Chapter 3

Introduction to Accounting

Learning Objectives

1. Explain the differences between financial accounting and management accounting.

2. Describe the organizational data related to financial accounting.

3. Discuss and analyze the key types of master data involved with financial accounting.

4. Explain and apply basic accounting concepts.

5. Execute key processes in financial accounting.

Learning Objectives (Continued)

6. Identify key integration points between financial accounting and other processes.

7. Prepare reports in financial accounting.

Accounting Categories

- The accounting process is divided into two major categories:
  - Financial accounting (FI)
  - Management accounting (CO)

FI Accounting vs. CO Accounting

	Financial accounting	Management accounting
Focus	External	Internal
Purpose	Legal reporting (financial statements) Tracking financial impact of processes Communicate with investors	Managing the firm with regard to costs and revenues
Content	Defined by laws and regulations	Defined by management needs

Key Financial Accounting Processes

- General ledger accounting
- Accounts receivable accounting
- Accounts payable accounting
- Asset accounting
- Bank ledger accounting

Organizational Levels

- Client

- Company code

- Business area

Client

- Highest organizational level
- Only one client per enterprise
- Can have one or multiple company codes

Company Code

- Highest organizational level for financial reporting (external, legal reporting)
- Four-digit alphanumeric field
- Smallest entity that supports a full set of books
  - General ledger, journals, etc.
- At least one CC is required; can have more than one

Multiple Company Codes

One for each legal entity

- Buick
- Cadillac
- Oldsmobile
- Chevrolet
- Hummer
- Saturn
- Saab
- GMC

One for each country

- GBI USA
- GBI Germany
- GBI Australia
- Consolidate to the "parent" company code level

Business Areas

- Internal division to generate financial statements
- GM
  - Cars (Sedans)
  - Cars (Sports)
  - Pick-up
  - SUV
  - Minivan
- Across Company Codes

GBI Business Areas

	GBI	GBI Germany	GBI Australia
Bicycles	X	X	X
Accessories	X	X	X

	GBI USA	GBI Canada	GBI Mexico	GBI Germany	GBI UK
GBI North America	X	X	X		
GBI Europe				X	X

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Master Data

- Chart of Accounts
- General Ledger Accounts
  - Balance sheet accounts
  - Income statement accounts
  - Reconciliation accounts
- Subsidiary ledgers (sub ledgers)
  - AR(customers)
 - AP (vendors)
  - Assets

Chart of Accounts

- An orderly definition of accounts in the general ledger
- Three types of chart of accounts:
  - Operative COA
  - Country-specific COA
  - Group COA
- Multiple charts of accounts exist
  - US (CAUS) , Germany (GKR), Canada (CANA)
    - Country specific to meet reporting requirements
  - International Chart (INT)

Chart of Accounts

- A chart of account can be used by multiple company codes
  - Different GM companies (Buick, Cadillac, Oldsmobile) can use the same (US) chart of accounts
  - Saab will use the German chart of accounts
- A company must use at least one chart of account
  - Can use more than one chart of account to create alternate ledgers

GBI Chart of Accounts and Company Codes
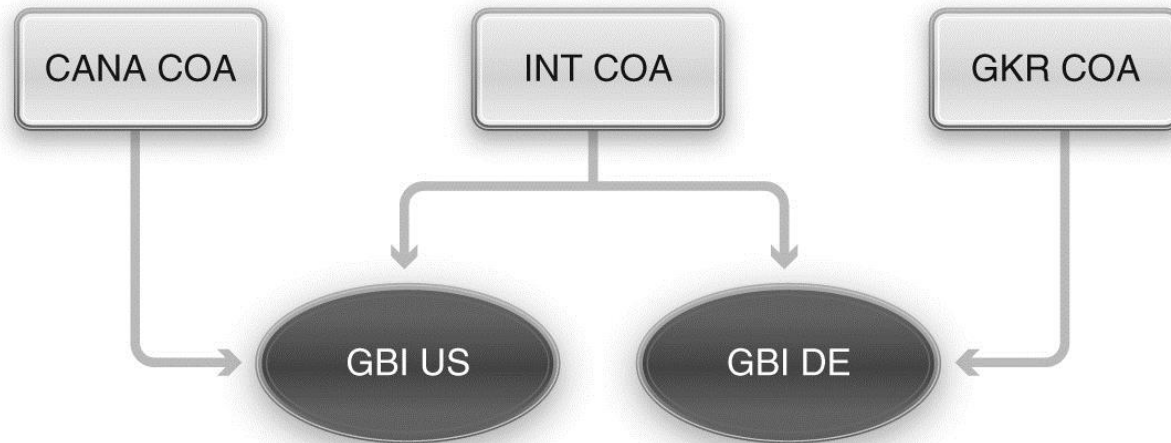
General Ledger Accounts

- G/L accounts are master data

- Recording of all accounting-relevant business transactions occurs in a G/L account

