

SAPFIN

**an Introduction to
mySAP ERP Financials**

Contents

Course Overview	vii
Course Goals	vii
Course Objectives	vii
Unit 1: Introduction	1
mySAP ERP Financials Positioning	2
Unit 2: Business Processes in the mySAP ERP Financials Solution	19
Overview of the Business Processes in mySAP ERP Financials	21
Purchase to Pay Process	32
Plan to Product Process	52
Order to Cash Process	66
Unit 3: Financial Supply Chain Management	91
Financial Supply Chain Management	92
Unit 4: Corporate Services	105
Incentive and Commission Management	106
Travel Management	116
Real Estate Management	140
Unit 5: Analytical Applications in the mySAP ERP Financials Solution	155
Business Information Warehouse (BW) and SAP BW Business Content	157
Strategic Enterprise Management Introduction	166
Strategy Management and Performance Measurement	176
Stakeholder Relationship Management	194
Business Planning and Simulation	200
Business Consolidation	207
Business Analytics	220
Unit 6: Financial Portal Solutions	231
Financial Portal Solutions	232
Unit 7: Navigation (Optional)	245
Logon and Screen Design	246

Calling Functions	256
Getting Help	265
Personalizing the User Interface.....	272
Appendix 1: Abbreviations	293
Glossary	297

Course Overview

mySAP ERP Financials offers accounting, company managers, and other management figures in a company an extensive selection of solutions and tools that they can use to optimize company processes and increase the long-term value for investors and stakeholders. mySAP ERP Financials supports cross-company control and the integration of financial and other company information that is important for strategic and operational decisions, and facilitates communication with external stakeholders.

Target Audience

This course is intended for the following audiences:

- People that are interested in a general overview of mySAP ERP Financials (management, employees, and decision-makers within Accounting)
- Members of the project team in the organizational and conceptual phase of mySAP ERP Financials implementation

Course Prerequisites

Required Knowledge

- Theoretical knowledge of Financial Accounting and Accounting

Recommended Knowledge

- SAP01 SAP Overview
- Knowledge of the SAP system



Course Goals

This course will prepare you to:



- Obtain an overview of the mySAP ERP Financials solution
 - Learn about the key functional areas and the most important key capabilities in the mySAP ERP Financials solution
 - Identify the business processes that can be modeled using mySAP ERP Financials
-



Course Objectives

After completing this course, you will be able to:

- Recognize how mySAP ERP Financials supports management in the area of Financial Accounting
- Explain which business processes you can map in internal and external Accounting using SAP ERP
- Recognize what options Financial Supply Chain Management offers you for streamlining the financial and payment processes.
- Illustrate which Corporate Services are available in mySAP ERP Financials
- Explain the importance of Business Information Warehouse in mySAP ERP Financials
- Name the most important key capabilities of Strategic Enterprise Management and assign them in the correct context
- Describe the role of Business Analytics within mySAP ERP Financials
- Recognize the importance of Corporate Services and how they can be implemented.
- Illustrate what advantages the implementation of portals offers and which Business Packages are available in the solution.

SAP Software Component Information

The information in this course pertains to the following SAP Software Components and releases:

Unit 1

Introduction

Unit Overview

This introductory unit provides a theoretical overview of the mySAP ERP Financials solution. In the lesson on mySAP Financials Positioning, we explain the solutions and key areas of SAP Financials. It explains the role that SAP ERP plays in the solution.



Unit Objectives

After completing this unit, you will be able to:

- Recognize how mySAP ERP Financials supports management
- Explain how mySAP ERP Financials enables a closed loop management
- List the key functional areas in the mySAP ERP Financials solution

Unit Contents

Lesson: mySAP ERP Financials Positioning 2

Lesson: mySAP ERP Financials Positioning

Lesson Overview

mySAP ERP Financials offers accounting departments and members of management in a company a comprehensive selection of solutions and tools that they can use to optimize their company processes, obtain long-term value for investors and stakeholders, and ensure short-term profitability and liquidity. It supports cross-company controls and the integration of financial and other company information that is centrally important for strategic and operational decision-making and facilitates communication with external stakeholders. mySAP ERP Financials enables you to streamline your financial and payment processes and enables you to ensure a competitive advantage by using new e-business models.



Lesson Objectives

After completing this lesson, you will be able to:

- Recognize how mySAP ERP Financials supports management
- Explain how mySAP ERP Financials enables a closed loop management
- List the key functional areas in the mySAP ERP Financials solution

Business Example

The current company situation is shaped by a dynamic environment that is extremely complex. In order to position the company, CFOs of leading companies are rethinking the role of accounting with regard to the organizational structure, the processes, the systems, and the skills required by employees.

The Changes in Company Structures

The increasing globalization and the growing importance of the Internet have led to far-reaching changes in business processes in companies. More than ever, companies are required to react quickly and competently to the increasingly changing external environmental factors. Using the right tools helps them to do this. In the networked economy of today, you can no longer simply tie a company down to a building, a specific geographical location, one individual company, or one individual industry. Today, a company consists of virtual teams; it makes partnerships and works together with other companies, often at global level. In this new environment, the **ability to work together** is the key to success. The company's aims however remain the same: the need for profitability and lasting increased value for investors and stakeholders.

In the 1980's, companies started to buy IT systems to support the daily operational transactions in finance and accounting and to make them more efficient. The organizational structure in the form of vertical and thereby completely functional structures is primarily responsible for **Reporting**. As far as finance and accounting are concerned, the main responsibility is firstly restricted to the legal rules, that is, the creation of financial statements - tasks from classic financial accounting.

The next step in development was the integration of different ERP systems within a company or group. From an organizational point of view, this step was achieved through a global matrix organization; at management level, the Portfolio Management of the independent business units (profit centers) was at the forefront. Today, the situation is frequently shaped by a very **heterogeneous system landscape**.

The challenge faced by companies today is to integrate all of these systems and to use financial and accounting functions across all systems, taking into account the fact that companies are now part of a **global network**. One area that has grown in importance over the last decade is the analysis of collected data and information. Statistical methods and the creation of relevant and structured data improve your ability to understand your customers' behavior and enable you to tailor specific products to a customer's actual requirements and offer these products to the right market segments at the right time. The challenge today is to find the right analysis tools and to use them correctly. Knowledge alone is useless if there are no methods that carry out the strategic and operational adjustments required. New management methods enable you to convert strategic visions into measurable goals and to build up the future of the company on this basis. However, to be absolutely effective, you must be able to evaluate the strategies and compare them using **analysis tools** in order to reconcile business processes even more precisely. The challenging question that companies face today is how to support company management in the making of strategic decisions to determine the future of the company.

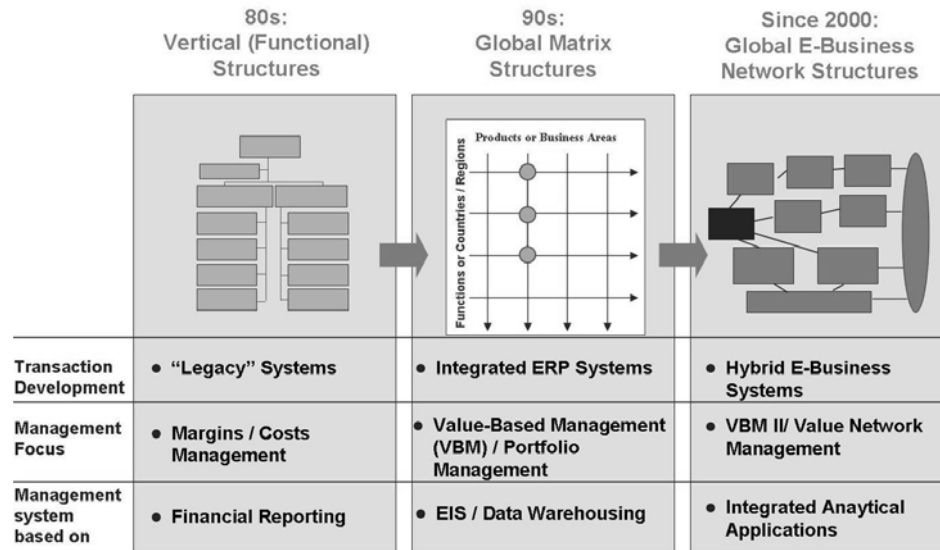


Figure 1: The Changes in Company Structures

Financial Accounting and Cost Accounting as Core Function of the Company

Regardless of the management method that a company employs, the result of business activity appears in the financial report. As a result of its central importance, finance is a **focal point** for the whole company. The financial influence stretches from the **operational area**, for example, processing sales orders, across **analytical support for decisions**, right up to **strategic management**. The task is to collect all of the data required and analyze it. By applying suitable analytical methods, you can convert data quantities into knowledge of the area concerned. This information is then a basis for further decisions. The better the information, the more comprehensive the knowledge, the more sound the decisions and the business result.

When companies reposition themselves in order to optimize added value, CFOs and financial and accounting functions also have to redefine their roles in this environment. When internal and external processes are processed, the CFO must have an overview of these processes - both related specifically to his own company and beyond the company boundaries - and be able to coordinate them in order to make improvements. As the person responsible for the entire assets of a company (tangible as well as intangible), the CFO also has a central responsibility for the investment and amortization of the IT infrastructure.

In the 1980's, the focus in finance and accounting was on executing transactions in the operational area, that is, processing daily business. The task of finance and accounting as provider of information to support decision-making had only a subordinate role. In

the 1990's, this role came to the forefront and included a wider spectrum since less time was required for these tasks as a result of the automation of transaction execution. Today we can see that for those responsible for finance and accounting, the task focus has not moved, rather, they are confronted with completely new demands. Today, the CFO has a defined **coordination function** that is documented by the fact that firstly, he has to coordinate independent business units and support them in decision-making, and secondly, he must take over the coordination of shared service centers and monitor tasks that have been outsourced.

In order to meet the frequently changing requirements, finance will be heavily fragmented in the future. Since many tasks are delegated to managers or are moved to shared service centers, the finance employees will take over tasks in the area of coordination and strategy.

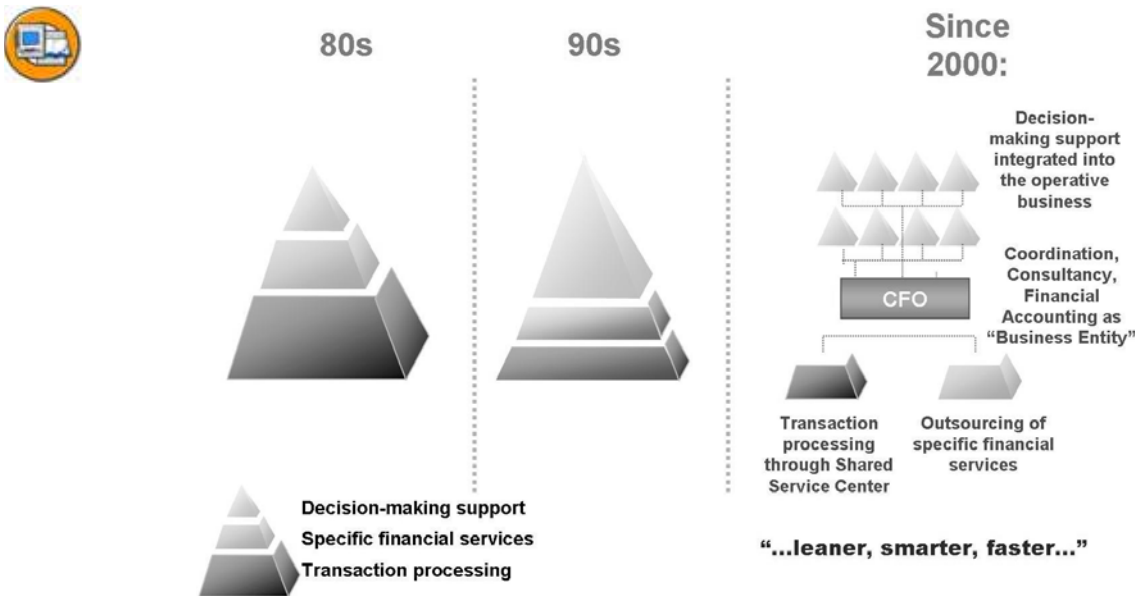


Figure 2: Financial Accounting and Cost Accounting as Core Function of the Company

Developing the Financial Accounting and Cost Accounting

The development of Financial Accounting and Cost Accounting can be described in three waves. In each wave, the increase in the value of the company can be achieved.

- **Improvement in operational performance and monitoring:** The automation of the Financial Accounting and Cost Accounting transactions has contributed to an improvement in productivity and an increase in efficiency. The result of this computer-supported mass processing is also an improved control of the financial processes and a cost-reduction of the financial transactions (also externally due to the use of Electronic Bill Presentment and Payment, that is the option to present and settle bills using the Internet). The creation of more timely and precise financial data for internal and external purposes is supported.
- **Insight into business activities:** Efficient mass processing makes it possible to use data from the past as the basis for analyses, simulations, and projections. Prerequisite is the integration of the data from heterogenous, distributed transaction systems. This enables an improved support of decision-making and offers advantages for Reporting and for the planning and budgeting process.
- **Value added:** The Shareholder Value concept from Alfred Rappaport documents the company objectives, capital, and resources to increase the company value and therefore the shareholder value. It is important to ensure that the strategic aims at operational level are put into practice and a Performance Monitoring is carried out. In the strategic orientation, the interests of the shareholders and other stakeholders must be taken into consideration.

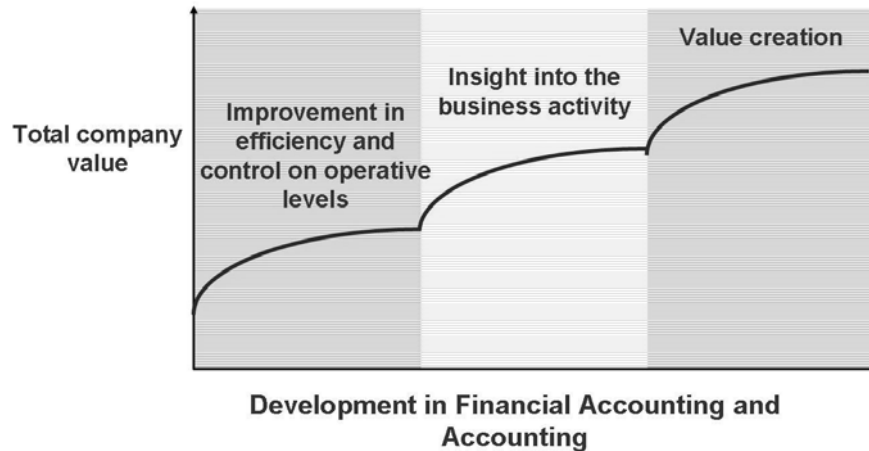


Figure 3: Development in the Financial Accounting and Cost Accounting

The mySAP ERP Financials Solution

The balance between the long-term increase in company value and the orientation towards short-term successes is, in times of economic difficulties, more than ever the core task of the Chief Financial Officer (CFO). mySAP ERP Financials provides the CFO with all the tools that he needs to fulfill this task. mySAP ERP Financials is the most comprehensive solution available today for company management in Financial Accounting and Cost Accounting. mySAP ERP Financials stands for real-time, transparent and consistent data, highly efficient billing and payment processes which satisfy the highest security requirements and the integrated control of strategic success factors. mySAP ERP Financials supports the transformation of Financial Accounting and Cost Accounting from an administrative function to a globally-directed and value-oriented company management.

Experience has shown that decision support is at its most efficient when management processes and information (strategic, finance-related, and operational) are most closely integrated. The starting point is the evaluation of the strategy, whereby stakeholder information (employees, customers, vendors, stockholders, analysts, and so on) should be used in the strategy assessment and specification. You can firstly simulate the strategic orientation in a strategic planning loop before actually making the strategy decision. The strategy specification and action planning that then takes place in Strategy Management and Performance Measurement enables forecasting that is then converted into specific goals in Business Analytics. The conversion of these

goals into reality may also be subject to adjustment over the course of time. Reporting on the achievement of goals or the level of achievement is included in forecasting and can then flow into the feedback on the strategy. This can lead to a new evaluation and specification of the strategy at strategic level.

Data from the operational systems of a company and the value chain is consolidated and compared with goals that form part of the Performance Measurement process. You can convert this information into knowledge using simulation and scenario models and use it as a basis for future strategic orientation of the company.

You can view the mySAP ERP Financials solution from the management cycle point of view. Within the management cycle (analysis, decision, execution/cooperation, measurement), each key functional area of the mySAP ERP Financials solution has a special task. SAP SEM (Strategic Enterprise Management) helps you view and assess the company from a strategic perspective and define its strategic orientation, including the expectations of the stakeholders and the shareholders in the strategy consideration. If decisions are made at this level, they can then be operationalized in Financial Analytics. Financial Supply Chain Management enables the execution of financial transactions that accumulate in connection with delivery and order processes. Management Accounting is responsible for data retention and carries out the evaluations. Using the Business Information Warehouse (BW), this data is then used for operational analytical evaluations in Business Analytics. The management cycle is closed by the management decision-making support. Portals can be used as a central entry-point into the application.

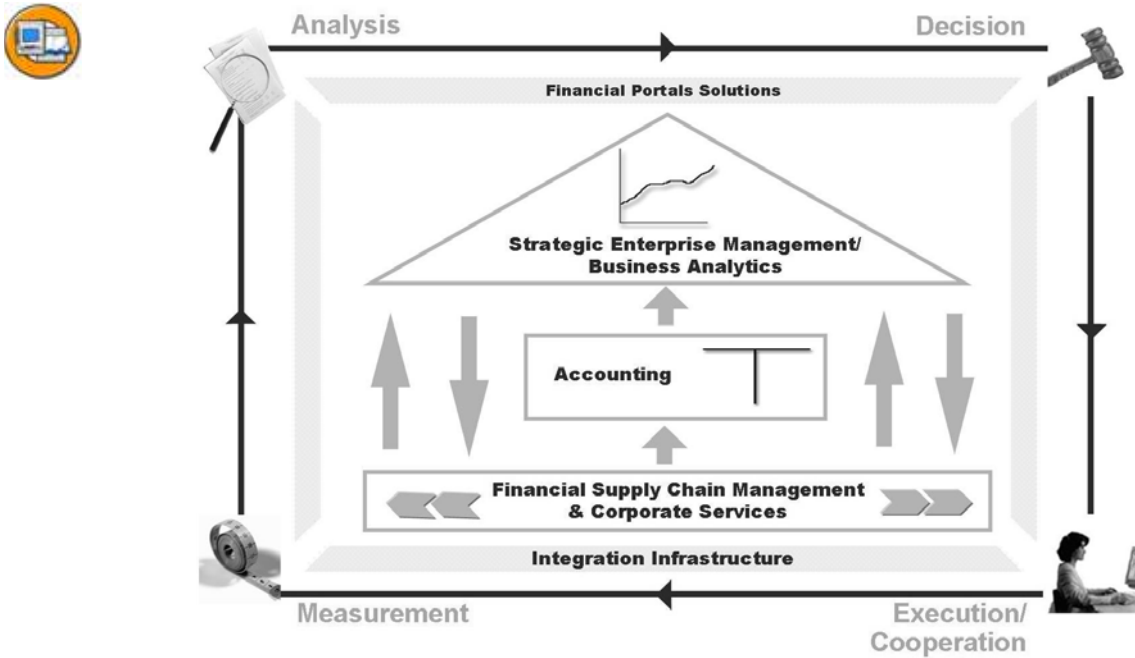


Figure 4: mySAP ERP Financials

The solution maps were developed as a tool for visualizing an integrated, coherent solution, planning it, and implementing it in a company.

The mySAP ERP Financials **solution map** describes the mySAP ERP Financials solution from the view of the business processes within a company. Processes stretch from operational financial transactions, across financial functions within a company, to accounting tasks for analytical and strategic decision-making. Support is also provided by Corporate Services.

- **Strategic Enterprise Management:** Enables companies to execute strategies quickly and successfully and to manage business performance within the company as a whole. It supports strategic planning, performance monitoring, consolidation, value management, and efficient communication with stakeholders.
- **Business Analytics:** Enables managers and leading figures within the company to identify and exploit value adding business potential through improved use of tangible assets and intangible asset values (for example, customer master records and relationships, employee knowledge). It facilitates improvement in operational performance, accurate forecasting, and business planning.
- **Financial & Management Accounting:** You can use this key functional area to enter quantities and values for accounting-relevant business transactions in order to carry out consistent, reconciled reporting suitable for audit purposes. The key functional area Accounting also provides you with information necessary for business management, as well as a database for analytical applications.
- **Financial Supply Chain Management:** Enables cooperation within the company and in the business partner network in the area of payment flows and the efficient use of capital. Intelligent tools provide for electronic payment and bill settlement as well as a streamlining of the bank transactions. The most modern cash management functions guarantee a fast and unproblematic supervision and control of the use of capital and minimization of risks.
- **Real Estate Management (Corporate Service):** Offers a complete solution with functions for managing real estate and optimizing investment portfolios across their entire lifecycle.
- **Travel Management (Corporate Service):** Supports and optimizes the planning and settlement of business trips.
- **Incentive and Commission Management (Corporate Service):** Offers an efficient and flexible solution for employee motivation and management through innovative incentive programs such as commissions and sales bonuses.
- **Financial Portal Solutions:** Portals offer a user-specific introduction to the selected applications that are necessary in the respective functions.



Strategic Enterprise Management	Stakeholder Relationship Management	Strategy Management	Performance Measurement	Strategic Planning & Simulation	Business Consolidation	
Business Analytics	Financial Analytics	Customer Relationship Analytics	Supply Chain Analytics	Human Resource Analytics	Product Lifecycle Analytics	
Accounting	Financial Statements	General Ledger & Subledgers	Revenue & Cost Accounting	Order & Project Accounting	Product & Service Cost Calculation	
Financial Supply Chain Management	Credit Management	Electronic Bill Presentment and Payment	Dispute Management	In-House Cash	Cash & Liquidity Management	Treasury & Risk Management
Corporate Services	Real Estate Management		Travel Management		Incentive & Commission Management	
Financial Portal Solutions	Manager Self-Service			Corporate Finance Portal		

Figure 5: mySAP ERP Financials - Solution Map

The Role of SAP ERP Financials

The mySAP ERP Financials solution is easiest to understand in the context of its overall development. At the beginning, the intention was to optimize internal business processes using central **mainframe computers**. All data, applications, and relevant information were centralized on one server. Specialists in the individual transactions were able to use the system. The next development level was the **client server architecture**. The development of ERP systems went from mainframe-based SAP R/2 Systems to a client server-based system, SAP R/3. ERP systems will continue to play an important role for companies by reducing internal costs, shortening production cycles, optimizing inventory management, and improving sales and distribution. The SAP system is embedded in the mySAP ERP Financials solution. The SAP system contains the ERP part of the overall functionality offered by mySAP ERP Financials. These components have proven that they can be viewed as best practices in the area of finance.

The current release of the SAP system is called SAP ERP Central Component. On the one hand it can be seen as a further development of SAP R/3 Enterprise, on the other hand, SAP ERP Central Component is an important part of the aim of providing SAP system customers with additional key components. New developments will be delivered in encapsulated units known as SAP ERP Extensions. This technology will ensure that companies can introduce new functions step by step. All processes that are supported in R/3 Enterprise are also available in SAP ERP Central Component.



- New developments in the area of SAP R/3 Enterprise are provided in standalone extensions and can be implemented optionally and flexibly.
- The SAP R/3 Enterprise Extensions are provided to all SAP R/3 customer as part of their maintenance agreement.
- SAP R/3 Enterprise Extensions have a separate Release cycle compared to SAP R/3 Enterprise Core

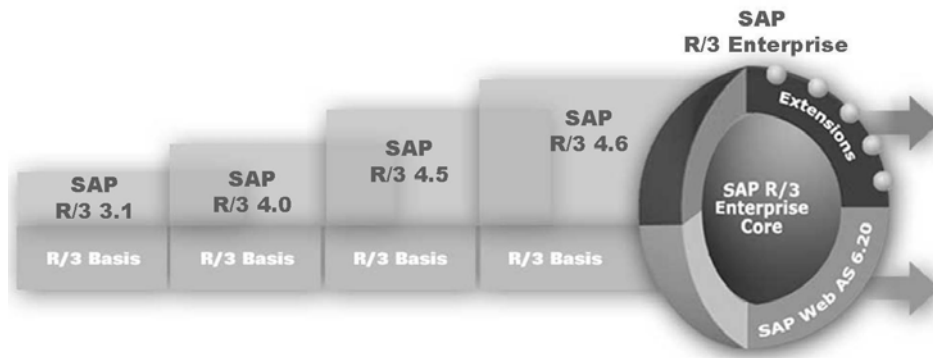


Figure 6: SAP R/3 Development Strategy

Transition to mySAP ERP Financials

A characteristic feature of the mySAP ERP Financials solution is that the entire solution is open and therefore extremely flexible. It was designed to be open for services and applications from third party providers. SAP ERP is an important component of the mySAP ERP Financials solution. Due to the flexibility of the solution, existing customers are free to choose when and to what extent they implement new components and SAP ERP Extensions. Adjustments can also be carried out step-by-step for each country, region, or business branch, for example, for an individual shared service scenario - dependent on the special requirements of each company.

Existing mySAP ERP customers from finance and accounting have the option of upgrading in the direction of the mySAP ERP Financials solution.



- Addition of the Business Information Warehouse for data warehousing and reporting
- Implementation of Strategic Enterprise Management to optimize company performance and make reporting, budgeting, and the consolidation process more efficient
- Utilization of the complete potential of mySAP ERP Enterprise by using existing functions in the Travel Management, Real Estate Management, and Incentive and Commission Management areas
- Enhancement in the area of Financial Supply Chain Management to increase the efficiency of payment transactions
- Addition of portals to increase employee productivity

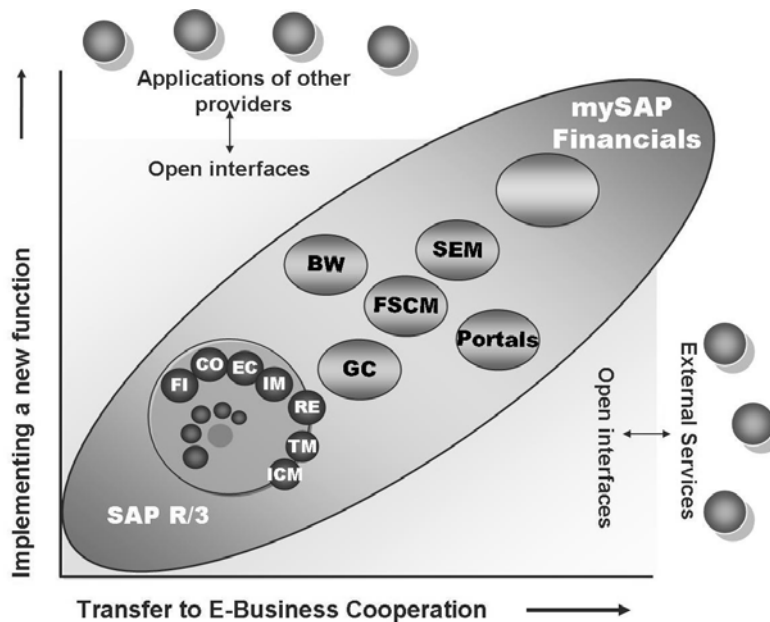


Figure 7: Transition to mySAP ERP Financials

Using the mySAP ERP Financials solution gives you the following **advantages**:

- Streamlined financial processes, lower costs, and a lower capital tie-up
- Increased value creation in the e-business strategy of the company by connecting own financial processes with those of business partners and external service providers
- Increased transparency of company performance and strategic success factors that the company can use to react quickly to changes in market conditions and to control profitability and value creation
- Improved access to information for managers and knowledge workers via the most modern Self-Services that link applications and content management to each other
- Improved relationships with investors and customers, as well as the ability to realize the full value of a company on the stakeholder and capital market
- A solution that you can implement worldwide (currency capability, country versions)
- Permanent further development of the mySAP ERP Financials solution
- Smooth transition from SAP R/3 Enterprise to mySAP ERP Financials.



Lesson Summary

You should now be able to:

- Recognize how mySAP ERP Financials supports management
- Explain how mySAP ERP Financials enables a closed loop management
- List the key functional areas in the mySAP ERP Financials solution



Unit Summary

You should now be able to:

- Recognize how mySAP ERP Financials supports management
- Explain how mySAP ERP Financials enables a closed loop management
- List the key functional areas in the mySAP ERP Financials solution



Test Your Knowledge

1. What are the key functional areas of mySAP ERP Financials?



Answers

1. What are the key functional areas of mySAP ERP Financials?

Answer: The key functional areas Strategic Enterprise Management, Business Analytics, Financial & Management Accounting, Financial Supply Chain Management, Corporate Services, and Financial Portal Solutions are part of the mySAP ERP Financials solution.

Unit 2

Business Processes in the mySAP ERP Financials Solution

Unit Overview

This unit explains how business processes in internal and external Accounting are handled within mySAP ERP Financials using mySAP ERP. We demonstrate the correlations between Financial Accounting and Controlling. The transactions of a Purchasing Process (Purchase to Pay), of Planning and Value Creation (Plan to Product) and of Customer Order Processing (Order to Cash) which are relevant for Accounting are illustrated using an integrated scenario.



