

# BACHELOR of ECONOMICS



**Thammasat University  
Faculty of Economics  
Bachelor of Economics (International Program)**

## AC201 Fundamental Accounting

Semester 2/2013

### Course Materials

**Topic:**

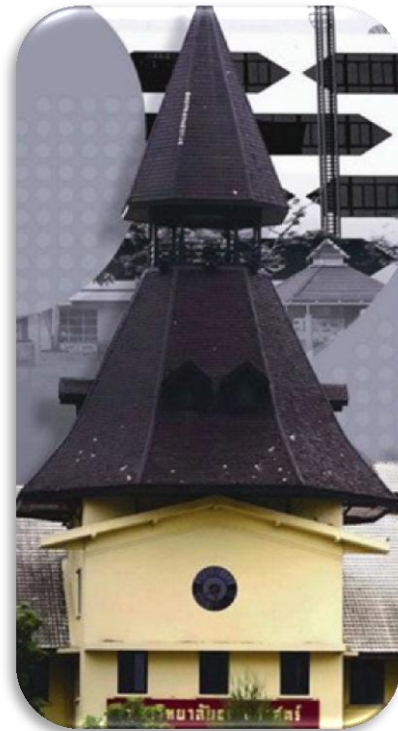
Chapter 08: Reporting and Interpreting  
Property, Plant, and Equipment,  
Natural Resources, and Intangibles

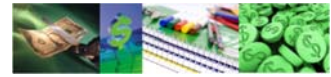
**Session:**

Session #13

**Instructor:**

Assistant Professor Dr. Orapan Yolrabil





## CHAPTER 8: REPORTING PROPERTY, PLANT, AND EQUIPMENT; NATURAL RESOURCES; AND INTANGIBLES

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มาตรฐานการบัญชี ฉบับที่ 16 (ปรับปรุง 2552)

เรื่อง

ที่ดิน อาคารและอุปกรณ์

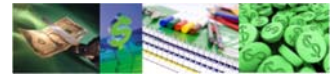
คำแถลงการณ์

มาตรฐานการบัญชีฉบับนี้ได้ปรับปรุงให้เป็นไปตามเกณฑ์ที่กำหนดขึ้นโดยมาตรฐานการบัญชีระหว่างประเทศ ฉบับที่ 16 เรื่อง ที่ดิน อาคารและอุปกรณ์ ซึ่งเป็นการแก้ไขของคณะกรรมการมาตรฐานการบัญชีระหว่างประเทศที่สิ้นสุดในวันที่ 31 ธันวาคม 2551 (IAS 16: Property, Plant and Equipment (Bound volume 2009))

**TAS16 Property, Plant, and Equipment**

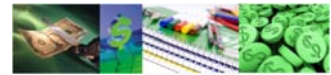
Federation of Accounting Professions

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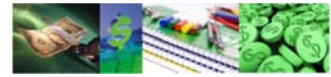
## Definition

- ◆ **The following terms are used in this Standard with the meanings specified:**
  - ◆ **Carrying amount** is the amount at which an asset is recognized after deducting any accumulated depreciation and accumulated impairment losses.
  - ◆ **Cost** is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction.
  - ◆ **Depreciable amount** is the cost of an asset, or other amount substituted for cost, less its residual value.
  - ◆ **Depreciation** is the systematic allocation of the depreciable amount of an asset over its useful life.
  - ◆ **Fair value** is the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction.
  - ◆ An **impairment loss** is the amount by which the carrying amount of an asset exceeds its recoverable amount.



## Definition

- ◆ **Property, plant and equipment** are tangible items that:
  - ◆ (a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
  - ◆ (b) are expected to be used during more than one period.
- ◆ **Recoverable amount** is the higher of an asset's fair value less costs to sell and its value in use.
- ◆ The **residual value** of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.
- ◆ **Useful life** is:
  - ◆ (a) the period over which an asset is expected to be available for use by an entity; or
  - ◆ (b) the number of production or similar units expected to be obtained from the asset by an entity.



## Recognition

### ◆ Recognition

- ◆ Items of property, plant, and equipment should be recognized as assets when it is probable that: [TAS 16.7]
  - ◆ it is probable that the future economic benefits associated with the asset will flow to the entity, and
  - ◆ the cost of the asset can be measured reliably.
- ◆ This recognition principle is applied to all property, plant, and equipment costs at the time they are incurred. These costs include costs incurred initially to acquire or construct an item of property, plant and equipment and costs incurred subsequently to add to, replace part of, or service it.
- ◆ TAS 16 does not prescribe the unit of measure for recognition – what constitutes an item of property, plant, and equipment. [TAS 16.9] Note, however, that if the cost model is used (see below) each part of an item of property, plant, and equipment with a cost that is significant in relation to the total cost of the item must be depreciated separately. [TAS 16.43]

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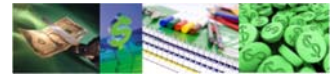
## Initial Measurement

### ◆ Initial Measurement

- ◆ An item of property, plant and equipment should initially be recorded at cost. [TAS 16.15]
  - ◆ Cost includes all costs necessary to bring the asset to working condition for its intended use.
  - ◆ This would include not only its original purchase price but also costs of site preparation, delivery and handling, installation, related professional fees for architects and engineers, and the estimated cost of dismantling and removing the asset and restoring the site. [TAS 16.16-17]



