Innovations in SAP Finance



Nigel Rayner, Gartner Analyst, summarized the business impact of in-memory computing (IMC) solutions in the Gartner study "IT Market Clock for Financial Management Applications", August 26, 2014 (G00259892), as follows:

IMC-enabled financial applications will leverage IMC technologies to provide significantly higher scalability than traditional relational architectures. For example, IMC will enable GL systems to process higher volumes of transactions so that data from operational systems could be posted directly to the GL. Relational ERP architectures are not scalable enough to support this "fat" GL concept, which has created reconciliation issues between financial, management and regulatory reporting. IMC will also enable more sophisticated predictive and prescriptive analytics; for example, CPM applications will be able to perform planning and profitability at greater levels of granularity and will support more powerful optimization.

IMC technology enables analytics to be performed on transactional databases in real time. This will reduce the need to extract transaction data to a separate data mart or data warehouse to perform more complex analytics. This will significantly change the way financial management applications are used in the future, in particular eliminating the technical boundaries between core financial applications and CPM applications (particularly office-of-finance CPM). This will have a significant impact on financial processes, enablina finance to deliver business insight in real time rather than at period

Innovations in SAP Finance – SAP Simple Finance Add-on

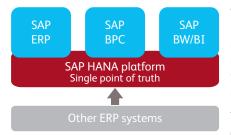
Introduction

The SAP Simple Finance Add-on solution to SAP HANA provides some fundamental innovations in finance and data management that allow highly extended ERP usage and evaluation for many companies. The biggest change in accounting is the pooling of financial accounting and controlling into one ledger, based on a multidimensional data model without any restrictions concerning the number of dimensions. This means unlimited evaluation characteristics on one single point of truth with harmonized and coordinated FI/CO data. The monthly closing is simplified and accelerated by eliminating the often complex coordination between financial accounting and controlling. It is possible to make simulations of monthly financial statements in an arbitrarily definable time frame. The high-performance SAP HANA platform also has the advantage that considerably larger amounts of data can be processed, and previous systems are integrated into financial accounting and controlling on document level or are resolved in subsidiary ledgers. This considerably reduces the complexity in the architecture of financial applications and simplifies the underlying processes.

The new architecture allows real-time reporting based on the data at the document level. Due to the elimination of summary tables in SAP, the volume of data to be stored is significantly reduced and TCO (total cost of ownership) of these applications is reduced. In the field of cash and fraud management, as well as integrated planning, new functionalities of SAP Simple Finance Add-on also facilitate process transparency and evaluation options.

SAP Simple Finance Add-on is particularly interesting for companies that require to launch ERP or harmonization projects based on templates in order to reduce the complexity of existing system architectures, benefit from faster monthly financial statements and better, flexible evaluation possibilities. For industries where performant and coordinated real-time information from operational finance systems is of critical importance, SAP Simple Finance Add-on is an efficient and strategically sustainable solution.

Solution overview



The SAP Simple Finance Add-on solution includes the SAP HANA platform, the classical SAP core ERP Finance and the new features of the SAP Simple Finance Add-ons. This modular design offers the possibility to make the existing SAP ERP architecture faster, more agile and more transparent by use of minimal migration effort.

The SAP HANA platform offers considerably faster data access in both accessing reports and monthly closing jobs,

such as cost allocations or account statements. Structuring information within a single point of truth also makes recurring and complex coordination processes between the different SAP applications FI, CO, CO-PA, BPC and BW/BI dispensable. In addition, non-SAP applications can be integrated into the SAP world more easily and data can be harmonized.

With EHP 7 in SAP ERP 6.0 new features of SAP Simple Finance Add-on are available. They are based on the in-memory database technology and include the following areas:

- SAP Accounting Finance-in-memory functionalities for SAP ERP customers
- SAP Cash Management New products for group-wide cash management
- Integrated Business Planning New BPC functionalities and improved integration of ERP and BPC

SAP Accounting powered by SAP HANA

SAP HANA enhances performance and thereby enables improved data in SAP Accounting

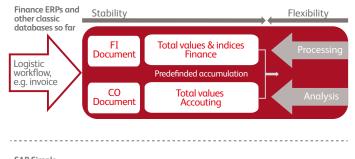
Until now an ERP has had to aggregate and store individual items in summary tables to achieve faster data access. The analysis that followed had to be executed on condensed summary tables. However, this table structure required much more data and limited the number of evaluable dimensions that were updated in the summary. The in-memory technology makes it possible for the first time for redundant data storage to become obsolete in sum and index tables in FI and CO. SAP makes an exception for the special ledger (FI-SL), as there are often customer-specific densities required and used.

