

Attorney
CLE Series



Intangible Assets

IDENTIFICATION, VALUATION
& CONTROVERSIAL ISSUES

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presented by
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GROSSMAN YANAK & FORD LLP
Certified Public Accountants and Consultants



Grossman Yanak & Ford LLP

Headquartered in Pittsburgh, Grossman Yanak & Ford LLP is a regional certified public accounting and consulting firm that provides assurance and advisory, tax planning and compliance, business valuation and technology services. Led by five partners, the 24-year-old firm employs approximately 55 personnel who serve corporate and not-for-profit entities in Pennsylvania, Ohio, West Virginia and New York.

Our firm was founded on the idea that the key to successful, proactive business assistance is a commitment to a high level of service. The partners at Grossman Yanak & Ford LLP believe that quality service is driven by considerable involvement of seasoned professionals on a continuing basis. Today's complex and dynamic business environment requires that each client receive the services of a skilled professional with a broad range of experience and knowledge who can be called upon to provide efficient, effective assistance.

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Our professionals understand the importance of quality and commitment. Currently, the majority of the professional staff in our Assurance and Advisory Services and Tax Services Groups hold the Certified Public Accountant designation or have passed the examination and need to complete the time requirements for certification. Each of our peer reviews has resulted in the highest-level report possible, attesting to the very high quality of our firm's quality control function. The collective effort of our professionals has resulted in our firm earning an exemplary reputation in the business community.

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Robert J. Grossman, CPA/ABV, ASA, CVA, CBA



Bob brings extensive experience in tax and valuation issues that affect privately held businesses and their owners. The breadth of his involvement encompasses the development and implementation of innovative business and financial strategies designed to minimize taxation and maximize owner wealth.

His expertise in business valuation is well known, and Bob is a frequent speaker, regionally and nationally, on tax and valuation matters. He is a course developer and national instructor for both the American Institute of Certified Public Accountants (AICPA) and the National Association of Certified Valuators and Analysts (NACVA) and served as an adjunct professor for Duquesne University's MBA program. Bob has also written many articles for several area business publications and professional trade journals.

After graduating from Saint Vincent College in 1979 with Highest Honors in Accounting, Bob earned a Masters of Science degree in Taxation with Honors from Robert Morris University. He is a CPA in Pennsylvania and Ohio and is accredited in Business Valuation by the American Institute of Certified Public Accountants. Bob also carries the well-recognized credentials of Accredited Senior Appraiser, Certified Valuation Analyst and Certified Business Appraiser.

A member of the American and Pennsylvania Institutes of Certified Public Accountants (PICPA), Bob has previously chaired the Pittsburgh Committee on Taxation. He has also served as Chair of the Executive Advisory Board of NACVA, its highest Board. Currently Bob is the Chair of NACVA's Professional Standards Committee; he previously chaired its Education Board.

Bob received the NACVA "Thomas R. Porter Lifetime Achievement Award" for 2013. One award is presented annually to a single member, from the organization's 6,500 members, who has demonstrated exemplary character, leadership and professional achievements to NACVA and the business valuation profession, over an extended period of time.

Bob is a member of the Allegheny Tax Society, the Estate Planning Council of Pittsburgh and the American Society of Appraisers. He has held many offices and directorships in various not-for-profit organizations. He received PICPA's 2003 Distinguished Public Service Award and the 2004 Distinguished Alumnus Award from Saint Vincent College.

Bob and his wife, Susie, live in Westmoreland County. They have two grown children.



Melissa A. Bizyak, CPA/ABV/CFF, CVA



Melissa has practiced in public accounting for 20 years and has significant experience in business valuation and tax-related issues for privately-held concerns and their owners. Her experience is diverse, with clients including both private and publicly-held companies in a wide variety of industries.

Melissa has performed valuations for various purposes, such as Employee Stock Ownership Plans (ESOPs), equitable distributions, buy/sell transactions, dissenting shareholder disputes, value enhancement and gift and estate tax purposes. She also provides litigation support services, including expert witness testimony.

After graduating from the University of Pittsburgh in 1994 with a B.S. in Business/Accounting, Melissa spent more than two years with a local accounting firm in Pittsburgh. She joined Grossman Yanak & Ford LLP in 1997.

Melissa is a certified public accountant. She is accredited in business valuation and certified in financial forensics by the American Institute of Certified Public Accountants (AICPA). She has also earned the AICPA Certificate of Achievement in business valuation. Additionally, Melissa carries the credentials of Certified Valuation Analyst.

Her professional affiliations include the AICPA and the Pennsylvania Institute of Certified Public Accountants (PICPA), as well as the Estate Planning Council of Pittsburgh. She is also a member and serves on the Executive Advisory Board of the National Association of Certified Valuators and Analysts (NACVA).

Melissa has authored articles appearing in professional publications and has written business valuation course-related materials for NACVA and the AICPA. She serves as a national instructor for NACVA.

Melissa is a graduate of Leadership Pittsburgh, Inc.'s Leadership Development Initiative. She serves on the Board of Directors of the Children's Museum of Pittsburgh and is a member of the Executive Leadership Team for the American Heart Association's "Go Red for Women" initiative. Melissa is a mentor for women business owners in Chatham University's MyBoard program and serves on Robert Morris University's Professional Advisory Council.

Melissa resides in the South Hills of Pittsburgh with her husband and their two sons.



GYF CLE Course Offerings

The following courses have been presented by our professionals:

The Business Valuation Process: *Understanding Professional Requirements, Fundamental Procedures & Practical Considerations in Business Valuations*..... (February 26, 2009)

Understanding Standards of Value and Levels of Value: *A Precursor to the Application of Valuation Premiums and Discounts* (June 11, 2008)

The Income Approach to Business Valuation: *Understanding the Methods and Their Basic Application*..... (June 4, 2009)

The Market Approach to Business Valuation: *Understanding the Methods and Their Basic Application*..... (October 7, 2009)

The Cost/Asset Approach to Business Valuation: *Understanding the Approach and Reviewing Expert Reports* (February 4, 2010)

Quantification and Application of Valuation Discounts: *Understanding the Uses and Misuses of Discounts for Lack of Control and Lack of Marketability* (October 1, 2008)

S Corporations vs. C Corporations: *Understanding Valuation Differences* (March 6, 2008)

Special Purpose Valuations: *Understanding the Nuances of Valuation in the Context of ESOPs and Buy-Sell Agreements* (June 3, 2010)

Special Purpose Valuations: *Business Valuations for Estate & Gift Tax Planning* (October 7, 2010)

Economic Damages: *Lost Profits Determinations* (February 10, 2011)

An Attorney's Guide to Financial Statements: *A Primer for Understanding, Interpreting and Analyzing Financial Statements* (June 15, 2011)

Marcellus Shale: *A Discussion of Income Tax & Valuation Issues Related to Landowners* (October 11, 2011)

Family Limited Partnerships: *The Realities of Estate Planning with FLPs* (February 8, 2012)

Business Entity Selection & Structuring Transactions: *Understanding the Options and How to Effectively Use Them in Planning*..... (June 14, 2012)

Fraud & Forensic Accounting: *Schemes, Investigative Techniques & Prevention/Detection* (October 9, 2012)

Navigating the New Tax Laws: *Recent Changes & 2013 Planning*..... (February 7, 2013)

Intangible Assets: *Identification, Valuation and Controversial Issues*..... (June 19, 2013)

Employee Stock Ownership Plans: *Understanding ESOPs and Their Use In Exit Planning*.... (October 10, 2013)

Advising Individual Tax Clients: *For 2013 and Beyond* (February 12, 2014)

Analyzing Financial Statements and Their Impact on Value (May 29, 2014)



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Portions of these materials are adapted from the following source:

Valuing Intangible Assets, Robert F. Reilly and Robert P. Schweihs (McGraw-Hill, 1999)

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Intangible Assets – Identification, Valuation & Controversial Issues

Chapter I – *Introduction to Intangible Assets*

It is becoming increasingly and, continually, more apparent that management of all operating companies, large and small, must focus on the development and maintenance of the organization's intangible assets. According to United States government statistics, public corporations derive between 70% and 80% of their value from intangible assets. While that percentage of total value is not likely to be exact when looking to the valuation of privately-held enterprises, there is no reason to believe that the numbers are not similar.

These numbers represent a distinct 180-degree shift from the thinking in the early part of the twentieth century, when it was thought that the same 70% to 80% of public corporation value came from those companies' investments in hard assets. Again, it seems extremely likely that privately-held enterprises follow this trend, a finding that can easily be confirmed in transaction data.

As we have moved from a "bricks and mortar" economy into one more driven by intangibles, it is almost impossible to think of a successful company in the United States without recognizing that technological advantages have contributed significantly to its financial well-being. Such intangible assets include logos and product symbols, Internet domain names and trademarks, customer relationships and customer lists, order backlogs, licensing rights, royalty agreements, franchise rights, patents, trade secrets and know-how. Clearly, understanding the importance of intangibles in today's economic environment is paramount to creating, maintaining and growing value through better management and protection of these critical assets.

One need only think of Apple, Inc. or Nike to understand the financial and economic benefits that intangible assets bring to the competitive marketplace. On a much smaller scale, in our region, UPMC and Giant Eagle carry significant name and logo identification. Reading materials published by the Pittsburgh Technology Council clearly illustrate the influence that technology-driven intangibles have in this area. Not as visible, but no less important to our region's growth and economic stature, are the many traditional and historic manufacturing, distribution and services businesses that have enhanced their financial success by virtue of better management of know-how, technology and employee workforces.

Because of the critical significance of intangible assets in facilitating business income and cash flow (and, correspondingly, value), understanding these assets is critically important in merger and acquisition transaction analysis and compliance. This insight is also essential in litigation environments in which the compromise of those assets has allegedly led to economic and monetary damages, as well as in effective management of asset performance in order to optimize the business for all stakeholders, while driving value upward for the benefit of the owners of the enterprise.



Intangible Assets – Identification, Valuation & Controversial Issues

Intangible assets have long been recognized as valid assets for accounting, tax and legal purposes. However, over the last two decades, as financial statements prepared under generally accepted accounting principles have shifted from using an “historical cost perspective” to a “fair value perspective,” numerous issues have arisen. This movement by the accounting profession to change reporting methods has led to the release of a great deal of information, providing insight to many of the complex issues that must be considered in the context of accounting for intangible assets. Though much of this guidance is aimed at addressing financial statement reporting issues, the mechanics of the commentary easily extend to intangible asset considerations in tax, valuation and legal venues.

Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 805, *Business Combinations* (formerly Statement on Financial Accounting Standard No. 141), sets out categories of intangible assets that are required, under the literature, to be recognized on the business’s balance sheet, separate and apart from goodwill. The primary categories listed in this pronouncement are marketing-related intangibles, customer-related intangibles, contract-based intangibles and technology-based intangibles. While a complete listing of the types of assets contemplated in the pronouncement are listed in Chapter II of these materials, the broad nature of the categories demonstrates an expanded view of intangible asset classification that has extended into all areas of commercial activity.

The ever-expanding significance of intangible assets in businesses of all types requires that members of the legal profession be proficient in understanding intangible asset valuation. Examples of transactions in which understanding the value of the asset(s) under consideration is critical include: purchasing or selling a company or division; merging with another company to operate together in the future; entering into a joint-venture agreement to conduct business with another party; operating in a bankruptcy or reorganization; entering into a royalty or licensing agreement; and finally, understanding the extent of economic damages if a company’s intangible asset(s) have been compromised.

Today’s program is intended to provide participants with an overview of those concepts and processes that should be properly understood and undertaken in the course of providing legal services to clients in these matters. The session is not intended to be all-encompassing, but rather a “primer” on key elements of the economics of intangible assets, and the valuation thereof. The program is divided into the following sections:

- Understanding the Different Types and Character of Intangible Assets
- Intangible Asset Valuation Process
- Commonly-Accepted Intangible Asset Valuation Methodologies
- Court Cases Addressing Intangible Asset Valuation
- Conclusion and Practical Considerations



Intangible Assets – Identification, Valuation & Controversial Issues

While we do not expect that participation in this program will turn those of you with little experience in this area into absolute experts, we do hope that the information conveyed will better prepare you to address these complex matters and guide you on how best to proceed in advising your clients to their best interests.

Should you have further general questions or a specific concern, please feel free to contact us directly.

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Intangible Assets – Identification, Valuation & Controversial Issues

Chapter II – Understanding the Different Types and Character of Intangibles

A company's intellectual capital is a classification of assets that is typically unrecorded. The components of the cost of a product today are largely research and development and intellectual assets. The major asset of Coca-Cola is not its plant facilities – it's the formula for making Coke. Today, we operate in an economy dominated by information and service providers, and their major assets are often intangible in nature.

