

**Intellectual Property**  
**Prof. Feroz Ali**  
**Department of Humanities and Social Sciences**  
**Indian Institute of Technology, Madras**

**Lecture – 69**  
**Valuing Intellectual Property**

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## Valuing Intellectual Property



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### Importance of IP Valuation

- Securing financial investment
- Identify walk-away position in negotiations
- Foundation to establish damages for infringements
  - Georgia-Pacific factors: reasonable royalties
- Determining royalties
- Legal and accounting reasons



Valuing intellectual property or IP valuation, IP valuation is an important function for all businesses. It helps them to secure financial investment; it helps them to identify walk

away position in negotiations, where IP is involved. It is the foundation to establish damages in infringement cases for instance we will be looking at the US yardstick what is called the Georgia Pacific factors on how to determine reasonable royalties .And reasonable royalties can also be determined even without there being an infringement suit, say the party is going for arbitration and the arbitrator has to determine the royalties. So, it could IP valuation could again be relevant in those cases and it could be relevant for legal and accounting reasons.

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## Challenges in valuing IP

- Level of subjectivity and assumptions: “probabilistic rights”
- Lack of information to identify benchmarks: intangibility
- Shortage of valuation experts: inter-disciplinary difficulties
- For startups – defending valuation during negotiation



Now, there are some challenges in valuing I P, there is a level of subjectivity and you need to make some assumptions with regard to intellectual property rights and some scholars have called it probabilistic rights, that the rights may exist now, but there is no certainty that they will exist in the future. And there is a lack of information to identify the benchmarks this comes out of the intangible nature of IP. And obviously, there is a shortage of valuation experts because, IP is an interdisciplinary field and having people who have steeped in the knowledge of valuation and in the knowledge of IP could be difficult to find.

For startups the challenge is in defending the valuation during a negotiation because, startups the values always in the future. So, it becomes hard to value the IP when it is in it is early growth phase.

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## Valuation methods

- Fair value approach – commonly followed
  - Valuation to reflect reasonable assumptions and estimates
  - Significant factors to be considered – information about business, understanding of market conditions, marketability of final product/service based on IP
- Two major approaches to valuation
  - Cost-based valuation
  - Market-based valuation



Now, let us look at some of the valuation methods that are there in the market a fair value approach is commonly followed. The valuation is for to reflect the reasonable assumptions and estimates made by the business and there are significant factors to be considered; information about the business, understanding of the market conditions, marketability of the final product of this or the I P based on I on the I P, marketability of the final product or service based on IP and to see to what extend it contributes to the product IP at times maybe a small contributor to the value of the product. And the two major approaches of valuation are the cost based valuation and the market based valuation. Now we look at these two approaches in detail.

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## Cost-based valuation

- Basis – economic principles of substitution and price
- Value of IP assumed to be historical production and protection cost
- Information required for this approach:
  - Material cost – isolated costing of tangible assets used to develop IP
  - Labor cost – wages, fees, compensation, insurance etc.
  - Apportioned overhead cost
  - Redevelopment information
  - Profit and incentive component



The basis of a cost based valuation is the economic principles of substitution and price are there any alternatives to the product and what could be the price the market wants to pay. The value of the IP is assumed based on the historical production and protection cost. And the information required for this approach involves material cost, isolated costing of tangible assets used in the development of IP, we had seen this in R N D it could be the laboratory, the equipment, the salaries there is a quite a lot of tangible assets that go into creation of IP. We need to look at the labour cost, wages, fees, compensation, insurance etcetera Apportioned overhead cost, redevelopment information, profit and incentive component.

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## Application of cost-based valuation

- New IP
- Exchangeable for intangibles like software (different code for same function)
- Royalty rates set as fair rate of return based on cost of IP
- Estimate internal Return Of Investment (ROI) of IP of associated technology or other intangible asset



Now, the application of cost based valuation happens for new IP for exchangeable for intangibles like software where you can use a different code for doing the same function. The royalty rates are determined as a fair rate of return based on the cost of IP and an estimate of internal return of investment of IP of associated technology or other intangible assets.

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## Common issues with cost-based valuation

- No correlation between sunk cost and real market value of IP
- Does not account for economic and market factors related to IP
- Opportunity cost not considered
- Risks associated with economic and other returns not factored
- Technological obsolescence not factored (depreciation issues)



Some common issues with cost based valuation; there is no correlation between sunk cost and real market value of IP, we had mentioned this in the instance of Microsoft

software. It may the sunk cost may not reflect the value market value of the IP, especially for software which is become outdated. It does not account for economic and market factors relating to IP, Opportunity cost are not considered. Risk associated with economic and other returns are not factored, Technological obsolescence is not factored, like for instance, software, which could have caused millions to develop, may not be relevant after some time.

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## Market-based valuation

- Basis–potential economic returns to be earned from products/services from IP
- Two market-based valuation approaches
  - Comparable transactions/industry benchmarked approaches
  - Future income based approaches



Now, the market based valuation, which is the other approach. The basis is the potential of economic returns to be earned from products and services using IP. The two market based valuation approaches are comparable transactions or industry benchmarked approaches there is a comparable transaction in the market. So, you use that as a guideline or future income based approaches, what could be the future income the IP can bring.

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## Comparable transaction/industry benchmark

- Used for benchmarking similar technologies (or deals with IP at similar stage)
- When relevant market information on prices, royalty rates or investment available, most reliable method
- However, it depends on access to information such as
  - Product lifecycles in industry, potential entry barriers, potential for income growth



Now, this approach is used for benchmarking similar technologies or deals with IP at similar stage, it is relevant when the market information on prices, royalty rates or investment is available. Then it is the most reliable method, if information on comparative transaction is available in the market then this works well; however, it depends on access to information such as product lifecycles in industry, potential barriers to entry and potential for income growth.

