



Business-Driven Intelligence

Plan & Collect Data

Automatically Collect Data and Plan Processes
at a Low Expenditure



Introduction

As an integrated solution, Performance Management controls the strategy, planning, budgeting, and the implementation of measures and offers comprehensive reporting functions.

Data usually originate from Performance Measurement and Business Intelligence systems that are rated as time-consuming by users, since the lion's share requires approximately 60% of the expenditure for data collection and preparation, leaving the critical value-adding analysis behind.

Beyond Collecting Data

The Gesellschaft für Informatik (a German IT institution) defines Performance Management as „a system that controls and influences the performance of both the company and the individual employee“.

This system measures and manages the time needed for the performance, the allocated resources, and rates the achieved work (performance x time).

The particular goal of Performance Management is the systematic, multi-dimensional measurement, control and evaluation of the performance and of the processes and performance levels (employees, teams, departments, processes). Ideally, such an integrated Performance Management includes strategy, planning, budgeting, and the implementation of measures through reports tailored for these purposes.¹

This is caused by error-prone and insufficiently automated Excel processes that many companies continue to use to collect their data. Furthermore, coverage of many BI and PM tools must be regarded as defective because core processes and system requirements are partially or totally disregarded.

This whitepaper intends to demonstrate what Performance Management is really about, which processes it integrates and how they can be implemented.

Parting from the actual situation and historical data, such Performance Measurement and Business Intelligence systems try to project the development of performances and processes into the future. This puts them in sharp contrast with the dated control instruments of the early BI stages, whose main focus was on the balancing of accounts and on accounting, i.e. on historical financial magnitudes.

Hence, modern balanced PM systems mainly integrate future-oriented, non-financial magnitudes thus enabling holistic performance management/capacity and planning.

▶ **Performance Management counts among the most important topics in Business Intelligence.**

Historical data originating from numerous sources are extracted and aggregated by Business Intelligence and Data Discovery systems and output as reports or dynamic analyses.

Since more and more data from new systems (e.g. CRM, ERP, and social media) become critical for success or failure, hardly any company can escape these BI and Data Discovery solutions. Reports and data analysis, however, are but the basis of Performance Management:

- ▶ **Specialists often have to explain specifics of or deviations between actual and budget data.**
- ▶ **In many cases, the required information is not available in the central system and must be extracted from local systems in a tedious process.**
- ▶ **However, it is mainly the analysis of historical data that is crucial for future-oriented planning. This requires parameters and values to be retrieved and used as scenarios in planning models (e.g. for integrated corporate, sales, production, or marketing planning).**

Especially if planning is interdepartmental and does not merely consist in financial planning further data collection and explanation is required.

Example:

- ▶ **Collection and aggregation of quantitative detail data of identical structure, e.g. sales-distribution forecasts by sales representatives or headcount indicators.**
- ▶ **Collection of manifold ad-hoc data, e.g. customers and orders, prospective customers, resource demand, project status, and risks.**
- ▶ **Explanation of observed issues, situations, or intentions.**

An essential prerequisite for turning Business Intelligence into a Performance Management solution is to collect the distributed knowledge and merge it with the existing data from various systems.

- ▶ **It is the combination of BI and PM that empowers you to successfully manage your company.**

