

# Lecture 8

## **The Financial Plan**

An abstract graphic on the right side of the slide. It features a dark rectangular area containing a grid of small white dots. Overlaid on this are several larger, semi-transparent circles of varying shades of gray and white. Some circles contain smaller white dots, creating a layered, digital effect.

# The Nature of Accounting

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- Why Accounting ? → provide **financial info that is useful in making economic decision.**
- It is a service activity
- Its function is to provide **quantitative information**, primarily financial in nature, about economic entities
- Language of business.
- Important to have a **proper record-keeping system** that states all financial transactions related to the business → gauge how your business is doing.
- Everyone is affected by accounting info.

# Financial Reporting Process

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- Is to capture financial activities and quantify economic values.
- **Enable decision making** process based financial information captured using relevant accounting policies
- The process:
  - 1. Identify : Economic events, source documents, Transactions.
  - 2. Measure :Express in money terms. \$
  - 3. Record : Classify and summarise. Accounting system
  - 4. Communicate: Financial reports for users of info.

# Users of Accounting Info

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- 1. Internal decision makers :
  - Special purpose financial reports → directly **affects internal operations of the company.**
  - E.g. company's owner, senior mgt team, head of divisions etc
  - Known as **Management Accounting**
  
- 2. External decision makers :
  - General purpose financial reports → affects their relationships with the company → **forecast how the company can be expected to perform in the future.**
  - Known as **Financial Accounting**

# Business Entities

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- 1. **Sole Trader or Single proprietorship:**
  - One owner.
  - Not a separate legal entity.
  - May offer investors debt or equity
  
- 2. **Partnership :**
  - As sole trader but more than one owner.
  - May offer investors debt or equity
  
- 3. **Company or Corporation :**
  - Owned by shareholders.
  - Separate legal entities.
  - Legal “person” composed of equity investors in company.
  - May sell stock (equity) or bonds (debt)

# Business Entities

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- 4. **Nonprofit Corporation/501 (c) (3)**
  - Financed by donations; may not sell debt or equity
  - Tax exempt
  
- 5. **Cooperative**
  - Owned by customer/members
  - All customer/members own shares of company but each has one vote
  - E.g. Condo Club House

# Business Entities

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- Sole Proprietorship

- **Advantages**

- Easy and inexpensive
    - Owner maintain complete control
    - Owner retain all profits
    - Business losses can be deducted against other sources of income
    - Easy to dissolve
    - No double taxation (being taxed on the net income and, when the same income is distributed to shareholders in the forms of dividends, is taxed again on shareholders' personal income tax returns.

- **Disadvantages**

- Unlimited of owner' s liabilities
    - Business relies on single owner skills and abilities
    - Raising capital can be difficult
    - Liquidity of owner' s investment is low

# Business Entities

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- Partnership

- **Advantages**

- Easy and inexpensive as compare to corporation
    - The business skills and abilities of more than one individual is available
    - Easier to raise fund ( > 1 owner)
    - Business losses can be deducted against the partners' other sources of income
    - No double taxation

- **Disadvantages**

- Liability on the part of EACH partner is unlimited
    - Business relies on the skills and abilities of fixed number of partners
    - Raising capital can be difficult
    - Business ends at the death or withdrawal of one partner unless otherwise stated in the partnership agreement
    - Decision making process may become difficult. Disagreement can occur
    - Liquidity of owner's investment is low



## Malaysian Accounting Standards Board (MASB)

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- MASB → statutory body established under the Financial Reporting Act 1997, as an independent authority to develop and issue accounting and financial reporting standards in Malaysia.
- Objectives → to continually improve the financial reporting quality and to contribute to the international and development of financing reporting.

## 6 “Cs” of Bank Borrowing

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- **Collateral**—does entrepreneur own property, cars, etc. that bank can take if loan is not paid?
- **Cash Flow**—do projected cash flow statements show business will be able to make loan payments?
- **Credit History**—does entrepreneur have good credit?
- **Capacity**—what are business's expense? Can it afford to pay the loan?
- **Commitment**—how much of own money has entrepreneur invested?
- **Conditions**—general economic climate

## Establish Good Credit

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- “No credit” is not “good credit.”
- Prove you can make regular payments on a debt. Open a charge account, charge some purchases and pay them off on time.
- Check your credit reports every 6 months to make sure they are accurate.

# **Financial Reports / Documents**

The background of the slide features a complex, abstract pattern. It consists of a grid of small, light-colored dots arranged in a regular fashion. Overlaid on this grid are several larger, semi-transparent circles of varying sizes. Some of these circles contain smaller, solid-colored dots, creating a layered, digital effect. The overall aesthetic is modern and technical, typical of corporate or financial presentations.

## 3 Most Important Financial Documents

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### ■ 1. Profit and Loss Statement

- Financial performance
- A snapshot view of the assets and liabilities of the company **at a particular point in time.**
- Gross Profit, Profit Before and After Tax

### ■ 2. Cash Flow Statement

- Sources and uses of cash
- Captures the financing activities and application of funds during a period of time.

