CONCEPTUAL FRAMEWORK OF INTANGIBLE ASSETS WITH SPECIAL REFERENCE TO INDIAN ACTS

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ABSTRACT
This paper tries to discuss the conceptual framework of Intangible assets. The existence of Intangible assets has been around for a long time. Thomas Edison created the first bulb had some extraordinary knowledge. That knowledge was an Intangible asset. People who created languages, religions, number system, currencies, printers, telephones, mobiles etc. possess immense knowledge and invented extremely valuable Intangible assets. Intangible assets are non-physical resources and rights that have value to the firm and give an additive advantage to the firm. Intangibles are classified in varied number of ways. Broadly, they are classified as identifiable and un-identifiable. Identifiable Intangible assets can be further classified as Acquired identifiable Intangible Assets and Internally Generated Intangible Assets. Acquired identifiable intangible assets consists of assets like purchased technology, customer lists etc. Intangible assets are considered internally generated if they are created or produced by an entity with the help of research and development. Efforts have been placed to provide an in depth knowledge about the intangible assets, their increasing importance in today’s knowledge based economies, legal prospective attached to them, their valuation, problems in valuation and lastly problem faced with intangible.

KEY WORDS: Copyright, Intangible Assets, Patents, Research &Development, Trademarks, Valuation.

Introduction
Intangible Assets are rapidly capturing the center stage in today’s world. The growth in Intangible assets has been enormous over the last few decades, across the entire spectrum of firms. Research (Nakamura, 2003) indicated that the annual USA investment in Intangibles is at least $ 1 trillion per year. This also points out that Intangible assets have become an indispensable part of the current knowledge based economies. In December 2007, Brand Finance Institute came out for the first time with its Global Intangible Tracker 2007. According to this, India ranked as number three economy in the world with 74% Intangible component to the total enterprise value (because of huge presence of Intangible assets in software sector). Interestingly, India ranked number one amongst top 10 Asian economies. All this shows that Intangible assets are growing fast and they have become very crucial for survival and growth of the business not only in the developed countries but also in
developing countries. Therefore it has become important to understand what Intangible Assets are, how they are classified, what are their economic characteristics, how they are valued, what are the possible problems faced with them etc. assets. The main objective of this paper is to have an overall view about intangible assets, how they are valued and how get registered under their respective acts.

Rational of the Paper

The main objective of this paper is to throw light on the following aspects related with the understanding of Intangible assets:

- Understanding Intangible assets
- Economic characteristics of Intangible assets
- Classification of intangible assets
- Valuation of intangible assets
- Problem faced with Intangible assets

Defining Intangible Assets

An asset is an economic resource tangible or intangible that is being owned by an individual, company or country with the expectation of future economic benefits. The monetary value of the owned assets is depicted by the balance sheet of the firm. Two major classes of assets are tangible assets and intangible assets. Tangible assets include current assets (inventory, cash) and fixed assets (buildings). Intangible assets are non-physical resources and rights that have a value to the firm and give an additive advantage to the firm. Examples of intangible assets are patents, copyrights, goodwill, trademarks, human capital and computer programs.

Various accounting standards have defined Intangible Assets as:

- An Intangible asset is an identifiable non-monetary asset, without physical substance, held for use in the production or supply of goods or services, for rental to others, or for administrative purposes. Accounting standard-26(India)

- Intangible asset is an identifiable non-monetary asset without physical substance. International Accounting Standard-38(International standard)

- Intangible assets are non-financial fixed assets that do not have physical substance but are identifiable and are controlled by the entity through custody or legal rights. Financial Reporting Standard-10(United Kingdom)

- Intangible assets are the assets, not including financial assets that lack physical substance. Financial Accounting Standard-142(USA)

From the above stated definitions of Intangible assets given by various accounting standards we can conclude that

“An Intangible asset is an identifiable non-monetary asset/non-financial asset without physical substance and control of which comes from custody or legal rights.”

Economic Characteristics of Intangible Assets

Intangible Assets have some peculiar characteristics which are specific to these assets. These cannot be observed in the case of tangible assets. Jeffery A. Cohen has given very interesting economic characteristics of Intangible Assets in his book. This section describes...
some of the economic characteristics, such as high initial cost, economies of scale, joint consumption etc.

