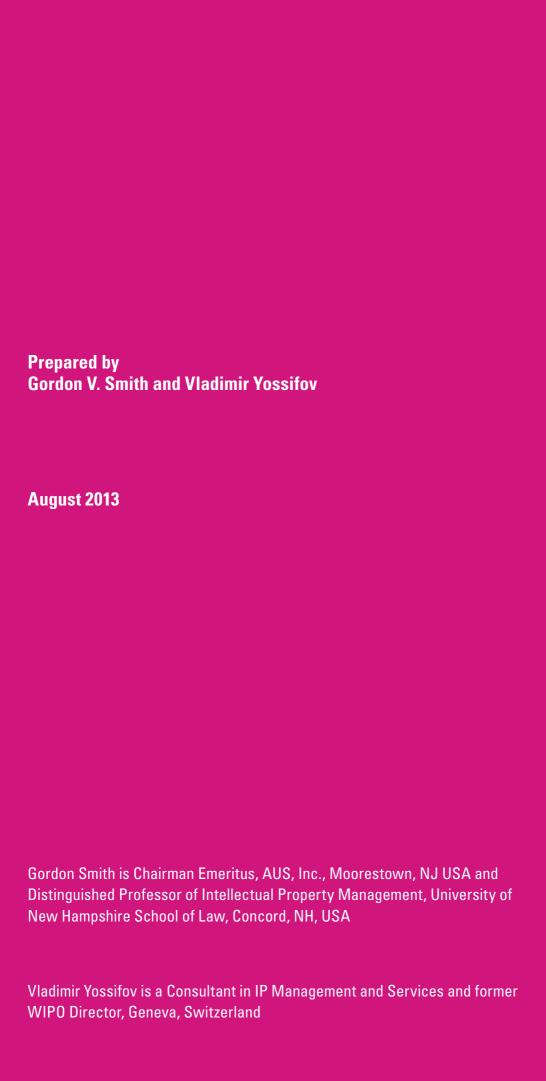


MONETIZATION OF COPYRIGHT ASSETS BY CREATIVE ENTERPRISES

Creative Industries - Booklet No. 7







Monetization of Copyright Assets by Creative Enterprises

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1. INTRODUCTION

The term 'intellectual property rights' (IPR) encompasses a broad spectrum of human creativity. Article 2 (viii) of the Convention Establishing the World Intellectual Property Organization (WIPO) states that IPR relate to:

'...literary, artistic and scientific works; performances of performing artists, phonograms, and broadcasts; inventions in all fields of human endeavor; scientific discoveries; industrial designs; trademarks, service marks, and commercial names and designations; protection against unfair competition; and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.'1

Intellectual property is often described as either 'industrial property', comprising patents, utility models, industrial designs, trademarks, service marks, trade names, indications of source or appellations of origin, and the repression of unfair competition,² and/or 'copyright', which refers to literary and artistic works. In fact, the correct use of the term 'intellectual property' comprises both industrial property and copyright. The focus of this study is on the copyright subset of IPR.

The first objective of this study is to create an awareness of IPRs that are associated with creative activities.

There are many explanations of the term *innovation* and for purpose of this study we consider innovation as a process of introducing a new product, technology, service, useful design, new process, artistic work, fabric, etc. to the market and the consumer. Every new idea transformed into a new product or service is considered to be an innovation – some innovations involve inventions, know-how and trade secrets, while others are based on new artistic perceptions, addressing emotions and senses. For example, innovations that result in a patent or trade secret, or the art and science of building a trademark are creative activities. There is, however, a great deal of creative activity that is not technology or brand related. Much of this creative activity is performed by individuals or small organizations and its results are often not as obvious to their creator or an observer or user as in the case of an invention (that may be protected by a patent) or a brand protected by product or service trademark.

While not so visible, the results of these creative activities can be important business assets and are an increasingly large portion of the world's intellectual property. These creative activities are not so obvious to us because they are constantly occurring as a result of human activity all over the world and because their successful creation does not receive the attention given to a new smart phone or drug, for instance. For the

- **1** See www.wipo.int/treaties/en/convention/trtdocs_wo029.html#P50_1504
- 2 See www.wipo.int/treaties/en/ip/paris/trtdocs_wo020.html#P71_4054

most part, the results of these creative activities are protected as copyright. Another reason why these activities may go unnoticed is that in most cases their intellectual property status and protection is given without the need for express legal or administrative action. According to Art. 5(2) of the Berne Convention³, 'The enjoyment and the exercise of these rights shall not be subject to any formality'. In fact, many individual and small company creators of copyrights may be unaware of both the status and the value of their creation.