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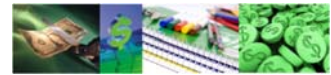
## Measurement Subsequent to Initial Recognition

### ◆ *Measurement Subsequent to Initial Recognition*

- ◆ TAS 16 permits two accounting models:
  - ◆ Cost Model. The asset is carried at cost less accumulated depreciation and impairment. [TAS 16.30]
  - ◆ Revaluation Model. The asset is carried at a revalued amount, being its fair value at the date of revaluation less subsequent depreciation and impairment, provided that fair value can be measured reliably. [TAS 16.31]



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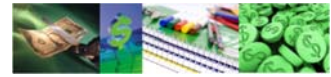


## Depreciation

### ◆ **Depreciation (Cost and Revaluation Models)**

- ◆ For all depreciable assets:
  - ◆ The depreciable amount (cost less residual value) should be allocated on a systematic basis over the asset's useful life [TAS 16.50].
  - ◆ The residual value and the useful life of an asset should be reviewed at least at each financial year-end and, if expectations differ from previous estimates, any change is accounted for prospectively as a change in estimate. [TAS 16.51]
  - ◆ The depreciation method used should reflect the pattern in which the asset's economic benefits are consumed by the entity [TAS 16.60];
  - ◆ The depreciation method should be reviewed at least annually and, if the pattern of consumption of benefits has changed, the depreciation method should be changed prospectively as a change in estimate. [TAS 16.61]
  - ◆ Depreciation should be charged to the Statement of Comprehensive Income, unless it is included in the carrying amount of another asset [TAS 16.48].
  - ◆ Depreciation begins when the asset is available for use and continues until the asset is derecognised, even if it is idle. [TAS 16.55]

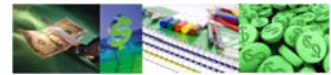
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## Derecognition

### ◆ Derecognition (Retirements and Disposals)

- ◆ An asset should be removed from the statement of financial position on disposal or when it is withdrawn from use and no future economic benefits are expected from its disposal. The gain or loss on disposal is the difference between the proceeds and the carrying amount and should be recognized in profit or loss. [TAS 16.67-71]

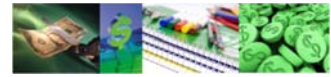


## Disclosure

### ◆ Disclosure

- ◆ For each class of property, plant, and equipment, disclose: [TAS 16.73]
  - ◆ basis for measuring carrying amount
  - ◆ depreciation method(s) used
  - ◆ useful lives or depreciation rates
  - ◆ gross carrying amount and accumulated depreciation and impairment losses
  - ◆ reconciliation of the carrying amount at the beginning and the end of the period, showing:
    - ◆ additions
    - ◆ disposals
    - ◆ acquisitions through business combinations
    - ◆ revaluation increases or decreases
    - ◆ impairment losses
    - ◆ reversals of impairment losses
    - ◆ depreciation
    - ◆ net foreign exchange differences on translation
    - ◆ other movements





## Classifying Long-Lived Assets

- ◆ **The resources that determine a company's productive capacity are often called long-lived assets.**
  - ✦ These assets that are listed as noncurrent assets on the Statement of Financial Position may be either tangible or intangible, and have the following characteristics.

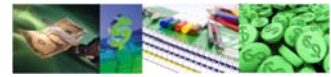
### Tangible assets

- They have physical substance; that is they can be touched. This classification is called **property, plant, and equipment** or fixed assets.
  - Land
  - Building, fixtures, and equipment

### Intangible assets

- They are long-lived assets without physical substance that confer specific rights on their owner.
  - Examples are patents, copyrights, franchises, licenses, and trademarks.

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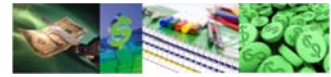


## Property, Plant, and Equipment

- ◆ **Property, plant, and equipment include land, building structures (offices, factories, warehouses), and equipment (machinery, furniture, tools).**
  - ✦ Major characteristics of property, plant, and equipment are as follows:
    - ✦ They are acquired for use in operations and not for resale.
    - ✦ They are long-term in nature and usually depreciated.
    - ✦ They possess physical substance.

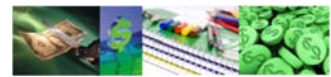


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## Asset Cost

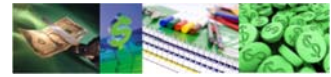
- ◆ **Most companies use historical cost as the basis for valuing property, plant, and equipment.**
  - ◆ Historical cost measures the cash or cash equivalent price of obtaining the asset and bringing it to the location and condition necessary for its intended use.
- ◆ **Under the cost principle, all reasonable and necessary expenditures made in acquiring and preparing an asset for use should be recorded as the cost of the asset.**
  - ◆ Acquisition cost:
    - ◆ The net cash equivalent amount paid or to be paid for the asset.
  - ◆ The expenditures are capitalized when they are recorded as part of the cost of an asset instead of as expenses in the current period.