Intangible assets have two main characteristics:

- ***They lack physical existence.*** Unlike tangible assets, such as property, plant and equipment, intangible assets derive their value from the rights and privileges granted to the company using them.
- ***They are not financial instruments.*** Assets such as bank deposits, accounts receivable and long-term investments in bonds and stocks lack physical substance, but are not classified as intangible assets. These assets are financial instruments and derive their value from the right (claim) to receive cash or cash equivalents in the future.

In most cases, intangible assets provide services over a period of years. As a result, they are normally classified as long-term assets.

Generally, valuation analysts and other financial professionals often group individual intangible assets into several common categories. Intangible assets in each category are typically similar in nature, function and methods for valuing the assets. For purposes of this material, we provide the following five major categories:

- Marketing-related intangible assets,
- Customer-related intangible assets,
- Artistic-related intangible assets,
- Contract-related intangible assets, and
- Technology-related intangible assets.

Marketing-Related Intangible Assets

Marketing-related intangible assets are those assets primarily used in the marketing or promotion of products or services. Examples are trademarks or trade names, newspaper mastheads, Internet domain names and noncompetition agreements. The aforementioned assets enhance the value of a business by supporting its marketing activities and by creating or preserving a competitive advantage.



Intangible Assets – Identification, Valuation & Controversial Issues

Customer-Related Intangible Assets

Customer-related intangible assets occur as a result of interactions with outside parties. Examples are customer lists, order or production backlogs, and contractual and non-contractual customer relationships. Often, customer relationships consist of both a contractual component and an additional relationship component. The value derived from a contract is evident. The value of the relationship component results from the possibility that the contract will be renewed, thereby preserving the relationship and providing future cash flow.

Artistic-Related Intangible Assets

Artistic-related intangible assets involve ownership rights to plays, literary works, musical works, pictures, photographs, and video and audiovisual material. These ownership rights are protected by copyrights. Artistic intangible assets can be recognized individually or in conjunction with related (or similar) assets.

Contract-Related Intangible Assets

Contract-related intangible assets represent the value of rights that arise from contractual arrangements. Examples are franchise and licensing agreements, construction permits, broadcast rights, and service or supply contracts. A very common form of a contract-related intangible asset is a franchise.

Technology-Related Intangible Assets

Technology-related intangible assets are associated with innovations or technological advances. Examples are patented technology and trade secrets. To illustrate, patents are granted by the U.S. Patent and Trademark Office. The two principal kinds of patents are product patents, which cover actual physical products, and process patents, which govern the process by which products are made.

A patent gives the holder the exclusive right to use, manufacture and sell a product or process for a period of 20 years, without interference or infringement by others. For example, companies such as Merck, Polaroid and Xerox were founded on patents.

Note that intellectual property is a specialized classification of intangible assets. Intellectual property is created by specific human intellectual capital activity, while other commercial intangible assets are typically created in the normal course of a business's operations. Intellectual property includes patents, trade secrets, copyrights and trademarks. Due to their special status, intellectual properties enjoy special legal recognition and monopolistic protection. They are typically registered under, and are protected by, specific federal and state statutes giving the owner of the property the right to prevent other parties from commercializing the subject property.



Intangible Assets – Identification, Valuation & Controversial Issues

The following is a list of intangible assets. Although it is comprehensive, it is not intended to be all-inclusive.

- Advertising campaigns or programs
- Advertising contracts
- Advertising jingles
- Agreements, contracts
- Airport gates/slots, landing rights
- Appraisal plants (files and records)
- Audiovisual materials, e.g., motion pictures, music videos, television programs
- Awards/judgments
- Bank customers – deposit, loan, trust, credit card, etc.
- Blueprints/drawings
- Brand names and logos
- Broadcast licenses
- Broadcast rights
- Buy-sell agreements
- Certificates of need for healthcare institutions
- Chemical formulations
- Claims (against insurers, etc.)
- Collective marks/certification marks/service marks
- Computer software and mask works (both internally developed and externally purchased)
- Computerized databases
- Contracts/agreements/employment
- Construction contracts
- Construction permits
- Cooperative agreements
- Copyrights, patents, trademarks, trade names
- Covenants
- Credit information files
- Customer contracts
- Customer lists
- Customer relationships
- Customers – deposit, loan, trust and credit card
- Databases
- Depth of management
- Designs, patterns, diagrams, schematics, technical drawings
- Desk manuals
- Development rights
- Distribution networks
- Distribution rights
- Domain name (Internet)
- Drilling rights
- Easements
- Employment contracts/agreements
- Engineering drawings and related documentation
- Environmental rights (and exemptions)
- FCC licenses related to radio bands (cellular telephone, paging, etc.)
- Favorable financing
- Favorable leases
- Film libraries
- Food flavorings and recipes
- Formulae, formulations
- Franchise agreements (commercial)
- Franchise ordinances (governmental)
- Going concern (and immediate use value)
- Goodwill – celebrity



Intangible Assets – Identification, Valuation & Controversial Issues

- Goodwill – institutional
- Goodwill – personal
- Goodwill – professional
- Government contracts
- Government programs
- Government registrations (and exemptions)
- Historical documents
- HMO enrollment lists
- Insurance expirations
- Insurance in force
- Internet domain names
- Joint ventures
- Judgments/awards
- Know-how and associated procedural documentation
- Laboratory notebooks
- Lease agreements
- Leasehold estates
- Leasehold interests
- Licenses – professional, business, etc.
- Literary works, e.g., books, magazines, newspapers
- Litigation awards and damages
- Loan portfolios
- Location value
- Mailing lists
- Management contracts
- Management depth
- Manual databases
- Manuscripts
- Marketing and promotional materials
- Mastheads (newspaper)
- Masks and masters (for integrated circuits)
- Medical (and other professional) charts, records, files
- Mineral rights
- Mortgage-servicing contracts
- Motion pictures
- Music videos
- Musical works/compositions
- Natural resources
- Newspaper morgue files
- Noncompete covenants/agreements
- Noncontractual customer relationships
- Nondiversion agreements
- Open to ship customer orders
- Operating and broadcast rights
- Options, warrants, grants, rights (related to securities)
- Order or production backlogs
- Ore deposits
- Patent applications
- Patented technology
- Patents, copyrights, trademarks, trade names (both product and process)
- Patterns
- Permits, e.g., construction
- Personality contracts
- Plays, opera, ballets
- Pictures/photographs
- Possessory interest
- Prescription drug (customer) files



Intangible Assets – Identification, Valuation & Controversial Issues

- Prizes and awards (related to professional recognition)
- Procedural (“how we do things here”) manuals and related documentation
- Production backlogs
- Product designs
- Property use rights
- Proposals outstanding
- Proprietary computer software
- Proprietary processes
- Proprietary products
- Proprietary (unpatented) technology
- Publications
- Purchase orders
- Registered claims
- Regulatory approvals (or exemptions from regulatory requirements)
- Reputation
- Retail shelf space
- Rights (of refusal, various)
- Rights, e.g., air, water, land, drilling, mineral, timber cutting, route authority
- Royalty agreements
- Sales rights
- Sales programs
- Schematics and diagrams
- Securities portfolios
- Security interests
- Service or supply contracts
- Servicing contracts, e.g., mortgage-servicing
- Service marks/collective marks/certifications marks
- Shareholder agreements
- Shelf space agreements/contracts
- Solicitation rights
- Song lyrics
- Standstill agreements
- Stock and bond instruments
- Subscription lists
- Supplier contracts
- Technical and specialty libraries
- Technical documentation
- Technology
- Technology sharing agreements
- Television programs
- Territory rights/agreements
- Title plants
- Trade dress (unique color, shape or package design)
- Trade secrets, e.g., formulas, processes, recipes
- Trained and assembled workforce
- Trademarks and trade names
- Training manuals and related educational materials – videos, etc.
- Unpatented technology, including title plan
- Use rights, e.g., air, water, land, drilling, mineral, timber cutting, and route authorities
- Video and audiovisual material, e.g., motion pictures, music videos, and television programs
- Work in process (unbilled but completed work)



Intangible Assets – Identification, Valuation & Controversial Issues

Chapter III – *Intangible Asset Valuation Process*

An asset is anything that 1) can be owned and 2) has value. Therefore, for an intangible asset to exist, it should be subject to ownership and have value. In an operating business, intangible asset value exists when the cash flow generated by the business exceeds a reasonable return on the tangible assets owned and employed in the operations. Consider the following example of an excess earnings calculation:

AB Company has tangible assets consisting of cash, inventory, property, plant and equipment, totaling \$5 million. The Company's liabilities consist of accounts payable, various accrual accounts and bank notes payable in the amount of \$2 million. Therefore, the Company's net tangible asset value is \$3 million (\$5 million – \$2 million). AB Company generates average free cash flow of \$500,000 annually. The Company's estimated cost of equity capital is 20%, and the after-tax cost of debt is 3%.

In order to ascertain whether intangible asset value exists, the valuator must have an understanding of the rates of return on both tangible and intangible assets. The rates of return on tangible assets, generally, are significantly less than those of intangible assets and the overall operating entity (which includes both tangible and intangible assets). Additionally, the rate of return on intangible assets is generally higher than the required rate of return of the entire company, as these assets are deemed to be inherently more risky. One very significant element of risk is that intangible assets seldom have any value in liquidation.

There are other important factors in the estimation of the rate of return applicable to the excess earnings of a company, which are attributed to the intangible assets of the company, such as the longer the time period and the greater the certainty of the expectations of excess earnings, the lower the rate of return.

Prior to the application of selected methodologies to value specific intangible assets, it is first necessary to determine an appropriate discount rate attendant to the investment risks encompassed in each asset. Generally, empirical evidence setting forth such rates is unavailable, necessitating valuator judgment based on his or her experience, training and historical observation.

Commonly-accepted valuation theory states that the rate of return (discount rate) attributable to tangible assets such as machinery and equipment is, generally, substantially lower than the rate investors require to purchase intangible assets. The reason for this occurrence is the perceived lower level of risk inherent in tangible "hard" assets. Moreover, the overall discount rate for an enterprise is a weighted average of the rate attributed to both tangible and intangible assets at fair value. As such, these concepts should be visualized as producing a discount rate for tangible assets below the overall enterprise discount rate, while the discount rate attributable to the intangible assets would approximate (in some instances) or be higher than the overall enterprise discount rate.



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Working capital is one of the more-liquid assets of a company and, therefore, the investment risk associated with it is relatively low. The rate of return for AB Company's working capital was determined assuming that it would be financed with 80% debt and 20% equity and by applying the cost of equity (20%) and cost of debt (3%) components noted above. This yielded a rate of return for working capital of 6.40%, rounded to 6.0%.

Fixed assets are not as liquid as the working capital of a company. However, with fixed assets, there is an element of marketability. Thus, risk is inherently higher than that related to working capital, but not nearly as high as the overall company or its intangible assets. It is assumed that the fixed assets would be financed with 60% debt and 40% equity and by applying this debt/equity weighting to the cost of equity and cost of debt as done above. The resultant rate of return for fixed assets is estimated at 9.80%, rounded to 10%.

As noted earlier, the return on intangible assets, such as a customer base, trade name and goodwill, requires a higher rate of return than tangible assets. Based upon the overall risk associated with AB Company, an intangible asset rate of return of 25% is estimated. The following illustrates the calculation of the excess earnings method.

<u>EXCESS EARNINGS METHOD</u>			
	<u>Net Asset Value</u>	<u>R.O.R.</u>	<u>Return On</u>
Working Capital	\$ 1,000,000	6.00%	\$ 60,000
Fixed Assets	\$ 2,000,000	10.00%	\$ 200,000
Debt-Free Cash Flow			\$ 500,000
Less: Cash Flow Return to Tangible Assets			(260,000)
Cash Flow Return to Intangible Assets			240,000
Intangible Asset Rate of Return			25%
Value of Intangible Assets			<u>\$ 960,000</u>
Value of Net Tangible Assets			\$ 3,000,000
Value of Intangible Assets			<u>960,000</u>
FMV of a 100% Controlling, Marketable Interest			<u>\$ 3,960,000</u>

Note that AB Company is generating cash flow sufficient to provide a return on the intangible assets of the Company. The resulting value of the intangible assets, in aggregate, is nearly \$1 million.



Intangible Assets – Identification, Valuation & Controversial Issues

Purposes of Intangible Asset Valuation

Intangible asset valuations and economic analyses are performed for transactional, as well as notional, purposes. Transactional purposes contemplate a commercial transaction with an exchange of economic consideration. Notional purposes do not contemplate a commercial transaction. Note that an intangible asset valuation for either transactional or notional purposes is equally complex and rigorous.

