business integration excellence



Planning in the SAP world Many options, which ones to use?



Introduction

"Planning replaces coincidence with error" is a well-known phrase in controlling. Targetoriented corporate controlling is always based on corporate planning, because only those who plan and thus control, can take action in the event of both positive and negative corporate developments in order to achieve corporate goals.

To overcome this hurdle, many companies still rely on Excel. The advantages are obvious, since the setup and deployment are not dependent on the IT department and, in addition, the flexibility for changes is very high. However, decentralized data entry and manual consolidation are very error-prone, and error analysis and troubleshooting are very timeconsuming. Excel can also only guarantee the requirements for data up-to-dateness and data security to a limited extent, which is why Excel is not suitable as a company-wide planning tool.

What is important when deciding which planning tool to use in your company? Which factors play a role in successful corporate planning?



Criteria for the evaluation

Quality features			
Planning frequency	The more up-to-date the actual and planned figures are, the higher the quality of the planning and the decisions derived from it. At the same time, however, the effort required for manual data entry steps increases.		
Data granularity	High granularity requires more planning effort, but enables a more precise root cause analysis. An alternative is aggregated planning with distribution to break down the plan figures.		
Integration	Integration of different sub-plans, such as sales and cost center planning, but also integration with actual data and retraction into the source systems. This saves duplicate planning and avoids differences between plans.		
Maturity	A high level of maturity is characterized by a high degree of automation/standardization and few manually required planning steps based on a technically reliable solution.		
Responsibility	There are clear and technically competent responsibilities to ensure the quality of the planning and also to ensure that the planning figures flow into the current reporting and are actively used for decision support.		

These factors can now be translated into evaluation criteria for a planning tool as follows.

Criteria			
Data volumes	Which data volumes can be processed quickly and flexibly in the tool?		
Integration	What options are available for transferring actual figures and distributing plan figures to other subplans or systems?		
Maturity	Which preconceived or pre-implemented solutions are available for the respective tool that simplify or accelerate implementation?		
Automation	What possibilities does the tool offer for automating individual planning steps?		
Usability	A tool for planning must be as intuitive as possible to be used by the various business units involved and allow effective data entry, even for large volumes of data.		
Maintainability	Like any software product, a planning tool must be maintainable without high manual effort to ensure high system availability and security. In addition, it should be possible to implement adaptations to changed requirements quickly and inexpensively.		
Future-proof	How long is maintenance of the tool guaranteed by the provider?		

We have deliberately omitted the criterion of costs at this point, as these depend very individually on existing software licenses with SAP and are therefore difficult to compare.



SAP solutions considered

We have now looked at the extent to which the tools provided by SAP meet the criteria above. In doing so, we have examined tools that primarily concern corporate planning. Special tools, such as IBP for logistics planning, are important for the planning process, but are not considered here.

The following tools are used by companies:

- Planning in SAP Business Warehouse (BW)
- SAP ERP/S/4 HANA
- SAP Analytics Cloud





Planung im SAP Business Warehouse (BW)

The proven SAP BW is initially perceived as a Data Warehouse and therefore as a rather technical solution. Over the years, however, it has established itself as a planning tool with the planning components BPS (Business Planning and Simulation), but especially with IP (Integrated Planning) and now BPC (Business Planning and Consolidation).

There are basically two planning tools available for SAP BW if a complete on-premise solution is the goal. For SAP BW 7.5 on HANA, there are the solutions SAP BPC Standard 10.1 and SAP BPC Embedded 10.1; for SAP BW/4 HANA, SAP BPC Standard and Embedded are delivered in version 11. While the former versions of the tools come as a pre-installed component of the BW Suite, the successor versions must be installed as an additional (license-required) add-on.

Standard and embedded solutions not only have different development histories, but also differ greatly in terms of their implementation approach, BW integration and target group.

Special case SAP BPC Standard

SAP BPC Standard combines planning, reporting and consolidation tools under one roof and is primarily aimed at departments and their users who want to develop and implement planning solutions and reports independently and decentrally.

Due to its independent development history and origin (financial planning and consolidation), SAP BPC Standard has its own concepts and specifics with regard to data modeling, dimensions, key figures, authorizations, etc., which often differ from BW approaches.

The required technical objects such as cubes, InfoObjects, etc. are created and managed in BPC, i.e. they exist as their own redundant data models. The required master and transaction data must be loaded from BW. In many respects, SAP BPC Standard corresponds to a data mart-oriented solution here. The tool is not suitable for processing very large data volumes.

In the following, we will only look at the embedded solution.

The solution formerly known as "integrated planning" IP has been completely absorbed into SAP BPC Embedded.