- **Low Marginal Cost**
  Marginal cost is an addition to the total cost resulting from a unit increase in the output. In the context of Intangible Assets it means an additional cost incurred to reproduce the asset in its economic benefits. Intangibles have very low, sometimes even zero marginal cost. Cost of production does not repeat with every additional output in case of Intangibles. For example a publisher incurs production and distribution costs to produce an extra copy of a book but the author doesn’t have to write the book again and again. This means investment and efforts made by the author was only for the original copy. In the same way drug companies do not have to invest huge amount for each tablet. The initial investment is only for the development of the formula for the medicine.

- **High Initial Investment**
  Initial investment is the cost incurred for the production of the first copy. For Intangible Asset there is high initial investment. For example Pharmaceutical companies invest millions of rupees every year on Research and Development for the development of new products (drugs). For example, Research and Development expenditure of Ranbaxy for the year 2012 was Rupee 4,490.41 million. The cost thus incurred on R&D is the company’s initial investment for the product.

- **Economies of Scale**
  The above two factors- Low Marginal Cost and High Initial Investment lend themselves to the generation of economies of scale for the company. Economies of scale mean more of a product can be produced at a decreasing cost. For example if a company develops software and produces just twenty or thirty copies of that software it will not be able to economize the cost. But if it starts large scale production (say 10,000 or more copies) then it will be able to reap the benefits of economies of scale.

- **Joint Consumption**
  This is a unique characteristic of Intangibles. In case of Intangibles more than one consumer derives benefits from the use of Intangible Assets at the same time. This is not the case with tangible assets as only the owner of the assets has the benefits. For example, benefits arising from a machine owned by a company can only be consumed by a company. But in case of Intangibles like software, drugs, the company is the patent holder and the consumers are public at large using the respective Intangibles simultaneously.

- **Imperfect Substitution**
  Imperfect substitution means an Intangible asset can’t be substituted perfectly. For example management expertise held by an executive of a company can’t be perfectly imitated by another executive. Each executive possesses a unique expertise in the form of human capital. Because of this, executives with special and unique expertise get huge salary packages. They become competitive advantage for the company.

- **Network Effects**
  Network effect results when the value of an asset increases with the increased number of people who also own the asset. For example a phone is more useful when others also have.
In the same way Microsoft Office Software is more useful when other computers also have this software otherwise there will be a problem in using the transferred documents.

- **Non-marketability**
Intangibles are not traded in “active and transparent” market. Attention should be given to the words ‘active’ and ‘transparent’. Like share market, there is no active market for the trading of Intangible Assets. The main reason behind non-tradability is lack of information symmetry between the buyer and the seller as it is difficult to fully communicate the profit potential of an Intangible Asset in a credible way. For example it is difficult to properly communicate the profit potential of a particular drug or software. This may be because of high risk of uncertainty (what will happen in future?) associated with Intangible Assets. Non-transparency implies that details about the transactions which actually happen (number is very less) are not disclosed publicly.

**TYPES OF INTANGIBLE ASSETS**
Companies have different types of assets in their balance sheets. These assets can be divided into two parts – assets with physical substance and assets with no physical substance. Assets with no physical substance are known as Intangible assets. Financial assets such as stocks and bonds also lack a physical embodiment but they are not Intangible Assets because they represent claims on corporate assets. It is difficult to compile a comprehensive list of Intangible Assets as there are Intangible Assets which are specific to a particular business organization. Some of the common types of Intangibles are: - patents, copyright, licenses, trademarks, software, customer lists and relationships, trade secrets, goodwill, brand, human capital, know-how etc. All Intangible assets are not recognized and shown in the balance-sheets because of recognition and valuation problem. For example human capital is difficult to value. Difficulty arises in estimating contribution of each employee to the company’s profit sales etc. but companies still try to value its human capital as it has become an important factor of competitive advantage. In India, very limited number of companies goes for human resource accounting.