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## Issues with Comparable approach

- Identifying similar IP difficult
- Difficulty in obtaining details about terms and conditions of relevant transactions: confidentiality issues
- Market may undervalue IP at early stage due to information asymmetry



Now, the issues with the comparable approach is that, you have to be identifying similar IP and finding similar IP could be difficult, it is very hard to find another intellectual property right, which is gone through the same cycle, same growth phases and which can be equated for comparing value. Difficulty in obtaining details about terms and conditions of relevant transactions most of the time there are confidentiality clauses covering these agreements and they are not available in the public domain. Market may sometimes undervalued IP at an early stage specially for startups due to information asymmetry.

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### Future income based approach

- Basis—forecasting income streams expected from IP and discounting it to present terms
  - Income = cash flow (and not profit)
- Identifying potential income
- Assessing duration of said income
- Risk assessment of forecasted income
- Information required
  - Selling prices, market share, volume or product, capital expenditure, time for regulatory approval, historical prices of sales, costs, profits etc.



The other approach is the future income approach; the future income approach the basis is forecasting income streams expected from IP and discounting it in present terms. So, income is regarded as cash flow and not profit. Identifying potential income is the foundation of determining future income, assessing the duration of the said income, risk assessment of forecasted income. The information required include selling price, market share, volume or number of product, capital expenditure, time for regulatory approval, historical prices of sales, cost profits etcetera.



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## Issues with Future Income approach

- Identifying the appropriate income stream
- Obtaining various information
- Forecasting future income streams
- Issues with discounting rates – what rate to choose



The future income approach like the comparable products approach has certain issues. Identifying the appropriate income stream sometimes becomes a problem, obtaining various information that is required is again problematic forecasting future income streams can be risky and issues with discontinuing rate What rate to choose could be another issue?

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## What method to choose?

- Cost based:
  - Legal and accounting requirement standards
  - Taxation, capital gains tax, stamp duty liabilities
- Market based:
  - Determining license and royalty fees
  - To get financial investments
  - Strategic reasons (to identify worth of the business)



Now, what method would a person choose? The cost based method is used for legal and accounting requirement standards requires you to use that taxation, capital gains, tax

stamp, duty liabilities all go buy a cost based method. The market based method is used in determining licence and royalty fees that is one of the approaches and to get financial investments into a firm and for strategic reasons to identify the worth of a business when there is a wholesale, takeover of the business or valuation of the business this is being used.

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## Georgia-Pacific Factors

1. Royalties patentee receives for licensing the patent in suit
2. Rates licensee pays for use of other comparable to the patent in suit
3. Nature and scope of license in terms of exclusivity and territory / customer restrictions
4. Licensor's established policy and marketing program to maintain patent monopoly by not licensing others to use the invention
5. Commercial relationship between licensor and licensee, such as whether they are competitors or inventor and promoter
6. Effect of selling the patented speciality in promoting sales of other products of the licensee; the existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or conveyed sales



In an infringement suit the courts would use, what specially the courts in the US the United States would use what is called the Georgia Pacific factors. In India we have not evolved any specific yardstick for the courts to determine royalty. So, we use the approach in other countries. So, this is a set of factors which looks at royalties patentee receive for licensing the patent in suit, the rates licensee pays for use of other comparable to the patent in suit.

So, there is also it factors the comparative approach comparable product approach nature and scope of licence in terms of exclusivity and territory licences established policy and marketing program to maintain patent monopoly by not licensing others to use the invention.

Commercial relationship between licensor and licensee, such as whether they are competitors or inventor and promoter effect of selling the patented speciality in promoting sales of other products of the licensee The existing value of the invention to the licensor as a generator of sales. And the extent of such derived or conveyed sales.

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## Georgia-Pacific Factors

7. Duration of patent and term of license
8. Established profitability of the products made under the patent, its commercial success and its current popularity
9. Utility and advantages of patent property over old modes and devices
10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefit of those who have used the invention
11. The extent to which the infringer has made use of the invention and the value of such use
12. The portion of profit or selling price customarily allowed for the use of the invention



The court will also look into the duration of patent and terms of licence, the established profitability of products made under the patent, commercial success the utility and advantages of patent property over old modes and devices the nature of the patented invention; the character of the commercial embodiment.

The extent to which the infringer has made use of the invention and the value of such use in infringement cases, the extent of users also factor the portion of profit or selling price customarily allowed for the use of the invention, if there is some past instances that will be factored.

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## Georgia-Pacific Factors

13. The portion of realizable profit attributable to the invention as distinguished from non-patented elements, significant features / improvements added by the infringer, the manufacturing process or business risks
14. Opinion testimony of qualified experts
15. Outcome from hypothetical arm's length negotiation at the time of infringement began

**Source:** *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1119-20 (S.D.N.Y. 1970), *modified and aff'd*, 446 F.2d 295 (2d Cir.); *Unisplay, S.A. v. American Electronic Sign Co., Inc.*, 69 F.3d 512, 517 n.7 (Fed. Cir. 1995).



The portion of realizable profit attributable to the invention as distinguished from non patented elements. So, the court will do an analysis of the contribution of the patented elements to the value. Opinion testimony of qualified experts like value the people who value IP I P valuers say accountants and experts in the field their testimony can be factored in. Outcome from hypothetical arms length negotiation at the time the infringement began. So, they could the court will envisage a situation where the licensor and the licensee could have entered into a agreement before the infringement began.