

# **BARC Score**

## **Integrated Planning and Business Intelligence DACH**

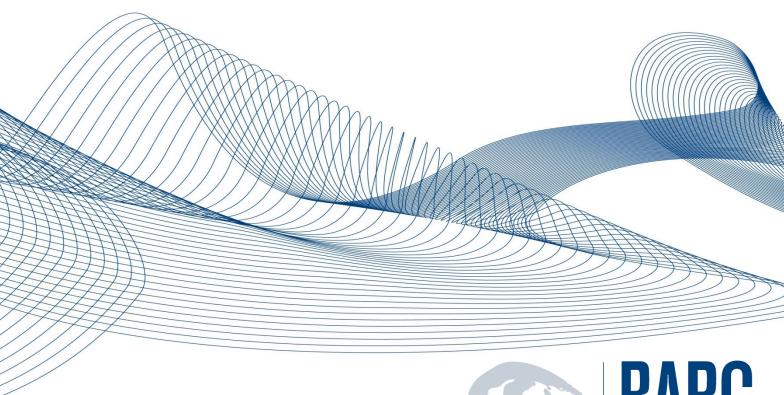
Portfolios for planning, reporting and analysis

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#### **Abstract**

Planning is an important element of management control to align operational business with strategic corporate objectives. However, successful planning processes require comprehensive business intelligence (BI) functionality. This BARC Score focuses on the market for integrated planning and BI products and portfolios in the DACH region (Germany, Austria and Switzerland) due to the importance of both topics in combination for many companies, especially in the mid-market. Based on data points from The Planning Survey, The BI Survey and numerous analyst interactions, vendors are rated on a variety of criteria, from product capabilities and architecture to sales and marketing strategy, financial performance and customer feedback.





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## **Overview**

The simplest definition of management is to plan, steer and control an organization's performance. Planning and controlling this performance relies on the analysis of the past outcomes of operational processes. Planning tries to anticipate and reflect future developments in the enterprise's process goals and structures. Supporting this closed-loop management cycle from reporting and analyzing process results to prediction and planning for adapting the operational processes is a key task for business intelligence (BI).

For this reason, the integration of performance management (in particular planning) and BI has been one of the most stable and relevant trends for companies for several years. Many companies and users know that there can be no planning without supporting functionality for reporting, analysis and monitoring (dashboarding). The integration of planning and BI with specialist software solutions in one common platform is therefore essential to optimally support the management cycle. To avoid time-consuming and error-prone data transfer processes between software systems, an integrated database for actuals and plan data represented in a consistent data model forms the basis for integrated software solutions. The centrally harmonized master data provides a single, common data basis for planning and BI as well as other performance management processes such as risk management, financial consolidation etc.

Today, the reality in many companies is that integrated planning and BI is an often proclaimed, but seldom achieved goal. Reasons such as internal policies or difficulties with historically grown system landscapes could account for this. So Excel, as the lowest common denominator, is often the default first choice for integrating planning with BI. However, the lack of coherence of data and functionality resulting from using multiple tools for planning and BI, and using Excel instead of specialized software tools, are frequently cited reasons for user dissatisfaction, inconsistencies or error susceptibility with planning and BI in companies today.

Nevertheless the integration of planning and BI in common software platforms is a means of avoiding problems and user dissatisfaction in planning and BI processes. In particular, best-in-class companies recognize this important relationship and therefore regularly opt for integrated software platforms. Companies that use integrated software platforms for planning and BI experience far fewer problems than those that address both topics separately with different software tools. Paying attention to the integration of planning and BI is therefore especially important for companies when selecting software products to support the whole management cycle mentioned above.

The software market for planning and BI products in the DACH region (Germany, Austria and Switzerland) is highly competitive. Besides a few international software generalists offering their planning and BI portfolios worldwide, there are many local specialists challenging the big vendors. This report focuses on the German-speaking planning and BI DACH market and analyzes the strengths and challenges of all the leading vendors as well as many smaller vendors that often have less visibility, but equally offer outstanding value to their customers.

Planning and BI initiatives always include more than just the front-end products. The technical architecture also includes data warehouses and data marts (e.g., for planning), data integration and data quality components, dictionaries, repositories and many other technologies. Organizations should have a proper BI strategy that goes well beyond an architecture blueprint to include non-technical requirements, alignment with corporate strategy, organizational models, outcome-based priority settings and a proper roadmap.

Still, when it comes to kicking off or expanding a planning and BI program, the initial focus almost always lies on the required toolsets. While this may not be the ideal starting point, at some stage a platform, portfolio or product decision has to be made. This document will help with the selection process by evaluating the market leaders and most commonly used product sets.



# **Inclusion Criteria**

There are two principal inclusion criteria for this BARC Score: the first is associated with each vendor's products and the other is linked to the financial results relating to those products. Functionality for planning (including write-back of planning data to a central database and other advanced planning features such as workflows, simulation etc.) is the entrance ticket to be evaluated in this BARC Score. Moreover, a vendor has to supply additional functionality for all four technologies from the following platform portfolio in a solution not merely focused on one industry or use case:

- · Formatted reporting
- · Ad hoc query and reporting
- Analysis
- Dashboarding

In addition, the vendor has to generate a minimum of 3 million EUR in license revenue per year with its product set in German-speaking countries (Germany, Austria and Switzerland). There is no differentiation between on-premises offerings and cloud-based product sets.

# **Evaluation Criteria**

Every vendor is evaluated on two dimensions: portfolio capabilities and market execution. Each represents one axis on the Score. These two dimensions include the following sub-criteria.

## **Portfolio Capabilities**

The portfolio capabilities criteria selected to rank the planning and BI vendors in this Score include the following technologies and their corresponding weightings (see Table 1). In general, portfolio capabilities reflect functional and architectural criteria. A special emphasis is placed on the integration of planning and BI functionality within the vendors' product portfolios. An additional and important evaluation criterion is ease of use for business users.

Please note: Only vendor-distinct functionality is rated in our vendor portfolio ratings, not that of integrated OEM products or partner solutions.

#### **Planning**

Planning describes the task of creating data with a future time reference. An essential software requirement here is to write back planning data from planning forms in the front end to a planning data model in a central database. The planning model consists of planning structures (master data), key figures and planning logic, and combines different operational and financial plans. Both the planning forms and planning model are created using a planning solution. The coordination of the various planning activities and planners involved is handled by process control functionality (workflow). For plan data entry, specific planning functionality (e.g., data allocation, simulation and comments) is provided.

#### Portfolio evaluation

Portfolio evaluation includes assessing each vendor's overall portfolio from a customer perspective. Consistency and seamless integration are important criteria for the optimal support of planning and BI processes and the whole management cycle. Planning is generally not possible without reporting (e.g., results reports or reports on intermediate results) or analysis functionality (e.g., analyses of planned and actual values). Having all planning and BI functionality in one integrated product on one database is certainly preferable to an integration, for example, at database level between different products with the



need for ETL processes to transfer data. Moreover, the product's lifecycle and maturity are assessed. Customers often complain about reliability and stability in early product releases. Early versions are rarely as functionally rich as mature products so they usually do not meet all their customers' functional requirements. And sometimes vendors offer mature products that are no longer being enhanced with innovative, new features. As a consequence they may not fulfill new and emerging requirements.

#### Ad hoc query and reporting

Reporting can be either formatted (standard reporting) or interactive ad hoc reporting. In many cases, users require more interactivity than they receive from formatted reports. Ad hoc reporting is geared to non-professional report developers and provides basic filtering and navigation features (e.g., drill down, ranking and conditional formatting).

#### **Analysis**

Data analysis differs from basic reporting in that it probes much more deeply into (operational) data and generates new information, which can be interpreted and acted upon by the business. Further analyses can be carried out using mathematical methods. Traditional online analytical processing (OLAP) provides dimensional (versus reporting) data views which make it easy for users to drill down, drill across and pivot dimensions as well as apply sophisticated calculations without scripting. Certain analysis products also offer methods to support set-based, visual or discovery-oriented data analysis.

#### Formatted reporting

Formatted standard reports are usually page-oriented reports running on regular schedules. These include static reports, which usually appeal to the widest audience in a company because they are simple to use, and prompted reports, which enable users to filter reports based on predefined parameters. Aside from pixel-perfect displays, which provide developers with precise control over how they place report objects and images on a screen, formatted reports also support rich printing options, dynamic page sizing and a WYSIWYG ("what you see is what you get") development interface.

Virtually every BI product is able to provide some type of reports. The importance of page orientation, scheduling and other advanced reporting features, however, varies depending on the customer's requirements.

#### Ease of use for business users

Ease of use considers the general user-friendliness of a planning and BI product for business users in areas such as model design, screen generation, report development, administration in business departments, etc. This criterion is included because ease of use for business users is often a very important criterion in software selection processes.

#### Infrastructure evaluation

Infrastructure evaluation focuses on the overall architecture of each vendor's product portfolio and includes a broad range of technical criteria. This includes the integration of the various components, from the perspective of the front-end and user experience as well as at infrastructure levels, including data access, models and metadata. In addition, support for different platforms, scalability, performance optimization techniques and security settings are considered in this evaluation.

#### **Dashboarding**

Dashboards are also referred to as cockpits, scorecards or BI applications. They provide graphical views of key performance indicators and the ability to drill down to details. Some dashboards offer self-service functions so end users can create their own layouts without any outside help. Others (especially BI applications with guided navigation) require support from technically savvy business users or programmers. Scorecards often incorporate strategy maps and applications to manage improvement initiatives.



