ISCTE-IUL Business School

2nd year Management

Management Accounting II

Planning, control and performance

The budgeting process 2

Learning Objectives

1. Describe the budget development process, behavioural implications of budgeting, advantages of budgeting, and the master budget.
2. Explain how managers develop a sales forecast and demonstrate the preparation of a sales budget.

3. **Prepare a production budget and recognize how it relates to the material purchases, direct labour, and manufacturing overhead budgets.**
4. **Prepare budgets for material purchases, direct labor, manufacturing overhead, and selling and administrative expenses.**

5. **Explain the importance of budgeting for cash and prepare a cash receipts budget, a cash disbursements budget, and a summary cash budget.**
6. **Prepare budgeted income (P&L) statements and balance sheets and evaluate the importance of budgeted financial statements for decision making.**

7. Contrast budgeting in a manufacturing company with budgeting in a merchandising company or a service company.

LOI

Introduction

Why do we implement a planning system?

- Analyse and manage the change
- Identify coherent development scenarios
- Promote the communication in the company
- Improve the company’s profits
- Guide managers’ decision-making

What is a plan?

A process of definition of objectives,

resources and action plans for the future

Conditions for Planning Success

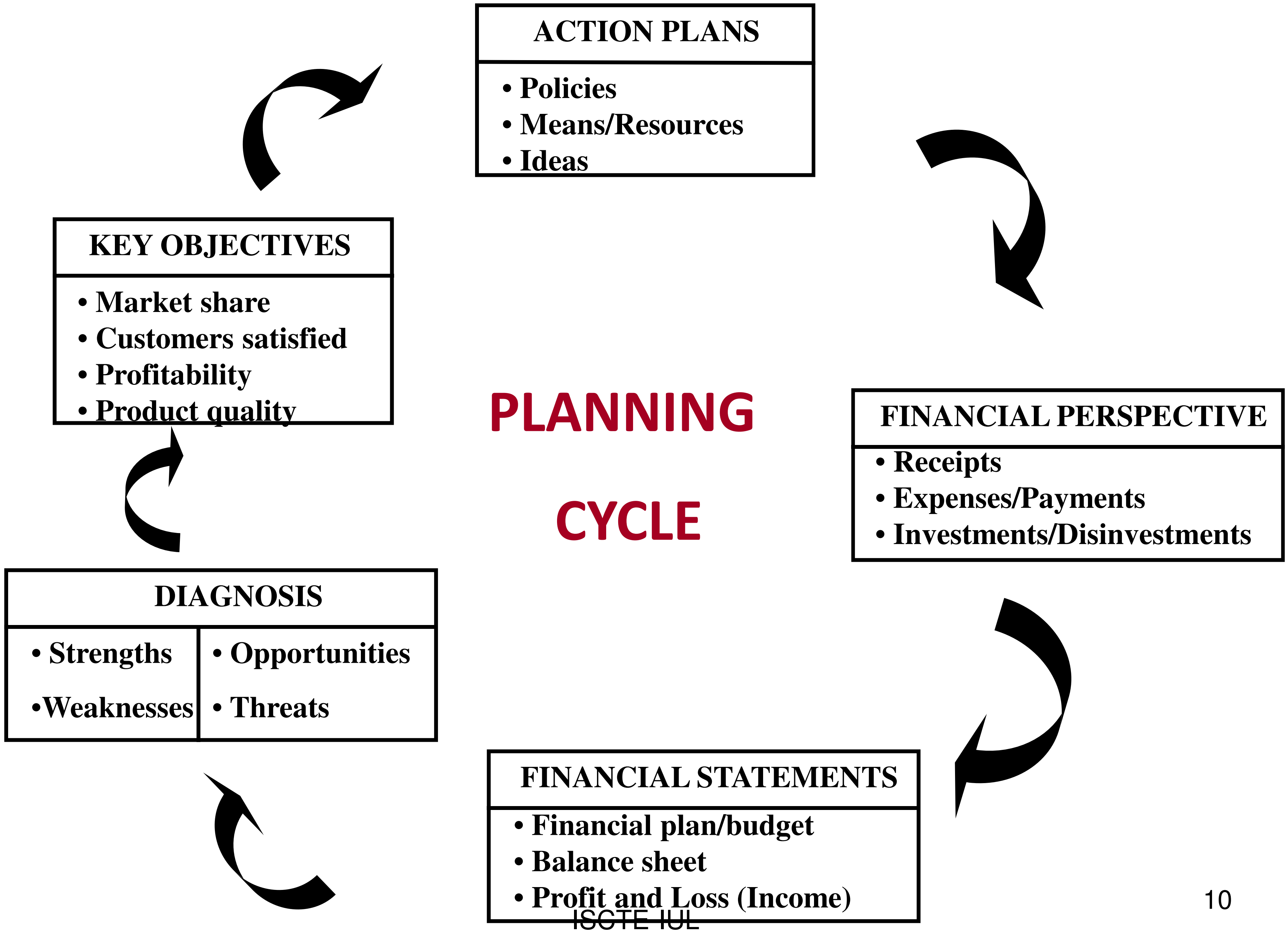
- Will and determination of the Executive Committee
- Maturity of those who are responsible for management
- The company's dimension
- The activities nature
- Existence of an incentives plan