Business Intelligence

Performance Management

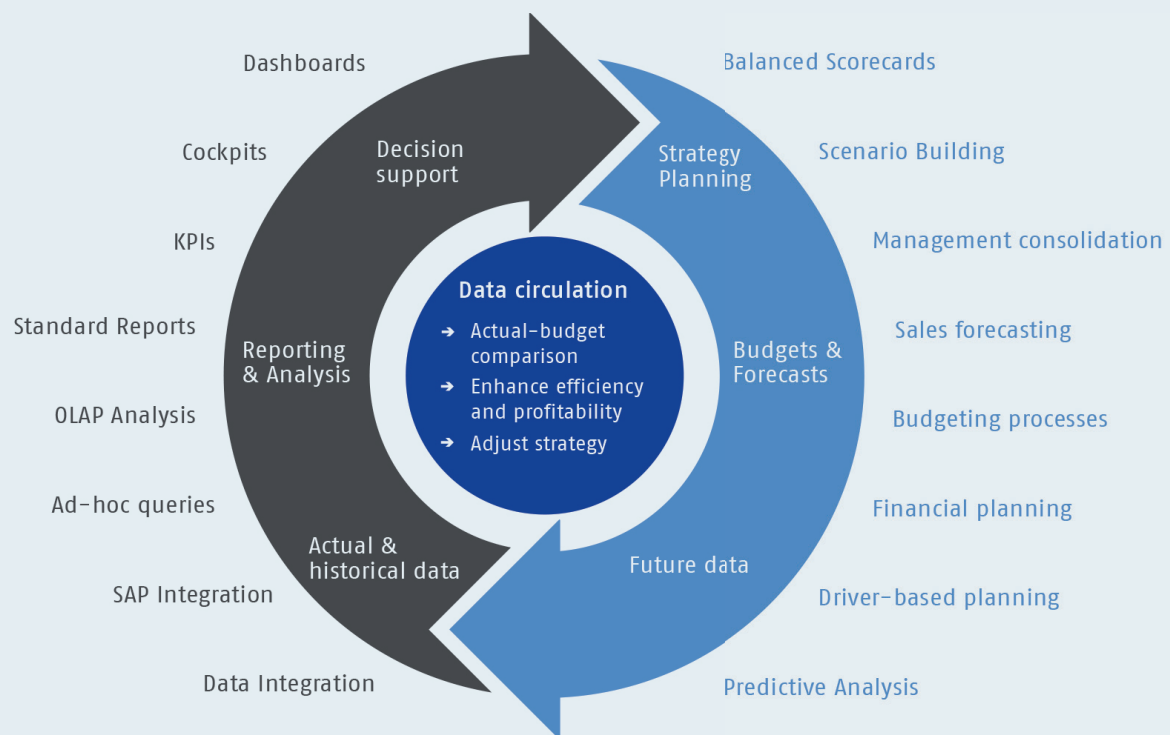


Figure 1: BI- und PM Data Circulation

Only the whole picture makes Performance Management happen.

02 Collecting Data – Trapdoors in Daily Routine


The demand of combining BI and PM makes factual sense to everyone. According to PwC, however, many companies admit that they fail to do so, since too much time is needed for data collection: Instead of the envisaged optimum of two thirds, only just over one-third of the estimated expenditure is used for value-adding data analysis.²


This process continues, says PwC, „for more than half a year from the definition of strategic goals to the specification of operational targets“, which suggests that the potential of Performance Management is far from being fully exhausted.


Its main reason can be seen in a dated approach to the subject, as the renowned techchannel points out: In practice, relevant data is not extracted from a central system but from local redundant sub-systems, which makes queries laborious and error-prone. Relevant data from these heterogeneous internal and external sources would have to be ordered and adjusted in a first step to combine information and analysis.³


In addition, Excel is still used in more than 80% of the companies of all sizes for budgeting, planning, and forecasting.


Excel-based planning usually involves these tasks:


- 


1. Create templates
The process owners create Excel templates for data input by the planners.
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2. Import actual data
Preceding annual data that the planning is based on are often entered manually into the planning reports.
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3. Distribute templates
The coordinator sends the templates to the planners.
- 