## **Advanced analytics**

Predictive analytics and data mining use various methods and (statistical) algorithms of classification and time series analysis to forecast events and behaviors. A general goal is to identify relationships between data and generate insights for existing data as well as new data using mathematical models. In the context of planning, predictive methods especially support forecasting by calculating suggestions for future planning data which can be used or overwritten by the planner.

Table 1: Portfolio Capabilities - Weighting of Criteria

Criteria	Weighting
Planning	High
Portfolio evaluation	High
Ease of use for business users	High
Ad hoc query and reporting	Medium
Analysis	Medium
Infrastructure evaluation	Medium
Dashboarding	Medium
Formatted reporting	Low
Advanced analytics	Low

#### **Market Execution**

On the market execution axis, we rate the planning and BI vendors in this Score using the following criteria and corresponding weightings (see Table 2).

## **Product strategy**

This is the most important of all the criteria. Vendors are rated on their product development track record, product roadmap and innovation, as well as the company portfolio's alignment with current market trends and demands.

#### **Customer satisfaction**

Here, we include the 'Customer satisfaction' KPIs from The Planning Survey and The BI Survey. These take into account product satisfaction, vendor support and implementer support ratings reported by customers. The ratings of vendors that provide more than a single product are combined into a single rating. Vendors not included in The Planning Survey or The BI Survey (due to a limited number of survey responses from their customers) receive an average rating. This average rating stands for "satisfied" and does not negatively affect the score.



#### **Financials**

This criterion covers the financial position of the vendor, from market capitalization, cash position and EBITDA to profitability, burn rate and investment rounds. For private companies or vendors that don't break out the numbers for individual product lines, estimated figures are used.

#### **Ecosystem**

In this category, we evaluate the extended ecosystem in which the vendor participates. This includes business partner networks, hardware or cloud infrastructure providers, consulting firms and systems integrators, and other technology alliances.

#### Sales strategy

To rate a vendor's sales strategy, we look at the various channels through which the company goes to market: with both direct and indirect sales teams, through distributors, value-added resellers (VARs), online channels and OEM relationships. We also evaluate the vendor's product pricing and sales models, such as perpetual licensing, support subscription, open source and freemium.

#### **Organizational strength**

Vendors are rated on their organizational stability, which is influenced by consistency of corporate strategy, continuity of executive leadership, but also staff turnover, reorganization and layoffs.

#### **Marketing strategy**

A vendor's marketing strategy is evaluated by rating its corporate and product messaging, the company's presence in printed media, advertising and social networks, as well as its ability to run events, such as conferences, seminars, roadshows and webinars.

Table 2: Market Execution - Weighting of Criteria

Criteria	Weighting
Product strategy	High
Customer satisfaction	High
Financials	Medium
Ecosystem	Medium
Sales strategy	Medium
Organizational strength	Medium
Marketing strategy	Low



# **Score**

Calculating the individual ratings for all criteria and all vendors produces two scores per company: the portfolio capabilities score and the market execution score, each being plotted on the corresponding axis and thus resulting in the vendor's dot on the following BARC Score graphic (see Figure 1).

Please note: Only vendor-distinct functionality is rated in our vendor portfolio ratings, not that of integrated OEM products or partner solutions.





## Portfolios for planning, reporting and analysis



Disclaimer: BARC Score is published by BARC GmbH (BARC). This chart is part of a larger research document, which contains explanations of the methodology and criteria behind the chart, and should be viewed in the context of the full document. BARC does not endorse any of the vendors featured in its research documents, and does not advise readers to select only those vendors with the highest ratings. Vendors appearing in the bottom left corner of this chart are market entrants or specialists and should not be interpreted as inferior. Those vendors in the top right area are not necessarily superior, but have strong portfolio capabilities and market execution.

Figure 1: BARC Score Integrated Planning and Business Intelligence DACH –
Portfolios for planning, reporting and analysis



## **Score Regions**

Vendors can be positioned in one of five regions, depending on their total score on each of the two axes.

#### **Dominators**

Dominators are vendors that drive both technology and market adoption in a highly influential manner. They possess both a broad portfolio of market-leading and dominating products with a strong brand as well as a robust commercial prowess through best-in-class sales and marketing programs, an extensive ecosystem of business partners and alliances, and a rock-solid financial position. Dominators are considered a contender in virtually every planned implementation.

#### **Market Leaders**

Market Leaders are well established vendors that drive strong market adoption, supported by technology innovation and strategic acquisitions and by leveraging robust account management and a solid track record. Their portfolio enjoys high brand awareness in the market and covers an extensive range of technologies and services with only few gaps. Market Leaders typically have a large market share, making them a viable contender in almost all implementation scenarios.

#### **Challengers**

Challengers come in various shapes and sizes. They can be large vendors tapping into a new market by acquisition and pushing their way in with force, small innovative companies with a promising portfolio but limited sales and marketing resources, or vendors that attempt to disrupt a market with a new technology approach or different business model.

## **Specialists**

Specialists are usually smaller vendors with a portfolio focused on a specific market segment. They can be either limited in their technical capabilities by concentrating on certain features and functions, or they may only focus on select geographic regions rather than the global marketplace.

#### **Entrants**

Entrants are usually startups that have limited reach and visibility in the market. Their product capabilities are incomplete when compared to competitors, and the vendor's long-term market potential is still unproven.



# **Evaluated Products**

The latest versions of the following products are evaluated in this BARC Score:

Vendor	Product(s)		
Anaplan	Anaplan		
Bissantz	DeltaMaster		
BOARD International	BOARD		
CoPlanner	CoPlanner		
Corporate Planning	CP-Suite		
Cubeware	Cubeware Solutions Platform C8 (CSP C8)		
cubus	cubus outperform		
evidanza	evidanza		
IBM	IBM Planning Analytics (formerly TM1) IBM Cognos Analytics IBM SPSS Modeler		
IDL	IDL CPM Suite		
Infor	Infor d/EPM Birst		
Jedox	Jedox Suite		
LucaNet	LucaNet.Planner		
Oracle	Oracle EPM Cloud Oracle Hyperion Planning Oracle Business Intelligence Oracle Analytics Cloud		
SAP	SAP Business Planning and Consolidation SAP BusinessObjects Enterprise SAP Analytics Cloud		
Unit4 Prevero	Unit4 Prevero		
Wolters Kluwer   CCH Tagetik	CCH Tagetik		



# **Vendor Evaluations**

In the following section, we discuss each vendor and highlight their strengths and challenges based on customer surveys and market research by the authors.

Each vendor description includes vendor-related information, products covered in the BARC Score, and strengths and challenges.



## **Anaplan**

San Francisco, CA, USA

www.anaplan.com

Anaplan is a US-based software vendor headquartered in San Francisco and founded by the people behind Adaytum (ex-IBM Cognos Planning). The company currently has a further 20 subsidiaries world-wide and a total of approximately 1,000 employees, with over 200 of them in research and development. Several major investors have financed Anaplan's growth and global expansion.

The Anaplan product began its development in 2006 and was officially released in 2011. The company's name is a combination of analytics and planning. The product represents a new generation of planning platforms developed with state-of-the-art technologies on a modern software architecture. Anaplan is a purely cloud-based product using an in-memory database to store data (with patented Hyperblock technology). The goal behind Anaplan's development was to create a new planning platform with the ease of use and flexibility of a spreadsheet and the scalability of an enterprise planning product in the cloud.

Anaplan targets corporate finance and business departments for financial planning and analysis as well as multiple supported use cases in large enterprises and groups worldwide. It has no particular industry focus. According to the vendor, it now has more than 970 global customers with a combined total of over 100,000 users. Implementations range from double-digit to several thousand users per installation.

As a cloud-based platform, Anaplan flexibly provides functionality for top-down as well as decentralized bottom-up planning approaches. With its platform approach, customers can create various planning models on different aggregation levels (strategic and operational planning) for an integrated enterprise planning approach (including financial planning). The vendor's in-memory database supports detailed planning models with data up to transactional level (articles, stores, employees etc.). Moreover, Anaplan and its partners offer more than 200 apps and planning models as predefined content via the App Hub site (e.g., for financial planning, sales planning, financial consolidation, strategy execution etc.).

#### **Strengths**

- Technologically a modern and scalable cloud-based planning platform for use in business departments with complementary BI functionality
- Flexibility for a wide variety of planning approaches (centralized top-down, decentralized bottom-up) and planning topics (operational planning, financial planning etc.) with no industry focus
- Lots of predefined planning models and applications on Anaplan's App Hub site (e.g., for demand planning, capex planning, financial consolidation, strategy execution etc.)
- Top ranked in BARC's Planning Survey 18 for the options and flexibility the product provides to implement concepts such as driver-based planning. 89 percent of Anaplan users say they would probably or definitely recommend the product to other organizations.

