SEMINARIO NACIONAL DE LA OMPI SOBRE LA IMPORTANCIA DE
LOS ACTIVOS DE PROPIEDAD INTELECTUAL EN LAS
ESTRATEGIAS DE GESTIÓN EMPRESARIAL

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THE IMPORTANCE OF THE VALUATION OF INTELLECTUAL PROPERTY ASSETS.
VALUATION MECHANISM

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The economic boundaries between countries are continuing to fall all over the world. This brings both difficulties and opportunities. One certain result of all of this, however, is that there is ever-increasing commerce in intellectual property. I believe that there will be more and more commercial transactions involving intellectual property in which it will be sold, purchased, licensed, joint ventured, and carried from country to country by multinational companies.

I also observe that more and more business enterprises have become highly dependent upon intangible assets and intellectual property for their earning power. Worldwide brands are at the heart of consumer goods companies and the technology embodied in computers, software, and semiconductors is driving the earnings of companies that did not even exist 10 years ago. The Internet would not be in existence were it not for the revolution in telecommunications technology that has enabled the tremendous quantity of digital information to be transmitted worldwide. I would never have imagined that I could sit in my hotel room here in Buenos Aires and, with a laptop computer which I carried with me, do research in a library in England and send an E-Mail to someone in Hong Kong. All of this has occurred because of the explosion in intellectual property worldwide.

The result of all of this has been that we in business no longer only focus on factories and production equipment, but must pay increasing attention to the intellectual assets that we must have in order to compete. As managers and owners of businesses, we must protect the intellectual assets that we have, and provide an atmosphere in which new intellectual properties are created and nourished.

The financial marketplace provides ample proof of this trend.

The Business Enterprise

A business enterprise is a portfolio of assets which has been assembled together in order to serve the needs of a specific marketplace and to provide an investment return on the funds expended to create it. I believe that there is a basic equation which tells us that the value of that portfolio of business assets is equal to the value of invested capital (equity and debt).

The portfolio of assets is comprised of three elements: monetary assets, tangible assets, and intangible assets. Monetary assets comprise inventories, cash investments, work in progress, and accounts receivable less current liabilities. Some refer to this asset as "net working capital." Tangible assets include land, buildings, machinery and equipment, mineral reserves, and the like. Included in the intangible asset category are computer software, assembled work force, patents, trademarks, copyrights, proprietary technology, customers, favorable contracts, and goodwill.

The Business Enterprise

\[
\text{Value of Equity} = \text{Value of Long-Term Debt} + \text{Monetary Assets} + \text{Tangible Assets} + \text{Intangible Assets}
\]

Some prefer to look at a business enterprise in terms of an accounting balance sheet. In that structure, intangible assets usually do not appear but would, if they were included, be part of the asset side along
with current assets and plant, property and equipment. The offsetting entry would be an addition to stockholders' equity on the liability side of the balance sheet which is usually evident in the market value of the common stock of an enterprise exceeding the book value.

Balance Sheet View of the Business Enterprise

<table>
<thead>
<tr>
<th>Current Assets</th>
<th>Current Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant, Property</td>
<td>Long-Term Debt</td>
</tr>
<tr>
<td>and Equipment</td>
<td></td>
</tr>
<tr>
<td>Other Assets</td>
<td>Stockholder's Equity</td>
</tr>
<tr>
<td><strong>Intangible Assets</strong></td>
<td></td>
</tr>
<tr>
<td>and Intellectual Property</td>
<td></td>
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</tbody>
</table>

What is important to us here today are the intangible assets and intellectual property that form an increasingly important part of every business. I classify intangible assets as:

- Rights
- Relationships
- Intellectual Property
- Undefined Intangibles

The rights of a business are usually contractual in nature, and include leases, agreements with distributors, employment contracts or covenants not to compete, favorable financing arrangements, supply contracts, licenses or certifications, and franchises. A second category of intangible assets are the relationships which can be extremely important in a business. These relationships include those with an assembled workforce, with customers, or with distributors. Another category of intangible assets are the undefined intangibles, or so-called goodwill or elements of a going concern. If we are unable to define specific intangible assets, we may have to describe them in these general terms.

We are focusing today on intellectual property, which I believe to be a specific form of intangible assets within a business. Intellectual property, as you know, exists as a matter of law and is considered to be a special category of property as a result. There are a number of types of intellectual property:

**Intellectual Property**

- Proprietary Technology
  - Trade Secrets
  - Know-how
- Patents
- Copyrights
- Trademarks
- Right of Publicity
I often have found that unpatented technology, or proprietary technology which can also be referred to as "trade secrets" or "know-how," can be the most valuable intellectual property in a business. The protection given to trade secrets varies greatly from country to country throughout the world. I would expect that increasing protection will be given to this form of intellectual property since it forms such a significant portion of intellectual property value in many business enterprises. Proprietary technology can include such things as:

**Proprietary Technology**

- Formulas, Recipes, Specifications
- Management, Accounting, Mfg. Procedures
- Formulations, Plans, Training programs
- Marketing Strategies
- Artistic Techniques
- Customer Lists, Routes, Demographic Studies
- Job Files, Product test results
- Business Knowledge - Suppliers, Lead times, Cost and pricing data

**Essential Relationship of Earnings and Value**

There is an essential and very important concept which relates the value of a business enterprise to the value of its underlying assets. If a business is consistently not earning an adequate return on the value of its underlying assets, the value of the enterprise is best realized in a disposal of those assets in some form of liquidation value. As the earnings of the business rise, so does the value of the underlying assets, to a maximum of their replacement cost. Increases in the value of the enterprise after that point result from the creation of new intangible assets or unidentified goodwill.