4. Enter data
The planners enter their data into the Excel templates.
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5. Return templates
The planners return their results to the coordinator.
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6. Check data
Check results for correctness and resubmits them to the planners in case of content or formal errors.
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7. Keep deadlines
The planners have to return their faultless forms in time.
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8. Consolidate planning
The planning forms are often reconciled with the overall budget through partially automated processes.
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9. Analyze planning
The overall budget is checked for consistency and the achievement of objectives.
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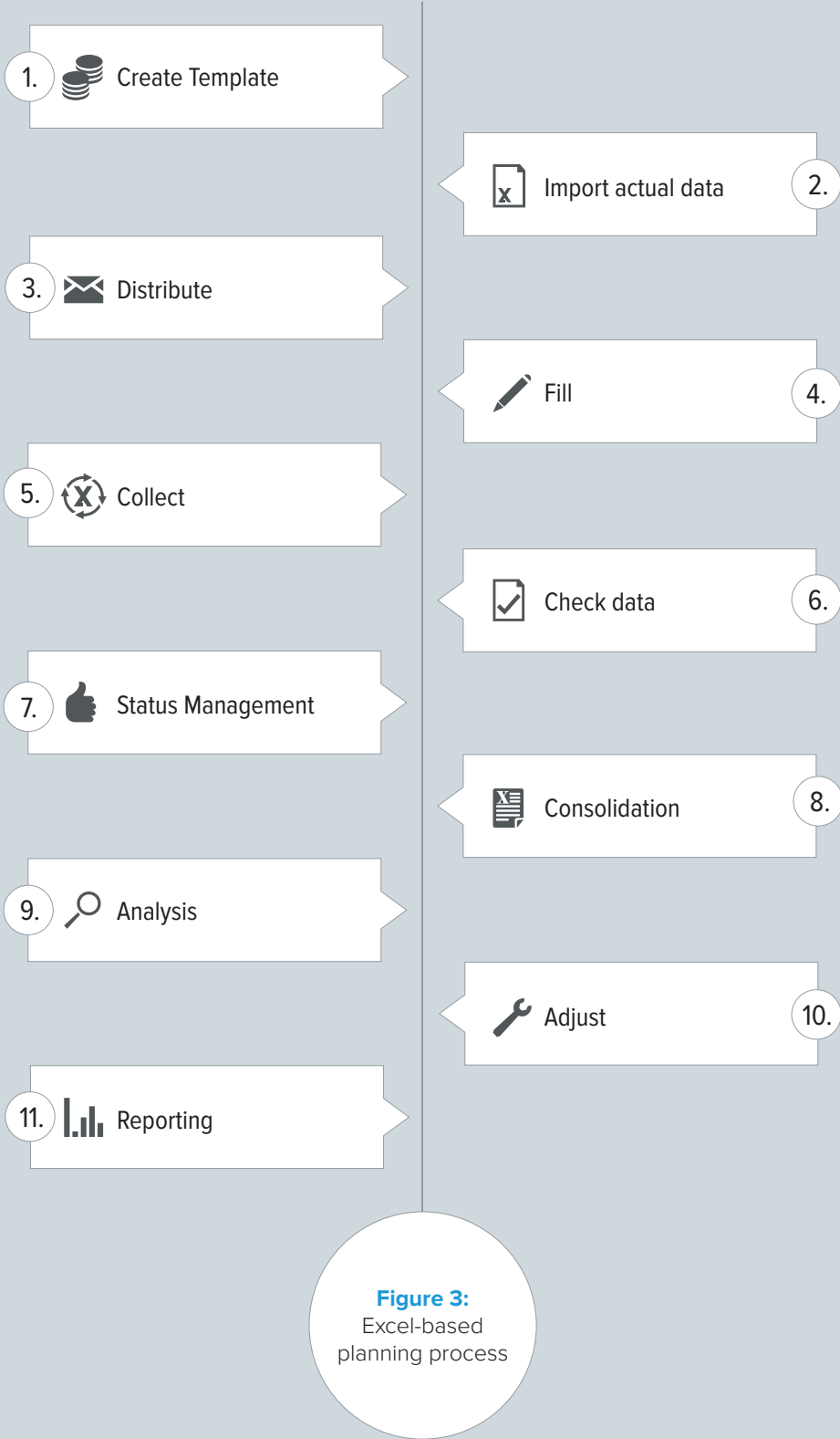
10. Adjust planning
If the results of the overall budget are not satisfactory they must be corrected (back to step 2).
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11. Report overall budget
The final overall budget has to be reported to the management and deployed in the leading system for continuous plan–actual comparisons and variance analyses.

Figure 2: Data Circulation

Excel-based planning process

It goes without saying that such a process is error-prone and time-consuming. Furthermore, a survey by the Business Application Research Center (BARC) confirms that users of the mostly used Excel tool are also the least satisfied and that planning expenditure is 25% higher on average than in companies with adequate Performance Management solutions.⁴



Requirements for a Performance Management solution

1. General Process Requirements

A summary of the principles of Performance Management solutions is provided by a series of papers on modern budgeting published by ICV (Internationaler Controller Verein e.V.) that mention the following core requirements:⁵

Flexible:

1. Be prepared for changes, sensitivities and scenarios
2. Set complementary relative goals
3. Implement (rolling) forecasts and budget reviews
4. Monitor resource allocation

Integrated:

5. Combine strategy, planning, reporting and forecasts
6. Set few goals that can be derived from each other
7. Loosely integrate budget and incentive systems
8. Do not only set short-term goals

Simple:

9. Restrict processes to lean and management-relating contents
10. Only employ useful tools and methods
11. Use few input parameters
12. Work out an optimum level of detail

2. General System Requirements

Flexibility, integration and simplicity are also of vital importance to implement the general requirements in the planning tool:

Flexibility

Planning systems must cover various business models: Flexibility is required for individual planning contents and for fields with a specific planning logic. This does not aim at extensive customizing when the system is introduced but at continuous and ad-hoc adjustments of the business model to new requirements. This applies to planning templates, reports, database structure, and the granularity of data input or of the planning horizon.