- Cloud-only the product is purely cloud-based and not available on-premises. Web access is essential to use the product (except for offline planning in the Excel add-in)
- Anaplan is essentially a planning product rather than a BI product. Besides functionality for OLAP analysis and screen-based dashboards, there is limited support for traditional BI topics such as standard, formatted reporting and ad hoc analysis
- Anaplan's flexibility can lead to complex handling, especially when implementing and building intricate applications
- Compared to its mid-market focused competitors, Anaplan is relatively expensive



#### **Bissantz**

Nuremberg, Germany

www.bissantz.com

Bissantz & Company was founded in 1996 in Nuremberg, Germany. The company initially specialized in solutions for sophisticated data analysis tasks in business environments. Today, it has about 100 employees based in four locations in Germany. The company has over 500 customers, primarily in Germany, Austria and Switzerland. Bissantz targets mid-sized companies and large corporations across all industries to support them in controlling and planning business performance. Most of its customers are in the DACH region. Worldwide consulting and support is available through certified partners.

DeltaMaster, Bissantz's flagship product, offers flexible and integrated functionality for (advanced) data analysis, ad hoc reporting, dashboards and planning. The strengths of the solution lie in its analytic capabilities, which include good support for proactive analyses as well as automated and predefined analytic methods with comprehensive visualization functions. Besides its BI functionality, DeltaMaster can also be used to build individual planning applications with capabilities for top-down and bottom-up planning. The product supports business departments in building detailed operational budgets. Delta Master contains little predefined business content and has the characteristics of a development environment that requires no programming.

As a front end, DeltaMaster supports direct connections to popular multidimensional databases (Microsoft SQL Server Analysis Services, SAP BW/NetWeaver BI, IBM TM1, Oracle Essbase, Infor d/EPM Platform) as well as relational databases (such as Microsoft SQL Server, SAP HANA, Oracle, IBM DB2, MySQL). Planning applications are mostly based on Microsoft SQL Server and/or Analysis Services. However, Infor d/EPM Platform, IBM TM1 and SAP HANA can also be used for planning applications. In the Microsoft environment, Bissantz fosters a hybrid approach which combines multidimensional and relational data processing to deal with performance requirements in large planning scenarios.

As a second product line, Bissantz develops and markets DeltaApp, a dedicated mobile business intelligence app which also supports templates for data input.

## **Strengths**

- Integrated product for (advanced) analysis, ad hoc reporting, dashboards and planning
- Broad analysis and visualization functionality. Support for large data volumes.
- Innovative chart types for data-dense reports and dashboards
- Flexibility in creating individual planning applications with options for top-down as well as bottom-up planning, including comprehensive capabilities for commenting
- Good approach to the establishment of visual design standards. Bissantz innovation in this area
  is key to preserving the vendor's top rank in all of its peer groups in the BI Survey 18.

- No predefined business content for planning tasks (e.g. integrated financial planning)
- Limited workflow functionality for controlling planning processes (e.g. planning calendar, task management with status monitoring, visual display of planning processes, and approval processes available through database modeling only, not as standard functionality)
- No Excel add-in. Only export of data to and import of data from Microsoft Excel provided.
- Less focus on reports with page orientation or high levels of individual formatting



#### **BOARD International**

Chiasso, Switzerland

www.board.com

BOARD was founded in 1994 and employs more than 300 people worldwide. Both its European head office and software development headquarters with approximately 40 employees are located in Chiasso, Switzerland. A second regional US headquarters is located in Boston, Massachusetts. BOARD has 23 offices worldwide and a partner network in over 30 countries. Around 3,000 customers worldwide use BOARD to implement BI and planning projects. The company currently has a strong focus on internationalization, particularly by building up its presence in the United States.

BOARD provides a combined product consisting of a front end and a proprietary multidimensional database. It is a flexible development environment for creating dashboarding, reporting, analysis, planning and predictive analytics applications and can also be used to build financial consolidation and strategy management applications. BOARD offers strong functionality, especially for planning and simulation use cases, and provides a consistent environment for administration, development and utilization. Due to its tightly integrated front and back ends, the proprietary BOARD database allows only limited access for third-party front ends.

BOARD's product strategy is based on an "all-in-one" philosophy. The goal is to deliver an easy to use and technically homogeneous environment in support of BI and CPM. BOARD's vision is to enable business users to implement tailored solutions without significant IT support, based on an easy-to-use toolkit with no technical programming needed. Over the past few years, BOARD has strongly enhanced its innovative capacity, focusing on trending topics and providing new functionality. Besides BEAM (the vendor's analytical engine for advanced analytics), BOARD has introduced a cloud offering based on Microsoft Azure, storytelling, collaboration and cognitive capabilities incorporated into the system (including cognitive search by natural language query (NLQ)). Alongside existing self-service capabilities (called Data Fast Track) the vendor added self-service reporting features in its last release.

## **Strengths**

- Flexible product for developing BI and CPM applications with tightly integrated system architecture of multidimensional in-memory database and front end
- Graphical, business user-oriented development environment for creating complex BI and CPM applications without technical programming skills
- Functionality for bottom-up and top-down planning approaches (including workflow functionality)
- BOARD receives good feedback from customers for its ease of use and flexibility for users in BARC's BI Survey 18

- Limited access to the proprietary BOARD database for third-party front ends
- Limited predefined business content provided by BOARD itself (e.g., for integrated financial planning) as the vendor focuses on enabling individually tailored solutions. However, BOARD has already created some applications such as financial consolidation and lease accounting with more to follow and offers blueprint models for specific industries such as retail/fashion or automotive that can be adapted by customers
- The product's flexibility can lead to quite complex handling for inexperienced users when implementing and building intricate applications



#### **CoPlanner**

Graz, Austria

www.coplanner.com

CoPlanner was founded in 1989 in Graz, Austria, with the aim of supporting enterprises in implementing integrated BI systems by offering comprehensive business and technical expertise. The vendor currently employs about 40 people and has, according to its own accounts, approximately 500 customers with 2,500 implementations, primarily in Austria and Germany.

CoPlanner is a one-product-company. Since 2003, it has provided its BI and planning product CoPlanner, which is available in different specifications for small, medium and large companies. Data is physically stored in Microsoft SQL Server. Additionally, the vendor uses in-memory data storage on the CoPlanner server, which is synchronized simultaneously with the relational database. The product is a flexible development environment for all kinds of planning approaches (top-down, bottom-up or combinations of both). Business power users typically use it to create wizard-based individual planning applications requiring only minimal IT support (e.g., for data integration tasks or linking of sub-budgets in the data model via SQL).

The core of the product is CoPlanner's comprehensive planning functionality. The development environment provides flexible modeling of individual planning applications and integrated financial planning (balance sheet, profit and loss statement, liquidity) as standard. In typical implementations, CoPlanner is used by 30 to 40 concurrent users. However, there are also implementations with smaller and much larger numbers of users.

CoPlanner customers usually start off with planning projects but often have additional requirements for reporting, analysis or financial consolidation. For standard formatted reporting, CoPlanner provides an integrated, business user-friendly reporting module, which enables the creation of on-screen reports as well as formatted print reports. Comprehensive options are available for formatting and tabular layouts as well as graphical reports. Moreover, for ad hoc query and individual analyses, CoPlanner Analyzer and a feature-rich Excel add-in are available. Add-ins for Microsoft PowerPoint and Microsoft Word are also provided.

## **Strengths**

- Integrated product for planning, reporting, analysis and financial consolidation with flexible modeling of individual planning applications
- Comprehensive planning functionality for bottom-up (including workflow management functionality) and top-down planning approaches
- Predefined model for integrated financial planning (balance sheet, P&L, cash flow)
- Feature-rich Excel add-in with cell-based and formula-based (dynamic) mode
- Integrated engine to present relationally stored data multidimensionally, including the option of third-party product access

- Comparatively limited BI capabilities for reporting and dashboarding CoPlanner is rather a
  planning product with additional BI functionality
- Limited capabilities for predictive analytics and advanced analysis as well as mobile BI
- Microsoft SQL Server Integration Services is typically used for complex data integration tasks –
  it is not very business user-friendly and usually requires IT support
- Comparatively small vendor with a strong presence in Austria



## **Corporate Planning**

Hamburg, Germany

www.corporate-planning.com

CP Corporate Planning AG (CP) is a software vendor and consultancy based in Hamburg, Germany. The company, which was founded in 1989, currently has approximately 130 employees worldwide. CP has regional and international offices in Germany, Austria, the Netherlands, Switzerland and the UK, and is one of the largest planning software vendors in the DACH region.

CP offers solutions for operational management, integrated financial planning, financial consolidation and strategic management. The vendor combined its formerly separate products into the integrated CP-Suite. All modules have a common user interface and are based on an integrated database in Microsoft SQL Server. About 4000 customers worldwide use various modules of CP-Suite.

Corporate Planner, the planning product in CP-Suite, is targeted at business departments. The solution can be deployed both as a single desktop application as well as an enterprise solution for CPM and financial consolidation. Across its entire customer base, Corporate Planner is used by an average of 10+ users per installation, yet it also supports installations with significantly larger numbers of users.

Corporate Planner's strengths include its detailed dialog boxes and wizards as well as comprehensive planning functionality and predefined reports and analyses that support business power users in a variety of tasks. The product provides centralized top-down planning, decentralized bottom-up planning as well as a combination of both approaches. The vendor does not focus on one particular planning topic (financials, sales, HR etc.) or industry. Corporate Planner offers various report types to meet a range of reporting requirements. In addition the software integrates with Microsoft Word to generate page-oriented reports. A comprehensive library of predefined business analyses is also available (e.g., variance, ABC and portfolio analysis), which users can run directly on their data. A recently released CP-Sales module provides functionality for sales controlling with enhanced flexibility for navigation in data and improved dashboarding capabilities. These new developments are a first step to enhancing CP's BI functionality for dashboarding, ad hoc queries and analysis. However, because, at least in the past, CP doesn't regard itself as a typical BI product for individual analyses, a so-called BI-Exit is available for accessing CP data with third-party front ends (Connectivity BI and Connectivity Qlik).

