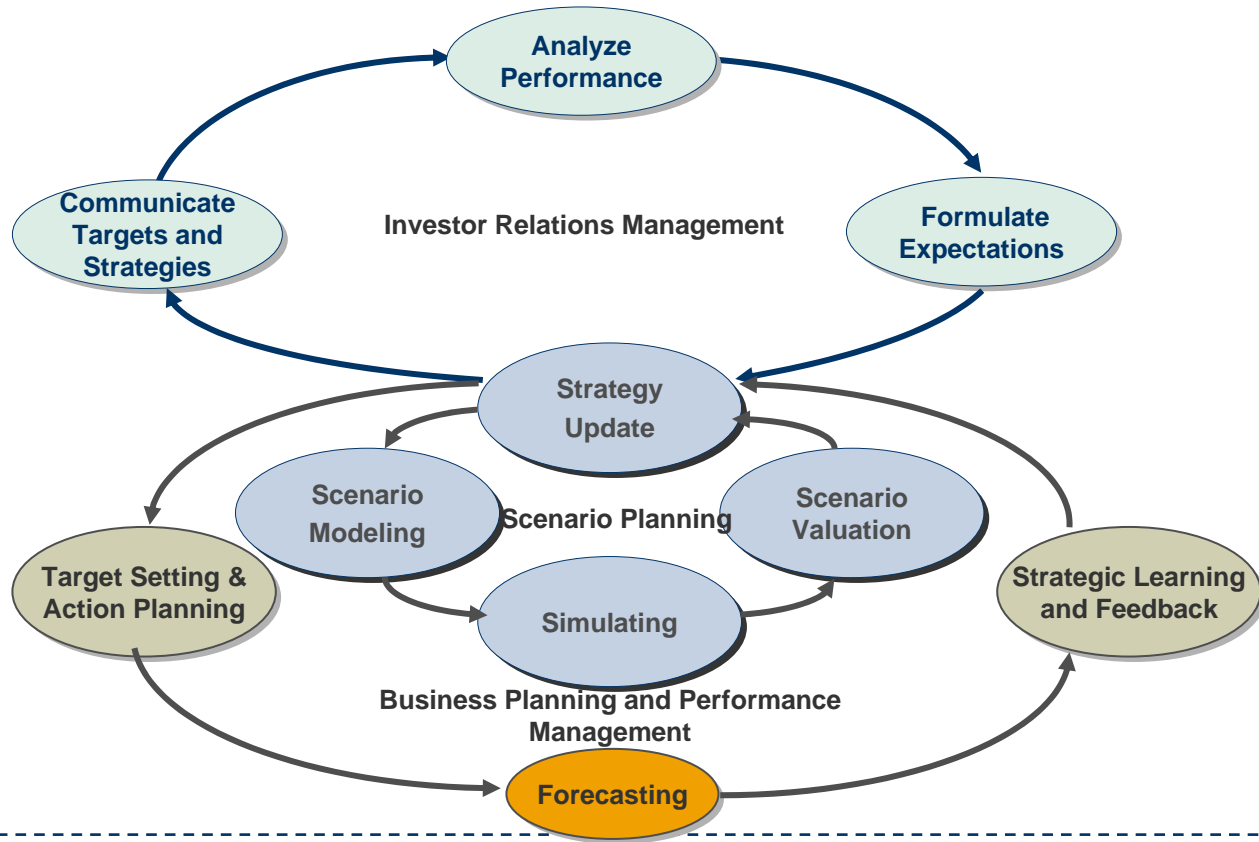
Investors



Investor Relations



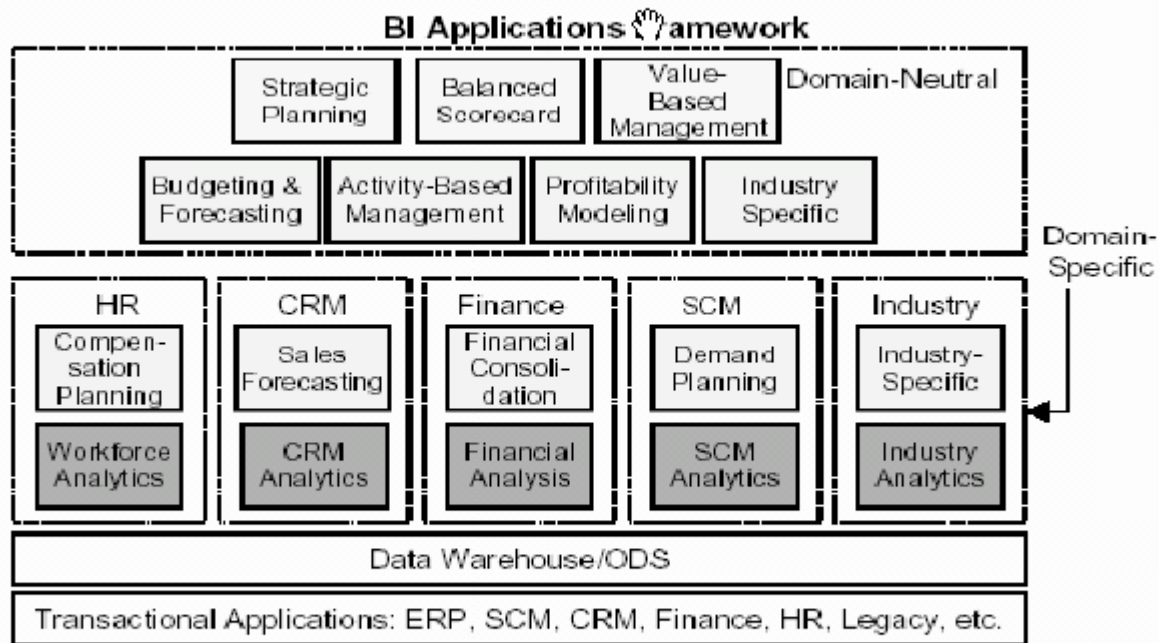
- **Understand capital market expectations**
- **Know more about your main Investors**
- **Establish ongoing relationship**
- **Deliver up-to-date informations**
- **Deliver the informations required by the capital market**
- **Control communication and do not react**
- **Utilize multiple communication channels**





- **Challenges and Approaches in Enterprise Management**
- **The Solution: mySAP Financials Strategic Enterprise Management**
- **Availability of Strategic Enterprise Management**
- **SEM Case Studies**

BI Applications Framework- 정리

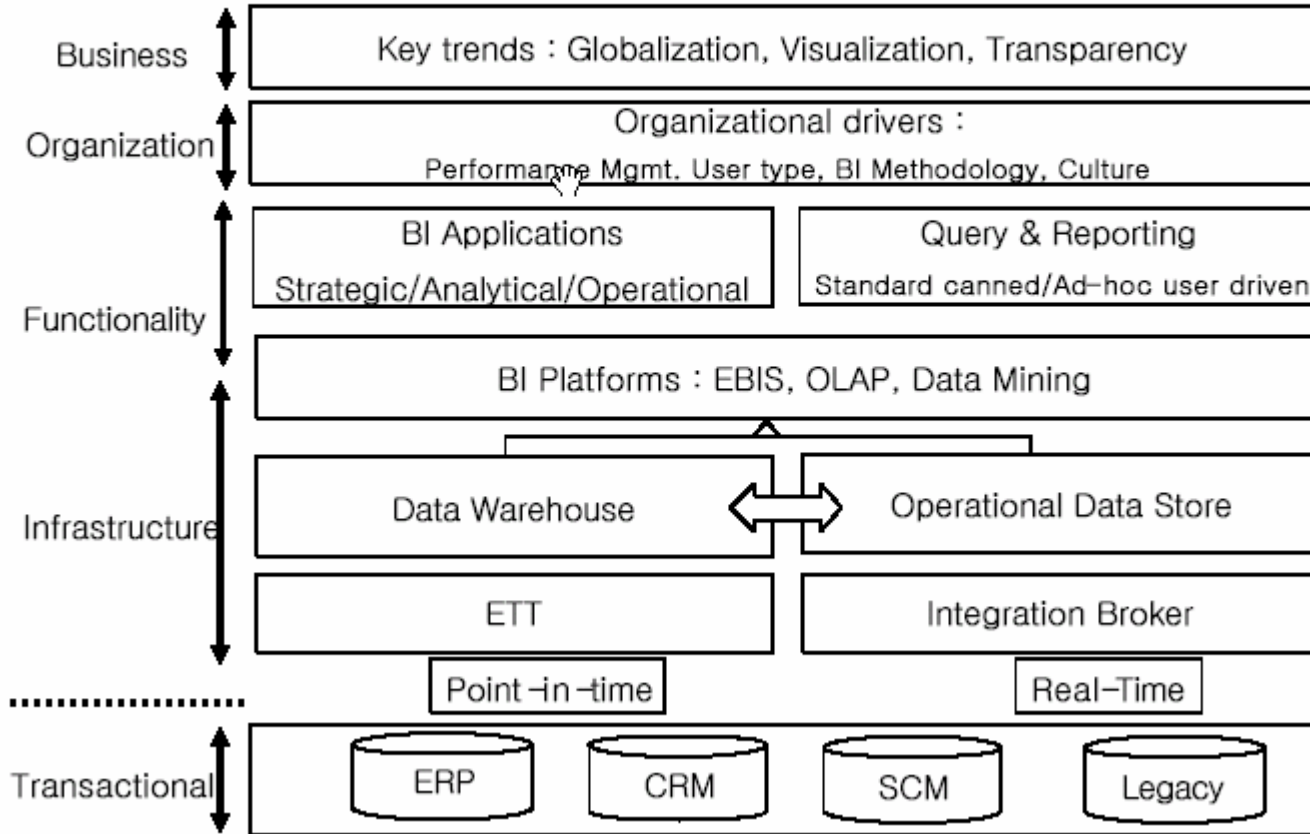


Key: Analytic BI Apps Operational BI Apps Strategic BI Apps

(Note: All applications shown are examples only.)