**CLASSIFICATION OF INTANGIBLE ASSETS**
Intangibles can be classified in number of ways. They can be classified as identifiable and unidentifiable intangibles, legal and competitive intangibles, market-related intangibles (trademarks, internet domain names), customer-related intangibles (customer lists and relationships), artistic-related intangibles (pictures, photographs, videos), contract related intangibles (franchise, broadcast rights) etc. Broadly, intangibles are classified as identifiable and unidentifiable. **Identifiable Intangibles** are those which can be identified separately from other assets like goodwill. These assets can be valued individually. They can be further classified as:-
- Acquired identifiable intangible assets
- Internally generated intangible assets

**Unidentified Intangibles** cannot be identified from other intangible assets. Therefore, they are bunched under the heading of goodwill.

The following section describes various types Intangibles assets. It also discusses some Intangibles that can be identified like research and development but accounting conventions do not treat them as assets.
1. Intellectual property

According to World Intellectual Property Organization

“Intellectual Property refers to creations of the mind: inventions, literary and artistic works, and symbols, names and images used in commerce”

Intellectual Property is an Intangible Asset. It is divided into two parts: Industrial Property and Copyright. Industrial property includes patents, trademarks, industrial designs and geographical indications. Copyright includes literary work, artistic work and architectural design. The rights which protect the intellectual property are known as Intellectual Property Rights. Intellectual property allows the creator/innovator to reap the benefits from his or her creative work. These rights provide legal protection to the creator against misuse and infringement of the work. Since creative work is protected, it encourages expenditure in innovative projects which in turn improves economic growth. At the international level, Intellectual Property is administered by the World Intellectual Property Organization. All the parts which constitute intellectual property have been discussed in detail in the following section.

- Patents

According to World Intellectual Property Organization

“A patent is an exclusive right for an invention, which is a product or a process that provides, in general, a new way of doing something, or offers a new technical solution to a problem”

A patent provides protection to the owner of the patent that the patented invention cannot be commercially made, used, distributed or sold. It basically grants a kind of monopoly to the inventor for a period up to which patent has been granted. An invention to get patented must have a practical usage, element of originality, an addition to existing knowledge. But above all the invention (subject) must be acceptable under law. There are various types of patents like utility patents, design patent, process patent, product patent etc. In India, patent is governed under The Patent Act 1970 which came into force on 20-April-1972, replacing Indian Patents and Design Act 1911. In 1988, India became the member of Paris convention & Patent Cooperation Treaty (PCT). Because of the membership, the Head office of patent office and its branch offices have become receiving offices for the purpose of international applications filed under Patent Cooperation Treaty (PCT). Patent origin is only of the country in which patent was applied and got registered. A worldwide patent cannot be obtained i.e. no “international patents” exist. In India, patent related to food, medicine and drug is granted for 5 years from the date of registering the patent or 7 years from the applied date of the patent whichever is shorter. For any other invention, the term of the patent is 14 years from the date of the patent (It is the date on which complete specification was filed). The cost of internally generated patent includes legal fees, registration fees, successful legal defense cost and other directly related expenditures for securing it. Research and development cost incurred for the patent are excluded as these are required to be expensed in the year in which they are incurred as per the Indian Accounting Standard on Intangible Assets, As-26. The capitalized value of the acquired patent is its purchase price. After 2005 amendment of Patent Act 1970, India switched from process patent to product patent to make its Act compliant with Trade Related Aspects of Intellectual Property Rights (TRIPS) rules of W.T.O.
• **Copyrights**

According to Oxford Dictionary of Economics

"Copyright is the exclusive right to reproduce artistic, dramatic, literary, or musical work or to authorize its reproduction by others."

According to World Intellectual Property Organization

"Copyright is a legal term describing rights given to creators for their literary and artistic works."