#### **Strengths**

- Integrated, business user-oriented suite for operational management, financial planning, financial consolidation and strategic management
- Predefined planning functions and business analyses included as standard functionality
- Flexible capabilities for top-down and bottom-up planning. Predefined financial planning model
- According to The Planning Survey 18, customers are satisfied with CP's planning functionality as well as the business value the product offers

- Limited suitability for environments with >100 concurrent users and complex structures
- Limited flexibility due to high degree of prefabrication. Restricted capabilities for reporting and ad hoc analysis. BI functionality has been extended with the new CP-Sales module. However, only CP-Sales customers can use these functions. They are not generally available to all users.
- Limited functionality for formatted print-oriented reporting (the vendor recommends its Microsoft Word add-in for this purpose)
- Limited capabilities for predictive analytics and advanced analysis



#### Cubeware

Kolbermoor, Germany

www.cubeware.com

Founded in 1997 and based in Kolbermoor, Germany, Cubeware currently has about 140 employees in five German offices as well as subsidiaries in the DACH region; San Jose, USA; and Bangalore, India (additional off-shore development). In 2008, Cubeware was acquired by Cranes, a vendor based in India. Primrose Investments GmbH now owns Cubeware, having acquired it from Cranes Group in 2016.

Cubeware's BI platform CSP C8 was first released in 2014. Its main components are the BI front ends C8 Cockpit, C8 Mobile and C8 Snack; the application server C8 Server; and C8 Importer. All products are developed by Cubeware itself and are primarily sold directly by the vendor in the DACH region, as well as through partner channels and various OEM versions. Cubeware products are used by approximately 4,200 customers worldwide of which about half are from German-speaking countries.

CSP C8 is an integrated platform for data management, modeling, distribution (of reports), analysis and planning based on multidimensional databases (Microsoft SQL Server Analysis Services, IBM TM1, Infor d/EPM Platform, Oracle Essbase and SAP BW). C8 Cockpit module – an integrated solution for dashboards, ad hoc reporting, analysis and planning – is the main front end. C8 Importer handles data integration tasks, connecting to various data sources so data can be modeled multidimensionally.

CSP C8 is aimed at usage scenarios in business departments without any industry-specific focus. C8 Cockpit, a visual environment for building and displaying screen-based reports, analyses and dash-boards, offers good layout, graphic and interactive capabilities. In terms of planning, Cubeware positions itself as a vendor of operational planning and detailed budget planning solutions. Since 2016, a fine-tuned combination of CSP C8 and IBM TM1 (known as CW1 database powered by IBM) has been available, combining Cubeware's products with IBM's in-memory technology and Excel integration. Cubeware also extends the financial planning solutions of partners such as IDL and Denzhorn with BI and data management functionality.

## **Strengths**

- Integrated, business user-oriented platform for data management, modeling, dashboards, ad hoc reporting, OLAP analysis and planning based on multidimensional databases
- Visual environment for building interactive, screen-based BI and planning applications with good layout functions
- Comprehensive ad hoc reporting and OLAP analysis features targeted at business power users
- Data integration and modeling functions in C8 Importer are designed for business users with certified SAP connectivity

- Full product functionality only available on multidimensional databases however, write-back to relational databases provided (e.g., for commenting, maintenance of master data)
- Comparatively limited planning capabilities (e.g., lacks advanced workflow functionality such as task management, planning calendars; offline planning only with workarounds; no detailed business content (e.g., logic, data models, wizards for data entry) available from Cubeware itself)
- No proprietary Excel add-in, although the Excel add-ins of underlying databases can be used if required (e.g., Perspectives/CAFE Excel add-ins with CW1 database powered by IBM)
- Considering the results in BARC's BI Survey and Planning Survey, Cubeware's customer feedback is often below average (e.g., KPIs product and performance satisfaction, recommendation)



#### cubus

Herrenberg, Germany

www.cubus.eu

Founded in 1992 and based near Stuttgart, Germany, cubus currently has approximately 35 employees. According to its own accounts, more than 400 companies use its software.

Its product, cubus outperform, is an integrated CPM solution with functionality for planning, simulation, project portfolio management and strategy implementation (balanced scorecard). Its product, cubus outperform, is an integrated CPM solution with functionality for planning, simulation, project portfolio management and strategy implementation (balanced scorecard). For ad hoc reporting, dynamic OLAP analyses on the web and data visualization, cubus EV Analytics (formerly IBM Cognos Executive Viewer) is integrated in outperform. The product offers predefined business content, data models and logic. Aimed at business power users, outperform has a web-based user interface resembling Excel.

outperform provides a flexible platform for building individual, complex business logic for CPM and planning applications. The solution has no specific market or industry focus and is used by companies of various sizes and industries. outperform, however, does have predefined business content and logic for integrated profit and financial planning (P&L, balance sheet, cash flow), revenue and sales planning, HR planning, cost center planning, cost allocations, investment planning and project portfolio management. Customers can completely adapt and extend the models and logic to meet their specific requirements. Following initial implementation, business power users are able to develop outperform applications in a self-service manner without specific programming skills.

outperform uses multidimensional (Oracle Essbase, IBM TM1 or Microsoft SQL Server Analysis Services) and relational databases (Oracle or Microsoft SQL Server) for data storage. cubus has been rated as the most popular third-party client product for Oracle Essbase for the last four years in The BI Survey, underlining the fact that most cubus customers use the Oracle database rather than the Microsoft SQL Server Analysis Services or IBM TM1 database options. In addition, the vendor provides integration with Oracle BI and Oracle Analytics Cloud for customers with extended dashboarding and formatted reporting needs. Furthermore, cubus is strengthened by CXO software, offering both standardized financial reporting and the flexibility of ad hoc analysis.

## **Strengths**

- Integrated platform for planning, simulation, project portfolio management and strategy implementation (balanced scorecard) with predefined business content, models and logic
- Excel-like interface and web functionality, suitable for business users
- · cubus consultants possess strong business expertise
- Year after year, cubus repeats its excellent 'Vendor support' and 'Implementer support' ratings in The BI Survey. Good vendor support invariably leads to customer satisfaction.

- Small German vendor with international presence through partners
- · Limited functionality for formatted print-oriented reporting
- Limited capabilities for predictive analytics and advanced analysis
- Creating planning forms with the Excel add-in is rather complex, yet offers a broad scope of functionality to Excel-skilled users
- Availability of Office add-ins with write-back functionality depends on the database technology used (available with Oracle Essbase and IBM TM1 only)



#### evidanza

Regensburg, Germany

www.evidanza.de

evidanza was established in 2004 as a software vendor developing its own BI and planning solutions. The company is based in Salching, Germany, has about 40 employees and currently serves around 165 clients in mid-sized companies. The vendor has a network of national and international partners.

evidanza is a flexible platform with capabilities for building individual planning and BI applications. Having no specific market or industry focus, evidanza targets clients requiring an integrated reporting, analysis and planning solution. The platform is feature-rich and can be configured individually. It provides strong functionality, particularly for print reporting and the use of corporate designs. It supports various planning scenarios for top-down or bottom-up planning including workflow and monitoring features.

evidanza can either be used with Microsoft SQL Server as the underlying database or with SpeedBase, the vendor's proprietary in-memory database. Using SQL Server, evidanza can access any source system with SQL Server's Integration Services ETL product. However, administration and particularly ETL in evidanza are relatively technical and require support from IT or tech-savvy business users. Comprehensive wizards support modeling of business and structural models as well as planning structures in SQL Server. Business departments can manage ongoing operations as well as build planning models, sub-budgets and budget templates on their own. With SpeedBase, evidanza can be used with any relational database, which serves as a data store to persist SpeedBase's in-memory data (e.g., existing customer implementations use Microsoft, Oracle or SAP HANA). The cycle of data synchronization between SpeedBase and the relational database can be freely adjusted (e.g., batch, periodically). SpeedBase serves as an intermediate multidimensional layer that can be modeled by business users if desired (e.g., new cubes, dimensions, measures) and is optimized for parallel database access by many users for the specific case of data collection (multi-user storage optimization).

The vendor's multi-client strategy offers different ways to access the solution – including desktop, browser, tablets, ERP systems and SharePoint. Recently, the licensing model has been divided into four modules (e.g., planning and BI users) to allow customers to flexibly design their user model according to current needs.

## **Strengths**

- Integrated platform for reporting, analysis and planning with supplementary modules
- Offers the flexibility to build individual planning solutions including complex, multidimensional applications for top-down and bottom-up planning
- Wizards support modeling of business and structural models, integration of sub-budgets as well as planning structures in SQL Server
- Good functionality for formatted print reporting including corporate design templates

- Small German vendor with limited resources
- No Microsoft Office integration (i.e., no Excel add-in)
- Relatively technical administration and data integration (when using Microsoft SQL Server) so support is usually required from IT or tech-savvy business users
- According to BARC's Planning Survey, projects with evidanza tend to take longer than average
  to complete. Building up tailored planning and BI applications with development environments
  such as evidanza is usually quite time-consuming, possibly leading to longer project times.