Source: Gartner Research

BI 구조와 위상 - BI Architecture



SEM and Business Analytics

Strategic Enterprise Management



- Manage strategy of Enterprise / Business Units (BU) to create long-term value
- Manage performance of BU to improve short-term results

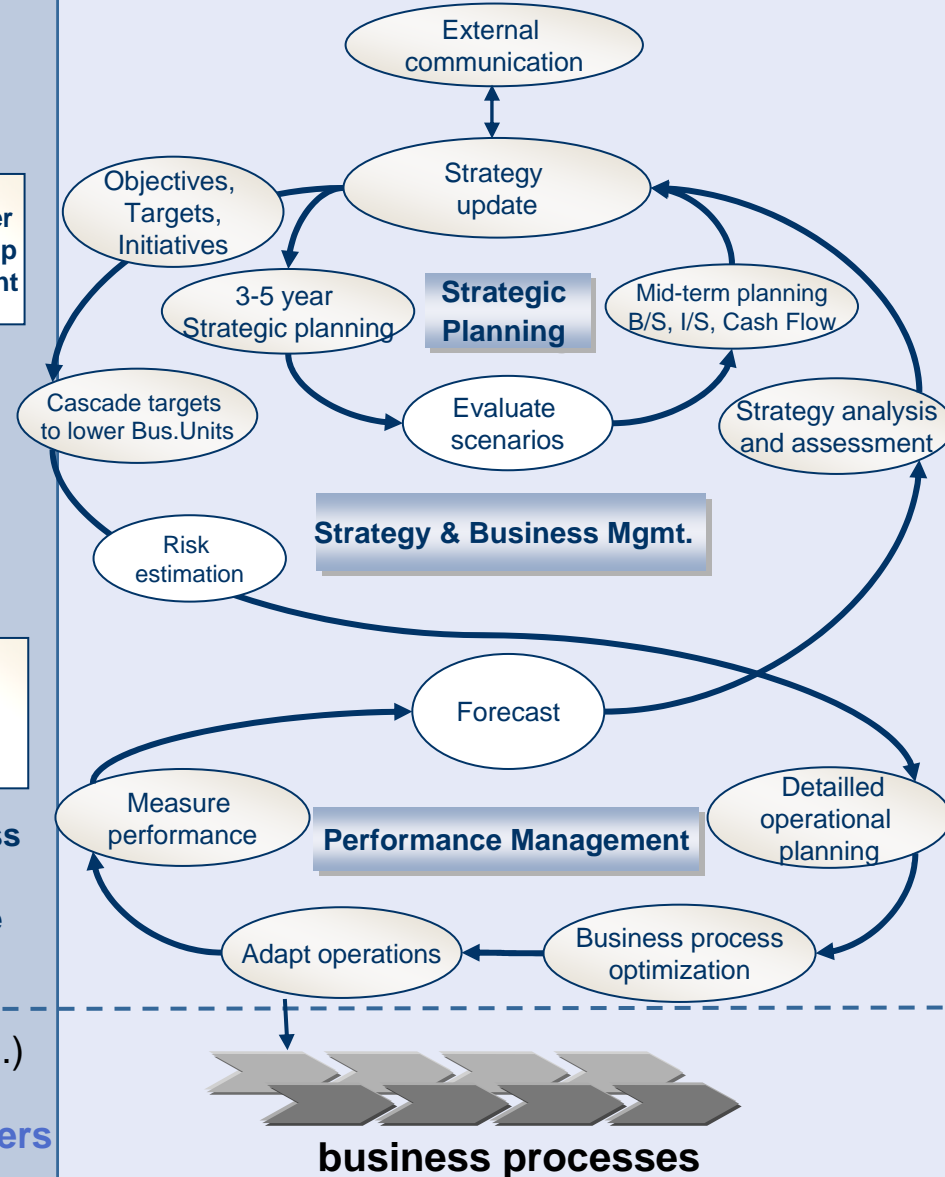
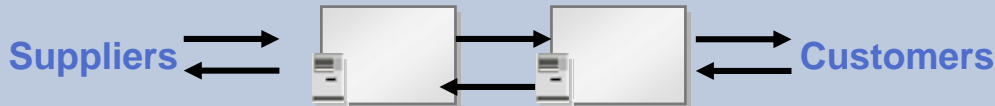


Business Analytics



- Adapt business operations based on results from Business Analytics
- Optimize business processes across functions to improve overall business performance

Transactional processing (R/3, CRM, SCM, ...)



Platform for SEM

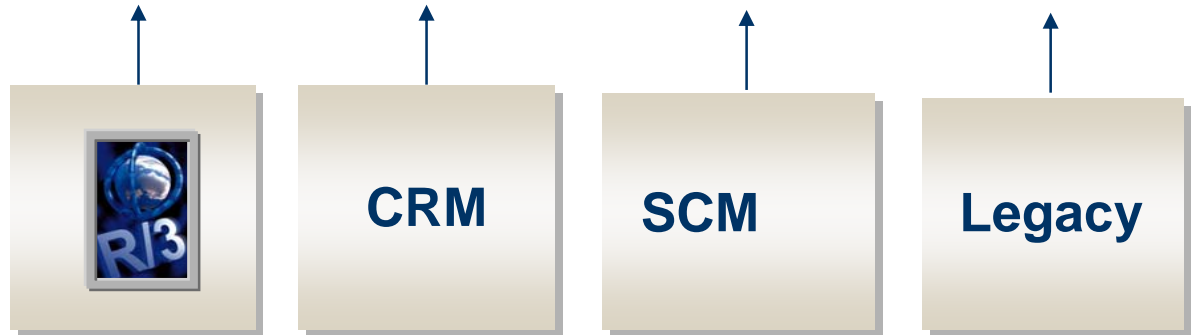
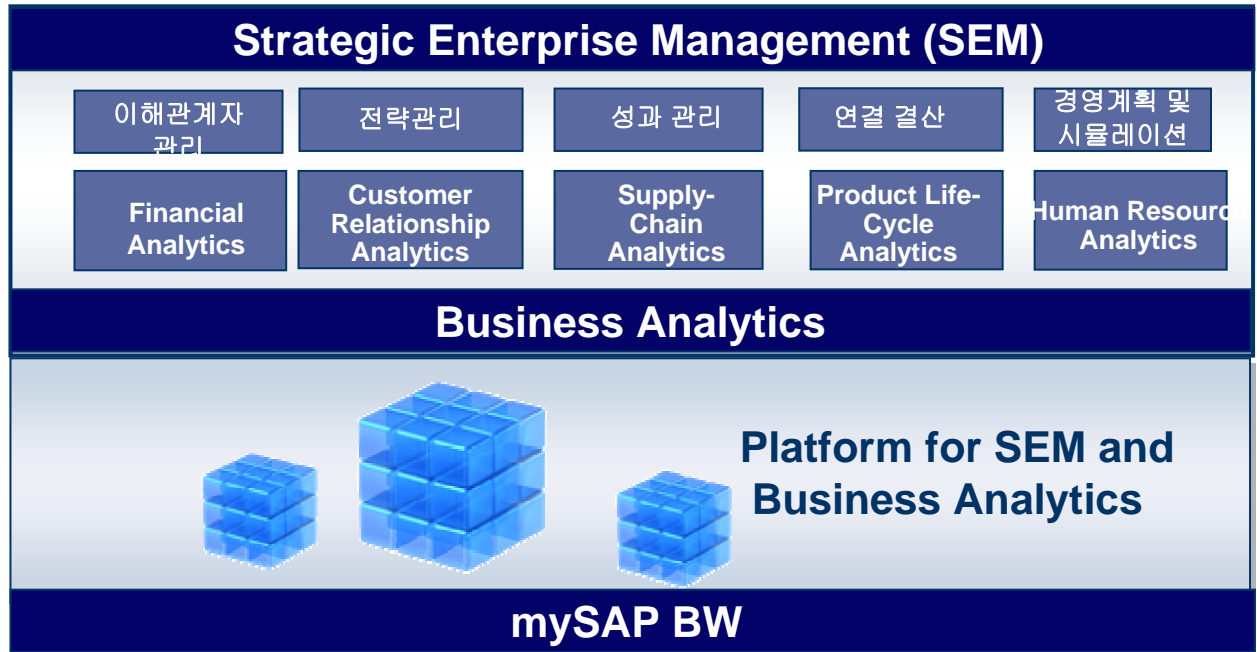
기업 정보를 가치있는 자산으로 변환하고, 공급망,조직,고객관리의 **Value Chain**을 연결, 가치를 최적화하여 기업 전략으로 연동시킴으로써 전사적 전략 경영관리를 구현

기업전략계획,성과관리를 관리하는 부문

기업 운영 최적화를 지원하는 부문

정보 추출가공을 위한 부문

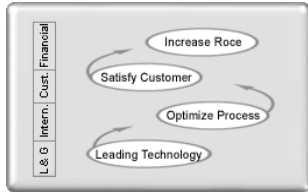
기업의 운영/기간업무 시스템 부문



SAP SEM and Business Analytics

Enterprise Portal

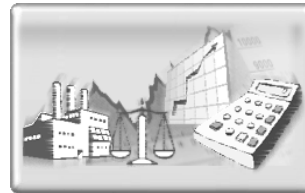
Strategy Management



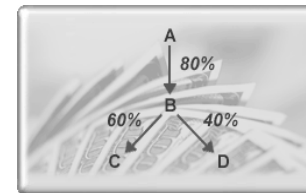
Performance Measurement



Business Planning & Simulation



Business Consolidation



Stakeholder Relationship Management



Manage strategy of Corporate and Business Units to create long-term value

Manage performance of Business Units to improve short-term results

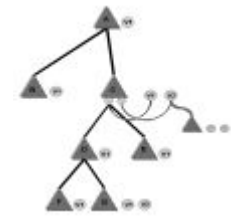
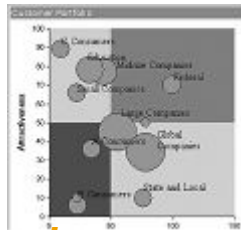
Financial Analytics