Unit Objectives

After completing this unit, you will be able to:

- Explain the tasks in Financial Accounting.
- Name the areas in Management Accounting and explain how they interact.
- Show the essential integration aspects within Accounting.
- Name the organizational units that play a role in Accounting.
- Name the individual substeps of the procurement process.
- Understand the business process in the SAP system.
- Present the effects of the Purchase to Pay process on Accounting.
- Explain the tasks of the individual areas in Management Accounting with respect to planning and production.
- Show the options for planning on Cost Centers and in the cost unit area.
- Track the production process using the example of a production order from the point of view of Accounting.
- Highlight the planning options in Services Controlling.
- Present an overview the Order to Cash process.
- Track a direct sales process from the Accounting point of view.
- Explain the transactions of a services sale which are relevant to Accounting.

Unit Contents

Lesson: Overview of the Business Processes in mySAP ERP Financials ...	21
Lesson: Purchase to Pay Process.....	32
Exercise 1: Purchase to Pay Process	43
Lesson: Plan to Product Process	52
Exercise 2: Plan to Product Process.....	63
Lesson: Order to Cash Process	66
Exercise 3: Order to Cash Process - Optional Exercise	77

Lesson: Overview of the Business Processes in mySAP ERP Financials

Lesson Overview

This lesson introduces you to the business processes in Accounting that can be handled with mySAP ERP.



Lesson Objectives

After completing this lesson, you will be able to:

- Explain the tasks in Financial Accounting.
- Name the areas in Management Accounting and explain how they interact.
- Show the essential integration aspects within Accounting.
- Name the organizational units that play a role in Accounting.

Business Example

Accounting must fulfill many different tasks. Fulfilling external requirements, which include legal restrictions such as the creation of balance sheet and profit and loss statements is just as important as fulfilling internal requirements, for example the analysis of overheads, calculation of products and the results analysis at company level. The task here is to judge how far the requirements can be fulfilled by SAP ERP.

Tasks in Financial Accounting

The component **Financial Accounting (FI)** focuses on the Main Ledger, the processing of receivables, payables, and Asset Accounting. Important tasks of Financial Accounting are the recording of monetary and value flows as well as the evaluation of the inventories.

The **General Ledger (GL)** contains the recording of all accounting-relevant business transactions on to G/L accounts from a business point of view. Every general ledger is structured in accordance with a chart of accounts. The chart of accounts contains structured definitions of all G/L accounts in the general ledger. These definitions basically include the account number, the G/L account designation and the categorization of the G/L account as an income statement or balance sheet account. For reasons of clarity, the General Ledger often contains only collective postings. In such cases, the posting data is represented in a more differentiated way in so-called **subledgers** which pass on their data compressed to the General Ledger.

Reconciliation Accounts link the subledgers to the General Ledger in real time. As soon as a posting is made to a subledger account, the same posting is made to the respective reconciliation account in the general ledger.

The **Accounts Payable Accounting** (AR) records all business transactions that have to do with the relationships to suppliers. It takes much of its data from Purchasing (MM - Material Management). **Accounts Receivable** (AR) records all business transactions that have to do with the relationships to customers. It takes much of its data from Sales & Distribution (SD). The bank accounting supports the booking of cash flows. The **Asset Accounting** (AA) records all business transactions that have to do with the management of assets. All postings that are executed for the asset (acquisitions, retirements, depreciations, etc) are recorded within the assigned company code. It often happens that asset lists and movements have to be evaluated differently for different purposes, for example, different valuation approaches should possibly be used for:

- the trade balancing of an account according to regional requirements
- the financial statement for tax purposes (insofar as another valuation is permitted)
- the internal Accounting (Costing)
- parallel accounting standards for the group balancing of account (according to IAS, US-GAAP, and so on.)

For many companies today, it may be necessary to prepare a balance sheet, not only for the national accounting standards, but also in accordance with other valuation guidelines such as IAS (International Accounting Standards) or US-GAAP (General Accepted Accounting Principles). The reasons for this can be the access to international capital markets, an orientation towards foreign shareholders, global mergers and acquisitions as well as increased transparency. In order to be able to carry out these different valuation approaches, valuation areas are established in the SAP ERP system. These **parallel accounting standards** can be realized with SAP ERP by handling the different valuations on different G/L accounts. These G/L accounts are used in different balance sheet / P/L structures.

The EC-CS (Enterprise Controlling - Consolidation) forms the group structure using consolidation groups and units for the tasks of **Consolidation**. Consolidation groups are defined for each hierarchy. They represent levels and consolidation takes place on these. Consolidation groups can be subgroups (company consolidation), business areas (business area consolidation), or profit centers and hierarchy nodes (profit center consolidation). The objects that are to be consolidated hang below the consolidation groups and are called consolidation units. Depending on the consolidation type, these are companies, combinations of companies and business areas or combinations of companies and profit centers.

SEM-BCS (SEM-Business Consolidation) can be used for internal management consolidation based on any characteristics.

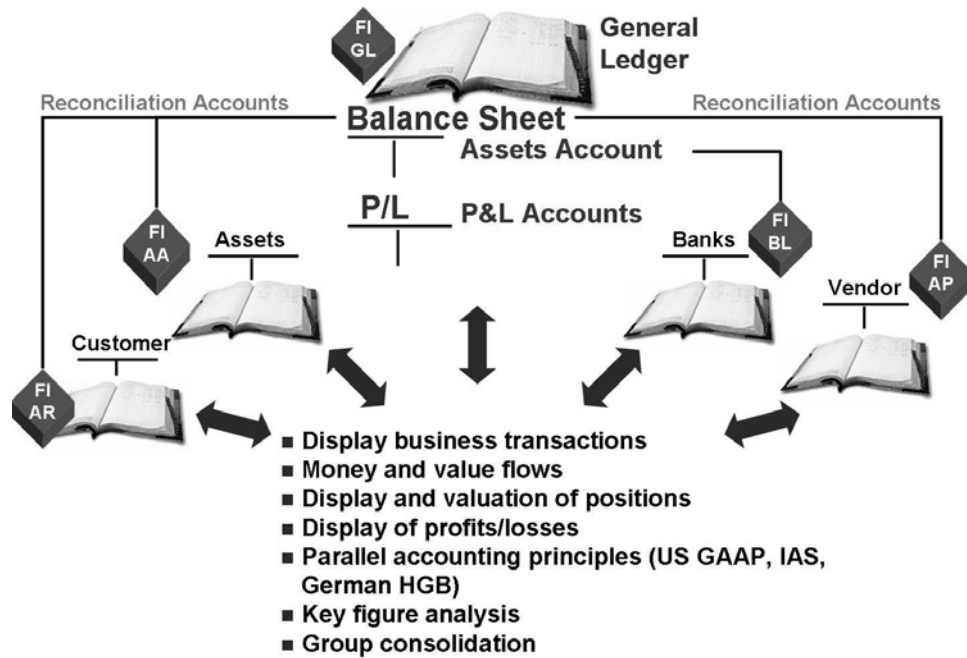


Figure 8: Tasks in Financial Accounting

The **General Ledger** is managed at company code level and, from this, the balance sheets required by the legislator as well as the P/L statement are compiled. The assets of a company are listed in the balance sheet, divided into **Assets** (application of funds) and **Liabilities** (source of funds). In terms of integration, the business transactions that are entered in the subledgers as well as those entered in Materials Management (material stock) or Financial Supply Chain Management also flow into the balance sheet in real time. The Financial Supply Chain Management (FSCM) component concentrates on functions such as means of payment, funds, foreign exchange, securities, loans, and market risk management (Corporate Finance Management).

The aim of recording business transactions is to create a **Balance Sheet and Profit & Loss Statement** in the form of a report. These reports must be adapted to the specific national requirements. Various balance sheet and profit & loss structures can be set up in the SAP ERP system for the different reporting requirements. In these Balance Sheet and Profit & Loss structures, it is defined exactly which accounts should appear in which balance sheet items. Many Balance Sheet/P&L Structures are already delivered as predefined. Financial reports that are required for external Reporting purposes are created in FI. These external Reporting requirements, like the

different legal requirements of the relevant Financial authorities, are provided, as a rule, by general accounting standards such as US-GAAP or IAS. Two procedures can generally be applied for structuring the profit & loss statement:

- Period Accounting
- Cost-of-sales Accounting

Both procedures result in the same operating income. Which of these procedures should be used is either stipulated by legal regulations or can be selected freely when there is a legal option. In this case, the decision in favour of one of the procedures is made based on an analysis from a business point of view (for example, international comparability).

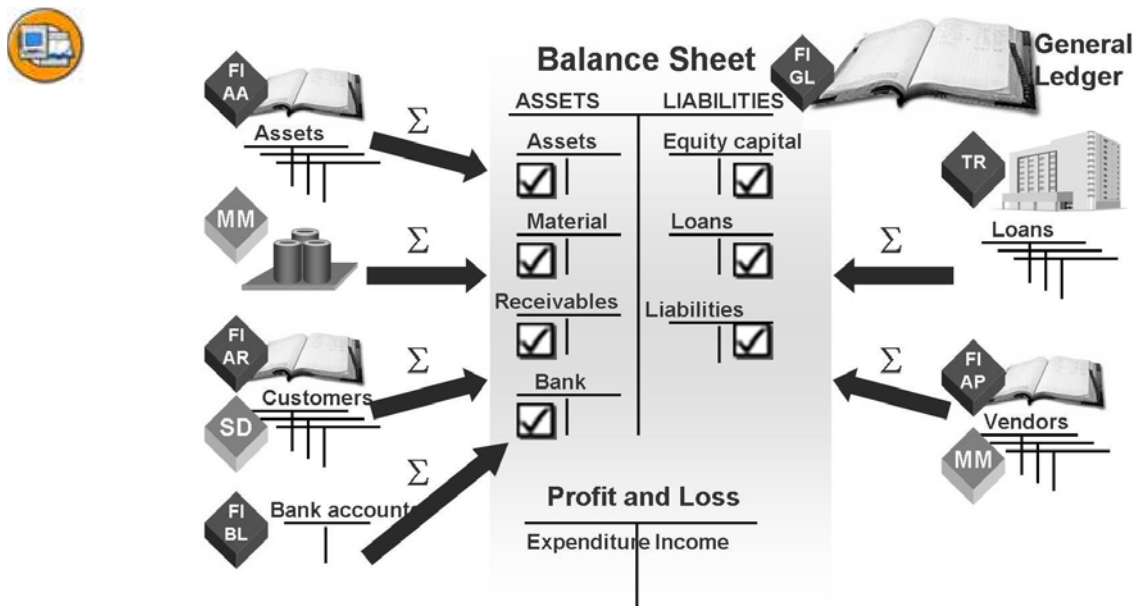


Figure 9: Integration of the G/L Account

Areas in Management Accounting

Management Accounting (CO-Controlling) is assigned the task of recording all business-related expenses and revenues in detail, in order to provide more exact information about the utilization of costs and assets within the company.

The **Cost Element Accounting (CO-OM-CEL)** provides information about what type these cost or revenues are (for example, personnel costs). It offers a structure for the assignment of CO data by classifying the transaction items that are posted to a respective Controlling object (for example, a cost center, an internal order) depending on the type of cost or revenue they represent.

Overhead Costs Controlling (CO-OM Overhead Management) focuses on assimilating costs that cannot be directly assigned to the goods and services of a company and, when possible, allocating them further on a cause-effect basis. Account assignments for such costs are, for example, Cost Centers and Internal Orders. Cost Centers therefore provide information about where costs are incurred in the company. This means that, within the framework of the planning process, not only costs but also internal services can be planned and utilized for price calculations of the activity type. If, over the years, the Cost Centers render services for other Cost Centers or for the value-adding area of the company, the services - evaluated with the prices - find their way to the respective recipients (consumers). At the end of the period, the balances of the overhead costs objects are determined and allocated further to Product Cost Controlling or to the profitability and sales accounting. The Overhead Costs Controlling therefore examines the cost causation of the company's functional areas. The proportion of overhead costs has increased rapidly in many companies. While a great deal of progress in cost controlling and process optimization has been achieved in the production areas, the overhead costs are still not very transparent meaning that it remains difficult to assess why these costs have been incurred. The Activity-Based Costing (CO-OM-ABC) within Overhead Costs Controlling provides you with easy access to further process-oriented, cross-functional allocation methods for costs.

Product Cost Controlling (CO-PC) assimilates the costs for the creation of goods and services (and, in certain cases, their sales revenues) and settles these in FI or in the profitability and sales accounting. Thus, it collects incurred costs before they are settled in the earnings. These costs are used for the calculation and evaluation of the production costs of a product, of the costs and/or revenues from the rendering of a service or in the execution of a project - in both plan and actual. This means that it provides the tools for a comprehensive analysis of the value-adding processes in a company.

The **Profitability Analysis** (CO-PA) is used for both company planning and to display the business success. Two main views are observed here: on the one hand, the "external view in the market" for analyzing market segments (Profitability Analysis), on the other hand, the "internal view" of individual parts of the company responsible for profit (Profit Center Accounting). The Profitability Analysis focuses on the analysis of the profits from the company's activities on the external market. It provides you with the option of ascertaining how profitable the company operates in different market segments (product category, customer, etc) and how these data have developed over time.

When you install the **Profit Center Accounting** (EC-PCA Enterprise Controlling Profit Center Accounting), assign a specific Cost Center to every object for which costs and revenues are incurred in your system. The Profit Center Accounting analyzes the success of the subdivisions in your company responsible for profit. It can display the "internal market" within the company, especially with the use of the

function “parallel valuation approaches and transfer prices”. When data are posted on an object that a Profit Center is assigned to, the data are automatically transferred statistically to the Profit Center Accounting. In this way, the actual data of the assigned objects are updated in the Profit Center Accounting.

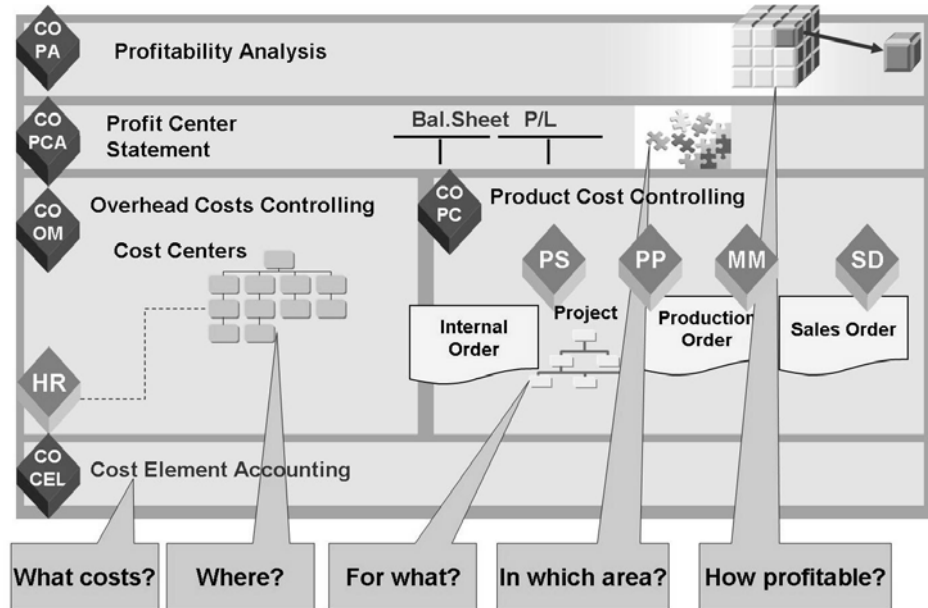


Figure 10: Areas in Management Accounting

Integration

Through the different business-related processes such as **Purchase to Pay**, **Plan to Product** (process from the planning to the internal added value) and **Order to Cash** (sales), it is necessary to display external and internal quantity and value flows in a differentiated way. Between the different accounting components, the costs and services quantity flows are displayed that are necessary for efficient accounting.

The SAP ERP application component **Financial Accounting** is a primary data source for **Management Accounting**. Most expenses postings that relate to the General Ledger result in a costs posting in CO. These postings to expense accounts in the General Ledger can be journal entries or they can be created by accounts payable postings or depreciation postings from Asset Accounting (FI-AA) or from other SAP ERP components. Thus, expenses and revenues postings in FI for example, result in the costs and sales revenues in the CO component, whereby an appropriate corresponding account assignment object is provided.

Directly attributable individual costs are posted on the cost unit on Product Cost Controlling, for which these costs are incurred (individual costs of manufacturing orders, customer orders, etc.). The **internal order** is an extremely flexible CO tool that can be used in many different ways for the documentation of costs and sometimes also for revenues. Internal orders are used for the planning, supervision and allocation of costs for internal tasks.

Overhead costs which are not directly attributable are first of all posted to the respective area of responsibility, the Cost center, from which they are then posted further using different procedures on a cause-effect basis to the cost units. Traditionally, overhead costs are allocated using different methods such as overhead rates and activity allocations from Cost Centers to cost units. As opposed to this, the Process Cost Accounting assigns the costs to business processes, whereby it is not important, which organizational unit has incurred these costs. A process is a cross-functional object that can draw resources from all Cost Centers of a controlling area. Likewise, a direct revenue posting can be made from FI to the CO-PA component or, for example, to a revenue-capable cost object (for example, a customer order or project). Furthermore, a backflow from CO into the FI can take place if production costs are activated as end products or WIP (work in process).

With the **Profitability Analysis (CO-PA)** you can analyze the profitability of segments of your external market. These segments can be defined according to products, customers, geographical areas and other characteristics depending on their internal organizational units such as company codes or business areas. Aim of the profitability analysis is to support the management, sales, marketing, planning and other groups within your organization by providing market-oriented aids for decision-making.

With the **Profit Center Analysis (EC-PCA)**, you can analyze internal profits and losses for Profit Centers. This enables the evaluation of different areas or units in your company using independent balance sheets and P/L statements. Profit Centers can be structured according to regions (subsidiaries, plants), functions (manufacturing, sales) or products (product groups, categories). Using Profit Center Accounting, you can assess the internal aspects of profitability. This internal view of profitability allows you to measure the success of a specific Profit Center based on the profitability objectives of the respective area of responsibility. The Profit Center Accounting can report on certain balance sheet items such as assets, receivables/liabilities, materials inventory and work in process. This enables the determination of certain financial key figures such as ROI (Return on Investment).

Other SAP system components such as HCM - Human Capital Management and the logistics components (MM - Materials Management, SD - Sales and Distribution, PS - Project System, and PP - Production Planning) are integrated in CO. By assigning employees in the HCM component to certain cost centers, you can directly assign the costs associated with payroll accounting and personnel cost planning to the cost center. Similarly, real-time expenses or costs postings in Financial and Management

Accounting are created by certain goods movements in the logistics components (MM, PP, PS or SD). For example, a goods issue for a production order leads to direct costs for the order and a goods consumption (P&L) against stock (balance sheet) is automatically posted in FI at the same time. The following explains key Accounting postings based on the above-mentioned **business processes such as Purchase to Pay, Plan to Product, and Order to Cash.**

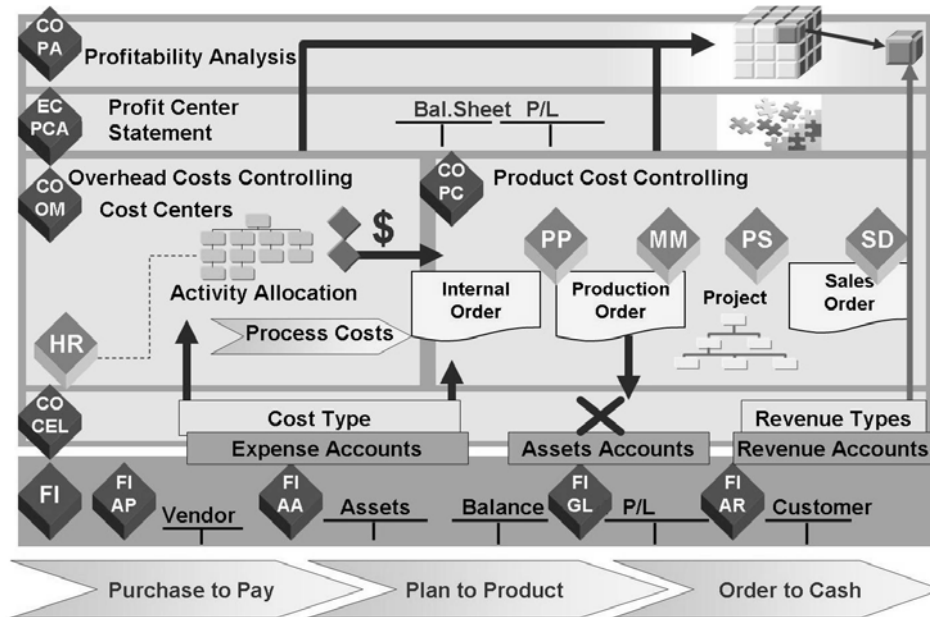


Figure 11: Integration

Organizational Structures

The **controlling area** is the basic organizational unit in Management Accounting. A Controlling Area represents a closed system for the purposes of cost accounting. Allocations can only be executed within a controlling area, they cannot apply to objects in other controlling areas. Several company codes can be assigned to a controlling area. As a result, Management Accounting can be carried out across all company codes. The Controlling Area and the company codes assigned to it must always use the same chart of accounts and a fiscal year variant with the same number of posting periods (only the number of special periods may be different). In order to maintain differentiated profitability reports of a controlling area, we recommend working with several Profit Centers.

The profitability analysis (CO-PA) is carried out within the **Profitability Report**. The Profitability Area is an organizational unit that depicts the structure of external market segments for the company. It can assign several controlling areas to every

profitability area in order to analyze these jointly. The profitability area enables the profitability accounting of a company to be carried out across company codes and across controlling areas.

The **Company Code** is an independent accounting unit within Financial Accounting. Balance sheets and P&L statements are prepared at company code level in order to correspond to legal Reporting requirements. The General Ledger is managed at company code level and, from this, the balance sheets required by the legislator as well as the P/L statement are compiled. The company code must be specified for every transaction in the financial component of the SAP system. This is done either manually or automatically by deriving the company code from other data elements. **Business areas** can be used to group strategic business fields and to compile reports in the form of internal P&L statements and balance sheets. Business areas can also be cross-company code.

The **Plant** represents a logistically closed organizational unit, for example, for the manufacture or sale of products. It represents the central organizational unit in the SAP system components Materials Management and Production Planning. When defining organizational structures, plants are assigned to company codes. A purchasing organization is an organizational unit in MM-Purchasing; the sales organization is an organizational unit in Sales and Service. Both are significant for Accounting only insofar as these data must be considered in the integrative business processes between Logistics and Accounting. All accounting-relevant transactions in one of these plants are posted in the Accounting of the assigned company code. Several warehouse locations can be assigned to the plants for the different warehouse storage of products or materials.

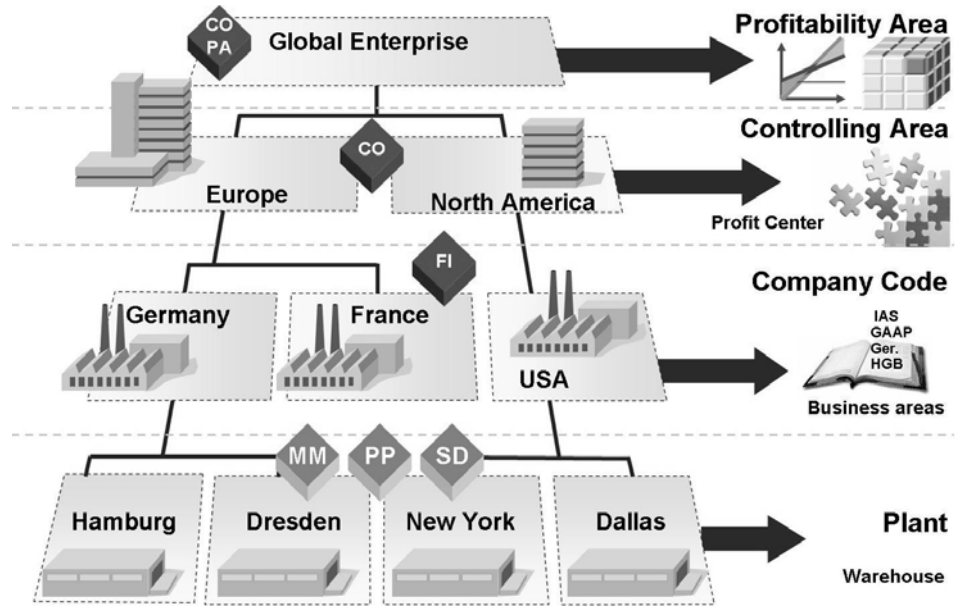


Figure 12: Organizational Units



Lesson Summary

You should now be able to:

- Explain the tasks in Financial Accounting.
- Name the areas in Management Accounting and explain how they interact.
- Show the essential integration aspects within Accounting.
- Name the organizational units that play a role in Accounting.

Lesson: Purchase to Pay Process

Lesson Overview

In this lesson, we shed light on the individual substeps of a Purchase to Pay process from the order requirement to payment.



Lesson Objectives

After completing this lesson, you will be able to:

- Name the individual substeps of the procurement process.
- Understand the business process in the SAP system.
- Present the effects of the Purchase to Pay process on Accounting.

Business Example

You would like to manage the procurement of individual parts in your company which is in the PC branch. To do this, you must gain an overview of the relationships between Materials Management, Purchasing and Accounts Payable Accounting. In addition, you require information about the price control options of your materials.

Purchase to Pay Process Overview

One essential business process is the purchase of goods that will be presented here as the complex process **Purchase to Pay** in order to explain the most important transactions in Accounting.

Purchase order handling: When you create purchase orders, the system provides you with tools to help you enter the data. The required entry data such as supplier, material, plant and other data relevant to the organization of purchasing must be provided. The purchaser can supervise the processing status of the order in the system. He can define, for example, whether a goods receipt or an invoice has been executed for the respective order position. The system also supports dunning. This procedure runs exclusively in Materials Management. No postings are made in Financial Accounting.

When **goods are received**, the system checks, among other things, the quantity of goods received against the order quantity. A material document is created in Materials Management to update the stock. At the same time, a document is created in Financial Accounting to post the evaluated goods to the material stock account or the consumption account (debit) and to a goods receipt / invoice receipt account (credit).

After the invoice has been received in the **Invoice Verification**, the **Vendor Invoice** is checked as to the correctness of computation and content. All of these purchasing processes are handled by the Logistics components of the SAP system. The vendor invoice is posted in Materials Management and, at the same time, a document is created in Financial Accounting to post the invoice amount to the goods receipt / invoice receipt account (debit) and the vendor account (credit). The goods receipt / invoice receipt account is used to make sure that a goods receipt is executed for every invoice and vice versa.

The **Payment Processing** usually takes place in Financial Accounting. It is here that decisions are made about the payment process, such as, for example, the payment methods and the bank settlement.

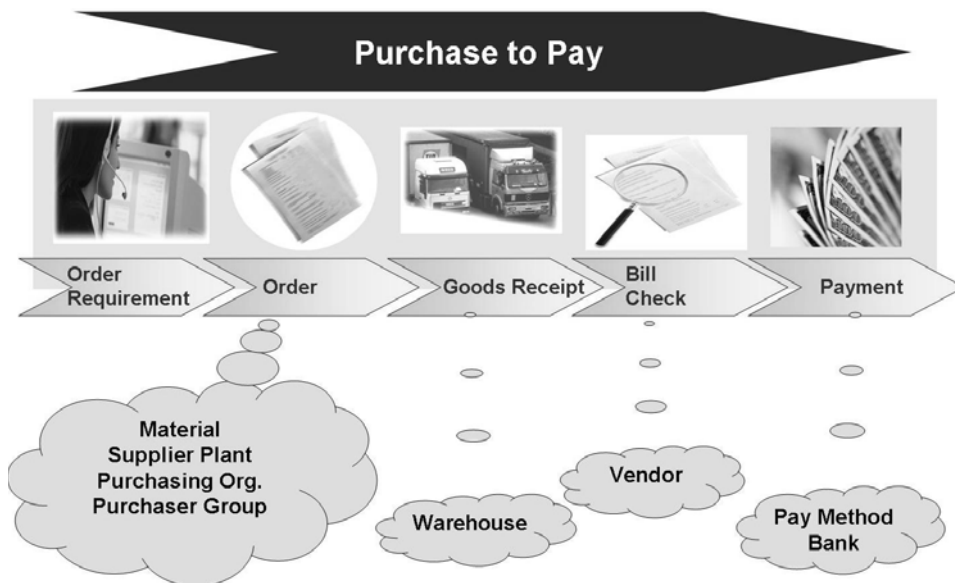


Figure 13: Purchase to Pay Process Overview

Order

The purchasing for the plants is carried out by **Purchasing Organization**. The purchasing organization buys from suppliers who are then paid by the vendor accounting. The different purchasing organizations of the group must create purchase-specific data in the **Vendor Master Record** before that can use the supplier master record. An order is a formal request from a purchasing organization to a supplier or a plant to provide or deliver a certain amount of goods or services at a particular time. **An order does not create a posting in Financial Accounting.**

However, it can create a commitment if, for example, it is not an order to the warehouse, but a consumption order (e.g. for Cost Center). In the case provided here, we will look at a general order to the warehouse.

Order transaction (ME21N) is a single-screen transaction, that is, you can maintain all relevant data on one central screen. The single-screen transaction is subdivided into four partial areas:

- **Header:** Used to record all the data that has to do with the entire order, for example, the address of the supplier or the organizational levels, such as the purchasing organization, purchaser group, and company code.
- **Item overview:** In this list, you can record your items with the data which are most important for you, for example, material, quantity, price and plant.
- **Item details:** Here, you can enter additional data for a certain item such as additional texts, account assignment details, and confirmations.
- In the **document overview** you can display the different purchase documents, for example, orders, requests and order requirements. User-specific requirements can be met using the personal settings. Every user can store or set own default values so that the document overview is automatically set up when the transaction is started. In addition, there is a help function that can be displayed in the same way as the document overview. This help display can be faded in or out. If you have opened help, you can still work on the transaction at the same time.