Integration

Integration of planning models with the system or the application can be seen as another critical requirement: Data exchange between systems (e.g. ERP, financial accounting, CRM, or DWH) must be secured, since it is the combination of actual, plan, budget, or forecast data that generates added value. Partial plans should also be combinable in one system to prevent redundancy and to provide a consistent aggregated overall view.

Even within the planning system itself, integration plays a vital role, since only the combination of manual input and system calculations, predictive analysis, and explanations by experts guarantee thorough planning support and best efficiency.

Simplicity

Finally, the specialized departments must be capable of implementing and adjusting the planning system without getting into trouble. Fast adjustments, however, are only possible if no complex IT knowledge is required: Therefore, the support by the IT department must not go beyond what is objectively necessary.

3. Functional System Requirements

Apart from the general requirements for the system, many others apply to its function:

Planning Sectors

This refers to modularization of complex overall planning, e.g. integrated enterprise planning consisting of marketing, distribution, production, material requirements, procurement, finances, overhead costs, liquidity, capital requirements and investment. In order to reduce complexity, it is highly recommend to group planning tasks in modules and combine them subsequently.

Aggregation/Disaggregation

Within the sectors, modeling of detail levels is required, e.g. for top-down and bottom-up planning. To this end, aggregation and disaggregation, input on the detailed and aggregated level as well as splashing of

aggregated data (e.g. reference splashing, copying, and bulk data changes), must be possible.

Calculation Rules/Key Performance Indicators

Furthermore, calculation rules for driver-based planning functions (e.g. price x quantity = sales) and KPIs must be made dynamic.