Copyright protects the creator of the work and provides exclusive right to reproduce the copyrighted work, create derivative works, distribute the work, perform the work, display the work and authorize others to use the work on agreed terms and conditions, i.e. only expressive pieces, or writings may receive copyright protection. As per this requirement, work of art must be reduced to some tangible form. The works covered under copyright include a) **artistic works** as paintings, architecture, technical drawings, sculpture etc. and b) **literary works** such as poems, reference works, newspapers, novels, computer programs etc. Copyright is recorded at their acquisition price if they are purchased otherwise they are recorded at the cost of filing the copyright notice. The creator can sell their copyright (especially in case of publications and films) to companies so that they market that work in a better way. Companies in return pay royalties for the use of work. The payment royalty is usually variable to the actual use of the work. So, these rights provide recognition and fair economic rewards. In India, copyright is governed by the **Copyright Act 1957**, which came into effect from January 1958. This Act is extensively borrowed from the new Copyright Act 1956 of United Kingdom. Under Indian Act, copyright registration is not compulsory. Acquisition of copyright is automatic and does not require any formalities. This is in compliance with the rules of World Intellectual Property Organization under which there is no copyright registration system. Though there are some countries which provides for registration of creative works. However, registered copyright is better as it becomes evidence in the eyes of law in case of dispute relating to its ownership. Copyright is granted for limited period. Under World Intellectual Property Organization rules, the limit is 50 years after the creator’s death. In India this time limit is 60 years. In the case of original literary, dramatic, musical and artistic works the 60 years period is counted from the year following the death of the author. In case of cinematograph films, sound recordings, photographs, posthumous publications, anonymous and pseudonymous publications, works of international organizations the 60 year period is counted from the date of publication. After 1999 Amendment, this act has become fully compliant with the Trade Related Aspects of Intellectual Property Rights (TRIPS) rules of W.T.O.

• **Trademarks**

According to World Intellectual Property Organization

"A trademark is a distinctive sign which identifies certain goods or services as those produced or provided by a specific person or enterprise"

As per TRIP any sign which is ‘capable of distinguishing’ the product or services of one business from the products or services of another business is capable of constituting a **trademark**. Trademark is also a kind of intellectual property. It provides protection to the owner by giving him/her the exclusive right to use symbols, names, packaging, and style of a product and even colour of a product. Trade dress is another related concept. It includes packaging, style, colour and fonts. We can say that it is a dress of the trademark. Trademark
has an indefinite life. It exist up to the time its owner continue to actively use it. In addition to commercial trademark, other categories also subsist. These are Certification and Collective trademark. Certification trademark is given when there is a compliance with certain established standards. The world-wide accepted “ISO 9000” is an apt example of quality certification. Collective trademark is used by the members of an association to identify themselves with the standards laid down by the association. For example, in India the accountants are represented by their association Institute Of The Charted Accountant Of India (apex body of accountancy). The capitalized cost of trademark includes design work expense, legal expense, filing fees to record the trademark and cost incurred to enforce the exclusive use of the trademark. In India, trademarks are governed by The Trademarks Act 1999. It extends to the whole of India. A proper record of all trademarks is kept at the “Registrar of Trademarks” which is kept at the Head Office. At the international level, WIPO has set up a system of international registration of trademarks under the governance of two treaties- The Madrid Agreement (International Registration of Trademarks) and The Madrid Protocol in order to avoid separate registration with each national office.

- Geographical Indications
Geographical indication is an indication originating from a definite geographical area used in the production of agricultural, natural or manufactured goods and these goods are able to be identified. Geographical indication is a part of Intellectual Property Rights under the Trade Related Aspects of Intellectual Property Rights (TRIPS) of World Trade Organization (W.T.O). India as a member of the W.T.O. enacted The Geographical Indications of Goods (registration and protection) Act 1999 which came into force from 15 September 2003. It covers the whole of India. The main objective behind the registration is to provide legal protection to Geographical Indications so that there is no unauthorized use of registered Geographical Indications (GI’s). Also, it promotes economic prosperity among the producers of the goods. The GI’s are registered for a period of 10 years and registration may be further renewed for a period of 10 years every time. In India, GI has been awarded to- Darjeeling Tea, Madhubhani Paintings, Kashmiri Sozani Craft and Thanjavur Paintings.

- Industrial Designs
According to World Intellectual Property Organization

“An industrial design is the ornamental or aesthetic aspect of an article. The design may consist of three-dimensional features, such as the shape or surface of an article, or of two-dimensional features, such as patterns, lines or colour”.