- Data in the general ledger accounts are segmented by organizational level
  - Chart of account segment
  - Company code segment
  - General ledger = COA data + Company code data
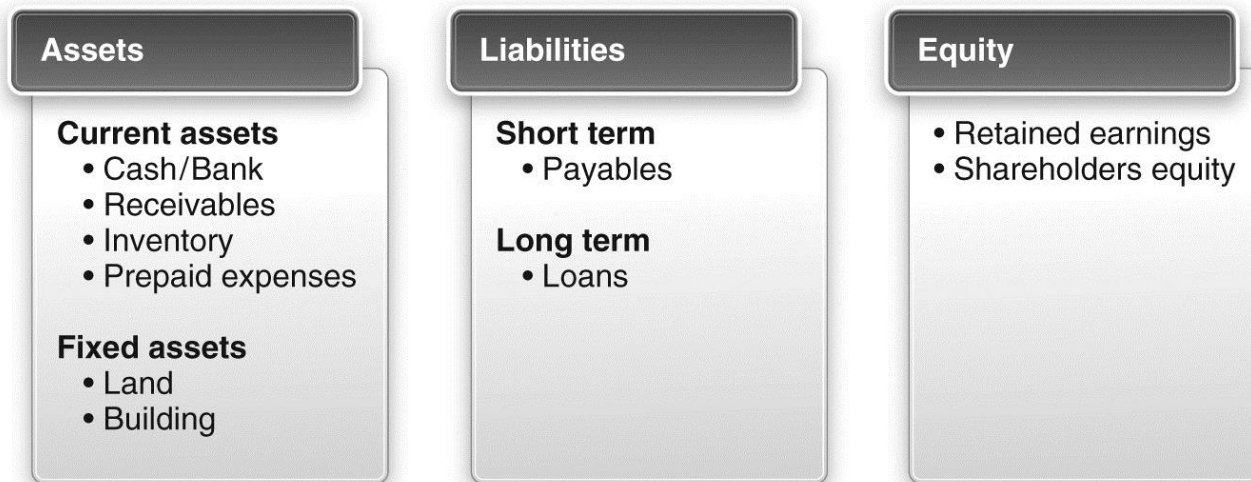
General Ledger Account Data

COA Segment (client)

- Account number
- Long text
- Short text
- Account group
- Balance sheet or income statement account
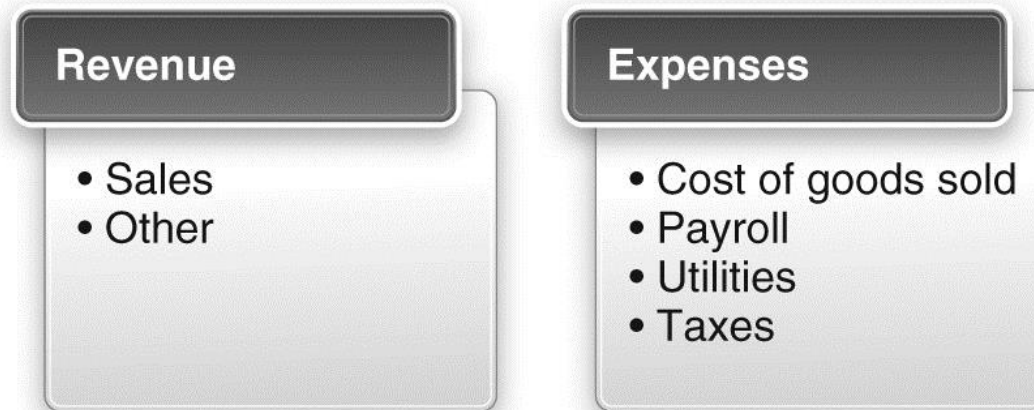
Company code segment

- Account currency
- Tax related data
- Field status group
- Open item management
- Line item display
- Reconciliation account for account type