Planning Process

Planning in the long term: The Strategic Plan

Planning in the medium term: The Operational Plans

Planning in the short term: The Budgets


ACTION PLANS
• Policies
• Means/Resources
• Ideas
FINANCIAL PERSPECTIVE
• Receipts
• Expenses/Payments
• Investments/Disinvestments
FINANCIAL STATEMENTS
• Financial plan/budget
• Balance sheet
• Profit and Loss (Income)
DIAGNOSIS
• Strengths
•Weaknesses
• Opportunities
• Threats
KEY OBJECTIVES
• Market share
• Customers satisfied
• Profitability
• Product quality
PLANNING
CYCLE

Budget Role

- Connection between short, medium and long terms
- Decentralization
- Motivation
- Coordination
- Performance evaluation

Budget

A budget corresponds to the visualization of the objectives and action plans in the short term.

It must:

- Quantify
- Hold responsible
- Rationalise

Difficulties of the budgeting process

A) Substantive

- Absence of objectives
- Absence of action plans
- Too much detail
- Budget ‘buffers’
- Indiscriminate cuts

Difficulties of the budgeting process

B) Procedural

- Calendar
- Templates
- Processes, proceedings and rules

Introduction

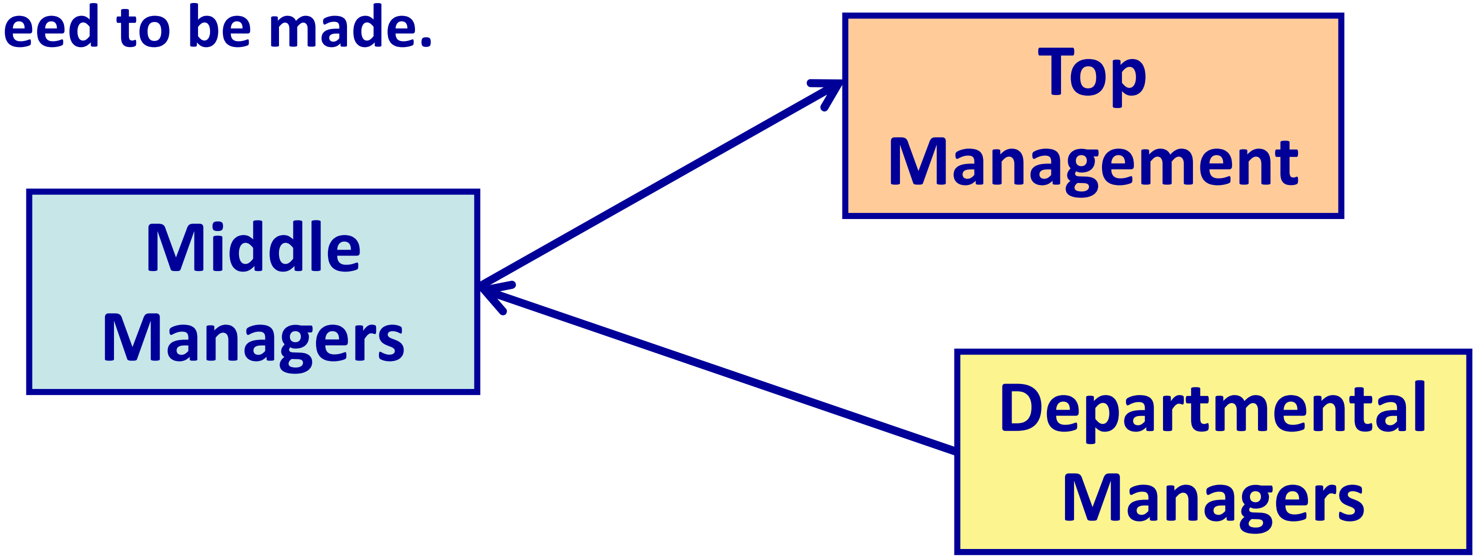
- ***Budgets*** **are plans dealing with the acquisition and use of resources over a specified period.**
- **Budgets can range from relatively simple personal budgets and time budgets to sophisticated budgets for multinational companies that use thousands of different materials and manufacture hundreds of products.**

The Budget Development Process

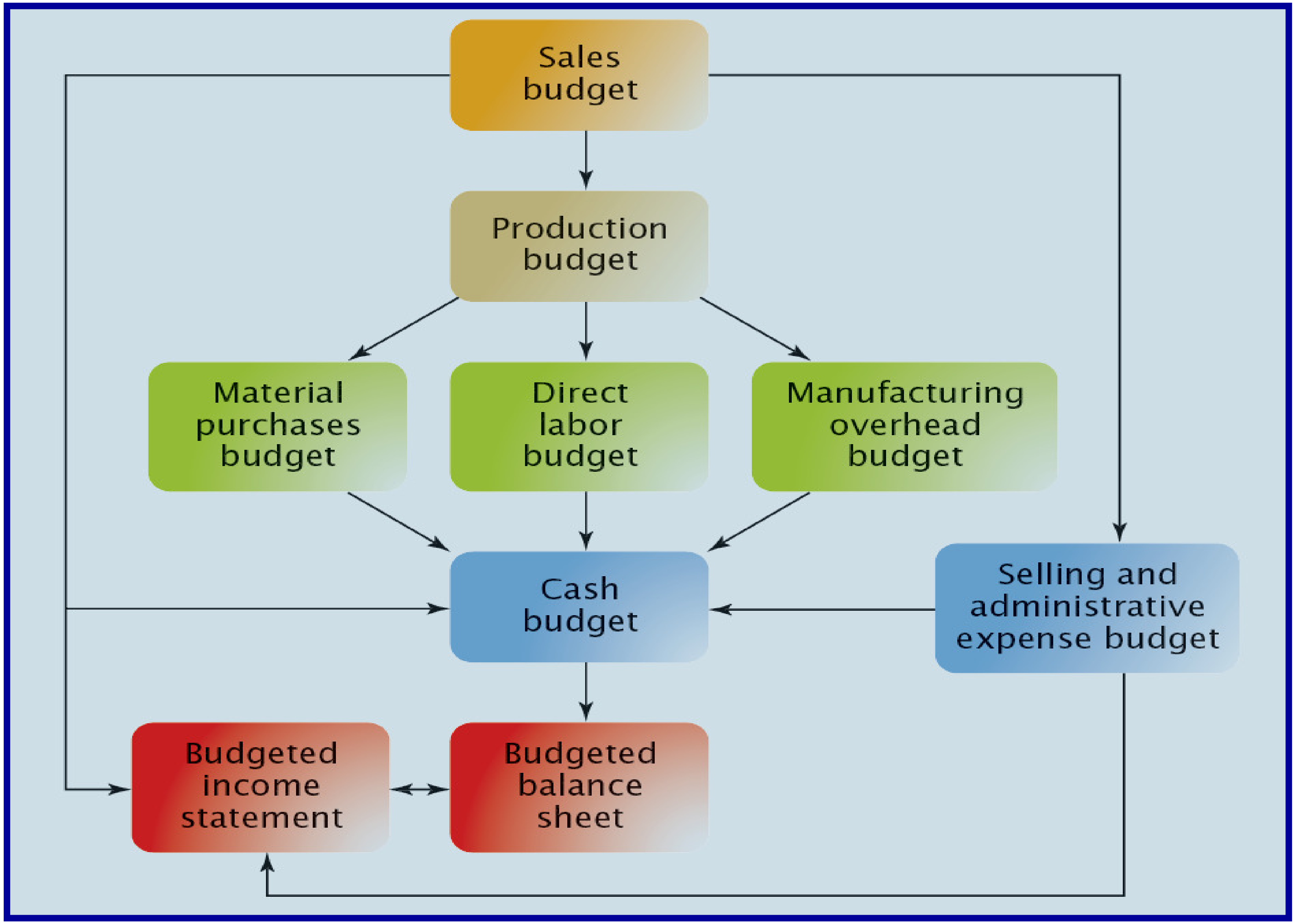
- Budgeting is much more than a number crunching exercise. It is a management task that requires a great deal of planning and input from a broad range of managers in a company.
- While it is time-consuming, the use of spreadsheets, such as Microsoft Excel, makes the process much simpler.