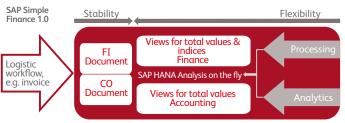
Thanks to SAP HANA, the individual tables can be used for high-performance real-time evaluations. This does not only increase the speed and reliability of evaluations (via an item table as a single point of truth), but it also considerably reduces the database size required by SAP. Furthermore, the reporting replaces the previously limiting factor for the selected reporting dimensions for the item tables by running analysis of almost any number of fields and links online. In addition, the SAP Accounting extends the available information of the item tables due to new potential report fields. As a result, these factors guarantee maximum flexibility and granularity of analyses, as well as easy scalability.

Another important new feature of SAP Accounting is the 'logical document'. To anchor the reconcilability between FI, CO and accounting CO-PA when booking line items, all attributes of the formerly separate

three documents are summarized in one 'logical document' and more attributes are 'linked' to new fields on line-item level with reference information.

In this way, the often long, manual reconciliation processes at the end of a month can be avoided and instead a harmonized and reliable reporting of external and internal accounting will be guaranteed. Furthermore, the machine coordination with the intercompany reconciliation tool (ICR) is faster because the selection and assignment of open items may be omitted or exercised in shorter time intervals. To further





optimize the database, the line-item records are classified as so-called 'hot' and 'cold' data. Depending on the definition of the residence time, old documents ('cold' data) can be rearranged to slower memories. This further reduces the storage space required.

With the migration to SAP Accounting, the asset accounting will be converted automatically to the 'New Asset Accounting' – FI-AA (new) if it is not already in use. The new asset accounting allows consistent, simultaneous updates of all accounting documents in all required evaluation areas. The new accounting logic on the new technical reconciliation account is used in all asset additions and disposals, as well as in asset statements in construction and asset capitalization, and enables a real-time reporting for all valuation areas in the asset accounting.

The benefits of SAP Accounting powered by SAP HANA

- Higher performance, real-time reporting in FI and CO on several dimensions
- Leaner databases and simpler table structures improve the 'total cost of ownership'
- Faster monthly financial statements by eliminating the coordination FI/CO and by shorter terms, such as in accrued sales, WIP determination, CO-PA assessments, billing, the running of the material ledger, etc.
- Further harmonizations of external and internal accounting by the logical document
- Avoidance of inconsistent data in decentralized FI/CO systems by SAP HANA as a single point of truth
- Evaluations in asset accounting at any time in all possible evaluation areas
- The option to evaluate operational business data from the sub-ledgers directly in the general ledger in real time

BearingPoint_®

Our methodology

The first important step is a thorough feasibility study and a robust potential analysis. Given that the change in SAP Accounting heavily depends on the technical initial situation, the requirements of the target system and the technical requirements for the way up to this point, this area demonstrates the focus of the first analysis:

- Evaluation of technical requirements that are already given, e.g. SAP HANA platform, EHP, etc. as well as evaluation of existing system architecture and interfaces (ERP systems, BW/BO, BPC, etc.)
- Identification of 'long-runners' under the reports/programs/ transactions and evaluation of the performance gain and the change effort (e.g. which reports should be converted to line-item tables)
- Definition of new, additional dimensions/fields in the reports. Restructuring and possible reorganization of the monthly closing plan because the programs run faster or steps are omitted.

If based on the results of the feasibility study and the analysis of potential, a decision to implement SAP Accounting is made and the traditional phases of an implementation follow

Migration scenarios for SAP Accounting powered by SAP HANA









* SAP Accounting powered by SAP HANA

In general, from any initial situation, whether new GL or traditional SAP FI, migration to SAP Accounting is possible. However, a conversion to SAP New Asset Accounting (new AA) is mandatory. In contrast to an implementation of SAP Accounting on an existing SAP New GL (Scenario 1 and 2), a kind of 'basic new GL' must be activated (Scenario 3) in order to meet the absolute minimum requirements. It is important to take into account that the existing FI document must be migrated to the new SAP New GL tables. Unfortunately, the customers in the document fields are not implemented standardly in the new table. In order to use new GL features, such as the document split for a gapless profit-center balance sheet, a complete implementation of the new GL can be useful (Scenario 4). However, the complete activation of the new GL can also be done subsequent to the intra-annual SAP Accounting migration in the new fiscal year. Which scenario is most suitable for a conversion depends not only on the initial situation but also on the requirements of the target system. We will be delighted to provide consulting.