As an example, the digital world has turned millions of us into active photographers. The photographs that we capture are our individual creations and, without any action on our part, are considered to be intellectual property that belongs to us. Most of us simply enjoy our photographs with family and friends and occasionally copy them for others. The issue of exercising our IPR never arises. What is the monetary value of our IPR in these photographs? Very little, if anything. There is, however, the *potential* for monetary value if we choose to exploit these photographs to obtain some economic benefit.

The second purpose of this study is to present financial and valuation tools that can enable the *quantification* of the monetary value of successful creative efforts. Unlike other forms of intellectual property, creative works tend to emanate from individuals or small business enterprises. Because of this, some of the valuation issues that typically arise in the corporate setting are not discussed. This study therefore emphasizes valuation and the monetization of creative works in the setting of individual or small and medium-sized enterprises (SME).

1.1 About Copyright

Copyright applies to a fairly broad group of creative activities including written material, literary, dramatic and musical works; pantomimes and choreography; pictorial, graphic or sculptural works; audiovisual works, sound recordings, and architectural works, as well as technological works such as computer programs and electronic databases. Generally speaking, a creator of such intellectual property is protected against the copying of that property by others without the creator's permission, though a copyright owner may authorize others to reproduce or distribute his/her work. This right – copyright – is not perpetual; it is limited in time, subject to national law. The duration of copyright is usually the life of the holder plus at least 50 years after the death of the right holder (this duration depends on national laws).

³ Berne Convention for the Protection of Literary and Artistic Works, WIPO, www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html

⁴ Art. 2 of the Berne Convention for the Protection of Literary and Artistic Works enumerates the works protected by copyright



Table 1.1: Types of works protected under most national copyright laws

Literary works	Novels, short stories, poems, dramatic works and any other writings, irrespective of their content (fiction or non-fiction), length, purpose (amusement, education, information, advertisement, propaganda, etc.), form (handwritten, typed, printed; book, pamphlet, single sheets, newspaper, magazine); whether published or unpublished; in most countries, 'oral works', i.e. works not reduced to writing, are also protected by the copyright law; translations, etc.
Musical works	Whether serious or light; songs, choruses, operas, musicals, operettas; if for instructions, whether for one instrument (solos), a few instruments (sonatas, chamber music, etc.), or many (bands, orchestras).
Artistic works	Whether two-dimensional (drawings, paintings, etchings, lithographs, etc.) or three-dimensional (sculptures, architectural works), irrespective of content (representational or abstract) and destination ('pure' art, for advertisement, etc.).
Maps and technical drawings	Cartographic works, such as globes and relief models; plans, blueprints, diagrams, electrical and mechanical drawings.
Photographic works	Irrespective of the subject matter (portraits, landscapes, current events, etc.) and the purpose for which they are made.
Motion pictures or cinematographic works	Whether silent or with a sound track, and irrespective of their purpose (theatrical exhibition, television broadcasting, etc.), their genre (film, dramas, documentaries, newsreels, etc.), length, method employed (filming 'live,' cartoons, etc.), or technical process used (pictures on transparent film, on electronic videotapes, etc.).
Computer programs and databases	Either as a literary work or independently.

Source: WIPO Guide on Surveying the Economic Contribution of the Copyright-Based Industries⁵

Copyright laws can also protect works of 'applied art' (artistic jewelry, lamps, wallpaper, furniture, etc.) focusing on the artistic elements in them.⁶

Copyright protects the *form* of expression of an idea, not the idea itself. That is, one could write a book about a man's pursuit of a white whale and, as long as none of Herman Melville's words, phrases and narrative were copied, one would not have infringed the copyright to *Moby Dick*?

The law pertaining to copyright ownership and exploitation can be very complex. One can easily appreciate the difficulties of copyright in the case of a motion picture or major advertising campaign that necessarily involves writers, musicians, performers, designers, and photographers creating original works, as well as the use of copyright works of others. Typically, the ownership of this multitude of creations is transferred

- 5 "Guide on Surveying the Economic Contribution of the Copyright-Based Industries", p. 14, WIPO
- 6 See "WIPO Intellectual Property Handbook: Policy, Law and Use" WIPO Publication No. 489 (E), ISBN 92-05-1004-8, Geneva, WIPO 2001, p. 43.
- 7 Note: Moby Dick; or, The Whale is a novel by the American novelist Herman Melville

to a common owner, but this is not always the case and the subsequent exploitation of the finished work may be impeded by inadequate contractual arrangements.