Participatory Budgeting

Participatory budgeting **starts with departmental managers and then flows up through middle management and, ultimately, to top management. At each level, budget estimates are prepared and then submitted to the next level of management, which has responsibility for reviewing the budget and negotiating any changes that need to be made.**



Master Budget - Manufacturing Company



LO2

The Sales Budget

Sales forecast

- Using last year's level of sales, sales forecasts help in the preparation of production budgets (for manufacturers) and purchases budgets (for merchandisers).

Sales budget

- The sales budget is a key component used in overall strategic planning and is also used in planning the cash needs of businesses.

Sales Forecasting Factors

- Historical data, such as sales trends
- General economic trends or factors
- Regional and local factors expected to affect sales
- Anticipated price changes for purchasing and sales costs
- Anticipated marketing or advertising plans
- The impact of new products or changes in the product mix
- Other factors, such as political and legal events

Unique Companies = Unique Factors

SIZE

The size and complexity of the organization will often determine the factors and complexity of the sales forecasting system.

Regardless of whether a company uses a complex model or one of intuition, all remaining budgets and related decisions are dependent on this estimate of sales.

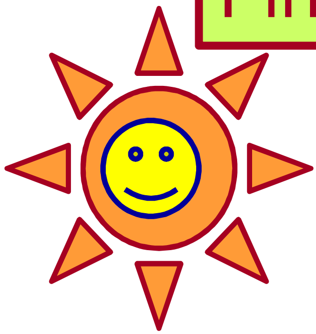
COMPLEXITY

Operating Budgets

Operating budgets are used by companies to plan for the short term—usually one year or less.

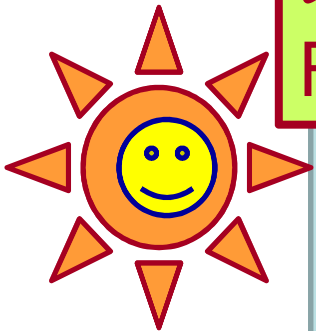
Let’s look at an example of Tina’s Fine Juices.