Balance Sheet Accounts

Assets

Current assets
- Cash/Bank
- Receivables
- Inventory
- Prepaid expenses

Fixed assets
- Land
- Building

Liabilities

Short term
- Payables

Long term
- Loans

Equity

- Retained earnings
- Shareholders equity

Assets = Liabilities + equities

Profit and Loss Accounts

Revenue
• Sales
• Other

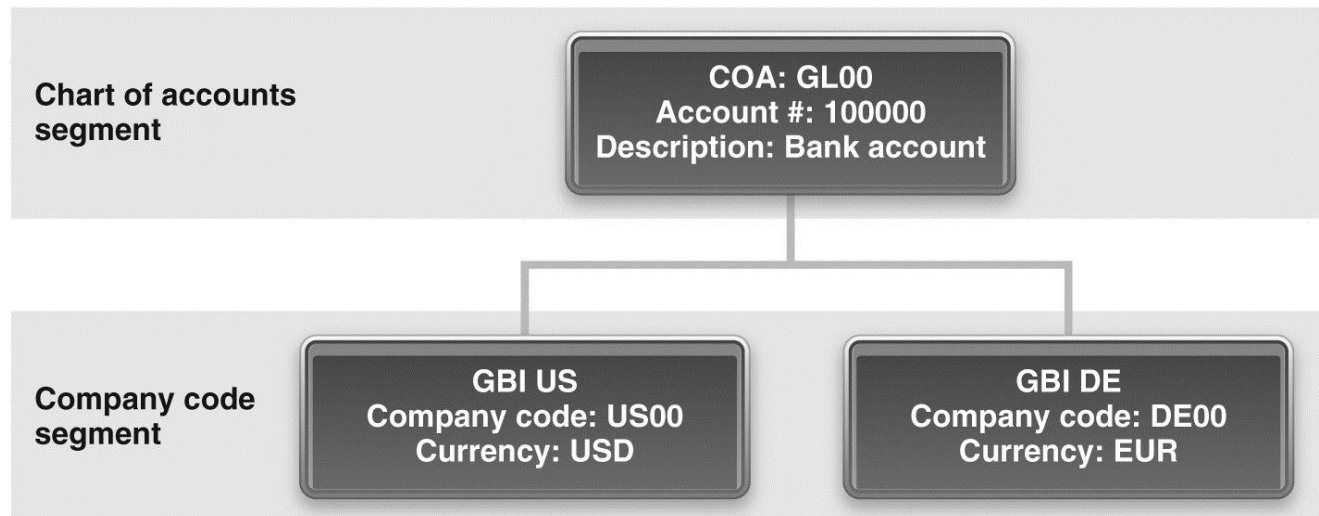| Expenses |
| --- |
| • Cost of goods sold |
| • Payroll |
| • Utilities |
| • Taxes |

Income = Revenue − Expenses

Demo 3-1: Review Charts of Accounts

- Review the contents of the chart of accounts.

G/L Account Example

Chart of accounts segment

COA: GL00
Account #: 100000
Description: Bank account

Company code segment

GBI US
Company code: US00
Currency: USD

GBI DE
Company code: DE00
Currency: EUR

Sub-Ledger and Recon Accounts

Sub ledger account	Reconciliation account
Customer	Accounts Receivable
Vendor	Accounts Payable
Asset (specific)	Assets

Subsidiary or sub-ledgers

- Are not part of the general ledger.
- Used to separate accounting for customers, vendors, and assets

Reconciliation accounts

- Are general ledger accounts
- Consolidate data in sub-ledger
- Cannot be posted to directly
- Maintain the sum of the postings in corresponding sub-ledgers
- Are specified in the definition of the sub-ledger

Demo 3-2: Review General Ledger Accounts

- Review the contents of the general ledger.

Key Concepts

- Key concepts to financial accounting are:
  - Accounting document
  - Parallel accounting
- Concepts in Management Accounting

Document Type

- Two-digit code that identifies the process that generated the document
  - Financial accounting document (**FI**)
  - Customer invoice (**DR**)
  - Customer payment(**DZ**)
  - Goods issue (**WA**)
  - Goods receipt (**WE**).
- Determines the document number range and the account type that can be posted to

Account Type

- Customer(**D**)

- Vendor (**K**)

- Asset (**A**)

- Material (**M**)

- General ledger accounts (**S**)

Structure of a FI Document

Header
- Document date
- Document type
- Document number
- Company code
- Posting date
- Currency
- Reference number

Items (detail)
- Account
- Description
- Posting key (debit or credit)
- Amount

Posting Keys

- A posting key is a two-digit code that determines how a line item is posted

- The posting key specifies the following:
  - Account type for posting the document item
  - Whether the document item is posted as a debit or a credit
  - Field status of the additional data

Posting Key Examples

| Posting key	Debit/Credit	Account type
01 (invoice)	Debit	Customer
15 (payment)	Credit	Customer
40 (debit)	Debit	G/L account
50 (credit)	Credit	G/L account
31 (invoice)	Credit	Vendor
25 (payment)	Debit	Vendor

Demo 3-3: Review an FI Document

- Review the contents of an FI document.

Parallel Accounting

- An enterprise can use multiple ledgers
  - Multiple "books" for different purposes
  - One leading ledger for all company codes
    - Global principles are consolidated
    - All transactions are posted to it
  - Non-leading ledgers for each company (company code)
    - Local accounting practices and reporting

Parallel Accounting
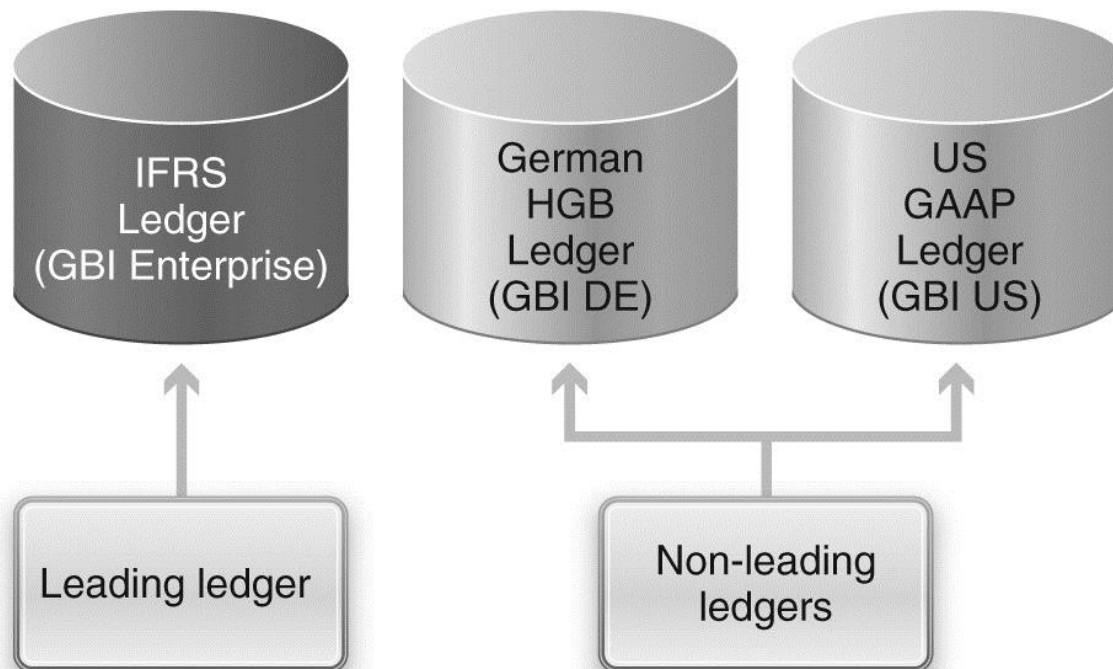
Concepts in Management Accounting