A full discussion of copyright law is beyond the scope of this study, and the reader is directed to more comprehensive sources.⁸

Today we witness a wide recognition of the fact that the creative industries are shaping the creative economy, which for many is becoming a synonym for the economy of the future. The WIPO Studies on the Economic Contribution of the Copyright Industries⁹ showed that in many countries the copyright industries have made a significant contribution to the GDP and employment. In some countries, such as Australia, Korea and the USA, the contribution to the GDP is over 10%. In many countries, 5-7% of the workforce is employed in the creative industries sector. And all this is a direct result of the awareness of the IP system and its efficient protection of intellectual property rights. The digital environment and the internet enabled the appearance and rise of new audio-visual creation, such as the gaming industry, music and image content creation and dissemination (e.g. 'YouTube'), mobile apps, etc. And all these creations of the human mind are subject to IP protection.

1.2 Monetization of IPRs in the Creative Industries

IPRs have little or no intrinsic value. They attain value by being successfully exploited. As an example, a successful copyrighted software application starts when a creative idea is captured in some digital format. At that point, value is negligible. Value accrues when the application begins to produce some economic benefit for its owner by being successful in the marketplace.

Exploitation can be:

- **Internal** the IP owner can use the IPRs exclusively in his/her business in order to provide new products/services, enhance existing ones, gain premium prices, create barriers to competitive entry, and so forth.
- **External** the IP owner can sell, license or barter the IPRs to others in whole or in part.

Suppose we are standing on the bank of the Seine River completing a sketch of the Eiffel Tower. Someone approaches us, admires the sketch, and offers to purchase it. We agree on a price, the admirer leaves with our sketch and we pocket the money. We have just 'monetized' some intellectual property rights. In another instance, perhaps we have published some holiday pictures on our website and an advertising agency wishes to use some of these pictures for an ad publication. We are flattered

- 8 WIPO makes available for download several documents describing IPR known as copyright. See www.wipo.int/copyright/en/
- 9 See: www.wipo.int/export/sites/www/copyright/en/performance/pdf/economic_contribution_ analysis_2012.pdf



that our pictures will be used and agree to the use of the pictures without asking for money. We may have just missed an opportunity to 'monetize' our IPRs on a cash basis. However, if we only granted the right to use on a 'one-time' basis, we retain some exploitation rights for ourselves. Or if we require the agency to include our name as photographer, we might be obtaining free publicity for our business.

The objective of this study is to examine the monetization of intellectual property rights in creative works. The sale of our sketch seems very simple; however, monetization can come in many forms and intellectual property rights can be quite complex, especially in the creative industries.

1. Monetization

A dictionary would tell us that to monetize something is to 'convert it into or express it in the form of currency'. Earlier editions would refer to the original understanding, which was that monetizing means 'to legalize as money', or 'to coin gold into money: e.g. 'to monetize gold'.

Today the most current understanding of *monetize/monetizing* is 'to utilize (something of value) as a source of profit,' or 'to convert an asset into money or a legal tender.'

The term has gained different meanings, depending on the context.

For example, a government can monetize the nation's debt by purchasing debt (treasuries) which in turn increases the money supply. Thus the debt is turned into money (monetization).

More recently, in relation to the use and development of the Internet-based business, the term *monetize* is used to describe the ways and means to generate income from items posted on the Web (e.g. a website or a blog).¹⁰

10 Websites are usually monetized by either selling access to their content and/or ad space or creating a related product line, such as T-shirts with slogans. This would also comprise revenue generation through affiliate programs, electronic commerce, premium content, on-line advertising or any form of revenue generation.

When people who browse the particular site click on one of the advertisers' links, the owner of the website earns a small amount of money (this is known as pay-per-click, or PPC advertising). If the website attracts enough visitors, the small amount paid by the advertisers for each click can add up to substantial monetization.

Another method used to monetize a website is the placement of banner advertisements. If a particular website has proven that it attracts a certain number of visitors each month, companies may pay to place advertisements that appear on the home page, certain pages or every page of the website, depending on the agreement between the website owner and the advertiser. Typically, larger and more prominently displayed advertisements cost more.

Other methods of website monetization include CPM advertising (cost-per-mille), text link advertisements, affiliate marketing and monetization widgets.

For different descriptions and definitions of the terms monetize, monetizing, etc., see *en.wikipedia.org/wiki/Monetization www.investopedia.com/terms/m/monetize.asp www.thefreedictionary.com/monetize*

Monetization of Copyright Assets by Creative Enterprises

In this study we will not deal with the various ways and means of monetizing (or making money from) copyrights and creative works, but will focus on the valuation of the many types of IPRs that could be the subject of a monetization effort. This is an important element in the monetization and commercialization process for any work, product or service.

Now, back to our case with the sketch.