CRM Analytics

PLM Analytics

SCM Analytics

Workforce Analytics



Adapt business operations based on results from Business Analytics

Optimize business processes across functions to improve overall business performance

Business Information Warehouse



CRM

SCM

PLM

SRM

non-SAP Apps



Enterprise Portal

SEM

Strategy Management

- Balanced Scorecard
- Value based Mgmt.
- EVA™ Adjustments
- Risk Management
- Strategy Templates

Performance Measurement

- Management Cockpit
- Value Driver Tree
- Measure Builder & Catalogs
- Benchmark Exchange & Analysis

Business Planning & Simulation

- Planning applications
 - Strategic Planning
 - Financial Statement Planning (B/S, I/S, CF)
 - Investment Planning
- Process Coordination
Planning Modelling

Business Consolidation

- Legal and Mgmt. Consolidation
- GAAP Adjustments
- Currency Translation
- Interunit Eliminations
- Cons. of Investments
- Restatement

Stakeholder Relationship Management

- Stakeholder Management
- Contact Management
- Business Information Collection

Business Analytics

Financial Analytics

- Financial Planning, Budgeting & Forecasting
- Profitability Management
- Cost Management
- ABC/M
- Product Design Cost Estimate
- Payment Behaviour

CRM Analytics

- Customer Analytics
- Sales Analytics
- Marketing Analytics
- Channel Analytics

PLM Analytics

- Product Design Cost Estimate
- Lifecycle Profitability Analytics

SCM Analytics

- Supply Chain Performance Management
- Supply Chain Benchmarking
- Supply Chain Event Management

Workforce Analytics

- Personnel Cost Planning
- Management by Objectives
- Employee Turnover & Retention Analysis
- HR Benchmarking
- HR Balanced Scorecard

Business Information Warehouse



CRM

SCM

PLM

SRM

non-SAP Apps



Business Challenges in Enterprise Management

Fast Close

Strategy Execution

Transparency of Risks

Long-term Planning and VBM

Mid-term Planning

Operational Planning

Flexible Plans – not fixed budgets

Performance Measurement

Business challenge: Fast Close

Functionality

- Legal and management consolidation
- Currency translation
- Inter-unit eliminations
- Consolidation of investments
- Reporting of consolidated statements
- XBRL-based exchange of statements

Business benefits

- Fast close via high degree of automation
- Flexibility – customer-definable data model
- Easy to use – control via graphical monitor
- Quantity – high performance of all functions
- Reconciled external and internal group reporting

Consolidation Monitor

Dimension 03 Cons chart/acct 01 Version 100 Period 12 / 1999

| Hierarchy | Description | Overall sta... | IU/AR-AP | SALES/C... | Valid CD |
|------------|-----------------------------|----------------|----------|------------|----------|
| 03 | PCA Integration | | | | |
| 01 | Group by Profitcenter-Gr... | | | | |
| SEG | Top Group by Segments | | | | |
| C-TOP-1 | EC North America | | | | |
| C-SEG-A | SEG Pharma & Chemicals | | | | |
| C-BA-4000 | BA Chemicals | | | | |
| C-BA-6000 | BA PHARMA | | | | |
| C-BS-SEG-A | B/S Segment A | | | | |
| C-SEG-B | SEG Services | | | | |
| C-BA-8000 | Bus. Unit SERVICES | | | | |
| C-BS-BA-8 | C-BS-BA-8 | | | | |
| C-DIV-91 | Pharma Analysis | | | | |
| C-SEG-C | SEG Corp. & Others | | | | |
| C-BA-9900 | Bus. Unit CORP&OTH. | | | | |

Ownerships

Dimension 01 Companies Cons chart/acct 01 COGS - Appr. in B/S (US) Version 100

Cons group C61 Legal Dimension Group currency USD US Dollar

| Accounting technique | Cons unit | Long name | Country | City | LC | Total equity LC |
|-----------------------------------|----------------|-----------|---------|-----------|-----|-----------------|
| Purchase method | | | | | | |
| C1000 | Germany | | DE | Frankfurt | DEM | 207.420.499,50 |
| C2000 | Great Britain | | GB | London | GBP | 17.738.010,91 |
| C3000 | United States | | US | New York | USD | 97.000.000,00 |
| C4000 | Canada | | CA | Toronto | CAD | 77.514.391,32 |
| C9000 | Parent Company | | US | Miami | USD | 16.216.338,00 |
| Proportional consolidation | | | | | | |
| C2200 | France | | FR | Paris | FRF | 347.473.320,00 |
| Equity method | | | | | | |
| C4100 | Australia | | AU | Melbourne | AUD | 37.908.770,42 |

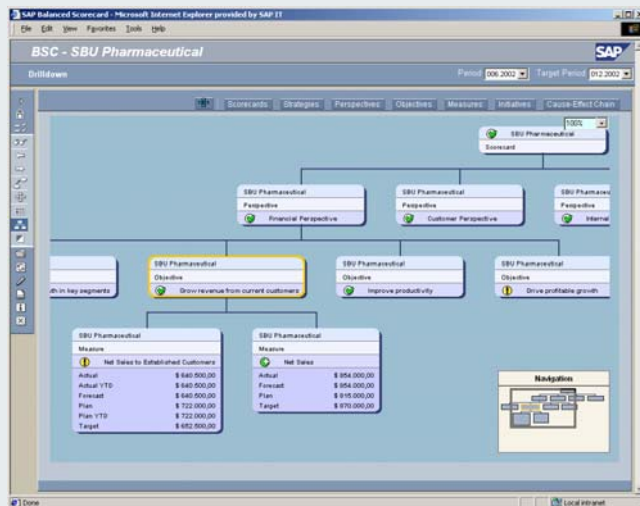
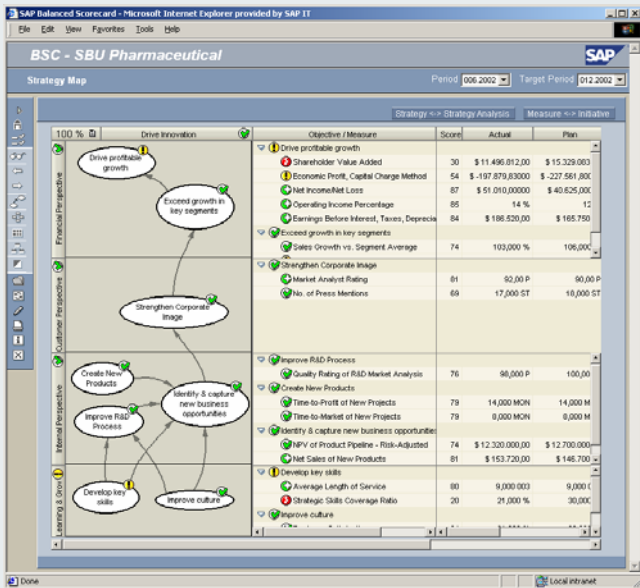
Business challenge: Strategy Execution

Functionality

- Balanced Scorecard
- Top-down target setting

Business benefits

- Break-down of strategy into objectives, measures, targets and action plans.
- “Balanced” view of all success factors
- Integration of strategy execution into day-to-day business.
- Organizational alignment across business units.
- Sophisticated drill-down reporting provides background information.



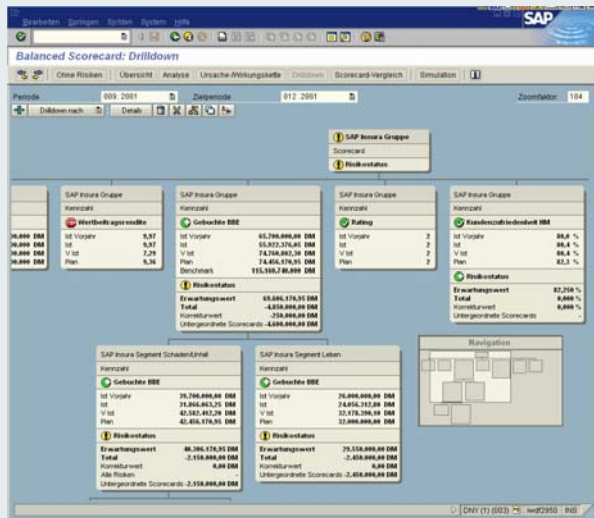
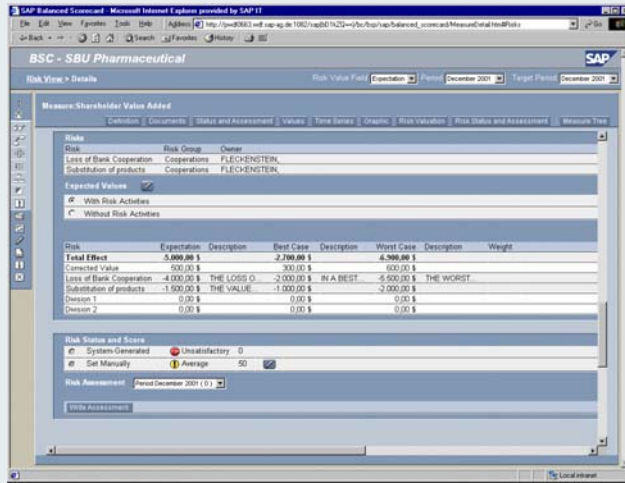
Business challenge: Transparency of Risks