In the **order transaction** you can open and close all screen areas individually and thus influence the size of the individual screen areas. If, for example, you close the header and item detail, the item overview becomes larger. This applies to the order header, the item overview and the item details, but also to the document overview and to the help function. Basically, when you re-enter an order transaction, it appears as you last left it. It does not matter what function (create, change, display) you use to enter the order. You can change between the functions using the “Create” or “Change/Display” icons. In addition, you can also branch directly to another order or order requirement using the “Other Order” icon.

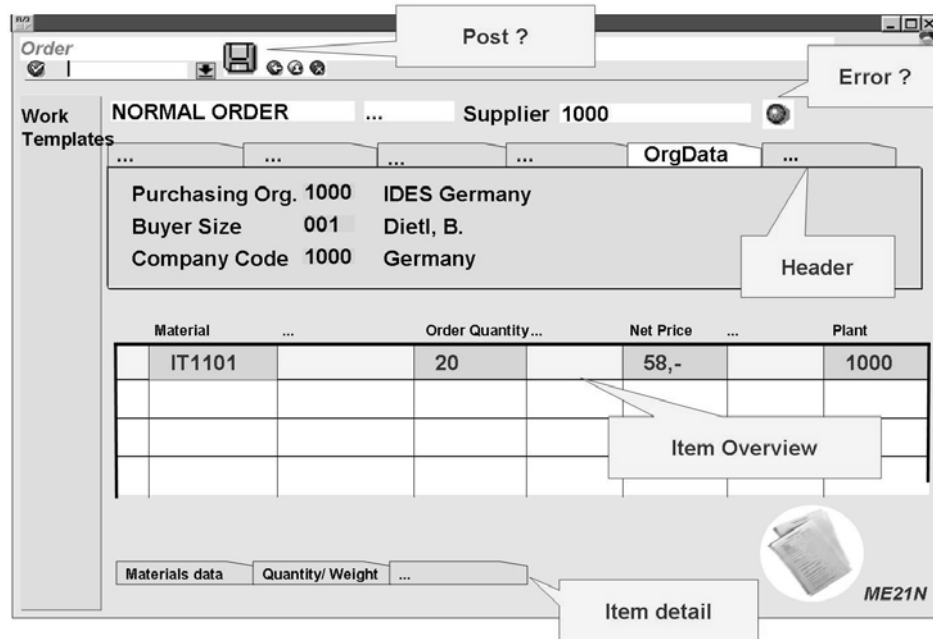


Figure 14: Order

Goods Receipt

With goods receipts, you decide which **Stock Type** a quantity is posted in. The stock type is relevant for determining the available stock in planning as well as for the removals in the inventory management. The goods receipt for order in the evaluated stock always takes place using movement type 101. The individual stock types (to be used freely, special stock, inspection stock) are distinguished by the inventory code that you can create on the item screen of the goods receipt editing.

The **material document** consists of a document header and at least one item. The header contains, among other things, the posting date and the name of the author. At item level, you record which material, in which quantity, in which warehouse of the respective plant is to be posted. In the item, you can check whether the amount received corresponds to the amount ordered. Following inspection, an “OK” indicator must be set before posting.

For **evaluated goods receipts**, not only a material document is created, but also an **accounting document**. At the same time, the order development is updated by the goods receipt. The accounting document shows the accounting effects of material movements. The document header contains generally valid data like the document date, the posting date, the posting period or the document currency. The G/L account numbers and the respective posting amount are recorded at item level. The

material and accounting documents are independent documents. The number of the automatically determined FI G/L account is derived in Customizing from different criteria such as, for example, movement type and movement category.

The **material valuation procedure** is set in the accounting view of the material master. With an evaluated goods receipt into the warehouse, the stock quantity is increased by the respective goods receipt quantity, independent of the valuation procedure set in the material master. The valuation of the goods receipt depends on the price control procedure set in the material master. In the SAP ERP system, the material valuation can be executed according to the moving average price procedure or the standard price procedure.

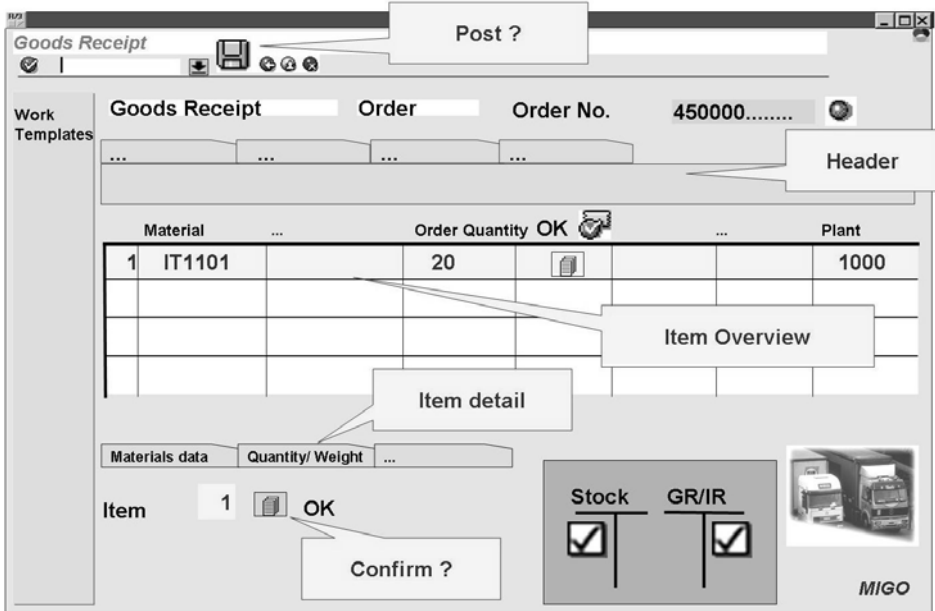


Figure 15: Goods Receipt

Invoice Verification

The entry screen for a vendor invoice or credit memo is divided into two areas:

- **Templates:** Entry variants, account assignment templates, or held documents can be selected here as templates.
- **Header and vendor data:** Data concerning the document header and the vendor item are entered here.
- **Item data:** The G/L account items of the document are entered here.
- **Information area:** The document balance and information about the vendor are displayed here.

The **invoice document** consists of a document header and at least one item. The header contains, among other things, the vendor (billers or suppliers), the posting date and the name of the author. At item level, you record which amount for which quantity of a material is to be invoiced. As with goods receipt, the recorded invoice amount must be confirmed using the “OK” indicator. Taxes can be calculated automatically.

The logistics invoice verification creates a separate **accounting document** as well as the invoice verification document. This is used in Financial Accounting to settle the invoice. The accounting document shows the accounting effects of the invoice entry. The document header contains generally valid data like the document date, the posting date, the posting period or the document currency. The G/L account numbers and the respective posting amount is recorded at item level. The invoice and accounting documents are independent documents. Documents can also be created in foreign currencies using this transaction. The foreign currency amount is converted into the house currency with the help of stored exchange rates. Ideally, the accounting document balances the GR/IR clearing account again and establishes a connection vis-à-vis the vendor (supplier) in the balance sheet.

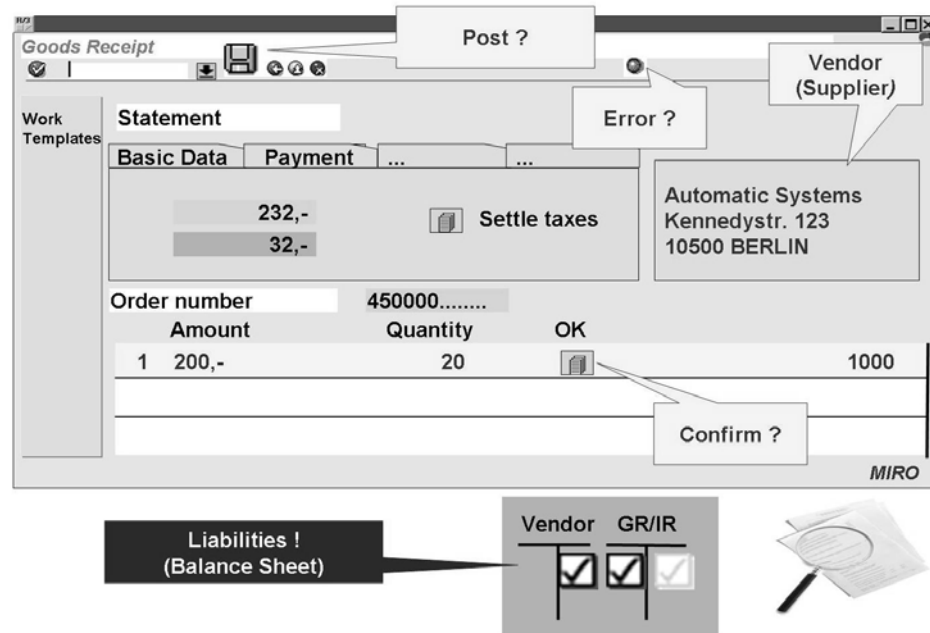


Figure 16: Invoice Verification

Payment Run and Account Statement

A payment transaction can either be executed **manually** (*vendor* → *posting* → *outgoing payment*) or automatically with the help of the **payment program**. The standard system includes the usual payment methods and the respective forms. The payment program was developed with customers and suppliers for international payment transactions and can be used for outgoing and ingoing payments. Use for outgoing payments is, however, internationally more customary.

The automatic payment process involves several steps. The first step includes the maintenance of parameters. You use parameters to inform the system about what accounts and items have to be included in the automatic payment run.

The second step includes the proposal run. In the proposal run, the accounts and documents selected by the parameters are searched according to due items, due items are brought together for payment and suitable payment methods, house banks and partner banks are selected for payment.

In the third step, the payment proposal you have created can be checked and edited. You can skip this step. We recommend, however, that you make sure the data are correct.

The fourth step includes the actual payment run. In the payment run, payment documents are posted, open items are compared and data are made available for the printing program used to print payment media.

The last step includes printing. In this step, the payment media are generated, that is, payment media are printed, IDocs for electronic data transfer (EDI) are generated and payment data are sent to the DME administration (Data Medium Exchange).

The bank informs Accounting about the transactions on the company bank account with the help of the account statement. The postings listed in it must be reproduced in Accounting. The account statement can reach the company as follows:

- **As a form:** In this case, the account statement must be created manually in the SAP system.
- **As a file:** The file is either supplied on the data carrier or can be called up from the bank using a (bank-specific) data transfer program. An SAP Report reads this file in the bank's temporary storage in the SAP system.

The account statements in the bank's temporary storage can be printed for the purposes of documentation. Batch Input Folders are also created from the account statements in the bank's temporary storage. These must be processed in order to create the necessary postings. Possible follow-up work is carried out either through the visible processing of the Batch Input Folders or - for direct posting - through a special follow-up transaction.

Outgoing checks: The payment program creates the check and posts the outgoing check, whereby the open vendor items are balanced. The outgoing check is posted on an outgoing check account designed for this purpose. If the check has finally been submitted by the vendor and charged to the bank account, this appears on the account statement and the bank accounting folder of the account statement function posts outgoing check / assignment to bank". When using the check administration, this posting is done via the check return.

Bank transfers are used very intensively in some countries, and in others hardly at all.

Outgoing transfers: The payment program creates the bank transfer and posts it to a cash disbursement account. At the same time, the open vendor items are balanced. The cash outflow appears later on the account statement and the bank accounting folder creates the posting "cash disbursement / assignment to bank".

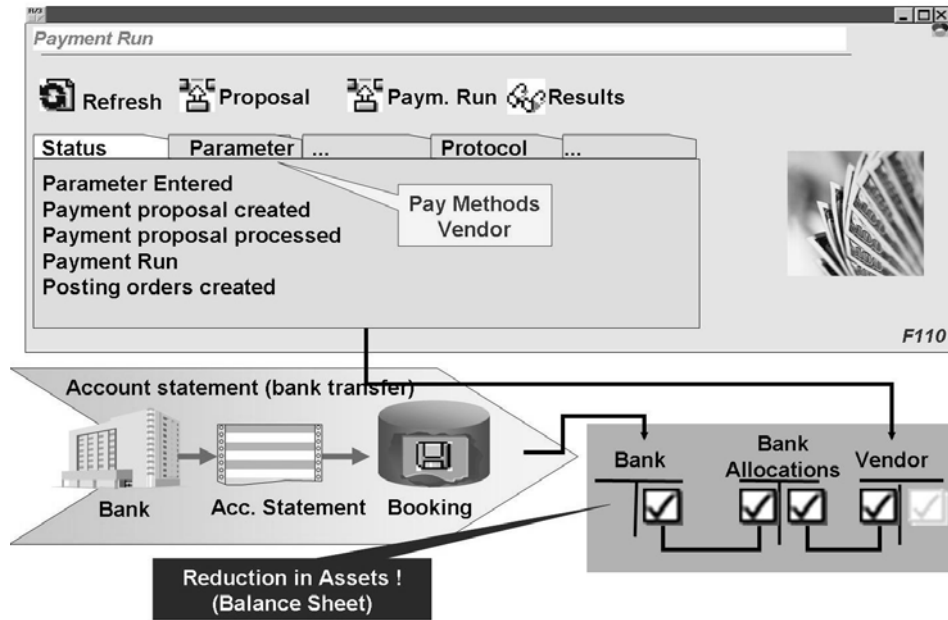


Figure 17: Payment Run and Account Statement

Warehouse Procurement Process from the Account View

If you follow the individual subprocesses of the general Purchase to Pay procurement, then you will recognize that, due to several sequential postings, ultimately the GR/IR clearing account as well as the bank clearing accounts are balanced again. Likewise, the liabilities built up in the short term by the payment are balanced again. From the point of view of the balance sheet, procurement into the warehouse is a material stock increase bound to a bank account reduction. External price fluctuations which may arise can be recorded - depending on the price control of the material - as a price difference, therefore in the Profit and Loss Statement.

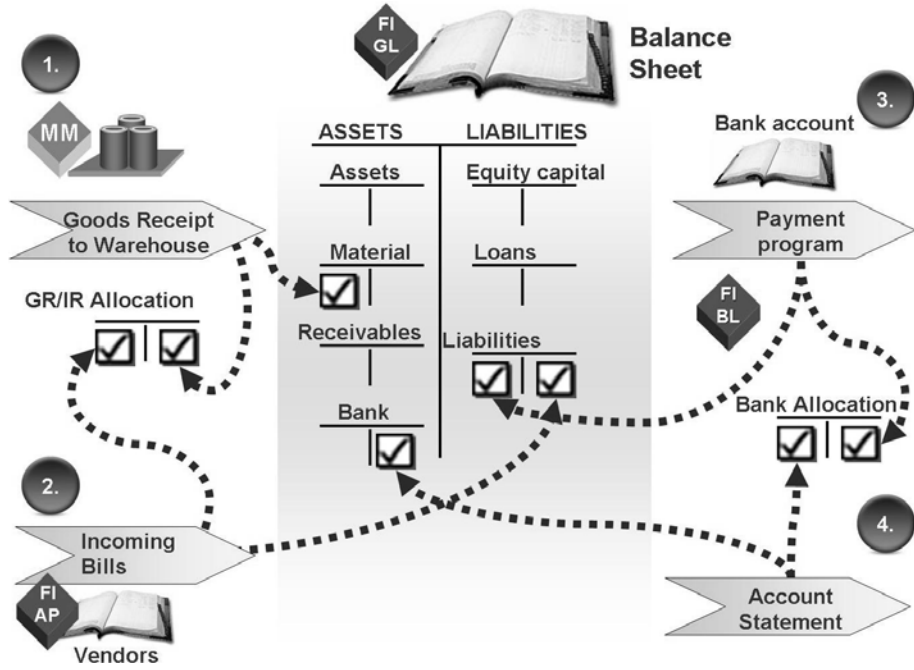


Figure 18: Warehouse Procurement Process from the Account View

Exercise 1: Purchase to Pay Process

Exercise Objectives

After completing this exercise, you will be able to:

- Depict an ordering process in the SAP ERP system and explain its effects in Financial Accounting.

Business Example

PC network interface cards are to be bought in your company. You have to create an order for this. Following receipt of goods, you should create the corresponding invoice. This is a warehouse procurement process. You require the network interface cards to make your company available within the framework of network installations that it provides as a service. The effects in Financial Accounting should be reproduced by analyzing the balance sheet and the P&L.

Task:

Carrying out a Purchase to Pay process

1. **Basic user settings:** Change your basic settings by also displaying the technical names of all the transactions in the menu path (transaction codes). This means that you can better trace whether you always call up the appropriate transactions in the exercises.
2. **Reporting in Financial Accounting:** Call up a balance sheet (S_ALR_87012284 - Balance/P&L) for company code 1000 as well as the chart of accounts INT for the current fiscal year with the following entries. Keep all other presettings. Take note of the following amounts.

Chart of Accounts	INT
Company Code	1000
Reporting year	Current year
Balance Sheet/P&L Structure	INT
List output	ALV-Tree control

Continued on next page

Item	Value
Profit and loss statement (negative values = profit)	
Sales Revenues (under P&L)	
Raw materials and supplies (under Assets - Current Assets - stocks)	
Finished goods and merchandise (under Assets - Current Assets - stocks)	
Accounts receivable from deliveries and services (under Assets - CV - Receivables)	
Accounts payable (under Liabilities - liabilities)	

3. Remain in this report and open the second session. Change to the new session.
4. **Purchase order:** Create a purchase order for your network interface cards with material number **R-55##** (## always stands for the number of your PC, while you are working on this course). For the order, please select (via transaction **ME21N**) the purchasing organisation 1000, the purchasing group 001 and supplier 1000 in the header. In Details, please enter your material number R-55##, quantity 10 and plant 1200. "Enter" enriches the data with additional information such as the order price.

Note the order price here (net price): _____ / per unit.

Post the order by pressing *Save*.

Note the order number here _____.

5. **Goods receipt:** In addition to the purchase order number for your network interface cards with the material number **R-55##**, post the goods receipt (transaction **MIGO**) and enter the order number you noted. Enter 0001 as warehouse. Check whether the "OK" indicator is already set. If it is not set, activate this indicator at the bottom left of the screen (press "Enter"). If the indicator is set, choose "Save".
6. Now enter the **invoice** with the current date as the invoice date for your order (via transaction **MIRO** in the Logistics invoice verification). Enter your purchase order number (roughly in the center of the screen) and choose "Enter". Activate the control code **0I Input Tax (course) 0%** (for reasons of simplicity, post the document without tax). Make sure that the code in the item data and the header data is set. Click the "**Booking OK**" button in the position line. The amount

Continued on next page

given in the position line must be entered again in the header data (basic data) by hand. Check again whether the balance is 0 (top right) and then choose "**Post**". Skip over warning messages which may occur using "Enter."

7. Analyze again the **Balance Sheet** (S_ALR_87012284 - Balance Sheet/P&L). It may be necessary to branch to your initial mode and call the report anew. How has your stock of raw materials and your liabilities from supplies and services changed in comparison to exercise 2?

Stock of raw materials: more? same? less?

Accounts payable: more? same? less? (absolute amount independent of preceding signs)

Solution 1: Purchase to Pay Process

Task:

Carrying out a Purchase to Pay process

1. **Basic user settings:** Change your basic settings by also displaying the technical names of all the transactions in the menu path (transaction codes). This means that you can better trace whether you always call up the appropriate transactions in the exercises.
 - a) In SAP Standard Menu: *Extras* → *Settings*. Activate “Display technical name.” Press “Enter.”
2. **Reporting in Financial Accounting:** Call up a balance sheet (S_ALR_87012284 - Balance/P&L) for company code 1000 as well as the chart of accounts INT for the current fiscal year with the following entries. Keep all other presettings. Take note of the following amounts.

Chart of Accounts	INT
Company Code	1000
Reporting year	Current year
Balance Sheet/P&L Structure	INT
List output	ALV-Tree control

Item	Value
Profit and loss statement (negative values = profit)	
Sales Revenues (under P&L)	
Raw materials and supplies (under Assets - Current Assets - stocks)	

Continued on next page

Finished goods and merchandise (under Assets - Current Assests - stocks)	
Accounts receivable from deliveries and services (under Assets - CV - Receivables)	
Accounts payable (under Liabilities - liabilities)	

- a) *Accounting → Financial Accounting → General Ledger → Information System → General Ledger Reports → Balance Sheet/ Profit and Loss Statement/ Cash Flow → General → Actual/Actual Comparisons → S_ALR_87012284 - Balance Sheet / Profit and Loss Statement*
- 3. Remain in this report and open the second session. Change to the new session.
 - a) System -> Create Session. Activate the new session using your Windows footer.
- 4. **Purchase order:** Create a purchase order for your network interface cards with material number **R-55##** (## always stands for the number of your PC, while you are working on this course). For the order, please select (via transaction **ME21N**) the purchasing organisation 1000, the purchasing group 001 and supplier 1000 in the header. In Details, please enter your material number R-55##, quantity 10 and plant 1200. "Enter" enriches the data with additional information such as the order price.

Note the order price here (net price): _____ / per unit.

Post the order by pressing *Save*.

Continued on next page

Note the order number here _____.

- a) *Logistics* → *Materials Management* → *Purchasing* → *Purchase Order* → *Create* → *Vendor/Supplying Plant known (ME21N)*:
- b) Close the "EnjoySAP: Purchase Order" help window that might be open on the left.
- c) In the first line, on the right next to the text "Vendor", enter vendor 1000
- d) In the header screen - "Org.data" tab page: (this data may already have been entered automatically by your user parameters)

Purchasing Organization	1000
Purchaser Group	001
Company Code	1000

- e) In the item overview tab page, only fill out the following fields:

Material	R-55##
Order Quantity	10
Plant	1200 (Dresden)

- f) Press "Enter."

Note the order price here (net price): _____ / per unit.

Post the order by activating the save key.

Note the order number here _____.

- 5. **Goods receipt:** In addition to the purchase order number for your network interface cards with the material number **R-55##**, post the goods receipt (transaction **MIGO**) and enter the order number you noted. Enter 0001 as

Continued on next page

warehouse. Check whether the "OK" indicator is already set. If it is not set, activate this indicator at the bottom left of the screen (press "Enter"). If the indicator is set, choose "Save".

- a) *Logistics → Materials Management → Inventory Management → Goods Movement → Goods Receipt → For Purchase Order → MIGO - PO Number Known*
 - b) Choose "Goods Receipt" – "Purchase Order" in the first line and enter your purchase order number.
 - c) Choose "Enter".
 - d) Enter warehouse 0001 in tab page "Where".
 - e) Check whether the "OK" indicator is already set behind your material. If it is not set, activate this indicator at the bottom left of the screen (press "Enter"). If the indicator is set, choose "Save".
6. Now enter the **invoice** with the current date as the invoice date for your order (via transaction **MIRO** in the Logistics invoice verification). Enter your purchase order number (roughly in the center of the screen) and choose "Enter". Activate the control code **0I Input Tax (course) 0%** (for reasons of simplicity, post the document without tax). Make sure that the code in the item data and the header data is set. Click the "**Booking OK**" button in the position line. The amount given in the position line must be entered again in the header data (basic data) by hand. Check again whether the balance is 0 (top right) and then choose "**Post**". Skip over warning messages which may occur using "Enter."
- a) *Logistics → Materials Management → Logistics Invoice Verification → Document Entry → Enter Invoice (MIRO):* Enter today's date as the invoice date.
 - b) Enter amount 1120 in the basic data and set the tax code 01.
 - c) Enter your order number behind "Order/Shipping Plan " and press "Enter".
 - d) Activate the control code 0I Input Tax (course) 0% in the item line (for reasons of simplicity, post the document without tax).
 - e) Select the the "Posting OK" indicator in the item line.
 - f) Check again whether the balance is at 0 (top right) and then select "Post."
7. Analyze again the **Balance Sheet** (S_ALR_87012284 - Balance Sheet/P&L). It may be necessary to branch to your initial mode and call the report anew. How has your stock of raw materials and your liabilities from supplies and services changed in comparison to exercise 2?

Continued on next page

Stock of raw materials: more? same? less?

Accounts payable: more? same? less? (absolute amount independent of preceding signs)

- a) *Accounting → Financial Accounting → General Ledger → Information System → General Ledger Reports → Balance Sheet / Profit and Loss Statement / Cash Flow → General → Actual/Actual Comparisons → S_ALR_87012284 - Balance Sheet / Profit and Loss Statement*

Chart of Accounts	INT
Company Code	1000
Fiscal year	Current year
Balance Sheet/P&L Structure	INT
List output	ALV-Tree control

- b) Stock of raw materials: greater
- c) Liabilities from deliveries and services: greater (absolute amount independent of preceding signs)



Lesson Summary

You should now be able to:

- Name the individual substeps of the procurement process.
- Understand the business process in the SAP system.
- Present the effects of the Purchase to Pay process on Accounting.

Lesson: Plan to Product Process

Lesson Overview

In this lesson we explain, from the Controlling point of view, the essential aspects of production, from planning to production in Actual. The most important steps in value creation are displayed.



Lesson Objectives

After completing this lesson, you will be able to:

- Explain the tasks of the individual areas in Management Accounting with respect to planning and production.
- Show the options for planning on Cost Centers and in the cost unit area.
- Track the production process using the example of a production order from the point of view of Accounting.
- Highlight the planning options in Services Controlling.

Business Example

Your company produces PCs and implements network installations for customers. You would like to find out what form production is processed in, in the SAP ERP system and how Accounting traces this process. In addition, you should assess the extent to which services can be processed with the SAP ERP system.

Plan to Product Process Overview

Planning is used to define company goals. The comparison of actual company results with the planned results helps in ascertaining deviations and enables the timely implementation of corrective measures. The SAP ERP system offers a broad spectrum of options for achieving these goals.

Overhead Costs Controlling (CO-OM) focuses on assimilating costs that cannot be directly assigned to the goods and services of a company and, when possible, allocates them further on a cause-effect basis. Account assignments for such costs are, for example, Cost Centers and Internal Orders. This means that, within the framework of the planning process, not only costs but also internal services can be planned and utilized for price calculations of the activity type. If, over the years, the Cost Centers render services for other Cost Centers or for the cost units in the Product Cost Controlling (CO-PC) of the company, the services - evaluated with the prices - find

their way to the respective recipients (consumers). At the end of every period, the balances of the overhead costs objects are calculated and allocated further to Product Cost Controlling or to the profitability and sales accounting.

Product Cost Controlling (CO-PC) records the costs for creating goods and services (and, in certain cases, their sales revenues) and settles these in Financial Accounting or Profit Center Accounting. The product cost planning is used for both the calculation (product cost planning) and evaluation of the production costs of a product, of the costs and/or revenues from the rendering of a service or in the execution of a project - in both plan and actual (cost unit accounting). This means that it provides the tools for a comprehensive analysis of the value-adding processes in a company. Depending on the company scenario, the cost objects in a company are strongly connected to other SAP system components, such as **Project System (PS)**, **Sales and Distribution (SD)**, or **Production Planning (PP)**.

Profit Center Accounting is used to plan and analyze the profits recorded by the company's market segments (CO-PA) and the overall profit of the strategic enterprise entities (profit centers in EC-PCA).

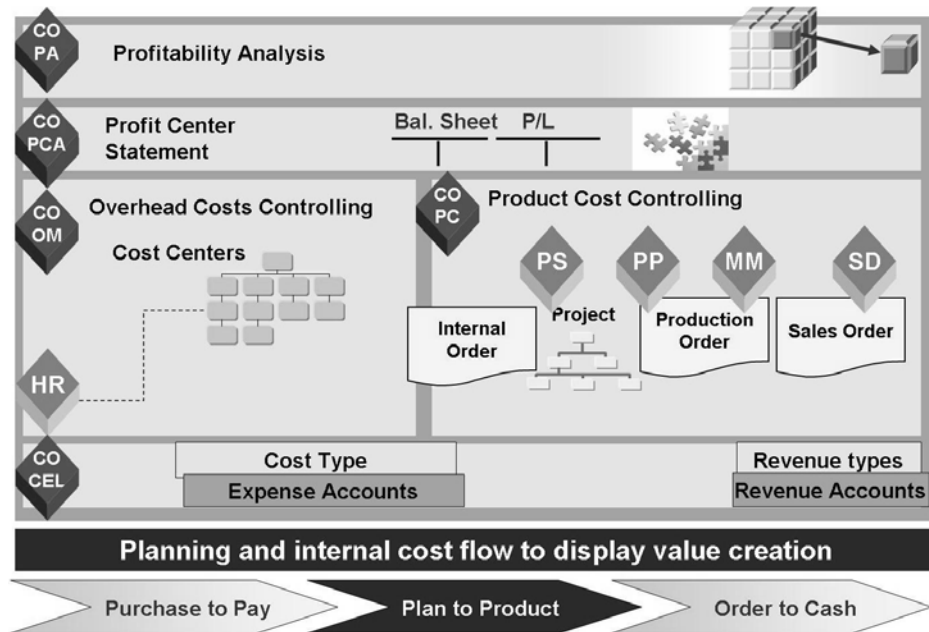


Figure 19: Plan to Product: Process Overview

Cost Center Planning

The **Cost Center Planning** can be carried out manually or with the help of automatic procedures, such as formula planning. The Cost Center Planning is always done in detail with regard to individual primary and secondary cost elements. Planned values (such as planned personnel costs and planned depreciation) can also be transferred automatically to the Cost Centers from **Human Resources Management HCM** and **Asset Accounting (FI-AA)**. Both fixed and variable costs can be planned for each area of responsibility, i.e. for each Cost Center. The delimitation process means that calculatory costs can also be charged to the Cost Centers. Within the framework of **distributions and assessments**, costs that were planned on one Cost Center can be allocated according to keys (such as percentages, amounts or statistical key figures) predefined by the user. The advantage of this procedure is that it is easy to manage: The keys, as well as the sender and receiver relationships are usually defined only once. It is the aim of Cost Center Planning to calculate planning costs to **define deviations** later and to prepare the **allocation to cost units**. As a rule, planning is based on absorption costing, that is, you try to allocate all (fixed and variable) costs in the overheads area to the cost units in a company using different procedures.