### ■ 3. Balance Sheet

- Financial position
- Captures the activities of the company during **a period of time.**
- Assets vs Liabilities

# 1.0 Profit and Loss Statement

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- Sometimes known as the Income Statement
- P & L Statement is the most important document within the financials → where costs are balanced off with revenue → portrays overall performance of company.
- For longer-term projects, the financials should outline a minimum of 5 to 7 years of performance and forecasts. Short-term projects are usually ideal at 3 years.
- A **month-by-month breakdown** should be provided for Year 1.
- Reviewing P&L is most useful → do it for more than just one period together. Also used to determine income tax liability.
- **Sample P&L**

# 1.0 Profit and Loss Statement Components

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- **Revenue**

- Money received as income from operating the business
- E.g. selling goods or services

- **Expenses**

- **Earnings before interest and tax (EBIT)**

- **Interest**

- **Taxes**

## 2.0 Cash Flow Statement

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- Cash Flow is the second most important financial document → outlines **cash flow situation** during the course of the project → outlines **financial health** of the company.
- Outlines how much capital is available at any given time and whether it is enough to tide over operational issues → if not enough, may be disastrous for business.
- It is very important to know how much cash a company has → ideally has 2 to 4 months' worth of operational cash in balance. (Microsoft often maintain 12 months of cash flow in balance).
- **Sample Cash Flow**



## 2.0 Cash Flow Statement - Objectives

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- To assess the enterprise's ability to generate positive net cash flows in the future
- To assess its ability to meet its obligations to service loans, pay dividends etc
- To assess the reasons for difference between reported profit and related cash flows
- To assess the effect on its finances of major transactions in the year

## 3.0 Balance Sheet

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- Is a **snapshot in time** of everything a company owns (assets) and everything it owes (liability and equity) at a particular moment.
  
- Useful for :
  - Assessing and evaluating the **financial strength and capabilities** of the business
  - Basis for computing rates of return and evaluating capital structure of the company
  - Assessment of enterprise risk and future cash flow
  - Analysis company liquidity, solvency and financial flexibility

## 3.0 Balance Sheet : The Accounting Equation

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$$A = L + OE$$

A = Assets (Debit nature)

L = Liabilities (Credit nature)

OE = Owner's Equity (Credit nature)

- Debit – left-hand side
- Credit – right-hand side
- Sample Balance Sheet

## 3.0 Balance Sheet : Components

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### ■ **Assets**

#### – **Current assets**

- assets that can be easily converted into cash within one calendar year
- E.g. petty cash, bank's account, account receivable, inventory, prepaid expenses

#### – **Fixed (Capital) assets**

- Assets that provide companies with operating capability
- E.g. Machinery, computer equipment, furniture & fixture, land & building

#### – **Others assets**

- Assets that cannot be defined as either current or capital and intangible assets
- E.g. Incorporation cost, goodwill

## 3.0 Balance Sheet : Components

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- **Liabilities**

- **Current liabilities**

- Liabilities expected to be paid in the next 12 months
    - E.g. Account payable, accrued liabilities, income tax payable

- **Long-term liabilities**

- Liabilities that will not be paid in the next 12 months
    - E.g. Mortgage payable, installments

## 3.0 Balance Sheet : Components

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- **Owner's equity**

- **Capital Stock**

- Represents shareholders' ownership of the business

- **Capital Contributions**

- Represents any amount that shareholders invest in the business on semi-permanent basis

- **Retained earnings**

- Represent the accumulated amount of income the corporation still possesses after it has paid all taxes and dividends

- **Dividends**

- Payments to the shareholders to compensate for their ownership in the corporation

## Equity Funding vs Debt Financing

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### ■ Equity Funding

- Equity funding means exchanging partial ownership in a firm, usually in the form of stock, for funding
- The most common sources of equity funding include angel investors, private placement, venture capital, and initial public offerings.

### ■ Debt Financing

- Debt financing is getting a loan.
- The most common sources of debt financing are commercial banks and the Small Business Administration (Guaranteed Loan Program).

# Cash Flow Management

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- Is the process of monitoring, analyzing and adjusting business' cash flows
- It is all about cash flow. Cash flow is the **movement of money** into (money received from customer, lenders & investors) and out (repayments, salaries, suppliers' payment, creditors payments etc) of your business
- If "\$ in" > "\$ out" => surplus
- If "\$ in" < "\$ out" => deficit



# Cash Flow Management

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- **A healthy cash flow is an essential part of any successful business**
- **E.g. if a business fails to satisfy a customer's needs and lost that customer's business, the business can always work harder to please the very next customer. However, if the business fails to have enough cash to pay suppliers, creditors or even its employees, there would not be much business to do in a very near future, would it?**

# Capital Budgeting

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- S/W Entrepreneur may be required to make several investment decisions
- Some decisions will be felt primarily within a year
- On other investments, the returns are expected to extend beyond one year which referred to as capital investments or capital expenditures
- Objective is to maximize the value of the firm
- Capital Budgeting – a technique the entrepreneur can use to help plan for capital expenditure
- The inflows, or returns as they are commonly called, are equal to net operating income before deduction of payments to the financing sources but after the deduction of applicable taxes and with depreciation added back
- Expected Returns =  $X ( 1 - T ) + \text{Depreciation}$ 
  - $X$  = Net Operating Income
  - $T$  = Appropriate Tax Rate