When we sold our sketch we accomplished a quick, one-time monetization of our property, but in fact the monetization of that sketch might have taken a number of different forms:

- We could have bartered with the admirer and accepted her hat in exchange for our sketch. In doing so, we would have benefited from the saving of time and the cost of a new hat like hers.
- We might have gone to a nearby shop with the admirer and made a photocopy of the sketch to sell to her, keeping the original for ourselves.
- The admirer might have been an art gallery owner who would sell our sketch in her gallery in return for a commission.
- Perhaps she owns an auction house and would have placed our sketch at auction for a fee.
- The admirer might have wanted to make multiple copies of our sketch to be sold as postcards and might have been willing to pay us a small fee for each postcard sold.
- She might have wanted to use our sketch in a magazine advertisement or on a billboard with an entirely different compensation scheme for us.
- She might simply have wanted to take a photograph of our sketch with her iPhone and send the image back to a friend in Sweden and pay us some money.

All of these instances are monetization opportunities of one sort or another. So we must recognize that when we speak of monetization we are referring to a myriad of possibilities, each with its own characteristics, advantages and disadvantages, and likelihood of success.

In this study we will adopt a broad view of monetization. In our simple example, monetization has taken the form of exploiting a creative work that is already in existence (our Eiffel Tower sketch). That is the form of monetization that most commonly comes to mind.



However, we do not wish to exclude monetization that is undertaken to *enable* the creation of intellectual property rights in a work. We would therefore define monetization for the purposes of this study to be the intersection of money and intellectual property rights in a variety of circumstances. Expanding on our example, let us assume that we required some financial assistance in order to travel to Paris for the purpose of sketching scenes in the city. We might borrow the money, with the lender accepting the resulting sketches as collateral. Or we might repay the loan by agreeing to pay the lender a portion of the ultimate sale of the sketches. There is a myriad of possibilities. That further complicates the issues, of course, but this expansion of the monetization concept is useful for the purposes of this study. That is, monetization can occur either before or after creation of the subject work.

We liken monetization to exploitation. We do not mean exploitation in the pejorative sense of one taking undue advantage of another, but in a broader sense of developing and employing intellectual property rights in order to realize some economic benefit. We will be discussing intellectual property exploitation extensively in subsequent sections of this study.

2. About Intellectual Property Rights (IPRs)

When we sold our sketch in Paris, we were not simply selling a physical piece of paper. We were selling the *right* to exploit the image that we had created.

When we refer to intellectual property rights, we mean a bundle of rights that are associated with owning intellectual property. In this regard, intellectual property does not differ from other forms of property. The classical 'Bundle of Rights Theory' for real property confers on the owner¹¹:

- The right to use the property,
- The right to lease the property to others,
- The right to enter the property,
- The right to give the property away,
- The right to refuse to exercise any of these rights.

We can express these rights as they apply to intellectual property and in the context of our example above:

- We might decide to use the property ourselves, and hang the sketch on our wall to enjoy.
- We might lease our image to a company, in the form of a license, to use on a calendar.
- We might simply give the sketch as a gift to the lady who admired it.
- We might be unhappy with the sketch and throw it away.
- Or, we might avail ourselves of the opportunity to exploit our rights in a
 myriad of ways offered uniquely by intellectual property. The exploitation
 rights granted by copyright are broad and include what is known as 'economic
 rights', which include, the rights of reproduction, distribution, communication
 to the public, use in a public performance, and broadcasting.

Intellectual property rights are a subset of intangibles. Among the distinct properties of intangibles is that their use and application are not limited to one user or a single place of use. Intangibles can generate scalable benefits, and modern technology (audio-video recording, internet, broadcasting) can boost the scalability of benefits.

One of the very important differences between intellectual property rights and other forms of property is that intellectual property rights are not fixed in a geographical location or exclusively attached to some particular industry, product, or service. That is, intellectual property rights can be exploited by multiple parties for multiple purposes. There is a unique versatility associated with intellectual property that contributes substantially to its value.

The breadth of exploitation possibilities for intellectual property rights can also introduce some complexity in carrying out those exploitations. As an example, our sale of the sketch to the lady in Paris was a very simple, one-time transaction. Had we decided instead to give her a license to reproduce the sketch as a postcard, we might well require some professional services to design the transaction because we would be retaining some intellectual property rights and assigning some rights to another person. When exploitation involves dividing the total bundle of rights among several parties, it can become very complex.

3. Creative Works

To most of us, the expression 'creative works' refers to literary works, musical works and artistic works, which are the more traditional forms of copyrighted creativity. However, film and image-capture technology introduced photographs and motion pictures as creative works and, more recently, the use of computers, mobile devices and the digital world of the Internet have introduced additional areas of potentially copyrightable creativity.