The **activity type planning** is an important step in Cost Center planning, as the planned activity amounts can influence planned costs. A Cost Center can provide any amount of activities. The amount of activities can be determined either manually or can be transferred from other modules, such as Production Planning (PP). As the individual objects plan the provision and planning of services independently of one another, an automatic adjustment to the activity relationships can be made with the help of the **plan reconciliation** at the end of the planning process. The **price calculation** for the Cost Center services is the last step in the Cost Center planning. The price per Cost Center/activity type is entered manually or, in cases of automatic price calculation, on the basis of the planned costs in relation to the planned activity. As the activity amount for the provision of a service to other objects is evaluated using this price, a combined quantity and value flow is the result of the allocation of an activity.

As an alternative to activity allocations, the Cost Centers can also be credited with the help of **overhead rates** or **assessments**. The Cost Centers are then each credited with the allocated amount. In cost center planning, certain dependencies regarding the order of the planning steps have to be taken into consideration. Plan distribution based on variable proportions can only be carried out after the allocation bases have been planned for the receivers. In addition, automatic price calculation cannot be carried out until all of the distributions have been made. The **Schedule Manager** offers support in the definition, planning, execution and control of periodically repeated activities.

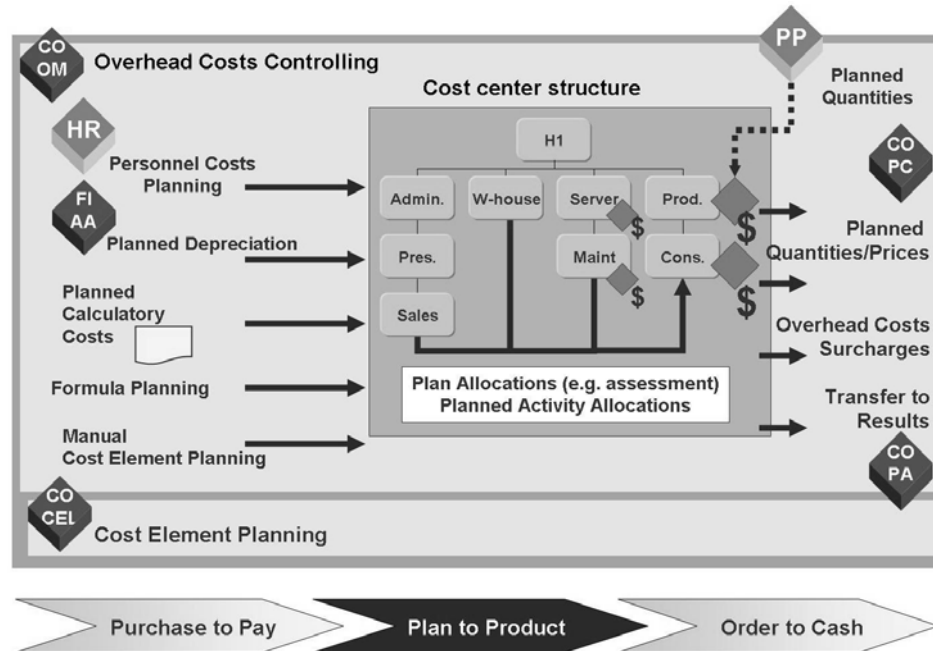


Figure 20: Cost Center Planning

Cost Planning in Cost Unit/Production Area

Cost Object Controlling comprises three main steps: **preliminary costing of the cost object, simultaneous costing, and final costing**. The preliminary costing is based on the calculation of planning costs for a cost unit, for example, for a production order, a customer order or a project. Planned or target differences can be determined later by comparing the results of the preliminary costing for the order with the actual costs. A preliminary costing like this usually contains directly assignable individual costs (such as planned material removals or external services) as well as overhead costs that are allocated internally for planning via the activity type/prices or via overhead rates.

Product Cost Planning in Product Cost Controlling (CO-PC) can access master data from other SAP system component applications during preliminary costing for the various cost objects. These plan references from Integration can be production orders, for example, the piece lists and workplans of logistics. For projects, this usually takes place using existing network structures. For sales orders, planning can be carried out automatically on the basis of planned sales prices in Sales and Distribution (SD) and existing costs of goods manufactured in the material master record (costing view).

If you also want **manually created plan templates** in addition to or as an alternative to these plan templates from Integration, you can use **base object costing, multilevel unit costing, or easy cost planning**. The Base Object Costing determines the costs for an abstract object that is called "base object". You enter the quantity structure

manually at the time of costing or as a copy from a variant. The result is a calculated quantity structure that can be used again in Costing for different cost units under the name of the base object. You can use multilevel unit costing to define worklists to create a quantity structure with as many levels as necessary for use as a costing basis. Easy Cost Planning is a costing method for carrying out quick and simple cost planning. The principle is based on the provision of costing models which are an aid to planning (for example, for internal orders, appropriation requests).

Profit Center Planning in CO-PCA is part of the overall planning concept for all plannable SAP objects since these objects are assigned to a profit center. The Profit Centers in particular make the integrated character of company planning apparent, as the planning data are principally generated via other applications and added to or changed in Profit Centers. Profit Center Planning is part of the short-term company planning that covers a fiscal year. **Sales and Profit Planning in CO-PA** enables various planning scenarios (for example, sales in different regions or to different customer groups) to be simulated at an aggregated level. These plans can be broken down to smaller levels with by using methods such as top-down distributions, for example. By using existing or by defining own planning layouts, you can implement, in practice, all scenarios of the central or local planning.

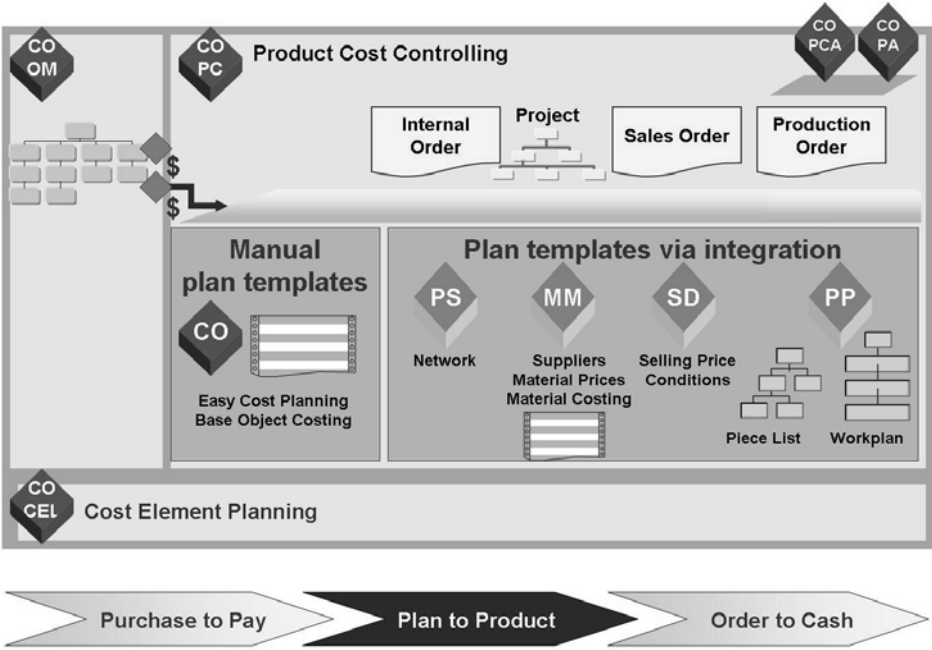


Figure 21: Cost Planning in Cost Unit/Production Area

Example: Production Processing with Management Accounting

One example of cost unit processing is **order-based production** with a **production order** that produces a certain amount and then delivers this to the warehouse. The logistics area **Production Planning (PP)** is very closely connected to Management Accounting. Bills of material and routings created in PP can be used for product cost calculation in Management Accounting. In addition, PP production orders are in the form of cost units that are used in Cost Unit Accounting for purposes of documentation and controlling the production costs.

When creating a production order, a **preliminary costing** is automatically carried out to calculate the planning costs for the order. Actual costs are incurred when you **withdraw materials** from the warehouse and activity types from cost centers are allocated by means of **confirmations**. Costs from **external services** can also be posted directly on the production order. Once the order quantity has been completed in full or partially, the order delivers finished products to the warehouse. At the same time, the order is credited as a cost object by the quantity received by the warehouse multiplied by the relevant valuation price. The order can also be debited with occurring overhead rates or with process costs. The current plan prices which are evaluated using confirmations can be subsequently evaluated at the end of the month, that is, after the real actual costs are known, using the **actual prices** of the cost centers. As the different actual costs are posted simultaneously with the utilization of materials or services on the production order, the costs for the production order can be called and analyzed at any time. After all costs are complete on the cost unit, you can begin with the final costing. This includes determination of the **work in process**, an analysis of **variances** and **scrap**, and **settlement** of the accrued amounts in Accounting.

No matter how different the activity output processes are in the respective companies or branches from the point of view of logistics, from a Controlling point of view, they are at least all similar. This is because, no matter what the activity output process (product, service, project, etc.) looks like, the steps in **preliminary costing**, **simultaneous costing**, and **final costing** phases are basically always the same.

Product cost controlling is to be seen more as a “toolbox” with many cost objects and functions. Select the appropriate cost object and the suitable transactions, depending on the Controlling aims, but also dependent on the existing Integration data (quantity structure). The result is your Cost Unit Accounting for the activity output process under observation. For another activity output process (product group, service, etc.) you may choose other cost objects bringing you to another scenario. However, independent of what your scenarios look like, the basic steps or **core processes of the Cost Unit Accounting** always remain similar.

First of all, select from all possible cost objects, those that are best suited in terms of their functionality or integration. Many of these cost objects can also be implemented in combination, for example production order for a customer order, customer project with attached networks and production orders. For most cost objects, it is possible to calculate the costs and save them as plan values on the cost object. If the cost object has a status management, the cost object must be released before you can carry out actual postings on the cost object. The order of the actual postings is not provided, but is derived from the business transactions. First of all, you can remove the required materials from the warehouse (possibly with reference to a piece list). Execution of the activity output process using either the work timesheets or the confirmations.

Goods receipts and invoice receipts may occur for services purchased externally or for externally procured goods. These are posted on the cost object. You can allocate overhead rates and processes as periodical transactions. If products are finished, they can be delivered to the warehouse which credits the cost object in most scenarios. At period end, depending on the cost object type, you can calculate the goods in process, the deferral to cost objects and/or calculate the variants (final costing). You settle the cost objects at the end of the period or when the order is completed.

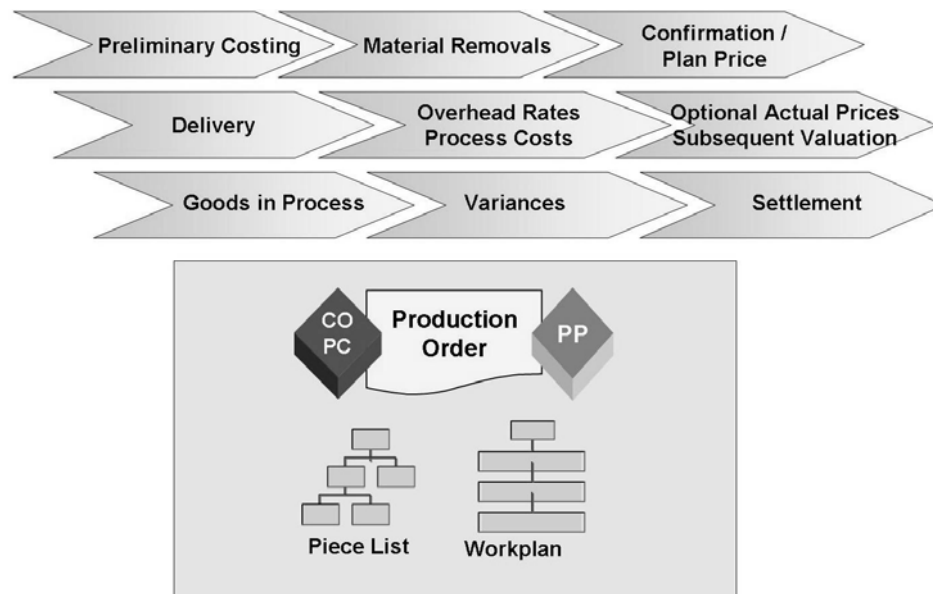


Figure 22: Example: Production Processing with Management Accounting

Production Process from the View of Accounting

The following section discusses in detail the process steps **material withdrawal, confirmation, and settlement** for Accounting, since several important Accounting documents are created here.

After the preliminary costing data has been created and the order released, costs are initially incurred by **material withdrawals**. The raw materials inventory (that has been supplied before) is reduced and expenses, in the form of cost elements, flow via the respective consumption accounts to the accounting object 'production order'. Similarly, **external services** via invoices are posted directly on the order using account assignments from Financial Accounting. Here, we speak of individual costs or **direct costs** of the order.

Confirmations constitute a further debit in Logistics. A confirmation relates to one or more internal activities that are performed by a cost center. Since the cost center costs are not yet fully known when the confirmation is made, a plan price is allocated here. These costs are either make-to-order production costs or production overheads. As a result, the cost center is credited in production. If there is a **deficit or surplus** at the end of the month, these variances can be allocated subsequently via different functions. It is possible to execute a subsequent evaluation for the actual price or to allocate the entire balance to the result. A similar temporary evaluation of the cost unit is done using **overhead rates** when, for example, a Cost Center warehouse allocates its material overhead costs to the cost unit using a temporary percentual consumption record.

The **period-end closing** of the cost object informs you about the cause of cost fluctuations within the framework of the **variants analysis**. Similarly, you can calculate scrap costs that can be used for the operational production control. The **work in process** function enables the monthly deferral of costs that are perhaps already posted in FI as expenses but not yet on a finished product. This work in progress is calculated in Management Accounting (CO) and included in the cost object reports as well as in the reports for Financial Accounting (FI) where the WIP is transferred from CO to FI.

The **delivery or settlement** of the production order effects an increase in the inventories of finished products, whereby unusual internal cost fluctuations can also be posted to price difference accounts in the P/L. This depends on the detail of the price control in the Material Master and on the account determination.

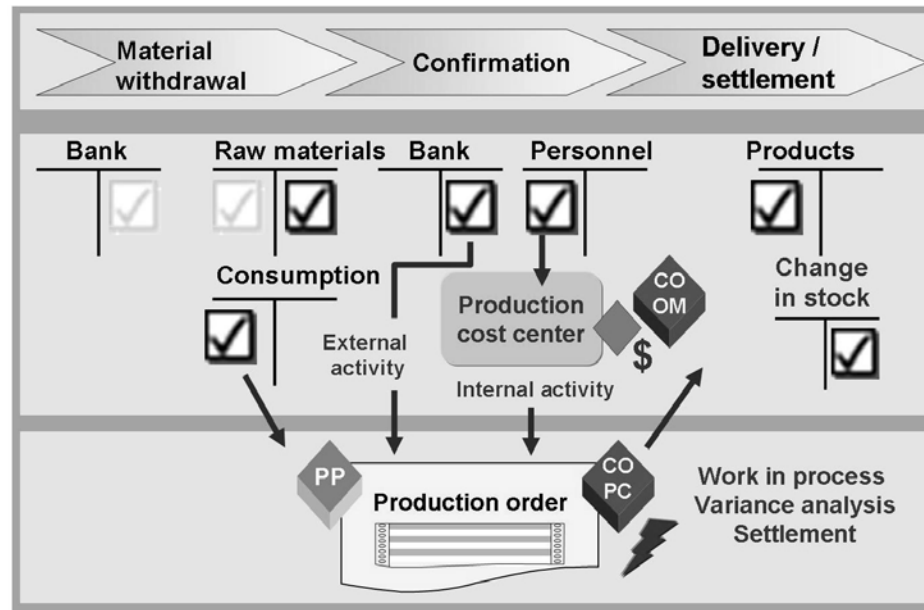


Figure 23: Production process from the point of view of Financials

Example: Base Planning Object Costing in Services Controlling

In many areas, for example, in **services**, the preliminary costing is made more difficult because the required logistical quantity structures (piece list, workplan) are missing.

You can also manually create **plan templates** as an alternative to preliminary costing from Integration or as a simplification for individual cost planning. **Base planning object costing** or **Easy Cost Planning** can be used here. The Base Planning Object Costing determines the costs for an abstract object that is defined as a master record. You first enter the quantity structure manually at the time of costing of the cost unit or as a copy from a variant. The result is a calculated quantity structure that can be used again in Costing for different cost units under the name of the base object.

Creating a base planning object costing first of all creates a master record. Texts, assignments and the unit of measure for the base planning object costing are maintained there. A base planning object costing is always clearly assigned to a Controlling Area. When you access the costing screen, selecting a costing variant means that you define what rules should be evaluated for the costing items and what lot sizes should be calculated. Enter an **item type** for every item in the costing. The

item type defines which data you enter, which are read by the system and how costs can be calculated for the item. The figure below shows which item category is allowed and which entries are permitted for which object.

- Item type (required for every line item)
- Resource (for example, material number or Cost Center)
- Work center (for internally rendered services)
- Plant
- Cost Element
- Quantity
- Unit of Measure
- Total Price
- Fixed Price
- Total Value
- Fixed Value
- Currency

The system automatically derives the cost elements and prices as well as the cost centers from the combination of item category and resource (such as the material number or the activity type of cost centers).

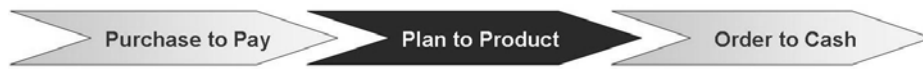
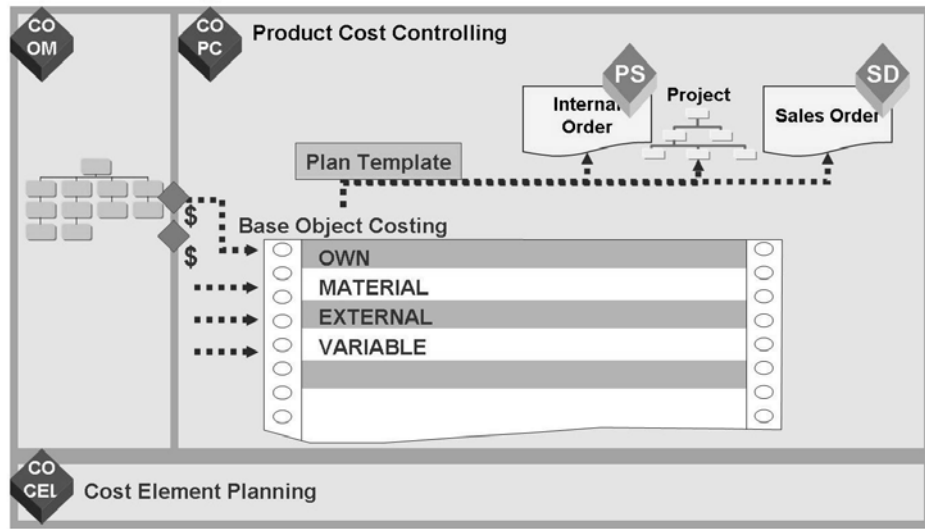


Figure 24: Base Planning Object Costing as a planning template in Services Controlling

Exercise 2: Plan to Product Process

Exercise Objectives

After completing this exercise, you will be able to:

- Analyze a base object costing

Business Example

You want to execute a plan for the “installation of networks” service offered by you using base object costing. As this is a service, you cannot access logistical data in the form of piece lists and work plans, to execute the planning of costs. The base object costing contains all items that should be realized in creating the service.

Task:

Analysis of a pre-defined base object costing.

1. Analyse the base object costing for a “R-NET-INST” network installation in the InfoSystem of the product cost planning (KKED). Use the evaluated multilevel BOM. Fade in all items and select the Layout /SAPFIN. Answer the following questions:

How many different materials are implemented? _____

What Cost Center is planning the allocation of different services? Cost Center: _____

What other costs are planned? _____ for _____ EUR

How high is the total price of a network installation for only one PC (only one USER)? _____ EUR

What items are fixed items? _____

Solution 2: Plan to Product Process

Task:

Analysis of a pre-defined base object costing.

1. Analyse the base object costing for a "R-NET-INST" network installation in the InfoSystem of the product cost planning (KKED). Use the evaluated multilevel BOM. Fade in all items and select the Layout /SAPFIN. Answer the following questions:

How many different materials are implemented? _____

What Cost Center is planning the allocation of different services? Cost Center:

What other costs are planned? _____ for _____ EUR

How high is the total price of a network installation for only one PC (only one USER)? _____ EUR

What items are fixed items? _____

- a) *Accounting → Controlling → Product Cost Controlling → Product Cost Planning → Information System → Detailed Reports → For Base Planning Object → Costed Multilevel BOM (Only Base Planning Object Exploded) (KKED)*
- b) Enter the base object costing "R-NET-INST" on the initial page and choose "Execute".
- c) In the report, choose the "Show All Items" pushbutton and select layout /SAPFIN to analyze the base object costing.
- d) How many different materials are implemented? 3 materials: R-5001; R-5000; R-5501

What Cost Center is planning the allocation of different services? Cost center: 4279 External Service

What other costs are planned? Travel expenses for EUR 100 (this amount can vary, if necessary, when changes take place in the system)

How high is the total price of a network installation for only one PC (only one USER)?

What items are fixed items? Material R-5001 (network server): 1 piece and cost center 4279/activity 1463: 3h Manager consulting



Lesson Summary

You should now be able to:

- Explain the tasks of the individual areas in Management Accounting with respect to planning and production.
- Show the options for planning on Cost Centers and in the cost unit area.
- Track the production process using the example of a production order from the point of view of Accounting.
- Highlight the planning options in Services Controlling.

Lesson: Order to Cash Process

Lesson Overview

This lesson presents the sales process and the relevant business transactions from Financial Accounting and Cost Accounting connected with this. In doing this, we will go into the details of a services scenario.



Lesson Objectives

After completing this lesson, you will be able to:

- Present an overview the Order to Cash process.
- Track a direct sales process from the Accounting point of view.
- Explain the transactions of a services sale which are relevant to Accounting.

Business Example

Your company produces PCs and implements network installations for customers. You are interested in settling a sale ex stock. You are to install networks at the customer. Therefore, the main question is, how is this kind of services sale settled. The analysis options should be displayed from the Accounting point of view.

Order to Cash Process - Process Overview

The **sales order** is the basis of the sales process. When an order has been settled effectively, all services with regard to the customer run off as an integrated process. The SAP **Sales and Distribution (SD)** component uses interlinked documents to initiate a workflow. In the SAP system, **sales organizations** are legally responsible for sales. There can be several sales organizations within one company code. Every sales organization can use different **distribution channels** to sell goods. The combination of a sales organization and a distribution channel is also called a **Distribution Chain**. The sales order is generated at the level of the distribution chain. The ordered items can apply to different **Divisions**. After the sales order has been entered, the system carries out an availability check for the desired delivery date.

Many different scenarios can be handled with sales orders in SD. Two examples of the scenarios in Accounting are presented in the following section: the **anonymous sale of products ex stock** and **make-to-order production using the creation of a service as an example**.

Sale of products ex stock: because this sale **does not involve creation of a services** (the material is evaluated in stock), it is handled with a sales order item that is **not a cost object** (defined in Customizing). This means that costs and revenues are derived

automatically from the material production costs or from the sales prices. In this case, you do not post individually on each of the sales order items. On the day of shipping, an **outbound delivery document** is created. The delivery cannot be billed until the goods have been withdrawn from the stock and posted as a goods issue. You can create a **Transport Order** that generates a commissions order. The required goods are removed from the stock and prepared for delivery. The goods to be delivered are posted as **Goods Issue**. A goods issue document is created in Materials Management and an accounting document in FI to post the goods issue to the correct general ledger accounts. The last step in the sales and distribution process is **Billing**. A billing document is created in Sales and Distribution and a printed invoice is sent to the customer. The SAP system allows you to analyze the stock of open items and dunning overdue items automatically. In doing this, a dunning level is defined which is higher, the higher the number of days in arrears is. On the basis of this dunning level, dunning fees and interest can be calculated and the dunning text that is selected depends on the dunning level. A dunning history is administered via the dunning notice which has been sent. Automatic dunning can be triggered for either only one account (individual dunning) or, the dunning program executes automatic dunning for a limited amount of accounts. The accounts are selected in the dunning run and checked for overdue items. Finally, a check is made whether reminders have to be sent and dunning levels are allocated. All dunning data are saved in one dunning proposal. From a Management Accounting perspective, billing is when the revenue occurs. The **payment** received from the customer is posted in Financial Accounting. The documents created in the SAP system make sales order administration easier for you and your customers.

Made-to-order production using the creation of a service as an example: Unlike ex stock sales, rendering a service represents a **direct services generation process** that is also modeled using a sales order item. In order to enable Controlling for this, a sales order item - controlled via Customizing - is created as a **cost object**. This means that the costs (and later also the revenues) can be posted specifically and directly to the sales order item. The steps incoming orders, billing, payment and dunning are nearly all identical to sales ex stock. In this services example, however, no goods are transported or delivered. The cost object **sales order item** can be posted for all transactions of the **service generation** directly. For example, transactions such as an internal activity allocations, external invoices, materials orders or overhead rates can be offset. When the service generation is finished, you can pass on the costs and revenues to the profitability analysis (CO-PA) via the **Order Settlement**.

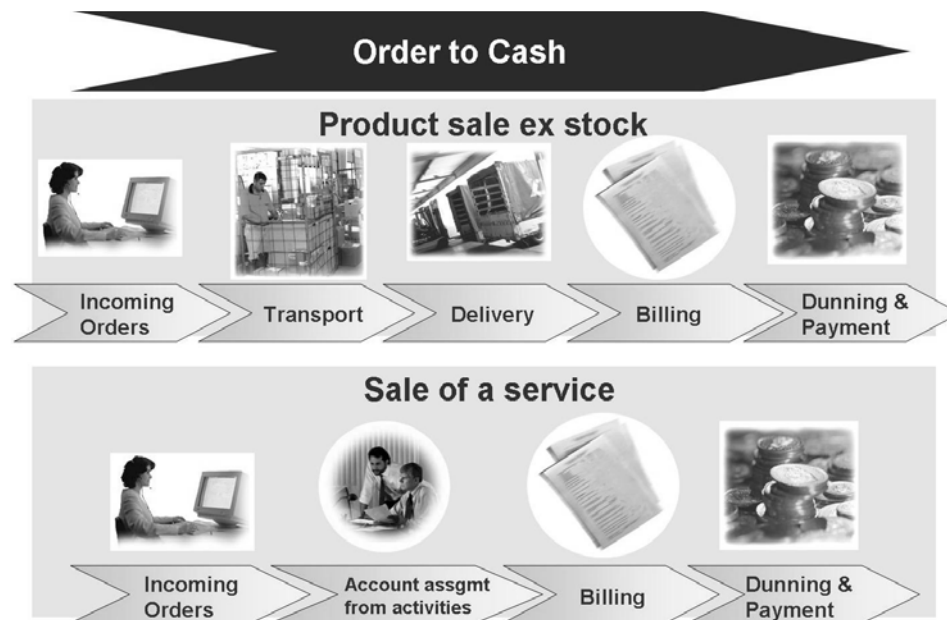


Figure 25: Order to Cash Process - Process Overview

Create a Sales Order

During order processing, a **sales order** is normally the first object created. A customer inquiry and quotation to the customer may precede the sales order. A sales order, as an electronic document in which the goods or services your customer has ordered, are recorded. The sales order contains all relevant information for processing the customer order within the framework of sales order transaction. The Sales and Distribution component automatically proposes data from the material and customer master record as well as control tables. This means that when you are processing an order, you can avoid possible entry errors and the multiple entry of redundant data. A sales order can contain several order items (one item per material).

The business partners relevant for a sales transaction are **customer, receiver of goods, payer and receiver of invoice**. These business partners assume different functions (also partner roles) in the business process.

The sales document data can be displayed and processed on different **views** in order to process the sales document efficiently. The views are group in overview screens, header screens and item screens. You usually create new sales documents on the overview screen.

- **Sales document header:** The data in the document header applies to the entire document. It includes customer-related data, for example.
- **Items in the sales document:** Every item in the sales document has its own data. This includes, for example, details about the material / article and about the order quantity. Every sales document can have several items, whereby the individual items can be controlled differently. Examples are material items, service items, free items or text items.
- **Schedule lines in the line items:** Schedule lines contain delivery quantities and delivery dates. They clearly belong to one item. Every item that a delivery entails in the further sales process must have at least one schedule line. It can also have several schedule lines, for example, if the ordered amount is to be delivered in several partial deliveries on different dates.

