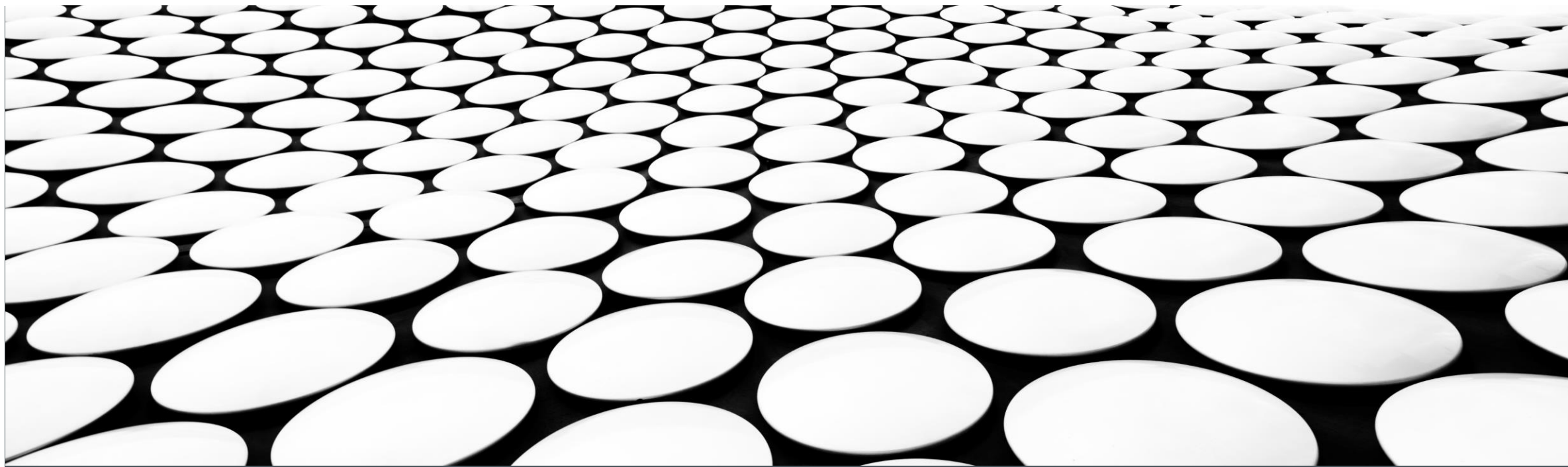


MODULE X – VALUATION APPLICATION – INTANGIBLE ASSETS

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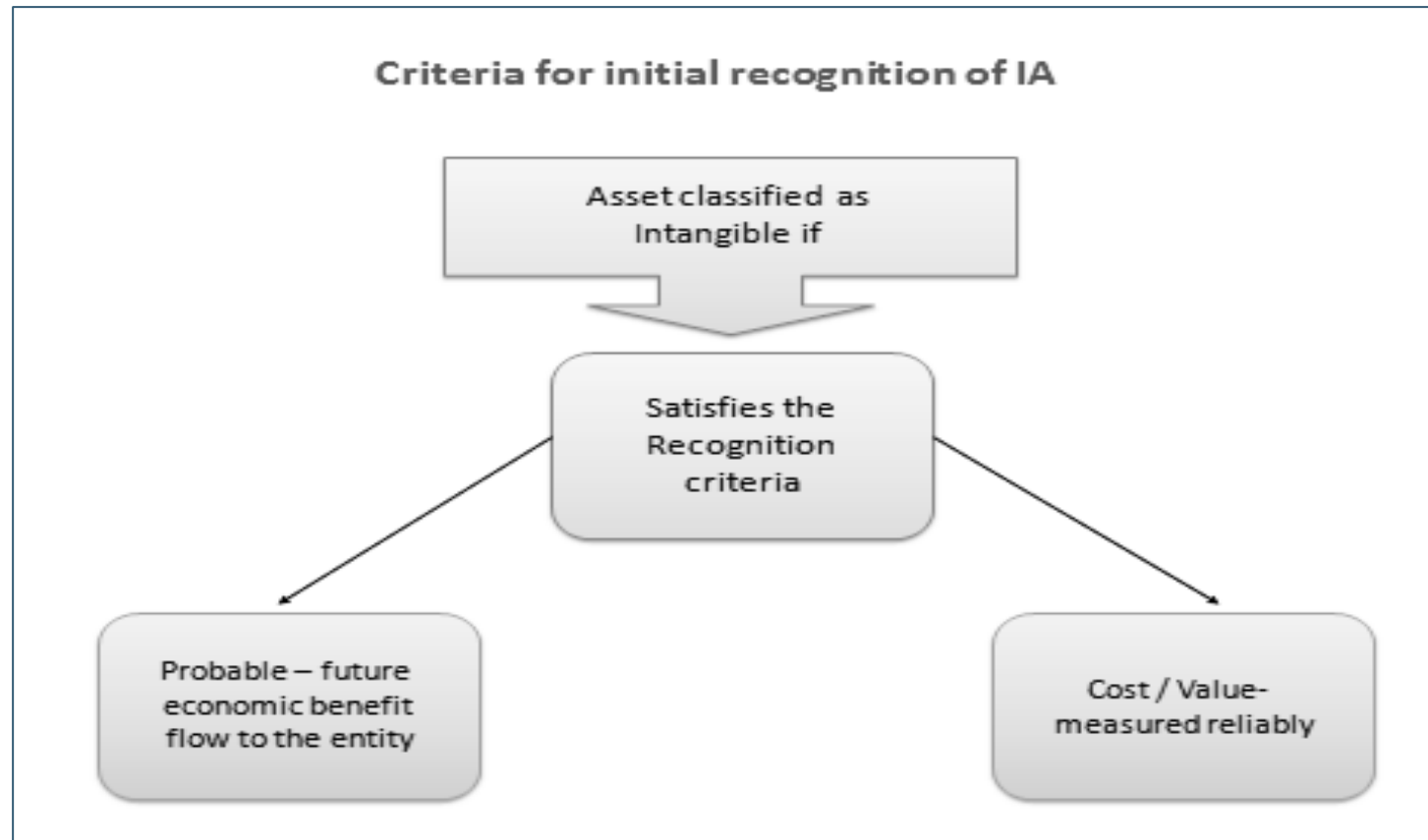


VALUATION APPLICATION – INTANGIBLE ASSETS

VALUATION APPLICATION

Intangible Assets

An **intangible asset** is an identifiable non-monetary asset, without physical substance, held for use in the production of goods or services, for rental to others or for administrative purposes.