![Relationship of Earnings and Value Diagram](image-url)

It is very important to keep this relationship in mind and to continually test the valuation of specific business assets with the value of the business enterprise as a whole. The sum of the parts must be commensurate with the value of the whole.
Valuation Methods

There are really only three methods for the valuation of property, whether it is tangible property or intangible property. They are as follows:

**VALUATION METHODS**

- Cost Approach
- Market Approach
- Income approach

The cost approach seeks an indication of asset value by estimating the cost of reproduction or cost of replacement of the asset, less an allowance for loss in value due to physical, functional, and economic causes.

**COST APPROACH**

Cost of Reproduction or Cost of Replacement

Less: Physical Depreciation
Less: Functional Obsolescence
Equals: Replacement Cost Less Depreciation

Less: Economic Obsolescence
Equals: FAIR MARKET VALUE

If one can determine, from accounting or other cost records, the amount of costs expended in the development of the intellectual property together with the date at which those costs were expended, one can develop an indication of the current reproduction cost by the use of price trends for the types of labor and other expenses incurred. One must know something about the derivation of the price trends used, in order to form an opinion as to whether the result represents reproduction costs or replacement cost.

Trending historical costs may bring forward the costs of inefficiencies incurred in the original design of the intellectual property. It may also bring forward the costs of outmoded technologies, operating inefficiencies, and will reflect whatever accounting techniques were utilized at the time to record the costs. One must remember that the objective is to estimate the cost to replace the utility or functionality of the intellectual property.
An alternative method is to estimate the number of man-hours of work effort that would be required by the various skills involved to develop the subject intellectual property using the skills and technology of today. The hourly cost of those various skills, including base salary, benefits, overhead, and the like, are utilized to develop the total current cost.

The market approach seeks an indication of value from the exchanges of comparable property in an active marketplace. There are relatively few instances where the market approach can be utilized for intellectual property. Intellectual property is not commonly exchanged free of other assets in arm's-length transactions of sufficient number to provide a "market." In addition, the determination of comparability can be quite difficult.

**MARKET APPROACH**

- Analyze evidence of transactions of:
  - Comparable Property
  - At Arm's Length
  - Contemporaneous to Appraisal
  - In an Active, Public Market

The income approach seeks to value property by calculating the present value of the future economic benefits of ownership in a capitalization of income process. The underlying theory behind the income approach is to calculate the present value of a future stream of earnings by a direct capitalization (which assumes that the income will continue unchanged forever) of a technique of calculating the present value of discrete amounts of income to be received in the future (a discounted cash flow process).

**INCOME APPROACH**

In order to utilize this technique one needs to know the: (a) amount of income; (b) the duration of the income; and (c) the amount of risk of achieving it. We look to the economic advantage produced by the intellectual property for the amount of income.
QUANTIFYING THE ECONOMIC ADVANTAGE

- Enables the use of lower cost materials
- Enables the use of less material
- Reduces the amount of labor
- Increases speed of production
- Improves quality / reduces defects
- Eliminates or reduces environmental and/or safety hazards
- Results in premium pricing
- Provides economies of scale
- Provides purchasing power
- Relieves the owner of the cost to create

We have a range of rates of return with which to reflect the relative risk of the income. There are several considerations to be made as to the duration of the income.

Licensing and Royalty Rates

Many of these same techniques can be utilized to determine an appropriate royalty rate for the use of intellectual property. It is essential to remember that the economics of a licensing transaction are those of the licensee, not those of the licensor.

We must visualize that the owner of intellectual property possesses all of the bundle of rights associated with that property. When intellectual property is licensed, the owner therefore transfers some, but usually not all, of these rights to the licensee in return for a payment of "rent," or a royalty.

THE LICENSING TRANSACTION

We can apply the same cost, market, and income techniques to the determination of an appropriate royalty rate for the rental of intellectual property. The cost approach is based upon the expenditures necessary to develop the intellectual property originally. This methodology is usually not appropriate for intellectual property because the cost of its development is rarely the same as its ultimate value.

COST APPROACH ROYALTY

What did it cost to develop the IP?

Set a royalty that will recoup the cost.

NO!!
In the market approach, one looks to arm’s length transactions between other parties for similar properties. The royalty rates that resulted from those negotiations form the benchmark. The difficulty with this approach is that one rarely knows all of the details of other licensing transactions and so it is difficult to judge whether those transactions are sufficiently comparable to form a benchmark in a particular situation.

MARKET APPROACH ROYALTY

What royalties have others paid or received?
What is the “industry standard”?

MAYBE!!

In the income approach, one analyzes the economic benefit that the licensee will enjoy as a result of obtaining rights to the intellectual property. One must then come to a conclusion about how that economic benefit would reasonably be divided between licensor and licensee.

INCOME APPROACH ROYALTY

What is the economic benefit to the licensee?
What is our proper share?

YES!!

Conclusion

The subject of the importance of intellectual property and the methods for its valuation are complex indeed, and in the short time that we have together we must only consider them in cursory fashion. I would like to leave you with two thoughts, however:

- The importance of intangible assets and intellectual property in business is very significant and growing with each day,
- There are tools available to us to value these assets, and these tools are based on well known economic and investment principles.

Thank you.

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