#### **IBM**

Armonk, NY, USA

www.ibm.com

IBM is one of the world's largest vendors of IT hardware, software and services. The company has a global workforce of approximately 380,000 employees and is active in over 170 countries. In 2007, IBM purchased the Canadian software vendor Cognos for about \$5 billion (including IBM TM1) to become the center of its future BI product portfolio. IBM's performance management portfolio is completed by IBM Cognos Controller for financial consolidation and regulatory reporting (originally developed by Swedish vendor Frango) and IBM Cognos Disclosure Management.

IBM offers a comprehensive portfolio of on-premises and cloud BI, performance management (planning, consolidation, disclosure management) and advanced analytics solutions. The core offering consists of IBM's Analytics portfolio, Planning Analytics and SPSS.

Planning Analytics (based on IBM TM1) – IBM's strategic planning product – is a core element in IBM's performance management portfolio and has been on the market since the 1980s. Due to its rich functionality for planning and OLAP analysis, and its in-memory technology, the product plays a strategic role for IBM. Planning Analytics is essentially a high-performance, multidimensional in-memory database for planning and analysis with Excel and web front ends. The product is a development environment targeted at power users that, like Excel, is initially open for all kinds of applications (planning, analysis, strategy management). Therefore Planning Analytics has no dominant focus on certain topics and only a little predefined business content is available with the product.

IBM's web-based BI suite Cognos Analytics (formerly Cognos BI) – the company's enterprise BI solution – provides functionality for use cases ranging from formatted and ad hoc reporting to analysis and dash-boards. In recent years, the product has been equipped with data discovery and self-service BI capabilities allowing business users to upload personal data for analysis, prepare it and link it with 'trusted' data sources, as well as a new user experience. The suite is typically used in large scenarios supporting the needs of many concurrent users as well as large data volumes.

For advanced analytics IBM positions its SPSS offerings, including SPSS Modeler and SPSS Statistics.

#### **Strengths**

- Cognos Analytics is an extensive, scalable and well integrated product for formatted and ad hoc reporting; analysis and data discovery as well as dashboard creation
- Planning Analytics is a flexible product for business users with both web and Excel front ends for planning and OLAP analysis based on a high performance in-memory database
- Broad capabilities for data mining and advanced analysis with SPSS
- Well established and expansive partner community with global product support and know-how

- Only limited predefined business content currently available with Planning Analytics
- Currently, there is no complete integration between the Cognos Analytics, Planning Analytics and SPSS products. However, integration of Cognos Analytics and Planning Analytics has improved in recent versions.
- Limited functionality for advanced analysis in Cognos Analytics. However, SPSS is available as a dedicated product.
- Comparatively expensive BI and planning products, although the cloud versions of Cognos Analytics and Planning Analytics offer alternatives for cost savings and faster time to value



#### **IDL**

Schmitten, Germany

www.idl.eu

IDL is a solutions partner offering business, methodological and technological competencies in all aspects of consolidation, planning, reporting and analysis. The company was founded in 1990 and currently employs about 120 people, based in its offices in Germany, Austria, Switzerland and France.

IDL's CPM suite includes modules for financial planning (IDL.FORECAST), operational planning, reporting and analysis (IDL.DESIGNER) and financial consolidation (IDL.KONSIS). It also has complementary products for annual reports, e-balance filings, XBRL reporting requirements in banks and structuring of raw data for analysis. IDL solutions can either run on-premises, as cloud services (Microsoft Azure) or as hybrid scenarios (a combination of both cloud and on-premises). According to its own accounts, 850 corporate groups currently use IDL solutions. If required, third-party products can be used to enhance IDL's product portfolio (e.g., for ETL and operational planning). The vendor maintains a partner-ship with Cubeware (OEM products: IDL.IMPORTER, IDL.COCKPIT).

IDL.FORECAST is targeted at business departments, which often belong to a group of companies. Company-wide financial results plans (balance sheet, P&L, cash flow) at subsidiary or group level can be created using the product. Therefore, IDL.FORECAST provides a predefined financial (planning) data model with intertwined business rules, based on relational data storage. To address operational planning scenarios other than financial planning (e.g., sales or HR planning), IDL.FORECAST is complemented by IDL.DESIGNER. Operational plans, based on multidimensional databases (Microsoft SQL Server Analysis Services, IBM TM1), are integrated with financial plans at data level with predefined routines for data integration using ETL technologies that are available with the underlying databases (e.g., Microsoft SQL Server Integration Services, IBM TM1 Turbo Integrator) or IDL.IMPORTER. Thanks to the tight integration of IDL.FORECAST with IDL.KONSIS, it is possible to immediately consolidate plan data (or actuals) also taking into account planned intercompany allocations.

Besides its functionality for operational planning, IDL.DESIGNER is a central component of the IDL reporting platform and rounds out the portfolio with user-friendly, web-based functions to create ad hoc reports, analyses and dashboards. Its modern tile interface and Windows look and feel provide a user-friendly environment for designing individual reports and analyses with custom layouts.

## **Strengths**

- Comprehensive CPM product portfolio for planning, financial consolidation, reporting and analysis. If required, expandable with OEM products (e.g., for ETL).
- Extensive predefined business rules for financial planning and consolidation
- Transparent status monitoring for controlling planning and financial consolidation processes
- Business user-friendly, web-based solution for operational planning including workflow functionality, ad hoc reporting, OLAP analysis and dashboard design with IDL.DESIGNER

- Multidimensional operational plans with IDL.DESIGNER are integrated with relational financial
  plans at data level only with predefined routines for data integration. Therefore, higher systems
  complexity due to different environments, modeling techniques, UIs, data integration efforts etc.
- Platform support for IDL.DESIGNER limited to Microsoft SQL Server Analysis Services and IBM TM1. Formatted print reporting not a focus. Operational planning functionality is not yet mature.
- Implementation of (complex) financial management applications can require the help of external business consultants



#### Infor

New York, NY, USA

www.infor.com

Infor is a global US-based vendor of ERP, CRM, BI, SCM and other industry-focused business software solutions. The company was founded in 2002, has more than 170 offices in 41 countries and supports over 90,000 customers in around 200 countries. Infor is privately held by Golden Gate Capital, Koch Industries and Summit Partners.

Infor Dynamic Enterprise Performance Management (d/EPM), formerly Infor BI, the vendor's original BI and CPM product, was initially developed by MIS long before 2002. Several acquired products were combined into Infor d/EPM, which includes components for dashboards, reporting, OLAP analysis, planning and financial consolidation. With the acquisition of Birst in 2017, Infor's BI portfolio has been enhanced with a cloud-based BI platform for formatted and ad hoc reporting, dashboarding and analysis. Since the acquisition, Infor has changed its go-to-market and product positioning strategy significantly, splitting its portfolio into BI and CPM products. Birst is now positioned to serve BI usage scenarios and Infor d/EPM—Infor's existing CPM product — to serve CPM usage scenarios. Infor d/EPM and Birst are marketed to mid-sized companies and large corporations in all industries.

Infor d/EPM is a flexible CPM product combined with business content. The platform provides a multi-faceted development environment for tech-savvy business power users to build custom CPM and BI applications. Predefined CPM applications are available for various business functions and industries, including strategy management, budgeting, planning, financial consolidation, workforce planning and workforce budgeting. Recently, the vendor introduced a new version of Infor d/EPM with modernization improvements such as redesigned user interfaces or web-based administration.

Birst is Infor's cloud-based flagship platform for BI and analysis/data discovery. The product plays a significant role in Infor's BI and cloud strategy. According to the vendor, Birst connects to Infor's operational systems such as ERP and CRM, to Infor d/EPM's underlying OLAP database, as well as to non-Infor systems. One of Birst's particular strengths is its access to many different data sources and their combination in the product's integrated semantic layer, which is exposed to users.

## **Strengths**

- Birst as a cloud-based BI platform with a modern sematic layer concept to provide both governance and consistency as well as data discovery to support agile development
- Infor d/EPM as an integrated application suite for dashboards, reporting, analysis, planning and forecasting as well as financial consolidation with proprietary multidimensional data storage
- Strong functionality for ad hoc analysis and planning integrated in Excel
- Predefined CPM applications for various business functions and industries

- Visualizations created with Infor d/EPM cannot be reused in Birst to create formatted reports based on analysis results for instance. However, an integration of Birst visualizations into Infor d/EPM applications is possible.
- Infor d/EPM's flexibility can lead to complex handling when implementing/ building intricate applications
- Exceptionally negative feedback from Infor d/EPM's customers in The BI Survey 18 in important
  areas such as business benefits, customer satisfaction (recommendation, product satisfaction),
  customer experience (query performance) and innovation.



#### **Jedox**

Freiburg, Germany

www.jedox.com

Established in 2002, Jedox has grown into a team of about 150 employees. The vendor serves 2,300 clients in 140 countries worldwide through its headquarters in Freiburg, Germany, its seven international offices, and a network of 220 partners. Besides implementers, the vendor has extended its technology partner network to include Qlik, Microsoft (Azure, Power BI) and Salesforce.