The close link with BW-IP/PAK offers the possibility to create your own planning functions with FOX formulas or, in case of very high complexity, even in ABAP, or with an AMDP implementation directly on HANA. Thus, almost any planning requirement can be covered! Of course, reference data such as actual data from BW can be directly integrated. Likewise, an already existing authorization concept for reporting also pulls in planning. A blocking concept can be designed flexibly and thus allows joint planning with many users at the same time.

If a BW already exists with existing actual data, no replication to another system is required in order to use it in planning. If, in addition, the calculation requirements within planning are complex or the data volume is high, then planning directly in BW is certainly still the best solution.

PAK - License in BW 7.5 and License for Planning in BW/4

Up to BW 7.4, planning could be used without an additional license. In BW 7.5 on HANA, one can also use planning without an additional license for now. Only if one wants to use the additional performance by pushing down the planning functions to HANA, one needs the additional "PAK" license. In BW/4 HANA you need an additional license as soon as you want to use the planning functionality.

The disadvantage of this environment is that there is no business content from SAP for planning. Everything has to be developed individually. If actual reporting already exists, experience shows that this additional effort is manageable and the advantages of predelivered content are small.

Even for the retraction of cost center planning into an R/3, SAP has still provided a new planning function in BW/4 HANA, so that this step can also be implemented quickly in the meantime.

When selecting the front end for planning, a fundamental distinction must be made between entering the planning figures via a web interface or via Excel. More modern Lumira is available on the web. When entering larger numbers, however, Excel is often the preferred solution. Depending on the BW release and choice, however, additional license costs may be incurred.

Both SAP BPC Standard as well as the Embedded solution offer "SAP-Analysis for Office" connectivity, Standard via an EPM plug-in and Embedded via an Analysis plug-in. The tools are technically mature and flexible in operation and extension.

Planning in SAP S/4 HANA

SAP has provided two tools for planning for S/4 HANA over time.

For planning in S/4 HANA, BPC 10.1 is a powerful tool and the content "SFIN" is a fast and easy to implement solution for financial planning. By integrating the actual transaction data and the master data via a virtual access, no replication is necessary. This means that planning and reporting can take place in the familiar BW interface without the disadvantages of replication in another system. If all actual data is available in S/4 HANA, then this is the simplest and fastest solution for financial planning. Highly flexible, with always up-to-date figures to implement quickly.



With this solution, however, one should stay with the data model of the content solution if possible. Extending the data model is technically tricky and can lead to additional effort when upgrading or patching. Since the solution is technically more demanding, the causes of possible errors do not become apparent as quickly.

For reporting, the same sophisticated tools are available as for planning in SAP BW and allow planning both in Excel and in corresponding web interfaces.

The second tool for planning for S/4 HANA is the SAP Analytics Cloud.



Planning in the cloud

Since 2015, SAP has also been offering a cloud-based solution for corporate planning in the form of SAP Analytics Cloud (SAC). The general trend of offering software as a service (SaaS) was thus taken into account, and SAP is thus clearly positioning itself in this direction.

There are two basic scenarios for its use.

In one scenario, the SAC is only used as a front end for data entry and reporting, but the data itself continues to be stored in the on-premise systems. In the other, data is imported from sources in SAC and planning is performed exclusively in SAC.

Solution one takes two factors into account: the doubts that still exist in some companies regarding data security in the cloud and, above all, the continued use of planning processes already implemented in BW IP/BPC, thus allowing an elegant solution to these problems. This makes it possible to integrate existing solutions and use further scenarios in the cloud. Even the sometimes powerful planning functions with complex planning logic can be implemented with the possibilities of SAP BPC in SQL. However, this means that you lose some features of the SAC on the functional level and may have to replicate them manually using SAP BPC functions.

The full functionality of SAC is obtained when the planned and required actual figures are stored directly in the cloud. Existing SAP systems can be connected directly, ensuring easy data provision. An already available planning content of SAP allows an easy start and offers a good basis for the necessary adjustments to the company specifics in the planning process.

Overall, SAC is primarily aimed directly at the business departments and less at IT departments. For this reason, planning processes can also be completely designed via the web interface and flexibly adapted at any time. However, this approach can quickly reach its limits for complex processes in a corporate environment, where maintainability and stability become more important. SAP has provided a solution for this: the Analytic Designer. With it, so-called analytical applications, i.e. solutions tailored to the planning process, can be created. This for example, allows users to be guided through the sub-steps of the planning process. The accompanying reporting is then provided by Story Designer - a tool tailored to the business department that can then be designed completely freely by IT. (see our blog https://www.bix-consulting.com/sap-analytics-cloud-story-vs-application/)

This is supported by the SAP Analytics Cloud as a platform. The platform approach is rounded off by further integrated tools:

Smart Predictive: Based on machine learning, statistical analysis and artificial intelligence, scenarios can be created to analyze possible trends and forecast future results.