SAP Cash Management powered by SAP HANA

Real-time working capital management

With the help of SAP HANA-based analysis tools, a new real-time demand management and real-time DSO control is enabled. Based on the individual documents, customer- or product-specific DSO indicators can be identified, and further analysis can be applied throughout the company. A systematic and present monitoring of indicators enables an immediate and thorough root-cause analysis – prerequisite for the improvement of working capital management.

Cash management powered by SAP HANA

Cash management powered by SAP HANA enables access to group-wide, contractual bank balances as well as information from other areas, such as treasury management and cash in transit. As part of the liquidity forecast, maturity-matched projection of open items (including the payment behavior of customers) with a wealth of drill-down opportunities, differentiated according to foreign currencies, takes place. A new component represents the bank account management that supports the administration of all bank accounts in the group, including the fees, limits and approval workflows. Among the most important innovations, a new aspect is the implementation of a central exposure hub, including all future cash flows as well as the full integration between liquity planning and cash management.



The use of cash management powered by SAP HANA is particularly suitable for medium-sized and large companies that want to have or to develop a highly centralized cash management. In addition to the implementation, this application is of particular interest for global companies that want to restructure their activities in the area of cash management and aim to establish a central governance over the liquidity management and bank management. Using a real-time analysis of the liquidity situation — independent of the accounting

processing in SAP FI – increases the decision-making ability and efficiency in treasury and cash management significantly. The harmonization of processes and the support of the central governance as well as data transparency lead to a reduction in complexity and to better financial resource allocations within the group.

Our methodology

Before the implementation is executed, a comprehensive analysis of cash management processes will be performed. At the same time, the potential data sources for the short-term cash management are determined. In the next step possible implementation scenarios are investigated. As a result of this analysis e.g. a "side-by-side approach" can shape up as appropriate for companies which require a real-time access to all available cash flow data for analysis purposes in the SAP HANA database. However in most cases, the Cash Management is used as an Add-On together with other financial applications within the SAP HANA Business Suite.

The second step looks more specifically to how other data sources from non-SAP systems or other stand-alone systems can be integrated into the central application, in order to achieve a 'single point of truth' in the entire group. This is only guaranteed if there is a high data quality and timeliness at the source (i.e. in financial accounting or even already in logistic processes) for bookings and orders.

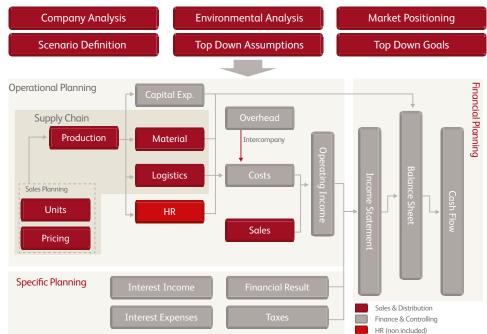
In the third step, the design and the concrete form of the future solution takes place: the connection of the decentralized SAP and non-SAP system to the centralized SAP HANA application and, at the same time, the restructuring of the business processes are made. In addition, the reports are defined with the relevant views and dashboards provided with KPIs, so that the management is able to have the main decision-making facts immediately available at a glance and in any place (including the use of mobile devices). In the fourth and penultimate step, the entire solution has to stand a functionality and an integration test. Lastly, there will be the go-live and a stabilization phase, during which the quality and reliability of the data is regularly tested.

Integrated Business Planning

The Integrated Business Plan is based on a multidimensional data model such as the SAP Accounting solution and allows the mapping of all planning dimensions. In future releases, the basis for the comparison of actual, forecast or plan data will be created with identical models. The planning solution also allows the simulation of data and statements within the SAP Smart Finance Solution. The integrated design solution is not only envisaged for financial planning, but rather has its strengths in the area of integration of operational partial plans with financial planning, due to the performant in-memory technology. This solution allows for logistics planning (sales planning, purchase planning, etc.), and there are several interfaces to the proven logistics planning solutions of SAP.

The benefits of SAP Cash Management powered by SAP HANA

- Multidimensional reports in real time for the transparent presentation of liquidity, credit lines, overdrawn limits, risk and cash flow analysis, foreign currency risks and DSO analysis
- Liquidity forecasts across heterogeneous systems, taking the payment behavior of customers into account
- Group-wide liquidity plan, long-term and medium-term liquidity plan with implemented deviation analysis (plan-actual comparison) and the possibility to implement actual data from the liquidity forecast as well as from the treasury transactions (as suggested values and default values) directly in the continuous planning
- Central bank management with approval workflow for setting up new bank accounts, and thus increased group-wide transparency and governance
- Execution and approval of payments directly from the bank account management in compliance with the principle of multi-assessor verification



The standardization of the data models for operational planning and planning at group level gives the data interchangeability for both stages of planning and makes the planning process more efficient.