## Measuring and Recording Asset Cost

- ◆ **Example:**
  - ◆ On Jan. 1, 2001, Company A purchased new equipment for a list price of 5,200,000 Baht. Company A received a discount of 200,000 Baht.
  - ◆ In addition, Company A paid for transportation and installation cost of 100,000 Baht

Invoice price	5,200,000
<b>Less:</b> Discount	<b>(200,000)</b>
Net cash invoice price	<u>5,000,000</u>
<b>Add:</b> Transportation and installation cost	<u>100,000</u>
<b>Asset cost</b>	<b><u>5,100,000</u></b>

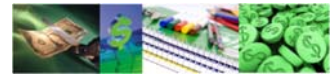


## Acquired Asset for Cash

- Assuming that Company A paid for the equipment and related costs, the transaction is recorded as follows:

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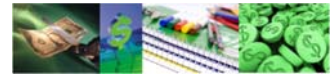
Date	Account Titles and Explanation	Debit	Credit
Jan. 1	Dr. Equipment	5,100,000	
20XX	Cr. Cash		5,100,000
	<i>To record purchase equipment for cash</i>		
Date	Account Titles and Explanation	Debit	Credit
Jan. 1	Dr. Equipment	5,100,000	
20XX	Cr. Cash		100,000
	Note payable		5,000,000
	<i>Purchase equipment for debt and cash</i>		
Date	Account Titles and Explanation	Debit	Credit
Jan. 1	Dr. Equipment	5,100,000	
	Cr. Cash		300,000
	Capital Stock		4,800,000
	<i>Purchase equipment for equity and cash</i>		



## Basket (Lump-sum) Purchase

- Basket (Lump-sum) Purchase**
  - The purchase of two or more assets acquired together at a single price.
    - Relative Fair Market Value Method is used
      - A way of allocating a basket purchase price to the individual assets acquired based on their respective market values.
- Illustration:**
  - Frank's Fruit Farm purchased land and a new sorting facility at a total cost of 3,600,000 Baht.

Asset	Fair Value	% of Total Value	Calculation	Cost Allocation
Land	1,000,000	25%	25% x 3,600,000 =	900,000
Building	3,000,000	75%	75% x 3,600,000 =	2,700,000
<b>Total</b>	<b>4,000,000</b>			<b>3,600,000</b>

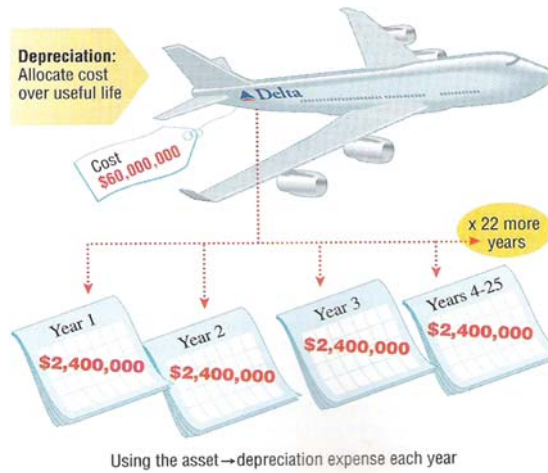


## Depreciation

**Depreciation:** Process of allocating the asset cost over their productive lives using a systematic and rational method.

**Estimated useful life:** The expected service life of an asset to the present owner.

**Residual value:** The estimated amount to be recovered at the end of the company's estimated useful life of an asset.



### Depreciation

It is the accounting process of allocating the cost of tangible assets to expense in a systematic and rational manner to those periods expected to benefit from the use of the asset.

When companies write off the cost of long-lived assets over a number of periods, they typically use the term depreciation.

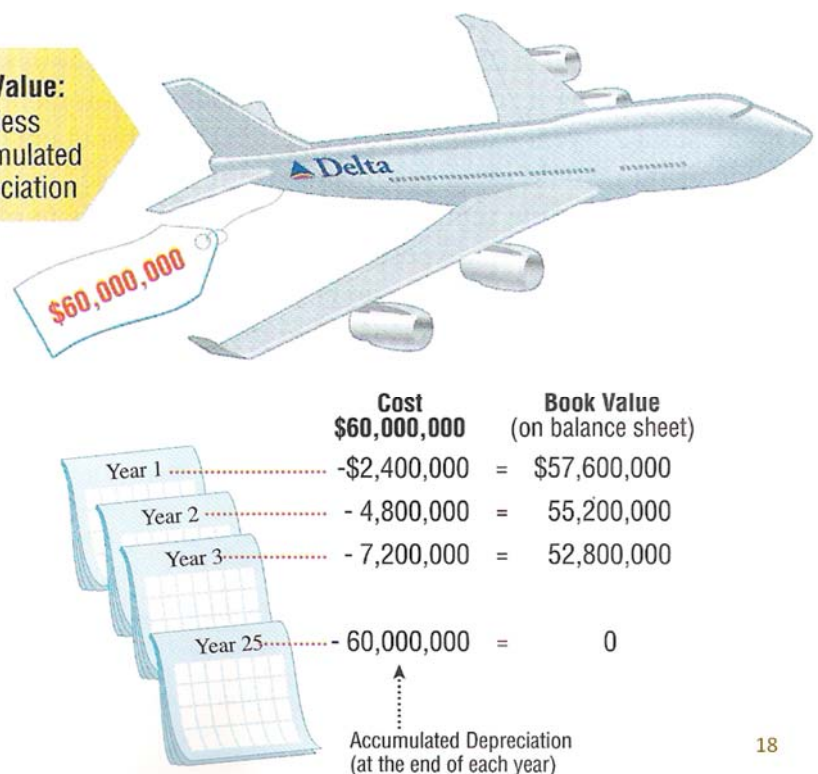


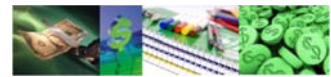
## Book Value

**Book value:** Difference between the balance of an asset and its related accumulated depreciation.

**Accumulated depreciation:** The contra asset account used to accumulate the depreciation recognized to date on plant assets.