- Most of the data used in management accounting are derived from financial accounting

- A key function of CO is to manage and allocate costs

- Companies incur these costs as they carry out various business processes such as fulfillment

Cost Center

- Master data in controlling
- Location where costs are incurred
  - Department, individuals, special projects
- Cost bucket used to accumulate costs
- Accumulated costs are then "charged" to other cost centers – CO process
- Many processes have "orders"
  - Purchase orders, Production orders, Sales orders
  - Expenses can be charged to these orders
- Collectively objects that can absorb costs arecalled cost objects

Processes

- Recording of value flows ($$) as a result of other processes and transactions
  - General Ledger Accounting
    - G/L postings for rent, utilities, wages, etc.
  - Accounts Payable Accounting
    - Part of the procurement process
  - Accounts Receivable Accounting
    - Part of the fulfillment process
  - Asset Accounting
    - Acquisition, depreciation, retirement

General Ledger Accounting

- Concerned with recording the financial impact of all process steps performed within the organization

- Double-entry accounting is used for every transaction

- Accounts are divided into balance sheet accounts and income (profit and loss) statement accounts

Debits and Credits

Account name

Debit	Credit
Assets and expenses +	Assets and expenses −
Revenue and liabilities −	Revenue and liabilities +

Posting Example 1: Investment in a Company


```
        Bank account              Common stock
          100000                     329000
Debit            Credit     Debit            Credit

  50,000                                      50,000
```
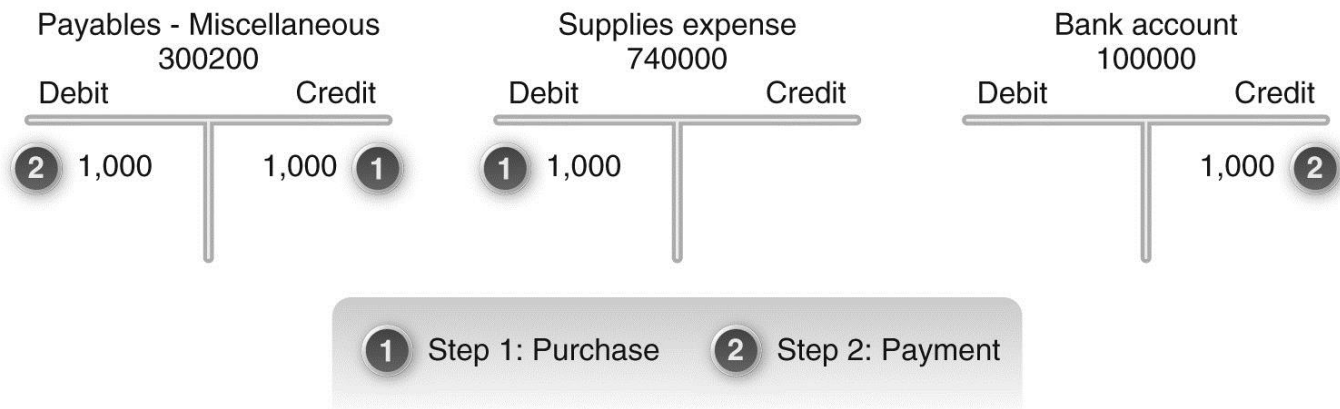
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Posting Example 2: Purchase of Supplies With Cash

Bank account
100000

Debit	Credit
	500

Supplies expense
740000

Debit	Credit
500	

Posting Example 3: Purchase of Supplies On Credit

| Payables - Miscellaneous 300200		Supplies expense 740000		Bank account 100000	
Debit	Credit	Debit	Credit	Debit	Credit
2 1,000	1,000 **1**	**1** 1,000			1,000 **2**

1 Step 1: Purchase **2** Step 2: Payment

Demo 3-4: Post General Ledger Entries

- Review the posting of general ledger entries.