Creative works, by their very nature, have different characteristics from other intellectual property normally found in the corporate setting. Creative works typically come into existence through the efforts of an individual or small group of people. An exception to this might be a major motion picture or a 'made for television' production, or advertizing spots or set-ups. Creative works on that scale, however, are also in essence the product of individual creative works such as the original story, the screenplay, a musical score, and the individually developed talents of the actors.

Creative works often do not require large amounts of capital investment and barriers to entry are typically low, especially in the world of the Internet. Since computers came into active use in the 1950s, we have always had 'apps', or application software. In the age of the Internet and mobile devices, however, the nature of application software has changed dramatically and has opened up an entirely new set of opportunities for many individuals and SMEs outside of the multinational corporate world. At the same time, the Internet also offers the extraordinary opportunity for worldwide distribution of a successful app.

Furthermore, the Internet has created an entirely new form of creative work and, at the same time, provided a brand new distribution system for traditional creative works such as writings, artwork, musical works, photographs, and the like.

The growth in electronic media and entertainment over the past few years has been unprecedented, as wireless devices such as smart phones, tablet computers, and game consoles proliferate. It is reported that by early 2012 there were more than 6 billion wireless device subscriptions among the world's population. It is also reported that more than 2 billion individuals are Internet users. Important parts of this growing industry are electronic games, apps and of course the social media. Some selected statistics serve to illustrate the size of this creative marketplace:¹²

- Video Game Industry was US\$63.0 billion worldwide in 2011
- Sales of Video Gaming consoles by end of 2011 were 225.1 million units worldwide
- Apps available for Apple mobile devices in mid-2012 500,000
- Apps available for Android mobile devices in mid-2012 450,000
- Worldwide App store downloads in 2011 was 17.7 billion and the forecast for 2014 is 185 billion
- Worldwide App store revenues in 2011 was US\$15.1 billion and the forecast for 2014 is US\$58 billion

¹² These data were sourced from Plunkett Research, Ltd, citing data from various companies and secondary sources and available in extensive reports or in summary form at www.plunkettresearch.com

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While they are only a part of the creative industries, we can observe the strong growth in the entertainment and media industries as an indicator of the size of this market. Obviously, a very important issue in this gigantic marketplace is the extent to which the ownership of copyright material can be controlled.

- Net Sales Revenue of U.S. Book Publishers 2011 was US\$27.2 billion
- Percentage of e-books 2011 was 15.0%
- Global Digital Music Revenues 2011 was US\$5.2 billion
- Global Film Box-office Revenues 2011 was US\$32.6 billion
- New Computer & Video Game software sales 2011 was 245.6 million units

It becomes clear that there is a very large and growing marketplace for the products of the creative industries. In fact, the growth rate of this marketplace has been spectacular in recent years as the digital age has been extending globally.

A very important characteristic of this recent growth is that it involves individuals and small business entities as well as the multinational companies that we would expect. The opportunity to exploit intellectual property rights has become much more individual and local than ever before.

There has always been an intersection between creativity and money. The famous artists of the Renaissance sought out patrons so that they could employ their talent. Then there was a period during which the creative industries were dominated by large enterprises. The publishing of a book required massive printing facilities and large distribution organizations that were only within the reach of large enterprises. Very much the same situation existed with respect to the music industry. Motion picture productions required large investment, huge physical plants, and a distribution organization. To reach the public of users and consumers, creators and authors depended on intermediaries with a large distribution network – publishers (books, music and video, film distributors, media companies, etc.)

Today, a book can be written on a home computer, self-published and distributed via the Internet. A video clip can be captured with a smart phone and again, distributed via the Internet. So there is a much larger body of people who would benefit by exposure to the law and economic principles associated with the successful exploitation of IPRs.

An illustration of the potential of internet distribution is the K-pop (i.e. Korea Pop-Music chart) single 'Gangnam Style' released in July 2012 as a single and on YouTube by the South Korean musician Psy. On December 21, 2012, 'Gangnam Style'¹³ became the first YouTube video to reach a billion views. As of June 1, 2013, the music



video has been viewed over 1.63 billion times on YouTube, and it is the site's most watched video, having surpassed Justin Bieber's¹⁴ single 'Baby.'¹⁵

With the current development of technology, every day we see new and unexpected opportunities for monetizing copyrights. For example, in the music and audio-visual industry since 2008-2009 we have witnessed a very rapid grow of online music streaming and access services, such as YouTube and Last.fm, but also Spotify, Pandora, etc. (For more details on the new digital music and audio-video distribution see Annex A – The new music streaming business (short presentation)).

1.3 IP Valuation: Why, What, How and When

The objective of anyone (owner or manager) who has the responsibility to manage an asset is to increase the value of that asset (or at least not decrease its value). To do that, a manager must have a clear understanding of the elements that drive value.