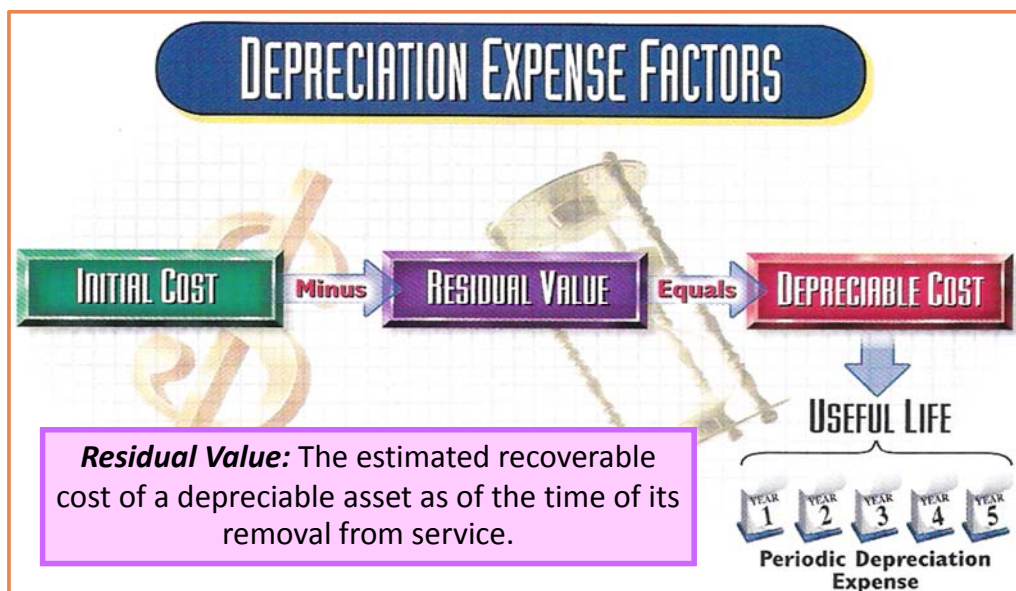
**Book Value:** Cost less accumulated depreciation





## Factors Involved in the Depreciation Process

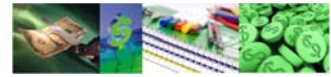
- ◆ **Depreciable base for the asset**
  - ◆ Depreciation base = Asset cost – Salvage value
  - ◆ Salvage value is the estimated amount that a company will receive when it sells the assets or removes it from service.
- ◆ **Estimation of service lives**
- ◆ **Methods of depreciation**
  - ◆ Activity method or units-of-production approach
    - ◆ This method assumes that depreciation is a function of use or productivity, instead of the passage of time.
  - ◆ Straight-line method
    - ◆ This method considers a function of time rather than a function of usage.
  - ◆ Decreasing-charge methods
    - ◆ These methods provide for a higher depreciation cost in the earlier years and lower charges in later periods.
      - ◆ Sum-of-the-years'-digits
      - ◆ Declining-balance method



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Date	Account Titles and Explanation	Debit	Credit
Dec. 31	Dr. Depreciation expense	XXX	
20XX	Cr. Accumulated depreciation		XXX
	<i>To record depreciation expense</i>		

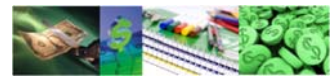
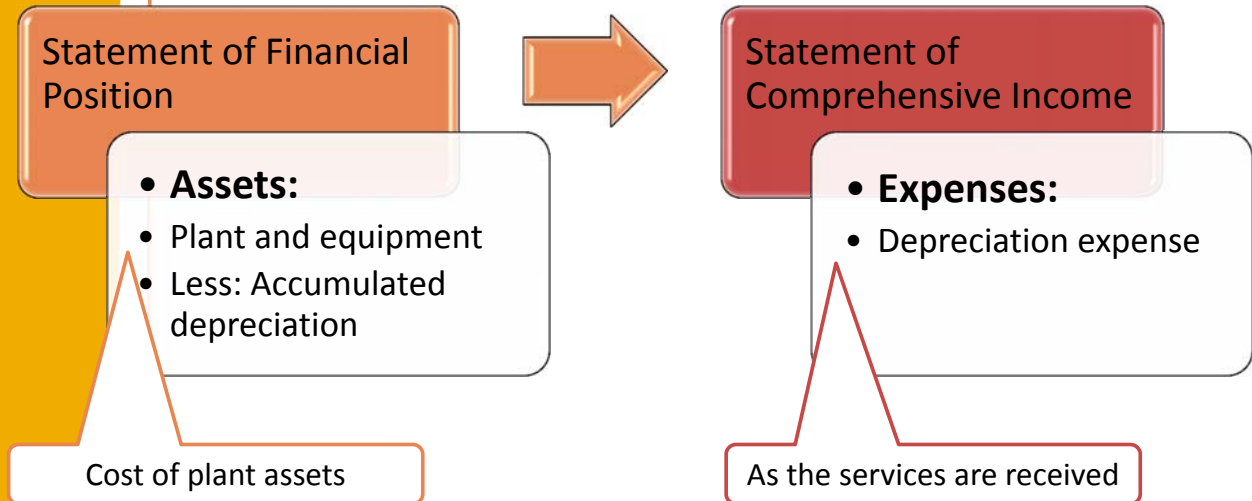
<b>A</b>	=	<b>L</b>	+	<b>E</b>
Accumulated depreciation [XA+, A-]				Depreciation expense [EXP+, R/E-, E-]
xx				xx