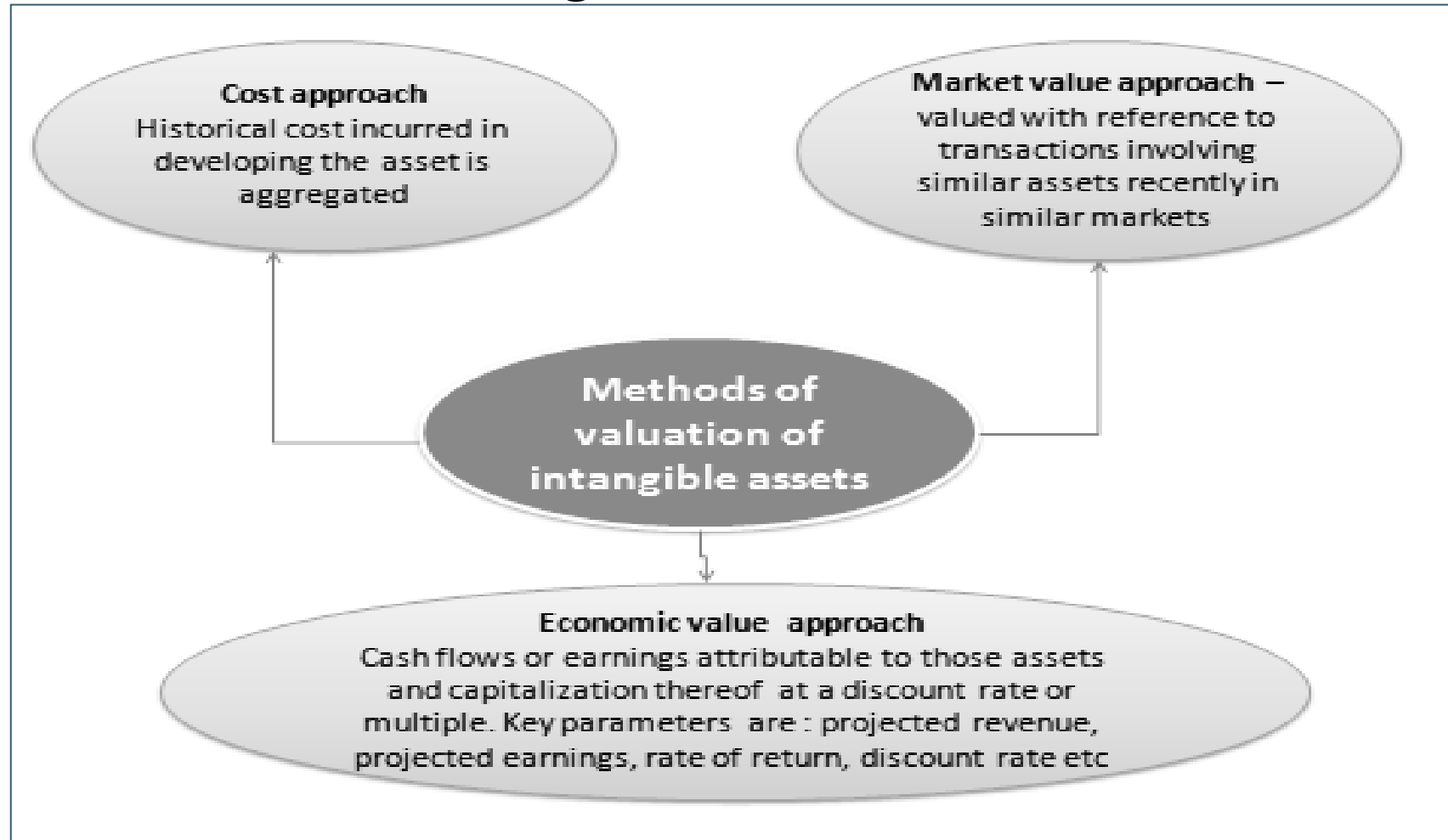
VALUATION APPLICATION

Intangible Assets - Categories

Categories	Examples
(a) Customer-based intangible assets;	(a) customer contracts. (b) customer relationships. (c) order backlog; or (d) customer lists.
(b) Marketing-based intangible assets;	(a) trademark; (b) brand; (c) trade name; (d) internet domain name; or (e) trade design
(c) Contract-based intangible assets;	(a) lease agreements; (b) non-compete agreements; (c) licensing agreements; (d) royalty agreements; or (e) employment contracts.
(d) Technology-based intangible assets; or	(a) patents; (b) know-how; (c) trade secrets; (d) copyrights; (e) processes; (f) software; (g) designs; or (h) formulae.
(e) Artistic-based intangible assets.	(a) films and music; (b) books; (c) plays; or (d) Copyright (non-contractual).