Transactional

- Negotiate
- Structure
- Complete commercial transactions
 - Buy/sell transaction
 - Fair royalty rate
 - Establish an equity or ownership exchange rate

Notional

- Accounting
- Recording
- Informational
 - Insurance estimates
 - Estate planning
 - Corporate strategic planning

Numerous specific reasons exist for conducting an intangible asset appraisal or economic analysis. Typically, the reasons can be grouped into the following general categories:

- Transaction pricing and structuring, for either the sale, purchase or license of the intangible asset.
- Financing securitization and collateralization, for both cash-flow-based financing and asset-based financing.
- Taxation planning and compliance, with regard to intangible asset amortization deductions, abandonment loss deductions, substantiation of charitable contributions, transfer pricing (international and interstate) substantiation, estate and gift tax, as well as various other taxation matters.
- Management information and planning, including business value enhancement planning, identification of licensing and commercialization opportunities, intangible asset spin-off opportunities and other long-range strategic issues.
- Bankruptcy and reorganization analysis, including the value of the estate in the bankruptcy, debtor-in-possession financing, traditional refinancing, restructuring, etc.
- Litigation support and dispute resolution, including marital dissolution, infringement fraud, lender liability, breach of contract, expropriation, etc.
- Financial accounting and reporting, with respect to purchase price accounting under FASB ASC 805, *Business Combinations* and FASB ASC 350, *Intangibles – Goodwill and Other*.



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Many intangible asset valuations or economic analyses undertaken within the above-noted groupings are due to mandates set forth by statutory provision, administrative ruling or regulatory authority.

Examples include the following:

- Allocation of business purchase price for financial accounting purposes
 - Currently governed by FASB ASC 805, *Business Combinations*
- Allocation of business purchase price for federal income tax accounting purposes
 - Currently governed by Internal Revenue Code section 1060
- Development of an international transfer pricing policy
 - Currently governed by Internal Revenue Code section 482

Valuation Process Overview

The main purpose of the appraisal process is to postulate a conceptual valuation model from which the observable behavior of the marketplace may be predicted with reasonable accuracy. Much like the value of most property, the value of a specific intangible asset is the present value of the future economic benefits expected to be generated from the asset. The appraisal is performed from the standpoint of considering the events one could reasonably expect to occur after the valuation date.

Understanding the basic steps in the appraisal process is integral to the success of an intangible asset valuation. The appraisal process generally includes the following four steps:

Identification of the intangible asset

- The first step is to identify relevant issues to address and to plan a strategy to complete the assignment.
 - Identify the subject asset
 - Determine the standard of value
 - Determine the date of valuation
 - Identify the ownership and property rights
 - Perform the highest and best use analysis
 - Determine the premise of value



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Collection of data and analysis

- The amount and type of data collected depends on how the assignment has been defined.
- The information collected, reviewed and analyzed has a direct impact on the judgments made.

Consideration of the remaining useful life and application of the three valuation approaches

- The value of an intangible asset is a function of its potential economic life. The remaining useful life of the subject intangible asset must be determined as part of the valuation process.
- The value of the subject intangible is determined after consideration of three distinct approaches:
 - Cost Approach
 - Income Approach
 - Market Approach
- Selection of the appropriate method(s) is dependent upon the type of property (e.g., patent, trademark, copyright), the use of the appraisal, and the quality and quantity of the data available for consideration and analysis.

Conclusion of value

- Appraisers typically perform a reconciliation of the alternative valuation conclusions in order to arrive at a final estimate of value. Even within the same valuation approach, different methods can result in different indications of value.
- The resulting conclusion should accomplish the objective/purpose of the valuation assignment.
- The conclusion should be reported, orally (e.g., expert testimony) or in a written report, to intended user(s).

Standard of Value

One of the essential elements in the valuation process is the identification of the standard of value that will be applied. The same intangible asset typically has different values to different parties. The standard of value tells to whom the value estimate applies.

- **Fair market value** – the value that a hypothetical willing buyer will pay to a hypothetical willing seller. This standard has little empirical relevance in the context of intangible asset transactions.



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- *Fair value* – the amount that will fairly compensate an owner who was involuntarily deprived of the economic enjoyment of an intangible asset. This is a legal concept with numerous jurisdictional-specific definitions.
- *Market value* – the most probable price that an intangible asset would bring in a competitive and open market, under all conditions requisite to a fair sale. These conditions include the buyer and seller each acting prudently and knowledgeably, and the assumption that the price is not affected by undue stimulus.
- *Acquisition value* – the price that a particular, specifically-identified buyer would be expected to pay for an intangible asset, with consideration given to any and all unique benefits of the asset to the identified buyer.
- *Use value* – the value of an intangible asset in a particular, specified use, which may be different from the intangible asset's current use or from the intangible asset's highest and best use.
- *Investment value* – the value of an intangible asset, given a defined set of individual investment criteria.
- *Owner value* – the value of an intangible asset to its current owner, given the owner's current use of the intangible asset and current resources and capabilities for commercially exploiting the intangible asset.
- *Insurable value* – the amount of insurance proceeds necessary to replace the subject intangible asset with an intangible asset of comparable utility, functionality and income-producing capacity.
- *Collateral value* – the amount that a creditor would be willing to loan, with the subject intangible asset serving as security for the loan.
- *Ad valorem value* – the value of an intangible asset for property taxation purposes, given the statutory standards of the particular taxing jurisdiction.

Selection of the appropriate standard of value is greatly influenced by the purpose or intended use of the appraisal.

Valuation Date

The value of an intangible asset changes over time. For this reason, it is imperative to determine an "as of" valuation date. Often, the valuation date is determined by the purpose of the valuation. The dates may be:

- *Historical* – as of a date previous to the performance of the appraisal or economic analyses,
- *Contemporaneous* – as of a current date or date of performance of the actual appraisal or economic analyses,
- *Prospective* – as of a future date or a date that is chronologically after the performance of the actual appraisal or economic analyses. If a prospective valuation date is used, the resulting appraisal is hypothetical because the conclusions are relative to conditions that have not yet happened.



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The appraiser and client should agree on the valuation date; however, the client typically needs the valuation as of a certain date. This necessity can easily determine the date of valuation. In some situations, statutory guidelines can dictate the valuation date that must be used for a particular appraisal.

Legal Rights Subject to Appraisal

Identification of the specific bundle of legal rights is a very integral step in valuing intangible assets. Complete intangible asset ownership consists of a group of distinct legal rights. Some of the more common legal rights include the following:

- Fee simple interest
- Life interest or estate
- Term interest or estate
- Licensor or franchiser interests
- Licensee or franchisee interests
- Sub-licensee or sub-franchise interests
- Reversionary interests
- Development rights
- Exploitation rights
- Use rights
- Other fractional ownership interests

In an instance when a legal right is separated from the entire bundle of rights and is transferred to another party, a partial or fractional property interest is created. The selection of the bundle of legal rights to be appraised has a direct impact on the value of the intangible asset.

Highest and Best Use Analysis

The following criteria are used for the selection and analysis of the highest and best use for an intangible asset.

Highest and best use:

- Should be a lawful use for the particular intangible asset;
- Should be physically possible, given the physical, functional and technological attributes of the subject intangible asset;
- Generates a positive economic return to the intangible asset holder; and
- Generates the greatest value for the subject intangible asset, of all the remaining alternative uses that are legally permissible, physically possible and financially feasible.



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Alternative Premises of Value

The assessment of the highest and best use of the subject intangible asset will determine which of the four alternative, fundamental premises of value should be applied.

The premises include:

- Value in continued use as part of a going-concern enterprise;
- Value in place, but not in current use in the production of income;
- Value in exchange, as part of an orderly disposition; and
- Value in exchange, as part of a forced liquidation.

Virtually any intangible asset can be valued under each of the above-listed fundamental premises of value. The appraiser selects the appropriate premise of value based upon the following:

- The purpose and objective of the appraisal;
- The functional and economic status of the subject intangible asset; and
- The highest and best use of the subject intangible asset.

Data Collection & Third-Party Sources

In order to perform a sound intangible asset valuation, a number of documents are needed from the subject company in order to form an opinion of value on the asset(s). These items include, but are not limited to, the following:

- Copies of current patents and patent applications, including descriptions of the products and processes encompassed in the patents and patent applications,
- Detailed listing of all technical drawings, blueprints and specifications related to each product,
- Detailed listing of all customers on the current customer list,
- Copies of all open contracts with customers or clients,
- Summary of all current customer proposals and quotations outstanding,
- Detailed listing of the current backlog of confirmed customer purchase orders, purchase releases or other purchase commitments,



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- Detailed description and listing of all in-house libraries, including purchased volumes and internally-generated documentation,
- Detailed listing of all externally-purchased and internally-prepared computer software,
- Detailed listing of all internally-generated or externally-purchased training materials,
- Detailed listing of all externally-developed or purchased promotional and marketing materials,
- Detailed listing of current employees who are subject to current employment contracts with the company, and current or past employees who have signed currently-enforceable covenants not to compete with the company,
- Summary of all current supplier and vendor contracts,
- Listing of current trademarks, trade names and registrations,
- Listing of current licenses, rights, contracts or agreements that allow the company to use another party's products, processes, technology, brand name or registration, and
- Synopsis of all leases.

External, third-party sources are also necessary in order to perform an intangible valuation. These third-party sources may include: scholarly and legal publications, trade publications, news sources, court cases and published books.

Interviewing the Intangible Asset Owner

It can be very important for an appraiser to interview the intangible asset owner, as well as to visit the business facilities. The purpose of the analysis, the nature of the industry and the size and complexity of the valuation can determine the necessity and extent of fieldwork. However, seeing a business operate and talking firsthand to an owner can significantly aid the appraiser as the valuation is completed. If a site visit is made, three objectives should be accomplished:

- Gain a better overall understanding of the subject industry,
- Understand the implications of the business's financial statements, operating statistics and other written information for the intangible asset analysis, and
- Identify current or potential changes that may cause the future of the subject intangible asset/company/industry to differ from what is indicated by a mere extrapolation of historical financial and operational data.



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Intangible Asset Useful Life Analysis

The remaining useful life of intangible assets is estimated for many reasons, including a sale transaction, controversy and litigation support purposes (e.g. damages), cost recovery for financial accounting or regulatory accounting purposes, financial planning or other strategic information purposes.

There are certain conditions that lead to the retirement, attrition or withdrawal of an intangible asset, including:

- *Physical conditions* – an accident, catastrophe, deterioration or wear and tear;
- *Functional conditions* – inadequacy, obsolescence and evolution of technology;
- *Operational conditions* – management, regulatory or accounting policies; and
- *Economic conditions* – lack of demand, interest rates, inflation or inadequate return on investment.

Generally, the type of intangible asset influences the selection of an appropriate useful life. However, there are several factors that can be analyzed in connection with estimating a useful life of most intangible assets, including:

- | | |
|---------------|-----------------|
| • Legal | • Technological |
| • Contractual | • Functional |
| • Judicial | • Economic |
| • Physical | • Analytical |

Appraisers use both qualitative and quantitative analysis when making determinations of the useful life of a particular intangible asset.

Basic Valuation Approaches and Methods

While there is one goal – obtaining an intangible asset's value – there are a number of approaches and methods used to achieve that goal. The *cost approach*, *income approach* and *market approach* are fundamental ways to analyze the economics of intangible assets. Described briefly below, these methods are discussed further in the following chapters.

The Cost Approach

The cost approach is based on the economic principles of substitution and price equilibrium, which state that an investor will not pay more for an investment than the cost to obtain an investment of comparable utility. The availability of substitute properties is affected by supply and demand shifts with respect to the substitutes.



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As supply decreases, the cost of the substitute will be driven upward; however, when demand decreases, the cost of the substitute will be driven downward. Likewise, as supply increases, the cost of the substitute will decrease, and as demand increases, the cost of the substitute will be driven up.

The marketplace influences the cost of an intangible asset. The relevant cost is the greatest amount that the marketplace is willing to pay for the subject intangible asset. This cost will not necessarily equal the historical cost of creating the intangible asset or the sum of the costs for which the willing seller would like to be compensated. It is important to note that when valuing intangible assets, the cost approach has limitations, as there is not always a reasonable substitute available to compare to the subject intangible asset.

Types of cost defined under the cost approach to intangible asset valuation:

- Reproduction cost and replacement cost are the two most common types when using a cost approach.
 - Reproduction cost considers the construction or purchase of an exact replica of the subject intangible asset.
 - Replacement cost contemplates the cost to recreate the utility of the subject intangible asset, but in a form or appearance that may be different from an exact replica of the actual intangible asset.
- Creation cost considers the cost to originally create the subject intangible asset from its conceptual inception without any guideline for the current creator to use as a point of reference.
- Recreation cost is the cost to duplicate the intangible asset, assuming that the current recreator possesses the knowledge, experience and expertise already developed during the (actual) original creation process.
- Cost avoidance is a method that quantifies some measure of either historical or prospective costs that are avoided by the intangible asset owner due to his or her ownership of the subject intangible asset. Presently, some practitioners consider the cost avoidance method to be a form of the income approach, which is described in the next section.