As an example, adding a swimming pool to an apartment building property ought to bring higher rents than otherwise. Higher rental income increases the value of the property. The property owner must, however, make a careful analysis of the pool's cost and maintenance expenses relative to the increased rental income in his/her decision-making.

Even though the owner, in this process, might never make an actual calculation of the property's change in value, all of the ingredients of this essential process come from valuation analysis.

In general, the need for intellectual property valuation services arises when additional specific information about intellectual property is required for management purposes. Typically, valuation services are provided by a professional specialized in valuation. The reason for this is that valuation principles and techniques are not generally known and because, in most circumstances, it is useful to have a value opinion produced by an independent entity that has expertise in the subject property (for example real estate, manufacturing plants or units, hardware, intellectual property).

In general, whenever you acquire or sell a property item (real estate, land, manufacturing premises (immovable property) or a car, food, furniture, equipment, hardware (movable property), you need to know its value. Knowing the value of a property is necessary for negotiating the transaction (selling or buying or renting/leasing).

Unlike most tangible property, the value of intellectual property depends much more on the level of its use and the benefits it may generate for its owner.

¹⁴ en.wikipedia.org/wiki/Justin_Bieber

¹⁵ en.wikipedia.org/wiki/Baby_(Justin_Bieber_song)

When we speak about the value of intellectual property assets (including IPRs), we should always remember that IP assets exist by virtue of protection by law – if intangible assets do not qualify to be protected by law, they are considered generally as intangible assets or intellectual capital.

To have value, IP assets must be

- identifiable and distinguishable from the other assets of a business
- able to produce on-going benefits for the business
- protected and not free in the public domain
- transferable from a seller to a buyer.

1. Resource Allocation

All IPRs of whatever type require some 'care and feeding'. In order to benefit from its ownership, like any other property, intellectual property must be identified and used, and its value increases when it is properly maintained, and developed. Good management suggests that the most valuable IPR within a business enterprise ought to receive the most resources. Valuation therefore becomes an effective tool for the allocation of company resources.

2. Cost Saving

The primary purpose of IPR exploitation is to achieve an economic benefit, hence monetization. It must be remembered that economic benefit is a *net amount*. It can be represented by increases in revenue or decreases in cost, or both. Ownership of IPRs does not lead automatically to monetization, neither does it create a right to economic benefits. It is essential to recognize that the ownership of IPR is not without cost. Even though copyright is usually not subject to registration and/or periodic fees (as are other IPRs like patents and trademarks) and usually does not require the same level of legal costs to establish the IPR, some diligence must be exercised in order to assure its protection – (e.g. monitoring of possible infringement) and that requires some human effort at some cost. A valuation will provide useful information about the cost-benefit relationships attaching to IPRs.

3. Transaction Support

The most common need for asset valuations relates to transaction support of various types. In essence, a valuation is a *virtual transaction*. When we make a valuation we are attempting to estimate the price that would result from a negotiated transaction between a willing buyer and willing seller. Whether we are a willing buyer or a willing seller, information gained in a valuation is most helpful as a preparation to an *actual* transaction. A market research will give us some ideas of the existence of potential



willing buyers and possibly also about the price which these willing buyers would be ready to pay.

4. Financing

Increasingly, intellectual property rights are being accepted as collateral for financing. This is especially true when the intellectual property rights are mature and have some 'track record' represented by a positive revenue stream.

Securitization of IPR is also becoming more common. In general, this involves the sale of securities (i.e. bonds) that provide an investment return based upon the future income stream of the underlying intellectual property rights.

5. **Litigation Support**

The traditional calculation of damages is to subtract market value *after* the alleged damaging event from market value *before* the alleged damaging event. The difference is a quantification of the damages suffered. This is one method that has been employed to calculate damages in a copyright infringement situation.

6. **Maximizing Exploitation**

Very often there are multiple exploitation opportunities for intellectual property rights; since they might overlap, a choice must be made between them as to which would be the most beneficial. The valuation principles that will be discussed in subsequent sections of this report can be useful in comparing alternative exploitation strategies.

7. Licensing

Typically, the economic questions that arise in a licensing transaction center around the royalty or other payment to be received for the specific use of the intellectual property rights. While this is not a specific valuation issue, valuation principles are useful in comparing alternative compensation schemes.

8. **Joint Ventures**

Joint venture arrangements often involve the trading of some type of intellectual property rights for a debt or equity position in the joint venture enterprise. A valuation of the subject intellectual property rights would be essential to the parties in such a transaction.

