Budgeting and Planning made easy

How technology changes the game
BOARD EXECUTIVE OVERVIEW

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BOARD executive overview

BI and CPM all in one

BOARD unifies Business Intelligence and Performance Management in a single integrated environment, providing a seamless solution for the support, control and management of core processes such as:

- Reporting
- Analysis and Simulation
- Scorecarding and Dashboarding
- Budgeting and Forecasting
- Profitability Modeling and Optimization
- Strategy Management

By integrating Business Intelligence and Corporate Performance Management in a single product, BOARD helps companies manage and control the entire decision-making process: from data collection to information analysis; from goal-setting to decision-making; from operational execution to results monitoring.

BOARD BI and CPM all in one
The toolkit approach

Thanks to its innovative toolkit approach, BOARD makes it possible to create customized Business Intelligence and Corporate Performance Management solutions without the need for any programming. From simple reports to the most sophisticated performance management applications, any analysis can be easily built using the drag and drop function and the configuration of objects that are automatically synchronized with the data. This unique capability allows application administrators to efficiently build and maintain applications, with a Time to Solution and Total Cost of Ownership unattainable by traditional BI and CPM solutions.

User self-service

BOARD enables end users to create personalized reports and analytical queries, freeing up IT staff to focus on tasks that are more critical. An innovative user environment that combines search based data discovery, personal dashboards and drag and drop capability makes access to the right information easier, faster and more effective for everyone. The integrated search functionality empowers users to easily explore data, metadata and applications and to use the results as navigation drivers for further explorations. Once identified, the right information in the drag and drop environment enable users to immediately attain personalized analyses and reports. Finally, the pinBOARD enables users to save their findings and create their own personal analysis environments.

Modern technological standards

From a technological standpoint, BOARD is one of the most innovative solutions on the BI and CPM market, characterized by a unique combination of strengths:

- Hybrid In-Memory (HBMP)
- Integrated Search
- Multilevel Workflow
- Data Federation
- Advanced MS Office Integration

International recognition

BOARD quality has been widely recognized by customers, partners, and IT analysts.

- Included as Visionary in Gartner Magic Quadrant for Corporate Performance Management Suites 2014
- Included in Gartner Magic Quadrant for Business Intelligence Platforms 2016
- Voted “Best Performance Management Product for Business Benefits” in The BI Survey 12 (the world’s largest BI & CPM users inquiry)
- Best CPM product for Overall Customer Satisfaction in the Gartner research “User Survey Analysis: Customers Rate Their CPM Vendors, 2012”
- Winner of the Microsoft Swiss Innovation Award
- Chosen by over 3000 organizations worldwide
Multi-dimensional planning at a glance

‘Planning’ comes from a Latin word meaning ‘flat’: the word essentially indicates the capability to translate and represent a complex and multi-dimensional reality into a simplified, 2-dimensional schema.

Today’s technology has changed the game.
Planning has moved from the typical Excel-like 2-dimensional representation of reality to a multi-dimensional vision, which enables a deeper understanding and a better control of the events.

The key differences between flat and multi-dimensional planning model are below:

### Multi-dimensional and hierarchical organization of data

All the information (cubes) that are managed can be:

- analyzed from different perspectives (dimensions) to obtain a multi-dimensional view of data (e.g. sales by channel, area, distributor, POS) as well as identifying and analyzing any sub-set (e.g. sales by channel X, of product Y, for area Z, at time W)
- navigated from the highest level of aggregation, to the lowest level of details (e.g. Total Sales > Sales by division > Sales by Product Lines > Sales by Single Item)

### Logical data-entry

When used in the context of multi-dimensional planning systems, the word logical data-entry indicates the capability to automatically update data across dimensions and hierarchies (as described above).

In practice, users enter numeric data at any aggregation level (i.e. Sales by Product Lines) and the changes are automatically allocated up to the broadest outline (Total Sales) and down to lowest level of detail (item code), across all the correlated dimensions (i.e. once a user updates Sales by Product Lines, the changes will also be distributed across geographic areas, channels, customers etc.). In a company where different people contribute to drawing up the budgets and forecasts this capability is crucial because it allows several individuals to work on the same process according to their specific role in the business (i.e. the Sales Manager can make conjectures about the total sales by Channel while the Marketing Director might choose to enter data by Product Line) and data consistency is granted at all times, without having to run batch processes, allocation procedures or consolidating the variations brought about by one or the other. Furthermore, logical data-entry brings goal-seeking and what-if analysis to a different level, allowing multi-dimensional simulations, where the impact of future events can be easily evaluated from different business perspectives.

### Example of logical data entry

<table>
<thead>
<tr>
<th>Gross Sales</th>
<th>Q4/12</th>
<th>Q3/12</th>
<th>Q2/12</th>
<th>Q1/12</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>17,962,456,570</td>
<td>17,962,456,570</td>
<td>17,962,456,570</td>
<td>17,962,456,570</td>
<td>73,892,951,770</td>
</tr>
<tr>
<td>Europe</td>
<td>1,447,366,233</td>
<td>1,447,366,233</td>
<td>1,447,366,233</td>
<td>1,447,366,233</td>
<td>5,785,464,931</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>3,067,321,706</td>
<td>3,067,321,706</td>
<td>3,067,321,706</td>
<td>3,067,321,706</td>
<td>12,268,837,086</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>22,477,139,503</td>
<td>22,477,139,503</td>
<td>22,477,139,503</td>
<td>22,477,139,503</td>
<td>89,317,763,997</td>
</tr>
</tbody>
</table>

**Example of logical data entry**

1. Rolled-up in the US total
2. Split down into the Californian cities, based on underlying value
With BOARD, everything that an enterprise needs to manage corporate planning processes is available in a single and integrated framework.