Accounts Payable Accounting

- Concerned with vendors

- Involve sub-ledgers to track money owed to individual vendors: vendor master

- Involve reconciliation accounts: Accounts payable-reconciliation

  - Recall the non-reconciliation AP account (payables-miscellaneous) discussed earlier

- Involve GR/IR account (discussed in procurement chapter)
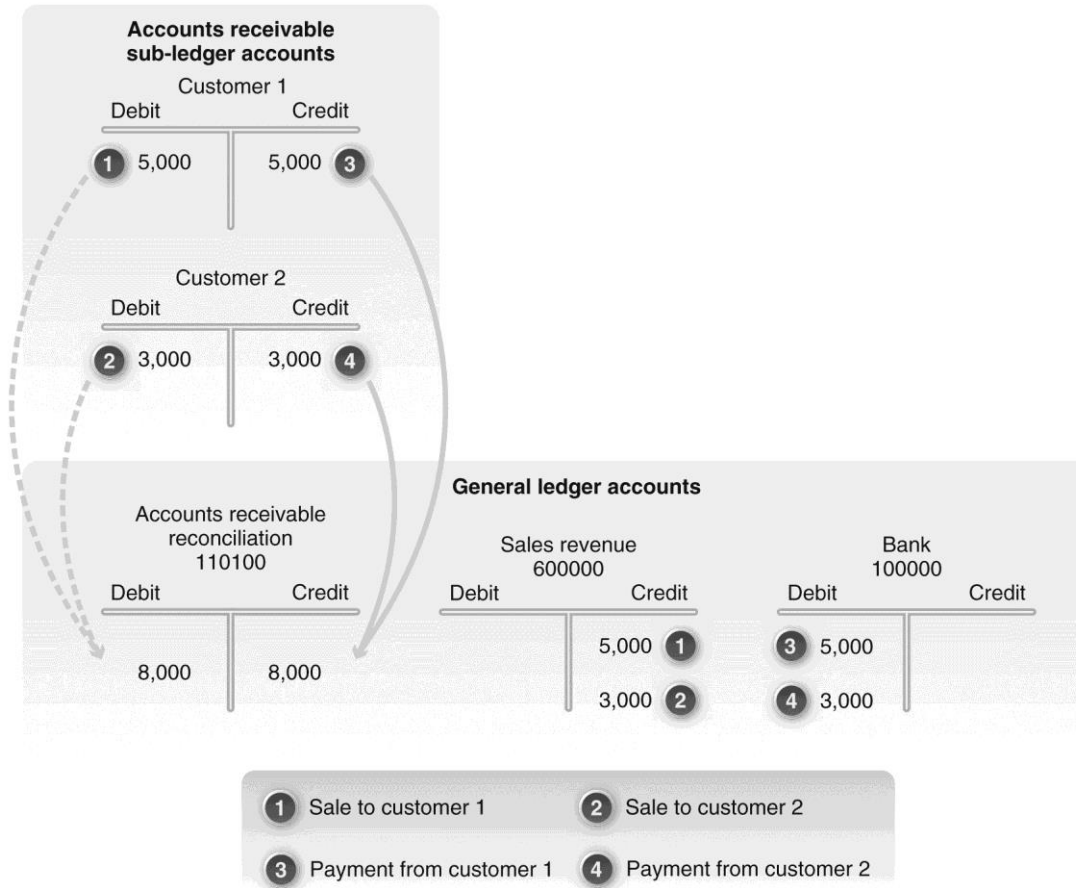
Accounts Payable Accounting
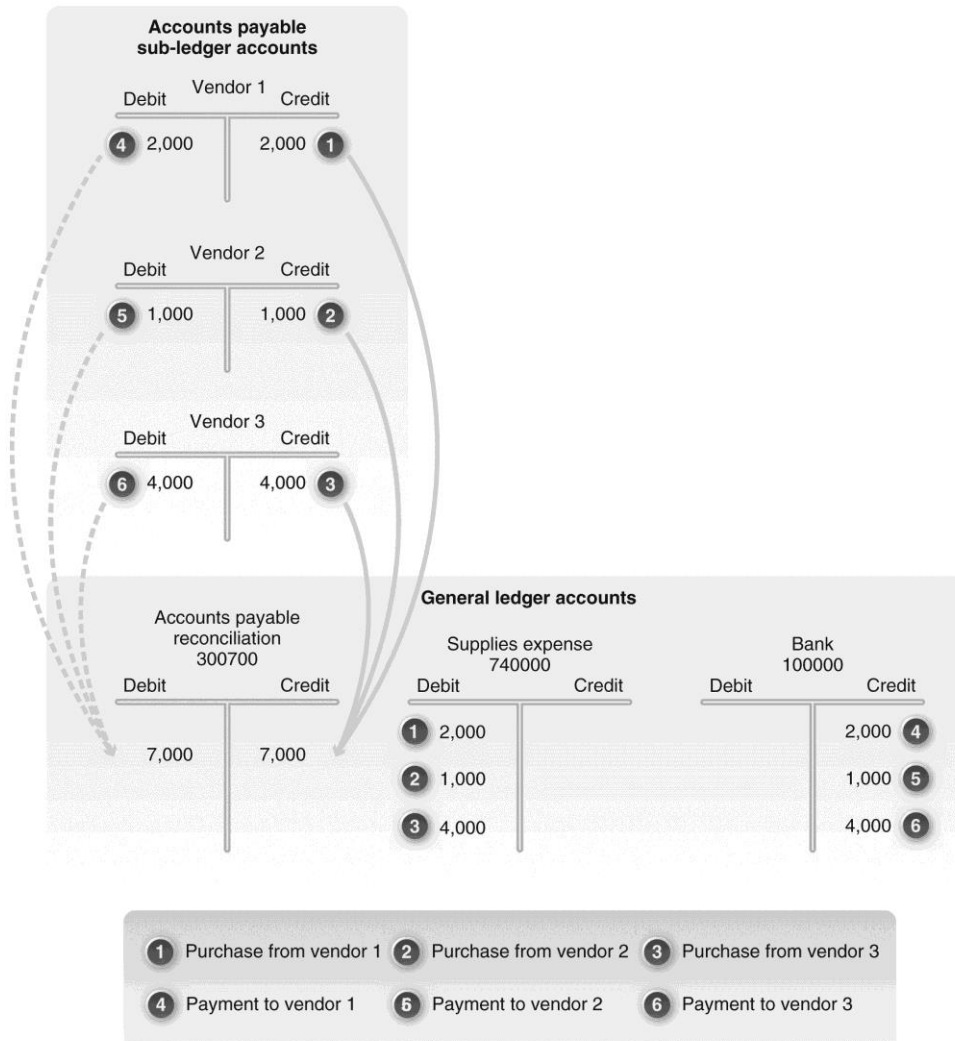
Demo 3-5: Review Reconciliation and Non-reconciliation A/P Accounts