The most important features of the intergrated planning solution on SAP HANA are:

- Full integration of planning features on SAP BPC 10.1 into the business suite available
- A unified platform for integrated planning
- Higher performance due to the availability of SAP HANA
- Simulations that have not been possible so far enabled by the higher performance
- Simple application by using Excel as a front end

Our methodology

 The Integrated Planning Assessment is a holistic view of the planning according to the following main dimensions:

- Global parameter and conditions
- Planning content
- Planning processes
- Planning application
- Planning organization
- Based on structured interviews and workshops will be conducted to evaluate the current situation
- Identified potentials for improvement and harmonization leads to a desired target state
- The Assessment usually is finalized by defining the measures needed to achieve the target based on the basic principles integration, flexibility and harmonization

After the implementation decision of the target solution, the classical phases of an implementation project follow:

 The basis for this is given by the defined strategy in the feasability study. A standardization of the planning content, processes and applications is the basis for the implementation concept



Cross-linking of financial partial plans to generate the profit and loss account, the balance

 Integration of the plans for functional costs with the profit and loss account

sheet and cash flows

The benefits of SAP Integrated

• Cross-linking of the operational planning with the financial

planning on the company or

Business Planning

region level

- Prevention of errors due to planning of integrated internal
- cost allocation
 The planning time can be reduced by the integration of
- the plans. Changes in the plans are easier to handle
- Creation of a basis for simulations and for driverbased planning

• The requirements defined in the concept phase will be implemented during the implementation phase. The results will be compared to the goals of the feasability study and checked for achievability

Our assessment of how BearingPoint can help your business

BearingPoint has intensively dealt with functions, technology, migration scenarios and the strategic possibilities of the SAP Simple Finance Add-on solution. In our SAP Competence Center we provide our customers an SAP Simple Finance Add-on demonstration system, and evaluate the functionalities and performance together in a demonstration environment.

On the basis of our experience and of numerous dialogues with customers and suppliers, we assess the SAP Simple Finance Add-on from the present point of view as follows:

- The SAP Simple Finance Add-on module is the first delivery of SAP that fully implements the SAP HANA in-memory technology in finance
- Functionally speaking, this technological quantum leap allows new and previously difficult or impossible analysis of large amounts of data with rapid response times and modern, intuitive user interfaces
- A stronger integration of operational and financial business processes and the underlying planning
 can be implemented by means of an integrated operational and business planning, which enables
 simulation capabilities based on real-time information
- The processes in the financial sector can be restructered and designed more efficiently by the use of SAP in-memory technology in the medium term
- New, real-data based analyses, such as for working capital management and liquidity planning, offer new approach opportunities to optimize the financial resource allocation and the financial disposition within the group in a sustainable way

We encourage our customers to deal with the SAP Simple Finance Add-on now. We assume that SAP will release more IMC-able modules and that, in the medium term, the core of all major SAP applications will be IMC-enabled and cloud-enabled. This opens new and extended opportunities for an approach to corporate management that is revolutionized in its significant parts. This is especially true for companies that dealt with a new set-up of their ERP system landscape in 2014-15: the SAP Simple Finance Add-on is a future-oriented architecture.

Even for companies that aggregated the information from their legacy system to the general ledger (e.g. banks, insurance companies), the new SAP solutions provide the performance to manage a general ledger with detailed information from the legacy systems for the first time. This also has the advantage that mistakes are minimized by the aggregation in the interface, what makes the information in a finance system more transparent (via a single point of truth).

The benefits for you

BearingPoint can support you with comprehensive market and product knowledge and systematic evaluation criteria in the selection of the appropriate system architecture and in finding the suitable migration scenarios. We ensure a proper and tailored design and implementation.

Through many years of experience and our expertise in SAP, especially in SAP Finance, in the context of previous solutions and of the innovative SAP Simple Finance Add-on, BearingPoint is capable of planning strategically from a single source, designing professionally and implementing these kind of transformation projects.

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About BearingPoint

BearingPoint consultants understand that the world of business changes constantly and that the resulting complexities demand intelligent and adaptive solutions. Our clients, whether in commercial or financial industries or in government, experience real results when they work with us. We combine industry, operational and technology skills with relevant proprietary and other assets in order to tailor solutions for each client's individual challenges. This adaptive approach is at the heart of our culture and has led to long-standing relationships with many of the world's leading companies and organizations. Our 3350 people, together with our global consulting network serve clients in more than 70 countries and engage with them for measurable results and long-lasting success.

For more Information: www.bearingpoint.com