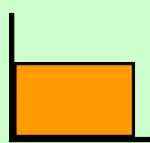
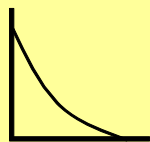
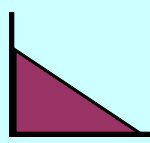

## Depreciation

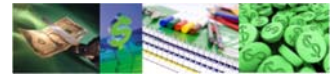
### Depreciation

- The allocation of the cost of a plant asset to expense in the periods in which services are received from the assets.



## Depreciation Methods

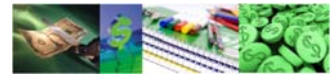
Method	Pattern	Computation	Remarks
Straight-line		$(\text{Asset cost} - \text{Residual value}) / \text{Useful life}$	Or <b>Depreciable cost x Straight-line rate</b>
			<b>Straight-line rate</b> = 100% / Useful life
Double declining balance		$(\text{Asset cost} - \text{Accumulated depreciation}) \times \text{Accelerated rate}$	Or <b>Book value x Accelerated rate</b>
			<b>Accelerated rate</b> = 200% / Useful life = 2 X Straight-line rate
Sum of the years' digits		$(\text{Asset cost} - \text{Residual value}) \times \text{Fraction}$	<b>Fraction</b> = Remaining useful life / Sum of the years' digits
			<b>Sum of the years' digits</b> = $n(n+1) / 2$
Units of production		<b>Units produced X Rate per unit</b>	<b>Rate per unit</b> = $(\text{Asset cost} - \text{Residual value}) / \text{Estimated capacity}$



## Depreciation Calculations

♦ To illustrate the depreciation calculation, we assumed that Company A purchased equipment on January 1, 20X1.

- ♦ The following facts apply:
  - ♦ Acquisition cost: 24,000 Baht
  - ♦ Estimated residual value: 2,000 Baht
  - ♦ Estimated useful life:
    - ♦ In years: 5 years
    - ♦ In capacity: 60,000 units



## Straight-line Method

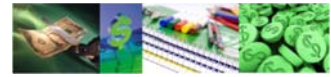
### Annual depreciation expense

= (Asset cost – Residual value) / Useful life (years)

= (24,000 – 2,000) / 5

= 4,400 Baht per year

	Computation	Annual Depreciation Expense	Accumulated Depreciation	Book Value
Acquisition date				24,000
End of year 1	(24,000 - 2,000) / 5	4,400	4,400	19,600
End of year 2	(24,000 - 2,000) / 5	4,400	8,800	15,200
End of year 3	(24,000 - 2,000) / 5	4,400	13,200	10,800
End of year 4	(24,000 - 2,000) / 5	4,400	17,600	6,400
End of year 5	(24,000 - 2,000) / 5	4,400	22,000	<b>2,000</b>
		<b>22,000</b>		



## Double Declining Balance Method

### Straight-line rate

= 100% / Useful life (years)

= 100% / 5

= 20%

### Accelerated rate

= 2 X Straight-line rate

= 2 X 20%

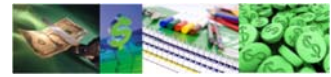
= 40%

### Annual depreciation expense

= (Asset cost – Accumulated depreciation) X Accelerated rate

	Computation	Annual Depreciation Expense	Accumulated Depreciation	Book Value
Acquisition date				24,000
End of year 1	24,000 X 40%	9,600	9,600	14,400
End of year 2	14,400 X 40%	5,760	15,360	8,640
End of year 3	8,640 X 40%	3,456	18,816	5,184
End of year 4	5,184 X 40%	2,074	20,890	3,110
End of year 5	*(22,000 - 20,890)	1,110	22,000	<b>2,000</b>
		<b>22,000</b>		

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## Units of Production Method

### Units produced:

Year 1: 12,000 units

Year 2: 18,000 units

Year 3: 11,000 units

Year 4: 9,000 units

Year 5: 10,000 units

### Depreciation rate per unit

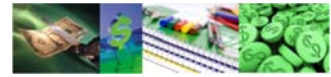
= (Asset cost – Residual value) /  
Estimated capacity