In today’s competitive world each and every feature of a product is important. Not even the technology, the design of a product has also become an important aspect of the product. Design includes colours, patterns, shapes etc. Design makes product attractive which in turns increases its marketability. This means that design increases the commercial value of a product. Like other industrial properties can be protected by getting it registered under respective law of the country.

It protects the design from unauthorized use and infringement. Registration of industrial design not only protects owner from misuse of the design but also the customer from duplicate and risky products. At international level, industrial design registration is governed under the Hague Agreement Concerning the International Deposit of Industrial Designs which is administered WIPO. The application for registration can be applied to WIPO or with any member country of the treaty. The design will get registered with as many countries as the applicant wants to. But still there is no single design application system present at the international level. However, members of the Paris Convention have certain privileges in
design registration. A party who files application in a member country like India can claim priority of the first application in other member countries by filing application within six months of the filing date in India. In India, industrial design is governed by The Design Act 2000. This act provides for the registration of industrial design in India. It is operative in the whole of India. Initially, it is granted for 10 years which may further be extended for a period of 5 years. Before this act the industrial design was governed by The Design Act 1911 passed by the then British Government of India. To provide more effective protection and to promote design activity this act was repealed and The Design Act 2000 came into existence.

- **Trade secret**
  Trade secret is the information which gives ability to a company to derive “independent economic value” as that information is not generally known to other companies. Information can be in the form of formula, method, process, technique, device etc. Trade secret existence is subject to the efforts put by the company in upholding its secrecy. For example a recipe of a cook might qualify a trade secret, provided an economic value can be derived by keeping it secret from the competitors (other cooks). The two firms can concurrently and autonomously hold the same information as trade secret. This is not possible in case of intellectual properties like copyrights and patents as two firms cannot hold copyright and patent simultaneously on the same invention. Jeffery A. Cohen has given differentiation between trade secrets and patents in his book ‘Intangible Assets: Valuation and Economic Benefit.’ According to him trade secrets are different from patents in three ways. i) Trade secrets cover wider area than patents as all trade secrets cannot be patented. ii) Trade secrets do not require originality as it is required in case of patents. iii) Trade secrets are not expected to provide usefulness of the society. In case of patents, the idea is useful to the society. With the help of the diagram Cohen depicted the patent-trade secret on the basis of two dimensions: the incentive to patent and the benefit of secrecy.

![Diagram](image)

**Figure2:** Patent or Trade Secret

The curve is convex to the origin depicting an inverse relationship between benefits of trade secrets and incentive to patent i.e. greater the benefit of trade secret lower is the incentive to patent. Main problem with the patent is that the patent make inventions public and competitors can design around the patent. Designing around the patent is known as reverse-engineering and it is perfectly legal and can be kept as a trade secret.
• Research and Development

As per Accounting Standard 26vii
"Research is original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding".

“Development is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services prior to the commencement of commercial production or use”.

According to the above definitions research is basically aimed at inventing new product or method and development is the activity that converts the result of a research to a marketable product by devising methods of making the product and testing its reliability. The designing of new products is very crucial for the survival of the business enterprise in today’s world. The firms have to continually revise their range of products due to continuous technology change and the changing preference of customers. Expenditure on R&D reflects firm’s ability to improve future performance and adapting itself to changing world. Research and Development is classified as an Identified Intangible asset when it directly results into an Intangible asset like patent. Main issue with Research and Development cost is whether to capitalize or expense it.

• Brand

Brand is
“A distinguishing symbol, mark, logo, name, word, sentence or a combination of these items that companies use to distinguish their product from others in the market”.viii