Tina’s
Fine Juices



Tina’s produces bottled orange juice from fruit concentrate. The process uses 5 machines. Each machine is run by one employee and produces 600 bottles per hour.

Operating Budgets



Tina's
Fine Juices

SALES FORECAST	
January	250,000 bottles
February	325,000 bottles
March	450,000 bottles

If Tina's sells the juice for €1.05 per bottle, in cartons of 50 bottles, the sales budget is as follows:

Sales Budget

	January	February	March	1st Quarter
Budgeted sales in bottles	250,000	325,000	450,000	1,025,000
Selling price per bottle	$ 1.05	$ 1.05	$ 1.05	$ 1.05
Total budgeted sales	$262,500	$341,250	$472,500	$1,076,250

LO3

Production Budget

- For manufacturing companies, the next step in the budgeting process is to complete the production budget.

Once the sales volume has been projected, companies must forecast how many units of product to produce in order to meet the sales projections.

Adjusting for Inventory

Since traditional manufacturers hold an established minimum level of finished-goods inventory (as well as direct materials inventory) to serve as buffers, the sales forecast must be adjusted to account for any expected increase or decrease in finished goods inventory.

Tina's Fine Juices tries to maintain at least 10 percent of the next month's sales forecast in inventory at the end of each month.

Production Budget

	January	February	March	1st Quarter
Budgeted Sales	250,000	325,000	450,000	1,025,000
Desired Clos. Finish Goods*	32,500	45,000	50,000	50,000
Total Budget Production	282,500	370,000	500,000	1,075,000
Opening Finished Goods**	25,000	32,500	45,000	25,000
Required Production	257,500	337,500	455,000	1,050,000
*For March: April sales are projected to be 500,000 units(or 500,000 x 10% = 50,000) **January opening inventory given as 25,000.				

Production Budget

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**January opening inventory given as 25,000.

Notice that the previous month's closing finished goods equals 10% of budgeted sales and that closing finished goods becomes opening finished goods for the following month.

Material Purchases Budget

Tina's Fine Juices Material Purchases Budget – Orange Concentrate				
	January	February	March	1st Quarter
Required Production in Bottles	257,500	337,500	455,000	1,050,000
Orange Conc. needed (l.)*	8,047	10,547	14,219	32,813
Add Desired Closing Inv. (l.) #	2,109	2,844	3,063	3,063
Total budgeted needs	10,156	13,391	17,282	35,876
Less Opening Inv. (l.)	1,609	2,109	2,844	1,609
Orange Conc. to purchase	8,547	11,282	14,438	34,267
Cost per litre	€4.80	€4.80	€4.80	€4.80
Cost of Orange Conc. To purchase	€41,026	€54,154	€69,302	€164,482

* Required production divided by 32 bottles per litre

\# 20% of next month's material needs

Direct Labour Budget

The direct labour budget starts with the production budget and is prepared by multiplying the units to be produced by the number of direct labour hours required to produce each unit.

	January	February	March	1st Quarter
Required production (From Production Budget)	257,500	337,500	455,000	1,050,000
Direct labour hrs/bottle	X 1/600	X 1/600	X 1/600	X 1/600
Total DLH for production	429.17	562.50	758.33	1,750
Direct Labour Cost/hr.	X €15.00	X €15.00	X €15.00	X €15.00
Total Direct Labour Cost	€6,438	€8,437	€11,375	€26,250

Manufacturing Overhead Budget

Tina's Fine Juices *Manufacturing Overhead Budget*				
	January	February	March	1^{st} Quarter
Budgeted machine hours (same as labour hours)	429.17	562.50	758.33	1,750
Variable overhead rate	€54.75	€54.75	€54.75	€54.75
Variable man. overhead	€23,497	€30,797	€41,519	€95,813
Fixed man. overhead	€123,333	€123,333	€123,333	€369,999
Total Man. Overhead *	€146,830	€154,130	€164,852	€465,812
* includes €103,333 noncash depreciation each month				