Thanks to its integrated BI and CPM environment, BOARD has the following advantages:

- supports in a single environment short term (daily, weekly, monthly time horizon) sales and operational planning (supply chain planning, open to buy, demand planning etc.), middle term (quarterly, yearly time horizon) financial planning (OPEX, CAPEX, P&L, Balance sheet), long term (3-5 years horizon) strategic/financial planning (initiative management, merger and acquisition, etc.)
- allows organizations to unify S&OP, OPEX and CAPEX budgeting processes with financial and strategic planning, seamlessly linking performance to strategic vision
- provides a single, accurate, corporate view of key information, ensuring the consistency and relevance of plans and improving predictability
- offers greater control and provides users with an insight that they can use throughout the budgeting cycle, while dramatically reducing the time required to complete the process
- supports the simulation and testing of complex business scenarios and enable users to model financial outcomes by varying the business driver assumptions - leveraging historical data or previous forecasts as a baseline
- makes it possible to integrate the planning process with profitability analysis, strategy management and financial consolidation
- enables effortless data integration from heterogeneous data sources

A typical BOARD application model in the BP&F area is shown below:
BOARD’s key advantages in BP&F

Single and integrated architecture for BI and CPM

BOARD is the only product on the market to offer a unified architecture for Business Intelligence and Corporate Performance Management. Reporting, dashboarding and analysis functionalities, and planning, consolidation and simulation capabilities are delivered from a shared data repository with a single logical view of the data model (metadata layer), a single security, a single interface, and a single administration and development environment. The result is a platform in which any changes to the data, data-model, security profiles or business rules is immediately propagated to every Business Intelligence and Performance Management application, offering great ease of use, unmatched time to solution and a single version of the truth across the entire organization.

**Single authoring environment**
- Single UI
- Single programming-free development environment
- Common content delivery across multiple clients

**Single security, administration and infrastructure**
- Common security definition for BI and CPM functions
- Single administration and installation
- Single business rules environment

**Unified Metadata**
- Single logical view of the data model for BI and CPM

Business benefits of BI and CPM integration:

**Shared environment for historical, actual and forecast data**

The coexistence of planned and historical data makes it possible to:

- Effortlessly produce budget/variance analysis
- Create immediate time comparisons and use them for planning and reporting through a set of time-based functions (previous year, yearly moving total, yearly moving average, previous period, period off-set, etc.)
- Easily create ad-hoc reports based on forecast and budgeting data
- Provide users with ad-hoc insights into planning data

**Easy representation of planning data and processes**

BI functionalities make it easy to effectively represent planning cycle statuses and objective achievements through dashboards and control panels.

**Native support for management and statutory reporting.**

- Rules (Multi-dimensional calculation, selections, conditional branching, etc.)
- “Roll-up entities” for charts of accounts such as P&L statements, which often contain ragged hierarchies. The basic idea is that a single entity contains its own internal hierarchy, which defines the aggregations using rules. These roll-ups contain automatically defined summation rules. The reports display roll-up entities with indentions to indicate the hierarchy levels
- Formatting options specifically for the creation of management reporting
- Booklet creation through the Word add-in
Integrated workflow management

BOARD provides an extensible workflow management, which natively includes conditional alerting and mailing, cell locking and triggered events, all driven through data audit and validation processes. Planning steps can be easily created and correlated to approval cycles according to the logic behind the process. Advanced functionality makes it possible to broadcast personalized Excel and Word-based reports at scheduled times or when a specific event occurs. Unlike the reports from typical BI and CPM systems, BOARD analyses are completely interactive, and once received allow users to interact on-the-fly with the data, according to their security profiles. Integration with BI guarantees a strong capability to monitor and represent workflow cycles, through interactive control panels and dashboards. The workflow process can include reconciliation of actual and forecast data, or the results of two rounds of planning, such as top-down and bottom-up.

Example of a workflow control panel

Versioning

BOARD enables the generation of unlimited plan versions and scenarios providing full support to rolling forecast and continuous planning. Thanks to BOARD’s DUAL Engine (which supports both MOLAP and ROLAP cube modeling), audited versions can be pushed back and integrated onto an ad-hoc structure of the company’s ERP System for prompt and full integration with the business cycle.
Unmatched data entry capabilities

As illustrated in the introductory chapter "Multidimensional Planning at a Glance", logical data entry is a key success factor in modern planning systems. BOARD's logical data-entry combines a unique set of characteristics:

**Concurrency**: The BOARD engine is optimized to enable simultaneous data entry by a large number of users without affecting system performances and data reliability.

**Validation**: Data entry can be easily controlled by defining a set of validation rules for any input value (i.e. minimum price for a product).

**Role based security**: The data visualized and/or enabled for data entry vary accordingly to the role of the users.

**Off-line or real time**: BOARD's Excel add-in allows users to work without being connected to BOARD and to synchronize data automatically when they first reconnect.