“A brand is a collection of perceptions in the mind of the consumer”xix

The American Marketing Association defines brand as: a name, term, sign, symbol, or design or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors. Thus, a brand identifies itself with the seller with its unique characteristics. It is the perception in the mind of the consumer. It may be positive or negative depending upon the services provided by the brand owner.It is the consumer’s perceptions and feelings about the product’s attributes. So, brand lives in the mind of the consumer. In this way it is an intangible asset but unlike patents and copyrights brand don’t have expiration date. It will work till the consumer’s perception and feelings are maintained by the owner of the brand. Examples of some valuable brands are Coca-Cola, Pepsi, Sony, Airtel etc. When we think of Airtel what comes to our mind is a package of superb services. This is the perception of the brand “Airtel” in the minds of the people. Now due to this perception more and more people go for Airtel. This is called brand formation. Also, brand works as an economic asset for the owner as extra premium can be earned because of good perception of the brand. Brand as an asset is not represented in the balance-sheet. But it is still valued as an off balance sheet asset. There is a value attached to every brand. Brand consultants use various methods for measuring brand value based in the specific conditions of the companies. In India, the enterprises are not allowed to show brand as an intangible asset as per the standard on intangible asset (AS-26). But still it works as a very powerful force for an enterprise.
• **Goodwill**

In accounting term, goodwill reflects the excess of the book value of a business over the value of its net identifiable assets. It normally arises in case of acquisition. Goodwill reflects the information that the business has some “inherent value” beyond its recorded assets. The excess money paid by the buyer may be for the accumulated know-how, work-force, competitive advantage, credit rating, location etc. The goodwill which is generated due to acquisition is known as an **acquired goodwill**. The purchasing company (acquirer) will show the acquired goodwill (positive) on the asset side of the financial statements. The carrying cost of goodwill is subsequently adjusted according to the relevant accounting standards and Generally Accepted Accounting Principles (GAAP). In some countries goodwill is amortized and in some countries it is tested for impairment. Like in India, goodwill is annually tested for impairment. Impairment of goodwill affects the acquirer’s financial statements (P&L A/C and Balance sheet) severely when there is downfall in the country’s economy or in the world economy (international acquisition). The fair value of the acquired company falls drastically in the recession hit market. First, it erodes the company’s earnings as impairment losses are to be charged from profit and loss account. Secondly, it erodes the value of balance sheet by the amount of impairment. **Negative goodwill** arises when the fair value of the net asset at the date of acquisition exceeds the cost of acquisition. It is recorded on the liability side. Another type of goodwill is **internally generated goodwill**. It is the excess of fair market value of the business to the book value of its net identifiable assets (fair market value-book value). This goodwill is not recognized in the financial statements because when the market value of the goodwill changes, internally generated goodwill also changes. This change is very frequent as a result of this it is not possible to recognize change every time in the financial statements. Therefore, capitalized value of internally generated goodwill is considered as zero.

• **Human Capital**

Human capital is a type of an intangible asset. All the attributes of human resource such as knowledge, skills, competence etc. are intangible in character. The success of organizations these days is contingent on the quality of their human resource — its knowledge, skills, competence, motivation and understanding of the organizational culture. In knowledge – driven economies therefore, it is imperative that the humans be recognized as an integral part of the total worth of an organization. Without human resources, the other resources cannot be operationally effective.

There are various methods which estimate and project the worth of the human capital. These methods help in quantifying the worth of the knowledge, motivation, skills and contribution of the human element. They also help in quantify the worth of the organizational processes like recruitment, selection, training etc. which are used to build and support these human aspects. This measurement aspect is taken care by Human Resource Accounting (HRA). It is a process by which data related to human resource is identified and measured and after that this information is communicated to the third parties. It allows management personnel to monitor effectively the use of human resources. It also provides a sound and effective basis of human asset control. Two approaches usually employed for measurement are – cost approach and economic value approach. The cost approach involves methods based on the cost incurred by the company, with regard to an employee. The economic value approach includes methods based on the economic value of the human resources and their contribution to the company’s gains.
Valuation of Intangible Assets

Valuation is a process by which a value is derived by keeping in mind the factors influencing the process. There has been a significant growth of intangible assets relative to tangible assets. The value which the business has derived in today’s knowledge based economy from intangible assets has increased significantly. Intangible assets have become an area of competitive advantage. A company with a popular brand name earns higher profits than other companies. All this raises the question of valuation of intangible assets. The purpose behind the valuation of intangible assets is not only to understand what intangible assets are but also to know that how they are going to affect the bottom-line. Intangible asset valuation is also important in case of mergers and acquisitions as they have become a major part of balance-sheet. Methods which can be used for the valuation of intangible assets fall into three categories — income based, cost based and market based. All these approaches are discussed below. The most widely used approach is income approach.