The company's flagship product is Jedox Suite, a flexible BI and CPM product with planning, reporting and analysis capabilities. The solution, which offers both an Excel client and web interface as front ends, was first launched in 2004. The Excel add-in is a classic spreadsheet interface combining well-known Excel functions with additional Jedox features. The web client has a browser-based spreadsheet interface – a type of Excel on the web – with additional functions. The underlying philosophy of Jedox Suite is to extend the familiar Excel environment with specific BI functionality. The software can be run onpremises, in the cloud and also in hybrid scenarios (development on-premises and production in the cloud for instance).

The product is aimed at business power users who create individual planning, reporting and analysis applications. With the company's own in-memory database, users have the advantage of a flexible multidimensional experience while staying in their familiar spreadsheet environment. However, tasks such as integrating data into Jedox OLAP Server using the vendor's web-based Jedox Integrator product may require IT support. Trained business users can later take on responsibility for the administration and further development of Jedox applications. These applications can be published to large groups of users through Jedox Web and Jedox Mobile. Both centralized top-down and decentralized bottom-up planning scenarios can be implemented with Jedox. Jedox now provides more than 50 predefined planning models created itself or by partners (e.g., for balance sheet, P&L, cost center, sales planning, HR planning and financial consolidation) via its own marketplace, which is integrated in Jedox Suite.

Jedox offers good ad hoc reporting and OLAP analysis functionality for business users. Reporting generally takes place in Excel using Excel's own functionality, or in Jedox Web, which offers additional capabilities for dynamic reporting and report distribution. Users can create reports, analyses and dashboards on the web from a spreadsheet interface closely resembling the functionality, look and feel of Excel. Both clients offer standard Excel charts for visualizing information as well as SUCCESS charts, which are compliant with the International Business Communication Standards (HICHERT®IBCS) for reporting.

The vendor has strengthened its cloud offering in recent releases and has introduced its first automated Al features (Alsissted™ Planning) to support planners in tasks such as forecasting.

## **Strengths**

- Flexible BI & CPM product for planning, reporting and analysis designed for business users
- Uses Excel and spreadsheet resembling Excel in the web client as user interfaces
- Good integration between Excel, web clients and mobile access to Jedox content
- Web-based modeling (OLAP database and ETL processes)
- BARC's BI Survey 18 again revealed a high level of satisfaction with vendor, product and functionality among Jedox customers, confirming its good price-to-value-perception

#### **Challenges**

 Jedox's flexibility as a development environment for BI and CPM can lead to complex handling when implementing/building intricate applications



- Comparatively limited predefined workflow functionality. Custom workflows can be built as part
  of the implementation project.
- Limited functionality for formatted print-oriented reporting within Excel client and web client
- Typically used in departmental or small-scale scenarios (source: The BI Survey 18). Customers with larger scenarios should evaluate similar references.



#### LucaNet

Berlin, Germany

www.lucanet.com

Founded in 1999, LucaNet is a German vendor focused on corporate performance management addressing finance departments. The company is headquartered in Berlin with additional offices in Germany, Europe, Asia and the United States. According to its own accounts, LucaNet has over 2,500 customers worldwide.

LucaNet's software portfolio comprises solutions for consolidation, planning, financial reporting and additional financial management topics, which can be used in any combination. All products are targeted at business users and are based on a proprietary multidimensional, in-memory database (LucaNet.Financial OLAP Server). The database provides a predefined data model with intertwined business rules for establishing an integrated financial planning model and creating consolidated financial statements. LucaNet.Importer provides a variety of predefined connectors to common ERP and financial accounting systems. It is also possible to collect and validate data via a web interface, including an intercompany reconciliation.

LucaNet's CPM solutions focus on financial consolidation, integrated corporate and financial planning and financial reporting and analyses. Since LucaNet's planning functionality is geared towards its consolidation logic, it is also possible to compare planned versus actual data at group level. For individual, flexible (ad hoc) reporting and analysis, LucaNet recommends its Excel add-in as a front end, or the enhanced functionality of various BI products such as Power BI, Qlik, Tableau, BOARD and others. Due to its open architecture, BI front ends capable of accessing OLAP data sources can access the LucaNet.Financial OLAP Server including all structures, hierarchies and values via XMLA.

In recent versions, the product's flexibility has been enhanced beyond its traditional focus on finance-specific content. An integrated development environment provides functionality to design individual forms, calculation rules and applications. Using the integrated development environment, LucaNet provides apps for several operational planning scenarios that can be used to feed the vendor's inherent financial planning model. They can be adapted to customer-specific needs and requirements. The user interface of LucaNet's entire software offering has been modernized with the latest release. In addition, LucaNet has switched from Java 8 to Java 11 due to Oracle's announcement that it was changing its release policy and discontinuing free support for Java 8.

## **Strengths**

- A business user-oriented CPM platform for integrated financial management of individual subsidiaries or at group level based on a proprietary multidimensional database
- Extensive predefined business rules for financial management tight integration of (financial) planning and financial consolidation (IDW PS 880 certified)
- In The Planning Survey 18, LucaNet achieved excellent feedback for performance satisfaction, project length and predefined data connections. The vendor offers a great collection of connectors to operational systems with semantic support including drill-down functionality (e.g., SAP, Microsoft Dynamics NAV, Diamant proALPHA, DATEV, Sage etc.)
- According to The Planning Survey 18, customers are very satisfied with the vendor and implementer support they receive and the price-performance ratio of the product

#### **Challenges**

In terms of operational planning, flexibility is a problem encountered by customers in The Planning Survey 18. Support for operational plans (apart from integrated financial planning) is limited



by LucaNet's flexibility (e.g., the number of dimensions in the data model is technically limited to a maximum of 11). Predefined apps for various operational plans are available.

- Limited functionality for individual reporting and analysis. However, proprietary OLAP cubes can be accessed by third-party BI front ends using XMLA or can be replicated in a standard DBMS.
- Creation of (complex) apps for operational planning with LucaNet's integrated development environment is rather technical and can require consulting know-how from implementation partners



#### **Oracle**

Redwood Shores, CA, USA

www.oracle.com

Oracle is a global provider of enterprise cloud computing, offering software as a service, platform as a service, infrastructure as a service and data as a service capabilities. The company employs more than 138,000 people worldwide. With more than 430,000 customers and deployments, Oracle offers a comprehensive stack of cloud applications, platform services and engineered systems.

The vendor's BI and enterprise performance management (EPM) portfolio contains various on-premises and cloud products. On-premises, the well-known Oracle Hyperion EPM portfolio and Oracle BI suite are available. However, in 2014, Oracle changed its general release strategy to "Cloud First", and the vendor now has a major strategic focus on enhancing its cloud portfolio. Oracle's EPM and BI cloud portfolio includes Oracle EPM Cloud and Oracle Analytics Cloud (OAC). A variety of other on-premises and cloud offerings complete Oracle's comprehensive product portfolio. Oracle's EPM portfolio includes applications for planning, financial consolidation, performance reporting, financial strategy management, profitability and cost management, account reconciliation and tax reporting.

Hyperion Planning, Oracle's on-premises planning product, was acquired with Hyperion Solutions in 2007 and is one of the most widely used planning products in the world with thousands of implementations. Based on Essbase as a multidimensional database, the platform is suitable for corporate planning as well as integrated financial planning. It is especially suited to centrally controlled, standardized planning applications in mid-size to large scenarios. Hyperion Planning is integrated with Oracle's other on-premises EPM products, such as Hyperion Financial Management for financial consolidation.

Oracle's entire EPM portfolio is now available in the cloud as EPM Cloud. This includes Planning Cloud (i.e., Enterprise Planning and Budgeting Cloud Service, Planning and Budgeting Cloud Service), Financial Consolidation and Close Cloud Service, and Profitability and Cost Management Cloud Service. All EPM Cloud solutions are based on a consistent technical architecture and can be deployed in a modular fashion.

For BI and analytics, the Oracle BI platform provides modules for developing and deploying dashboards, formatted reporting, ad hoc reporting and analysis. Oracle BI is available on-premises and as a cloud service (OAC). Oracle Analytics Cloud also includes Essbase Service, a multidimensional database which can be used for scenario modeling, OLAP analysis and the creation of analytics applications.

Complementing the portfolio, Oracle Advanced Analytics is available for data mining as an extension to Oracle's RDBMS.

#### **Strengths**

- Comprehensive portfolio of EPM applications in the cloud and on-premises covering financial and operational planning, financial consolidation and reporting
- Web-based BI product portfolio for formatted and ad hoc reporting, analysis and dashboarding in one suite available on-premises and in the cloud
- Recently added capabilities for data discovery and search-based analytics in OAC
- Hyperion Planning and Oracle EPM Cloud offer comprehensive functionality for web-based, integrated corporate planning in top-down and bottom-up planning scenarios based on Essbase, the vendor's high-performance multidimensional in-memory database
- Suitable for enterprise BI and planning scenarios in mid-size to large companies. Planning Cloud has also gained adoption in smaller organizations.



- Integration between product lines, such as Oracle Analytics Cloud and Oracle EPM Cloud, is at data level leveraging data models and structures. However, product lines are not integrated at report/visualization level.
- Hyperion Planning is not well suited to a self-service approach in line of business. Due to its
  comprehensive functionality and setting options, the back end requires tech-savvy power users
  for administration tasks and to set up individual planning applications. Conversely, back end
  complexity is much reduced with EPM Cloud as Oracle takes care of the technical operation of
  the system. Furthermore, packaged application content and wizard-based configuration enable
  faster deployment in the cloud.
- Oracle's cloud-first strategy for its BI and EPM portfolios leads to transient functional disparity between cloud and on-premises offerings
- Oracle is comparatively expensive but the pricing of BI and planning products is transparent.
   The cloud versions offer alternatives for cost shifting to future periods and faster time to value.