**Handling of calculated fields**: A special function called "reverse algorithm" extends the capability to propagate changes across dimensions and hierarchies to the calculated fields (i.e. a change in a percentage value will be automatically reflected in the quantities from which the percentage has been generated).

**Cells freezing**: BOARD allows the users to freeze the value of one or more cells, including subtotals or totals, and then distribute the data changes on non-locked cells only.

**ERP database write-back**: Thanks to its relational engine, BOARD can automatically write back the outcomes of any budget/data-entry cycle directly into the ERP database, effectively integrating transactional and planning systems.

BOARD technology guarantees data validity and consistency, without the need to run batch processes for allocating and consolidating the changes made by each individual user.

### Calculated fields: how the reverse algorithm works

The first column (a) contains the Budget Quantity and has data entry enabled (yellow column) to allow users to enter budget values.

The second column (b), Last Year Actual Sales, contains the Sales Quantity of last year: a reference value that helps users define the budget. Data entry is not allowed (white column).

The third column (c) represents the percentage variance calculated with the columnar formula $c=(a-b)/b \times 100$.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sales Qty</td>
<td>Previous Year Sales Qty</td>
<td>Variance %</td>
</tr>
<tr>
<td>Jan-11</td>
<td>247,116</td>
<td>650,299</td>
<td>-62.00%</td>
</tr>
<tr>
<td>Feb-11</td>
<td>219,075</td>
<td>190,486</td>
<td>15.00%</td>
</tr>
<tr>
<td>Mar-11</td>
<td>207,855</td>
<td>179,814</td>
<td>15.06%</td>
</tr>
<tr>
<td>Apr-11</td>
<td>98,600</td>
<td>87,537</td>
<td>13.74%</td>
</tr>
<tr>
<td>May-11</td>
<td>162,959</td>
<td>134,043</td>
<td>21.57%</td>
</tr>
<tr>
<td>Jun-11</td>
<td>95,561</td>
<td>105,596</td>
<td>-9.68%</td>
</tr>
<tr>
<td>Jul-11</td>
<td>108,776</td>
<td>69,249</td>
<td>57.08%</td>
</tr>
<tr>
<td>Aug-11</td>
<td>56,238</td>
<td>35,265</td>
<td>60.46%</td>
</tr>
<tr>
<td>Sep-11</td>
<td>214,930</td>
<td>210,582</td>
<td>1.70%</td>
</tr>
<tr>
<td>Oct-11</td>
<td>190,614</td>
<td>217,338</td>
<td>-12.30%</td>
</tr>
<tr>
<td>Nov-11</td>
<td>142,180</td>
<td>120,000</td>
<td>18.03%</td>
</tr>
<tr>
<td>Dec-11</td>
<td>66,262</td>
<td>45,111</td>
<td>46.59%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,308,952</td>
<td>2,027,338</td>
<td>-33.77%</td>
</tr>
</tbody>
</table>

The Reverse Algorithm consists of the capability to support data entry on the column C, allowing the user to key-in a percentage of variance and letting the system derive the Budget Quantity corresponding to the given variance. The budget quantity value will be derived by the system applying the reverse formula $a=b \times (c+100)/100$.

By enabling the use of the same cells in input and output, BOARD overcomes one of the most evident limits of spreadsheets, where a cell can manage a value or a formula, not both.
Advanced mode data-entry

When simulation or planning processes require allocating data changes not just based on underlying values, but also on more sophisticated criteria, BOARD offers a full set of advanced data-entry capabilities. BOARD’s advanced mode data entry allows users to easily make a selection of ranges of cells (contiguous or not), and either block them (to subsequently enter data on other non-locked cells), or modify the selected cells using one of the several functions made available.

Data-entry functions

**Total:** Displays the total value of the selected cells. Changing the total automatically reallocates the difference between the prior value and the new value proportionally to the underlying cells

**Average:** Displays the average value of the selected cells. Changing the average automatically reallocates the difference between the prior value and the new average value proportionally to the underlying cells

**Constant:** Sets all selected cells to the given value

**Add:** Adds the input value to all selected cells

**Subtract:** Deducts the input value to all selected cells

**Multiply:** Multiplies all selected cells by the value given

**Divide:** Divides all selected cells values by the value given

**Linear growth:** Increases the values of the cells, while moving left to right, by a constant number

**Growth %:** Increases the values of cells, while moving left to right, by a fixed percentage

**Copy from block:** Copies the values of the cell range from another block into the selected cells

Data spreading modeler

BOARD makes it very simple to create and use spreading models. The users can input a value and spread it to a more detailed level, through allocation patterns that they can easily define, adjust and simulate (i.e. the total Business Plan revenue for the year can be phased in months, based on different calendarization hypothesis).
Drillability through different planning cycles

BOARD provides the ability to drill down from a pure financial planning process into an operative planning process, ensuring full alignment of the financial perspective with the economic one and vice-versa. Financial and operational budgets not only coexist but can also mutually interact: this interdependency ensures the integrity and coherence of the whole planning process from all perspectives (financial, sales, assets etc.).

Multi-dimensional allocation

The BOARD MOLAP engine allows users to utilize the natively available allocation criteria or to implement driver-based processes, supporting the creation of models that enable users to obtain financial outcomes by varying the business driver assumptions (and vice versa). For example, in a classic BOARD planning model, a change in the allocation of fixed costs can be immediately reflected in the calculation of EBIT (and in the related allocation to the various objects of calculation such as product, channel, customer) and vice versa.