All of these costs include a number of components, including materials, labor, overhead, intangible asset developer's profit and entrepreneurial incentive. Additionally, forms of obsolescence need to be taken into account and subtracted from the intangible asset cost. Physical deterioration, functional obsolescence, technological obsolescence and economic obsolescence are common forms of obsolescence that must be considered.



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The Income Approach

The income approach is based on the economic principle of anticipation. The value under this approach is the present value of the expected economic benefits to be earned from the ownership of the subject intangible asset.

When valuing an intangible asset, there are five categories of income approach methods that are used:

- Methods that quantify incremental levels of economic income,
- Methods that quantify decremental levels of economic costs,
- Methods that estimate a relief from a hypothetical royalty or license payment,
- Methods that quantify the difference in the value of the overall business enterprise, or of a similar economic unit, as the result of owning the subject intangible asset, and
- Methods that estimate the value of the intangible asset as a residual from the value of an overall business enterprise value, or as a residual from the value of an overall estimation of total intangible value of a business enterprise.

The above-mentioned methods can be grouped into two additional analytical categories: those that rely upon a direct capitalization analysis and those that rely upon a yield capitalization analysis.

The direct capitalization analysis estimates the appropriate measure of economic income for a normalized or stabilized period. That amount is then divided by an appropriate investment rate of return. In a yield capitalization analysis, the economic income is projected for several discrete time periods into the future. The projection is converted to a present value by the use of a present value discount rate.

In some cases, both methods will be used to value an intangible asset. The appraiser will then need to reconcile the value indications into one income approach value conclusion.

The Market Approach

The market approach to intangible asset valuation is based on the related economic principles of competition and equilibrium, which state that in a free and unrestricted market, supply and demand will determine the price of any good to a point of equilibrium. Value under the market approach is defined as expected price – it is not cost or price. Cost represents a historical price, while price represents what one particular buyer actually paid for the intangible asset.

There are two categories of analytical procedures to indicate value under the market approach: the collection and analysis of market-derived empirical transactional data and the assessment of the current market conditions and of the changes in market conditions between the dates of the transactional data and the date of the analysis.



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The market approach has a systematic process of eight steps that aid in the application of the approach:

- Data collection and selection,
- Classification of selected data,
- Verification of selected data,
- Selection of units of comparison,
- Quantification of pricing multiples,
- Adjustment of pricing multiples,
- Application of pricing multiples, and
- Reconciliation of value indications.

Valuation Synthesis/Conclusion of Value

To arrive at a value for an intangible asset, an appraiser must look at the alternative value indications calculated under the three valuation approaches to arrive at a final value estimate. Professional judgment is a key component of reconciling these values to determine a final intangible asset value.

It is always useful to consider all three approaches in any given project, in that conclusions of value obtained under multiple approaches to valuation tend to provide the characteristic of improved confirmation of the business valuator's results. An example of such confirmation might include first using an income approach, whereby the future expected economic benefits associated with the intangible asset or business are identified, quantified and measured back to the date of valuation using basic time value of money concepts (discounted cash flow, for example.)

Valuing the same intangible asset or business under a market approach might lead to the identification of a number of completed transactions involving sufficiently similar assets so that an indication of value can be produced from that transaction data. Clearly, producing a reconcilable value under two disparate approaches and methodologies can prove a powerful force in validating the conclusion of value.

In a litigation scenario, defense of any valuation conclusion is a must, and validation and confirmation of the conclusion of value under multiple approaches and methodologies can often prove useful in sustaining credibility under cross-examination. Unfortunately, it is not uncommon for business valuers to use just one of the three available approaches to valuation when opining on the value of intangible assets. The most common reason for this limited assessment is, simply, lack of quality information.



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Professional judgment plays a significant role in the valuation of these assets, as will be illustrated in the examples in the following chapters. To minimize the role of professional judgment, valuers are prone to selecting those approaches for which the subject company can provide the greatest quantity and quality of financial information.

In most cases, the selected approach is intended to reflect those values that would be considered in an open market transaction between willing buyers and sellers. As with the general valuation approaches discussed previously, each broad approach serves as an umbrella for multiple methodologies within the approach.

As was noted, these methodologies generally involve the application of different procedures that best fit the facts and circumstances of any given situation and the availability of the information in any particular assignment. When the valuator uses multiple methodologies under a single approach, the conclusions attained under each of the utilized methodologies are most often synthesized into a single conclusion of value under that particular approach.

The next three chapters will address, in detail, each of the three valuation approaches.



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Chapter IV – Methods for Valuing Intangible Assets – Cost Approach

The cost approach to business valuation and intangible asset valuation is predicated upon the economic principle of substitution. Simply stated, the principle of substitution suggests that the value of any asset (in this case, an intangible asset), is that value that would be incurred to create a new “substitute” intangible asset.

In other words, why would any asset be worth more than the “cost” to simply develop a new, identical asset? Keep in mind, however, that the cost noted in the last sentence must be reduced for the “age” and “use deterioration” encompassed in the subject intangible asset. Usually adjusted through the use of amortization deductions under accounting and tax rules, these value reductions contemplate a depreciating value, due to decreasing usefulness as a generator of future economic benefits, of the intangible asset over its useful life.

The primary methods of valuation under the cost approach are *reproduction cost – new* and *replacement cost – new*. The International Glossary of Business Valuation Terms, approved by the four leading business valuation organizations in the United States, as well as the Canadian Institute of Chartered Business Valuators, provides the definition of these terms as follows:

- ***Reproduction Cost – New:*** the current cost of an identical new property.
- ***Replacement Cost – New:*** the current cost of a similar new property having the nearest equivalent utility to the property being valued.

While the wording of the two definitions may, at first read, appear very similar, it is important to recognize the subtle difference between the two. Reproduction cost – new is a methodology by which the total cost to develop an identical intangible asset, in current dollars, is assumed to provide an indication of value for the subject intangible asset.

Replacement cost – new, on other hand, is a methodology by which the total cost (in current dollars) to produce an intangible asset having the same functional utility is assumed to provide an indication of value of the subject intangible asset. Here, the “new” asset is not identical. However, the ability to generate future economic benefits is most often tied to an asset’s function or utility, rather than its absolute characteristics. Thus, if it is possible to establish the cost to develop an intangible asset with the same functional utility of the subject intangible asset, this method offers a strong means for establishing the value of the subject.

While we have listed the terms “functional utility” together, it is noteworthy that many treatises view the two (function and utility) as having different sources of orientation. Functionality is defined by many practitioners as an engineering concept with the implication that the intangible asset in question will be able to generate the operating



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results for which it was developed. Utility is based more on the discipline of economics, and means that the new intangible asset will have the ability to provide an equivalent amount of economic benefits to the asset's owner as the subject intangible asset.

It is somewhat difficult to think of these two concepts as mutually-exclusive, given that the ability to produce equivalent utility is not likely to be accomplished without the “new” intangible asset having the requisite functional attributes as the subject intangible asset.

There are other “lesser used” cost methodologies that merit mention in these materials. The first method of note is not really cost assessment but, rather, a cost “avoidance” method. Here, the method attempts to quantify either historical, or prospective, intangible asset development costs that will not be incurred and are avoided because the owner already owns the subject intangible asset.

Another method is the trended history method, under which the intangible asset's historical development costs are identified and subjected to trend analysis to the date of valuation, using an appropriate inflation rate to account for the time value of money.

Applying the Cost Approach Methodologies

Costs are defined in various ways throughout financial and economic treatises. However, there is some commonality in the literature as to exactly which costs should be considered in conjunction with the cost approach and performance of cost measurements related thereto. In considering costs, it is important to focus on the four broad categories of costs, including:

- **Direct development costs** – As the name implies, these costs are those that are directly related to the intangible asset development and include all materials, supplies and labor costs.
- **Indirect costs** – Indirect costs are those that are not directly traceable to the development of the intangible asset, but are incorporated into the cost measurement by virtue of an indirect cost “allocation.” Examples in the context of intangible asset development might include design and engineering costs, professional fees and various overhead expense allocations.
- **Profit to the developer** – Assuming that any cost reconstruction will include a profit margin to the developing party, it becomes necessary to calculate this amount, as it would constitute a real cost in the cost measurement process to a purchasing/acquiring party.
- **Opportunity cost** – Sometimes referred as the entrepreneurial incentive, the underlying assumption is that the “failure” to have the intangible asset in place is costing the business owner economic benefits sufficient



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to motivate the intangible asset's development. Once the decision is made to proceed with the development of the intangible asset, the opportunity cost measures lost income during the development period. In other words, the funds being expended during the development phase are being rerouted from alternative investment opportunities, and any lost income from this inability to invest in these alternative investments should be added to the cost.

Of the four categories of costs, the direct costs, as well as the indirect costs, are easily identified and quantified if the owner of the asset maintains adequate accounting records. In addition, the calculation of the profit to the developer can be ascertained via estimates generated from several commonly-accepted methodologies. Calculating the opportunity cost requires careful consideration, given that the calculation requires a great deal of professional judgment.

Adjustments for Decrease in Value

As noted earlier, it is imperative in making an accurate assessment of the subject intangible asset value that any development cost new be adjusted downward for the following key factors:

- **Physical deterioration** – Not usually applicable to an intangible asset, physical deterioration reflects physical wear and tear as an asset is used up over its estimated useful life.
- **Functional obsolescence** – This reduction in intangible asset value is due to the inability of the asset to continue to perform its function (or, in economic terms, yield the periodic utility) for which it was developed originally. One form of functional obsolescence is technological obsolescence. In this case, new developments in the technology inherent in the intangible asset renders the subject intangible asset less valuable.
- **External obsolescence** – This reduction in value is generally deemed to be attributable to events and conditions that are not attributable to, nor controlled by, the subject intangible asset. Thus, it is external and out of the hands of the owner of the subject intangible asset. Certain treatises break down the external obsolescence into location (or geographic) obsolescence and economic obsolescence.

Note that obsolescence of any type is curable if it would cost the owner less to cure the inefficiency in the intangible asset than the corresponding decrease in the value caused by the inefficiency.

Remaining Useful Life

Often, the obsolescence matters discussed in the last section are adjusted over a remaining useful life. Under the cost approach, determination of the asset's remaining useful life will allow for an estimate of the total amount of obsolescence that must be subtracted from the cost measurement produced under the cost approach – either the reproduction cost – new or replacement cost – new.



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The determination of the intangible asset's remaining useful life is a complex undertaking and is beyond the scope of today's program. Note, however, that there are numerous influences on this determination, as detailed on page 18 of these materials. Each of these influences must be studied, analyzed and quantified to allow for the requisite value reduction attributable to obsolescence.

Cost Approach – Best Applications

In many instances, cost detail, age of the subject intangible asset or limitations on available information will prevent the use of the cost approach. However, there are instances in which this approach may be the most useful one in valuing intangible assets. The best application of this approach may be in the following circumstances:

- When the subject intangible asset is relatively new or has been recently developed.
- When the historical cost/development data remains available from the owner.
- Where the owner/operator of the intangible asset carries a level of expertise that will allow for the estimation of the current cost of such an asset.
- Where the owner/operator of the intangible asset carries a level of expertise that will allow for the estimation of the remaining useful life and obsolescence of such an asset.
- Where intangible assets are used in the production of income, but do not independently generate any income.

The following example describes the steps and procedures generally undertaken to facilitate a valuation of an intangible asset under the cost approach.

AB Company is seeking to value its specialized engineering software. Based upon internal data and records maintained by the Company, a unit cost method can be applied. This method is a direct estimate of all the costs that would be incurred to create a similar replacement for the software. The replacement would include improvements necessary to cure any functional or economic obsolescence of the software.

Information including hourly rates for each employee working on the software project, as well as estimated hours devoted to the project per employee, benefits, overhead, material cost, profit and opportunity cost are all gathered. According to Company records, benefits are estimated at 30% of labor costs, overhead is applied at 15%, and entrepreneur's profit is estimated at 4%. Opportunity costs are a component of cost that must be recovered in an effort to compensate a developer undertaking a specific project, as the developer forgoes the return from the next most attractive investment opportunity. Opportunity costs for AB Company are estimated at 5%.

The calculation on the following page illustrates the cost approach, incorporating the above-noted data.