Selling and Administrative Expense Budget

Tina's Fine Juices *Selling and Administrative Expense Budget(€)*				
	January	February	March	1st Quarter
Variable Selling & Adm. Exp.				
Commissions	26,250	34,125	47,250	107,625
Shipping	10,500	13,650	18,900	43,050
Supplies	2,100	2,720	3,780	8,600
Fixed Selling & Adm. Exp.				
Rent	20,000	20,000	20,000	60,000
Insurance	5,000	5,000	5,000	15,000
Salaries	15,000	15,000	15,000	45,000
Advertising	8,000	8,000	8,000	24,000
Total Selling & Adm. Exp.	86,850	98,495	117,930	303,275

LO5

Cash Budgets

Many managers consider managing cash flow to be the single most important consideration in running a successful business.

Cash budgeting **forces managers to focus on cash flow and to plan for the purchase of materials, the payment of creditors, and the payment of salaries.**

Summary Cash Budget

	January	February	March	1st Quarter
Beginning cash balance	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Add receipts:				
Cash receipts from sales	$ 248,750	$ 300,000	$ 395,063	$ 943,813
Total cash available	$ 298,750	$ 350,000	$ 445,063	$ 993,813
Less disbursements:				
Manufacturing costs	$ (113,656)	$ (134,899)	$ (170,411)	$ (418,967)
Selling and administrative costs	$ (86,850)	$ (98,495)	$ (117,930)	$ (303,275)
Income taxes			$ (929)	$ (929)
Equipment purchases (given)		$ (75,000)		$ (75,000)
Payment of dividends (given)	$ (50,000)			$ (50,000)
Interest on long-term debt[1]			$ (30,000)	$ (30,000)
Total cash disbursements	$ (250,506)	$ (308,394)	$ (319,270)	$ (878,171)
Cash Balance before borrowing/repayment	$ 48,244	$ 41,606	$ 125,793	$ 115,642
Borrowing from line of credit[2]	$ 1,756	$ 8,394		$ 10,151
Repayments of line of credit	$ -	$ -	$ (10,151)	$ (10,151)
Interest on line of credit[3]	$ -	$ -	$ (184)	$ (184)
Ending cash balance	$ 50,000	$ 50,000	$ 115,458	$ 115,458

[1] Long term debt is $1,500,000 (Exhibit 9-19). Interest is paid quarterly at an annual rate of 8%. $1,500,000 x 8% x 3/12 = $30,000.

[2] The minimum cash balance at the end of each month is $50,000.

[3] The line of credit with interest is repaid at the end of March. The interest is calculated as $1,756 x 10% x 3/12 + $8,394 x 10% x 2/12.