Dynamic modeling and scenario management

Thanks to the A.T.O. (Advanced Transaction Object), BOARD offers advanced users the ability to directly modify the data model during the planning or forecasting process. A new business unit, a new product, a new market or a different investment can be inserted in a controlled way during a planning cycle, simulating the effect of a new scenario on the whole business model. From a functional standpoint this capability has proven to be extremely important and useful, not just for operational and financial planning, but also for initiative management and strategic planning.

Turnkey trends and forecast calculations

BOARD offers pre-built statistical models to calculate trends and forecasts. The trends calculation is based on a moving average model, while the forecasts, which take into account trends and seasonality, are determined based on three different statistical models: exponential smoothing and moving average, ARIMA or Winters. BOARD automatically selects the most appropriate depending on the historical data series available.

Time awareness

Unlike many competitors who need extensive programming to handle time, BOARD provides a full array of time-based out-of-the-box functions (previous year, previous periods, cycles, time cumulated value, period moving total, period moving average, period offset), making it easy to deploy on-the-fly historical analysis, comparison and data contextualization.
Extended information management at cell level

BOARD enables any type of file (e.g. Word, Excel, PowerPoint, PDF, RTF, image files) to be associated with an individual cell, in order to qualify the numeric or textual information contained within it.

A special type of cube, called a blob cube, enables each file to be treated like a piece of data, storing it and managing it in a multi-dimensional way. From a functional standpoint, it is easy to see the importance of blob cubes for managing information at single cell level, both in planning, budget and consolidation processes (e.g. sharing of comments regarding data, explanations, Excel attachments, Word documents etc.) and, more generally, in cases where associating an image or text to the data can make it easier to understand or use.

Comments, images and file attachments at cell level

BOARD enables images, text or any type of file (e.g. Word, Excel, PowerPoint, PDF, RTF) to be associated with an individual cell.

This function can be combined with the use of the tool-tip: in this case the information will be automatically displayed at the mouse-over on the green corner of the cell.

This ability to manage all information at the cell level proves to be extremely useful to enrich, explain and comment on the data used in any process of budgeting and planning, facilitating better collaboration among the people involved.

Multi-language support for international planning cycles

BOARD makes it possible to display the same occurrences in different languages according to the user’s log-on language.

For example, when reading an income statement, the item “income” will be displayed as “ricavi” for users who log on in Italian and as “ingresos” for users whose working language is Spanish.
Advanced Office integration

BOARD offers the ability to access multi-dimensional data directly from its MS Office add-in, providing users with the traditional OLAP analysis functions (drill-down, slice and dice, filtering, ad hoc query).

The BOARD Excel add-in provides a familiar environment for managing data collection processes and enables users to work both on-line and off-line.

The Word add-in allows users to easily merge multi-dimensional and dynamic data for the creation of “always updated” company statutory and management booklets.

The PowerPoint add-in allows users to meet advanced presentation needs and create slides including auto-updating BOARD charts, cockpits, bubble charts, and data views.

Excel add-in

The Excel Add-In makes it possible to perform:

- **Data Entry off-line**

while providing the key BOARD features, such as:

- **Drill-down**
- **Self-Service Analysis and Reporting**
- **Data-Entry on-line**

Thanks to the capability to enter data both on and off-line, the Excel add-in makes data collection processes more efficient: users can always work without being connected to BOARD and synchronize data automatically when they first reconnect.

All of this is delivered without affecting the integrity, consistency and traceability of data.

Power Point add-in: example of auto-updating presentation

Word add-in: example of auto-updating booklet
Effortless data integration and standardization

BOARD offers all of the features required for combining data from heterogeneous sources and provides the user with a unified view of the information.

- **Dual engine: ROLAP and MOLAP**
  In addition to providing a multi-dimensional integrated database, BOARD supports direct access to any relational database. Unlike other traditional CPM and BI software applications, BOARD's relational engine supports data write-back on any database, allowing the exploitation of all native simulation functions that have fuelled BOARD's international success. BOARD's dual engine allows customers to combine the typical user self-service queries, analysis and reporting capabilities of MOLAP with the ability to handle huge amounts of data via ROLAP.

- **Basic ETL**
  BOARD integrates all of the basic capabilities required to handle data cleansing and standardization processes, thus eliminating the need to use specific products for Extraction, Transformation and Loading (ETL). Thanks to BOARD's integrated ETL environment, validation and transformation rules can be defined and automatically applied during upload processing, making it simple to consolidate data from multiple data sources for use in your BI and CPM applications.

- **Integrated ODBO access to OLAP servers**
  Thanks to the OLE DB for OLAP (ODBO) integrated technology, BOARD provides customers with an industry standard method of accessing the most utilized multi-dimensional engines, such as Microsoft AS or Oracle EssBase.