- Review the posting of reconciliation and non-reconciliation accounts payable accounts.

Accounts Receivable Accounting

- Concerned with customers

- Involves sub-ledger accounts: customer master

- Involves reconciliations accounts: Accounts receivable – reconciliation
  - Non reconciliation AR accounts also exist (Misce AR)

Accounts Receivable Accounting

Demo 3-6: Review Reconciliation and Non-reconciliation A/R Accounts

- Review the posting of reconciliation and non-reconciliation accounts receivable accounts.

Asset Accounting

- Concerned with tracking the financial consequences associated with the entire lifecycle of an asset, from acquisition to disposal (retirement).

- Assets can be categorized as tangible, intangible, and financial

- Tangible assets can be further categorized as:
  - Fixed assets
  - Leased assets
 - Assets under construction

Asset Accounting

- Assets are assigned to
  - company code
  - Business area
- Asset accounts
  - sub-ledgers accounts
- General ledger
  - reconciliation accounts (in the general ledger)
- Involves account determination (via asset classes)

GBI Asset Accounts in the GL

Account number	Account name
220100	Land
220200	Production machinery, equipment, and fixtures
220400	Office furniture
220600	Office equipment and computers
200800	Vehicles

# Asset Accounts and Account Determination
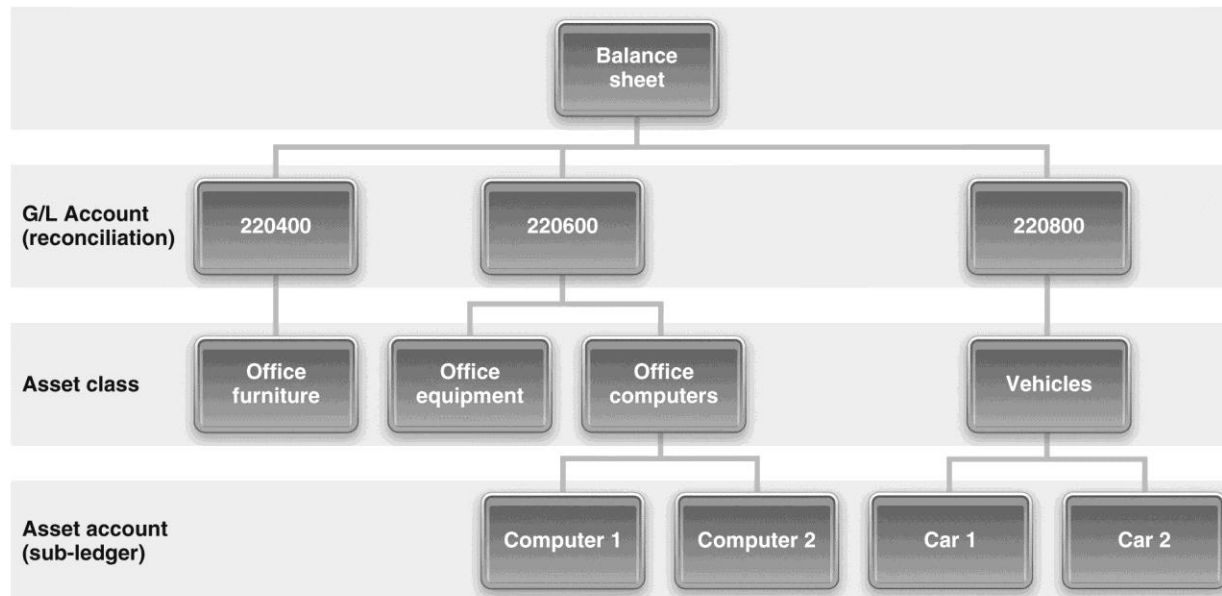
Demo 3-7: Review Asset Classes and Asset-Related Accounts

- Review the uses of asset classes and asset-related accounts.