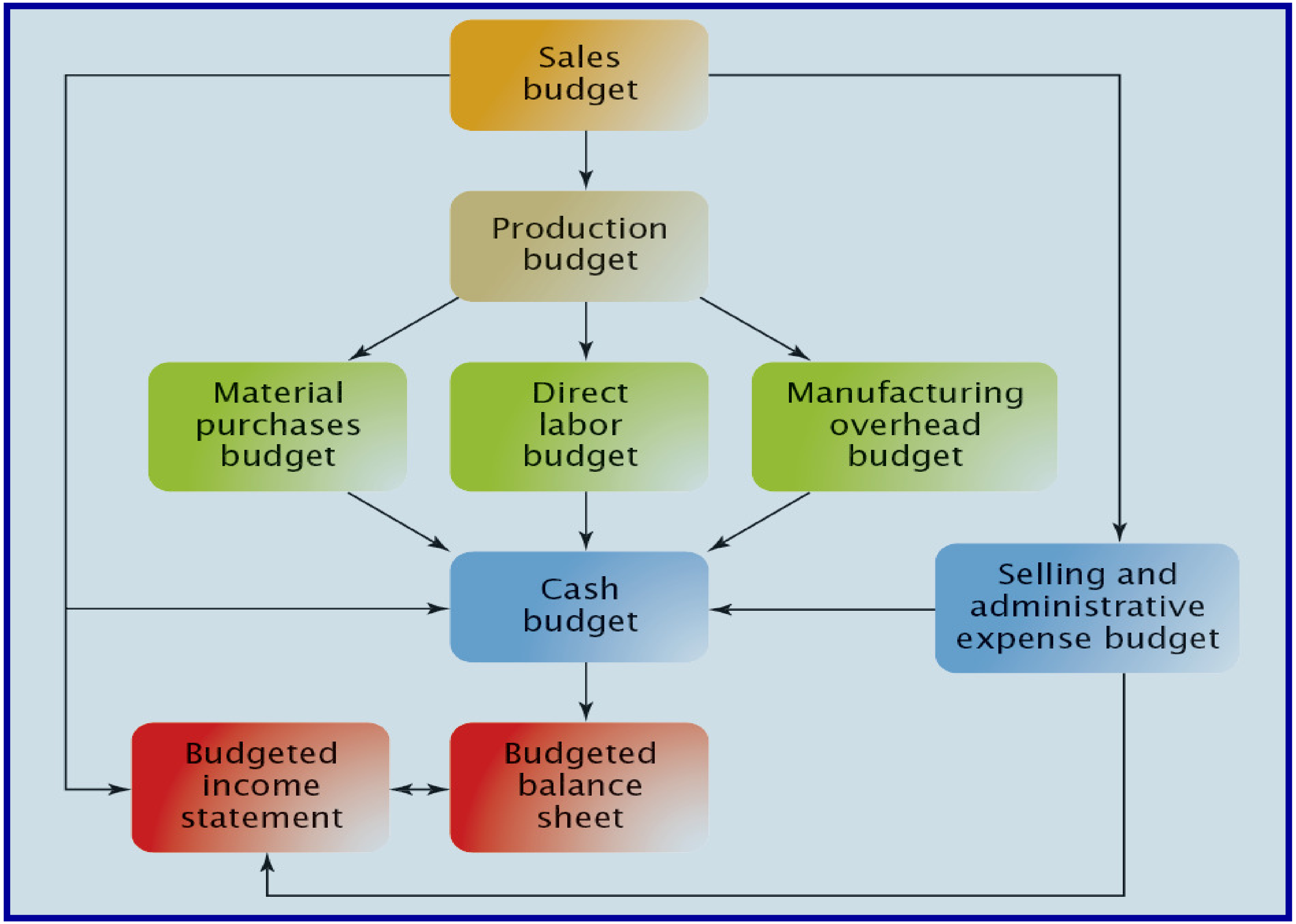
LO6

Budgeted Financial Statements

Companies may desire to prepare budgeted financial statements for either internal planning purposes or to provide information to external users.

The budgeted financial statements are often called *pro forma financial statements*.

Master Budget - Manufacturing Company



LO7 Budgets for Merchandising and Service Companies

The budgeting process for merchandising and service companies is similar to that of manufacturing companies, with a few important differences.

The key areas of budgeting for *service companies* is the labour budget and detailed budget of expected overhead expenditures (like rent, utilities, insurance, etc.).

Merchandising Companies

- While merchandising companies will prepare a sales budget, they will not prepare budgets for production, direct material purchases, direct labour, or manufacturing overhead.

- They will prepare a purchases budget (for goods to be sold to customers) based on the projections in the sales budget.

- In addition, many merchandising companies hold some level of merchandise inventory and will need to estimate desired inventory balances and adjust sales projections accordingly.

- The preparation of selling and administrative expense budgets, cash budgets, and budgeted financial statements in merchandising companies is similar to that in manufacturing companies.

Master Budget - Merchandising Company