- **BOARD connector for use with SAP**
  The BOARD Connector for SAP delivers high-speed access to SAP R/3, mySAP ERP or SAP BW, integrating SAP data into BOARD. Easily installable and configurable, BOARD SAP Connector allows mapping SAP data into BOARD databases, without writing any data extractions ABAP programs. BOARD Connector for SAP creates a direct communication channel between BOARD and SAP and eliminates the need for detailed knowledge of SAP internal tables and views.
Thanks to BOARD’s native All-in-One approach and to BOARD’s unique adaptability, you will cover all your BI & CPM needs with a single product, a single technology and a single data environment. BOARD will help you to reach a single vision of your performance in a simple and extremely effective manner. Information originating from various sources is integrated into a virtual data repository shared by the entire organization, thus providing business users with a customized but unitary vision. The native integration between the information base and applications ensures that changes made to applications are propagated to data, and vice versa. The end result is a full alignment of the Business Intelligence and Performance Management environment, which translates into a shared vision of corporate performances throughout the organization. By adopting BOARD, you will have the potential to implement any BI & CPM solution at any point in time without the need to buy and integrate any other product. Below are some of the solutions that have been implemented with BOARD across our clients.

<table>
<thead>
<tr>
<th>Finance and Management Accounting</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Top-Down/Bottom-Up Budgeting</td>
<td>Capacity Planning</td>
</tr>
<tr>
<td>P&amp;L, BS, Cash Flow Planning and Forecasting</td>
<td>Inventory Forecasting and Optimization</td>
</tr>
<tr>
<td>Statutory and Financial Consolidation</td>
<td>Materials Management</td>
</tr>
<tr>
<td>Intercompany Matching and Reconciliations</td>
<td>Procurement Analysis</td>
</tr>
<tr>
<td>Cost and Profitability Analysis</td>
<td>Production Forecast and Planning</td>
</tr>
<tr>
<td>Activity-Based Costing</td>
<td>Supplier Rating</td>
</tr>
<tr>
<td>Variance Analysis</td>
<td></td>
</tr>
<tr>
<td>Credit Management (DSO, Ageing, Customer Score)</td>
<td></td>
</tr>
<tr>
<td>Financial Reporting</td>
<td></td>
</tr>
<tr>
<td>Fast Closing</td>
<td></td>
</tr>
<tr>
<td>Compliance</td>
<td></td>
</tr>
<tr>
<td>Strategy Maps</td>
<td></td>
</tr>
<tr>
<td>Balanced Scorecards</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sales</th>
<th>SCM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Analysis (Customer, Area, Channel, Product, Line...)</td>
<td>Demand Planning</td>
</tr>
<tr>
<td>Rolling Top-Down and Bottom-Up Sales Budget and Forecasting</td>
<td>Cost to Serve</td>
</tr>
<tr>
<td>Products, Channels, Customers Profitability</td>
<td>Integrated Capacity Planning</td>
</tr>
<tr>
<td>Shops, Chains, Channel P&amp;L Projections</td>
<td>Daily &amp; Weekly Workload Planning</td>
</tr>
<tr>
<td>Variance Analysis (Price, Quantity, Mix)</td>
<td>Financial Insights Across the Supply Chain</td>
</tr>
<tr>
<td>Brand Performance</td>
<td>What-if and What-for Analysis to Forecast</td>
</tr>
<tr>
<td>Cross-Selling Analysis</td>
<td>Material and Production Line Needs</td>
</tr>
<tr>
<td>Loyalty Cards Management</td>
<td>Supply Chain Dashboard and KPIs</td>
</tr>
<tr>
<td>Loyalty and Retention Monitoring</td>
<td></td>
</tr>
<tr>
<td>Merchandise Intelligence</td>
<td></td>
</tr>
<tr>
<td>Markdowns and Promotions Optimization</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HR</th>
<th>Other areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR Performance Management</td>
<td>Service Level Management</td>
</tr>
<tr>
<td>HR Planning, Budgeting and Forecasting</td>
<td>Project Management</td>
</tr>
<tr>
<td>Employee Costs Monitoring</td>
<td>Post-Sales Management (Maintenance and Spare Parts Optimization)</td>
</tr>
<tr>
<td>Benefits and Incentive planning</td>
<td>Customer Service Level Analysis</td>
</tr>
<tr>
<td>Skills Mapping</td>
<td>IT Scorecards</td>
</tr>
<tr>
<td>HR dashboard and KPIs</td>
<td></td>
</tr>
</tbody>
</table>
PUMA

PUMA is one of the world’s leading sportlifestyle companies that designs and develops footwear, apparel and accessories. The PUMA Group owns the brands PUMA, Cobra Golf and Tretorn. The company, founded in 1948, distributes its products in more than 120 countries and employs more than 11,000 people worldwide. Puma is listed on German Stock Exchange (Deutsche Börse).

Number of users
500+ planners

Applications deployed
World Wide Integrated End-to-End Planning Solution, covering:
- Sales Plan
- Merchandising Plan, Conceptual Assortment Plan and Line Plan
- Forecast
- Rolling Forecast

Brief description of the solution

Business Challenges:
Before adopting BOARD, PUMA was running diverse functional plans, leading to a high complexity and economic inefficiencies. Lacking a holistic structured planning approach, PUMA was used to a reactive and execution-focused way of planning, where planning was exercised in functional silos, causing low commonality and inflated range sizes.

BOARD solution
The Integrated Planning Solution (IPS) developed with BOARD integrates multiple plans – from Merchandise Plans and Sales Plans to Demand Plans, Supply Plans and Rolling Forecasts – into one common system in order to ensure a holistic planning approach which effectively balances demand and supply. The solution embraces the whole planning process from merchandise & sales planning to diverse forecast steps to a rolling forecast and the return of order suggestions back to the operative systems.