9. Mergers & Acquisitions

Mergers and acquisitions typically center around the market value of the total portfolio of assets that comprise the target enterprise. In our experience the value of individual assets within a portfolio is usually not an issue. However, it is sometimes the case

that particular intellectual property rights may be the real target in an acquisition and in that case their value becomes essential to the transaction.

10. When should we undertake a valuation of IPRs?

The simple and spontaneous reply is as early as possible and feasible. As already mentioned, copyright is, in most cases, an automatic international right that is vested in its author from the very moment a work is fixed in a tangible medium of expression. You do not need to establish the monetary value of your work, until you decide to monetize it. If you have produced a work for your own satisfaction, you are the copyright owner, and if you have no intention to offer it for sale or licensing, you do not need to engage a valuation. For example, if you have painted a landscape or taken some photographs for your private use and satisfaction, you may not need a valuation of the copyright, but for the insurance you may need a valuation of the painting or photographs. However, if you decide to sell or license the copyright to these pieces of art, you will need a valuation as a support for your commercial negotiations.

In some cases, such as the contracts between an author and a publisher, the author is offered advance remuneration for the work she/he will create and the publisher will publish and distribute. However, that remuneration does not represent the value of the work, which will be influenced by many other factors, such as interest / satisfaction of the public (users, consumers, etc.), market size, easy access and price for value, etc. In principle, the value of an intellectual property right increases with its use.

Summary IP Valuation

Valuation

- Valuation is a process of determining the value or worth of an asset
- Valuation often combines objective and subjective considerations
- Valuation is an opinion about the result of a virtual transaction

IP Valuation

IP valuation is dependent on various factors, such as:

- Use of the IP assets
- Market position of the company
- Openness of economy (in the country or region of operation)
- Legal protection of IP
 - Enforcement cost
- Overall economic growth and profile of economy



Use of IP Valuation

- For commercial transactions
- For pricing the product, work or service
- For evaluating potential merger or acquisition candidates
- For identifying and prioritizing assets that drive value
- For strengthening positions in commercial negotiations
- For making informed financial decisions on IP maintenance, commercialization and donation
- For evaluating the commercial prospects for early stage R&D projects
- For evaluating R&D efforts and prioritizing research projects
- For financing or securitisation
- For litigation
- For tax planning

Benefits of IP Valuation

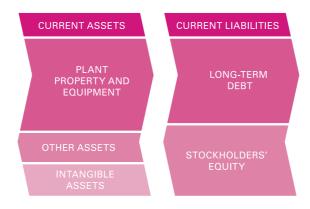
- Better idea of the overall value of the business and the impact of IP assets
- A tool to measure and manage the IP assets
- Security and backing for lenders
- Can result in taxation benefits (taxation deductions)
- Can reduce the proportion of business' net worth attributed to goodwill important when selling a business

1.4 IP Rights in Financial Reporting

We touch on financial reporting because many immediately look to a company's financial statements as a reliable source of the value of the company's assets. It is therefore helpful to observe the assumptions that underlie the preparation of financial statements in order to be able to evaluate the extent to which that information is helpful in identifying or valuing intellectual property rights.

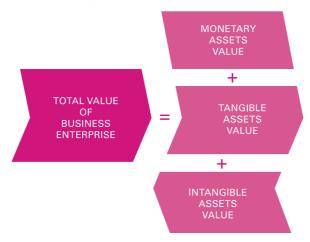
To put this in perspective, we can graphically illustrate the information that is contained on a typical financial balance sheet, divided into its two components – assets and liabilities:

Figure 1: Graphic illustration of balance sheet information



In an alternative view, we also must recognize that every business enterprise consists of a portfolio of assets that includes monetary, tangible, and intangible assets, including intellectual property rights:

Figure 2: The three components of the business enterprise



For many years the intangible asset category was simply called 'goodwill'.

This catch-all concept of goodwill has been with us a long time and was examined at length by the accounting profession in the 1960s in Accounting Research Study No. 10, published by the American Institute of Certified Public Accountants. Goodwill was discussed therein as follows:

The idea of goodwill appears to have existed long before the advent of modern business concepts. P. D. Leake mentions some early references to goodwill, including one in the year 1571 in England, 'I gyve to John Stephen... my whole interest and good will of my Quarrell ...[i.e., quarry].

In the simpler business organizations of [an] earlier period, goodwill was often of a rather personal nature, attaching in large measure to the particular personality, friendliness, and skill of the proprietor or partners of a business...