Functionality

- Risk management

Business benefits

- Transparency of business risks
- Early warning indicators
- E-mail notification
- Audit proof
- Drilldown into risk situation of multiple business units
- Integration of
 - Risk management
 - Value-based management
 - Strategy execution



Web-Based Planning Application - Z_SHV_SCENARIO - Microsoft Internet Explorer provided by SAP IT

SHV Scenario Planning: Premium Growth

Value Driver Planning: Premium Growth | Operating Margin | Tax | Working & Fixed Capital Investment | Cost of Capital

Results: Balance Sheet / P & L | Cash Flow / Shareholder Value | Group View

Business Unit: ALPHA | Version: 1 - Realistic

Calculate | Save | Exit

| Lead column | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|----------|----------|----------|----------|----------|----------|
| Gross Written Premium (GWP) | -291.688 | -290.888 | -309.226 | -329.140 | -329.140 | -329.140 |
| Ceded Premiums (% of GWP) | 24,75 | 24,45 | 23,70 | 23,24 | 23,24 | 23,24 |
| Net Written Premiums (NWP) | 219.501 | 219.763 | 235.955 | 252.651 | 252.651 | 252.651 |
| Change in Unearned Premium Reserve (% of NWP) | -0,56 | -0,08 | 1,15 | 1,22 | 1,22 | 1,22 |
| Change in Unearned Premium Reserve (abs) | -1.233 | -183 | 2.706 | 3.078 | 3.078 | 3.078 |
| Net Earned Premium (NEP) | 220.735 | 219.945 | 233.249 | 249.574 | 249.574 | 249.574 |
| Premium Growth (% change of NEP) | 0,00 | -0,36 | 6,05 | 7,00 | 0,00 | 0,00 |

Business challenge: Long-term Planning & VBM

Functionality

- Long-term planning (e.g. 3-5 years)
- Planning of shareholder value scenarios
- Value driver trees including “what-if” simulations
- *EVA™ adjustments and EVA calculations

Value Driver Tree: Economic Profit

Overview

Details | Navigation | Display <=> Change | Calculate | Calculate for Whole Tree | Copy | Save Data | Print | 01.02.2002

110%

| Category | Actual | Simulath Value Fields(USD) |
|--------------------|---------------|----------------------------|
| Revenues | \$ K: 175.000 | |
| Optimistic | | 175.000.000 |
| Realistic | | 175.000.000 |
| Worst Case | | 115.000.000 |
| COGS | \$ K: 110.000 | |
| Optimistic | | 110.000.000 |
| Realistic | | 80.000.000 |
| Worst Case | | 1.300.000.000 |
| Operating Profit | \$ K: 45.000 | |
| Optimistic | | 45.000.000 |
| Realistic | | 61.000.000 |
| Worst Case | | 43.000.000 |
| Operating Expenses | \$ K: 20.000 | |
| Optimistic | | 20.000.000 |
| Realistic | | 24.000.000 |
| Worst Case | | 25.000.000 |
| Tax Rate | 40,0 % | |
| Optimistic | | 40,00 |
| Realistic | | 40,00 |
| Worst Case | | 40,00 |
| NOPAT | \$ K: 27.000 | |
| Optimistic | | 27.000.000 |
| Realistic | | 38.000.000 |
| Worst Case | | -25.000.000 |

Business benefits

- Flexibility within calculation methods
- Rapid planning using value drivers
- Results presented in graphical form
- “What-if” simulation and sensitivity analysis
- Integration with other planning applications
- Easy to create values for top-down planning

* EVA is a registered trademark of Stern Stewart

Business challenge: Mid-term Planning

Functionality

- Planning of balance sheet, income and cash flow statements
- Integration with other plans such as:
 - Sales plan
 - Cost center plan
 - Investment plan
 - Long-term plan
- Derivation of account values via business functions delivered by SAP

Business Benefits

- Reconciled mid-term plans
- High degree of integration with various planning applications

The screenshot displays the SAP Financial Statement Planning interface. It features a navigation bar with 'Revenues', 'Investment', 'Work_Capital', and 'Interest_Tax'. Below this, there are two main tables: 'Input' and 'Output'.

Input Table:

| Planning Item | Amount 2000 | Cum. balance 2000 | Amount 2001 | Cum. balance 2001 | Amount 2002 | Cum. balance 2002 | Amount 2003 | Cum. balance 2003 |
|------------------|---------------|-------------------|---------------|-------------------|----------------|-------------------|-------------|-------------------|
| Means of Payment | 3.000.000,00 | 3.000.000,00 | 500.000,00 | 3.500.000,00 | -3.500.000,00 | 0,00 | 0,00 | 0,00 |
| Net Receivables | 5.000.000,00 | 5.000.000,00 | 458.333,33 | 5.458.333,33 | -5.458.333,33 | 0,00 | 0,00 | 0,00 |
| Warehouse Stock | 10.000.000,00 | 10.000.000,00 | 916.666,67 | 10.916.666,67 | -10.916.666,67 | 0,00 | 0,00 | 0,00 |
| Trade Payables | 6.000.000,00 | 6.000.000,00 | 550.000,00 | 6.550.000,00 | -6.550.000,00 | 0,00 | 0,00 | 0,00 |
| Working Capital | 12.000.000,00 | 12.000.000,00 | -2.175.000,00 | 13.325.000,00 | -9.825.000,00 | 0,00 | 0,00 | 0,00 |

Output Table:

| Lead column | 2000 | 2001 | Lead column | 2000 | 2001 |
|------------------|---------------|---------------|------------------------|---------------|---------------|
| Lead | 20.000.000,00 | 20.000.000,00 | Equity | 20.000.000,00 | 20.000.000,00 |
| Buildings | 5.000.000,00 | 5.000.000,00 | Net Income | 8.000.000,00 | 10.000.000,00 |
| Machines | 1.980.000,00 | 9.000.000,00 | Accrued Liabilities | 1.000.000,00 | 2.000.000,00 |
| Financial Assets | 1.000.000,00 | 1.200.000,00 | Longterm Liabilities | 5.000.000,00 | 7.500.000,00 |
| Warehouse Stock | 10.000.000,00 | 10.916.666,67 | Trade Payables | 6.000.000,00 | 8.575.000,00 |
| Net Receivables | 5.000.000,00 | 5.458.333,33 | Miscellaneous Payables | 3.000.000,00 | 3.000.000,00 |
| Means of Payment | 3.000.000,00 | 3.500.000,00 | Deferred Income | 2.000.000,00 | 4.000.000,00 |

Business challenge: Operational Planning

Functionality

Cost Center Planning

Primary Costs Activity Input

Resource Consumption

Select Cost Center: [BrewerySEM001200] Refresh

| Cost Element | Stat. key figure | Unit of measure | 1. 2002 | 2. 2002 | 3. 2002 | 4. 2002 | 5. 2002 | 6. 2002 | 7. |
|--------------------|------------------------------|-----------------|----------|----------|----------|----------|----------|----------|----------|
| Wages and Salaries | Number of Employees: Manager | PC | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Wages and Salaries | Number of Employees: Senior | PC | 10,00 | 10,00 | 10,00 | 10,00 | 10,00 | 10,00 | 10,00 |
| Wages and Salaries | Number of Employees: Junior | PC | 15,00 | 15,00 | 15,00 | 15,00 | 15,00 | 15,00 | 15,00 |
| IT Costs | Number of PCs | PC | 20,00 | 20,00 | 20,00 | 20,00 | 20,00 | 20,00 | 20,00 |
| Barrels 5 l | Number of Barrels 5 l | PC | 5,000,00 | 5,000,00 | 5,000,00 | 5,000,00 | 5,000,00 | 5,000,00 | 5,000,00 |
| Barrels 10 l | Number of Barrels 10 l | PC | 2,000,00 | 2,000,00 | 2,000,00 | 2,000,00 | 2,000,00 | 2,000,00 | 2,000,00 |
| Barrels 50 l | Number of Barrels 50 l | PC | 1,000,00 | 1,000,00 | 1,000,00 | 1,000,00 | 1,000,00 | 1,000,00 | 1,000,00 |

Copy Forward (Values) Validation

Primary Costs

Select Cost Center: [BrewerySEM001200]

| Cost Element | 1. 2002 | 2. 2002 | 3. 2002 | 4. 2002 | 5. 2002 | 6. 2002 | 7. 2002 | 8. 2002 | 9. 2002 | 10. 2002 | 11. 2002 | 12. 2002 |
|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Barrels 5 l | 10,000,00 | 10,000,00 | 10,000,00 | 10,000,00 | 10,000,00 | 10,000,00 | 10,000,00 | 10,000,00 | 10,000,00 | 10,000,00 | 10,000,00 | 10,000,00 |
| Barrels 10 l | 14,000,00 | 14,000,00 | 14,000,00 | 14,000,00 | 14,000,00 | 14,000,00 | 14,000,00 | 14,000,00 | 14,000,00 | 14,000,00 | 14,000,00 | 14,000,00 |
| Barrels 50 l | 12,000,00 | 12,000,00 | 12,000,00 | 12,000,00 | 12,000,00 | 12,000,00 | 12,000,00 | 12,000,00 | 12,000,00 | 12,000,00 | 12,000,00 | 12,000,00 |
| IT Costs | 13,000,00 | 13,000,00 | 13,000,00 | 13,000,00 | 13,000,00 | 13,000,00 | 13,000,00 | 13,000,00 | 13,000,00 | 13,000,00 | 13,000,00 | 13,000,00 |
| Wages and Salaries | 117,000,00 | 117,000,00 | 117,000,00 | 117,000,00 | 117,000,00 | 117,000,00 | 117,000,00 | 117,000,00 | 117,000,00 | 117,000,00 | 117,000,00 | 117,000,00 |
| Total | 166,000,00 | 166,000,00 | 166,000,00 | 166,000,00 | 166,000,00 | 166,000,00 | 166,000,00 | 166,000,00 | 166,000,00 | 166,000,00 | 166,000,00 | 166,000,00 |