Benefits
- Optimized Supply Chain: better availability, reduced stocks
- Integrated Margin Calculation
- Better control on Supply Chain profitability
- Improved forecast accuracy, granularity and transparency
- Lower system complexity and higher flexibility
- Openness to future integration of financial and strategic planning

Main data sources
SAP, Microsoft Dynamics, Oracle
US NAVY

The United States Navy (USN) is the naval warfare service branch of the United States Armed Forces and one of the seven uniformed services of the United States. It is larger than the next 13 largest navies combined in terms of battle fleet tonnage. The service has 317,054 personnel on active duty and 109,671 in the Navy Reserve. It operates 288 ships in active service and more than 3,700 aircraft.

Business Challenges:
In order to improve the precision of the Navy’s Military Personnel portion of the President’s Budget Submission to Congress, the Navy Financial Management leadership needed to revise their processes, methodologies and systems for preparing the Navy’s part of the President’s Budget submission.

The budgeting and long-range forecasting tasks were supported by spreadsheets and manual data manipulation processes that caused calculation errors, created major process inefficiencies and presented analytical challenges.

BOARD solution:
Centralized, integrated environment to manage the Bureau of the Military Personnel, Navy ($35 billion appropriation) Budget Process Lifecycle and to produce the J-book (Congressional Budget Book).

BOARD business analytics solution helped the Navy’s decision makers with consistent, accurate, and trusted information, allowing immediate insights into financial and operational performance, deeper analysis of trends and patterns, and clear foresight for planning and allocating resources.

Benefits:
• Re-pricing & what-if analysis to be done at any time with little effort
• Flexible decision support and planning model that can rapidly assimilate new data sources and accommodate any changes required by the Office of the Secretary of Defense (OSD)
• Improved accuracy and auditability of budget estimates and re-programming decisions
• Dramatic reduction of data administration and data maintenance efforts
• Audit readiness, by capturing source data and tracking changes
• Better quality of the data entering the analytical and modeling processes
• Increased analytical capabilities that enable more predictable and accurate results

Main data sources
Several legacy systems, including text feeds
The Acer Group is a family of three brands - Acer, Gateway, and Packard Bell. This unique multi-brand strategy allows each brand to offer a unique set of brand characteristics that targets different customer needs in the global PC market. Today, the Acer Group still strives to break the barriers between people and technology. It ranks No. 4 for total PC and No. 3 for notebooks shipments, and has a global workforce of 8,000 employees.

400+, 30 countries

European Sales Planning, Analysis and Simulation.

**Business Challenges:**

- Effectively manage a planning and controlling process characterized by a constant change in products and business lines
- Avoiding the management and continuous alignment of different applications requested for integrating sales analysis, planning, profitability optimization and simulation.
- Timely answer to the business requests of a multi-country and super-fast paced business environment

**BOARD solution:**

With BOARD, Acer Europe is able to unify the Planning and Business Intelligence processes of their European sales area, managing within a single tool Workflow, Data Entry, Simulation, Reporting, Dashboarding and Data Analysis. The BOARD applications allow Acer to plan and control the sales cycle, to optimize profitability, as well as performing detailed business simulations. The centralisation of information, workflow mechanism automation, data entry flexibility and a greater capability for change management that BOARD guarantees, improve not only efficiency, but also the effectiveness of their process as a whole.

**Benefits:**

- Capability to instantly deliver sales analysis and reporting based on simulation/planning processes
- Simulation by order line at part numbers/day/customer level
- Real time profitability calculation per BU and Customer (actual and planned)
- Sell-out vs. Sell-in marginality planning and simulation
- Logistic costs control and optimization

**Main data sources**

Data integrated from the existing business systems of 30 different countries
EMAAR

Emaar Properties PJSC is one of the world's largest property management companies by market capitalization. Listed on the Dubai Financial Market (DFM), Emaar is also part of the Dow Jones Arabia Titans Index. With six business segments and more than sixty active companies, Emaar has a presence in several markets spanning the Middle East, North Africa, Pan-Asia, Europe and North America.

400 users

Integrated Financial and Sales Operational Planning.
• Multicompany
• Multicurrency
• Multicountry

Business Challenges:
• Fragmented data from different systems to be consolidated, normalized and made consistent all over the organization
• Different business units to be consolidated in a single chart of accounts
• Capability to link S&OP with financial planning
• Need to ensure consistency, completeness, validity, timeliness and accuracy of data
• Possibility to manage multicurrency
• Ability to offer cross-company visibility and data consolidation

BOARD solution:
BOARD application allows each Business Unit to run its specific S&OP budgeting process and to create a P&L account that is consolidated in the group P&L projection through a world-wide multi-currency and multi-company process. This means that each business unit is involved in the same holistic planning process even if they can run the diverse budgeting phases in different moments and with their own timeline. The bottom-up budgeting cycle is complemented by a top-down rolling forecast process aimed at monitoring and anticipating key performance drivers.