#### SAP

Walldorf, Germany

www.sap.com

SAP was founded in 1972 as a business applications company, long before it entered the BI market with the acquisition of Business Objects (BO) in 2008. Today SAP is one of the largest applications vendors worldwide. Its original strategy was to view BI as an extension of its all-inclusive ERP offerings. Therefore, SAP launched SAP Business Warehouse (BW) in 1998, a completely packaged and plugand-play BI solution designed to complement SAP ERP applications. Today, SAP is investing heavily in building SAP Analytics Cloud (SAC), its next generation analytics platform that combines BI, planning and predictive analytics in one decision-making platform delivered as software as a service. It also continues to provide on-premises solutions such as SAP BusinessObjects Enterprise and SAP Business Planning and Consolidation (BPC). In the cloud analytics segment, SAP offers additional solutions such as SAP Digital Boardroom and SAP Analytics Hub (both built on SAP Analytics Cloud) and SAP S/4HANA Finance for Group Reporting.

SAP Analytics Cloud, SAP's strategic cloud offering, brings together analytics capabilities such as data discovery and visualization, planning and predictive analysis for different users into one product. With a large and growing development team, Analytics Cloud is becoming richer in features such as application design, planning and predictive functionality. SAC can be integrated with SAP BPC in a so-called hybrid scenario (aligning master data and transaction data) and used as a data entry front end on top of SAP BW systems. The product offers live and import connectivity. With its live connectivity to BPC 11, no data needs to be transferred to SAC. BPC Standard models can be integrated using the automated import/export capabilities of SAC. Moreover, SAC can connect directly to data sources such as SAP BW/4HANA and SAP BO Universes without moving, caching or persisting the data into the cloud.

BPC – SAP's recommended product for those requiring an on-premises planning solution – is a core element in the SAP Analytics portfolio. The product was originally developed by OutlookSoft based on Microsoft SQL Server as a database platform. Since the acquisition, SAP has developed a second version for BW. Starting with release 10.1, capabilities from BW Integrated Planning (SAP's own former BW-based planning product) have been introduced into BPC. BPC 10.1 runs on BW on HANA and combines IP's integration in BW with BPC's ease of use (esp. in Standard model). BPC is an integrated, Microsoft Excel and web-based solution for planning and financial consolidation that can be used to develop individual, workflow-based planning applications for various kinds of planning topics (sales, financials etc.). The latest version of the product (version 11) uses BW/4HANA as a basis, SAP's next generation data warehousing offering released in 2016. In addition to BPC, SAP has several on-premises products for financial close and consolidation (SAP Financial Consolidation) and reporting and disclosure (SAP Disclosure Management). With S/4HANA Finance for Group Reporting, SAP has introduced consolidation functionality into its S/4HANA public cloud solution. Since the latest release (1809), this functionality is also now available in the on-premises version.

Additional BI capabilities in the SAP Analytics portfolio are available via SAP BusinessObjects Enterprise for on-premises deployments. These are designed to work together with SAP Analytics Cloud. SAP BO incorporates various end-user tools with a moderate level of integration. The suite contains strong individual products as well as several clients for various types of analysis and capabilities for building custom guided BI applications that can be published to the web or mobile devices. The suite currently consists of the following products: SAP Crystal Reports, SAP BusinessObjects Web Intelligence, SAP Lumira and SAP Analysis for Office. Some products leverage the central Universe semantic layer to access data sources, while others access data sources directly. Organizations can access and manage both on-premises and cloud content from SAP and third parties with SAP Analytics Hub, part of SAP Analytics Cloud.



#### **Strengths**

- SAP Analytics Cloud is an integrated business-user-oriented solution for BI and planning with embedded functionality for predictive analytics and data discovery scenarios. It also serves as the platform for applications such as SAP Digital Boardroom and live connectivity to SAP's onpremises solutions.
- Extensive BI platform for formatted and ad hoc reporting, analysis, dashboarding and custom application development, suitable for large deployments (SAP BusinessObjects Enterprise)
- Growing predefined SAP Analytics Cloud content for SAP's operational systems such as SAP S/4HANA, SAP C/4HANA and so on
- BPC is a flexible, integrated product for planning and financial consolidation, providing functionality for web and workflow-based planning and consolidation scenarios
- Well established and expansive partner community with worldwide product support and expertise. Knowledge of SAP products in the DACH region is especially strong.

- Product integration in the BI portfolio remains a work in progress with a future strategy focused on combining SAP Analytics Cloud and SAP BusinessObjects Enterprise more closely into a hybrid solution supporting hybrid cloud and on-premises use cases
- If the 'embedded' modeling option in BPC is chosen, the product's back end in BW requires technical staff to set up the database (cubes) and queries not very business user friendly
- SAP offers a broad portfolio of separate BI and planning products for different use cases. Customers have to decide which product(s) best suit(s) their requirements.
- Strong focus on products such as Analytics Cloud and Digital Boardroom is leading to less innovation and fewer updates for the rest of the BI and EPM product portfolio
- SAP Analytics Cloud is still a very young solution with fewer references compared to other SAP
  products. Nevertheless, a lot of attention is being paid to the development of the product and it
  is being driven forward quickly.



#### **Unit4 Prevero**

Munich, Germany

www.unit4.com/de

Prevero was originally founded as a consultancy in 1994. The company, now known as Unit4 Prevero, is based in Munich, Germany, and has approximately 250 employees as well as an international partner network. In recent years, Unit4 Prevero has grown into one of the largest CPM vendors in the DACH region in terms of software revenues, and claims to have a client base of more than 4,500 companies in over 30 countries. Its growth has been largely organic but was also boosted considerably by the acquisition of software vendors Winterheller in 2011 and MIK in 2015. In 2016 Prevero itself agreed to be acquired by Unit4, a Dutch provider of enterprise applications (e.g., ERP) for service organizations.

For historical reasons, Unit4 Prevero has a strong focus on the utilities sector and offers pre-built content specifically for this industry. Approximately 20 percent of Unit4 Prevero's clients come from this sector. Despite this, Unit4 Prevero positions itself as industry-neutral and now wins more new clients outside the utilities sector. Additional predefined industry and business applications are available for areas such as project performance management, strategic controlling, and risk and opportunity management.

The basis of Unit4 Prevero's applications is the flexible Unit4 Prevero platform technology, which can be used for various BI and CPM use cases. Unit4 Prevero is targeted at business users who build BI and CPM applications with the help of wizards. The product provides a flexible development environment for building individual applications for planning, reporting and analysis, which is supported by dialog boxes and requires no knowledge of scripting.

Unit4 Prevero provides comprehensive capabilities for supporting top-down, bottom-up and mixed planning processes. Planners can enter budget data in the full client, HTML5 web client or Excel add-in. Aside from customized planning applications, Unit4 Prevero also offers a financial planning module for companies across all industries. Furthermore, broad functionality is available for reporting and application creation with a tabular grid that closely resembles Excel in the full client. For consolidation purposes, Unit4 Prevero was reinforced by an OEM solution which was recently replaced by its own in-house developed Unit4 Prevero Consolidation. The consolidation application not only includes legal consolidation covering several consolidation standards but also offers reporting capabilities and predefined disclosure statements. For data storage and navigation, Unit4 Prevero uses a ROLAP approach and offers typical OLAP navigation capabilities in its clients.

As of 2018, the Unit4 Prevero CPM platform has integrated artificial intelligence based on multi-level neural networks. Users are assisted by deep learning functions while building forecasts and detecting deviations or anomalies in data entry.

## **Strengths**

- Integrated, feature-rich platform for CPM and BI aimed at business users
- Strong reporting functionality with development in an environment resembling Excel (full client)
- Comprehensive functionality for top-down, bottom-up and mixed planning methods
- Predefined business applications and content (topical and industry-focused applications)
- Microsoft Office Add-in (Microsoft Word, Microsoft PowerPoint and Microsoft Excel)
- BARC's BI Survey 18 and The Planning Survey 18 reveal that customers are largely satisfied with the vendor's flexibility and breadth of functionality



- Comparatively limited functionality for tool-based ad hoc reporting for business users. Currently only available in Unit4 Prevero's full client (it is restricted in the web client).
- Currently, the functionality of the HTML5 web client is limited compared to the full client (e.g., no administration, no modeling)
- Besides incorporated Al functionality, no support for open libraries such as R or Python to leverage existing advanced analysis models created by data scientists
- According to BARC's Planning Survey and BI Survey, performance seems to be an issue for some customers. Particularly in environments with large amounts of data and concurrent users, organizations should evaluate Unit4 Prevero's performance.



## **Wolters Kluwer | CCH Tagetik**

Lucca, Italy

www.tagetik.com

CCH Tagetik is an Italian software vendor and solutions partner for CPM and finance-oriented corporate management which was founded in 1986 in Lucca (Italy) as a management consultancy. In 2017, Tagetik was acquired by Wolters Kluwer, a global company with revenues of 4.4bn Euro in 2017 that provides information, software and services to a variety of industries, including the health, tax, accounting, risk and compliance, finance and legal sectors. The group serves customers in over 180 countries, maintains operations in over 40 countries, and employs approximately 19,000 people worldwide. The company is headquartered in Alphen aan den Rijn, the Netherlands. CCH Tagetik, a part of the Tax and Accounting division, provides solutions to CFOs for corporate performance management, available onpremises and in the cloud. According to the vendor, 75,000 users at more than 1,000 customer organizations in 35 countries worldwide use its solutions.