- Planning applications: sales, profitability, cost center, personnel cost, and investment planning
- Planning workbench for creation of user-defined planning applications

Business benefits

- Integrated financial, sales, and headcount plans
- Simple, personalized interface
- Web and MS Excel access
- Centralized definition and maintenance of planning models ensures consistency across the organization
- Support of top-down and bottom-up approach

SAP Sales Planning

Execute Sales Planning

Global Sales Targets 1

Sales Manager

Sales Employees

California

New England

Mid-Atlantic

Florida

California

Denver

Desktop

Graphic Arts

Business Software

Computer Factory

Pushing Quantity Planning Pushing Sales and Profit Planning Yearly Sales Following Year Quarterly Sales Following Year

Valuation with Agreed Price Valuation with Plan Price

Sales Distribution: [Brazil] [England] [France] [Korea] [Sales] [Germany]

Sales Organization: 07991000 USA East Product Category: DEMO%100 Hardware

Sales Office: 07991100 Mid-Atlantic Product Man. Group: DEMO%120 Monitors

Business Partner: DEMO%1000 Technology Markets Product Group: DEMO%121 Cathode Ray Tube

Fiscal year: 2002 04/2002

| | January | February | March | April | May | June |
|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Sales Quantity | 180 PC | 110 PC | 115 PC | 120 PC | 130 PC | 120 |
| Planned Price | 1,750 USD | 1,800 USD | 1,800 USD | 1,800 USD | 1,800 USD | 1,800 USD |
| Gross Revenue | 315,000 USD | 198,000 USD | 207,000 USD | 216,000 USD | 234,000 USD | 216,000 USD |
| Discount 1 | 0 USD | 0 USD | 0 USD | 0 USD | 0 USD | 0 USD |
| Discount 2 | 0 USD | 0 USD | 0 USD | 0 USD | 0 USD | 0 USD |
| Discount 3 | 0 USD | 0 USD | 0 USD | 0 USD | 0 USD | 0 USD |
| Net Revenue | 315,000 USD | 198,000 USD | 207,000 USD | 216,000 USD | 234,000 USD | 216,000 USD |

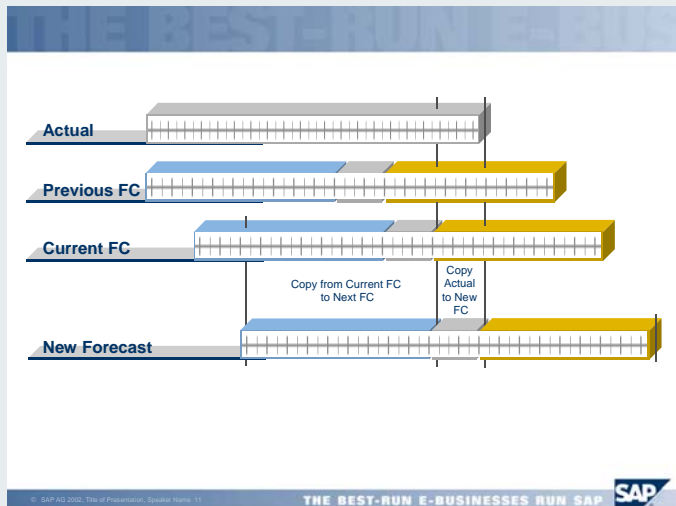
Business challenge: Flexible Plans – not fixed budgets

Functionality

- Rolling forecast

Business benefits

- Ability to adapt financial plans to constantly changing business environment
- Keeping track of changes



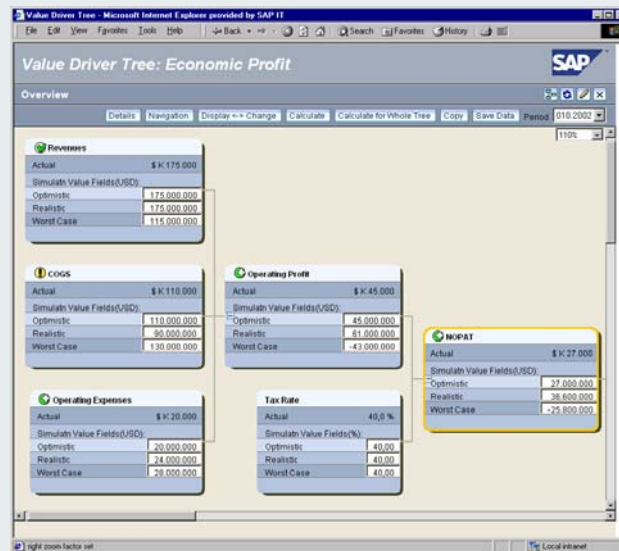
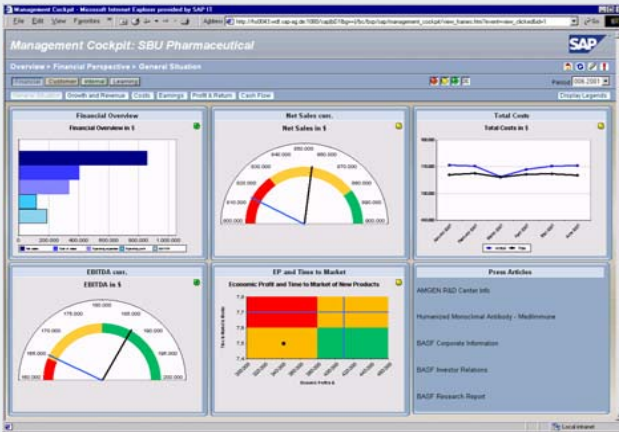
Business challenge: Business Performance Measurement

Functionality

- Management Cockpit
- Value Driver Tree including Simulation
- Benchmark Analysis

Business benefits

- Reporting for senior management
- Zero training effort
- Alert-driven view of key success factors
- Graphic-driven performance analysis
- Actual performance, trends, and forecasts
- Drilldown to detailed OLAP-based reports
- „What-if“ analysis within value driver tree
- Outside-in approach: target management based on external benchmarks



Business Analytics

Financial Analytics

Product Lifecycle Analytics

Customer Relationship Analytics

Supply Chain Analytics

Workforce Analytics



Analytical Applications for Process Optimization

Financial Analytics – What does it include?

Cost Center Planning

Primary Costs Activity Report

Resource Consumption

Select Cost Center [Dreher/02M0001200] Subtotal

| Cost Element | Stat. Key Figure | Unit of measure | 1. 2002 | 2. 2002 | 3. 2002 | 4. 2002 | 5. 2002 | 6. 2002 | 7. |
|--|------------------------|-----------------|----------|----------|----------|----------|----------|----------|----------|
| Wages and Salaries: Number of Employees: Manager | PC | | 1,00 | 1,00 | 5,00 | 1,00 | 1,00 | 1,00 | 1,00 |
| Wages and Salaries: Number of Employees: Senior | PC | | 10,00 | 10,00 | 10,00 | 10,00 | 10,00 | 10,00 | 10,00 |
| Wages and Salaries: Number of Employees: Junior | PC | | 15,00 | 15,00 | 15,00 | 15,00 | 15,00 | 15,00 | 15,00 |
| IT Costs | Number of PCs | | 20,00 | 20,00 | 20,00 | 20,00 | 20,00 | 20,00 | 20,00 |
| Barrels 5 l | Number of Barrels 5 l | PC | 5.000,00 | 5.000,00 | 5.000,00 | 5.000,00 | 5.000,00 | 5.000,00 | 5.000,00 |
| Barrels 10 l | Number of Barrels 10 l | PC | 2.000,00 | 2.000,00 | 2.000,00 | 2.000,00 | 2.000,00 | 2.000,00 | 2.000,00 |
| Barrels 50 l | Number of Barrels 50 l | PC | 1.000,00 | 1.000,00 | 1.000,00 | 1.000,00 | 1.000,00 | 1.000,00 | 1.000,00 |

Select Element (Value)

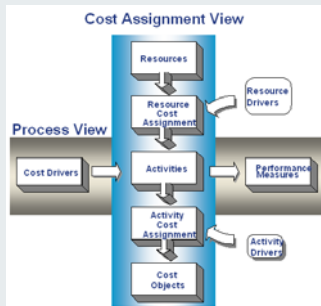
Primary Costs

Select Cost Center [Dreher/02M0001200]

| Cost Element | 1. 2002 | 2. 2002 | 3. 2002 | 4. 2002 | 5. 2002 | 6. 2002 | 7. 2002 | 8. 2002 | 9. 2002 | 10. 2002 | 11. 2002 | 12. 2002 |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Barrels 5 l | 10.000,00 | 10.000,00 | 10.000,00 | 10.000,00 | 10.000,00 | 10.000,00 | 10.000,00 | 10.000,00 | 10.000,00 | 10.000,00 | 10.000,00 | 10.000,00 |
| Barrels 10 l | 14.000,00 | 14.000,00 | 14.000,00 | 14.000,00 | 14.000,00 | 14.000,00 | 14.000,00 | 14.000,00 | 14.000,00 | 14.000,00 | 14.000,00 | 14.000,00 |
| Barrels 50 l | 12.000,00 | 12.000,00 | 12.000,00 | 12.000,00 | 12.000,00 | 12.000,00 | 12.000,00 | 12.000,00 | 12.000,00 | 12.000,00 | 12.000,00 | 12.000,00 |
| IT Costs | 13.000,00 | 13.000,00 | 13.000,00 | 13.000,00 | 13.000,00 | 13.000,00 | 13.000,00 | 13.000,00 | 13.000,00 | 13.000,00 | 13.000,00 | 13.000,00 |
| Wages and Salaries | 117.000,00 | 117.000,00 | 117.000,00 | 117.000,00 | 117.000,00 | 117.000,00 | 117.000,00 | 117.000,00 | 117.000,00 | 117.000,00 | 117.000,00 | 117.000,00 |
| Total | 166.000,00 | 166.000,00 | 166.000,00 | 166.000,00 | 166.000,00 | 166.000,00 | 166.000,00 | 166.000,00 | 166.000,00 | 166.000,00 | 166.000,00 | 166.000,00 |