Benefits:
• Ability to bridge the gap between financial planning and operational planning, linking high level plans with day-to-day operations and company profitability analysis, while delivering one shared, accepted output
• Extreme flexibility in managing scenarios and new initiatives, that allow the whole organization to stay nimble and adapt more quickly to market challenges
• Holistic and single version of the truth, running a very pervasive planning and budgeting process on a unique, validated and shared data repository
• Act based decisions on the fly, thanks to the capability to connect financial measures with sales and operational information and to run analysis on those planning data

Main data sources
Data integrated from the existing business systems, SQL
**GIGASET**

Gigaset AG, Munich, is a worldwide operating company in the telecommunication and accessories sector. The company is a leading global producer of cordless phones and Europe’s market leader in DECT phones. Internationally, the premium provider with 1,600 employees in more than 70 countries is ranked third place in its sector.

300+, 20 countries

Multi-country Sales and Margin planning solution.

**Business Challenges:**

Before implementing BOARD, Gigaset planning process was based on SAP BI IP and SAP APO, and reporting was based on SAP BW, all of which had continuously grown in complexity and scope over the years.

The aim was to remove these systems as BI tools as they were expensive and complex in terms of both maintenance and the support required and, in addition, users were requesting considerably faster performance.

**BOARD solution:**

**Financial/demand planning**

- Sales planning
- Reporting forecast
- Administration (life cycle management, planning monitor)
- Pricing, manufacturing costs, turnover and margin planning (forecast and budget)

**Sales/logistics reporting**

- Logistics and sales-related controlling

**Variant planning**

- Life cycle and pre-series planning for products

**Material management**

- Material stocks controlling
- Purchasing and consumption reports

Planning data is directly written back on SAP as a basis for the entire supply chain management (SCM) chain from procurement to production control.

**Benefits:**

- IT costs in the areas of reporting and planning alone have been reduced by more than 90% with the discontinuation of SAP BW, SAP APO DP and SAP BI IP
- The fragmented planning processes relating to volume planning, the rolling value forecast and annual budget planning were merged within a single tool and the processes simplified and harmonized.
- Displays and calculations that were previously unable to be effected with the SAP tools are now immediate with BOARD
- Business users have the full control of the application with minimal IT involvement

**Main data sources**

SAP, SQL
MITSUBISHI ELECTRIC

With $37 billion turnover and over 100,000 employees, Mitsubishi Electric is a world leader in the manufacture and sales of electric and electronic equipment used in Energy and Electric Systems, Industrial Automation, Information and Communication Systems, Electronic Devices, and Home Appliances.

Number of users
500+

Applications deployed
Integrated planning process including the following steps:
• Units quantity planning for fiscal year
• Units quantity definition for each month
• Price and Cost Management
• Sales Channel allocation
• Discounts Management
• Final Forecast/Budget and Reporting

Brief description of the solution
Having already implemented BOARD to provide integrated self service Business Intelligence in 5 European countries (UK, IR, FR, DE, ES) Mitsubishi’s LES Division, realized that they need to apply a similarly integrated, easy to use approach to Budgeting, Planning and Forecasting.

Previously a 3rd party tool was used to write the budget. Subsequently complicated and difficult to control spreadsheets were issued to each division. Divisional budgets would then be created, generating even more spreadsheets, before being loaded into the 3rd party software. The process was time-consuming, prone to error and could only be analyzed at an aggregated level (Cost or Profit Centre). The need for a solution which gave greater control, audit, accuracy and speed would provide immediate business benefits across the supply chain.

BOARD provides Mitsubishi Electric with a fully integrated, flexible, scalable and easy to use system which is reliable and synchronized daily with all relevant core business systems, such as SAP, CRM and other external data sources. This has enabled deep, cross business insight with rapid data integration.

BOARD has ensured that Mitsubishi’s planning process is accurate and timely and centered around existing business processes, utilizing BOARD’s in-built write-back and workflow functionality.

Main data sources
SAP, SQL DWH
GSK ITALY

GSK is the second largest pharmaceutical group in the world (3,300 employees in Italy).

Number of users

1,300 BI Users + 60 planning users

Applications deployed

• P&L Planning
• Sales Planning
• Sales Analysis and Reporting

Brief description of the solution

Sales and P&L Planning

From 3 to 5 times a year GSK starts a planning process aimed at preparing the next 48 month's P&L projection. The Marketing Team, with the support of the Business Controlling Team, plans sales. Then the Business Controlling Team determines the direct costs of product and the fixed costs, allocates them to the products and finally draw-up the P&L plan.

Monthly Profit & Loss by Product Closing, through the following phases:

• Retrieval of sales data from datawarehouse, with computation of cost of sales and other direct costs
• Retrieval of accounts balance (costs) from SAP. Input of period adjustments, cost allocation on products
• Management and Operational Reporting focused on the comparison between actual monthly P&L and P&L budget and forecast

GSK monthly closings must occur within the first 5 days of the following month, because they have an obligation to send the results to the HQs. Thanks to BOARD, they now need only one solution for managing the monthly closing process.

Consensus Forecast Process

The Marketing Team, supported by the Business Controlling Team, acquires the quantitative data of GSK's demand planning processes on a monthly basis. Those data are used to create a value and quantity forecast on a 48-month basis that includes a set of KPIs developed to compare the actual sales with the outcomes of the previous Consensus Forecast processes. The whole planning process is aimed at balancing and aligning Sales and Supply Chain needs.