= (24,000 – 2,000) / 60,000 = 0.37 Baht per unit

### Annual depreciation expense

= Actual units produced X Depreciation rate per unit

	Computation	Annual Depreciation Expense	Accumulated Depreciation	Book Value
Acquisition date				24,000
End of year 1	12,000 X 0.37	4,400	4,400	19,600
End of year 2	18,000 X 0.37	6,600	11,000	13,000
End of year 3	11,000 X 0.37	4,033	15,033	8,967
End of year 4	9,000 X 0.37	3,300	18,333	5,667
End of year 5	10,000 X 0.37	3,667	22,000	<b>2,000</b>
		<b>22,000</b>		



## Sum-of-the-years-digits Method

Remaining useful life

Sum-of-the-years'-digits  
 $[n (n+1)] / 2$

**Sum-of-the-years'-digits**

$$= [N(N+1)] / 2$$

$$= (5 \times 6) / 2 \rightarrow \text{Useful life} = 5 \text{ years}$$

$$= 15$$

**Annual depreciation expense**

$$= (\text{Asset cost} - \text{Residual value}) \times \text{Fraction}$$

	Computation	Annual Depreciation Expense	Accumulated Depreciation	Book Value
Acquisition date				24,000
End of year 1	$(24,000 - 2,000) \times 5/15$	7,333	7,333	16,667
End of year 2	$(24,000 - 2,000) \times 4/15$	5,867	13,200	10,800
End of year 3	$(24,000 - 2,000) \times 3/15$	4,400	17,600	6,400
End of year 4	$(24,000 - 2,000) \times 2/15$	2,933	20,533	3,467
End of year 5	$(24,000 - 2,000) \times 1/15$	1,467	22,000	<b>2,000</b>
		<b>22,000</b>		



## Other Issues

### Estimates of Useful Life and Residual Value

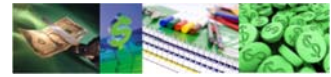
- May differ from company to company.
- The reasonableness of management's estimates is evaluated by external auditors.

### Principle of Consistency

- Companies should avoid switching depreciation methods from period to period.

The total amount of depreciation recorded over the useful life of an asset is the same regardless of the method used. Depreciation expense recorded in any one period will vary according to method used.





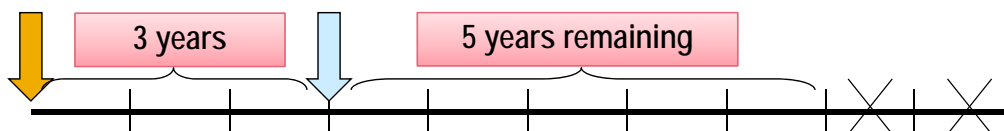
## Change in Accounting Estimates

- ◆ **Over the life of an asset, new information may come to light that indicates the original estimates need to be revised.**
  - ◆ Residual value
  - ◆ Useful life
- ◆ **Illustration**
  - ◆ On January 1, 20X1, equipment was purchased at a cost of 300,000 Baht. The equipment has a useful life of 10 years and no salvage value.
  - ◆ On January 1, 20X4, the useful life was revised to 8 years total (5 years remaining).
    - ◆ Calculate depreciation expense for the year ended December 31, 20X4, using the straight-line method.



On Jan.1, 20X1,  
Co. purchased  
equipment for  
300,000 Baht

On Jan.1, 20X4,  
Co. revised  
useful life to be 8  
years total



### ① Straight-line depreciation (Original estimates)

$$\begin{aligned}
 &= (\text{Asset cost} - \text{Residual value}) / \text{Useful life} \\
 &= (300,000 - 0) / 10 \\
 &= 30,000 \text{ per year}
 \end{aligned}$$

Original estimates:  
Residual value = 0  
Useful life = 10 years

### ② Accumulated depreciation at the date of change

$$\begin{aligned}
 &= 30,000 \text{ Dep. per year} \times 3 \text{ years} \\
 &= 90,000
 \end{aligned}$$

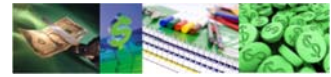
### ③ Book value at the date of change

$$\begin{aligned}
 &= \text{Asset cost} - \text{Acc. Dep.} \\
 &= 300,000 - 90,000 \\
 &= 210,000
 \end{aligned}$$

### ④ Revised depreciation per year

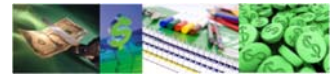
$$\begin{aligned}
 &= (\text{Book value at the date of change} - \text{Revised residual value}) / \text{Remaining useful life} \\
 &= (210,000 - 0) / 5 \\
 &= 42,000
 \end{aligned}$$

Revised estimates:  
Residual value = 0  
Useful life = 8 years





## Disposition of Property, plant, and Equipment

- ◆ **The disposal of a depreciable asset usually requires two journal entries:**
  - ◆ An adjusting entry to update the depreciation expense and accumulated depreciation account.
  - ◆ An entry to record the disposal.



## Disposition of Property, plant, and Equipment

<p style="text-align: center;"><b>Cedar Fair</b></p> <p>Receive ← \$6,000,000 on disposal</p> <p style="text-align: center;">but</p> <p style="text-align: center;">Give-up → \$7,500,000 Book value</p> <div style="text-align: center;">  </div> <p style="text-align: center;">creates</p> <p style="text-align: center;"><b>LOSS = \$1,500,000</b></p>	<p style="text-align: center;"><b>Six Flags</b></p> <p>Receive ← \$6,000,000 on disposal</p> <p style="text-align: center;">but</p> <p style="text-align: center;">Give-up → \$4,035,000 Book value</p> <div style="text-align: center;">  </div> <p style="text-align: center;">creates</p> <p style="text-align: center;"><b>GAIN = \$1,965,000</b></p>
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## Disposal of Property, Plant, and Equipment (Cont.)

