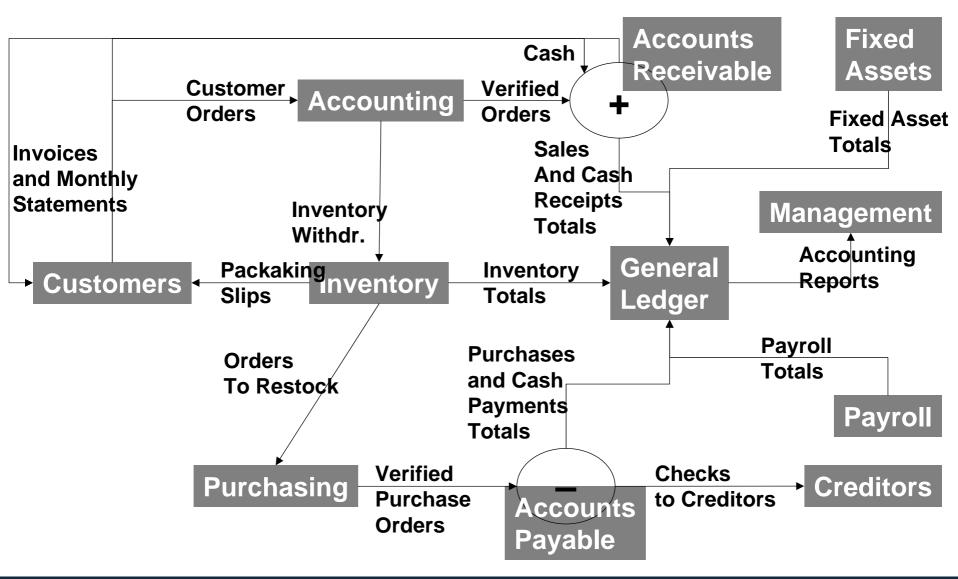


ERP Course: Accounting and Finance Reading: Chapter 5 from Mary Sumner

Peter Dolog dolog [at] cs [dot] aau [dot] dk E2-20 I Information Systems September 22, 2006







Accounting

Account = a financial variable representing a business aspect of a company

Maintained in bookkeeping

Single entry accounting system (small businesses, simple, no need for ERP ©)

Double entry accounting system (usuall)



Principles

Assests = Liability + Owner's equity

Asset is anything owned which can produce economic benefit Liability is something owed to another party Equity is a difference between asset and liability



Assets

Current Assets (cash, receivables, short term investments, inventory, prepaid expenses)

Long term investmnets

Fixed Assets (property, plant, equipment)

Intangible assets (copyrights, patents,...)



Liabilities

Current (less then year)

- Accounts payable
- Wages
- Taxes
- Adjusting Entries

Long Term (more then year)

- Leases
- Pensions
- Bonds
- And so on



Journal

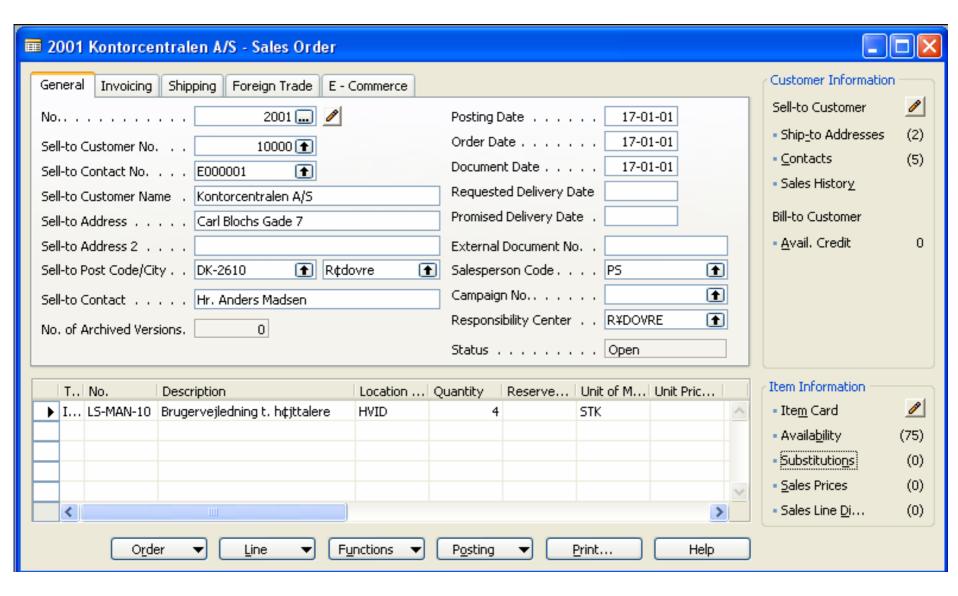
Records first entry documents certifying expenses and receivables