During the sale, **costs and revenues** related to the sale are planned in the sales order item and updated later in Actual. The **planned revenues** are calculated using pricing in the sales order (via condition determination in Sales and Distribution). The plan revenues are compared to the plan costs. For stock products, these generally originate from a **material cost estimate** or from the valuation price in the material master. The actual revenues are posted when invoicing takes place, whereby the evaluation of the cost of sales are also posted with the costing.

In cases of made-to-order products and, especially in the generation of services, plan costs can also be calculated individually on the sales order item. **Base object costings** can serve as a template for this purpose. The actual costs result from material removals, production orders, internal activity allocations and surcharges that can be offset directly on the sales order item. The actual revenues and actual costs are settled in Profitability Analysis to determine profitability in conjunction with other sales characteristics.

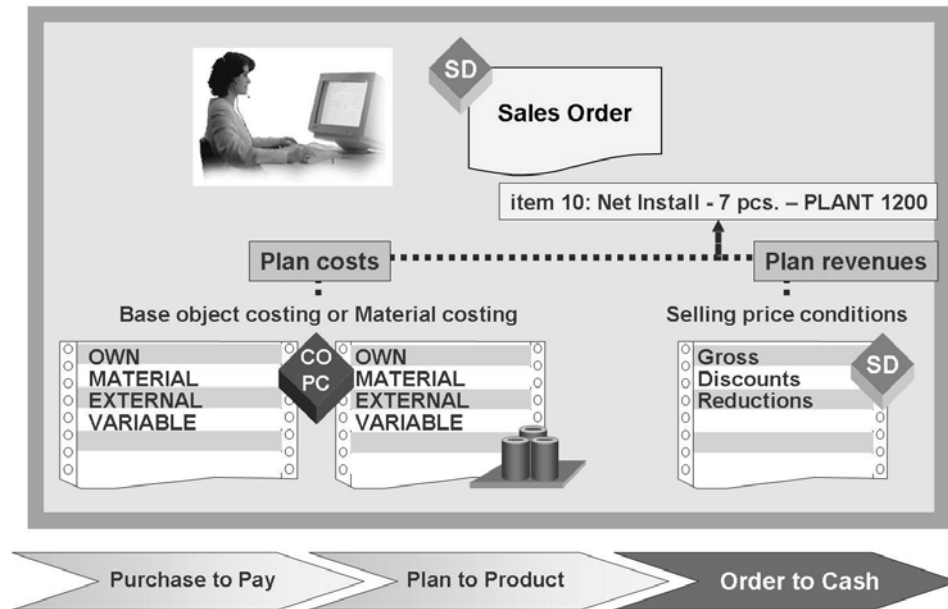


Figure 26: Create a Sales Order

Ex stock sales process from the point of view of Accounting

When an **order has been settled** effectively, all services with regard to the customer will be processed as an integrated process. A series of interlinked documents is created during this process. The SAP Sales and Distribution system component begins by handling the processes before the actual sale and ends by settling the customer payment for the goods and services received. Every one of these processes is processed using electronic documents that are each linked to the previous or subsequent document. These documents can be clearly evaluated from the sales order using the **display document flow** function.

During order processing, a **sales order** is normally the first object created. A customer query and an quotation to the customer may precede the customer order. A delivery document is created for the delivery and an invoice document is created for invoicing. From a Management Accounting perspective, billing is when the revenue occurs. The link in Financial Accounting is established when the customer makes the payment.

The documents defined in the SAP system make sales order administration easier for you and your customers. When you post data in Sales and Distribution, line items are created for delivery and billing in Financial Accounting as well as in Profitability

Analysis. When you create the invoice, data from the sales order and the delivery is transferred to invoicing. Both delivery items and order items (for example, with services) can be variants for the invoice.

With the goods issue or **delivery document**, the product or stock account is credited and offset as a change in stock. The **invoice** is the **sales and distribution document**, that supports you when you are creating bills. It is used as a data source for Financial Accounting to support you in monitoring and handling payments. If you create an invoice document the G/L accounts are generally automatically updated. The SAP system executes a debit posting on the receivables account of the customer and a credit posting on the revenue account. If you post an **incoming payment document**, the affected G/L accounts are also generally automatically updated. The SAP system executes a debit posting on the cash account of the customer and a credit memo on the receivables account of the customer.

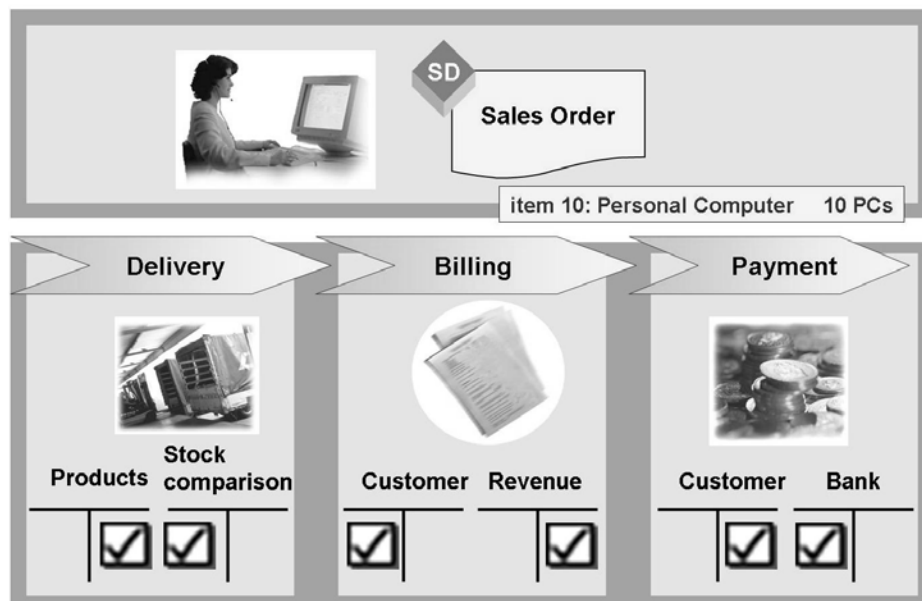


Figure 27: Ex stock sales process from the point of view of Accounting

Ex stock sales process with account determination

In the overview, the ex stock sales process creates several central documents from the account point of view.

In order to understand the account determination more exactly, you first of all have to look at the **activity output** of the product. An expenditure (for example, **costs of the production order**), that is paid through bank accounts (compare lesson 'Plan to

Product Process') precedes both the external procurement of services and in-house production. In in-house production, a finished inventory was created from the delivery or **settlement of the production order**.

The **outbound delivery** in the order to cash process withdraws from this produced stock (thus reducing the stock account) and posts the delivery quantity multiplied by the material valuation price to the stock change account. **Billing** creates the income and the corresponding receivables vis-à-vis the customer. The payment settles these receivables, leading to a debit posting on your bank account. Ideally, all accounts balance each other, except with an adjusted, higher bank balance, because the income is higher than the expenditure, which is also shown in the profit and loss statement by a corresponding profit.

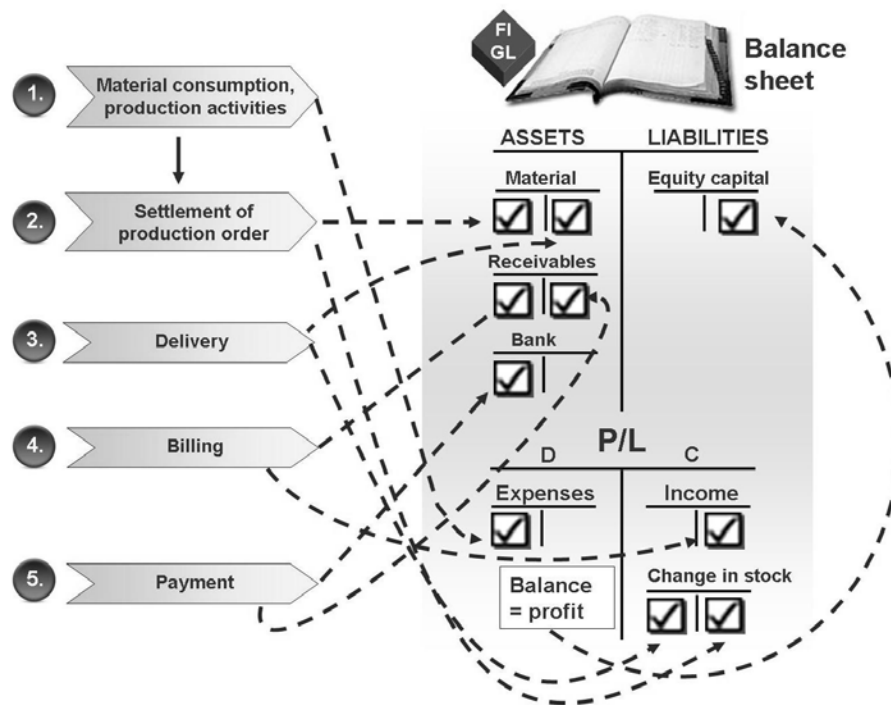


Figure 28: Ex stock sales process with account determination

Sale of Services: Process from an Accounting Perspective

In the example of a sale of a service, SAP recommends that a **sales order item** be used as a cost object. An order-specific **preliminary costing** can be created for the cost unit. In this case, we are dealing with a sales order calculation whose profits can be saved for the sales order as plan values. The **actual costs** incurred by rendering a service are

charged directly to the order item, for example, the services utilized by a Cost Center, use of material by the warehouse, externally procured goods and external services. This means that the costs flow either directly to the cost object (direct costs as a result of direct assignments to the order) or indirectly, in which case the cost center costs are allocated indirectly by means of allocation records (activity types with plan prices).

In order to balance the planned consumption rates with the actual expenditure in Financial Accounting, you must carry out a **Period end closing for the Cost Centers**. The analysis of variants is an analytical tool here for recognizing the causes of variants. This answers the question, why there is even a deficit/surplus for the Cost Center at period end. However, you can change the balance of the Cost Center with this tool. You have two possibilities for bringing the Cost Center balance to zero (that is pass on the deficit/surplus):

- **Transfer to Profitability Analysis:** This means that you do not allocate cost center overabsorption/underabsorption using cost objects. The main point of discussion here is how the balances of the Cost Centers can be assigned to the market segments.
- **Actual price calculation and revaluation of the activity quantity flows:** Here, you allocate cost center overabsorption/underabsorption to the cost objects. You have to do this in order to show the actual costs of the period on the cost bearers. This particularly makes sense if you want to use the actual costs for a final evaluation of your inventories for actual production costs (actual calculation/material ledger function) or if, for other reasons, you are reliant on actual costs (for example, for expenditure-oriented billing of the cost bearer or when you want an analysis of the actual profit in made-to-order products or the generation of a service).

For the sales order item, the **revenues** are also posted directly to the order when invoicing. When the **order is settled**, you can transfer the costs and revenues directly to Profitability Analysis. This settlement is not necessarily relevant for Financial Accounting, since the costs and revenues have already been updated to the cost object from a Financial Accounting perspective. Before settlement, however, you still have the option of carrying out a period-based profitability analysis on the cost object. In this case, you would transfer the results of the profits calculation to Profitability Analysis (and for Financial Accounting with cost-of-sales accounting) rather than the posted costs and revenues. The receivables posted by the invoice are balanced again by the payment.

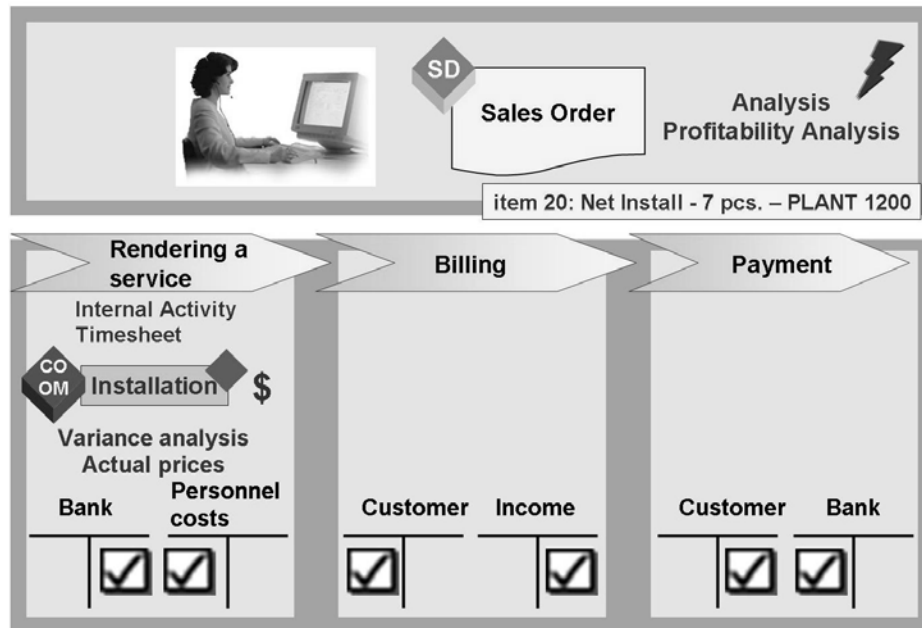


Figure 29: Sale of Services: Process from an Accounting Perspective

Sale of Services: Process with Account Determination

In the overview, the service sale process creates several central documents from the account point of view.

In order to understand more exactly, you first of all have to look at the **activity output** of the product. Expenses are incurred when services are procured outside the company and provided internally. External services are posted without and internal services with an account assignment to the cost center performing the activity (personnel expenses).

In comparison to the ex stock sales process, the **delivery of goods** does not apply here. **Billing** creates the income and the corresponding receivables vis-à-vis the customer. The **payment** settles these receivables, leading to a credit memo on your bank account. In the ideal case, all accounts are settled exactly, except with an adjusted, higher bank balance, because the income is higher than the expenditure, which is also shown in the **profit and loss statement** by a corresponding profit.

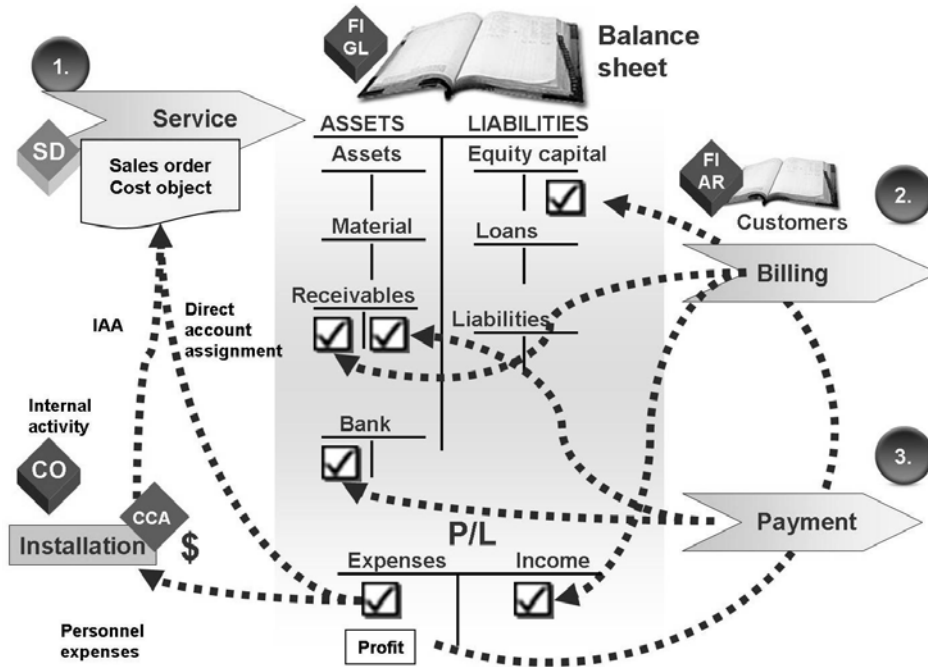


Figure 30: Sale of Services: Process with Account Determination

Extended Analysis of Results

Profitability Analysis allows you to analyze **profits and contribution margins** for your company's market segments. For this purpose, Profitability Analysis supports sales, product management, and corporate planning and decision-making by using an external view based on a **market-oriented perspective**. Profitability Analysis therefore provides a very differentiated, internal analysis of a company's profits that is similar to the P&L sheet in accounting but broken down according to market segment or revenue and cost item.

The **market segments** are defined by characteristics such as products, product groups, customers, customer groups, geographical areas, etc. For example, they can analyze the profitability of a certain product group that they sell to a certain customer (or a certain customer group). When you set up CO-PA in your company, you have a very flexible choice when **selecting the characteristics** that are relevant for the definition of the market segments for your company. Every clear combination of characteristics (e.g. sale of product A to customer Y) defines a **profitability segment** that corresponds to a market segment. A profitability segment is created dynamically, as soon as it is addresses for the first time. In comparison to Financial Accounting, the results that are presented here can also be subdivided into **fixed and variable costs**, offering you a very flexible option of different contribution margin calculations.

Profitability Analysis provides you with a **multidimensional reporting tool**, which you can use to create reports that analyze data for any market segment and profitability measure.

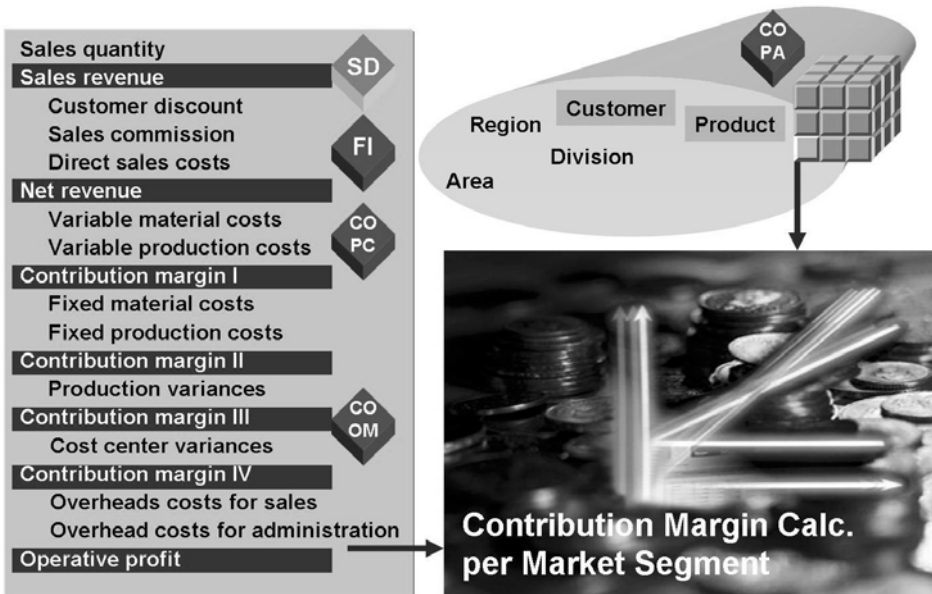


Figure 31: Profitability Analysis

Exercise 3: Order to Cash Process - Optional Exercise

Exercise Objectives

After completing this exercise, you will be able to:

- Settle the sale of a service.

Business Example

Your company installs networks at customers. A customer order is created for this. The plan data contains the customer order via a base object costing already defined by you. You post the actual costs on your customer order (travel costs, Cost Center services, material removals). After creating the bill, the data are analyzed in Customer Order Controlling. You use Profitability Analysis to analyze results.

Task:

Settling a services sale

1. Create a **customer order** for the sale of the service “network installation” (VA01). You sell a network installation with 4 units (4 pcs. R-NET-INST) via the order type OR, the sales organization 1000, the distribution channel 10 and division 00. Change the desired delivery date to the current date. Enter 1000 as ship-to party and 111## as the PO Number.
2. Go to the **details of the sales conditions** (using Goto →Item).
How high is the sales price? _____ EUR (for 4 units/ EA)
How high is the assumed contribution margin? _____ EUR (for 4 units/ EA)
3. Now calculate the **costs for the service** individually by using the **base object costing R-NET-INST planning** as a variant. To do so, choose the costing icon (calculator) in the conditions overview, then the costing variant PC04 and enter the base planning object costing "R-NET-INST" as the template.
Change the following items in the costing:
Replace the 4 pcs. R-5500 with your purchased material (from the first exercise), the network card R-55##, also 4 pcs.
Change travel expenses from 400 km to 600 km.

Continued on next page

How high are the total costs for the network installation? Costs:
_____ EUR

Save the calculation and check the contribution margin in the “conditions” view again. Contribution margin: _____ EUR

4. Now save your sales order and make a note of the sales order number:

5. Now analyze your sales order for the sale of the “network installation” service in the **information system for sales order controlling** (KKBC_CUST). Enter your order number, press “Enter ” and select the **Layout /SAPFIN** in Report in order to analyze the order.
6. Change once again to another session, in order to post your **actual costs** on the order that have been incurred for the service.

Next, create a G/L account posting to post the actual travel expenses. Do this using a normal G/L account posting (FB50).

Choose “Tree On” and double-click the **screen variant** “SAPFIN” or “Standard 4” that enables you to make account assignments to a sales order.

In the first item, enter **account 475000** in debit, the amount 650, the control key figure V0 and (scroll a little to the right) your **customer order number** with the position 10.

In the second position, enter the **account 113100** as a debit item with the same amount of 650. When the traffic light displays **GREEN**, select “post”.

7. Now allocate from **Cost Center 4279** the **services** of the employees who are taking part in the network installation (KB21N).

On the entry screen for the activity allocations, select the **screen variant customer order/ cost object** and the entry category 'list entry'.

Enter the following allocations:

Send. CCtr	Send. SAty Typ	Rec.SaleOrd. (your order)	Rec.Itm	Total quantity
4279	1461	_____	10	4
4279	1462	_____	10	6
4279	1463	_____	10	3

Choose “Post.”

Continued on next page

-
8. Enter the **material removals** of PCs, servers and network cards for your order (MB1A). Post the goods issue to your customer order as well as the respective order item via the goods issue. Enter the following output for plant 1200 and storage location 0001:

R-5000 (Maxitec PC)	4 pcs.
R-5001 (Server)	1 pcs.
R-55## (network cards)	4 pcs.

Enter your **customer order** and the **item 10** as the account assignment object.

Choose "Post."

9. Now **invoice** your customer order in sales and distribution (VF01). Enter your **order number** as a document and press "Enter". The invoice is created by posting this bill.

If you want, you can look at an output document for the invoice via "display bills" (VF03). In transaction VF03, select issue bills - screen - message type RD00. Choose "Execute."

10. Now **analyze** your sales order for the sale of the "network installation" service again in the **information system for sales order controlling** (KKBC_KUN).

Enter your order number, press "Enter" and select the **Layout /SAPFIN** in Report in order to analyze the order. How high is the profit?

_____ EUR

11. **Settlement of the sales order in Profitability Analysis:** To be able to analyze the result of the order in Profitability Analysis, you have to settle the order. You can also do this in the **subsequent functions for the sales order in Sales and Distribution** (VA88). To do this, select your order number as a document, sales organization 1000 and the current period. Select the "Detail List" checkbox and deselect the "Test Run" checkbox. The choose "Execute".

Analysis in the balance sheet: Analyze - as you did in the very first exercise - the balance sheet and P&L accounts. How have the 'Revenue' and 'Profit and Loss Statement' items changed (absolute figures)?

Continued on next page

Chart of Accounts	INIT
Company Code	1000
Reporting year	Current year
Balance Sheet/P&L Structur	INT
List output	ALV-Tree control

12. **Analysis in CO-PA:** To view a detailed profit statement for your services earnings, you can also view an analysis in Profitability Analysis (operating concern IDEA). To do so, call up **report SAPFIN** (KE30) for the current period. Select the “Graphic Report Output” option, click “Execute” and try to navigate exactly to your article result.

How high is the total revenue with R-NET-INST? _____

How high is contribution margin 1 with R-NET-INST? _____ (revenue – variable costs)

How high is contribution margin 4 with R-NET-INST? _____ (revenue – total costs)

Solution 3: Order to Cash Process - Optional Exercise

Task:

Settling a services sale

1. Create a **customer order** for the sale of the service “network installation” (VA01). You sell a network installation with 4 units (4 pcs. R-NET-INST) via the order type OR, the sales organization 1000, the distribution channel 10 and division 00. Change the desired delivery date to the current date. Enter 1000 as ship-to party and 111## as the PO Number.
 - a) *Logistics* → *Sales and Distribution* → *Sales* → *Order* → *Create (VA01)*:
In the initial screen, enter **order type OR**, the **sales organization 1000**, the **distribution channel 10** and the **division 00** and press “Enter”.
 - b) Select 1000 as **ship - to party** and 111## as the **PO number**. Change the desired delivery date to the current date.
 - c) In the first item, enter **R-NET-INST** as the material (that is the service here) and **4 as order quantity**. Press “Enter.”
 - d) **Delete the results analysis key UNIT** at the end of the item line, if this is still active.
2. Go to the **details of the sales conditions** (using Goto →Item).

How high is the sales price? _____ EUR (for 4 units/ EA)

How high is the assumed contribution margin? _____ EUR (for 4 units/ EA)

 - a)
3. Now calculate the **costs for the service** individually by using the **base object costing R-NET-INST planning** as a variant. To do so, choose the costing icon (calculator) in the conditions overview, then the costing variant PC04 and enter the base planning object costing "R-NET-INST" as the template.

Change the following items in the costing:

Replace the 4 pcs. R-5500 with your purchased material (from the first exercise), the network card R-55##, also 4 pcs.

Change travel expenses form 400 km to 600 km.

Continued on next page

How high are the total costs for the network installation? Costs:
_____ EUR

Save the calculation and check the contribution margin in the “conditions” view again. Contribution margin: _____ EUR

- a) Choose *Extras* → *Costing* and enter the costing variant PC04 and the base object costing R-NET-INST.
- b) Costs: _____ EUR
- c) Save the costing.
- d) Go to the conditions by choosing *Goto* → *Item*
- e) Contribution margin: _____ EUR

4. Now save your sales order and make a note of the sales order number:

- a) Sales order number: _____

5. Now analyze your sales order for the sale of the “network installation” service in the **information system for sales order controlling** (KKBC_CUST). Enter your order number, press “Enter ” and select the **Layout /SAPFIN** in Report in order to analyze the order.

- a) *Accounting* → *Controlling* → *Product Cost Controlling* → *Cost Object Controlling* → *Product Cost by Sales Order* → *Information System* → *Reports for Product Cost by Sales Order* → *Detailed Reports* → *For Sales Order (KKBC_KUN)*
- b) Press “Enter.”
- c) Enter your customer order number and press “Enter.”
- d) Select Layout /SAPFIN in the settings and execute the report.
- e) Check the planned result of your order again.

6. Change once again to another session, in order to post your **actual costs** on the order that have been incurred for the service.

Next, create a G/L account posting to post the actual travel expenses. Do this using a normal G/L account posting (FB50).

Choose “Tree On” and double-click the **screen variant** “SAPFIN” or “Standard 4” that enables you to make account assignments to a sales order.

Continued on next page

In the first item, enter **account 475000** in debit, the amount 650, the control key figure V0 and (scroll a little to the right) your **customer order number** with the position 10.

In the second position, enter the **account 113100** as a debit item with the same amount of 650. When the traffic light displays **GREEN**, select “post”.

- a) *Accounting* → *Financial Accounting* → *General Ledger* → *Posting* → *Enter G/L Account Document (FB50)*. Press “Enter”.
- b) Select “Tree on” and double-click the screen variants SAPFIN (or Standard 4), that enable you to make account assignments on the customer order.
- c) In the first item, enter account 475000 in debit, the amount 650, the control key figure V0 and (scroll a little to the right) your customer order number with the position 10.
- d) In the second position, enter the account 113100 as a debit item with the same amount of 650 and press “Enter”. When the traffic light displays GREEN, select “post”.

- 7. Now allocate from **Cost Center 4279** the **services** of the employees who are taking part in the network installation (KB21N).

On the entry screen for the activity allocations, select the **screen variant customer order/ cost object** and the entry category ‘list entry’.

Enter the following allocations:

Send. CCtr	Send. SATy Typ	Rec.SaleOrd. (your order)	Rec.Itm	Total quantity
4279	1461	_____	10	4
4279	1462	_____	10	6
4279	1463	_____	10	3

Choose “Post.”

- a) *Accounting* → *Controlling* → *Cost Center Accounting* → *Actual Postings* → *Activity Allocation* → *Enter*
- b) Make your entries according to the table.
- c) Choose “Post.”

Continued on next page

-
8. Enter the **material removals** of PCs, servers and network cards for your order (MB1A). Post the goods issue to your customer order as well as the respective order item via the goods issue. Enter the following output for plant 1200 and storage location 0001:

R-5000 (Maxitec PC)	4 pcs.
R-5001 (Server)	1 pcs.
R-55## (network cards)	4 pcs.

Enter your **customer order** and the **item 10** as the account assignment object. Choose “Post.”

- a) *Logistics →Materials Management →Inventory Management →Goods Movement →Goods Movement (MB1A)* Press “Enter.”
 - b) Enter plant 1200, storage location 0001 and the movement type 291 and press “Enter.”
 - c) After you enter your materials and customer order number,press “Post.”
9. Now **invoice** your customer order in sales and distribution (VF01). Enter your **order number** as a document and press “Enter”. The invoice is created by posting this bill.

If you want, you can look at an output document for the invoice via “display bills” (VF03). In transaction VF03, select issue bills - screen - message type RD00. Choose “Execute.”

- a) *Logistics →Sales and Distribution →Sales →Order →Subsequent Functions →Billing Document (VF01)*
- b) Enter your order number as a document and press “Enter”. The invoice is created by posting this bill.
- c) To view invoice (optional): *Logistics →Sales and Distribution →Sales →Order →Subsequent Functions →Billing Document* Enter.