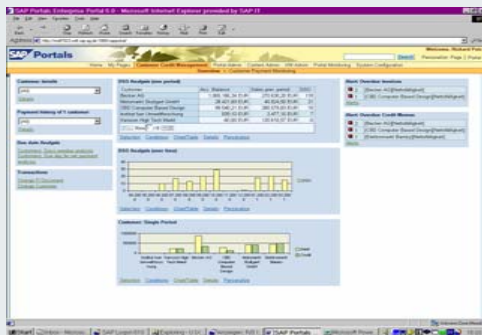
Financial planning and budgeting

- Financial planning and budgeting applications



Cost and profitability management

- Overhead cost assignments with ABC/M
- Product design cost estimate



Payment behavior analytics

- Customer credit management



Get to know your customer's behavior and value in every phase of the lifecycle

Acquisition phase

- **Market exploration**
- **Marketing Planning**
- **Campaign Management**

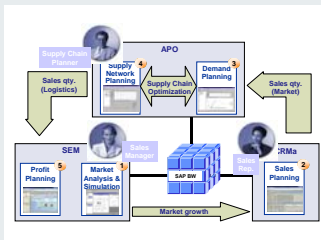
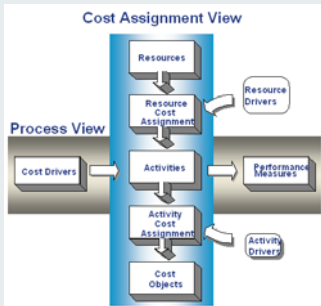
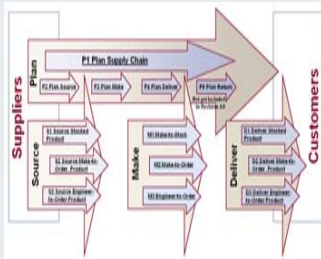
Growth phase

- **Channel Analytics**
- **Sales Planning**
- **Sales Performance Analytics**
- **Customer Behaviour Analytics**
- **Customer Value Analytics**

Retention phase

- **Service Analytics**
- **Churn Management**

Supply-Chain Analytics – What does it include?



Supply-chain analytics

Supply chain performance management

Supply chain cost analytics

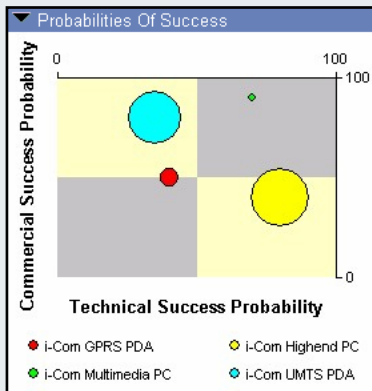
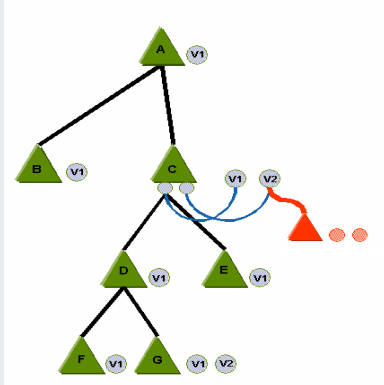
Integrated business planning

Product Life-Cycle Analytics

Product design cost estimation

Target costing

Product portfolio management





Setting objectives (MBO)

- Objectives at employee level
- Compensation-relevant setting of objectives

Operative planning and simulation

- Detailed planning of headcount/costs
- Employee and position level
- Analysis and simulation support

Reporting and analysis

- Ad hoc query and standard reporting
- Example: salary analysis via benchmarks
- Example: fluctuation analysis



- **Challenges and Approaches in Enterprise Management**
- **The Solution: mySAP Financials Strategic Enterprise Management**
- **Availability of Strategic Enterprise Management**
- **SEM Case Studies**

Financials

| | | | | | | |
|--|--|--|---|--|---|---------------------------------------|
| Strategic Enterprise Management | Stakeholder Relationship Management | Strategy Management | Performance Measurement | Strategic Planning & Simulation | Business Consolidation | |
| Business Analytics | Financial Analytics | Customer Relationship Analytics | Supply Chain Analytics | Human Resource Analytics | Product Lifecycle Analytics | Business Performance Analytics |
| Accounting | Financial Statements | General Ledger & Subledgers | Revenue & Cost Accounting | Order & Project Accounting | Product & Service Cost Calculation | |
| Financial Supply Chain Management | Order-to-cash | Purchase-to-pay | Bank Process & Relationship Management | Cash Management | | |
| Corporate Services | Real Estate Management | Travel Management | Corporate Finance Management | Incentive & Commission Management | | |
| Financials Enabling Solutions | Financial Portal Solutions | Exchange and Integration Infrastructure | Shared Services | | | |

Strategic Enterprise Management

| Stakeholder Relationship Management | Strategy Management | Performance Measurement | Strategic Planning & Simulation | Business Consolidation |
|--|--|---|--|--|
| <ul style="list-style-type: none"> ● Stakeholder Administration (C13, C23) ● Contact Management (C13, C23) ● Document Management (C13, C23) ● Stakeholder Self-Services (C13, C23) ● XBRL Exchange (C13, C23) ● Internal Stakeholder Reporting (C13, C23) ● Information Collection from Internet (C13, C23) | <ul style="list-style-type: none"> ● Strategy Execution (C13, C23) ● Balanced Scorecard (C13, C23) ● Strategy Templates (C13, C23) ● Strategic Initiatives (C13, C23) ● Value Driver Analysis (C13, C23) ● Support for Management by Objectives (C13, C23) ● Value-based Management (C13, C23) ● Business Risk Management (C13, C23) | <ul style="list-style-type: none"> ● Measure & KPI Administration (C13, C23) ● Content for Measures & KPIs (C13, C23) ● Measure Tree Analysis (C13, C23) ● Management Cockpit (C13, C23) ● Benchmark Integration & Analysis (C13, C23) | <ul style="list-style-type: none"> ▶ Portfolio Planning (C13, C23) ● Scenario Modeling & Dynamic Simulation (C13, C23) ● Value-based Planning (C13, C23) ● Financial Statement Planning (C13, C23) ● Integration of Operational & Strategic Planning (C13, C23) ● Supply Chain Network Design (C8) | <ul style="list-style-type: none"> ● Legal & Management Consolidation (C13, C23) ● GAAP & Value Adjustments (C13, C23) ● Currency Translation (C13, C23) ● Inter-unit & Profit Elimination (C13, C23) ● Allocation (C13, C23) ● Consolidation of Investments (C13, C23) ● Restatements & Simulation (C13, C23) ● Organisational Changes (C13, C23) ▶ Corporate Registry (C13, C23) ▶ XBRL Framework (C13, C23) |

● SAP Component Available
 ▶ SAP Component Available with Future Releases
 © Future Focus

● Partner Product Available
 ▶ Partner Product Available with Future Releases
 ● Collaborative Business Map Available

Sxx SAP Component
 Pxx Partner Product

For more information about these products, please see the tables at the end of this presentation.

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Business Analytics

| Financial Analytics | Customer Relationship Analytics | Supply Chain Analytics | Human Resource Analytics | Product Lifecycle Analytics | Business Performance Analytics |
|---|---|--|--|---|--|
| <ul style="list-style-type: none"> ● Payment Behavior Analytics (C13, C23) ▶ Credit Risk Analytics ▶ Liquidity & Cash Flow Analytics (C13, C23) ● Financial Portfolio & Market Risk Analytics | <ul style="list-style-type: none"> ● Customer Value Analytics (C10, C17, C23) ● Customer Behaviour Modeling (C10, C17, C23) ● Marketing Analytics (C10, C17, C23) ● Sales Analytics (C10, C17, C23) ● Service Analytics (C10, C17, C23) ● Channel Analytics (C10, C17, C23) | <ul style="list-style-type: none"> ▶ Supply Chain Cost Analytics (C13, C23, C8) ▶ Supply Chain Event Management (C8) ● Demand Planning (C11, C8) ● Supply Network Planning (C11, C8) | <ul style="list-style-type: none"> ● Headcount Planning & Simulation (C14, C24, C3) ● Workforce Analytics (C14, C24, C3) ● HR Benchmarking (C14, C24, C3) | <ul style="list-style-type: none"> ▶ Product Portfolio Management (C12, C6) ▶ Product Lifecycle Profitability Management (C12, C6) ▶ Product Design Optimization (C12, C6) ▶ Service & Warranty Profitability Management (C12, C6) ● Quality Cost Management (C12, C6) ▶ Cost of Change Analysis (C12, C6) ● Asset Life Cycle Management (C12, C6) | <ul style="list-style-type: none"> ● Cost & Profitability Management (C13, C23) ● Working Capital Management (C13, C23) ● Fixed Asset Management (C13, C23) ● Planning, Budgeting & Forecasting (C13, C23) ● Supply Chain Performance Management (C13, C23) ● Employee Performance Management (C13, C23) |