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	<u>COST APPROACH METHOD</u>					
	<i>Estimated Hours to Replace</i>	<i>Hourly Rate</i>	<i>Materials</i>	<i>Direct Labor</i>	<i>Benefits, O/H Profit & Opp. Costs</i>	<i>Total Costs</i>
Development	300	\$ 75.00	-	\$ 22,500	12,150	\$ 34,650
Project Management	2,000	\$ 50.00	-	\$ 100,000	54,000	154,000
Analyst	10,000	\$ 45.00	-	\$ 450,000	243,000	693,000
Programmer	15,000	\$ 45.00	\$ 2,500	\$ 675,000	365,850	1,043,350
Testing	1,000	\$ 30.00		\$ 30,000	16,200	46,200
Before-Tax Replacement Cost						1,971,200
Less Tax (@ 40%)						<u>(788,480)</u>
After-Tax Replacement Cost						\$ 1,182,720
Rounded						<u>\$ 1,183,000</u>

The value of AB Company's proprietary engineering software is estimated at \$1,183,000.

In conclusion, the cost approach does have limitations as noted herein. It is, however, the preferred method when the subject intangible asset is readily replaceable, and when the cost of reconstructing or replacing the asset with a similar substitute can be reasonably estimated.



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Chapter V – Methods for Valuing Intangible Assets – Income Approach

The income approach to valuation is predicated upon the economic principle of anticipation. Fundamentally, all valuation is forward-looking. This approach essentially “anticipates” future expected performance of an asset and brings the economic benefits associated with that future performance back to present-value dollars at a risk rate that is commensurate with the risk of receiving those future economic benefits, at the dates they are expected to be realized, and at the amounts that are expected in the future.

The income approach captures these conceptual aspects of value determination clearly and efficiently. In most cases, the future economic benefits that are anticipated are characterized as cash flow. The risk rate is a discount rate generally constructed using a build up model or a modified capital asset pricing model. It is most often defined as that rate of return necessary to draw investment dollars to a particular investment. Dividing the future expected cash flow by the discount rate, after reduction for growth, produces an indication of value. This methodology is known as the capitalization of cash flow method.

The alternative methodology is a discounted future cash flows method, which provides for discrete projections into future years and, then, allows for discounting those future cash flows back to present-value dollars at the commensurate level of risk embodied in the discount rate developed in the same way as noted above.

Perhaps the most significant advantage of the income approach is the approach’s flexibility and adaptability in allowing the analyst to view varying circumstances and assumptions, thereby allowing for analytical refinement as the process evolves. It is widely accepted and understood and allows the *trier of fact* to consider historical financial statement information in analyzing the propriety of the future expected economic benefits.

Similarly, the approach, as well as the two methods, can be applied to the valuation of intangible assets. There are, however, three principal differences to intangible asset valuation in comparison to business enterprise valuation. First, and foremost, most intangible assets have, or are presumed to have, a finite remaining life, whereas business entities are presumed to have an operating life into perpetuity. As a result of this difference, the valuation of intangible assets under the income approach generally includes a discrete projection period illustrating the expected future economic benefits to be received over a *finite* period of time.

Another significant difference in the valuation of intangible assets, versus an entire business enterprise, is the amount of risk inherent in an investment in each. Intangible assets almost always carry a greater amount of investment risk than an entire business. The primary reason for the risk differential is that the underlying asset mix in an entire business includes both lower-risk “hard,” or “tangible,” assets and higher-risk “soft,” or “intangible,” assets.



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As a result of this mix of assets, generally, a business rate of risk is predicated upon a weighted average of the cost of capital (WACC) associated with these two asset classes. As the rate of risk associated with tangible assets is generally considered to be lower than that associated with intangible assets, the weighting of the two assets classes' risk should equal the overall business enterprise risk.

By way of example, assume that an appropriate rate of return for a specific operating business is determined to be 25%. This rate is a weighted average (based on asset market values) of the risk rate associated with both tangible and intangible assets. Assume that the business has tangible assets worth \$10,000,000 with a required risk rate of 10%. Assume that the intangible assets are worth \$30,000,000 and require a rate of 30%. The mix of asset types reconciles to the overall risk rate, as follows:

<u>Asset Type</u>	<u>Market Value</u>	<u>Weighting</u>	<u>Rate of Return</u>	<u>WACC</u>
Tangible Assets	\$10,000,000	25%	10%	2.5%
Intangible Assets	\$30,000,000	75%	30%	22.5%
Total Weighted Average Cost of Capital				25.0%

Intangible assets, by themselves, do not get the weighting of risk rates when valued alone. Thus, the higher risk associated with an investment in a single intangible asset ends up being reflected in the valuation process by a higher discount rate under the income approach.

Keep in mind that the information set forth in the preceding paragraphs is general, as there can be instances in which an entire business's risk is greater than a specific intangible asset's risk. However, such cases are rare and usually indicate a troubled business enterprise carrying a disparate amount of risk, as compared to healthier businesses in the same industry.

Another key element to consider in valuing intangible assets is whether the particular asset is being valued as part of a going concern (an operational business expected to continue as of the date of valuation) or, alternatively, whether the intangible asset is being valued on a "stand-alone" basis as an independent economic unit. Consideration as an element of a going concern usually carries with it a valuation discount rate commensurate with the overall business risk. If the asset is being valued alone, the discount rate under the income approach is most often higher to reflect the higher risk associated with the independent status of an intangible asset.

Finally, the third important difference between valuing an entire business enterprise and an intangible asset is, that in consideration of valuing the intangible asset, only those future economic benefits (cash flows) associated with the particular asset are considered. Alternatively, all cash flows are considered in valuing the entire business, regardless of which assets generate the cash flows.



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Keep in mind, identifying specific cash flows associated only with the intangible asset is a complex undertaking, requiring both detailed financial analysis and professional judgment. Generally, the types of income considered in the determination of value for an intangible asset include:

- ***Incremental (residual) income*** – total income generated by the economic unit that uses (or will use) the subject intangible asset, less a specific capital charge that reflects a fair economic return on the tangible and other intangible assets associated with the subject intangible asset.
- ***Profit-split income*** – total income generated by the economic unit that uses (or will use) the subject intangible asset, split between the subject intangible asset and all other tangible and intangible assets that are used by an economic unit. The split here is market-driven and should reflect that market allocation percentage between intangible asset owners (licensors) and intangible asset users (licensees), such that the allocation provides a fair return on all of the tangible and intangible assets used in the economic unit to produce the cash flows.
- ***Royalty income*** – a payment for rent that the licensee pays to the licensor for the use of a discrete, stand-alone intangible asset.

Income Approach – Methods

Underlying the income approach are three critical elements that are part of every mechanical calculation involving the valuation of intangible assets. These three critical elements are:

- Determination of future expected economic benefits (cash flows),
- Determination of the length of time associated with the projected cash flows, and
- Determination of the appropriate risk rate.

While there are numerous available procedural underpinnings to establishing the three determinants of value under the income approach, all alternative measures of income can be grouped into two broader categories of methods available under the income approach. These include:

- Yield capitalization method
- Direct capitalization method

Both methods are predicated upon the same foundational interpretation of the income approach. Simply stated, the value of any asset, tangible or intangible, is the value of all expected economic benefits, reduced to a present-value



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number, at a discount rate commensurate with the risk of attaining those future economic benefits, in the amounts and at the times set forth in the projections.

The *yield capitalization method* is defined as, “the present value of a nonconstant stream of projected economic income flows over a discrete time period.”

The *direct capitalization method* is defined as, “the capitalization of a constant or a constantly changing [in terms of rate of change] stream of economic income flows over a specific time period.”

In effect, the two methodologies are substantially the same, as the discounted future cash flows (DCF) method and the capitalized future cash flows (CCF) method are generally held to be the primary methods under the income approach (and discussed above) for use in the valuation of entire businesses or full operating units. The one substantial difference is the cap on the projection period (corresponding to the remaining useful life of the intangible asset), versus the perpetual life envisioned in valuations of operating businesses.

Beneath the two broader categories of methods available under the income approach, all income approach methodologies for valuing intangible assets generally fall into three types of analyses:

- Incremental income analysis methods
- Profit-split analysis methods
- Royalty income analysis methods

To fully understand the valuation methodologies underlying intangible asset valuation, it is necessary to briefly address each of the three types of analyses.

Incremental Income Analysis

This is often referred to as “with” and “without” analyses, in that the exercise requires looking at key elements of the business’s income and loss statement and attempting to identify and quantify relevant economic criteria including:

- Additional sales or revenue attributable to the presence of the subject intangible asset
- Any cost reductions attributable to the presence of the intangible asset

The process undertaken is intended to consider the combined effects of increasing revenues and decreasing costs by virtue of holding the intangible asset. The additional cash flows generated by the “net” changes in these items, and generally held to be those associated with the subject intangible asset, are those that would be subjected to the income approach calculations, e.g., discounted to present value at a risk rate commensurate with the determined risk.



Intangible Assets – Identification, Valuation & Controversial Issues

From a revenue standpoint, the following items might be considered in applying the incremental income analysis method:

- Increases in actual sales or revenue dollars
- Increases in actual unit sales
- Increases in actual unit selling prices
- Increases in product or service market share
- Increases in time period of future sales or revenue generation

As can be observed, changes to the positive in revenue and sales generation that are applicable to a specific intangible asset would tend to add value to that asset.

From a cost reduction standpoint, the following items might be considered in applying the incremental income analysis method:

- Decreases in costs of sales or costs of goods sold
- Decreases in rent expenses
- Decreases in repairs/asset maintenance expenses
- Decreases in scrap material expenses
- Decreases in selling, general and administrative expenses

As can be observed, changes to the negative in cost and expenses incurred that are applicable to a specific intangible asset would tend to add value to that asset.

In addition to those elements meriting consideration as listed above, there are other operational analyses that could serve to generate additional future cash flows, leading to higher intangible asset valuation. A sample of these elements include:

- Increases in operational efficiency
- Increases in production levels
- Decreases in capital expenditure investment
- Decreases in overall business risk and the overall weighted cost of capital

Keep in mind that these analyses are all intended to look at the incremental benefits associated with the presence of the subject intangible asset, versus not having the subject intangible asset in the business.

The incremental income method is most often used to measure the value of noncompetition agreements, where the value is calculated as the difference between having and not having (“with and without”) the agreement in place. An example of the application of this method is provided on the following page.



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AB Company benefits from its previous owner's agreement not to compete with the Company. The "with" scenario is a discounted cash flow model of the operations of the business as it stands, with the agreement in place.

The new owners of the Company believe that, without the agreement in place, they could stand to potentially lose 20% of revenue in the first year of the projected period, which declines to 10% by year five of the projection. Further, the new owners assess the probability of competition at 50% in years one and two, and 25% in years three through five.

The risk (discount) rate used in the calculation to determine the incremental value of AB Company, with and without the noncompetition agreement, is 15%. (The development of this risk rate is beyond the scope of this material.)

INCREMENTAL INCOME METHOD

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Revenue	\$ 5,000,000	\$ 5,500,000	\$ 5,900,000	\$ 6,200,000	\$ 6,600,000
Revenue Lost to Competition	1,000,000	990,000	885,000	744,000	660,000
Probability of Competition	(50%)	(50%)	(25%)	(25%)	(25%)
Adjusted Revenue	4,500,000	5,005,000	5,678,750	6,014,000	6,435,000
Cost of Sales	<u>2,925,000</u>	<u>3,253,250</u>	<u>3,634,400</u>	<u>3,848,960</u>	<u>4,054,050</u>
Gross Profit	1,575,000	1,751,750	2,044,350	2,165,040	2,380,950
SG&A Expenses	<u>1,125,000</u>	<u>1,251,250</u>	<u>1,476,475</u>	<u>1,563,640</u>	<u>1,737,450</u>
EBITDA	450,000	500,500	567,875	601,400	643,500
Depreciation	<u>67,500</u>	<u>75,075</u>	<u>85,181</u>	<u>90,210</u>	<u>96,525</u>
EBIT	382,500	425,425	482,694	511,190	546,975
Less: Taxes (@40%)	<u>153,000</u>	<u>170,170</u>	<u>193,078</u>	<u>204,476</u>	<u>218,790</u>
Debt-Free Net Income	229,500	255,255	289,616	306,714	328,185
Plus: Depreciation	67,500	75,075	85,181	90,210	96,515
Less: Capital Exp.	(67,500)	(75,075)	(85,181)	(90,210)	(96,515)
Less: Working Capital	<u>(55,000)</u>	<u>(60,500)</u>	<u>(64,735)</u>	<u>(67,972)</u>	<u>(72,050)</u>
Cash Flow	\$ 174,500	194,755	224,881	238,742	256,135
P.V. Factor	0.9325	0.8109	0.7051	0.6131	0.5332
Present Value	\$ 162,722	157,922	158,565	146,382	136,562
Total					\$ 762,153
Value with Noncompetition Agreement					<u>\$ 824,661</u>
Concluded Value of Noncompetition Agreement					62,508
Rounded					<u>\$ 63,000</u>



Intangible Assets – Identification, Valuation & Controversial Issues

Profit-Split Analysis Methods

The profit-split methods are intended to derive a “fair economic return” of income to the subject intangible asset. This fair economic return is predicated upon the “split,” or allocation, of some measure of future economic benefit associated with the business enterprise, and the assignment of a required rate of return directed to the subject intangible asset. Usually, the measure of future economic income is cash flow, but operating income, operating cash flow or after-tax net income can be used as well.