From the menu: Display Billing Document (VF03) - from the menu: Issue Output to – Screen – Output Type RD00

10. Now **analyze** your sales order for the sale of the “network installation” service again in the **information system for sales order controlling** (KKBC_KUN).

Continued on next page

Enter your order number, press “Enter ” and select the **Layout /SAPFIN** in Report in order to analyze the order. How high is the profit?

_____EUR

- a) *Accounting →Controlling →Product Cost Controlling →Cost Object Controlling →Product Cost by Sales Order →Information System →Reports for Product Cost by Sales Order →Detailed Reports →For Sales Order (KKBC_KUN)*
- b) Enter your order number and press “Enter.”
- c) In the settings, select Layout /SAPFIN aus.
- d) Check the planned and actual result of your order again.

11. **Settlement of the sales order in Profitability Analysis:** To be able to analyze the result of the order in Profitability Analysis, you have to settle the order. You can also do this in the **subsequent functions for the sales order in Sales and Distribution (VA88)**. To do this, select your order number as a document, sales organization 1000 and the current period. Select the "Detail List" checkbox and deselect the "Test Run" checkbox. The choose "Execute".

Analysis in the balance sheet: Analyze - as you did in the very first exercise - the balance sheet and P&L accounts. How have the 'Revenue' and 'Profit and Loss Statement' items changed (absolute figures)?

Continued on next page

Chart of Accounts	INIT
Company Code	1000
Reporting year	Current year
Balance Sheet/P&L Structur	INT
List output	ALV-Tree control

- a) *Logistics →Sales and Distribution →Sales →Order →Subsequent Functions →Settlement*
- b) Select the current settlement period and the current fiscal year. Enter your customer order number as the sales document. Exit the test run and select the Detail List. Choose “Execute.”
- c) *Accounting →Financial Accounting →General Ledger →Information System →General Ledger Reports →Balance Sheet/ Profit and Loss Statement / Cash Flow →General →Actual/Actual Comparisons →S_ALR_87012284 - Balance Sheet / Profit and Loss Statement*

Both the items **Revenues** and **P/L** have increased in comparison to the first exercise in the course (note: compare the absolute amounts because revenues have a minus sign).

- 12. **Analysis in CO-PA:** To view a detailed profit statement for your services earnings, you can also view an analysis in Profitability Analysis (operating concern IDEA). To do so, call up **report SAPFIN** (KE30) for the current period. Select the “Graphic Report Output” option, click “Execute” and try to navigate exactly to your article result.

How high is the total revenue with R-NET-INST? _____

How high is contribution margin 1 with R-NET-INST? _____ (revenue – variable costs)

Continued on next page

How high is contribution margin 4 with R-NET-INST? _____ (revenue – total costs)

a) *Accounting* → *Controlling* → *Profitability Analysis* → *Information System* → *Execute Report* → *if necessary, choose operating concern IDEA (costing based) (KE30)* → *Choose AC040*. Choose “Execute”.

b) Enter the current period and current period and select “Graphical Report-Output.” Version = 0. Execute.

c) In the report, double-click plant 1200 (in the detail List at the top right) - double-click division 08 Services (in the detail list at the top right). Your article R-NET-INST should now appear in the Detail List. You can also double-click it.

d) How high is the total revenue with R-NET-INST: _____

How high is the contribution margin 1 with R-NET-INST: _____
(revenue – variable costs)

How high is the contribution margin 4 with R-NET-INST: _____
(revenue – total costs)



Lesson Summary

You should now be able to:

- Present an overview the Order to Cash process.
- Track a direct sales process from the Accounting point of view.
- Explain the transactions of a services sale which are relevant to Accounting.



Unit Summary

You should now be able to:

- Explain the tasks in Financial Accounting.
- Name the areas in Management Accounting and explain how they interact.
- Show the essential integration aspects within Accounting.
- Name the organizational units that play a role in Accounting.
- Name the individual substeps of the procurement process.
- Understand the business process in the SAP system.
- Present the effects of the Purchase to Pay process on Accounting.
- Explain the tasks of the individual areas in Management Accounting with respect to planning and production.
- Show the options for planning on Cost Centers and in the cost unit area.
- Track the production process using the example of a production order from the point of view of Accounting.
- Highlight the planning options in Services Controlling.
- Present an overview the Order to Cash process.
- Track a direct sales process from the Accounting point of view.
- Explain the transactions of a services sale which are relevant to Accounting.

Unit 3

Financial Supply Chain Management

Unit Overview

The Financial Supply Chain Management supports, expands and optimizes existing and new business processes in the financial area. This is achieved by optimizing the cash flows and improving the exchange of information within the company and between business partners, in order to guarantee an efficient use of tied capital.



Unit Objectives

After completing this unit, you will be able to:

- Name the functions in Financial Supply Chain Management.
- Explain the different models of Electronic Bill Presentment and Payment
- Explain the Direct Biller Model.

Unit Contents

Lesson: Financial Supply Chain Management.....	92
Exercise 4: SAP Biller Direct.....	99

Lesson: Financial Supply Chain Management

Lesson Overview

The financial value creation chain is made up of functions and processes for internal and cross-company financial transactions. These begin before the buyer and seller contact each other and are not yet completed after settlement. Financial Supply Chain Management (FSCM) traces the Order to Cash Process during the pre-transaction phase and after contract fulfillment.



Lesson Objectives

After completing this lesson, you will be able to:

- Name the functions in Financial Supply Chain Management.
- Explain the different models of Electronic Bill Presentment and Payment
- Explain the Direct Biller Model.

Business Example

As a member of the project team, you are to make a statement about how Financial Supply Chain Management can effect an improvement in the existing settlement and payment system and how the processing time for bills disputed by the customer can be reduced. Up until now, the company has presented bills to its customers and partners in paper form and paid bills by transfer, check, or debit memo.

Financial Supply Chain Management

Financial Supply Chain Management (FSCM) makes it possible to optimize the Order to Cash Process during the pre-transaction phase and after contract fulfillment. The functions in Financial Supply Chain Management are closely integrated with the existing SAP R/3 functions and complement and/or optimize these. Dispute

Management, Credit Management and Cash Management are required during the entire term of the business relationship. Biller Direct and Biller Consolidator are not implemented until after contract fulfillment.

- The **In-House Cash component** enables international companies to manage the internal and external payment flows efficiently. You configure an In-House Cash Center centrally and use it to process payments between the individual company units. The In-House Cash Center corresponds to a **virtual bank** where the subsidiary companies have current accounts.
- **Dispute Management** offers you system support for processing payment deductions This improves **Receivables Management** and speeds up invoice settlement.
- The **Credit Management** enables a cross-company credit limit check and variable monitoring of a customer on all distribution channels. You can analyze customer creditability taking into account the **credit policy** of your company.
- The aim of **Cash Management** is to secure the liquidity and optimization of the financing costs. The **Transaction Manager** provides an instrument to Corporate Finance Management departments for settling mid and long-term financial transactions from entry to the transfer of the relevant data to Financial Accounting.

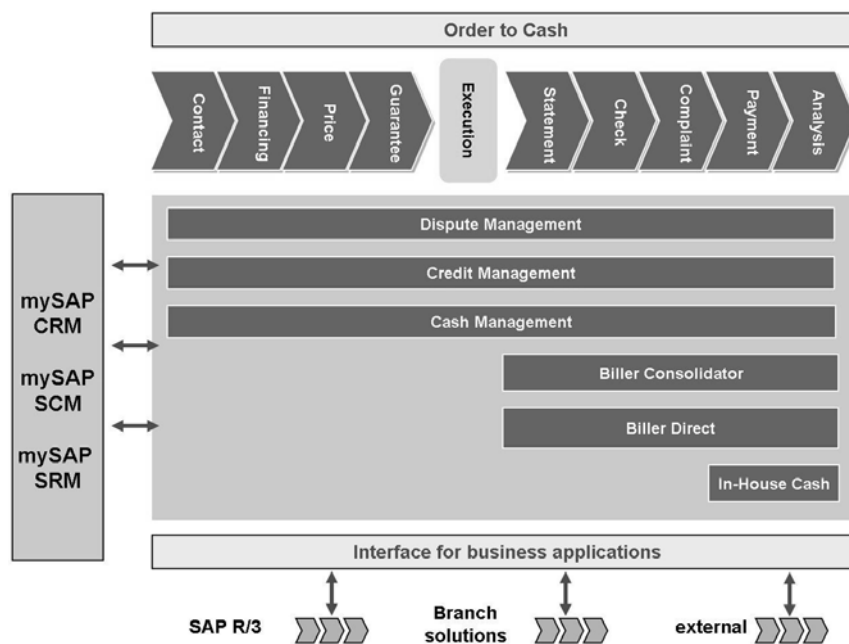


Figure 32: Financial Supply Chain Management

Electronic Bill Presentment and Payment

Most bills still reach customers the classic way, that is, by post.

The traditional method of sending bills by post has various disadvantages, including:

- Both the biller and the customer have to go through numerous individual steps to process the transaction. The biller prepares the bill and then sends it. The customer receives the bills and checks the content. This takes a lot of time and is subject to error.
- High costs for creating a bill.
- Processing incoming payments can be very time-consuming, particularly if only part of the bill is paid or if you cannot assign payments.

Electronic Bill Presentment and Payment enables you to prepare and display bills within different scenarios from **B2B (Business-to-Business)** and **B2C (Business-to-Customer)** via the **Internet**. Using Electronic Bill Presentment and Payment makes several individual processing steps superfluous. This reduces the amount of time required to forward the bill information to the customer. Streamlining the process can reduce the costs per bill by up to 70%.

Electronic Bill Presentment and Payment can be implemented to show customers bill information via the Web (Electronic Bill Presentment). The customer receives the billing information and can carry out various actions: Arrange payments, for example, by credit card or direct debit, or submit questions and complaints. There is complete integration with the open items and bill data. Electronic Bill Presentment and Payment can also be integrated into industry-specific portals.

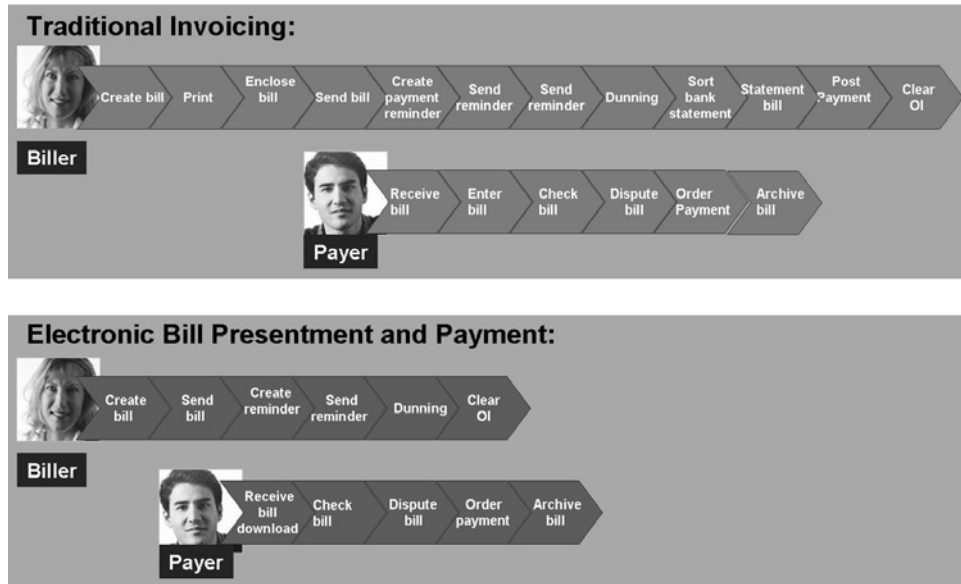


Figure 33: Electronic Bill Presentment and Payment vs.. Traditional Invoicing

Advantages for the biller:

- Reduction in the cost of issuing bills
- Improvement in the payment and problem solving processes
- Improvement in cash flow (reduced arrears)
- Reduction in time taken by customers to check and pay bills (improved problem management)
- Profit due to streamlined cash management
- Integration to business partner accounting - no duplicate retention of data
- Real-time integration
- Integration of Electronic Bill Presentment and Payment with additional processes, for example, payment reminders and dunning
- Inclusion of non-EDI-compatible business partners in electronic bill processing
- Optimization for changes to bills (partial payment of collective bills)
- Profit from more customer loyalty
- Increased competitiveness with an attractive service offer
- Utilization of the advantages of one-to-one marketing

Advantages for the bill recipient:

- Process-oriented bill processing via the Internet and access check (= cost reduction)
- Controlled scheduling of payments and cash flow handling with regard to payment obligations
- Profit due to streamlined cash management
- Improved use of vendor credit
- Submission of questions regarding payment reductions online
- Electronic integration of bills in business partner accounting, no retention of redundant data
- Reduction of accounting errors
- Inclusion of non-EDI-compatible business partners in electronic trade
- Simplification of electronic payment
- Summarization of vendor relationships on one payment Web page
- Data analysis option
- No archiving of incoming bills necessary
- Easy and comfortable Internet access anywhere (B2C)
- Potential integration with PFM (Private Finance Management) software (B2C)

Electronic Bill Presentment and Payment Models

There are three **Electronic Bill Presentment and Payment Models**. In the **Biller Direct model**, the billers exchange their bills with several customers directly via the Internet (1:n relationship). In the **consolidator model**, several billers exchange bills with several customers (n:n relationship) via the consolidator. In both consolidator models, you can decide whether data is exchanged exclusively with the “Thick Consolidator” (complete use) or whether data is only partially exchanged with the “Thin Consolidator” (partial use).

With the thin consolidator model, the invoicing party supplies only the most important data (invoice header information). The invoice recipient is presented with only the invoice overview in the Consolidator Portal. For further details, the invoice recipient clicks a link to the homepage of the invoicing party and receives detailed information and possibly marketing material (cross-selling).

With the thick consolidator model, the invoicing party sends his or her invoices with all the detailed information.

The **Biller Direct** model is defined in such a way that there is no consolidator between the biller and the bill recipient. Once the purchase, order, and delivery have taken place, the bill is created. Purchase and order take place in the usual way, the bill is sent

via the Internet. The customer then logs on to the biller's homepage and can display his bills. He can either pay the bills directly from there, or transfer the information to his own system. He can download the information in Excel, and then upload it and convert it into incoming bills in the SAP System. If the customer pays via the Internet, then either the money is collected from the customer's bank and the customer's bank checks the collection authorization, or the customer sends a payment notification to his bank, and the bank forwards the transfer to the biller's bank.

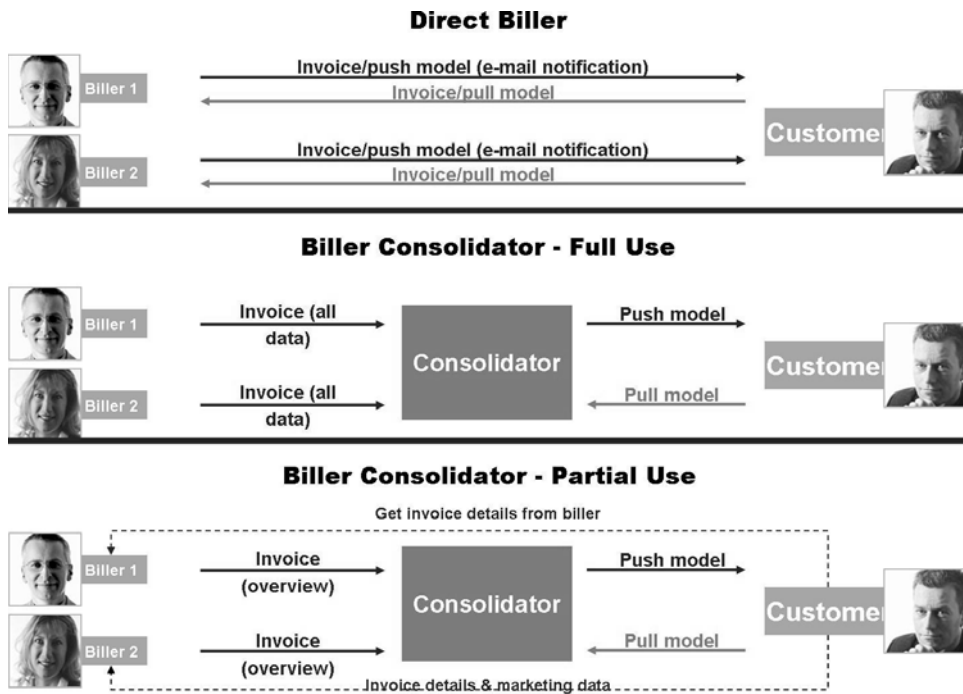


Figure 34: Electronic Bill Presentation and Payment Models

Exercise 4: SAP Biller Direct

Exercise Objectives

After completing this exercise, you will be able to:

- Reconstruct a model business process with SAP Biller Direct.

Business Example

The IDES company handles its invoicing requirements with SAP Biller Direct.

Task:

A customer uses the SAP Biller Direct Portal from IDES to check his invoices and makes a payment. The customer has a question regarding a particular invoice. This question is processed by IDES using SAP Biller Direct.

1. A SAPTutor has been created for this exercise.

Solution 4: SAP Biller Direct

Task:

A customer uses the SAP Biller Direct Portal from IDES to check his invoices and makes a payment. The customer has a question regarding a particular invoice. This question is processed by IDES using SAP Biller Direct.

1. A SAPTutor has been created for this exercise.
 - a) Play the SAPTutor.



Lesson Summary

You should now be able to:

- Name the functions in Financial Supply Chain Management.
- Explain the different models of Electronic Bill Presentment and Payment
- Explain the Direct Biller Model.



Unit Summary

You should now be able to:

- Name the functions in Financial Supply Chain Management.
- Explain the different models of Electronic Bill Presentment and Payment
- Explain the Direct Biller Model.



Test Your Knowledge

1. What is Electronic Bill Presentment and Payment?

2. What advantages does using Electronic Bill Presentment and Payment have for billers?

3. What are the advantages and disadvantages of the Biller Direct model?



Answers

1. What is Electronic Bill Presentment and Payment?

Answer: Electronic Bill Presentment and Payment is a procedure that enables you to convert bills into an electronic format and present them to other business partners via the Internet. The bills can be checked and paid via the Internet. However, the customer can also download the information to his own accounting system and process (pay) the bills there.

2. What advantages does using Electronic Bill Presentment and Payment have for billers?

Answer: Electronic Bill Presentment and Payment helps to reduce transaction costs. It also optimizes the payment and payment exception process (payment handling). This reduces arrears, improves the customer's payment behavior, and may increase subsequent business with the customers concerned.

3. What are the advantages and disadvantages of the Biller Direct model?

Answer: In the Biller Direct model, the provider can influence the layout of the form, the data access, and can also provide services. The disadvantage is that the provider has to run the system himself.

Unit 4

Corporate Services

Unit Overview

The key area Corporate Services includes Incentive and Commission Management, Travel Management and Real Estate Management. Incentive and Commission Management enables customers to process variable remunerations for employees and partners. Travel Management supports the entire process of trip processing in a company. Real Estate Management enables the processing of the commercial and technical Facility Management.



Unit Objectives

After completing this unit, you will be able to:

- Provide an overview of Incentive and Commissions Management.
- Explain the processes that are shown in Incentive and Commissions Management.
- Understand the integration of Incentive and Commissions Management from Corporate Services with upstream and downstream systems.
- Provide an overview of business concepts used in Travel Management
- Name the central Travel Management functions
- Provide an overview of Flexible Real Estate Management.
- Explain the processes in Flexible Real Estate Management and integrated components.
- Understand the integration of Flexible Real Estate Management with upstream or downstream systems.

Unit Contents

Lesson: Incentive and Commission Management.....	106
Lesson: Travel Management	116
Exercise 5: Travel Management.....	127
Lesson: Real Estate Management	140

Lesson: Incentive and Commission Management

Lesson Overview

This lesson provides the participants with an insight into all areas of Incentive and Commission Management. Incentive and Commissions Management is the SAP solution used for developing different types of remuneration for employees and partners, for example, commission, bonuses or brokerages.



Lesson Objectives

After completing this lesson, you will be able to:

- Provide an overview of Incentive and Commissions Management.
- Explain the processes that are shown in Incentive and Commissions Management.
- Understand the integration of Incentive and Commissions Management from Corporate Services with upstream and downstream systems.

Business Example

As a member of the project team you have the task of finding out how the processing of commission and bonuses for employees and partners can be made more efficient. Which processes can be represented using Incentive and Commissions Management, and which functions can, for example, be used to evaluate the variable remunerations?

Introduction

Incentive and Commissions Management is placed as a corporate service in the mySAP Financials solution. It provides enterprises with a flexible solution that motivates the partners and employees using monetary incentives, and thus gears the sales results towards the enterprise strategy.

The most important **functions** of Incentive and Commissions Management are:

- **Design Compensation Plans:** Design of commission contracts based on sales planning. Commissions contracts contain the rules which define how remunerations are to be calculated for every recipient of commission.
- **Calculate Variable Compensation:** Calculation of sales commissions on the basis of sales activities (direct sales commissions) and calculation of monetary and non-monetary bonuses based on targets (incentive compensation).
- **Effectiveness Analysis:** Flexible evaluation for managers, for example (commission) reports about products, regions, customers, or sales employees. Up-to-date insight for employees into earned and expected commission.
- **Organizational Management:** Modeling and maintenance of the internal and external sales organization.



Commissions:

Variable remunerations that are based on transactions

Example: Acquisition commission

The acquisition of a contract or order (= the transaction) leads to the disbursement of a commission for the sales manager, and possibly also for his/her manager.

Incentives:

Variable remunerations that are posted periodically

Example: Annual bonus that is based on performance

The results that an employee obtains during the fiscal year are evaluated and possibly compared with a predefined goal that has been agreed upon.

Figure 35: Commission/Incentives Terminology

Functions of Incentive and Commissions Management

Incentive and Commission Management is a global industry solution that represents all types of variable remuneration such as commissions, bonuses, brokerage, and so on.

- Incentive and Commissions Management manages the **recipients of commission**, their contracts and agreements, as well as the network or the organizational hierarchy to which they are assigned.
- It processes all types of **variable remuneration**, for example, transaction-based or direct remuneration: acquisition commission, or splits; periodically calculated remuneration: bonus for achieved goals, non-monetary remunerations, sales competitions (“Salesperson of the Year”), recall for a contract cancellation or reduction.
- Incentive and Commission Management provides up-to date and clear information for employees, partners, and managers about **earned and expected commissions and bonuses**.

Incentive and Commission Management is a standalone solution and uses preconfigured interfaces to other SAP applications on the inbound interface to mySAP Customer Relationship Management and on the outbound interface to both mySAP Human Capital Management (Payroll) and mySAP ERP Financials (FI-AP Accounts Payable). Open interfaces also mean that non-SAP applications can be connected without problem. The set of rules that is used for the calculation of commissions and bonuses can be adapted quickly and efficiently to new business strategies. Incentive and Commissions Management saves each change in versions. This ensures that each calculation can be retroactively analyzed at any time.



- **Open architecture**

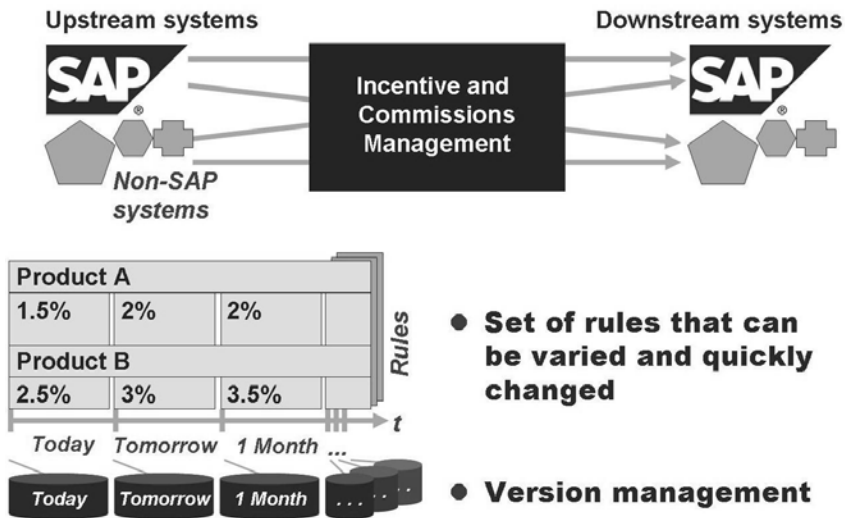


Figure 36: Advantages of Incentive and Commissions Management

Integration Overview

Incentive and Commission Management guarantees that individual actions are oriented towards strategic goals. The rules governing commissions lean on the specifications from analytical planning applications and operationalize these to calculate performance-dependent remunerations.

The relationship with Analytics

On the one hand, Incentive and Commissions Management must represent the enterprise strategy right down to products, organizational units and people. Changes and developments in the strategy normally need to be put into the set of rules in Incentive and Commissions Management.

The relationship with the operative processes

On the other hand, the performance-related remuneration must be paid out soon after the operative processes have taken place. The motivation of a sales agent can only be increased if that agent can see a direct link between a successful acquisition and an immediate "reward", or at least an immediate message of a remuneration that can be expected.

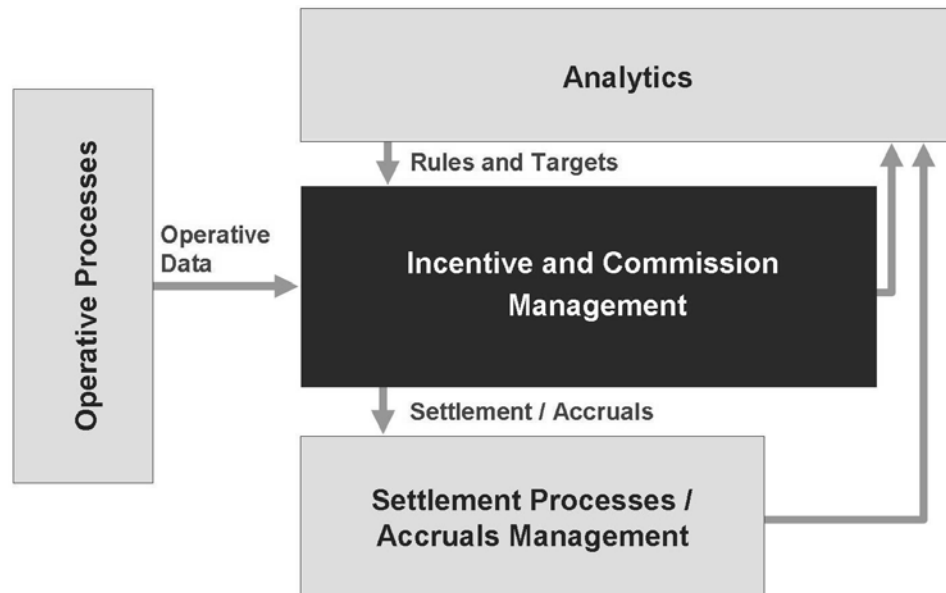


Figure 37: Overview of ICM Integration

Integration Detail

Incentive and Commissions Management was devised as a standalone product and contains open interfaces. This means that it can be integrated with any upstream or downstream system, either SAP or non-SAP. The advantage of Incentive and Commissions Management for enterprises that have a heterogeneous system landscape is that all data for commission and bonus processing can be centralized. This ensures that a correct display of all remuneration shares can be provided at all times, regardless of the operative area (for example, the product line) that they are referring to.

The rules and targets are derived from the **enterprise strategy**. They are based on the **object valuation** (how do I remunerate a certain product/product line?) and on personal **remunerations** (which rules do I use to provide remuneration to a certain manager, employee or partner?). At the end of the process, the calculated data flows back into the analytic applications for **evaluation purposes**. The **operative policy management systems** provide the operative data. This data can be provided in a timely manner (for example, every night) or it can be aggregated on a periodic basis (for example, at the end of the month). The operative data that leads to commission and bonus calculation can be transferred at different times in the operative cycle, for example, when the sales activity takes place, when the contract is signed or during billing. The calculated data is transferred to the **settlement systems**, which control the disbursement of the remunerations on the due date and manage the reserve amounts.

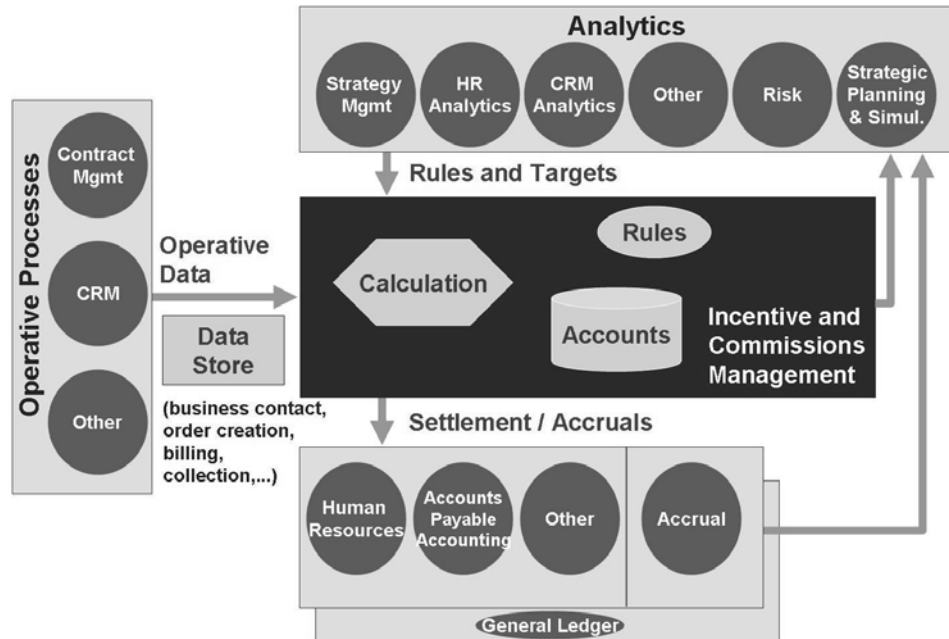


Figure 38: Integration Detail

Processes in Incentive and Commissions Management

The **commission case** is the business object information that is provided by the upstream systems. The information is structured as follows:

- Business partner, such as the sales agent
- Business object: for example, a service A
- Activity, such as new acquisition or extension

The process is automatic. Once the data has been received, Incentive and Commissions Management processes the following steps:

1. Participant determination
2. Object valuation
3. Remuneration calculation

The results of these process steps are posted as documents. If the process cannot be completed successfully, the commission case is set to “pending”. The commissions clerk finds the case in their worklist and processes it manually. At the end of the period, closing takes place and the data is transferred to the settlement systems.