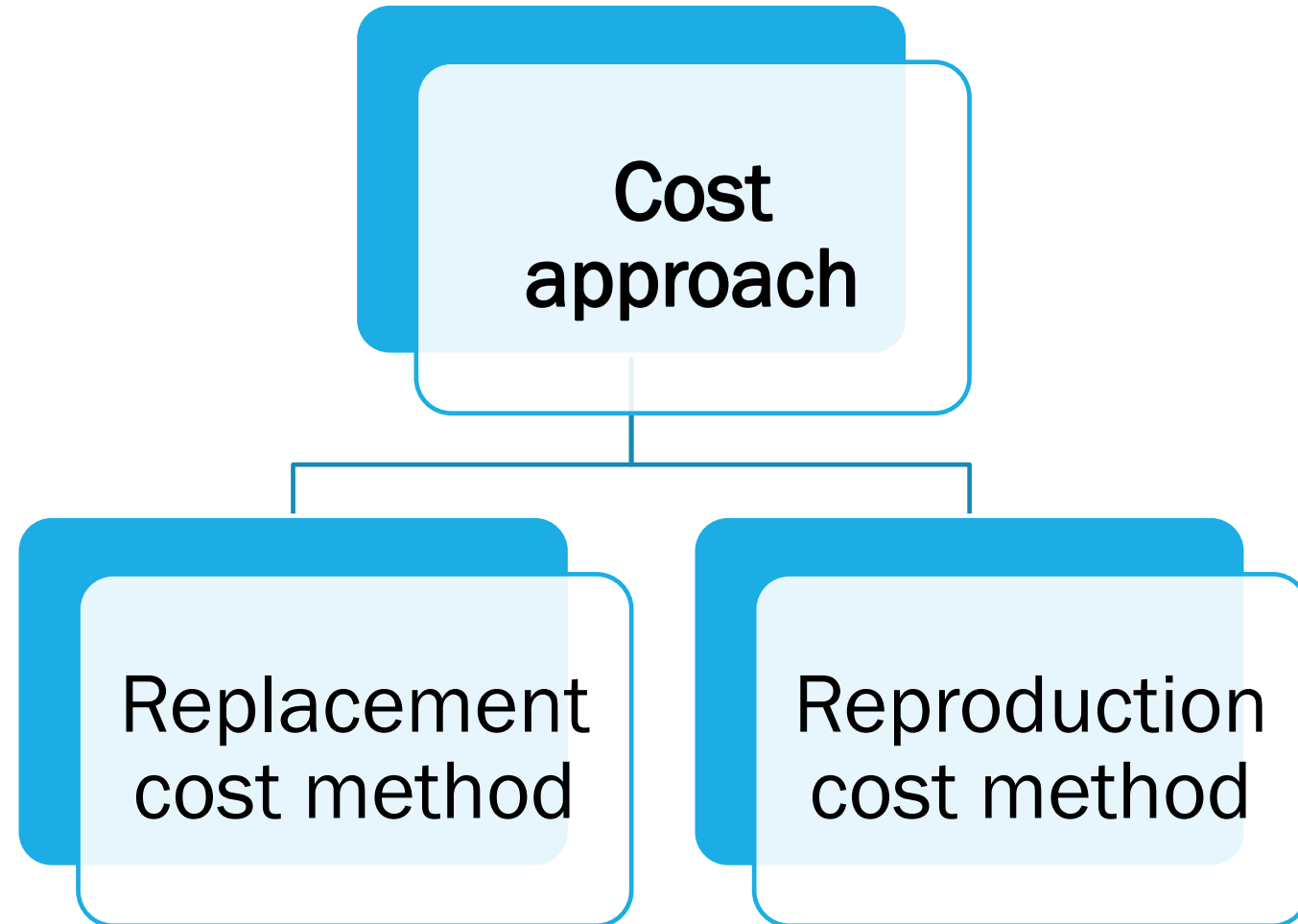
VALUATION APPLICATION

Valuation Methods of Intangible Assets



VALUATION APPLICATION

Valuation Methods of Intangible Assets



VALUATION APPLICATION

Valuation Methods of Intangible Assets

☐ **Cost approach**

Cost approach is a valuation approach that reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost). The methods used are as under:

➤ **Replacement Cost Method**

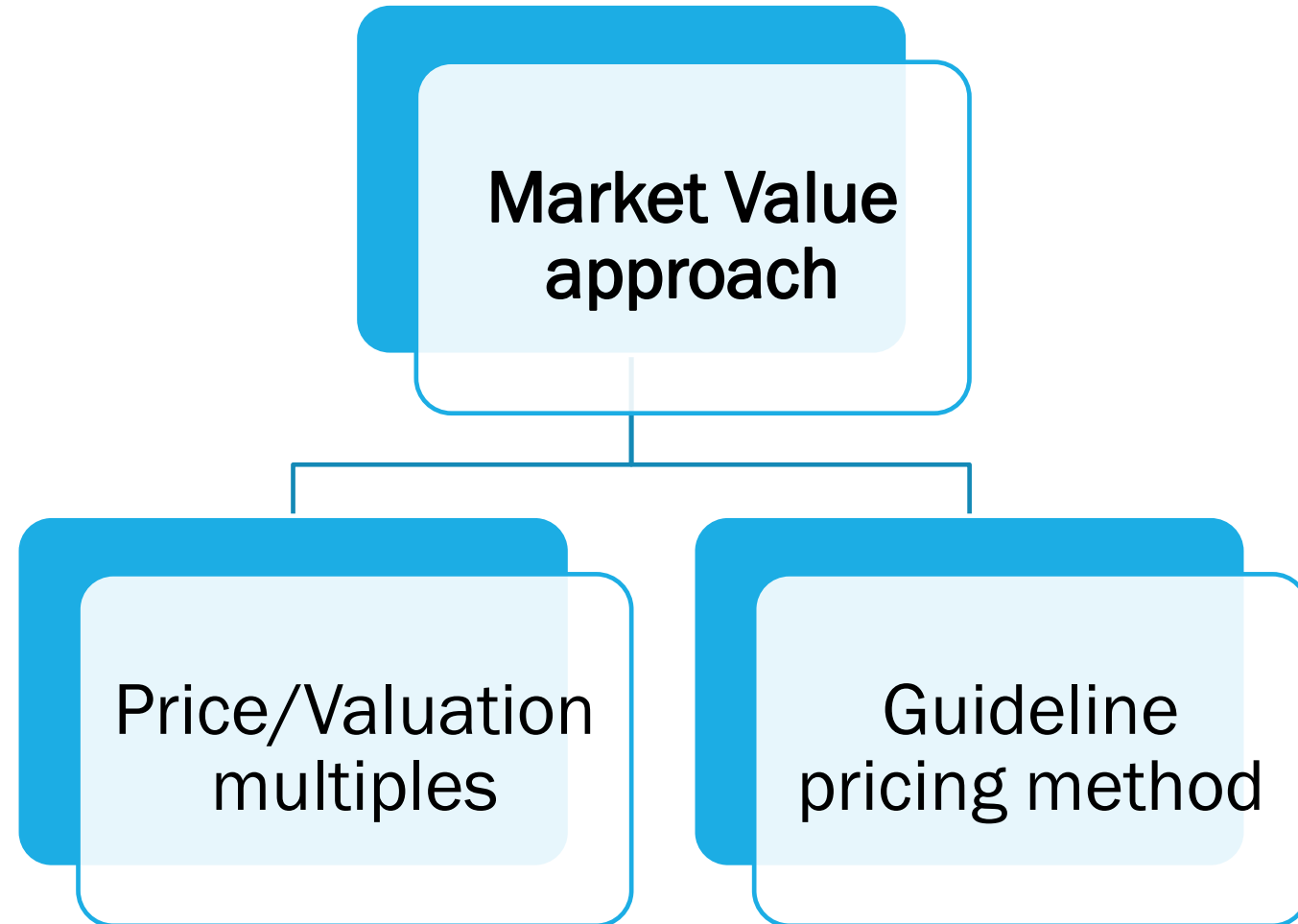
This Method involves valuing an asset based on the cost that a market participant shall have to incur to recreate an asset with substantially the same utility (comparable utility) as that of the asset to be valued, adjusted for obsolescence.

➤ **Reproduction Cost Method**

This method involves valuing an asset based on the cost that a market participant shall have to incur to recreate a replica of the asset to be valued, adjusted for obsolescence.

VALUATION APPLICATION

Valuation Methods of Intangible Assets



VALUATION APPLICATION

Valuation Methods of Intangible Assets

❑ Market value approach

In comparable market value approach, intangible assets are valued with reference to transactions involving similar assets recently in similar markets. The approach is possible when there is an active market in which arm's length transactions have occurred recently involving comparable intangible assets and adequate information in terms of transactions is available.

The methods followed are as under:

➤ Price/Valuation multiples/Capitalisation rates

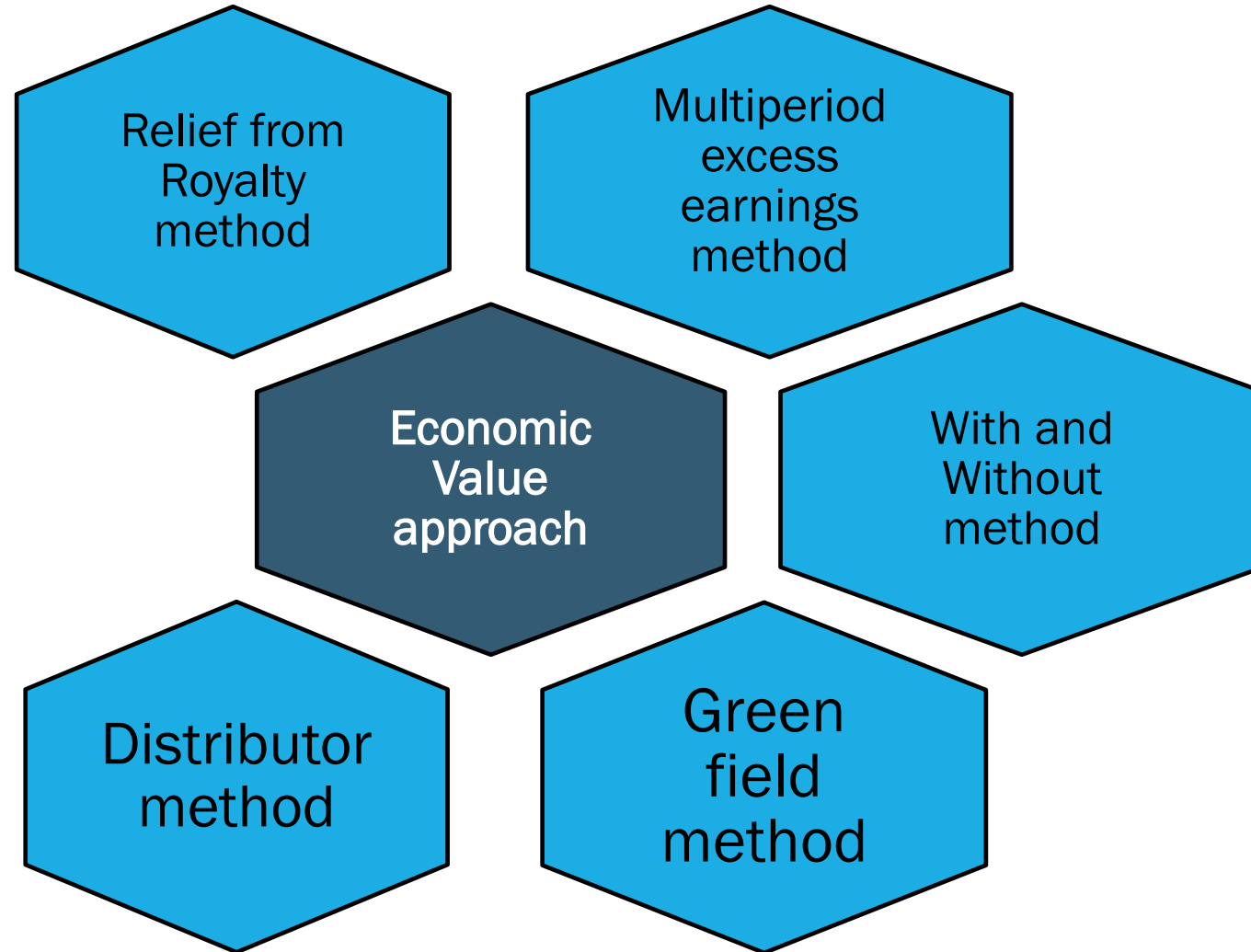
This method considers certain multiples/capitalisation rates to arrive at the valuation of a comparable intangible asset. The multiples shall be adjusted appropriately to factor in any differences between the intangible asset to be valued and comparable intangible asset.