Essentially, use of these methods simply requires that the starting point be the total measure of economic benefit, however defined, for the business or operating unit that is using the subject intangible asset. This total is split between the subject intangible asset and all other tangible and intangible assets.

Obviously, the critical element in any analysis under these methods is the economic measure split. Split percentages can vary widely depending on specific facts and circumstances in each case and, at a minimum, should consider the following:

- The specific nature and type of the subject intangible asset
- The nature of the business enterprise and the specific type of operations conducted therein
- The nature of the industry in which the subject intangible asset is deployed

In any profit-split percentage determination, care should be exercised to ensure that the following items are given due consideration:

- Actual arm’s-length royalty agreements or transaction data illustrating the transfer of similar intangible assets between third parties
- The functional assessment of the business or operating unit utilizing the subject intangible asset, and exactly how that asset is integrated into those operations
- The income generation contribution of the subject intangible asset, as compared to that contribution made by all of the remaining assets, both tangible and intangible
- The extent to which the selected measure of economic income already provides for a fair economic return for the other assets of the business or operation

The percentages determined after giving effect to these analyses generally reflect the economic return on the subject intangible asset, while the balance of the allocation is that economic return applicable to all other assets of that business or operating unit.



Intangible Assets – Identification, Valuation & Controversial Issues

The following example provides an illustration of the net operating income profit-split analysis associated with the trade name, using the profit-split method.

AB Company is the number-one manufacturer and distributor of coffee mixes in the country. The mixes are sold under the brand name “Mocha Mix,” which is a registered trade name in the United States.

The Company had average sales of \$50 million over the last five years and an operating profit margin of 20%. The Company is projecting next year’s revenue at \$52.5 million and operating profit margin at 20%.

There are other intangible assets of AB Company, including proprietary know-how associated with the formulations and key customer contracts. A capital charge will need to be applied for the other intangible assets that are used to support the end product displaying the trade name Mocha Mix.

The capitalization (risk) rate applied to the profit-split associated with the trade name is 15%.

<u>PROFIT-SPLIT METHOD</u>	
Projected 2014 Net Sales	\$ 52,500,000
Projected 2014 Operating Profit Margin	10,500,000
Less: Taxes (@40%)	<u>(4,200,000)</u>
Projected Net Income	6,300,000
Less: Other Intangible Assets’ Capital Charge	<u>(1,500,000)</u>
Projected Economic Income	4,800,000
Multiplied by: Profit-Split Percentage	<u>25%</u>
Indicated Profit-Split	1,200,000
Divided by: Capitalization Rate	<u>15%</u>
Value of Trade Name	<u>\$ 8,000,000</u>

The estimated value of the Mocha Mix trade name is \$8 million under the profit-split method.



Intangible Assets – Identification, Valuation & Controversial Issues

Royalty Income Analysis Methods

Royalty rate analyses under the income approach are relatively rare, as the information required to perform such analyses must necessarily fall into one of two possible scenarios:

- Royalty income that has actually been earned and received or, alternatively, royalty income that could have “hypothetically” been earned or received by the owner of the subject intangible asset for licensing the use of the subject intangible asset to a third party
- Hypothetical royalty that would have been required to be paid to an independent third party for the use of the subject intangible asset had it not been owned already by the business or the operating unit, relieving the business or operation from the necessity of leasing the subject intangible asset from another party

The latter is the most-often-used foundational analysis for the *royalty cost savings* or *relief from royalty* methods of intangible asset valuation.

Royalty rate measurements vary and can include the following forms:

- Actual royalty dollars paid in any measurement period
- Percentage rates applied against measurement-period sales or revenue
- Percentage rates applied against measurement-period profits
- Actual royalty dollars paid on units sold in any measurement period
- Actual royalty dollars paid on units produced in any measurement period

The determination of hypothetical royalty rates can take many forms but, generally, is presumed to be market-driven. As such, most analysts look at royalty rate analysis as a market-based method. The authors of these materials agree with that assessment and address the royalty rate determination process under the market approach to valuation set forth in the next chapter. An example of this method will also be provided in the next chapter.

As with the valuation of entire businesses, income approach methodologies add company-specific detail into the calculation of value in determining intangible asset values. While this is an important element of ensuring credibility in developing the conclusion of value, it must be remembered that methods performed under the income approach must be free of bias and manipulation to add absolute integrity to the valuation process. Failure to adhere to independent assessment can easily void any of the benefits otherwise available under this approach.



Intangible Assets – Identification, Valuation & Controversial Issues

Chapter VI – Methods for Valuing Intangible Assets – Market Approach

No approach relating to the valuation of entire businesses or intangible assets offers a more compelling argument for use than the market approach. By looking to intangible assets that are the “same or similar” to the subject intangible asset and that have been recently transferred or licensed in a third-party, “arm’s-length” transaction, the valuator is able to bring to the table a dose of reality from open-market transactions that is not available under the cost approach or the income approach.

Moreover, should the conclusions of value obtained under a properly-applied market approach approximate the conclusion of value obtained under one or both of the other approaches, the question of value of the subject intangible asset is generally confirmed. Numerous courts, as well as the Internal Revenue Service, look to the market approach, if applied correctly, to eliminate questions as to valuation results obtained under the other approaches where valuator and management judgment and prognostication might otherwise be challenged.

The market approach is based on the economic principle of competition. In a free market, the supply and demand forces will move transaction prices for all assets to a point of equilibrium. Buyers would not pay more for a business (or an intangible asset), and a seller will not accept less, than the price of a comparable enterprise or asset.

While the market approach, if applied correctly, can provide clear and convincing evidence of intangible asset value, it is very often misapplied. Moreover, the lack of quality information available from transaction and licensing activities makes identification and interpretation of meaningful data extremely difficult and, at times, impossible. However, failure to consider the market approach in the context of any valuation is a failure to comply with business valuation standards and generally accepted business valuation theory and procedures noted in most valuation treatises.

Research and the Information Gathering Process

Availability of market information regarding transactions and licenses related to intangible assets, and the volume of that information, are often dependent on the type of intangible asset and the function and utility of that intangible asset. For example, certain licenses, such as those granted by the Federal Communications Commission allowing for the public broadcast rights of television and radio signals, are very often traded; therefore, complete databases and industry resources are available for research to get solid information. The same availability seems to be present with respect to professional athletes’ contracts, credit card portfolios and trademarks.

Other intangible assets, such as technical know-how, for example, rarely trade on a “stand-alone” basis and are seldom broken out in publicly-released information. In these cases, it is more cumbersome to utilize the market approach.



Intangible Assets – Identification, Valuation & Controversial Issues

The key element, which requires great effort in the process of applying the market approach to the valuation of an intangible asset, is proper research and data collection. To optimize the analysis, it is imperative that each identified “guideline” transaction or licensing agreement be thoroughly reviewed and precisely understood.

The outcome of the research and analyses will be the development of valuation and pricing multiples, which will then be applied to the same variables of the subject intangible asset to provide an indication of value of that asset. Thus, the critical aspect of this process is to ensure that the selected market data resulting from the research is taken from guideline intangible assets that are sufficiently similar to the subject intangible asset, as to ensure that the multiples extrapolated from the selected guideline assets, and then applied to the subject intangible asset are meaningful.

In addition to understanding that the guideline intangible asset’s characteristics and attributes are sufficiently similar, it is equally important to review and understand, if possible, the functional role that the asset has undertaken in conjunction with the operations of the business or unit. If the subject intangible asset is to be used in a capacity or function that differs markedly from that in which the guideline intangible asset is being used, it might not prove reliable to use valuation multiples developed from that data.

Lastly, in researching and reviewing licensing agreements of guideline intangible assets, care must be taken to ensure that the bundle of rights and privileges conveyed in the agreement are those that would be useful in valuing the subject intangible asset, assuming it was licensed for similar use.

In identifying, quantifying and establishing valuation multiples for intangible asset valuation purposes, at least nine basic elements of comparison have been identified as requiring consideration when selecting and analyzing guideline sales or licensing transactions. These factors are listed below:

- The bundle of legal rights attendant to ownership of the intangible asset that was purchased or sold in the guideline transaction;
- The presence of any special financing terms that were part of the intangible asset sale or licensing transaction that might alter the trading value from a “cash equivalent” value;
- The existence, or absence, of arm’s-length trading conditions;
- The economic conditions existing in the intangible asset marketplace at the time of the transaction;
- The industry in which the intangible asset was used, and the economic conditions affecting that industry at the date of the transaction;



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- The geographic or territorial characteristics of the guideline sale or license transaction, in comparison to the subject intangible asset;
- The term and duration of the intangible asset in the guideline sale or license transaction, compared to the subject intangible asset;
- The use, exploitation or obsolescence characteristics of the intangible asset in the guideline sale or license transaction, compared to the subject intangible asset; and
- The inclusion of other tangible or intangible assets in the intangible asset sale or licensing transaction, which would skew the corresponding valuation information.

Development of Valuation Multiples

Valuation multiples are simply the result of dividing a dependent economic variable by an independent economic variable within the selected guideline intangible asset sale or licensing transaction, and applying that multiple to the same independent economic variable of the subject intangible asset. The resulting computation is an indication of the value of the subject intangible asset based upon the application of the selected multiple under the market approach.

Most often, valuation multiples for cash flow-generating assets are based upon income statement economic variables. Those most commonly used for valuation of intangible assets include 1) average selling price, 2) average unit volume, 3) net sales or revenue, 4) net income (before or after taxes), 5) gross cash flow, and 6) net cash flow. If determinable, net cash flow is often the most telling economic variable.

Balance sheet data can sometimes be used as the economic variable, but rarely provides the usefulness of income statement economic variables.

Market Approach – Methods

The five primary methods of valuation of intangible assets under the market approach are:

- The sales transaction method,
- The relief from royalty method,
- The comparative income differential method,
- The industry rules of thumb method, and
- The market replacement cost method.



Intangible Assets – Identification, Valuation & Controversial Issues

Sales Transaction Method

This method estimates the value of the subject intangible asset based upon actual market transactions – that is, the sale of comparable or guideline intangible assets to independent third parties in arm’s-length transactions. When data is available, this is considered the most direct and systematic approach to value estimation.

The key to applying this method properly is to conduct appropriate research that allows for selecting comparable or guideline transactions that have a “sufficient” level of similarity to the subject intangible asset, so that multiples derived from the selected transactions carry credibility when applied to the subject intangible asset’s variable.

The first step in the analysis is an assessment of the relative economic strengths and weaknesses of each individual market observation and of the subject intangible asset. Understanding the specific attributes of the market observations leads to better assessments of comparability.

The second step is the identification and quantification of adjustment factors related to the differences between the market observations (e.g., comparable or guideline transactions) and the subject intangible asset. This process is fraught with valuation risk, and failure to exercise due care in applying professional judgment can lead to erroneous conclusions, often significant in nature.

In the third step in the analysis, valuation multiples are estimated and applied to the appropriate subject intangible asset financial parameter (e.g., sales, operating profit, cost, subscribers) in order to estimate the value indication through the sales transaction method. The key in this step is simply ensuring that all multiples are determined appropriately and applied in a consistent manner from market observations to the subject intangible asset.

Relief from Royalty Method

As noted earlier, the relief from royalty method is sometimes considered an income approach valuation method because the estimated royalty income is capitalized to reach an indication of value. This method is also sometimes referred to as a cost approach method because the value of the subject intangible asset is estimated by reference to the royalty cost the owner is relieved from having to pay had the intangible asset been licensed from a third party.

In the relief from royalty method, the subject intangible asset is valued by reference to the amount of royalty income it would generate if the intangible asset was instead licensed in an arm’s-length transaction. In using this method, arm’s-length royalty or license agreements are analyzed. The licensing transactions selected should reflect similar risk and return investment characteristics that make them comparative to the subject intangible asset. Again, understanding key attributes is critical, with emphasis here being on the bundle of rights encompassed in the agreements.



Intangible Assets – Identification, Valuation & Controversial Issues

The net revenues expected to be generated by the subject intangible asset from all sources during its expected remaining life are then multiplied by the selected benchmark royalty rate. The result of this calculation is an estimate of the royalty income that could be generated by licensing the subject intangible asset on a hypothetical basis. The estimated royalty stream, which the owner is relieved from paying since the intangible asset is already owned, is capitalized. This results in an indication of the value of owning the subject intangible asset.