● SAP Component Available
 ▶ SAP Component Available with Future Releases
 ○ Future Focus

● Partner Product Available
 ▶ Partner Product Available with Future Releases
 ○ Collaborative Business Map Available

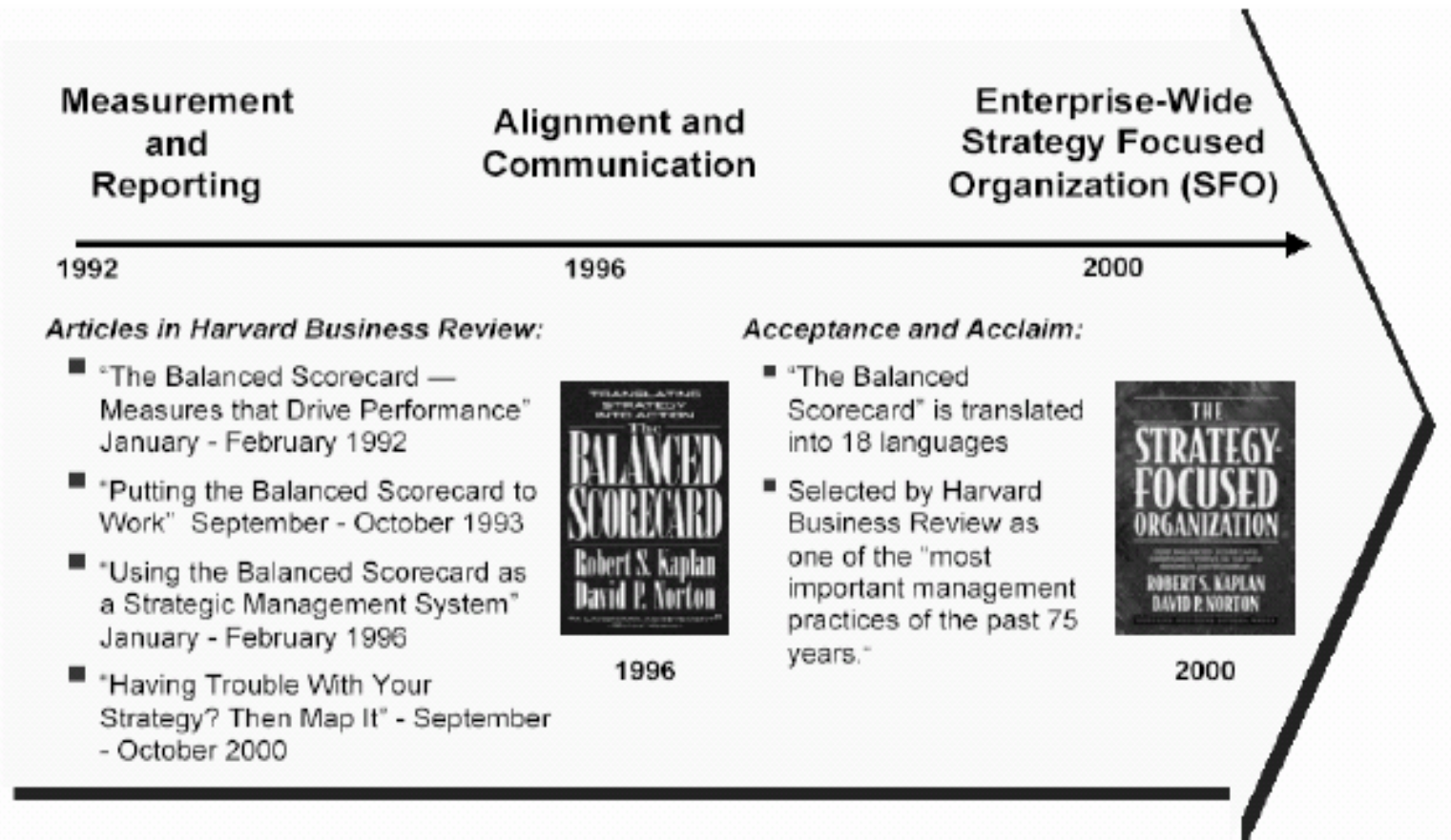
Sxx SAP Component
 Pxx Partner Product

For more information about these products, please see the tables at the end of this presentation.

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 © SAP AG 2002



- **Challenges and Approaches in Enterprise Management**
- **The Solution: mySAP Financials Strategy and Enterprise Management**
- **Availability of Strategy and Enterprise Management**
- **SEM Case Studies**



The Five Principles of Strategy-Focused Organization



- 1. Execution of corporate strategy**
- 2. Management Credibility**
- 3. Quality of corporate strategy**
- 4. Innovation**
- 5. Ability to attract and retain talented people**
- 6. Market share**
- 7. Management expertise**
- 8. Alignment of compensation with shareholders interests**
- 9. Research leadership**
- 10. Quality of major business processes**

*35% of valuation
decision is based on
non-financial data*

출처 : J.Low and T.Siesfield, Measures That Matter9Boston : Ernst & Y oung 1998)

Measure Builder and Measure Catalog

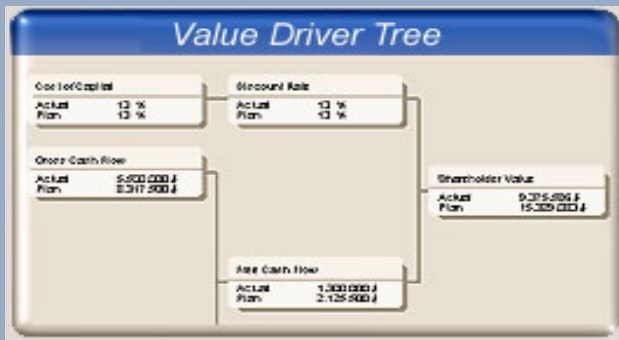
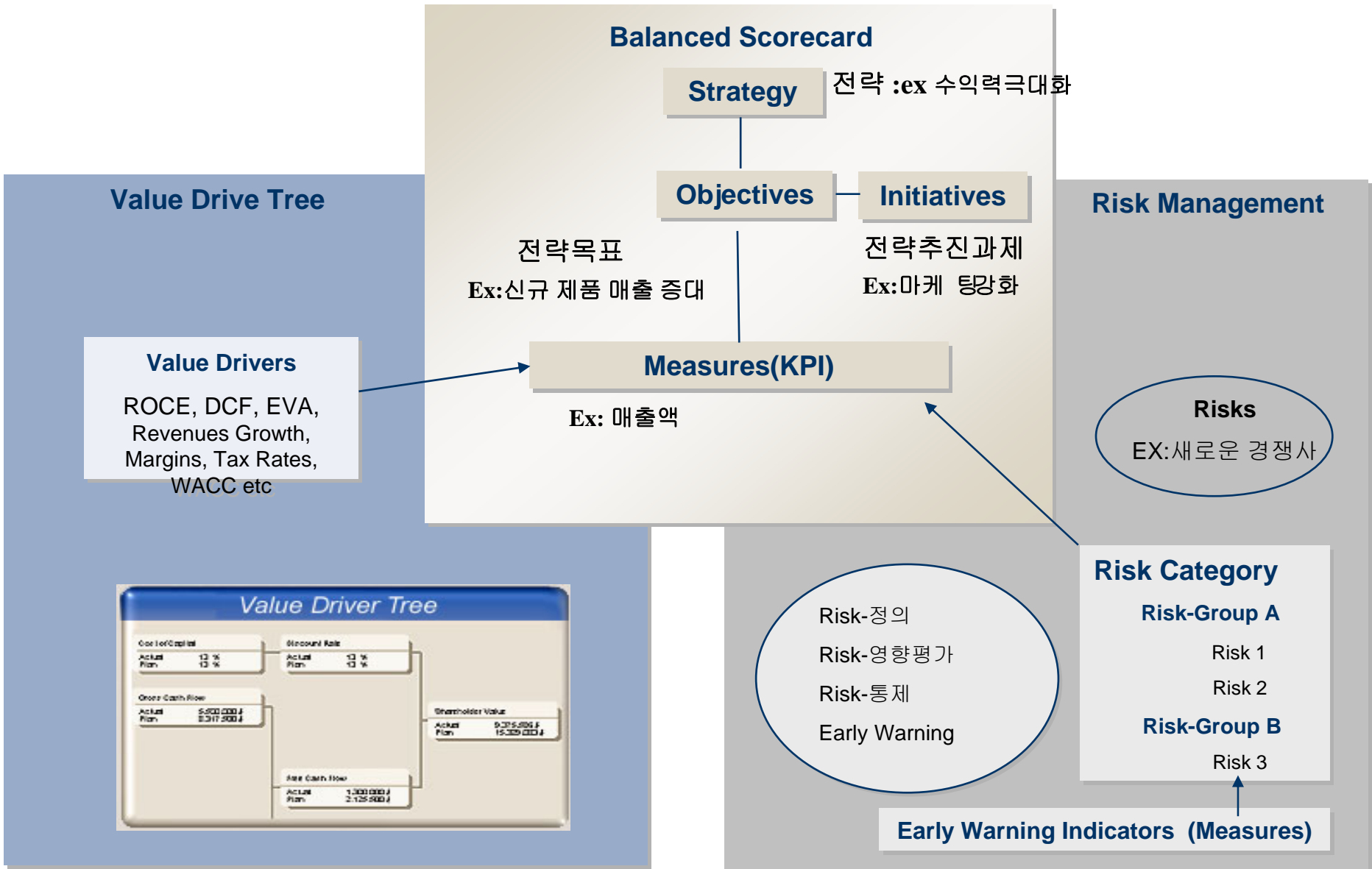
The screenshot displays the SAP Measure Builder interface for the 'ROCE' measure. The window title is 'Display measure 'ROCE''. The interface includes a menu bar (Measure, Utilities, Environment, System, Help), a toolbar, and a navigation pane on the left showing a tree structure of measure catalogs. The main area is divided into several sections:

- Name:** ROCE
- Description:** Return on Capital Employed
- Formula - Name:** $ROCE = NOPAT / Capital Employed$
- Measure : ROCE:** ROCE is a measure on how well capital (adjusted to exclude nonoperating assets) is used to generate operating profit. The Return On Capital Employed is equal to the Net Operating Profit After Tax (NOPAT) divided by Capital Employed for the same period as for calculating NOPAT. Two ratios may be combined to give the ROCE ratio: The first one is NOPAT divided by Net Sales, which indicates the operating profit margin achieved by a company.
- Operand : NOPAT:** To simplify the calculation of the Net Operating Profit After Tax in the context of EP calculation, you can use the operating profit and multiply it by (1-tax rate). In general, there are two additional, equivalent methods for the calculation of the NOPAT: The "operational" or "direct method" starts with the sales revenues from the company's operations, less the operational expenses and taxes. - Only the payable tax expenses on profit are taken into account. This corresponds to the tax expense on profit.