Asset Acquisition

- Asset acquisition is concerned with acquiring assets via internal or external processes

- Internal: production process or project systems

- There are three options for purchasing assets externally:
  - Purchase from an established vendor without using the purchasing process (manual entry in GL and sub-ledger; similar to AP accounting)
  - Purchase from an established vendor using the purchasing process (different GL accounts)
  - Purchase from a one-time vendor or a vendor for whom master data are not maintained (via clearing account).

Asset Acquisition With a Clearing Account
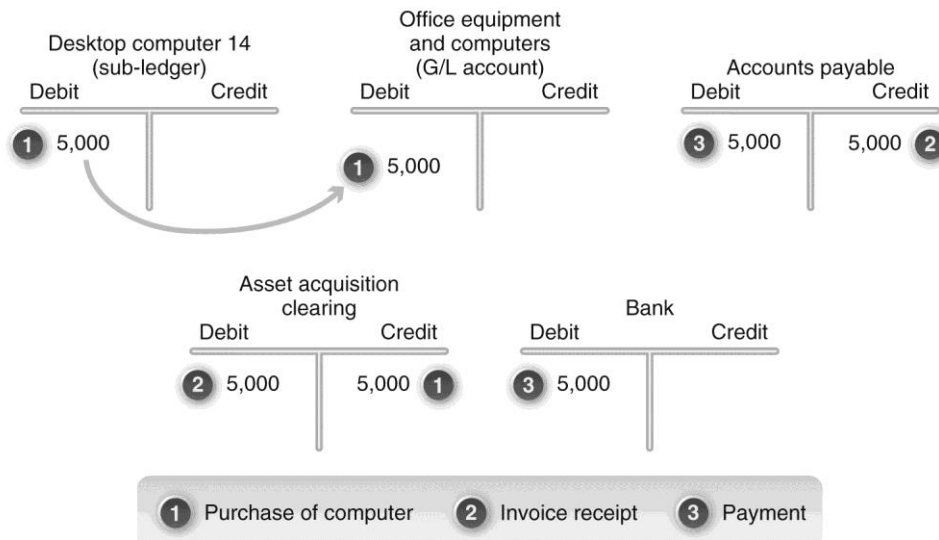
Demo 3-8: Acquire an Asset

- Review how an asset is acquired.

Asset Depreciation

- Asset depreciaton is concerned with the decrease in the value of an asset over time

- Depreciation can be planned or unplanned

- Depreciation methods are used
  - Straight line
  - Double declining balance

- Useful life

- Residual value

- Book value

- Depreciation areas: parallel valuation

Straight Line Depreciation

Year	Book value (start of year)	Depreciation expense	Accumulated depreciation	Book value (year end)
1	5,000	1,000	1,000	4,000
2	4,000	1,000	2,000	3,000
3	3,000	1,000	3,000	2,000
4	2,000	1,000	4,000	1,000

Double Declining Balance Depreciation

Year	Book value (start of year)	Depreciation rate	Depreciation expense	Accumulated depreciation	Book value (year end)
1	5,000	40%	2,000	2,000	3,000
2	3,000	40%	1,200	3,200	1,800
3	1,800	40%	720	3,920	1,080
4	1,080	1,080−80	80	4,000	1,000

Percent annual depreciation based on straight line method: 20%
Percent annual depreciation for declining balance = 2 × 20% = 40%

Asset Retirement

- Concerned with the disposal or retirement of an asset after its useful life

- Retirement may be:
  - Revenue generating (sold)
  - Non-revenue generating (scrapped)

Demo 3-9: Depreciate an Asset

- Review how to depreciate an asset.

Integration of Financial Accounting with Other Processes

- Financial accounting is integrated with other processes in SAP within the organization (enterprise)
- Numerous steps in different processes have a financial impact

Integration of Financial Accounting with Other Processes

Reporting

- Financial reporting is broadly divided into two categories:
  - Displaying account information
  - Generating financial statements

Account Information

- Account information can be displayed at three levels:
  - Balance
  - Line item
  - Original FI document

Account Information

Period	Debit	Credit	Balance	Cum. balance
8				
9	50,000.00	19,000.00	31,000.00	31,000.00
10	1,874.00	7,100.00	5,226.00-	25,774.00
11				25,774.00
12				25,774.00
13				25,774.00
Total	51,874.00	26,100.00	25,774.00	25,774.00

	St	Assignment	DocumentNo	BusA	Typ	Doc. Date	PK	Amount in local cur.	LCurr	Amo
☐	✓	20090905	100000003		SA	09/05/2009	50	10,000.00-	USD	
☐	✓	20090910	100000004		SA	09/10/2009	50	500.00-	USD	
☐	✓	20090915	100000006		SA	09/15/2009	50	500.00-	USD	
☐	✓	20090927	100000001		SA	09/27/2009	50	5,000.00-	USD	
☐	✓	20090930	100000007		SA	09/30/2009	50	3,000.00-	USD	
*	✓							19,000.00-	USD	
** Account 100000								19,000.00-	USD	

C...	Itm	PK	S	Account	Description	Amount	Curr.	Tx
CC10	1	40		780010	R & D	5,000.00	USD	
	2	50		100000	Bank Account	5,000.00-	USD	

Balance display

Line items

Original G/L entries

Demo 3-10: Review Account Information

- Review account information.