The product is a unified web-based platform for CPM (financial consolidation, planning and budgeting), financial corporate management, risk management and compliance as well as disclosure management. CCH Tagetik targets mid-size and large companies (or groups of affiliated companies) with lots of users involved in corporate planning and/or financial consolidation processes. Additional regulatory solutions are available (e.g., IFRS, Solvency II) based on the CCH Tagetik platform.

From a planning perspective, CCH Tagetik is focused on integrated financial planning and budgeting, with top-down, bottom-up and mixed approaches all supported. Comprehensive workflow functionality (especially for bottom-up approaches) is available to control planning processes involving lots of planners. CCH Tagetik contains a predefined model for integrated financial planning (balance sheet, profit and loss statement, liquidity) that can be used by individual subsidiaries or at group level. Consolidation of plans is possible thanks to CCH Tagetik's integrated functionality for financial consolidation.

In terms of reporting and analysis, CCH Tagetik's integrated functionality is geared to the on-screen display (not printing) of reports and dashboards. Recently, a new analysis panel in the web client and Excel add-in was introduced for analyses by cell (drill down to details in a specific cell), by cube (pivot analysis for a specific range of data) or anywhere (free filtering of data room). Moreover, CCH Tagetik enables wizard-driven automatic cube generation for Microsoft SQL Server Analysis Services and third-party BI products (partly OEM) from XLCubed, Microsoft, SAP and Qlik. The relational CCH Tagetik data model, stored in Microsoft SQL Server, Oracle, PostgreSQL or (since 2014) SAP HANA, is open to third-party access.

## **Strengths**

- Integrated product for financial planning (balance sheet, P&L, liquidity) for individual subsidiaries or at group level with additional CPM functionality (financial consolidation, risk management, disclosure management) targeted at mid-size and large companies. The offer is expanded by the Analytical Information Hub making the processing of mass data available on a granular level.
- Comprehensive predefined set of business rules for financial corporate management (financial planning and financial consolidation) and selected operational plans
- Comprehensive web-based workflow functionality with transparent status monitoring
- Possibility to leverage SAP HANA as a platform and use built-in HANA connectivity for real-time data access (e. g. ACDOCA)
- Business user-friendly Microsoft Excel add-in and web-based planning forms for data entry



- Implementation at SMEs with simple requirements involves relatively high effort
- Flexibility of CCH Tagetik's standard financial data model ("Financial Workspace" with 11 predefined dimensions and 5 additional dimensions with opportunity for double occupancy) can be enhanced by the "Analytical Workspace", offering flexible and scalable possibilities for open data modeling, financial performance management (e.g., regulatory reporting, IFRS 16), planning and analytics with no limit to dimensions.
- Screen-based reporting and dashboarding, Microsoft Word add-in-based disclosure management and Microsoft PowerPoint add-in available in CCH Tagetik. This is supplemented by third-party BI products (OEM) such as SAP Analytics Cloud, Qlik or XL Cubed



# **Other Vendors**

There are many other established software vendors in the DACH region that provide mature and very useful technology, which may be ideal for organizations looking for a planning and BI solution. However, due to the inclusion criteria applied in this report, those vendors are not evaluated in detail. To complete the market overview, here is a selection of those providers (this does not claim to be a complete list).

## **Adaptive Insights**

Palo Alto, CA, USA

www.adaptiveinsights.com

Cloud-based BI and planning product with modules for planning, financial consolidation, reporting and analysis.

#### Denzhorn

Ulm-Jungingen, Germany

www.denzhorn.de

Standardized software product for integrated financial, results, sales, investment and HR planning.

#### **elKomSolutions**

Tuttlingen, Germany

www.elkomsolutions.de

Software for integrated corporate planning and financial consolidation based on IBM TM1 technology (database, data integration and front ends).

#### **Kern Allevo**

Freiburg, Germany

www.kern.ag

Allevo integrates with SAP ERP CO to provide Excel-based operational planning, analysis and visualization of SAP ERP CO data in the field of operational BI.

## Longview

Markham, Canada

www.longview.com

Longview provides CPM and BI products with options for on-premises, private cloud and public cloud deployments (Longview Close, Longview Analytics powered by arcplan, Longview Plan powered by Tidemark).

#### macs Software

Zimmern, Germany

www.macscontrolling.com

Modular software product family for accounting and controlling with integrated planning functionality. Flexible combination of different software modules is possible.



#### **OneStream Software**

Rochester, MI, USA

www.onestreamsoftware.com

CPM product with functionality for financial consolidation, planning and analytics.

#### **Procos**

Vaduz, Liechtenstein

www.procos.com

Flexible budgeting and planning software for operational as well as strategic planning (balanced score-carding).

## **Prophix**

Mississauga, Ontario, Canada

www.prophix.com

Integrated BI product for planning, analysis, reporting, dashboarding and financial consolidation focused on mid-sized companies and based on the Microsoft SQL Server platform.

#### **PST**

Freising, Germany

www.pst.de

Integrated software for dashboarding, reporting, OLAP analysis and planning based on the Microsoft SQL Server platform.

## Software4You

Munich, Germany

www.software4you.com

Software for planning and corporate controlling with a particular focus on HR planning.

#### **Solvistas**

Linz, Austria

www.solvistas.com

Software suite with separate modules for planning (financials, costs, liquidity, sales), analysis based on key figures and balanced scorecarding.

## **SWOT**

Berlin, Germany

www.swot.de

Standardized software product for integrated financial planning and corporate controlling focused on small to medium-sized enterprises.



## **Thinking Networks**

Aachen, Germany

www.thinking-networks.de

Flexible planning software for creating tailored applications focused on sophisticated planning requirements.

## **Valsight**

Potsdam, Germany

www.valsight.com

Innovative platform for interactive, driver-based simulation and corporate management based on operational and strategic drivers. Scenario simulation of action alternatives and measures considering uncertainties and risk simulations (Monte-Carlo).



# **Related Research Documents**

The following BARC and teknowlogy Group documents complement this BARC Score report:

- BARC Access: Access to BARC's complete research portfolio, including product reviews with detailed insights into more than 40 BI solutions, covering all the major players in the BI space http://barc-research.com/research/business-intelligence/
- BARC Study "Softwarewerkzeuge für die Planung": Detailed information on the marketleading planning products in the DACH region. The study scores products from different vendors for use in mid-size and large companies (in German language only).

http://barc.de/planung

BARC Score Enterprise BI and Analytics Platforms: A quick and clear overview of the international BI products market based on a combination of detailed end-user feedback and thorough analysis of products and vendors.

http://barc-research.com/barc-score/bi-score/

BARC Score Advanced Analytics Platforms: This report focuses on vendors offering advanced analytics and data mining platforms. It analyzes the strengths and challenges of all the leading vendors in the market as well as a number of smaller players that often have less visibility, but equally offer outstanding value to their customers.

http://barc-research.com/barc-score/advanced-analytics/

BARC Score Data Discovery – Data Preparation, Visual Analysis and Guided Advanced
Analytics for Business Analysts: Data discovery is currently one of the world's most influential
Bl trends. The demand for flexible, user-friendly tools that can be used to efficiently analyze and
research data is rising accordingly. BARC Score Data Discovery provides a market segment
overview that clearly addresses the strengths and challenges, current market position and functional scope of individual providers, and serves as a valuable guide for the selection of software.

http://barc-research.com/barc-score/barc-score-data-discovery/

 The BI Survey: Research based on the world's largest annual survey of BI end users looks at the latest trends, compares software products in detail and reveals how real-world users currently rate their BI vendors and products.

https://bi-survey.com/

• The Planning Survey: The world's largest vendor-independent survey on the use of planning products looks at the latest trends, and features user ratings of the leading planning vendors and products.

https://bi-survey.com/

 BARC BI Trend Monitor: BARC's BI Trend Monitor study gives BI practitioners a platform to have their say on the trends currently shaping the BI and data management market, supplemented by additional commentary and analysis from BARC analysts. Free to download at:

http://barc-research.com/research/bi-trend-monitor/



# **BARC Consulting Services**

What's included	BARC Score Inquiry	BARC Score Workshop	BARC Score Short List
BARC Score Paper			
<ul> <li>Score methodology</li> </ul>			
o Score graphic			
<ul> <li>Page per vendor with</li> </ul>	$\checkmark$	$\checkmark$	✓
<ul> <li>Vendor and product description</li> </ul>			
<ul> <li>Strengths and challenges</li> </ul>			
Analyst inquiry time (connect directly with BARC analysts)	One hour	During the workshop	During the workshop
Explanation of the BARC Score concept		✓	<b>√</b>
Introduction of the vendors rated in BARC Score, as well as other interest- ing players		✓	✓
Requirements discussion and weighting		During the workshop	Dedicated requirements analysis workshop
Verbal tool recommendation		<b>✓</b>	✓
<ul> <li>Presentation of documented short list (with filters, exclusion criteria, explana- tion per excluded vendor)</li> </ul>			✓

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