The relief from royalty method requires the subject intangible asset to generate some identifiable stream of economic income so the analyst can apply the royalty compensation formula (e.g., a percentage of revenue, a percent of gross profits, etc.) derived from the guideline license agreements.

In a valuation analysis conducted under the relief from royalty method, the following procedures are typically performed:

- Assess the terms of each guideline license agreement with special consideration of the following terms:
 - The description of the bundle of legal rights for the guideline licensed property
 - The description of any maintenance required for the guideline intangible property (e.g., product advertising, product enhancements, quality controls)
 - The effective date and termination date of the guideline license agreement
 - The degree of exclusivity of the guideline license agreement
- Assess the current status of the industry and the associated relevant markets and prospective trends
- Estimate an appropriate market-derived capitalization rate
- Apply the market-derived capitalization rate to the appropriate economic income measure with respect to the subject intangible asset in order to arrive at an indication of value

To illustrate the relief from royalty method, we provide an example on the following pages.



Intangible Assets – Identification, Valuation & Controversial Issues

The advisors of AB Company would like to have the Company's trade name valued for planning purposes. The AB Company trade name is used to mark all Company products, and it has high name recognition in the marketplace, as AB Company is the fourth largest company in its industry. The Company has a history demonstrating the ability and means of promoting the trade name.

The valuator chooses to use the relief from royalty method. Through a search of two widely-used sources of royalty rate data, Royalty Source and ktMINE, the following guideline royalty rates were found.

<i>Licensor</i>	<i>Licensee</i>	<i>Date</i>	<i>Terms</i>	<i>Royalty</i>	
				<i>Low</i>	<i>High</i>
GRT Name	A Company	Dec - 0X	Exclusive	2.0%	4.0%
BST Name	B Company	Sept - 0X	North America	0.5%	1.5%
No. One Name	C Company	June - 0X	Exclusive	1.0%	2.0%
Numero Uno	D Company	April - 0X	Exclusive	1.0%	3.0%
Chief Name	E Company	Dec - 0X	Exclusive	4.0%	4.0%
			High	4.0%	4.0%
			Low	0.5%	1.5%
			Mean	1.7%	2.9%
			Median	1.0%	3.0%
			Mode	1.0%	4.0%

It was determined based on the specific facts and circumstances existing at AB Company that a 2% royalty rate would be applied to the Company's projected revenue over the remaining useful life of eight years.

The present value of the royalty payments that AB Company is relieved from paying by owning the trade name is determined by applying a discount rate of 22%. See the calculations on the following page.



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<u>RELIEF FROM ROYALTY METHOD</u>								
<i>In thousands (000)</i>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Revenue	\$105,000	\$115,500	\$133,000	\$148,000	\$161,000	\$170,000	\$178,000	\$187,000
Pre-Tax Royalty Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Pre-Tax Royalty Savings	2,100	2,310	2,660	2,960	3,220	3,400	3,560	3,740
Less: Taxes	(840)	(924)	(1,064)	(1,184)	(1,288)	(1,360)	(1,424)	(1,496)
After-Tax Royalty Savings	\$ 1,260	\$ 1,386	\$ 1,596	\$ 1,776	\$ 1,932	\$ 2,040	\$ 2,136	\$ 2,244
Present Value Factor	0.9054	0.7421	0.6083	0.4986	0.4087	0.3350	0.2746	0.2251
Present Value of After-Tax Royalty Savings	\$ 1,141	\$ 1,029	\$ 971	\$ 885	\$ 790	\$ 683	\$ 586	\$ 505
Sum of Royalty Savings	<u>\$ 6,590,051</u>							
Rounded	<u>\$ 6,600,000</u>							

The fair market value of the subject trade name is \$6.6 million.

Comparative Income Differential Method

The third method under the market approach is the comparative differential method. In some circumstances, information gathered from the market may permit the analyst to compare the income generated by two similar operations – one that operates with an intangible asset and one that operates without the asset. When these two operations consistently generate significantly different income, the value of the intangible asset can be estimated using the comparative income differential method. The resulting differential in company performance can be implied to be associated with the intangible asset and then capitalized to determine its value.



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This method may be applicable to intangibles such as franchise agreements, proprietary technology, trade names, and patents, to name a few. The following represent typical comparative income differential method procedures:

- Estimate the projected normalized economic income differential associated with the use of the subject intangible asset.
- Apply the market-derived capitalization rate to the estimate of prospective economic income differential in order to conclude an indication of the value of the subject intangible asset.

Industry Rules of Thumb Method

Some industries have rules of thumb (sometimes given an aura of creditability by being referred to as industry valuation formulas) about how intangible assets in their industries are valued for transfer purposes. On the one hand, if such rules of thumb are widely disseminated and referenced in the industry, the analyst probably should not ignore them. On the other hand, rules of thumb rarely, if ever, are able to be used as a primary source of valuation since the basis for the rules of thumb is often not available.

Rules of thumb are usually quite simplistic. As such, they obscure many important details. They fail to account for how differences from one company to another, in either operating characteristics or assets, affect the valuation. They also fail to differentiate changes in conditions for companies in various industries from one time period to another.

Furthermore, it is common for intangible assets employed in many industries to sell or be licensed on terms other than cash, so the “prices” generated by the rules of thumb often are not cash-equivalent values. The terms may vary considerably from one transaction to another. Consequently, rules of thumb should rarely, if ever, be used without considering other, more reliable valuation methods.

Market Replacement Cost Method

The final method under the market approach is the market replacement cost method. This method contemplates the replacement cost of the intangible asset in the open market. While the replacement cost method generally begins by examining the internal records of the subject intangible asset’s owner, this method considers an estimate of the replacement cost of the intangible asset by knowledgeable outsiders. If objective arm’s-length estimates can be obtained, they may lead to a reliable market-derived estimate of the intangible asset’s replacement cost. From the point of determining the replacement cost estimate, the procedures described under the cost approach in Chapter IV (e.g., analyzing obsolescence factors that differentiate the subject intangible asset’s characteristics from its replacement cost) should be followed.



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While the cost to replicate the subject intangible asset is at the heart of this methodology, it has limited usefulness in that such costs are very hard to identify with any degree of accuracy in the open marketplace. More often than not, looking to the cost approach details exactly how reconstruction of the owner's cost history can assist with some level of credibility in developing an estimate to replicate the subject intangible asset. As such, most often, this type of assessment is considered under the cost approach.

Conclusion

Market evidence is always helpful in the field of valuation. Where it is necessary to utilize management projections, users of valuations are often suspect of the credibility of those projections. As noted earlier, the critical element of confirming valuation conclusions obtained under other methodologies with real evidence of market transactions can go a long way to convince skeptics of the propriety of the value conclusion. Keep in mind, however, that sufficient similarity between market observations and the subject intangible asset is critical to proper application of any of the methods available under the approach.



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Chapter VII – Court Cases Addressing Intangible Asset Valuation

There have been many court cases involving disputes over intangible assets, ranging from divorce to matters of economic damages and lost profits. The following section is intended to provide a sampling of cases in which intangible assets, including the valuation of these assets or damages thereon, were at issue.

Langdon v. Commissioner, 59 Fed. Appx. 168, 2003 U.S. App. LEXIS 2714

Cortland Langdon was the owner/operator of Bemidji Distributing Company, Inc. (BDC), a large wholesale beer distributorship in Minnesota. In 1990, Langdon retained a consulting firm to value BDC and to broker a sale of the Company. The firm concluded that BDC's tangible assets were worth \$765,000, and its intangible assets (consisting of goodwill, franchise rights and customer lists) were worth \$1.2 million.

The owner sold BDC to Bravo Beverage, Ltd. in 1992, for a sales price of \$2,017,461. The parties made the following purchase price allocation:

- \$817,461 attributed to BDC's tangible assets;
- \$200,000 for a two-year consulting agreement; and
- \$1,000,000 for a five-year covenant not to compete.

The parties did not allocate any of the purchase price to intangible assets. The IRS challenged the allocation and assessed a deficiency, while the owner and BDC challenged this determination.

In *Bemidji Distributing Company v. Commissioner*, T.C. Memo 2001-260 (T.C. Oct. 1, 2001), the Court noted that because the parties to the sale did not have competing tax interests, the Tax Court examined the allocation and found it lacked economic reality under the nine-factor test. The nine factors are: 1) the seller's (e.g., the covenantor's) ability to compete; 2) the seller's intent to compete; 3) the seller's economic resources; 4) the potential damage to the buyer posed by the seller's competition; 5) the seller's business expertise in the industry; 6) the seller's contacts and relationships with customers, suppliers and others in the business; 7) the buyer's interest in eliminating competition; 8) the duration and geographic scope of the covenant; and 9) the seller's intention to remain in the same geographic area.

The Tax Court ruled that the covenant not to compete was not worth \$1 million and was primarily "disguised payment" for the intangible assets. The Court reduced the value of the covenant to \$334,000 and assigned the remaining \$666,000 as the value of the intangible assets. The Tax Court held in favor of the IRS and ruled that BDC and Langdon owed additional income taxes. The taxpayers appealed.



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The Eighth Circuit affirmed, holding that the parties produced no evidence that the covenant was worth \$1 million. The Court of Appeals also upheld the Tax Court's conclusion that it was unreasonable for the parties not to allocate any value to BDC's intangible assets. BDC was an established and profitable business, and the buyer acquired BDC's customer lists and exclusive brand and distribution rights; additionally, the consulting firm assigned value to these intangibles prior to the sale. The Court noted that it was reasonable, therefore, to conclude that the buyer acquired goodwill and a going concern in the transaction.

Finding no clear error in the Tax Court's decision, the Eighth Circuit held that BDC and Langdon had not met their burden to prove that the Tax Court's ruling was incorrect.

***Bobrow v. Bobrow*, Hamilton County No. 29 DO1-0003-DR-166 (Indiana Superior Court)**

One of the issues in this marital dissolution was the value of the husband's partnership interest in the accounting firm of Ernst & Young (E&Y), including his interest in the enterprise goodwill of the firm. There were two separate components of E&Y that were subject to valuation: the Consulting Services division that was sold in the Cap Gemini Transaction shortly after the separation date and the remainder of the accounting firm.

The husband's expert did not include the enterprise goodwill of E&Y in his valuation of either component. The husband argued that the enterprise goodwill should not be included in the marital estate and, therefore, did not present evidence of its value. Accordingly, the trial court rejected the expert's valuation testimony.

The wife's valuation expert testified to the valuation of both components of E&Y. His valuation of the remainder of the firm, including the methods he used to value each type of asset, follows.

<i>Asset</i>	<i>Method</i>	<i>Value</i>
E&Y as a whole – enterprise value	Discounted cash flow method with 12% growth rate	\$ 5,530,000,000
Tangible assets	Cost approach	\$ 1,120,000,000
Established relations with customers	Total of client relationships, trade name, methods and tools	\$ 2,672,400,000
Client relationships	Income approach	\$ 2,108,000,000
E&Y's trade name	Relief from royalty method with 1.5% royalty rate	\$ 155,900,000
Methods and tools	Relief from royalty method with 3.5% royalty rate	\$ 408,500,000



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Established relations with employees	Cost approach	\$ 464,700,000
Total tangible and identifiable intangible assets	Total of individually valued tangible and intangible assets	\$ 4,257,100,000
Remaining unidentifiable intangible assets	Residual method – Enterprise value less total tangible and identifiable intangible assets	\$ 1,273,400,000
Enterprise goodwill	Total of all intangible assets	\$ 4,410,500,000
Husband's 0.22% interest	Multiply total E&Y enterprise goodwill by 0.22%	\$ 9,748,087

In addition to the valuation of the Consulting Services division prepared by the wife's expert, the trial court also considered the testimony from another consultant concerning the allocation of the purchase price of that division in the Cap Gemini transaction. The valuation figures considered by the court are shown below.

Valuation of E&Y Consulting Services Division Sold in Cap Gemini Transaction

<u>Asset</u>	<u>Value</u>
E&Y Consulting Services division as a whole – enterprise value	\$4,744,700,000
Total tangible and identifiable intangible assets	Over \$4 billion
Enterprise goodwill	\$3.35 billion
Richard Bobrow's 0.22% interest	\$10,100,000 (rounded)

The wife's expert also performed an alternate valuation of the husband's share of E&Y's enterprise goodwill. The expert determined the fair market value of the salary component of the husband's compensation. The remaining portion of the husband's compensation was attributed to earnings from his ownership interest, and the present value of the future stream of these earnings was calculated. The expert's initial enterprise goodwill value fell within the range of values determined by this method, thus, providing confirmation.