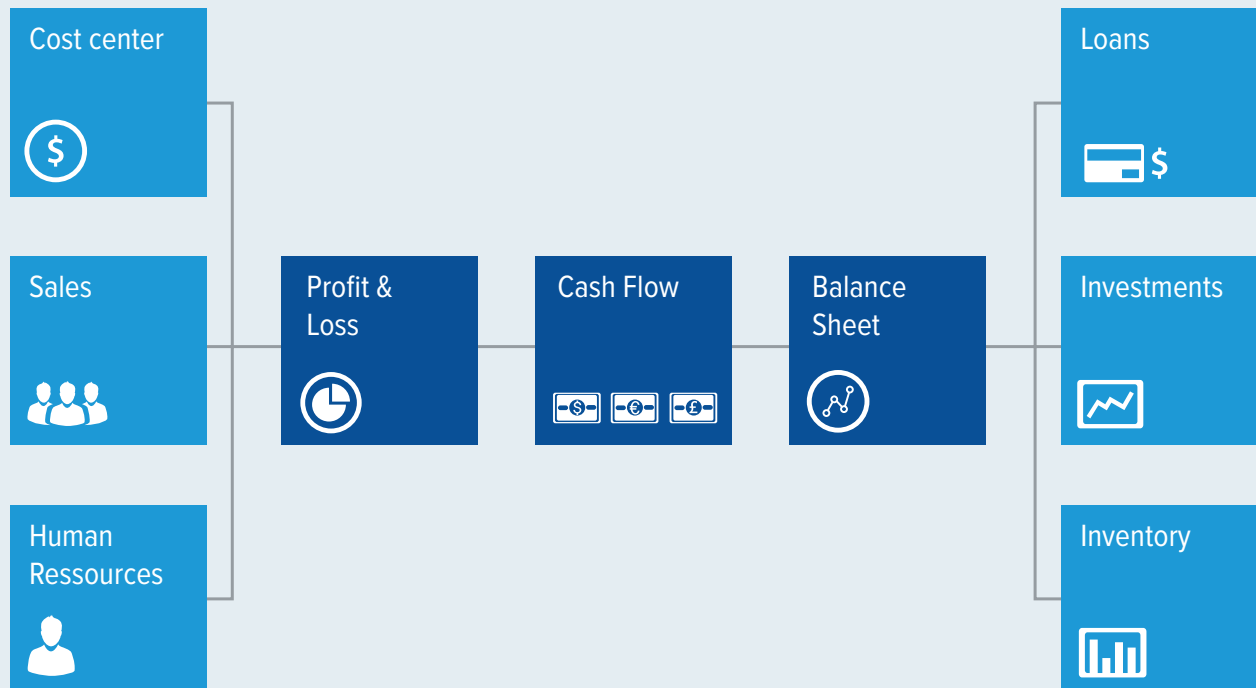


Figure 4: Modularization by Planning Sector

4. Process Control Requirements

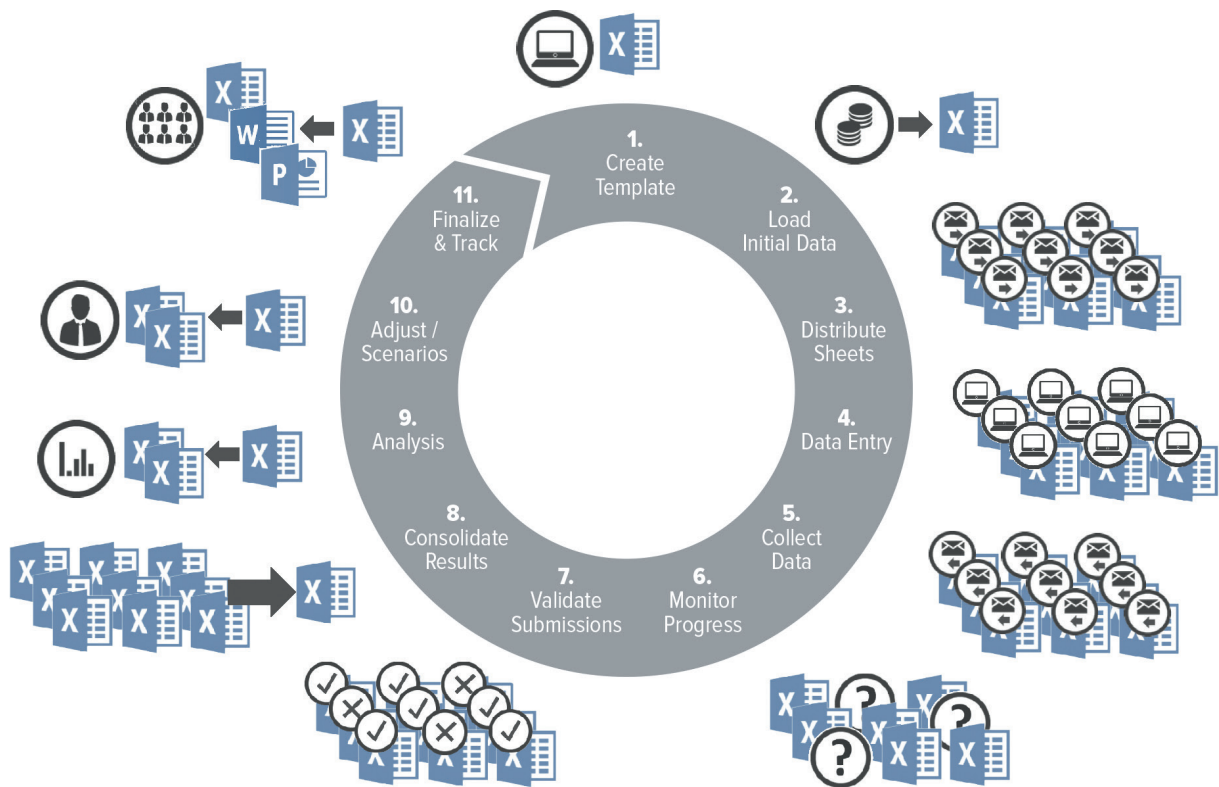
Other requirements result from shared tasks for planning and data collection. For optimum support, planning systems must allow local input, for instance through a web, mobile, or client-server architecture.

Status and workflow management functions that grant an overview of the overall process also play an important role. While security mechanisms and access control guarantee that only data, for which permissions exist, can be viewed and edited, value and plausibility checks secure formal correctness and completeness of the entered data.

Versioning is required for multi-level planning processes (e.g. top-down and bottom-up). Logs provide information on which user has changed what data and when. Also the content-related support for the input of aggregated and detailed data, including target search and reconciliation processes (known as kneading phase among the users), plays a key role.