➤ Guideline pricing method

This method determines the value of an intangible asset by considering the price paid in an orderly transaction for a comparable intangible asset (called as the guideline intangible asset which is similar to the intangible asset to be valued).

VALUATION APPLICATION

Valuation Methods of Intangible Assets



VALUATION APPLICATION

Valuation Methods of Intangible Assets

Economic value approach

This approach is based on cash flows or earnings attributable to those assets and capitalization thereof at an appropriate discount rate or multiple. Some of the key parameters used in this approach are: projected revenue, projected earnings, rate of return, discount rate etc. Under this approach the valuer has to identify cash flows or earnings directly associated with the intangible assets like the cash flows arising from the exploitation of a patent or copyright, licensing of an intangible asset etc.

This approach can be applied only if cash flows arising out of intangible assets are identifiable from the management accounts and budgets, forecasts or plans of the company. In most situations of valuation of intangible assets, the economic based approach is used, because of the uniqueness of intangible assets and the lack of comparable market data for the use of market value approach.

The methods used are as under:

- (a) Relief-from-royalty-method;
- (b) Multi-period Excess Earnings Method (MEEM);
- (c) With-and-Without method or premium profit method;
- (d) Greenfield method; and
- (e) Distributor method

VALUATION APPLICATION

Valuation Methods of Intangible Assets

□ *Relief from Royalty (RFR) method*

This is a method in which the value of the asset is estimated based on the present value of royalty payments saved by owning the asset instead of taking it on lease. It is generally adopted for valuing intangible assets that are subject to licensing, such as trademarks, patents, brands, etc.

The major steps in deriving a value using the RFR method is enumerated as under:

- Obtain the projected income statement associated with the intangible asset to be valued over the remaining useful life of the said asset from the client or the target;
- Analyze the projected income statement and its underlying assumptions to assess the reasonableness;
- Select the appropriate royalty rate based on market-based royalty rates for similar intangible assets or using the profit split method;
- Deduct costs associated with maintaining licencing arrangements for the intangible asset from the resultant royalty savings;
- Apply the selected royalty rate to the future income attributable to the said asset;
- Use the appropriate marginal tax rate or such other appropriate tax rate to arrive at an after tax royalty savings;
- discount the after-tax royalty savings to arrive at the present value using an appropriate discount rate; and
- Tax amortization benefit, if appropriate, should be added to the overall value of the asset.

VALUATION APPLICATION

Valuation Methods of Intangible Assets

☐ *Multi-Period Excess Earnings method (MEEM)*

This method is generally used for valuing intangible asset that is leading or the most significant intangible asset out of group of intangible assets being valued. The value under this method is equal to the present value of the incremental after-tax cash flows ('excess earnings') attributable to the intangible asset to be valued over its remaining useful life.

The major steps in deriving a value using the MEEM are depicted as under:

- obtain the projections for the entity or the combined asset group over the remaining useful life of the said intangible asset to be valued from the client or the target to determine the future after-tax cash flows expected to be generated;
- analyze the projections and its underlying assumptions to assess the reasonableness of the cash flows;
- Contributory Asset Charges (CAC) or economic rents to be reduced from the total net after-tax cash flows projected for the entity/combined asset group to obtain the incremental after-tax cash flows attributable to the intangible asset to be valued;
- the CAC represent the charges for the use of an asset or group of assets (e.g., working capital, fixed assets, assembled workforce, other intangibles) based on their respective fair values and should be considered for all assets, excluding goodwill, that contribute to the realization of cash flows for the intangible asset to be valued;
- discount the incremental after-tax cash flows attributable to the intangible asset to be valued to arrive at the present value using an appropriate discount rate; and
- Tax amortization benefit, if appropriate.

VALUATION APPLICATION

Valuation Methods of Intangible Assets

□ *With and Without method (WWM)*

Under this method, the value of the intangible asset to be valued is equal to the present value of the difference between the projected cash flows over the remaining useful life of the asset:

The major steps in deriving a value using the above method are enumerated as under:

- obtain cash flow projections for the business over the remaining useful life of the said asset to be valued under the following two scenarios:
 - (i) business with all assets in place including the intangible asset to be valued; and
 - (ii) business with all assets in place except the intangible asset to be valued.
- Analyze the projections and its underlying assumptions to assess the reasonableness of the cash flows;
- discount the difference between the projected cash flows under two scenarios to arrive at the present value using an appropriate discount rate; and
- Tax amortization benefit, if appropriate

VALUATION APPLICATION

Valuation Methods of Intangible Assets

Green Field method

This method is usually used to value franchise agreements and certain licenses.