Smart Discovery: Using automatically generated analysis pages, business drivers behind core KPIs can be identified, outliers can be analyzed, and "what if" simulations can be performed.

While the web interface was the primary access point for a long time, SAP now provides a SAC edition of its well-known Analysis Plug-In in Excel for planning. However, this version does not yet have the same functionality as the classic version, but enhancements are made on a regular basis.





Evaluation

If one now tries to compare and evaluate the tools presented, the result is, as always, ambiguous and depends heavily on one's own company situation. Even if SAP sees SAC as the strategic product, there are conditions in which a different solution is the best. Especially if deep know-how for e.g. BPC is available in the company, sticking to this solution may be adequate.

The following overview now attempts to apply the criteria listed above to the tools, which shift depending on the concrete requirements and framework conditions.

Criteria	SAP BW	S/4 HANA	SAC
Data volumes	++	+	+
Integration	+	++/-	+
Maturity	++	++	0
Automation	+	+	0
Usability	+	+	0
Maintainability	+	0	+
Future reliability/ Further development	0	0	++

When it comes to data volumes and maturity, SAP BW is the clear favorite. The system has been under development for decades and was developed precisely for processing large volumes of data. In terms of maturity, S/4 HANA, which has been on the market for years, is convincing, as is the integration with actual data, since this is generated and processed directly in the system itself. However, if one assumes that not all of the required data is available in S/4 HANA, the evaluation turns, as a connection of third-party systems is rather difficult.

In terms of maturity, the still young cloud solution has some catching up to do, just as it does in terms of automation and usability. Although some steps can also be automated in the cloud via planning functions, it does not yet have the level of the other tools. Usability currently still suffers from the somewhat rudimentary Excel integration, but in the web interface all tools are almost equal.

With S/4 HANA, maintainability suffers somewhat from the overall complexity of the system and the often rigid maintenance cycles of an enterprise solution; here, satellites such as BW and SAC have a clear advantage.

If the primary goal is to build a solution that is as future-proof as possible and that is to be maintained and also further developed by the manufacturer over a long period of time, then SAC as SAP's strategic planning tool is the only right answer. Only here is no end to maintenance in sight so far.

Conclusion

As it's almost always the case, it can be stated that there is no universal tool that represents the best solution for every company. Rather, each customer must decide for themself how to evaluate the respective tool based on the criteria listed above and thus find some clues to select the right planning tool.

Generally speaking, financial planning in S/4HANA certainly makes the most sense if all planning-relevant companies are already available with their data in S/4 HANA and the ERP strategy is also aligned with S/4 HANA.

If a BW is in use anyway and there are also a number of small companies that are not fed via an ERP, the implementation in BW/4 HANA is advantageous. The most promising solution of SAC planning, which is also strongly favored by SAP, may still have one or two missing functions at the moment, but these will certainly be added by SAP in further releases soon.

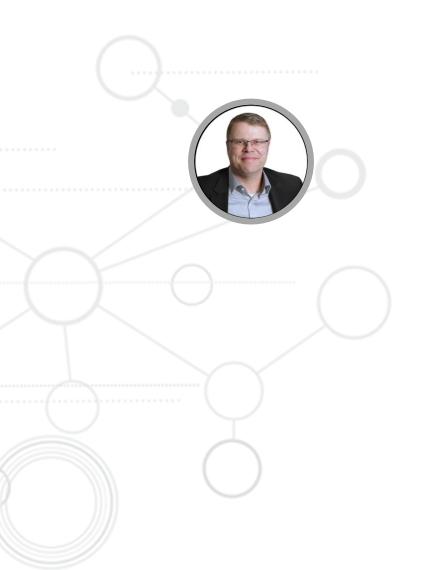


About biX-Consulting

biX Consulting GmbH & Co. KG is a medium-sized consulting company with numerous branches in Germany and abroad and offers customers many years of experience and a high level of competence with business intelligence systems based on SAP[®], Tableau as well as other manufacturers and the associated architectures, products and solutions.

We advise and support customers in our business units Consulting, Services and Solutions in a holistic 360° approach and offer all relevant services from a single source. biX stands for Excellence in both "Business Integration" and "Business Intelligence" and describes our orientation and our claim.

For biX Consulting it is intrinsic to penetrate the processes of its business partners. This makes it possible to implement high-quality and, above all, precisely fitting architectures and solutions with modern and proven technology. In our projects we often work as a bracket between the information technology and the functional business areas with their manifold processes. In doing so, biX Consulting advises cross-industry customers in Germany, Austria, Switzerland as well as in the Benelux countries.



Contact

Oliver Ossenbrink

Management Sales and HR

Phone: +49 (0) 21 02 8 75 46 - 00 Mobile: +49 (0) 151 58 75 75 55

oliver.ossenbrink@bix-consulting.de