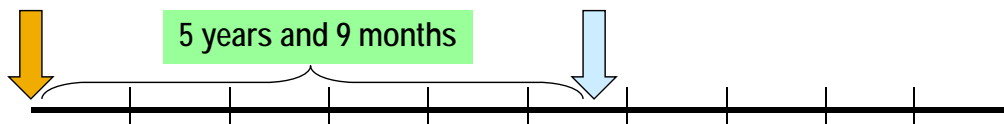
**Illustration:**

- On Sept. 30, 20X6, Company A sold machine that originally cost 1,000,000 Baht for 600,000 Baht cash.
  - The machine was placed in service on Jan. 1, 20X1.
    - It was depreciated using the straight-line method with an estimated salvage value of 200,000 Baht and a useful life of 10 years.



On Jan. 1, 20X1,  
Co. purchased  
equipment for  
1,000,000 Baht

On Sept. 30,  
20X6, Co. sold  
equipment for  
600,000 Baht



① Straight-line depreciation per year  
 = (Asset cost - Residual value) / Useful life  
 = (1,000,000 - 200,000) / 10  
 = 80,000

Residual value = 200,000  
 Useful life = 10 years

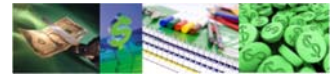
② Accumulated depreciation at the date of sale  
 = (80,000 X 5 yrs) + (80,000 X (9/12))  
 = 460,000

③ Book value at the date of sale  
 = Asset cost - Acc. Dep.  
 = 1,000,000 - 460,000  
 = 540,000

Cash > BV → Gain (↑E)  
 Cash < BV → Loss (↓E)

④ Compare the book value at the date of sale with the cash received:

Cash received from sale		600,000
Book value at the date of sale		
Asset cost	1,000,000	
Less: Accumulated depreciation	(460,000)	(540,000)
Gain (loss) on sale		<u>60,000</u>



## Disposal of Property, Plant, and Equipment (Cont.)

- Prepare the journal entry to record Evans' sale of the machine on September 30, 20X6.

GENERAL JOURNAL			
Date	Account Titles and Explanation	Debit	Credit
Sept. 30 20X6	Dr. Depreciation expense Cr. Accumulated depreciation To record depreciation expense during 20X6	60,000	60,000
Sept. 30 20X6	Dr. Cash Accumulated depreciation Cr. Equipment Gain on sale of equipment To record the sale of equipment	600,000 460,000	1,000,000 60,000

A	=	L	+	E
Accumulated depreciation [XA+, A-] -60,000				Depreciation expense [EXP+, R/E-, E-] -60,000
Cash [A+] +600,000				Gain on sale of equipment [REV+, R/E+, E+] +60,000
Equipment [A-] -1,000,000				
Accumulated depreciation [XA-, A+] +460,000				

## STATEMENTS OF FINANCIAL POSITION

PRESIDENT BAKERY PUBLIC COMPANY LIMITED

As at 31 December 2011 and 2010

**Example of Financial Statement Presentation & Disclosure: Property, Plant, & Equipment**  
[Source: www.farmhouse.co.th]

(Unit: Baht)

### SEPARATE FINANCIAL STATEMENTS

	NOTE	2011	2010
<b>Non-current assets</b>			
Investment in joint venture	12	5,850,000	5,850,000
Other long-term investment	13	15,000,000	-
Property, plant and equipment	14	2,786,147,285	2,660,925,587
Advance payments for purchase of assets		29,022,722	15,347,413
Intangible assets	15	805,771	1,294,434
Leasehold rights	16	1,996,354	2,323,734
Other non-current assets		6,356,402	6,541,253
<b>Total non-current assets</b>		<b>2,845,178,534</b>	<b>2,692,282,421</b>
<b>Total assets</b>		<b>4,312,142,658</b>	<b>3,762,471,123</b>



As at 31 December 2011, the Company has equipment acquired under finance lease agreements, with net book value amounting to Baht 191 million (2010: Baht 162 million).

As at 31 December 2011, certain equipment items have been fully depreciated but are still in use. The gross carrying amount before deducting accumulated depreciation of those assets amounted to approximately Baht 1,153 million (2010: Baht 975 million).



มาตรฐานการบัญชี ฉบับที่ 38 (ปรับปรุง 2552)

เรื่อง

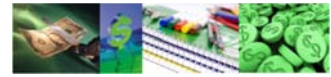
สินทรัพย์ไม่มีตัวตน

คำแถลงการณ์

มาตรฐานการบัญชีฉบับนี้เป็นไปตามเกณฑ์ที่กำหนดขึ้นโดยมาตรฐานการบัญชีระหว่างประเทศ ฉบับที่ 38 เรื่อง สินทรัพย์ไม่มีตัวตน พ.ศ. 2552 ซึ่งเป็นการแก้ไขของคณะกรรมการมาตรฐานการบัญชีระหว่างประเทศที่สิ้นสุดในวันที่ 31 ธันวาคม พ.ศ. 2551 (IAS 38: Intangible Assets (Bound volume 2009))

**TAS38 Intangible Assets**

Federation of Accounting Professions



## Intangible Assets

### Intangible assets:

- Assets that have special rights but not physical substance.
  - Characteristics
    - They lack physical existence.
    - They are not financial instruments
- Intangible assets are recorded at historical cost only if they have been purchased. If these assets are developed internally by the company, they are expensed when incurred.
  - Upon acquisition of intangible assets, managers determine whether the separate intangibles have definite or indefinite lives.