The steps for deriving value under this method are as under:

- prepare cash flow projections with the premise that the intangible is the only asset in the business;
- project the related revenues, expenses, working capital and capital;
- project the amount and timing of expenditure relating to acquisition, creation or rentals of other assets required by the intangible asset to be valued;
- compute the present value of the net cash flows using an appropriate discount rate; and
- Tax amortization benefit (TAB) can be appropriately built and added to the overall value of the intangible asset

VALUATION APPLICATION

Valuation Methods of Intangible Assets

□ *Distributor method*

This is a variant of MEEM and is used to value customer based intangible assets.

The steps involved in deriving value under this method are as under:

- Prepare revenue and expenses projections of existing customers relationships along with relevant attrition.
- Determine profit margins of distributors who are comparable to the subject business and apply the same to the cash flows projected;
- Determine the support of distributor contributory assets like working capital, fixed assets, workforce, etc;
- Ascertain excess earnings after considering the contributory asset charges;
- Compute the present value of cash flows using an appropriate discount rate; and
- Calculate tax amortization benefit, if appropriate and applicable, and add it to the value of the intangible asset to be valued.

VALUATION APPLICATION

Illustration I - Valuation of Intangible Assets and segregation of Assets and Expenses based on recognition criteria

An enterprise is developing a new production process. During the year 20X1, expenditure incurred was Rs. 10 lakhs, of which Rs. 9 lakhs was incurred before 1 December 20X1 and 1 lakh was incurred between 1 December 20X1 and 31 December 20X1. The enterprise is able to demonstrate that, on 1 December 20X1, the production process met the criteria for recognition as an intangible asset. The recoverable amount of the know-how embodied in the process (including future cash outflows to complete the process before it is available for use) is estimated to be Rs. 5 lakhs.

Solution

At the end of 20X1, the production process is recognised as an intangible asset at a cost of Rs. 1 lakh (expenditure incurred since the date when the recognition criteria were met, that is, 1 December 20X1). The Rs. 9 lakhs expenditure incurred before 1 December 20X1 is recognised as an expense because the recognition criteria were not met until 1 December 20X1. This expenditure will never form part of the cost of the production process recognised in the balance sheet.

VALUATION APPLICATION

Illustration II - Valuation of Intangible Assets after giving effect to impairment

During the year 20X2, expenditure incurred is Rs. 20 lakhs. At the end of 20X2, the recoverable amount of the know-how embodied in the process (including future cash outflows to complete the process before it is available for use) is estimated to be Rs. 19 lakhs.

Solution

At the end of the year 20X2, the cost of the production process is Rs. 20 lakhs (i.e. Rs. 20 lakhs expenditure recognised in 20X2). The enterprise recognises an impairment loss of Rs. 1 lakh to adjust the carrying amount of the process before impairment loss (Rs. 20 lakhs) to its recoverable amount (Rs. 19 lakhs). This impairment loss will be reversed in a subsequent period if the requirements for the reversal of an impairment loss in Accounting Standard on Impairment of Assets, are met.

VALUATION APPLICATION

Valuation of internally generated Intangible Assets

- ❑ According to Para 66 of IAS 38, the cost of an internally generated intangible asset comprises all directly attributable costs necessary to create, produce, and prepare the asset to be capable of operating in the manner intended by management.
- ❑ Examples of directly attributable costs are:
 - (a) costs of materials and services used or consumed in generating the intangible asset;
 - (b) costs of employee benefits (as defined in IAS 19) arising from the generation of the intangible asset;
 - (c) fees to register a legal right; and
 - (d) amortisation of patents and licences that are used to generate the intangible asset.
- ❑ IAS 23 specifies criteria for the recognition of interest as an element of the cost of an internally generated intangible asset.

VALUATION APPLICATION

Valuation of internally generated Intangible Assets

- ❑ According to para 67 of IAS 38, the following are not components of the cost of an internally generated intangible asset:
 - (a) selling, administrative and other general overhead expenditure unless this expenditure can be directly attributed to preparing the asset for use;
 - (b) identified inefficiencies and initial operating losses incurred before the asset achieves planned performance; and
 - (c) expenditure on training staff to operate the asset.
- ❑ Internally generated brands, mastheads, publishing titles, customer lists and items similar in substance shall not be recognised as intangible assets (Para 63 of IAS 38)

VALUATION APPLICATION

Illustration III - Valuation of Intangible Assets : Recognition criteria

- (a) D has developed a new drug which has been approved for clinical use. The costs of developing the drug was Rs. 12 m. Based on early assessments of its sales success D has estimated its market value at Rs. 20m.
- (b) In Dec 20X0 D paid Rs.5 m for a television advertising campaign for its products that will run for six months from 1st Jan 20X1 to 30th June 20X1. The directors believe that increased sales as a result of the publicity will continue for two years from the start of the advertisement. Comment on both the cases.

Solution

(a) According to *IAS 38: Intangible assets* these are defined as assets which would have the following criteria:

- (i) These are identifiable – separable and linked to contractual rights
- (ii) These are controlled by the entity
- (iii) Economic benefit is expected to flow to the entity

In the instant case, all the three criteria are fulfilled and hence Rs.12 m would be capitalized and amortized over its estimated useful life.

(b) According to IAS 38, Television advertising campaign for its products – spend of Rs. 5 m – would not be treated as Intangible assets as it does not fulfill the criteria highlighted in the IAS. This is specially the third test where it is not clear whether the advertising campaign will generate economic benefit to flow to the entity.

VALUATION APPLICATION

Illustration IV - Valuation of Intangible Assets : Linked to amortization and impairment

J & T Ltd hold a trademark with a carrying value of Rs.1.7m, which it uses to produce consumer goods. It is expected that the products will continue to be in demand for the foreseeable future, and the trademark has an indefinite life. At 31st December 20X6, based on a report by an independent expert, it is estimated that the recoverable amount of the trademark is only Rs.1.6m.