Asset Explorer

- Asset explorer provides an overview of all activities related to the asset
  - Acquisition data
  - Planned and posted depreciation
  - Drill down details for:
    - Master data
    - Transactions
    - Documents
  - Depreciation posting run

Asset Explorer

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Demo 3-11 Review Asset Explorer

- Review the capabilities of asset explorer.

Financial Statements

- Three types
  - Balance Sheet
  - Income Statement
  - Statement of cash flows
- Required for external reporting
  - Quarterly filings with the SEC?
- Accuracy is critical – SOX compliance
  - Certified by CEO and CFO

Financial Statement Version with Balance Sheet Accounts

Financial Statements

Financial Statement (GBI)

0L	Ledger
10	Currency type Company code currency
USD	Amounts in United States Dollar
2010.01 -2010.16	Reporting periods
2009.01 -2009.16	Comparison periods

F.S. item/account	Tot.rpt.pr	tot.cmp.pr	Abs. diff.
▼ 🗀 ASSETS	244,208.44	0.00	244,208.44
▼ 🗀 Cash & Cash Equivalents	45,050.00-	0.00	45,050.00-
▶ 🗟 100000 Bank Account	52,550.00-	0.00	52,550.00-
▶ 🗟 110000 Trade Account Reveivables	7,500.00	0.00	7,500.00
▼ 🗀 Short-Term Assets	30,925.10	0.00	30,925.10
▶ 🗟 200000 Inventory-Raw Materials	232,925.00	0.00	232,925.00
▶ 🗟 200100 Inventory-Finished Goods	133,400.00	0.00	133,400.00
▶ 🗟 200200 Inventory-Trading Goods	76,117.50	0.00	76,117.50
▶ 🗟 200500 Inventory-Suspense (Heaven)	411,517.40-	0.00	411,517.40-
▼ 🗀 Long-Term Assets	258,333.34	0.00	258,333.34
▶ 🗟 220100 Land	10,000.00	0.00	10,000.00
▶ 🗟 220400 Office Furniture	150,000.00	0.00	150,000.00
▶ 🗟 220500 Accumulated Depreciation-Offic	1,666.66-	0.00	1,666.66-
▶ 🗟 220800 Vehicles	100,000.00	0.00	100,000.00
▼ 🗀 LIABILITIES / EQUITY	202,015.00-	0.00	202,015.00-
▼ 🗀 Current Liabilities	202,015.00-	0.00	202,015.00-
▶ 🗟 300000 Payables-Trade Accounts	150,000.00-	0.00	150,000.00-
▶ 🗟 310000 Goods Receipt / Invoice Receipt	52,015.00-	0.00	52,015.00-
PROFIT & LOSS STATEMENT			

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Financial Statement Version with Profit and Loss Accounts

Financial Statements

Financial Statement (GBI)

0L	Ledger
10	Currency type Company code currency
USD	Amounts in United States Dollar
2010.01 -2010.16	Reporting periods
2009.01 -2009.16	Comparison periods

F.S. item/account	Tot.rpt.pr	tot.cmp.pr	Abs. diff.
▶ ☐ ASSETS	244,208.44	0.00	244,208.44
▶ ☐ LIABILITIES / EQUITY	202,015.00-	0.00	202,015.00-
▼ ☐ PROFIT & LOSS STATEMENT	42,193.44-	0.00	42,193.44-
▼ ☐ Revenue	134,715.00-	0.00	134,715.00-
▶ 🖷 600000 Sales Revenue	134,715.00-	0.00	134,715.00-
▼ ☐ Expenses	23,559.06	0.00	23,559.06
▶ 🖷 720000 Raw Material Consumption Exp	44,337.40	0.00	44,337.40
▶ 🖷 720200 Trading Good Consumption Exp	765.00	0.00	765.00
▶ 🖷 720300 Semi-Finished Consumption Ex	760.00	0.00	760.00
▶ 🖷 740000 Supplies Expense	8,000.00	0.00	8,000.00
▶ 🖷 741600 Manufacturing Output Settlemer	1,570.00-	0.00	1,570.00-
▶ 🖷 741700 Manufacturing Output Settlemer	80,400.00-	0.00	80,400.00-
▶ 🖷 741800 Depreciation Expense	1,666.66	0.00	1,666.66
▶ 🖷 770000 Research & Development	50,000.00	0.00	50,000.00
▼ ☐ Cost of Goods Sold	68,962.50	0.00	68,962.50
▶ 🖷 780000 Cost of Goods Sold	68,962.50	0.00	68,962.50

Demo 3-12: Generate Financial Statements

- Review the generation of financial statements.

Financial Statements Based on Depreciation Areas

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