- **Income Approach** - As the name implies this approach takes into consideration income generated by an Intangible asset for its valuation. Future expected earnings attributable to the asset are identified and examined for valuation of an Intangible asset. This is the most relied upon approach and it is used in addition to other approaches by valuation experts. The methods which are used under this approach are
  a) Capitalization of historic profits  
b) Gross profit differential method  
c) Excess profit method  
d) Relief from royalty method. The most commonly used methods are excess profit method and relief from royalty method. Under relief from royalty method, the price that business would be willing to pay for an Intangible asset is estimated. This estimated price is then capitalized to show the effect of risk associated with this Intangible asset. Excess profit method takes into consideration the excess profits earned due to the use of an Intangible Asset excluding the effect of other assets on those profits. It is basically the present value of the earnings generated by the asset, net of the contribution done by other assets in those earnings. As the name suggests Capitalization of historic profits method capitalize the historic profitability of the asset. Profits are multiplied by a multiple which is calculated after assessing the relative strength of the Intangible Asset in the light of factors such as stability, profitability strength etc. The major shortcoming of this method is that it gives little importance to future income. Gross Profit differential method is mainly related with trade mark and brand valuation. This method takes into consideration the difference between the gross profit of the branded or patented product and an unbranded product. Before applying income approach we must-identify the Intangible asset which we want to value, estimate the expected return to be generated from that asset over time and lastly estimating a suitable measure of risk. Notice that the above information is also used in valuation of a tangible asset. The difference is about the accuracy required in estimating the pattern of cash flows as it is more complicated in case of Intangible assets.

The first step is the identification of Intangible assets. It is very tricky to identify an Intangible asset. It is easy to trace tangible asset but not an Intangible asset. For example it is easy to locate a computer but complicated to locate expertise applied by the computer expert. Second step is to associate return that can be attributable to the asset. In this step we have to predict income flow for each future period during the useful existence of the asset. Cash flows which we have predicted in the first step are not 100% right i.e. we are not certain about the exact pattern of cash flows. Due to this we have to assign some discount rate to our cash flows. Discount rate will check
for the risk associated with the prediction of the cash flows. So, the third step is prediction of this risk/discount rate. Determination of discount rate requires lot of efforts. The discount can be derived from a number of different models. The two most commonly used models are Capital Asset Pricing Model and Arbitrage Pricing Model. Whatever model we follow, discount rate must take into consideration the effect of inflation rate, economic risk, risk associated with the investment etc.

• **Market Approach** - In this approach Intangible asset’s valuation is based on the market transactions taking place in similar Intangible assets. The first step of market approach is collection of transactions related to comparable assets. This step requires consideration of some special points. The first point to consider is to access the market conditions at two different points, one at the time of transaction and the other at the time of valuation. The purpose is to study the changes that happened in such conditions so that the effect of these changes can be considered while evaluating Intangible asset. Another point to consider is that how close we can substitute comparing asset with our Intangible asset. The points which can be considered for this analysis are scope of the asset (narrower or broader), useful life of the asset, chances of infringement etc. This analysis is important as it will indicate that whether the price of the comparable asset accurately reflects the price or not. The main problem with this approach is inadequate availability of transactions for comparable Intangible assets. Another problem is heterogeneity of Intangible assets.

• **Cost Approach** - According to this approach the value of the Intangible asset is the “cost to create” or “cost to replace” that asset. This method is appropriate for valuing internally developed assets as cost can be easily determined in this case. The relevant cost may include labour overheads, material overheads, research and development cost, testing cost, approval cost, protection cost etc. After determining the cost component, the next step is to adjust this cost figure for obsolescence. The types of obsolescence applicable to Intangible assets comprise of functional obsolescence (inability of the asset to perform the function), economic obsolescence (not able to earn fair rate of return due to external factors) and technological obsolescence (improvement in competitive technologies). This method should be viewed with prudence as there are many inbuilt problems within this approach. The first problem is that the value of Intangible assets is determined on the basis of cost and not on the basis of earning potential. Due to this it fails to reflect the earning potential of the asset. The second problem is with its assumption of direct relationship between cost and earning potential. There is a possibility of placing high value to less successful asset and vice-versa. Another problem is that there are many identifiable Intangible assets for which replacement may not be possible or estimation of replacement cost may not be possible. Also, this method ignores changes in the time value of money. The only point that goes in favour of this approach is easiness in calculation as data required is readily available.