Discuss the amortization and impairment of the trademark.

Solution

The value of the trademark will not be amortized since its useful life is indefinite. However, it will be tested for impairment annually. The recoverable amount is Rs.1.6m (Rs.0.1m less than the carrying value of Rs.1.7m)

Therefore, there is an impairment loss of Rs.0.1m. This amount will be deducted from the carrying value and recognized in the statement of profit or loss.

VALUATION APPLICATION

Illustration V - Valuation of Intangible Assets : Linked to Research and Development

On 1 April 2022 D commenced project developing a new production technique that would significantly reduce wastage. A team of 50 staff were employed on the project and the total annual salary cost of this team was Rs. 2 m accruing evenly during the year.

Other direct costs of the design and testing of the new technique were Rs. 200,000 p.m from 1.4.2022 to 31.12.2022 and Rs. 100,000 p.m. in January, February and March 2023.

By 30th June 2022, the team has developed an initial proposal and the technique was refined over the next six months, being subject to rigorous field testing. This testing was completed on 31.12.22 and the new production technique was approved as being technically feasible and commercially viable from that date. It was decided that the new production technique would be brought to practical use from 1.7.2023. On 31st December 2022 the directors estimated that the present value of the potential future cost savings the technique would generate were approximately Rs. 5 m.

Please comment.

VALUATION APPLICATION

Illustration V - Valuation of Intangible Assets : Linked to Research and Development

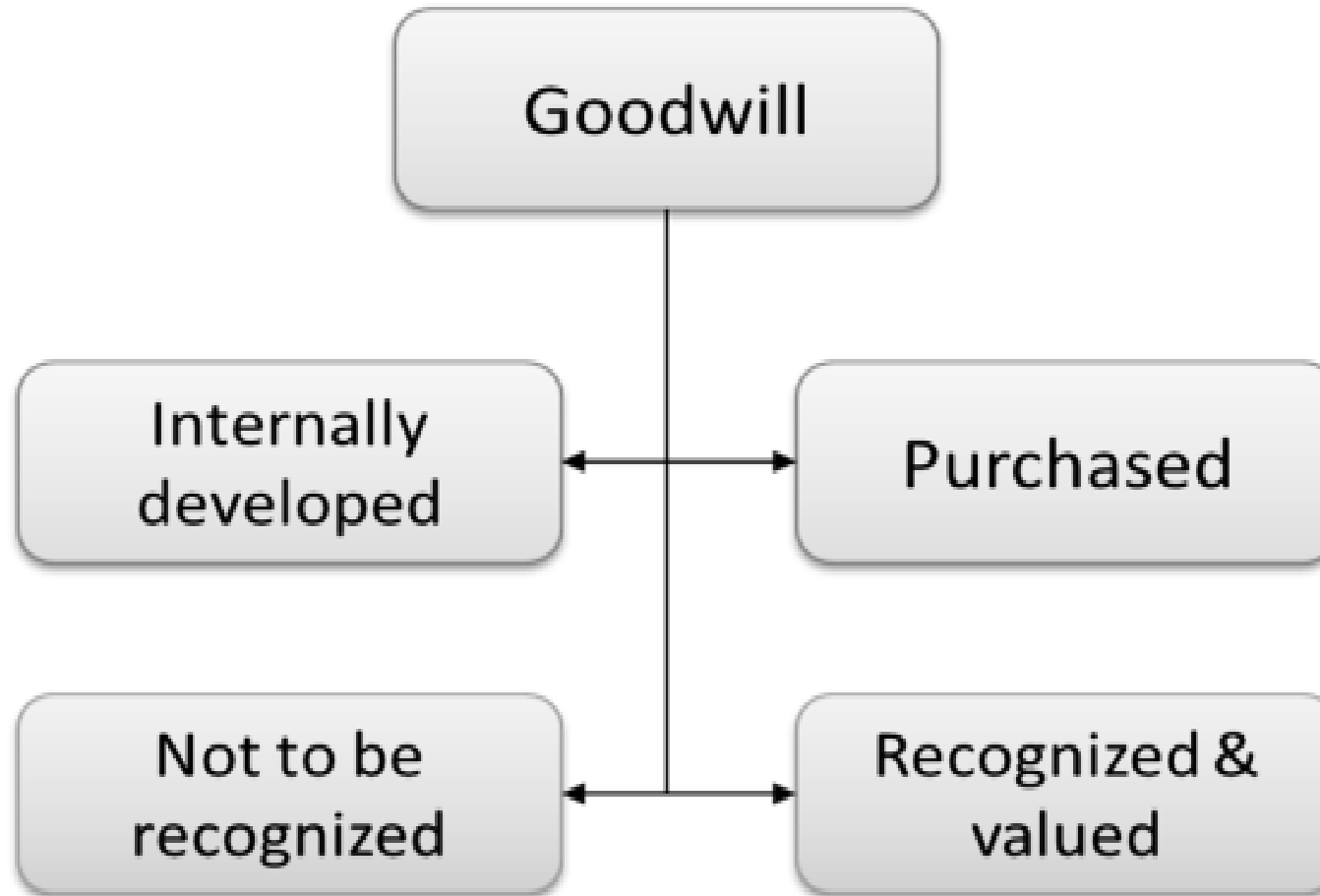
Solution

Critical date for this project is **31.12.22** when the testing was completed, and the new production technique was approved as being technically feasible and commercially viable from that date. Hence according to *Ind AS 38 Intangible assets all expenses prior to that date would be charged to Income statement as Research cost*. Expenses post that date would be treated as development cost and amortized over the life of the asset.