For detailed partial budgets, reconciliation with the overall budget must be done on-the-fly in order to avoid error-prone manual processes.

Dataintegration with Excel



Dataintegration with Jedox

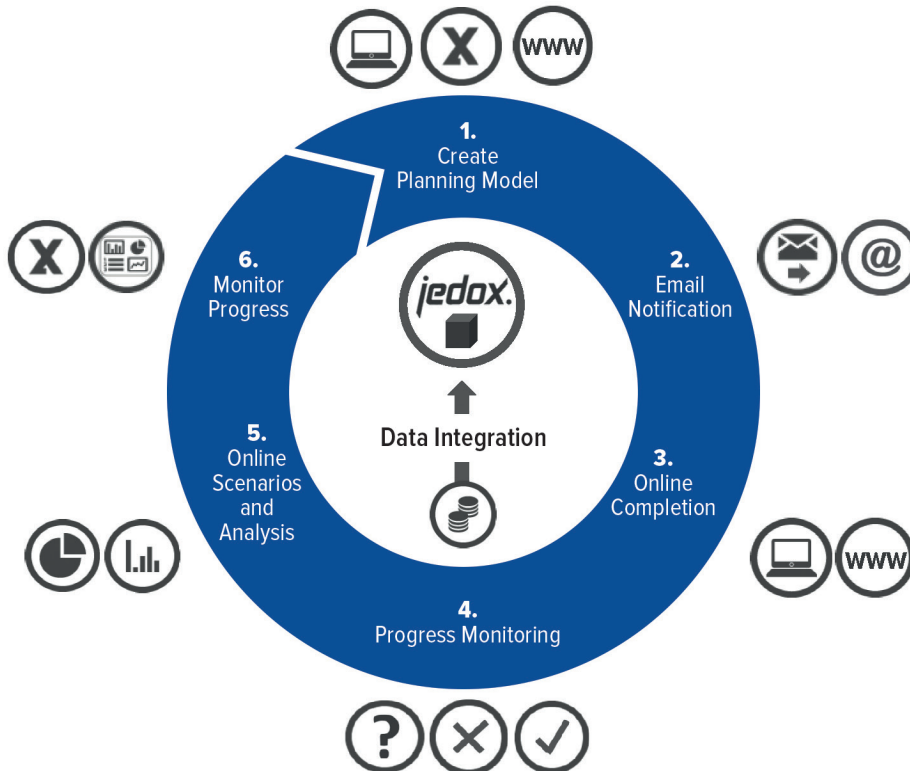


Figure 5: Overview
Data Integration with Excel and with Jedox

Conclusion:

Clean Data Collection Processes

- ▶ Data from operational down-stream systems are imported automatically into the system through interfaces.
- ▶ Central security regulations and access control guarantee that users can only see and change information according to their permissions.
- ▶ A central web-based input form replaces redundant Excel-sheets containing distributed information.
- ▶ Data is checked for quality and plausibility while being entered.
- ▶ Status monitoring and workflows support collaboration of the personnel involved in the planning.
- ▶ Data is aggregated automatically and in real-time.
- ▶ Planning versions and estimate–result comparisons can be analyzed and reported at all time and at each aggregation level.



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¹<http://www.computerwoche.de/>

²<http://www.pwc.de>

³http://www.tecchannel.de/server/sql/1739205/business_intelligence_teil_2_datensammlung_und_data_warehouses/index.html

⁴BARC-Studie „Softwarewerkzeuge für die Planung im Mittelstand“

⁵<http://www.controllerverein.com/>

About Jedox

Jedox AG, founded in 2002 with its headquarters in Freiburg im Breisgau/Germany, belongs to the leading providers of Business Intelligence and Performance Management solutions.

The self-service concept of Jedox enables users from specialized departments to model planning, analysis, and reporting functions without resorting to specialist knowledge from the IT department. This results in fast identification and realization of optimization potentials and in increased transparency of operational processes within the company.

Apart from software and support, the portfolio also comprises implementation and maintenance through business consultants and tailored workshops and trainings organized by our Jedox Academy on training premises worldwide. With its non-industry-dependent dual strategy exemplified by base and premium solutions, the company has so far recorded double-digit market growth rates each year and employs more than 100 heads at three locations in Germany and one in France. The Business Intelligence solutions of Jedox AG are available in 24 languages and used in over 180 countries around the world due to the dense partner network.