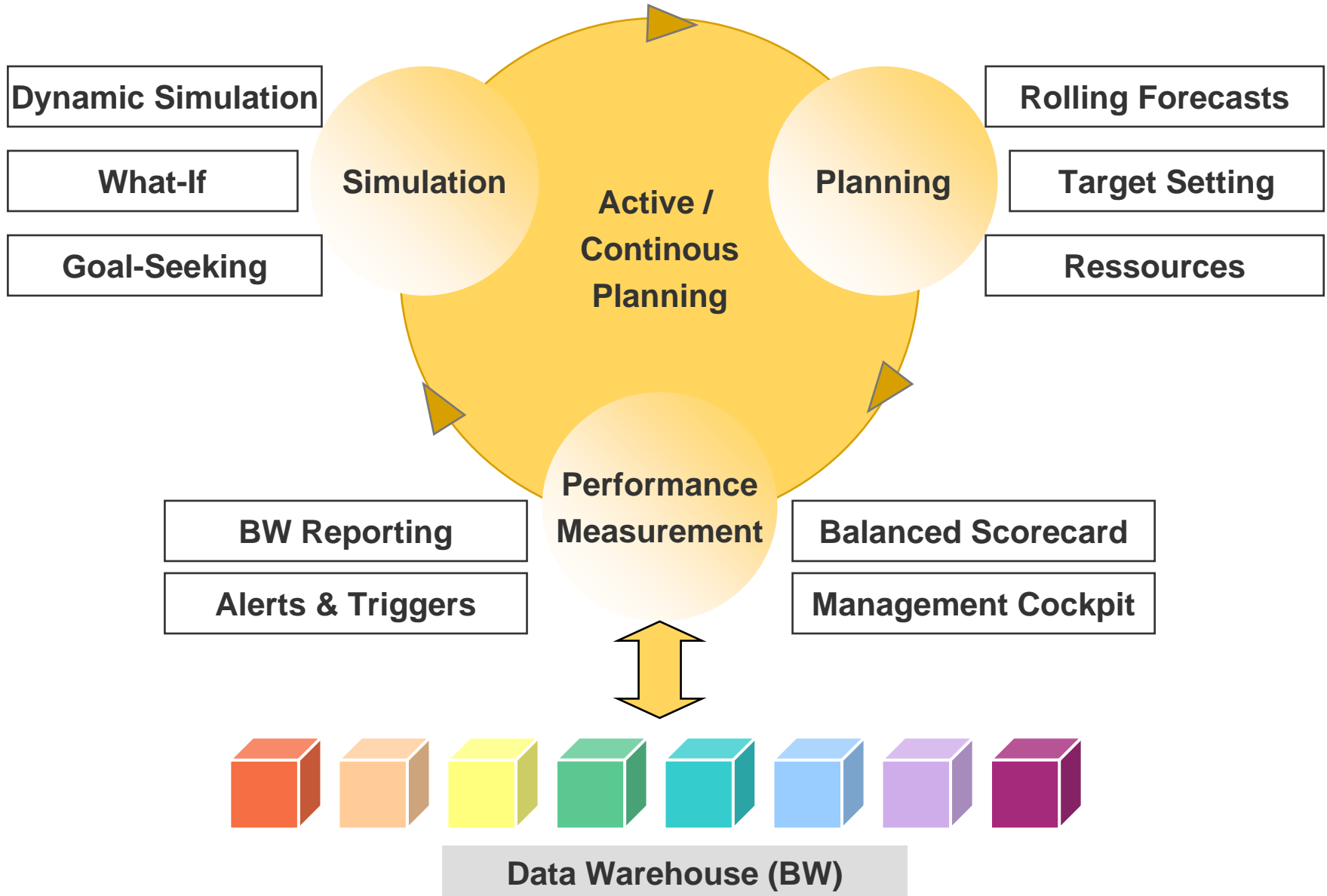
Callouts in the image point to the formula, the measure definition text, and the operand definition text.



전략관리 : BSC 와 Risk 관계는



사업계획 및 시뮬레이션 : Closed Loop Process



System Dynamics

System Thinking

+

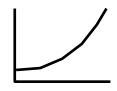
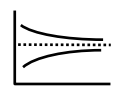

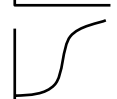
Computer Simulation

Structure(구조)

- ✓ **Cause and Effect**
- ✓ **Feedback**
- ✓ **Stock, Flow, Delay**

Time

Behavior(행태)

-  **Exponential Growth**
-  **Goal-Seeking**
-  **Oscillations**
-  **S-Shaped**

✓ **Modeling**

- 이해하기 쉽고 현재의 구조를 정확히 반영
- 상호간의 인과관계 및 Feedback 구조 반영

✓ **Simulation**

- 시간의 경과에 따른 구조의 행태 분석
- 발생된 문제의 해결 포인트 파악

Worldwide Business Intelligence Tools Revenue by Segment, 1999–2001 (\$M)

| | 1999 | 2000 | 2001 | 2001 Share (%) | 2000–2001 Growth (%) |
|-------------------------------|----------------|----------------|----------------|----------------|----------------------|
| End-user query and reporting | 1,367.6 | 1,723.9 | 1,779.5 | 46.6 | 3.2 |
| Online analytical processing | 1,005.6 | 1,214.7 | 1,201.1 | 31.5 | -1.2 |
| Data mining | 341.3 | 455.2 | 449.5 | 11.8 | -1.2 |
| Packaged data mart/warehouse | 163.0 | 213.0 | 304.1 | 8.0 | 42.8 |
| Executive information systems | 143.9 | 127.7 | 82.7 | 2.2 | -35.2 |
| Total | 3,021.5 | 3,734.5 | 3,817.0 | 100.0 | 2.2 |

Source: IDC, 2002

Worldwide Business Intelligence Tools Revenue by Vendor, 1999–2001 (\$M)

| | 1999 | 2000 | 2001 | 2001 Share (%) | 2000–2001 Growth (%) |
|-----------------------|-------|-------|-------|----------------|----------------------|
| Cognos Inc. | 236.0 | 339.8 | 362.5 | 9.5 | 6.7 |
| SAS Institute | 270.8 | 359.2 | 353.1 | 9.3 | -1.7 |
| Business Objects S.A. | 201.5 | 294.0 | 343.0 | 9.0 | 16.7 |
| IBM | 217.0 | 270.0 | 201.0 | 5.3 | -25.6 |
| Hyperion Solutions | 150.7 | 196.0 | 180.0 | 4.7 | -8.2 |
| Microsoft Corp. | 83.5 | 151.0 | 177.8 | 4.7 | 17.7 |
| SAP AG | 59.0 | 86.0 | 170.0 | 4.5 | 97.7 |
| Oracle Corp. | 230.6 | 180.4 | 166.1 | 4.4 | -8.0 |
| Crystal Decisions | 113.2 | 118.5 | 153.1 | 4.0 | 29.2 |
| MicroStrategy | 109.9 | 145.2 | 120.5 | 3.2 | -17.0 |
| Brio Technology | 106.0 | 128.2 | 115.1 | 3.0 | -10.2 |

Source: IDC, 2002

| 과거의 BI | 현재의 BI | 미래의 BI |
|---|--|--|
| <ul style="list-style-type: none"> ▪ 주로 DW(Data Infra)를 구축하는 IT적인 측면 강조 | <ul style="list-style-type: none"> ▪ 구축된 Data Infra를 활용하는 BI application 강조 | <ul style="list-style-type: none"> ▪ 모든 BI application 내에 Forecasting, planning, simulation 등 기능 탑재. ▪ 전사적인 통합 BI 강조 ▪ Operational system에 auto-feed back |
| <ul style="list-style-type: none"> ▪ ETL, DW, OLAP, Reporting, data mining ▪ 필요한 BI Application은 자체적으로 BI라 하지 않고 구축(ex. 전력수요예측) | <ul style="list-style-type: none"> ▪ 분석CRM, ABC, BSC, CPM, 각 부문 별 Risk Management, Credit Scoring, Fraud Detection ▪ 표준화된 tool, solution | <ul style="list-style-type: none"> ▪ SCI (Supply Chain Intelligence) ▪ Basel II ▪ 전사 통합BI – CRM/ABC/BSC/FMS/Risk/ Credit Scoring |