Research cost (Rs'000)	Development cost (Rs'000)	
1500	Annual salary cost (50 staff)	500
1800	Other direct cost	300
3300	31.12.22	800

VALUATION APPLICATION

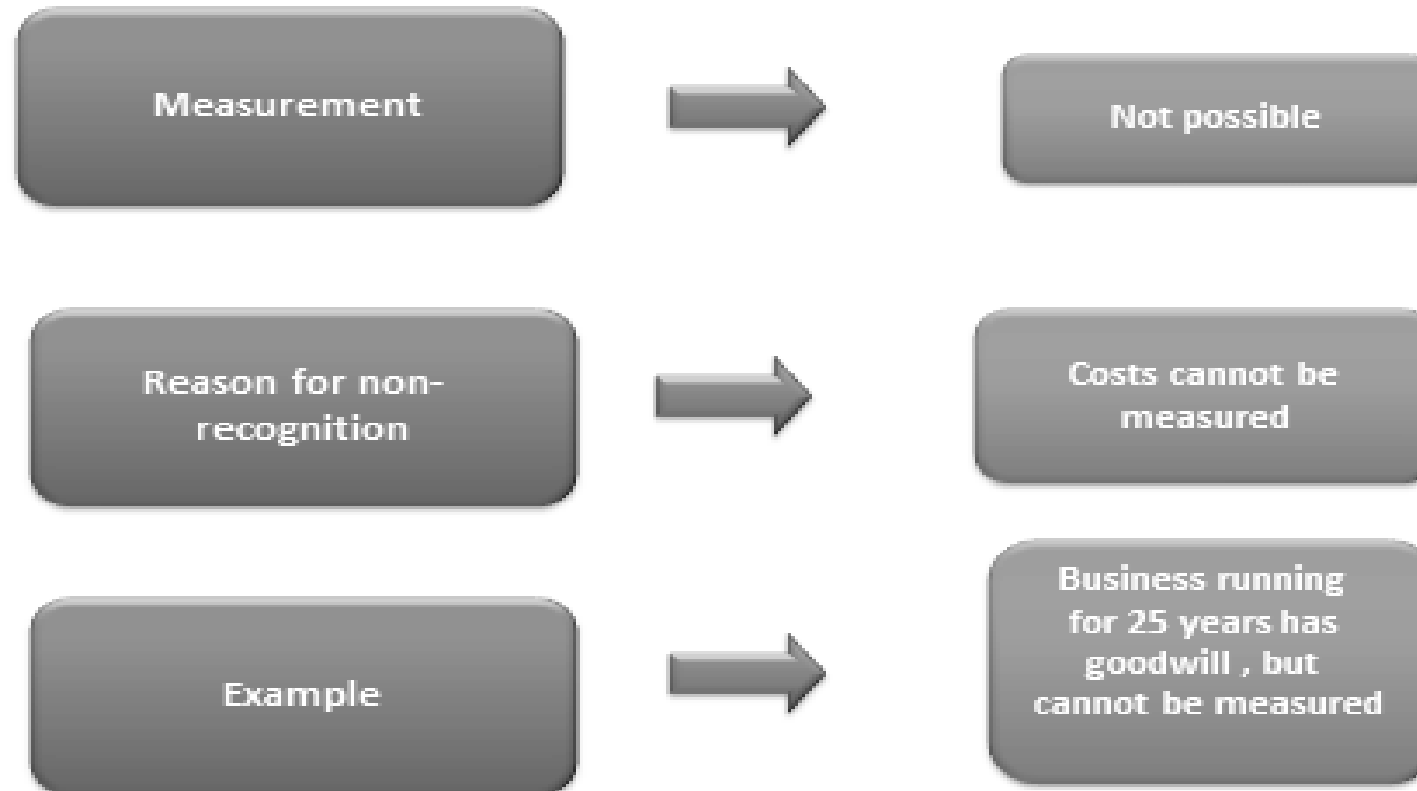
Valuation of goodwill



VALUATION APPLICATION

Valuation of internally generated goodwill

Internally generated goodwill



VALUATION APPLICATION

Valuation of purchased goodwill

**Goodwill = (amount paid by acquirer +
value of Non Controlling Interest)
Minus
Net Assets (assets – liabilities)**

**Note: This is in line with the provisions under
IFRS 3 Business Combinations**

Measurement of goodwill - IFRS 3

a) Aggregate of	
i) the consideration transferred measured in accordance with this IFRS, which generally requires acquisition date fair value	X
ii) the amount of non-controlling interest in the acquiree measured in accordance with this IFRS and	X
iii) in case of business combination achieved in stages (IFRS 3, para 41 and 42), the acquisition date fair value of the acquirer's previously held equity interest in the acquiree	X
TOTAL (A)	X
b) The net of acquisition date amounts of the identifiable assets acquired and the liabilities assumed measured in terms of this IFRS	X
TOTAL (B)	X
Goodwill (A- B)	X
Bargain purchase (B – A)	X *

VALUATION APPLICATION

Illustration V - Valuation of Goodwill – treatment of bargain purchase

Metaball's Inc. acquired Frost LLC. The assets were valued at Rs.5m and the liabilities at Rs.3m. the purchase consideration was agreed at Rs.1.5m. The net assets acquired are worth Rs.2.0m, but Metaball paid only Rs.1.5m for them. Metaball's reassessed the fair values. It found that a contingent liability for a pending tax litigation in respect of Frost Llc was likely to be paid Rs.0.3m. The revised fair values of assets were therefore Rs.5m (unchanged) and of liabilities (including contingent liabilities), Rs.3.3m (up Rs.0.3m). The fair value of purchase consideration was still found to be Rs.1.5m.

Solution

The reassessed net assets acquired are worth Rs.1.7m; purchase consideration, Rs.1.5m. There is an excess of Rs.0.2m (gain on bargain purchase), which would be immediately recognized in SOPL under IFRS.



THANK YOU!