# Payback Method

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- It is the length of time required to “pay back” the original investment
- Any project that requires a longer period will be rejected, and projects that fall within the time frame will be accepted
- Issues - Ignore cash flows beyond the payback period which might lead to wrong decision made
- Why entrepreneurial firms continue to use Payback Method:
  - It is very simple to use in comparison to other method
  - Projects with a faster payback period normally have more favorable short-term effects on earnings
  - If a firm is short on cash, it may prefer to use the payback method because it provides a faster return of funds

# Net Present Value

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- Is a technique that helps to minimize some of the shortcomings of the payback method by recognizing the future cash flows beyond the payback period
- It is to discount the future cash flows, and the discounted cash value is determined by present value of the cash flow.
- Project with the highest net present value

## Example

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- John has two exclusive projects, both of which require an outlay of \$1,000.
- John can afford only one of the projects
- First, he needs to take is to determine the expected return on each project :
  - Expected Life – 5 years
  - Applicable tax rate 40%
  - Depreciation = Cost/Life
  - Anticipated change in net income for Project-A in Year 1,2,3,4,5 is \$500, \$333, \$167, -\$300, -\$317
  - Anticipated change in net income for Project-B in Year 1,2,3,4,5 is -\$167, 0, \$167, \$333, \$500
- Secondly, John needs to buy a computer cost \$1,000 for the business but not sure which of two proposal to accept. Using Payback Method and help John to make decision.
- Thirdly, John would like to seek more information before making final decision. He would like to use NPV method. His cost of capital is 11.5 percent.

## Expected Returns

DEPRECIATION = Cost/L		200			PROJECT A
T=	40%				
					Expected Return
Year	X	(1-T)	X(1-T)	DEP.	X(1-T) + DEP
1	500				
2	333				
3	167				
4	-300				
5	-317				

DEPRECIATION = Cost/L		200			PROJECT B
T=	40%				
					Expected Return
Year	X	(1-T)	X(1-T)	DEP.	X(1-T) + DEP
1	-167				
2	0				
3	167				
4	333				
5	500				

# Payback Method

	<b>Cumulative Expected Return</b>		<b>Cumulative Expected Return</b>		
<b>PROJECT A</b>			<b>PROJECT B</b>		
500			100		
400			200		
300			300		
20			400		
10			500		

# Net Present Value

Project A			
<b>Cost of Capital</b>		11.50%	
Year	Cash Flow	Discount factor	Present Value
1	500		
2	400		
3	300		
4	20		
5	10		
			0.00
<b>Less : Initial outlay</b>		-	
<b>NPV</b>			0.00

Project B			
<b>Cost of Capital</b>		11.50%	
Year	Cash Flow	Discount factor	Present Value
1	100		
2	200		
3	300		
4	400		
5	500		
			0.00
<b>Less : Initial outlay</b>		-	
<b>NPV</b>			0.00

$$\text{Discount Factor} = 1/(1+r)^t$$



# Break-Even Analysis

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## Break-even point computation

- Assesses expected product profitability
- Determines how many units must be sold at a particular selling price
- Approaches used:

## Contribution margin

- Difference between selling price and variable cost per unit
- $FC = (SP - VC) S$  or  $0 = (SP - VC)S - FC$

SP = Unit Selling Price

VC = Variable cost per unit

S = Sales in units

FC = Fixed cost

## Graphic approach

- Deals with total revenue and total costs
- Enables visualization of cost structure

## Handling questionable costs

- Used with difficult-to-assign costs

# Break-Even Analysis

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## Handling questionable costs

- Used with difficult-to-assign costs
- Contribution margin and graphic approaches are adequate for situations in which costs can be broke down into fixed and variable components, some firms have expenses that are difficult to assign
- Example, are repairs and maintenance expenses fixed or variable expenses?
- The below technique calculate break-even points under alternative assumptions of fixed or variable costs to see if a product' s profitability is sensitive to cost behavior
- **Rules:**
  - If expected sales **exceed** the higher break-even point, then the product should be **profitable**, regardless of the other break-even point
  - If expected sales **do not exceed** the lower break-even point, then the product should be **unprofitable**

$$O = (SP - VC)S - FC - QC$$

$$O = [SP - VC - (QC/U)]S - FC$$

# Example

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- Peter has decided to use break-even analysis as a profit-planning tool for his company.
- From an analysis of the operating cost, Peter has determined that the variable cost per unit is RM9, fixed cost estimated to be RM1,200 per month. The anticipated selling price per unit is RM15
- He is unable to classify one cost as either variable or fixed. It is a RM200 repair and maintenance expense allocation. Next, the RM220 is appropriate for an activity level of 400 units.
- Sales are projected to be 400 units during the next budget period.

## Break-Even Point (Find S)

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### Assuming cost is fixed

$$0 = (SC - VC)S - FC - QC$$

### Assuming cost is variable

$$0 = [SC - VC - (QC/U)]S - FC$$