**Valuation Issues**
As we have seen that valuation of Intangible Assets is not an easy task. We can say that Valuation is an art more than a science. Correct valuation of Intangible Assets is very important. This section discusses some important valuation issues like identification of intangible assets, setting of economic life etc. These issues require consideration as they may help in proper valuation of Intangible Assets.
The major issues are:

- **Identification of Intangible Assets** - This is the first step of valuation process. Identification is particularly difficult in case of Intangible Assets than tangible assets. It is easy to spot hi-tech machinery in the factory premises but it is difficult to identify the operator’s know-how.

- **Economic Life** - There are some intangible assets in which it is difficult to estimate the economic life of an asset as in the case of brand name, customer relationships etc. Brand which is strong may have a long or even an indefinite life and on the other hand customer relationships may have a very short life. Presumably because of these uncertainties, accounting standards like AS-26, FAS-142 has not placed such assets under the heading of Intangible Assets.

- **Methodology of valuation** - Under this heading the valuation issues are related to the methods of valuation. Experience and judgement is required in the application of the valuation approaches. The various issues are:

  .1. The first issue is about the **selection of the valuation approach** i.e. which valuation approach to be followed. Market approach is the best approach but due to lack of market information on relevant transactions it is difficult to follow this approach. Because of this limitation income approach is more widely followed.

  .2. Next issue is related to the understanding of **underlying assumptions** of valuation approaches. Before selecting any approach one should check whether the assumptions are in line with the factors associated with the intangible asset to be valued.

  .3. Determination of **cost of capital** is the next issue. Cost of capital percentage should properly capture the risks and returns attached with the asset being valued.

  .4. **Projection of future income flows** is the most important valuation issue. Projection of future income flows is very difficult and requires lots of judgement. Future income projections are just estimation based on the experience and judgement of the valuation expert. These projections should be made carefully as this will have the maximum impact on the value of the asset.

  .5. Under relief from royalty method estimation of a suitable **royalty rate range** is another important issue to be taken care of. Selection of royalty rates should be rigorous as wrong selection can impact the value of the asset in a significant way.

  .6. Under income approach total income of the business generated by utilizing the asset is used rather than the incremental income generated by this asset. This mistake should be avoided. By taking total income, the contribution of tangible assets, intangible assets etc. together are automatically taken into account which is wrong. Therefore, **incremental income** generated with the use of intangible asset should be taken.

**Problems Faced with Intangible Assets**

The problem faced in the case of Intangible Assets is their measurement. Measurement becomes more judgmental and problematic in case of Intangible assets due to their specific characteristics – **non-tradability** and **partial excludability**. For example there has been extensive international debate on the accounting of purchased goodwill that should it be amortized or not. Proponents of amortization say that the purchased goodwill will get eroded in due course as the elements of goodwill are “used up” as the time passes. Therefore, it should be charged from profit and loss accounts. Opponents of amortization argued that
goodwill has an infinite life as it can be maintained over time by doing expenditure on advertising, product-development. Therefore, it should not be amortized. Also it is difficult to measure amortization period. Due to above arguments different countries follow different methods for accounting of goodwill. Same problem is with accounting of brand. This measurement problem not only question on the reliability of financial statements but also affects the decision-making of the capital market investors, managers and public policy makers. For investors valuing Intangibles-intensive enterprises creates measurement problems. Due to this, investors often misprice securities of these types of enterprises. For manager’s, problem is about allocation of resources in avenues like technology up gradation, employee’s development, research and development etc. Allocation decisions are based on comparison between investment costs and expected future benefits but it is difficult to ascertain future benefits with accuracy which complicates the investment decision. Same is the case with policy makers. In their policy they have to allocate resources in avenues like education, infrastructure etc. It is difficult to accurately measure benefits of education. This will cause misallocation of government funds.

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