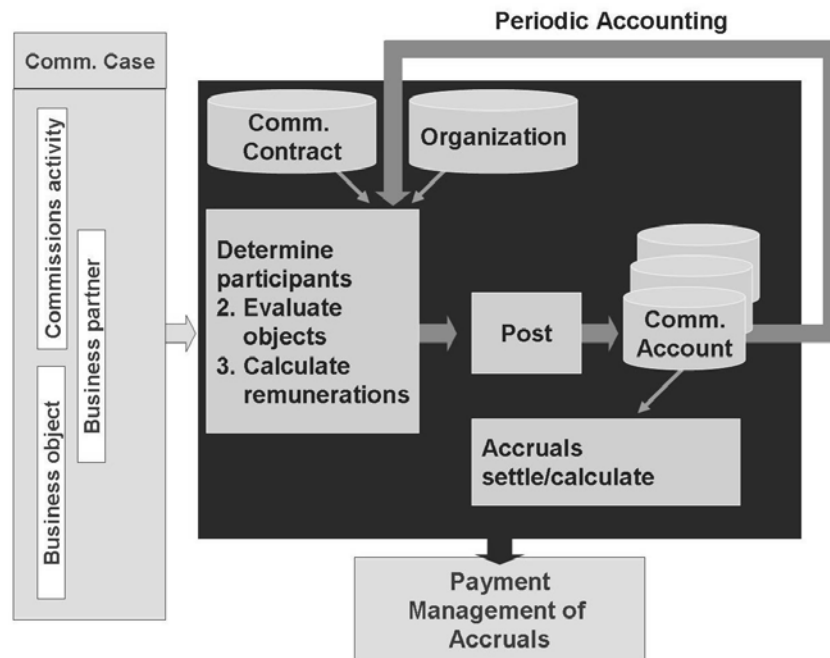


Figure 39: Processes in Incentive and Commissions Management

The master data in Incentive and Commissions Management consists of the **commission recipient** (a role in the SAP business partner) and the **commission contract**. The commission contract (and the related business partner) can be assigned to an organizational hierarchy. The commission contract shows the relationship between the business partner and the enterprise. It contains all agreements on the processing of commission and bonus calculation. Each partner can have more than one contract. Commission contracts are versioned according to date and time. To simplify the creation and management of the individual contracts, Incentive and Commissions Management enables you to maintain **standard contracts**. These standard contracts are a type of template that you can copy and adapt.

The commission contract shows the relationship between the business partner and the enterprise. It contains all agreements on the processing of commission and bonus calculation. Each partner can have more than one contract.



Commission contracts are versioned according to date and time.

Figure 40: Provision Recipient and Commission Contract

Commissions and bonuses are calculated and posted as follows:

1. Incentive and Commissions Management determines the **participants**. These are all the recipients that belong to a commission case. The direct participant data is transferred at the inbound interface. Incentive and Commissions Management uses the information from the commission contracts, and possibly from the organizational hierarchy to find out who the indirect participants are (for example, the managers who receive remuneration after a successful acquisition of an employee).
2. Incentive and Commissions Management values the **business object**, regardless of the recipient. In Customizing, you specify the set of rules used for valuation. This can be adapted quickly and flexibly, and is managed in historical versions.
3. Incentive and Commissions Management calculates the **remunerations** of each recipient, and includes the due dates and liability amounts. Remuneration can be monetary or non-monetary. In Customizing, you specify the set of rules used for remuneration. This can be adapted quickly and flexibly, and is managed in historical versions.

The result of the process is recorded in the following documents:

1. Object valuation (document)
2. Remuneration (document)
3. Due dates for the remuneration (document)
4. Liability (document)

The **commission account** is represented by the **reporting tool** in Incentive and Commissions Management. You can enter settings in Customizing to determine the way in which your documents are displayed. The results can be valued in various ways, for example, by recipient, region or product line.

Closing takes place at the end of the period. Incentive and Commissions Management calculates the periodic remuneration shares at this time, that are not variable (flat-rates, e.g. for office costs and guarantees, meaning a minimal remuneration that can be offset against remunerations from subsequent periods). After this, the financial data is transferred to the settlement systems. Examples: mySAP Human Capital Management, mySAP Financials (FI-AP Accounts Payable Accounting), industry-specific SAP systems, or non-SAP systems.

Business Benefits

SAP Incentive and Commissions Management provides the following **business benefits**:

- Economical solution through short processing times for large amounts of data and a high degree of automation.
- Efficient management instrument for sales: Commissions can be calculated right down to transactional level. The set of rules is flexible and can be created in simple or complex form.
- Implementing the enterprise strategy: Incentive and Commissions Management enables immediate implementation of changes to the enterprise strategy. The set of rules is easy to change.
- Central processing: All the data for commission and bonus processing can be centralized in the Incentive and Commissions System. This is an advantage for enterprises that have a heterogeneous policy management system. Central processing ensures that a correct display of all remuneration shares can be provided at all times, regardless of the operative area (for example, the product line) that they are referring to.
- Current representation of the remuneration for recipients (agents and employees) and management.
- Representation of long-term scenarios: Liability and recalls if a contract is cancelled or extended.



Lesson Summary

You should now be able to:

- Provide an overview of Incentive and Commissions Management.
- Explain the processes that are shown in Incentive and Commissions Management.
- Understand the integration of Incentive and Commissions Management from Corporate Services with upstream and downstream systems.

Lesson: Travel Management

Lesson Overview

Participants gain an overview of Travel Management. Travel Management is provided as a corporate service in the mySAP Financials solution. It is a global industry solution for completing all business processes required for business travel.



Lesson Objectives

After completing this lesson, you will be able to:

- Provide an overview of business concepts used in Travel Management
- Name the central Travel Management functions

Business Example

Before you start work with the project team, you want to gain an overview of SAP Travel Management. You want to know: What are the key capabilities of Travel Management, and what main tasks are included in each of the individual functions? Which processes can be represented using Travel Management and which roles are involved?

Introduction

With the growth of global business, international activities and the volume of national and international business trips are increasing. For the first time, “business travel expenses” are now seen as the second-largest controllable **corporate expense** for enterprises, behind salaries and benefits. Some of the challenges that have arisen in financial areas and Travel Management due to this fact are:



- How can the extremely high processing costs and huge amounts of paper generated be reduced?
- How can we analyze and cut costs for flights, hotels, and car rental?
- How can requests, reservations, settlement and reimbursement be managed - preferably at an international level, without being limited to one medium, and using one integrated software system?
- How can we maintain an overview of all travel-related costs when in reality this information exists in various different systems?
- How can we maintain a high level of flexibility for frequent travelers and still effectively implement travel guidelines?

Integrated online solutions, such as Travel Management, form an important basis for controlling and strategically managing “business travel expenses”. The Travel Management solution enables you to analyze both direct and indirect travel expenses, and to minimize expenses and costs according to enterprise-specific requirements. All of the information required to complete the processes and analysis come from one system. Travelers are responsible for their own part in the process and can, therefore, remain flexible.

Travel Management is fully integrated with both mySAP Financials and mySAP Human Resources. It is one of the Corporate Services, supplied as part of mySAP Financials, and supports cross industry processes within the financial area. In opposition to the simpler Internet “Travel Engines”, the Travel Management solution from SAP covers all processes required for business travel and integrates these into the existing SAP Solution.

Travel Management includes the following five **Key Capabilities**:

- Travel Request & Pre-trip Approval
- Travel Planning - Online Booking
- Travel Expense Management
- Mobile Self Service - Anytime & Anywhere
- Global Travel Policy Compliance
- Analytics



Without Electronic Travel Management:

- ◆ Missing Cost Control Mechanisms (data is distributed in many different unconnected Systems)
- ◆ Constantly reoccurring entry processes (requests, data to travel agencies, creating travel expenses)
- ◆ Unsystematic booking processes (dependent upon individual traveler)
- ◆ Routine trips are very time-consuming to process - this time could be put to better use (travel agency)

Advantages of Electronic Travel Management

- ◆ Reduction of both direct (-> purchasing conditions) and indirect costs (shorter processes, higher productivity)
- ◆ 100% reliable cost control as all data consolidated in one System
- ◆ Standard trip bookings (normally 80% of all trips) processed by decentralized users.
- ◆ Higher flexibility for travelers

Figure 41: Advantages of Electronic Travel Management

Process Overview

Travel Management integrates all tasks relating to business travel, including **settlement, taxation and payment**.

Travel Management provides the traveler, or another employee, with all of the information required to organize, plan and request their trips. It enables them to book any required transportation and accommodation, and to enter all the necessary trip data and receipts on their return, either at their workplace or using a mobile device. The **Travel Request** area manages the request and approval of trips using the Workflow process. **Trip Planning** allows simple and easy online booking of flights, hotels, rental cars and German railway trains via connections to the worlds largest central reservation systems. The employee is not limited to travel agency opening times and can make changes to his travel plans without the need for time-consuming telephone calls. As soon as the employee returns from his trip, he can complete the trip that he has already created in the System with the required data and receipts. The **Travel Expenses** are then automatically transferred to the expense department or to a supervisor/ manager for validation, approval and settlement. Integration with mySAP Financials and mySAP Human Capital Management provides full integration with the personnel and business process chains. The employee then receives a detailed form about any reimbursement amounts and payment is initiated (using mySAP Financials, mySAP Human Capital Management or Data Medium Exchange (DME)). The necessary accounting documents are created automatically, the correct percentages subject to and exempt from taxation are calculated, and the data is made available for reporting purposes. The traveler is identified in Travel Management using the personnel number. This requires a “ Mini Master record ” from HR, but does not require mySAP Human Resources to be implemented.

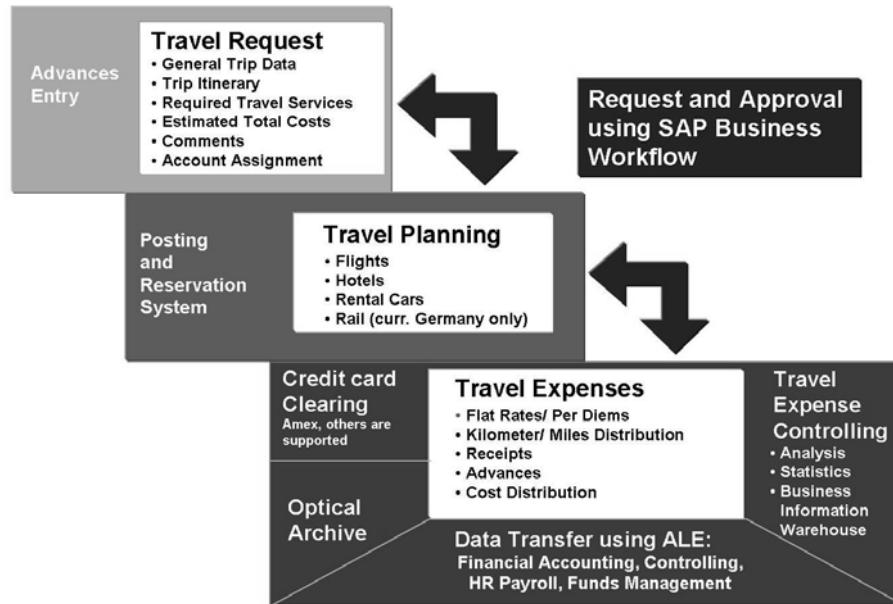


Figure 42: Travel Management - Complete Process

Travel Guidelines and International Legal Requirements

In addition to trip processing, control of statutory and enterprise-specific regulations plays the second key role in the Travel Management concept.

Travel Planning - Enterprise-Specific Travel Guidelines

On the one hand, clearly defined regulations for booking travel services are an important prerequisite for **minimizing direct travel expenses**. However, on the other hand, all guidelines can only be as successful as the level to which they are complied with in reality. This is where the Travel Planning section of Travel Management can help you implement more effective travel policies. You can create rules to control the booking options for employees in **Customizing for Travel Planning**. These rules can include factors such as:

- Trip location and duration
- Preferred suppliers
- Availability
- Negotiated prices/rates and discounts
- Allocation of different priorities
- Authorizations depending on different user groups



**Travel Guidelines =
Enterprise-specific rules for booking travel services**



Flight booking classes: Economy Class
domestic flight: Economy Class
(if Economy not available: higher flight class allowed)
international flights: Business Class



Hotel catalog:
Accommodation in one of the hotels listed in the catalog;
If no catalog hotels are available: *Sheraton* or *Hilton*



Rental Cars:
Worldwide *Hertz*, in Europe also *Europcar*,
in Madrid also *ITS Cars*
For travel period of > 7 days: Luxury class rental car allowed

Figure 43: Example: Travel Guidelines in Travel Planning

Travel Expense Accounting - Statutory and Enterprise-Specific Regulations

Statutory regulations include all regulations defined in the travel expense laws and income tax laws for each individual country. This also applies to the distribution of tax-free and taxable reimbursement amounts; certain calculation rules for flat rates/per diems; travel cost rates; accommodations rates and meals rates; reductions, and so on. Globally active companies and enterprises can use the international features of Travel Management to quickly implement a standard system landscape: In addition to a general international version, SAP ships many ready-to-run country versions that cover the specific statutory requirements for the country in question, such as the statutory per diem rates and maximum rates.

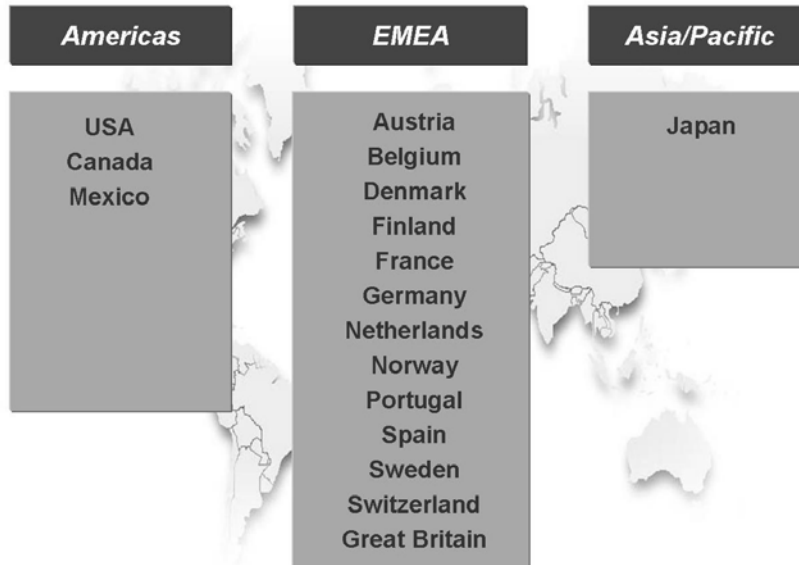


Figure 44: Pre-Configured Country Versions

In addition to regulation differences due to the different country versions, you can also link individual **groups of employees** to specific settlement rules and control parameters.

It is also possible to set enterprise-specific regulations for reimbursing travel expenses. These rules can be defined and stored in the system alongside the statutory requirements. Differences between statutory and internal rules are automatically taken into consideration in payroll accounting and separate settlement runs.

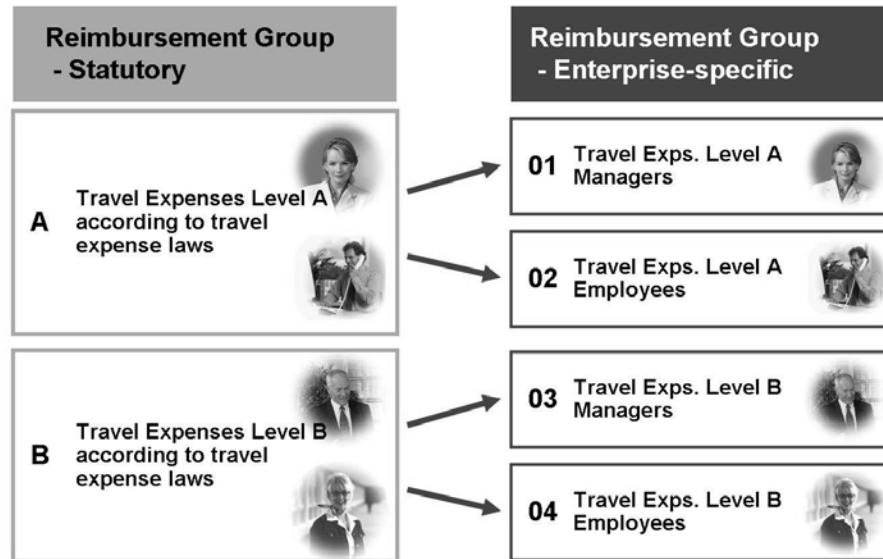


Figure 45: Example: Reimbursement Groups for Meals/ Accommodation

Travel Management Interfaces

Travel Planning processes your **online bookings** via connections to two of the world's largest global reservation systems: Amadeus and Sabre. Users thereby have the choice amongst hundreds of airlines, hotel chains and car rental suppliers, 24 hours a day, 7 days a week. Using Amadeus, there is also the possibility to book German rail tickets online, including seat reservation. Direct interfaces can also be implemented between the SAP ERP system and selected providers.

The connection to global reservation systems provides companies with the ability to use the “Best-buy” functions to ensure that the best value flights, hotels and travel services are found - including comparisons with pre-negotiated enterprise-specific rates.

It is, therefore, important that **constant synchronization** between the SAP System and the reservation systems is achieved. This means that bookings made using the Travel Management solution also exist, and are available in the reservation system directly (for example in the travel agency or at the airport desk). Alternatively, this also means that bookings made outside of the Travel Management solution (for example rebookings or changes made at the airport) are imported into the SAP System during synchronization, and are then also available for further processing within the system.

A defined standard interface is provided for reading credit card data of a Corporate Credit Card or a Travel Center Card. With the help of credit card clearing, the documents can be directly read in the Travel Expenses Accounting. Manual steps are reduced, the possibility of error decreased and the bill receipt verification simplified.

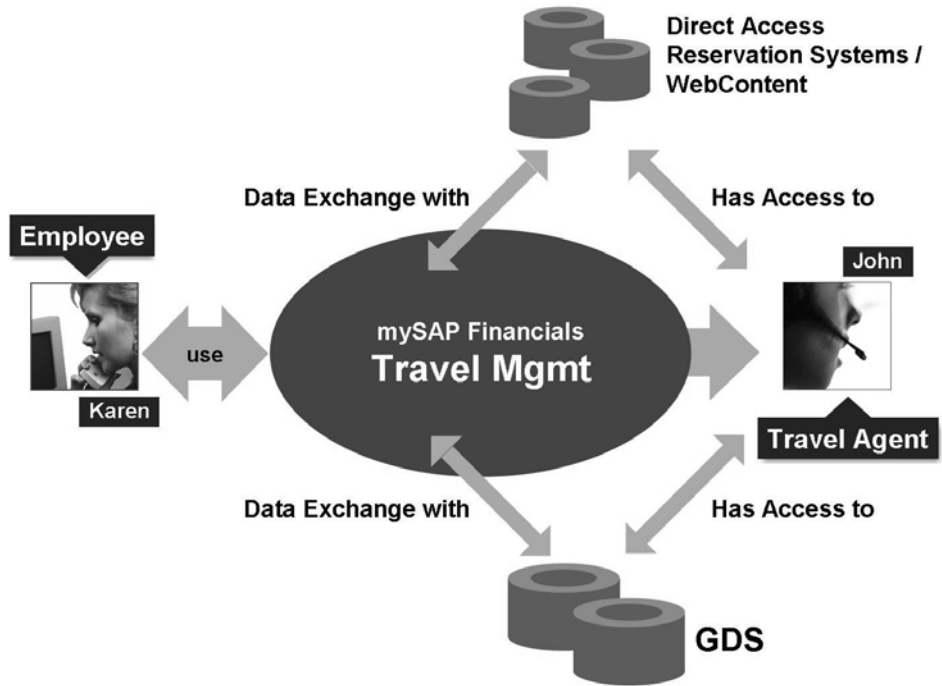


Figure 46: Communication Between SAP TM and Reservation Systems

Traveler Self Service - Anytime & Anywhere

Business trips always generate a lot of **administrative work** -- before and after the trip. Travel Management reduces the administrative effort for all those involved in trip processing, and provides more flexibility for your employees. The core travel

management processes, the operational support of the Business Trip Lifecycle, take place within the SAP ERP system. In order to support these processes, you can also choose to implement a number of other online and/or offline information services.

- **Offline Services**

You can create trips and enter receipts using the Java application “Mobile Travel Expenses for Laptops” (part of the Offline Application “Mobile Time & Expenses”). This application is offered by SAP in addition to the existing Employee Self Services. The data entered offline here is synchronized with the SAP system and assigned to the travel expense settlements. The correct tax-relevant and tax-exempt reimbursement amounts are then calculated. The Java application “Offline Travel Expenses” can be used with a Notebook, laptop or normal desktop computer. The solution uses a standard Web browser as its frontend, and is based on the SAP Mobile Engine.

- **Online Services**

As with the majority of SAP Applications, all Travel Management functions can be used via the mySAP Enterprise Portal. Hand-held devices, such as the iPAQ, enable you to complete functions relating to booking flights, hotels and car rental services.

As part of the SAP Portals, Travel Management supports different approaches: On the one hand, the Travel Manager is part of the Business Package Employee-Self-Services, on the other hand, in the future there will be a generic web application for travellers that can be activated in every SAP Portal. An additional logical collection of external information services (for example weather, visa and health requirements, maps and guides) will also be available. This collection will also include functions from the traditional Travel Management area, such as:

- An overview of open trips, with direct access to the planning and settlement functions.
- Simple availability display of flights, hotels and rental cars based on the travel guidelines defined in Customizing.

In addition to this, certain pre-configured Portals contain role-based Travel Management functions, such as the Approval and Reporting functions in the Business Package for Manager Self-Services.

Analytics

The strategic role of the **Travel Manager** or Travel Expense Controller is considerably strengthened through the implementation of SAP Travel Management. The data created in SAP Travel Management aids and simplifies actions such as

contract negotiations with service suppliers and the optimization and control of internal processes. The information supports decision-making processes and makes developing and implementing new strategies to reduce travel expenses easier.

On the technical side, travel managers are provided with a variety of ready-to-run queries, both in the SAP system and SAP BW. The BW Queries are supplied, along with a number of other objects, as part of the standard SAP BW Business Content. Examples:

- Actual travel expenses - Totals and per organizational unit
- Analysis of individual expense receipts, including percentages subject to tax.
- Overview of turnover with individual airlines, hotel chains and car rental providers.
- Analysis of City-Pairs (Outbound and Return Flights), for example analysis according to airline, class, basic and total price, and rate codes.
- Overview of bookings according to geographical area.

You can define so called “Exceptions” to highlight critical situations and to allow you to take any appropriate actions - for example changing the travel guidelines. The “Reporting Agent” allows travel managers to be directly notified about any exceptions.



Figure 47: Travel Managers' Tasks

Exercise 5: Travel Management

Exercise Objectives

After completing this exercise, you will be able to:

- Extend an HR master record to include travel privileges
- Automatically generate vendors for HR master records
- Check an employee's trip overview
- Calculate travel expenses
- Settle travel expenses
- Revise trip receipts in FI

Business Example

The IDES company has implemented Travel Management so that it can plan its trips more effectively and handle its travel expenses as easily as possible.

The travel expenses are transferred from Travel Management to Financial Accounting. The reimbursement amount is paid out to the employees using the IDES Accounts Payable accounting system.

Task 1: Create Travel Privileges

An employee in personnel area 1000 (Hamburg) is about to leave on his first business trip for IDES Germany. To enable the trip to be planned and settled in Travel Management, you have to extend the employee's HR master record to include *travel privileges*.

1. Create the travel privileges area in the employee's HR master record.

The employee has the personnel number 20##.

Copy the default values as they are.

Task 2: Create Vendors

Travel expenses at IDES Germany are paid by the Financial Accounting department using the payment program. For this purpose, a vendor master record has to be created for every employee who is away on business. This master record can then be used to process the payments. You can use a report to generate these vendors automatically.

1. Start the report for *creating vendors from HR master records*.

Use the report to create a vendor for **employee 20##**.

Continued on next page

Use the report variant SAPFIN to enter the data in the fields on the selection screen.

Replace the ## symbols with your group number in the three fields under *Process Mode* at the bottom of the screen.

Make sure that the *Client* field at the bottom of the screen contains the client in which you are currently working.



Note: Restrict the selection to your personnel number 20## so that each group can create its own vendor.

The SAPFIN variant forces you to restrict the selection to exactly one personnel number. In production operation, the report would naturally be run for several personnel numbers.

2. Start the batch input session.

The report has generated a batch input session. You have to execute this session to create the vendor master records.

Execute session A/P_ACC## in the foreground.

3. Check the vendor that has just been created automatically. To find the right vendor, use the *Vendors by Personnel Number* matchcode.
4. Make a note of the vendor number.

Task 3: Checking the Trip Overview

You can display all of an employee's business trips in the travel manager.

1. Use the travel manager to display an overview of all the trips that were created for the employee with personnel number 1000.
2. What was the destination and purpose of this employee's second business trip? Where did the trip begin and where did it end?

Continued on next page

Task 4: Enter Travel Expenses

Since you have defined travel privileges for employee **John Doe ##**, he can now leave on his business trip to **Berlin**. While he is there, he will meet with an important customer. He will fly to Berlin at **4 p.m.** today. He is due to fly back tomorrow. The expected arrival time is **10 p.m.** IDES Germany pays a per diem amount for meals. IDES has already paid for the flight. This information has still to be entered in the system for John Doe ## so that the total travel expenses can be calculated correctly. The flight costs **EUR 900**. John Doe ## also has a taxi receipt for **EUR 25** and a hotel receipt for **EUR 200**, both with today's date.

1. Enter the travel expenses for this trip. In each case, accept the input tax rates proposed by the system.
2. You can display the reimbursement amount that John Doe ## will receive before you save the trip data. What amount will be reimbursed?

What are the total costs for the trip?

Task 5: Settle Trips

As soon as the expense receipts have been checked, the department responsible settles the trip. Employee **20##** belongs to payroll area **D2**.

1. Approve the trip by launching the travel expense manager.
2. Settle the trip with variant SAPFIN. Enter the period in which the trip ended and the personnel number (20##).

Task 6: Transfer Trip Data to Accounting

You transfer the receipts to Accounting in two steps. First, you *create a posting run* and then you *manage the posting run*. Carry out these steps one after the other.

1. Use variant SAPFIN to do so. Enter the period in which the trip ended and the personnel number (20##). Name the posting run after your business area, BA##.
2. Now post the trips to FI.
3. Check the posting in Accounting by displaying the vendor items for employee 20##.
4. Name the posting items (the amounts may vary).

Solution 5: Travel Management

Task 1: Create Travel Privileges

An employee in personnel area 1000 (Hamburg) is about to leave on his first business trip for IDES Germany. To enable the trip to be planned and settled in Travel Management, you have to extend the employee's HR master record to include *travel privileges*.

1. Create the travel privileges area in the employee's HR master record.

The employee has the personnel number 20##.

Copy the default values as they are.

- a) Choose *Accounting* → *Financial Accounting* → *Travel Management* → *Person-Related Master Data* → *Maintain*

Field name	Value
<i>Personnel number</i>	20##

- b) Choose *Enter*.



Note: The infotypes that can be maintained in the mini-master record are displayed. Infotypes with a checkmark have already been created. Since there is no checkmark beside the *Travel Privileges* infotype, you have to create this infotype now.

- c) Choose *Travel Privileges* from the list of infotypes for the travel expenses.
- d) Choose *Create* (icon with the sheet of paper at the top left of the screen).
Do not make any changes.
- e) Choose *Save*.
- f) Go back to the *SAP Easy Access* menu by entering */N* in the command field.

Task 2: Create Vendors

Travel expenses at IDES Germany are paid by the Financial Accounting department using the payment program. For this purpose, a vendor master record has to be created for every employee who is away on business. This master record can then be used to process the payments. You can use a report to generate these vendors automatically.

1. Start the report for *creating vendors from HR master records*.

Continued on next page

Use the report to create a vendor for **employee 20##**.

Use the report variant SAPFIN to enter the data in the fields on the selection screen.

Replace the ## symbols with your group number in the three fields under *Process Mode* at the bottom of the screen.

Make sure that the *Client* field at the bottom of the screen contains the client in which you are currently working.



Note: Restrict the selection to your personnel number 20## so that each group can create its own vendor.

The SAPFIN variant forces you to restrict the selection to exactly one personnel number. In production operation, the report would naturally be run for several personnel numbers.