It is daily

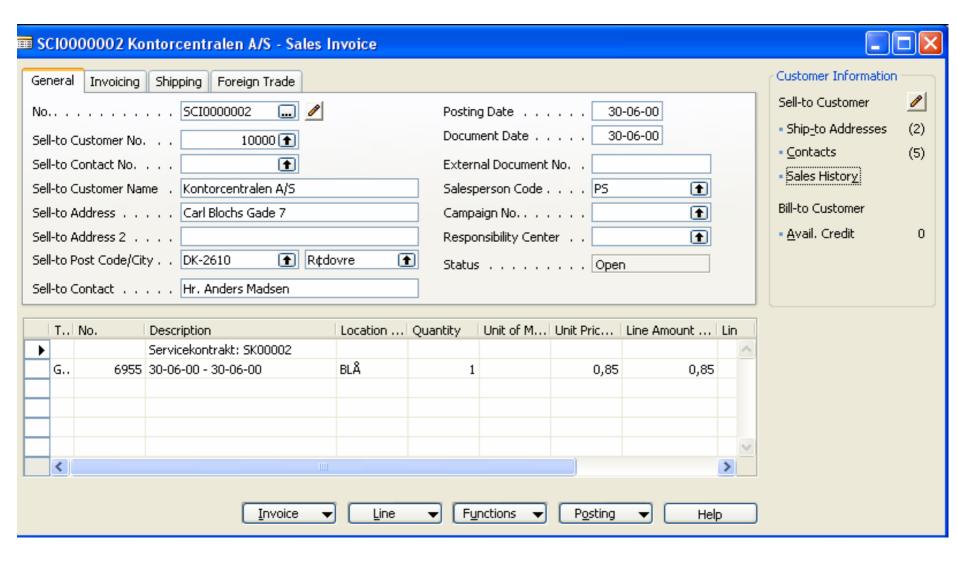
Contains

- Invoices (customer and purchase)
- Sales receipts
- Deposit slips
- Checks which effects debits and credits

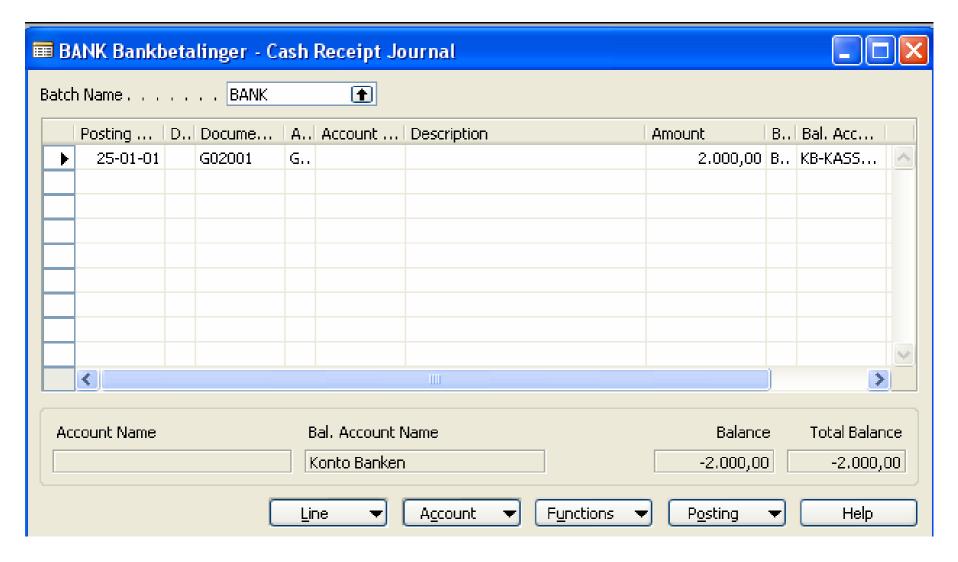














Ledger (Book of Accounts)

Bring together all amounts related to an account

The process is called posting

Posting undergo a balancing phase (reconciliation)

The phase is characterized by number of adjustments on accounts to fit accounting principles

Result is adjusted trial balance

It usually includes accounts for items such as fixed assets, current assets, liabilities, profit and loss, income and expenditure, funds and reserves



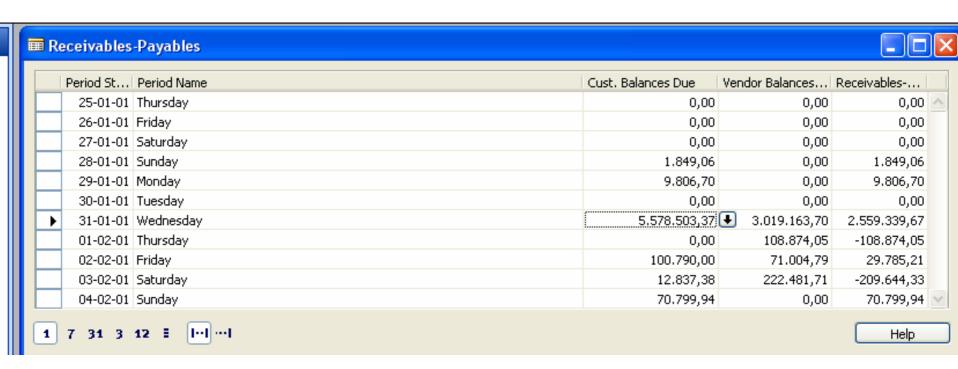
Trial Balance 21

Period:

CRONUS Danmark A/S

			Net Change	Balance	
No.		Name	Debit	Credit	Debit Credit
	1000	BALANCE			
	1002	ANLÆG			
	1003	Anlægsaktiver			
	1005	Materielle anlægsaktiver			
	1100	Grunde og bygninger			
	1110	Grunde og bygninger	12.666.785,97	12,666.1	785,97
	1120	Tilgang i år	1.264,82	1.3	264,82
	1130	Afgang i år			
	1140	Akk.afskr. grunde og bygn.	4.9	4.508.736,14 4.508.736,14	







Double Entry Accounting

If an account is credited another acount is debited Examples:

You buy a paper for your printer

This credits a company account where you bought the paper and paired with abank transfer

Your "usual goods" account on general ledger is debited

T account is used to record the entries

Account Debits Credits



Debit vs. Credit Normal Balance

Assests = Owner's equity + Liability

Assets are of debit normal balance (DB) Liability and equity are of credit normal balance (CR)

Debit increases value of DBA Credit increases value of CRA



Financial statements

Created from trial balance Income statement Balance sheet (at the end of the fiscal year) Cash flow statement



Income Statement

How revenue is transformed to Net Income Past performance of enterprise Can predict future performance



Cash Flow

Due Date	Cust. Balances Due (Net Change (LCY)	Balance at Date (LCY)
before	1.403.585,92	371.814,74	1.031.771,18	1.031.771,18
25-01-0124-02-01	6.997.844,55	3.961.160,71	3.036.683,84	4.068.455,02
after	-23.668,28	0,00	-23.668,28	4.044.786,74
Total	8.377.762,19	4.332.975,45	4.044.786,74	4.044.786,74



In Navision

General Ledger
Cash Management
Receivables
Payables
Fixed Assets
Inventory



Support of Integrated ERP System

Accounts receivable are updated automaticaly so sales know the customer credit limits

ERP automatically updates the value of finished goods when they are transferred to a warehouse

Up to date cost variance

Currency management

VAT management



Management Control Processes in Accounting

Budgeting
Cash Management
Capital Budgeting
Investment Management



Budgeting

Tracking revenues and expenses

Comparing current budget allocation to prior years

Comparign current revenues and expenditures to prior years

Using the information for further planning on:

- Budgets (increase or decrease)
- Personnel
- Assets



Cash Management Processes

To ensure sufficient cash for companies needs

Allocate excesses to investments

What if analysis can be used to analyse different options for cash and budget allocation



Capital Budgeting

To analyse impact of possible acquisitions Methods used:

- Net present value (NPV)
- Internal rate of return (IRR)
- Payback period



Net Present Value

 $NPV = sum_{t=0-N}(C_t/(I+i)^t)$

t ... is a time of cashflow

N ... is a total time of the project

i ... is is a discount reate

C ... cashflow at the point in time (includes expenses and revenues)

If the value is positive, company should invest

IRR is the same, but looks for i where NPV is 0



Further management functions

Cost center accounting
Internal orders
Activity-based costing
Product cost controlling
Profitability analysis
Profit center accounting
Consolidation



Profit centers – branches

Distribution of work and accounting to independent units Independent accounting

Own responsibility for revenues and losses

Profit center accounting creates reports on performance of these branches

Centers can be responsible for (which of them have the highest contribution margins):

- Products
- Teritorries
- Customers
- Or combined



Central Clearing House

Financial accounting – source for management (revenues, general ledger,...)

Materials management – posts costs of goods

Production planning – posts the costs of bills of materials which are created in

Personal administration – posts payrolls

Sales and distribution – posts billing documents



Activity Based Costs

- Traces costs from resources (people and machines)
- Applies them to costs of specific products, services and customers
- ERP helps with this and help to answer questions about profitability
- This information is strategic as it guides not just ordinary sales but also strategic decisions
- Selfreflection on accounting (how many people can process orders still efficiently and how much does it cost)
- Source for process improvements



100	Operational Control System	Activity Based Control
	Operational Control System	
		provides strategic cost
	information about process and	information about the
Purposo	information about process and business unit efficiency	underlying economies of the business
Purpose	business unit emclency	the business
	Timely, accurate and specific to	
Data	a workgroup	estimates are sufficient
	relevant information on costs of	
	people, machines, energy,	costs of resources across
How Cost is	which are used in operating	a value chain of providing
Defined	processes	a product
Questions	what was left from production?	how much does it cost to
addressed	How much of the material?	make a product?
		aggregates costs across
Scope	specific to a responsibility center	multiple centers
		Measure what it costs to
		conect a customer to
	measure actual expenses of a	internet including help
Example	specific process (e.g help desk)	desk