Sales Reporting

Analysis and comparison of actual sales with the main plan or with revised plans, addressed to Product Managers and Controllers.

Undergoing project: Working Capital, Receivables and Payables Analysis

Main data sources

SAP, Oracle DWH
MAGNETI MARELLI

Magneti Marelli is an international Group committed to the design and production of hi-tech systems and components for the automotive sector. With more than 34,000 employees, 83 production units, 12 R&D Centers and 26 Application Centers, the Group has a presence in 18 countries and supplies all of the most important car makers in Europe, North and South America and Asia.

Number of users
10 Business Lines, 77 plants, 18 nations

Applications deployed
- Multicompany, Multicurrency, e Multicountry IT budget (60 million euros)
- IT spending forecast
- Simulation

The BOARD project in Magneti Marelli is related to the process of Budgeting and Forecasting of IT spending and involves 10 Business Lines, 77 plants and 18 countries all operating in local currency, with automatic conversion in group currency. The data is partly input manually from the country, partly taken from SAP and reallocated—reflecting an organizational model matrix in which the investments are partly made locally and centrally-controlled, with a bottom-up process and partly directly reallocated from the central IT department to countries with a top-down process.

Main data sources
SAP

GRANAROLO

Leading dairy supply chain in Italy (Over 30% of Italian milk production).

Number of users
120+ planners

Applications deployed
- Sales Budgeting, Planning and Forecasting
- P&L planning
- Sales Force Weekly Target and Forecast (utilized for organizing weekly products distribution to the point of sales)

The Sales Force Weekly Target and Forecast is a cutting edge application in BP&F: every Monday morning in just 4 hours the product distribution for the whole week has to be defined. Peaks of 80/90 concurrent users rely heavily on the same mission critical application, that is the heart of supply chain operations. This can be compared to a system supporting over 2,000 users in a normal BP&F environment where connections happen at disparate time and date.

Main data sources
SAP, SQL DWH
BATA

Bata is one of the world's leading footwear retailers and manufacturers (1,000,000 pairs of shoes per day). The organization has a retail presence in over 70 countries and production facilities in 26 countries. In its history Bata has sold more than 14 billion pairs of shoes and was awarded the Guinness World Record as the "Largest Shoe Retailer and Manufacturer".

150+

Applications deployed

Integrated Planning System operating in 3 main phases:

• Operational Supply Chain Planning (sales, distribution, stock, purchases)
• Economic Planning (margin, P&L)
• Financial Planning (BS, Cash flow)

Brief description of the solution

Bata Italy implemented an integrated planning system across the whole organization. From sales planning to brand, shop and company P&L forecast; from scenario simulation to cash flow forecast all the company performances are managed and controlled with BOARD. Thanks to its success, the project has already been extended to Spain and Switzerland and soon to all of Europe.

Main data sources

AS/400 custom applications

HARVEY NICHOLS

Harvey Nichols founded in 1813, is an up-market department store chain.

100+

Applications deployed

• Sales Reporting, Planning and Forecasting
• Finance Reporting and Budgeting

Brief description of the solution

The core model is based around a very low level of data granularity: Each measure can be sliced from common product groupings, styles etc... down to SKU level (1,000,000+). These can be analyzed in near real time all the way down to which SKU's sold through which POS, operator and method of payment. The Planning is managed at style level for which there are 800,000+ elements planned on a weekly basis.

Main data sources

Retail Assist ERP, DB2
**BAULI**

Bauli is the Italian leader in products for festive occasions and the croissant industry.

- Number of users: 300+
- Applications deployed:
  - Budgeting, Planning and Forecasting
  - Profitability Optimization
  - Strategy Management
  - Financial & Management Reporting

One of the oldest BOARD customers (early 90’s), Bauli makes extensive usage of the power of BOARD across the entire organization. Every piece of information coming out of the ERP system is analyzed with BOARD at departmental level and it is consolidated in models supporting all levels of planning. Bauli can simulate the impact of an increase of flour purchasing price down to single customer P&L or up to Company level profitability. Recent company acquisitions made by Bauli were first simulated and evaluated in BOARD models.

- Main data sources: Formula ERP, DB2

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**BTC SPECIALTY CHEMICAL DISTRIBUTION GMBH**

BTC Specialty Chemical Distribution is the European sales organization that carries out the trading activities in specialty chemicals produced by the BASF Group.

- Number of users: 200+, 9 countries
- Applications deployed: International planning and budgeting solution for all 9 country subsidiaries

**BOARD solution:**

The top-down plan is carried out by the executive management team: all historical and current data from the product groups, concerning volume, price, sales turnover and margin – including forecasts and deviations – are collected, evaluated and managed in a single holistic environment. When all the planning steps have been completed, the final version of the top-down plan forms the basis for the subsequent bottom-up plan carried out by the sales directors. They start creating the budgets at the lowest level – by customer or product. The up-to-date product and customer overviews and the predefined input tables simplify the planning process. If for example, the volume, the price and the margin per product is revised for a certain customer, the turnover at all levels is automatically adjusted. Due to the multi-dimensional representation of all relevant data, the effects of certain planned values on other areas are immediately simulated and revised.

**Benefits:**

- More transparency and liability in planning
- Planning process shortened from 3 months to 3 weeks
- Manual activities in controlling are significantly reduced

- Main data sources: MBS Navision
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