The trial court found that the husband's interest in the enterprise goodwill of E&Y was a marital asset subject to distribution, citing *Yoon v. Yoon*, 711 N.E.2d 1265 (Ind. 1999) and other Indiana case law. The trial court further found that enterprise goodwill need only be transferable, not necessarily readily marketable, to be distributed in the dissolution action. The trial court determined that the terms of a partnership agreement, regarding distribution of assets upon withdrawal or termination of the partnership, were not controlling of the value of the partner's interest in the firm.



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The trial court accepted the testimony of the wife's expert, and found that the husband's partnership interest in the remainder of E&Y was \$9,748,087, and that his interest in the Consulting Services division was \$10,100,000. The trial court further found that the wife was entitled to 60% of the marital estate, and the husband to 40%.

Keener v. Keener, 2006 Iowa App. LEXIS 659 (June 28, 2006)

In *re the Marriage of Keener*, No.6-375, the Iowa Court of Appeals considered the valuation of a toy (manufacturer and seller) company. The company was incorporated by the wife on the day before the parties married. While the wife was the sole shareholder of the business, the husband operated the business, subject only to the wife's consent to financial decisions. The toy company grew during the marriage, acquiring manufacturing equipment, as well as the rights to several notable toy brands.

The wife's expert valued the business as a going concern using the net asset method. However, he did not include any value for the business's intangible assets. He also deducted a significant contingent liability, as well as applied a 30% discount for lack of marketability. The wife's expert determined that the business had a value of \$4.8 million.

The husband's expert disagreed with the zero valuation of the Company's intangible assets. The Company had a recent sale of two brand names for \$7.7 million and a sale of a third brand pending (post-divorce) for \$7 million. The expert also disagreed with the 30% discount for lack of marketability, noting that a 5-10% discount would be appropriate. Prior to consideration of the intangible assets, the husband's expert valued the net assets of the Company at \$10.17 million. The expert estimated that the rights to "hundreds" of other brand names would add another \$20 to \$30 million of intangible asset value, increasing the company's overall net worth to the \$30 to \$40 million range.

The trial court was not persuaded by the wife's valuation, in part for its failure to value the intangibles, and also for its "speculative" discounts concerning marketability and contingent liabilities. It found the husband's report more credible, adopting his net asset value of \$10.17 million and finding the company's intangibles to be worth an additional \$5 million. On review, the appeals court confirmed, finding the "undisputed" evidence of name-brand sales supported the intangible valuation. The appeals court found the husband's expert more credible, noting that the case was a "classic battle of expert witnesses."



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Carnegie Mellon University, Plaintiff, v. Marvell Technology Group, Ltd. Et al., Defendants, 09-290 (W.D. Penn. Feb 28, 2013)

In 2009, Carnegie Mellon University (CMU) claimed that Marvell Technology Group (Marvell) infringed upon two of its patents. The patents relate to certain hard drive control chips made by Marvell, which were incorporated into products sold by Marvell to third parties. The actual patented technology relates to high-density magnetic recording, which Marvell used to read and write data on hard-disk drives. According to court records, Marvell sold approximately 2.2 billion chips starting in 2003.

Pittsburgh Federal Court ruled that Marvell willfully infringed the two patents in question, awarding \$1.17 billion to CMU, representing the largest patent verdict in history. The damage amount was based upon a royalty of 50 cents for each chip the company sold. The significance of finding that the defendant acted willfully is that the court could impose damages of up to three times the jury verdict.

CMU was issued the two subject patents in 2001 and 2002, which related to the technology that CMU claims that Marvell used in at least nine circuit devices. Marvell argued that CMU had not invented anything new as far as technology, and that there was a different patent, filed earlier than CMU's, that describes CMU's technology. The Court found that Marvell did indeed infringe upon the patented technology willfully beginning in 2003.

Both parties presented experts – the plaintiff's expert calculated a reasonable royalty rate, while the defendant's offered a rebuttal expert. In addition, both sides filed Daubert motions.

The plaintiff's expert calculated a reasonable royalty rate after considering the possibility of an established royalty rate and finding none. While the expert stated in her report that she thought the Entire Market Value Rule (EMVR) applied, she did not use EMVR. Instead, the reasonable royalty rate was based on the value of the chips, apportioned between the patented and unpatented features. The plaintiff's expert also performed a *Georgia-Pacific* analysis (see below), in which she considered a PowerPoint slide (defendant's internal document) that proposed a 3% royalty rate on "substantial key functionality."

Georgia-Pacific Analysis

In the 1970 case of *Georgia-Pacific v. United States Plywood Corp.* (318 F. Supp. 1116), the U.S. District Court for the Southern District of New York used the following 15 factors to determine what type of monetary award would compensate for infringement:

1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.



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2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.
3. The nature and scope of the license, as exclusive or nonexclusive, or as restricted or nonrestricted, in terms of territory or with respect to whom the manufactured product may be sold.
4. The licensor's established policy and marketing program to maintain a patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
5. The commercial relationship between the licensor and licensee, such as whether they are competitors in the same territory in the same line of business, or whether they are inventor and promoter.
6. The effect of selling the patented specialty in promoting sales of other products of the licensee, the existing value of the invention to the licensor as a generator of sales of non-patented items, and the extent of such derivative or convoyed sales.
7. The duration of the patent and the term of the license.
8. The established profitability of the product made under the patent, its commercial success, and its current popularity.
9. The utility and advantages of the patented property over the old modes or devices, if any, that had been used for working out similar results.
10. The nature of the patented invention, the character of the commercial embodiment of it as owned and produced by the licensor, and the benefits to those who have used the invention.
11. The extent to which the infringer has made use of the invention and any evidence probative of the value of that use.
12. The portion of the profit or of the selling price that may be customary in the particular business, or in comparable businesses, to allow for the use of the invention or analogous inventions.
13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.
14. The opinion testimony of qualified experts.
15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement, that is, the amount to obtain a license to manufacture and sell a particular article embodying the patented invention – would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.



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In addition to the *Georgia-Pacific* analysis, the plaintiff used a 25% or 33% profit-split rule. One other consideration was three very broad licensing agreements, which generated between \$150,000 and \$250,000 annually. Ultimately, the plaintiff's expert calculated a running royalty of \$0.50 per chip for each infringing sale.

The defendant's expert proposed a lump-sum payment based on prior agreements that the plaintiff had with its affiliates. By using the prior agreements, if the Court agreed, then a reasonable royalty could not be greater than \$250,000. However, the Court found that there was a comparability issue between the subject case and the prior agreements.

The defendant also claimed that the plaintiff's expert failed to compare the value of the technology at issue to the next best alternative, which is required under *Apple v. Motorola, Inc.*, 2012 U.S. Dist. LEXIS 105387 (N.D. Ill. May 22, 2012). The Court declined to change its Daubert ruling, finding this objection untimely and unfounded.

Months after the verdict was returned, Marvell filed a motion to compel documents and wanted to use its laches defense. Marvell filed an "Emergency Motion to Strike CMU's Attempt to Include on Infringing Sales of Chips that Are Never Used in the U.S." The Court found that Marvell had not offered any new evidence and denied the motion.

On May 1, 2013, the Court heard all arguments regarding post-trial motions. During this hearing, Marvell argued that the damages should be reduced, and limited to the chips which were used inside the United States. Marvell also argued that the royalty rate should be based on \$0.03 per chip. However, Marvell did not challenge the royalty rate at trial. As far as the sales of chips, CMU argued that the infringing activity took place at Marvell's headquarters, which are based in the United States. CMU wanted the damages to be increased to punish Marvell for infringing on its patents.

A U.S. district court has ordered Marvell to pay CMU \$1.54 billion for damages, which includes over \$1.1 billion from an original jury verdict, as well as punitive damages for willful infringement.

Bowman v. Monsanto Co. et al., No. 11-796. Argued February 19, 2013; Decided May 13, 2013

Respondent Monsanto invented and patented Roundup Ready® soybean seeds, which allow the crop to grow tolerant of the herbicide (weed killer) glyphosate. Growers may spray glyphosate-based herbicides on fields with these seeds to kill weeds without harming their crop.

Growers are only able to obtain the Roundup Ready® seeds by purchasing them from an authorized seed dealer and signing a licensing agreement. Under this agreement, a grower is permitted to grow one generation of soybeans and sell them to be consumed through normal distribution channels. Further, the agreement provides no authoriza-



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tion to the grower to save and replant seeds from a harvested crop or to sell those soybeans to someone else to plant them. Farmers may sell second-generation seeds to a grain elevator. The restrictions were put into place because each of the harvested seeds contains the same patented technology as the original seed.

Petitioner Bowman, a farmer in Knox County, Indiana, purchased Roundup Ready® soybean seeds for his first crop of each growing season from a company associated with Monsanto and followed the terms of the licensing agreement. In order to reduce costs for his late-season planting, Bowman purchased soybeans intended for consumption from a grain elevator and planted them. Bowman treated this crop with glyphosate, killing all plants without the tolerant trait, harvested the resulting soybeans that contained that trait, and saved some of these seeds to use in his late-season planting for the next season.

After learning of this practice, Monsanto sued Bowman for patent infringement. Bowman raised the defense of patent exhaustion, which gives the purchaser of the patented article, or any subsequent owner, the right to use or resell that article. Bowman claimed that growing the new generations of soybeans did not actually create copies of the technology, but used the technology that is self-replicating.

The District Court rejected Bowman's defense, and the Federal Circuit affirmed. Patent exhaustion does not permit a farmer to reproduce patented seeds through planting and harvesting without the patent holder's permission.

An independent expert calculated damages of \$30,873.30. Monsanto argued that this amount did not make sense because it was less than it would have cost the farmer to buy the seeds and plant them legally (\$36,138). The Court then used this figure as the basis of its calculation. Bowman was ordered to pay interest on this amount, as well as Monsanto's legal fees. The final amount awarded was \$84,456.20.

Final Thoughts

In conclusion, the cases summarized above, especially the more recent cases, address the importance of intangible assets to any business operating in this economy. Valuers hired to value these assets or quantify damages must have experience not only in valuing total enterprises, but also in valuing intangible assets. As the earlier chapters presenting the approaches and methods noted the specific nuances when quantifying the value of intangible assets, the valuator should be knowledgeable of the methodology and have the experience in order to make informed decisions when valuator judgment is required.



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Chapter VIII – Conclusion and Practical Considerations

More than ever before, ideas and knowledge encompassed in intangible assets will continue to drive the most successful companies, both large and small. The sheer volume of intangible assets make them prime targets for new work and a commitment of energy from the legal and accounting professions. The work that can be developed from a strong grasp of these assets, including exactly what they are and how they are valued, can provide many avenues of revenue generation for the legal and accounting communities. Moreover, protecting and growing these assets is tantamount to helping businesses move into the future. There is no question that intangible asset considerations will drive businesses throughout the twenty-first century.

Members of the legal profession have generally encountered intangible asset considerations in patent acquisitions, merger and acquisition transactions and licensing activities, as well as in litigation assignments. However, other areas of legal intervention regularly come into play as the importance of these assets grows. Planning for gift and estate taxes is a critical element of seeing the transfer of these assets move from senior-generation developers and owners to junior-generation users and operators. Organization structure also plays a role in minimizing tax implications at future points of disposition. Finally, understanding tax implications from involvement in research and experimentation activities, as well as cross-border royalty and licensing agreements, has never been more important.

In addressing issues with respect to intangible assets, there is, perhaps, no area of valuation in which integrated input from the accounting and legal community is more useful. Much of the legal and tax emphasis of issues in relation to intangible assets is predicated on the arm's-length nature of transactions. In most cases, arm's-length determinations are analytically financial in nature, driving off of market activities of a similar nature and proven through numerical evidence. The essence of these financial analyses requires experienced, highly-trained individuals to assist legal counsel with interpreting the economic impact of the issues on the value of these assets.

Grossman Yanak & Ford LLP has those experienced individuals who can assist members of the legal community and the triers of fact in establishing the economic value of specific intangible assets, as well as assessing monetary damages associated with improper use or impairment of those assets, thereby causing loss in value or future expected economic benefits associated with the intangible assets.

Realizing that valuation and intangible asset considerations are broad, the program this morning was intended to allow you the opportunity to familiarize yourself with key concepts relative to the valuation of these assets and to provide an understanding of how you might be able to address client needs in this area in the future. To that end, it is our hope that by your attendance today, you will be able to return to your practice better prepared to serve your clients' needs.



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Obviously, a brief program such as this does not allow for total understanding, especially in specific facts and circumstances that differ from those illustrated here today. Should you have further questions, please feel free to contact Bob Grossman at 412.338.9304 or Melissa Bizyak at 412.338.9313.

Thank you for attending today!



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