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

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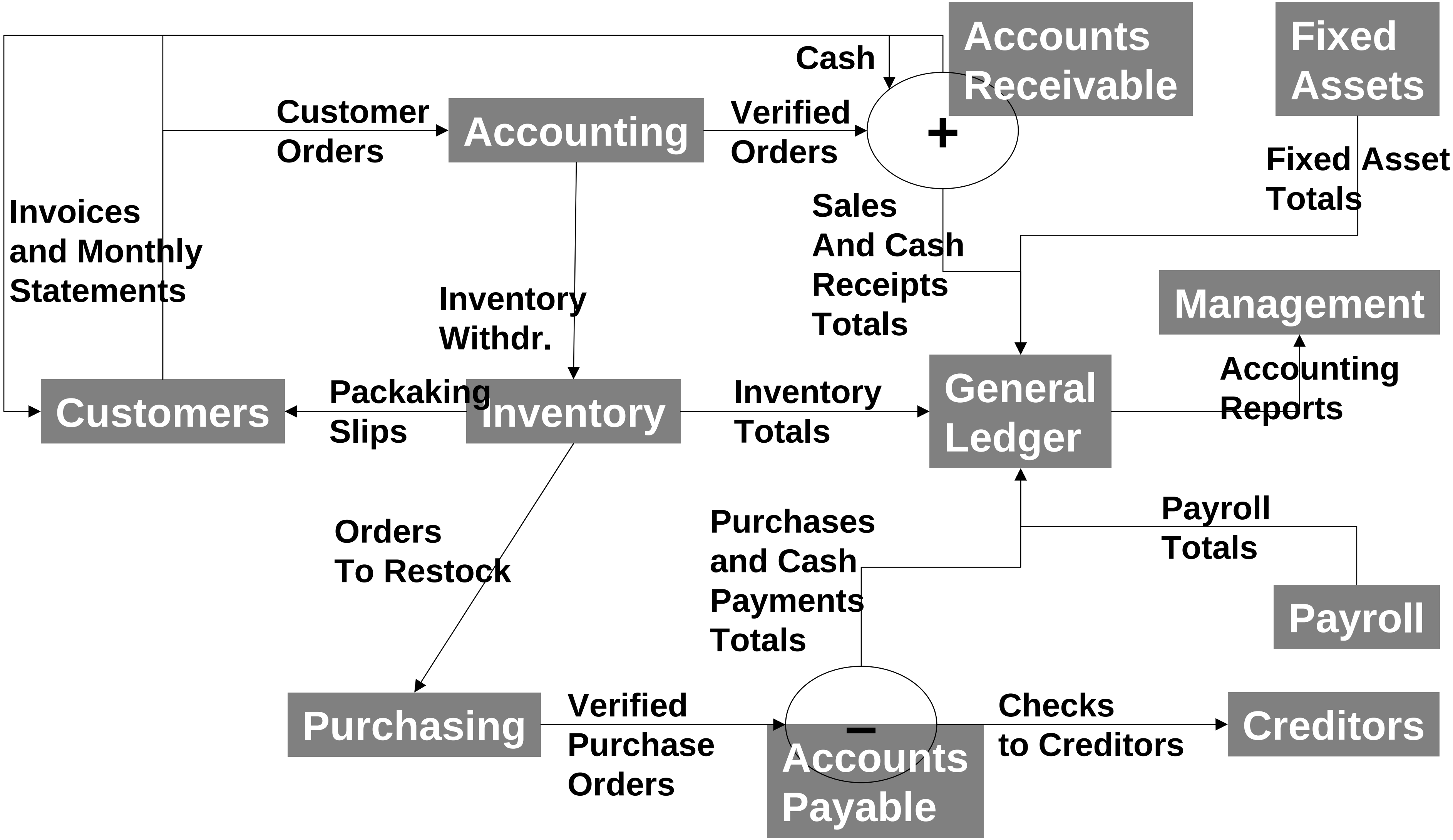
Accounts Receivable
Fixed Assets
Cash
Customer Orders
Accounting
Verified Orders
+
Fixed Asset Totals
Invoices and Monthly Statements
Sales And Cash Receipts Totals
Management
Inventory Withdr.
Accounting Reports
General Ledger
Customers
Packaking Slips
Inventory
Inventory Totals
Payroll Totals
Orders To Restock
Purchases and Cash Payments Totals
Payroll
Purchasing
Verified Purchase Orders
–
Accounts Payable
Checks to Creditors
Creditors

Accounting

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

Maintained in bookkeeping

Single entry accounting system (small businesses, simple)

Double entry accounting system (usual)

Principles

Owner’s equity = Assests – Liability

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

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 pairs with a bank transfer
Your ”usual goods” account on general ledger is debited
T account is used to record the entries

General Ledger

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

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
Comparing 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

$NPV = sum_{t=0-N}(C_t/(1+i)^t) - C0$
t … is a time of cashflow
N … is a total time of the project
i … is a discount rate
C … cashflow at the point in time (includes expenses and revenues)
C0 … initial costs/credits

If the value is positive, company shoud invest

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

Example

- T=0 -\$100,000 / $(1+ 0,10)^0$ = -\$100,000 PV.
- T=1 (\$30,000 - \$5,000) / $(1 + 0,10)^1$ = \$22,727 PV.
- T=2 (\$30,000 - \$5,000) / 1.10^2 = \$20,661 PV.
- T=3 (\$30,000 - \$5,000) / 1.10^3 = \$18,783 PV.
- T=4 (\$30,000 - \$5,000) / 1.10^4 = \$17,075 PV.
- T=5 (\$30,000 - \$5,000) / 1.10^5 = \$15,523 PV.
- T=6 (\$30,000 - \$5,000) / 1.10^6 = \$14,112 PV.

=> 8881

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

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