- a) Choose *Accounting* → *Financial Accounting* → *Travel Management* → *Person-Related Master Data* → *Create Vendors*
- b) Choose *Goto* → *Variants* → *Get*.
- c) Choose the variant SAPFIN.
- d) Replace the ## symbols with your group number in the three fields under *Process Mode* at the bottom of the screen.

You will probably have to scroll downwards to see these fields.

Field Name	Value
Personnel number	20##
Name of job; name of batch input session; user in work file	In these three fields, replace ## with your user number

- e) Choose *Execute*. A report is then displayed and indicates that exactly one HR record was selected.
2. Start the batch input session.

The report has generated a batch input session. You have to execute this session to create the vendor master records.

Continued on next page

Execute session A/P_ACC## in the foreground.

- a) At the top of the screen, choose the following path: *System* → *Services* → *Batch Input* → *Sessions*.
 - b) Choose session A/P_ACC##.
 - c) In the top part of the screen, choose *Process*.
 - d) Select the *Process/Foreground* radio button and then choose *Process* in the dialog box.
 - e) Confirm each screen for the vendor master records by pressing *Enter* until the entire batch input session has been completed.
 - f) Go back to the *SAP Easy Access* menu by choosing *Exit Batch Input*.
3. Check the vendor that has just been created automatically. To find the right vendor, use the *Vendors by Personnel Number* matchcode.
- a) Choose *Accounting* → *Financial Accounting* → *Vendors* → *Master Records* → *Display*
 - b) Delete the default value from the vendor field and choose the *possible entries* icon to the right of the *Vendor* field.
 - c) Choose the *Vendors by Personnel Number* matchcode tab page.

Field Name	Value
Personnel number	20##
Company Code	1000

- d) Choose *Start Search* (Enter).
4. Make a note of the vendor number.
- a) Choose the displayed vendor by clicking the vendor number.
Make a note of the vendor number.
 - b) Choose all views (by clicking the *Select all* icon at the top left of the screen) and go through all of the screens. Note that you can find the personnel number on the *Accounting Information Accounting* screen.
 - c) Go back to the *SAP Easy Access* menu.

Continued on next page

Task 3: Checking the Trip Overview

You can display all of an employee's business trips in the travel manager.

1. Use the travel manager to display an overview of all the trips that were created for the employee with personnel number 1000.
 - a) Choose *Accounting* → *Financial Accounting* → *Travel Management* → *Travel Manager*

Field Name	Value
<i>Personnel number</i>	1000

- b) Choose *Continue*.
2. What was the destination and purpose of this employee's second business trip? Where did the trip begin and where did it end?
 - a) Choose *List of All Trips*. Open the *Paid Trips* folder.
 - b) Open folder for a trip. Double-click *Travel Expenses* for the trip. Answer the question “Do you really want to change the trip data?” with “yes”.

Task 4: Enter Travel Expenses

Since you have defined travel privileges for employee **John Doe ##**, he can now leave on his business trip to **Berlin**. While he is there, he will meet with an important customer. He will fly to Berlin at **4 p.m.** today. He is due to fly back tomorrow. The expected arrival time is **10 p.m.** IDES Germany pays a per diem amount for meals. IDES has already paid for the flight. This information has still to be entered in the system for John Doe ## so that the total travel expenses can be calculated correctly. The flight costs **EUR 900**. John Doe ## also has a taxi receipt for **EUR 25** and a hotel receipt for **EUR 200**, both with today's date.

1. Enter the travel expenses for this trip. In each case, accept the input tax rates proposed by the system.
 - a) Choose *Accounting* → *Financial Accounting* → *Travel Management* → *Travel Manager*

Field Name	Value
<i>Personnel number</i>	20##

- b) Choose *Continue*.

Continued on next page

-
- c) Choose *Create Travel Expense Report*.
 - d) Choose *Business Trip* as the trip schema.
 - e) Choose *Enter*.
 - f) General Trip Data:

Field Name	Value
<i>Start of Trip</i>	<Today>, 16:00 (time)
<i>End of Trip</i>	<Tomorrow>, 22:00 (time)
<i>First Destin.</i>	Berlin
<i>Trip Country</i>	Germany
<i>Reason for Trip</i>	Business Trip

- g) Expense Receipts:

Field Name	Value
<i>Exp.Receipt 001</i>	Flight paid (choose appropriate entry from list)
<i>Amount</i>	900 EUR
<i>on</i>	Today

- h) Choose *Save*.
The document is show in the list of documents at the bottom of the screen.
- i) Expense Receipts:

Field Name	Value
<i>Exp.Receipt 002</i>	Taxi
<i>Amount</i>	25 EUR
<i>on</i>	Today

- j) Choose *Save*.

Continued on next page

The document is shown in the document list.

- k) Expense Receipts:

Field Name	Value
<i>Exp.Receipt 003</i>	HOTEL
<i>on</i>	<Today>
<i>Amount</i>	200 EUR

- l) Choose *Save*.

The document is shown in the document list.

2. You can display the reimbursement amount that John Doe ## will receive before you save the trip data. What amount will be reimbursed?

What are the total costs for the trip?

- a) Choose *Results* (display if already settled, otherwise simulate) at the top left of the screen. Scroll down to display the total travel expenses.

The total reimbursement amount for the employee is **EUR 225**.

The total costs for the trip are **EUR 1,155**.



Note: Since meals are paid on a per diem basis, the amounts will vary if you do not enter the dates and times exactly as they are described in the exercise.

- b) Choose *Back* (green arrow).
- c) Choose *Approve*. In this step, the travel expenses are saved and approved at the same time.
- d) Go back to the *SAP Easy Access* menu by entering **/N** in the command field.

Continued on next page

Task 5: Settle Trips

As soon as the expense receipts have been checked, the department responsible settles the trip. Employee **20##** belongs to payroll area **D2**.

1. Approve the trip by launching the travel expense manager.
 - a) Choose *Accounting* → *Financial Accounting* → *Travel Management* → *Travel Expenses* → *Travel Expense Manager*.
 - b) Select the trip.
 - c) Choose *Approve*.
2. Settle the trip with variant SAPFIN. Enter the period in which the trip ended and the personnel number (20##).
 - a) Choose *Accounting* → *Financial Accounting* → *Travel Management* → *Travel Expenses* → *Periodic Processing* → *Settle Trips*.
 - b) Choose *Goto* → *Variants* → *Get*.
 - c) Choose the variant SAPFIN.

Field Name	Value
<i>Other Period</i>	<month and year in which the trip ended>
<i>Personnel number</i>	20##

- d) Choose *Execute*. *Personnel Numbers Accounted* should now be set to 1.
- e) Go back to the *SAP Easy Access* menu by entering **/N** in the command field.

Continued on next page

Task 6: Transfer Trip Data to Accounting

You transfer the receipts to Accounting in two steps. First, you *create a posting run* and then you *manage the posting run*. Carry out these steps one after the other.

1. Use variant SAPPIN to do so. Enter the period in which the trip ended and the personnel number (20##). Name the posting run after your business area, BA##.
 - a) Choose *Accounting* → *Financial Accounting* → *Travel Management* → *Travel Expenses* → *Periodic Processing* → *Transfer to Accounting* → *Create Posting Run*.
 - b) Choose *Goto* → *Variants* → *Get*.
 - c) Choose the variant SAPPIN.

Field Name	Value
<i>Other Period</i>	<month and year in which the trip ended>
<i>Personnel number</i>	20##
<i>Posting Run: Name</i>	BA## (replace ## with your group number)

- d) Choose *Execute*. A green traffic light is then displayed and the value 1 appears under *Personnel Numbers settled, canceled*.
 - e) Go back to the *SAP Easy Access* menu by entering /N in the command field.
2. Now post the trips to FI.

- a) Choose *Accounting* → *Financial Accounting* → *Travel Management* → *Travel Expenses* → *Periodic Processing* → *Transfer to Accounting* → *Manage Posting Runs*.



Note: The *Posting Run Management* screen appears. Choose *Execute*.

- b) Place your cursor directly on posting run BA##.
 - c) Choose *Post*.

In the dialog box displayed, choose the *Post Immed.* option. An icon with a green traffic light is then displayed to confirm that your posting run was successfully posted to Accounting.

- d) Go back to the *SAP Easy Access* menu by entering /N in the command field.

Continued on next page

-
3. Check the posting in Accounting by displaying the vendor items for employee 20##.

- a) Choose *Accounting* → *Financial Accounting* → *Vendors* → *Account* → *Display/Change Line Items*.

Field Name or Data Type	Value
<i>Vendor Account</i>	<Vendor number for employee 20##>
<i>Company Code</i>	1000

- b) Choose *Execute*.

A line item with EUR 255 is then displayed.

4. Name the posting items (the amounts may vary).

- a) Expand the line item.
b) Choose *Document Overview*.

The following document items exist:

John Doe ##: **255.00**

Travel Expenses Clearing: **900.00**

Travel exp./accommod.: **200.00**

Travel exp./meals: **30.00**

Travel Exp. Drive/Fl.: **23.15**

Travel Exp. Drive/Fl.: **900.00**

Input tax: **1.85**



Lesson Summary

You should now be able to:

- Provide an overview of business concepts used in Travel Management
- Name the central Travel Management functions

Lesson: Real Estate Management

Lesson Overview

This lesson provides the participants with an insight into all areas of flexible Real Estate Management. Flexible Real Estate Management is a cross-industry solution for managing the financial aspects of real estate management, while profiting from the integration in mySAP Product Lifecycle Management for handling technical facility management.



Lesson Objectives

After completing this lesson, you will be able to:

- Provide an overview of Flexible Real Estate Management.
- Explain the processes in Flexible Real Estate Management and integrated components.
- Understand the integration of Flexible Real Estate Management with upstream or downstream systems.

Business Example

Before you start your work with the project team, you want to gain an overview of SAP Real Estate Management. What key areas does Real Estate Management include and what are the main tasks of these areas? Which processes can be represented using Real Estate Management and which roles are involved?

Introduction

Real Estate Management is positioned as a corporate service in the mySAP ERP Financials solution. It offers a flexible solution for all major processes involved in managing and administrating real estate portfolios - including maintenance, rent adjustment, posting of deferrals and accruals - regardless of whether you lease your properties out, use your own, or lease from others.

SAP Real Estate Management is used both in enterprises where property management is the primary function (**commercial**), and in those where real estate management is not primary, but where the value of efficient real estate management in saving costs and resources has been recognized (**corporate**).

Whether as owners or users of real estate, real estate managers and project developers require a solution that provides the necessary flexibility and transparency in real estate-specific processes. The following functions are provided by mySAP ERP Financials Real Estate.

- **Commercial Management:** Contains different functions for a successful administration of the real estate portfolio (such as, for example, rent contract management, rent collection, payment processes, rent adjustments, service charges).
- **Technical & Infrastructure Management:** Supports all processes that belong to buildings management.
- **Project Management:** Offers innovative functions for the planning, structuring, management and control in the complete project development process.
- **Customer Lifecycle Management:** Offers support in the setting up and maintenance of customer relations.
- **Real Estate Controlling:** Enables a better definition of investment strategies based on exact costs/revenue data through complete transparency of costs.
- **System & Real Estate Infrastructure:** Helps you define your real estate infrastructure and manage business partner relationships.
- **Real Estate Business Analytics:** Includes efficient tools to help manage and analyze real estate portfolios.

Real Estate - Overview

Every company owns or uses real estate. The Flexible Real Estate Management offers streamlined business processes for all major tasks involved in managing and administrating real estate properties. The core functions of the R/3 Real Estate package focus on the steps involved in entering, managing and monitoring expenses and revenues in addition to handling all lease and settlement transactions: Real Estate Management includes:

- Entry of all technical and architectural information for the real estate (**architectural view**)
- Entry of all real estate properties that the company owns, uses or manages (**usage view**) from the point of view of the company code.
- Entry of the **contractual relationships** of this real estate (e.g. lease-in, rent contract, internal onward charging, services contract)
- Execution of all processes of **internal and external Accounting** (for example, posting, payment, claims, dunning, offsets, distribution, controlling)
- Execution of **real estate-specific processes** (for example, service charge settlement, rent adjustment, sales-based rent settlement)

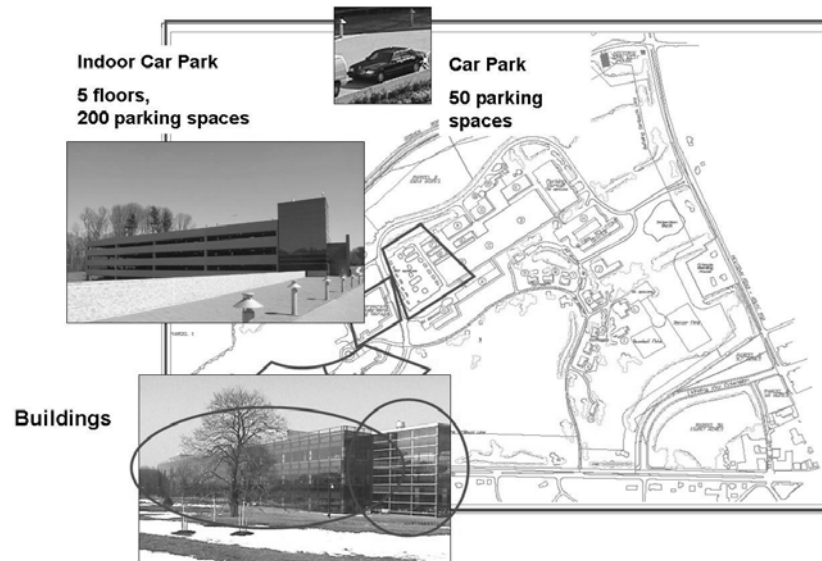


Figure 48: Real Estate - Example

Real Estate - Architectural Data

The actual structures of real estate complexes are displayed in the **architectural view**. The architectural objects do not relate to the company code. The number, type and hierarchical reference of the architectural objects among one another is arbitrary. The details of the architectural objects correspond to the standards in the sector. Data such as the structure of the service charge settlement, measurement (surfaces, room capacities) and characteristics can be created on the architectural objects. The architectural objects data can also be generated via a bi-directional connection to **graphic systems** (CAD/CAFM). Architectural objects can also be coupled to technical places in project management. Usage objects can be derived from architectural objects. These can also be used without an architectural view.

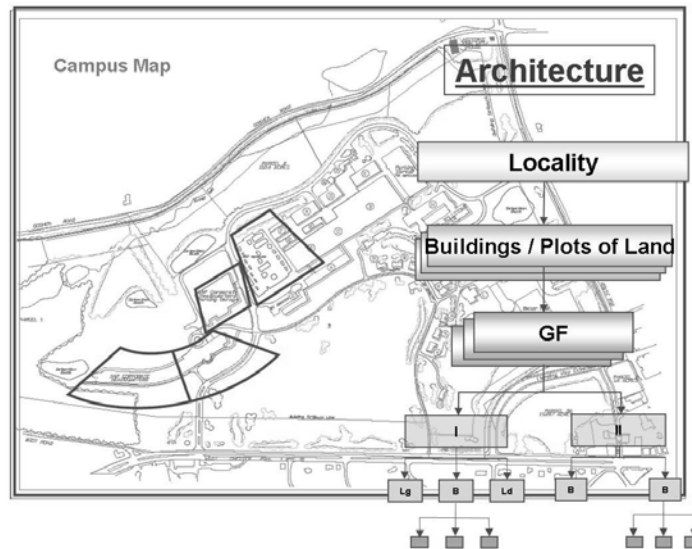


Figure 49: Real Estate - Architectural Data

Real Estate - Data which Depend on Company Codes

The **usage view** represents the view of a certain **company code**. Do these objects belong to me, do I rent them, do I rent them out? The objects of the usage view depend on the company codes. An architectural object can be assigned to several company codes, that is, within a Group, several companies can use this real estate object or bear a contractual relation to it. In the usage view, usage objects can be connected to **architectural objects**. The **business entity**, which is uniquely assigned to a company code, groups together real estate objects that are managed in the same way. The business entity usually comprises of a building or property complex, sharing the same utilities and subject to the same tax regulations.

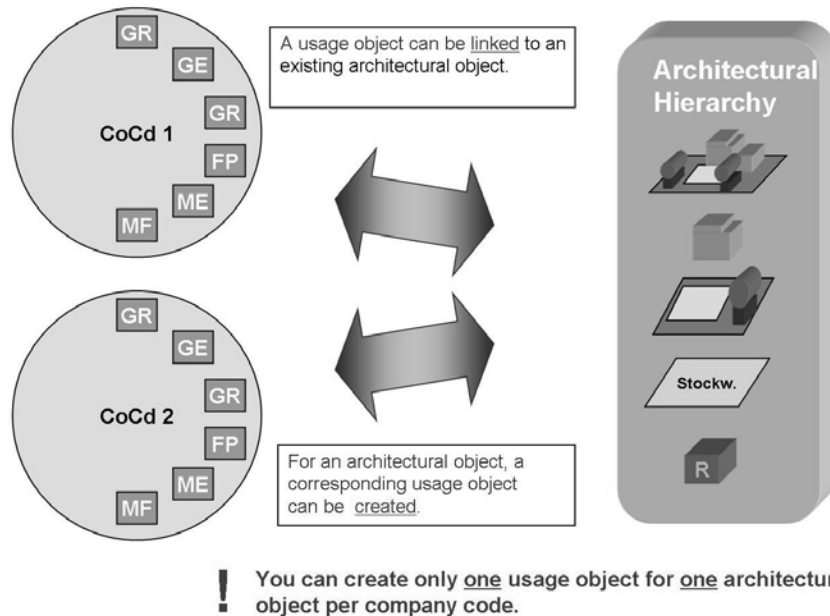


Figure 50: Real Estate - Data which Depend on Company Codes

Real Estate and Contractual Relationships

A **contract** is defined for all processes which have to do with Real Estate. You can use **contract types** to differentiate, for example, between lease-in, rent contract and services contract. A variable grouping of rental space for contract is possible. Any number of objects can be assigned to a rent contract. Rental spaces are first defined when the contract is created. The system also provides a comprehensive **monitoring of dates** with a central resubmission, for example, for notice, options, renewals, conditions and general resubmission.



Dependent on company code

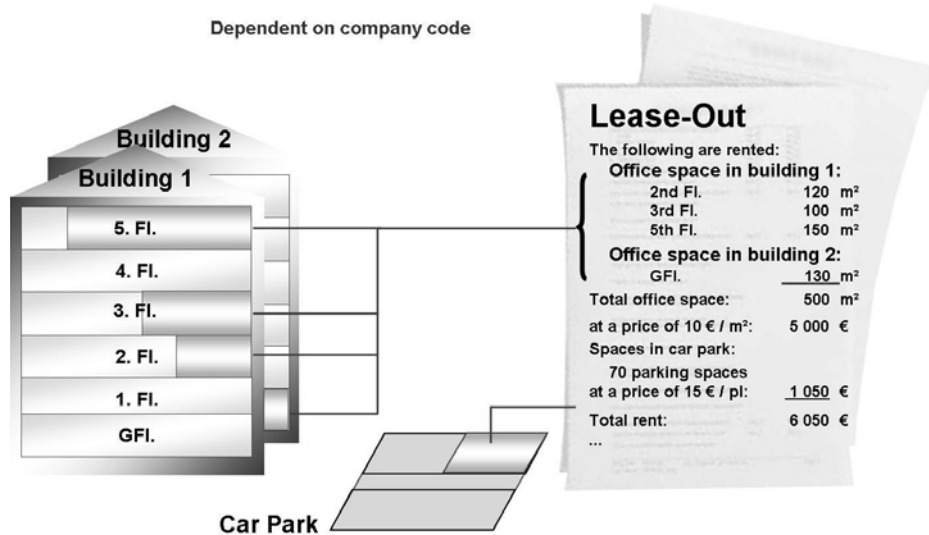


Figure 51: Real Estate - contractual relationships

When creating a contract, first of all define the **contract type** and then the **term**. This contains the date the contract becomes effective, the date it falls and data about notice and renewal. Finally, the **objects** that are to be rented or leased-in are assigned to the contract. Rent can be external or internal. In cases of **internal rent**, you must enter either a cost center, a project or a contract. Information such as the payment method, dunning and taxes is also provided in the contract. In cases of **external rent**, a debit-side master tenant is created as the main contract partner. A customer account is created for this partner and all relevant postings are made to it. Condition amounts are maintained for each object assignment and defined in the posting procedure. **Payment modalities** (payment method, form, frequency) are assigned to the contract and rules for generating resubmission dates are created. If all data are maintained, the real estate contract can be activated. After **activating**, all postings and processes that are relevant for this contract can be carried out.

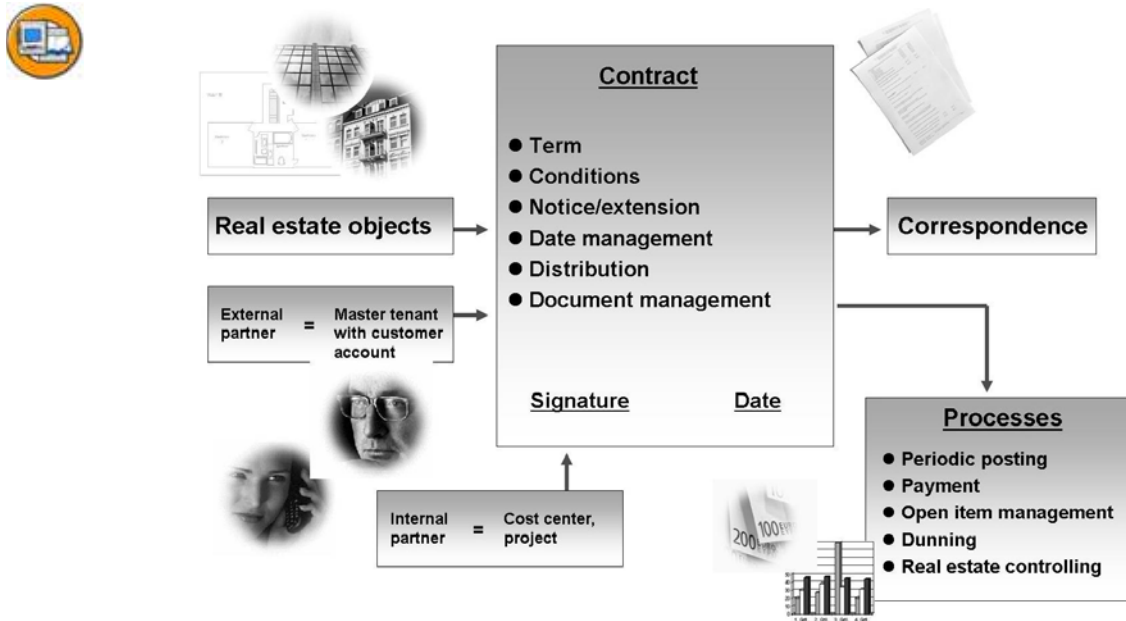


Figure 52: Real Estate Contract

Portfolio Analysis

Every company wants to manage its real estate portfolio as best it can. To achieve this, we provide tools that enable different views of the real estate portfolio in the company, depending on the task. This information supports the operational and strategic decision-making.

The portfolio analysis is characterized by the following:

- Different plan comparisons (annually, monthly)
- Evaluation of statistical key figures, for example, costs per square meter of floor space
- Navigational options through the real estate object hierarchy from building/structure to contract.
- Fast and simple navigation through extensive portfolios.
- MS Excel interface



<i>Market Data</i>	<i>Costs and Revenues</i>	<i>Occupancy</i>	
Where is my object located? What is the infrastructure like in every town / area / region?	<ul style="list-style-type: none"> What state is my object in (depending on the usage type, fixtures and fittings, age, size...)? 	<ul style="list-style-type: none"> Is my object fully used/ how many vacancies do I have (depending on fixtures and fittings, installations, age, size...)? 	Object information
	<ul style="list-style-type: none"> What state is my object in (depending on the surroundings, location class...)? 	<ul style="list-style-type: none"> Is my object fully used/ how many vacancies do I have (depending on surroundings, location class...)? 	Market information
		<ul style="list-style-type: none"> How is the price/value of some fo my buildings when they are completely or partially empty? 	Costs and Revenues

Figure 53: Portfolio Analysis

Real Estate Integration

The system is directly integrated with **Financial Accounting** and **Controlling** which are prerequisites of the Flexible Real Estate application. To gain maximum benefit from the Real Estate solution, integration is also possible to the SAP ERP components Plant Maintenance (SAP ERP PM), Materials Management (SAP ERP MM), and Project System (SAP ERP PS). Financial Accounting (SAP ERP FI) creates balance sheets and profit and loss statements. Rental accounting in Real Estate Management is fully integrated with SAP ERP Financial Accounting. A tenant is defined as a customer – the relationship of a tenant with a customer account in business partner administration to a customer in Financial Accounting is 1:1. Controlling (SAP ERP Management Accounting) provides a planning and control instrument for all quantity and value flows in Real Estate Management. SAP ERP Management Accounting also supports general cost accounting procedures from absorption costing to activity-based costing. Each real estate object is a controlling object (business entity, property, building, rental unit, lease-out, lease-in, settlement unit). Controlling (CO) functions are used for management accounting on real estate objects. Management accounting activities for real-estate-related account assignment objects include: Settlement of costs incurred by real estate objects as controlling objects (CO settlement); cost and revenue planning of real estate objects; profit center accounting; internal activity assignment; transfer postings; creation of statistical key figures for real estate objects.

Profit Center Accounting provides you with a periodic profit and loss statement for individual organizational units. The allocation of profit centers to Real Estate objects ensures that the profit centers allocated are automatically assigned for all postings to Real Estate objects for statistics. Assigning RE objects to profit centers allows you to

monitor activities of areas of internal responsibility. It is therefore possible to display profit-related business transactions within Real Estate, for instance: Revenue from basic rent, operating costs, heating expenses. Plant Maintenance (PM) plans and implements scheduled and non-scheduled maintenance work, reconstruction or new development in the Real Estate area. Real Estate objects are linked to functional locations in PM. Individual maintenance tasks are represented as orders for functional locations. Orders appear in RE reports. You manage real estate fixed assets (including their acquisition, retirement, depreciation, and so on) in Asset Accounting (FI-AA). Asset structure is determined from an accounting point of view. Buildings and property (land) can be assigned to fixed assets. You assign depreciation to an asset. The depreciation for this asset is shown in reporting.

Project System (PS) plans complex maintenance and investment projects, while taking constant risk factors into account.

Materials Management (MM) handles the purchase orders for supplying the real estate objects with material (spare parts) and preventive maintenance measures.



Lesson Summary

You should now be able to:

- Provide an overview of Flexible Real Estate Management.
- Explain the processes in Flexible Real Estate Management and integrated components.
- Understand the integration of Flexible Real Estate Management with upstream or downstream systems.



Unit Summary

You should now be able to:

- Provide an overview of Incentive and Commissions Management.
- Explain the processes that are shown in Incentive and Commissions Management.
- Understand the integration of Incentive and Commissions Management from Corporate Services with upstream and downstream systems.
- Provide an overview of business concepts used in Travel Management
- Name the central Travel Management functions
- Provide an overview of Flexible Real Estate Management.
- Explain the processes in Flexible Real Estate Management and integrated components.
- Understand the integration of Flexible Real Estate Management with upstream or downstream systems.



Test Your Knowledge

1. The master data in Incentive and Commissions Management consists of the _____ and the _____

Fill in the blanks to complete the sentence.

2. Describe the three steps used for calculating and posting commissions and bonuses.

3. What are the main areas under which all travel management processes can be categorized?

4. Travel Management is fully integrated with _____ and _____.

Fill in the blanks to complete the sentence.

5. What options does SAP Travel Management offer to travelers wanting to enter their data when they are traveling -for example, in an airplane - and are not connected to the system?

6. Name the target groups of Real Estate Management.

7. Name the two views that display all information on your real estate portfolio.



Answers

1. The master data in Incentive and Commissions Management consists of the commission recipient and the commission contract.

Answer: commission recipient, commission contract.

The commission recipient is a role of the SAP business partner, the commission contract can be assigned to an organizational hierarchy.

2. Describe the three steps used for calculating and posting commissions and bonuses.

Answer: First the participants are determined that belong to a commission case. Then Incentive and Commissions Management values the business object, regardless of the recipient. Finally, Incentive and Commissions Management calculates the remunerations of each recipient, and includes the due dates and liability amounts.

3. What are the main areas under which all travel management processes can be categorized?

Answer: Processes can be categorized under the areas Travel Request, Travel Planning and Travel Expenses.

4. Travel Management is fully integrated with mySAP ERP Financials and mySAP Human Capital Management.

Answer: mySAP ERP Financials, mySAP Human Capital Management

Travel Management is fully integrated with mySAP ERP Financials and mySAP Human Capital Management.

5. What options does SAP Travel Management offer to travelers wanting to enter their data when they are traveling -for example, in an airplane - and are not connected to the system?

Answer: Offline entry/creation of trips and individual receipts, simple to install on a laptop, use of the SAP Mobile Engine. The traveler can enter data without being connected to the SAP System and then synchronize all offline data with the SAP System at a later date.

6. Name the target groups of Real Estate Management.

Answer:

- Corporate Use: Real estate management is not the central function of the enterprise, but the management of its properties is of considerable importance.
- Commercial Real Estate Management: Management of real estate used for commercial purposes.
- Public Sector: Government authorities that need to manage their own real estate holdings, as well as public housing.

7. Name the two views that display all information on your real estate portfolio.

Answer: Architectural view (independent of the company code) and usage view (depends on the company code).