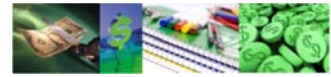
## Definite VS. Indefinite Life

### Definite Life

- The cost of an intangible with a definite life is allocated on a **straight-line basis** each period over its useful life in a process called **amortization** that is similar to depreciation and depletion.
- Most companies do not estimate a residual value for their intangible assets.
- Amortization expense is included on the Statement of Comprehensive Income each period and the intangible assets are reported at **cost less accumulated amortization** on the Statement of Financial Position.

### Indefinite Life

- Intangible assets with indefinite lives are not amortized.
- These assets are to be tested at least annually for possible **impairment**, and the asset's book value is written down (decreased) to its fair value if impaired.



## Intangible Assets

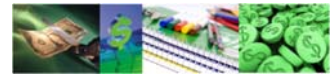
### Valuation

- Purchased intangibles
  - Intangibles purchased from another party are recorded at cost. Cost includes all costs of acquisition and expenditures necessary to make the intangible asset ready for its intended use. Typical costs include purchase price, legal fees, and other incidental expenses.
- Internally created intangibles
  - Cost incurred internally to create intangibles are generally expensed. Thus, even though a company may incur substantial research and development costs to create an intangible, it expenses these costs.

### Amortization of intangibles

- The allocation of the cost of intangible assets in a systematic way is called amortization.

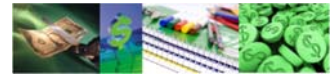
A		=	L		+	E	
Intangible assets [A+]	xx						
Cash [A-]	xx		Purchase of Intangible Assets for cash				
Accumulated amortization [XA+, A-]	xx		To record amortization expense			Amortization expense [EXP+, R/E-, E-]	xx



## Types of Intangible Assets

- Marketing-related intangible assets
- Customer-related intangible assets
- Artistic-related intangible assets
- Contract-related intangible assets
- Technology-related intangible assets
- Goodwill





## Types of Intangible Assets

### Marketing-related intangible assets

- Companies primarily use marketing-related intangible assets in the marketing or promotion of products or services.
  - Examples – trademarks, trade names, internet domain names, etc.
    - A trademark or trade name is a word, phrase, or symbol that distinguishes or identifies a particular company or product.

### Customer-related intangible assets

- Customer-related intangible assets result from interactions with outside parties.
  - Examples – customer lists

### Artistic-related intangible assets

- Artistic-related intangible assets involve ownership rights to plays, literary works, musical works, pictures, photographs, and video and audiovisual material.
  - Copyrights protect these ownership rights.

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## Types of Intangible Assets

### Contract-related intangible assets

- Contract-related intangible assets represent the value of rights that arise from contractual arrangements.
  - Examples – franchise and licensing agreements, broadcast rights, and service or supply contracts.
    - A franchise is a contractual arrangement under which the franchisor grants the franchisee the right to sell certain products or services, to use certain trademarks or trade names, or to perform certain functions, usually within a designated geographical area.

### Technology-related intangible assets

- Technology-related intangible assets relate to innovations or technological advances.
  - Examples – patented technology, trade secrets
    - A patent gives the holder exclusive right to use, manufacture, and sell a product or process without interference or infringement by others.

### Goodwill

- In a business combination, a company assigns the cost (purchase price), where possible, to identifiable tangible and intangible net assets. It records the remainder in an intangible asset account called “Goodwill”. Goodwill is not amortized.

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# STATEMENTS OF FINANCIAL POSITION

PRESIDENT BAKERY PUBLIC COMPANY LIMITED

As at 31 December 2011 and 2010

## Example of Financial Statement Presentation & Disclosure: Intangible Assets

[Source: www.farmhouse.co.th]

(Unit: Baht)

### SEPARATE FINANCIAL STATEMENTS

	NOTE	2011	2010
<b>Non-current assets</b>			
Investment in joint venture	12	5,850,000	5,850,000
Other long-term investment	13	15,000,000	-
Property, plant and equipment	14	2,786,147,285	2,660,925,587
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<b>Total non-current assets</b>		<b>2,845,178,534</b>	<b>2,692,282,421</b>
<b>Total assets</b>		<b>4,312,142,658</b>	<b>3,762,471,123</b>

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## 6.7 Intangible assets

Intangible assets are measured at cost on the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses.

Intangible assets with finite lives are amortised on a systematic basis over the economic useful life, except for computer software acquired since 1 January 2002 calculated by double declining balance basis, and tested for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method of such intangible assets are reviewed at least at each financial year end. The amortisation expense is charged to profit or loss.

A summary of the intangible assets with finite useful lives is as follows:

	USEFUL LIVES
Computer software	5 years

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