As the industrial system developed and business increased in complexity, the various advantages which a business possessed and which contributed to its profitability became less personal in nature. The individual advantages which a company enjoyed became more varied, were integrated with all facets and activities of a business, and thus became less distinguishable. Manufacturing processes, financial connections, and technological advantages all assumed increasing importance. Goodwill came to be regarded as everything that might contribute to the advantage which an established business possessed over a business to be started anew.¹⁶

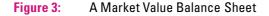
Since this was written, there has been a tremendous increase in the complexity of business enterprises, creating far more intangible assets. Today, the portfolio of intangible assets is the main (and very often the unique) source of profitability and competitive advantage for many business enterprises. Whole industry sectors are built on intangible assets (banking, financial, all kinds of services, entertainment, software) and in particular intellectual property, including copyrights – the IT and software industry, music, film, entertainment, media, etc.¹⁷ In addition, investors, lenders, governmental agencies, and taxing authorities have increasing needs to better understand the nature and value of intangible assets within a business enterprise.

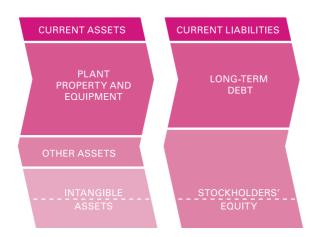
There is also an ever-increasing amount of commerce in intellectual property rights across corporate and national boundaries. So the aggregation of recognizable intangible assets and intellectual property that was once collectively described as *goodwill* has become much more important and the term *goodwill* has outlived its usefulness to a large extent.

As a result of the advancement of technology and global business relations, there has developed a significant discontinuity between business assets and the way they are reported to meet accounting standards and the assets that are recognized by investors and business owners as the total value of their enterprise. We can illustrate this as follows:

¹⁶ Accounting for Goodwill—Accounting Research Study No. 10 (Stamford, CT: American Institute of Certified Public Accountants, Inc., 1968), pp. 8, 10.

¹⁷ For more details of the role of IPRs in the creative industries see the Wipo Studies On The Economic Contribution of the Copyright Industries – www.wipo.int/ip-development/en/creative_industry/pdf/economic_contribution_analysis_2012.pdf





The equity in a business enterprise is viewed by shareholders in terms of its current market value, not its balance sheet recorded cost. Under normal circumstances, the value of that equity is greater than its cost. We submit that the enhanced value of stockholders' equity represents the additional amount that stockholder investors see and build into the price they are willing to pay which, in turn, supports their recognition of the additional value of intangible assets within the enterprise. In essence, we are observing a difference of opinion as to the value of the enterprise observed by shareholders and that recognized on financial statements. This discontinuity has long been with us but the difference has become more apparent as company value becomes more and more dependent upon the successful exploitation of intangible assets which include intellectual property rights.

As this discontinuity was building, the increase in global trade and financing transactions brought to the fore the increasing necessity for some commonality in financial statements. It became more and more important for companies, investors, lenders, and governments to be able to 'speak the same language' with respect to financial statements. This is especially true of businesses that may require access to capital markets which have become increasingly international in scope and are expected to continue in that form. International commerce had become a new Tower of Babel of national accounting rules and financial reporting standards.

In 2001 the International Accounting Standards Committee (IASC) Foundation and the International Accounting Standards Board (IASB) were formed. Their objective was, in part:

'... to develop, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require high quality, transparent and comparable information in financial statements and



other financial reporting to help participants in the world's capital markets and other users make economic decisions...'18

In the intervening years, a body of International Financial Reporting Standards (IFRS) has been developed. These standards are now in use in over 100 countries. Several large countries with long-standing accounting systems, such as the United States, are working to converge their accounting systems with the IFRS, and are close to doing so.

While these IFRS have not completely addressed the discontinuity noted above, they have introduced a number of *valuation requirements* and it is necessary for company managements, many of whom operate SMEs, and who have the responsibility for compliance, to understand these requirements and the tools that have been put in place.

The IFRS are voluminous documents covering all aspects of financial reporting and a complete review is beyond the purview of this report. In addition, many of the more recent changes to IFRS were triggered by the difficulties in evaluating and accounting for complex financial instruments that came to notice in the recent economic recession. We will limit our discussion to those aspects of the IFRS that pertain to intangible assets and more specifically to IPR in the creative industries.

1.5 IFRS for SMEs – IP Reporting and Communication Issues

During the development of the IFRS, the IASB recognized that, as a practical matter, the original body of standards might not be entirely appropriate for small and medium enterprises (SMEs). In 2003 the IASB began research, field-testing, and deliberation on the development of IFRS for SMEs. Since many copyright-based industries are likely to be SMEs, we will expand our discussion and provide some comment on the extent to which these financial reporting standards are different.

In general, there are five areas of difference between the whole body of IFRS and those IFRS specifically relevant for SMEs:

- Some IFRS topics are omitted because they are not relevant.
- Some accounting policy options are not allowed and have been simplified for SMEs.
- Some recognition and measurement principles have been simplified.
- There are substantially fewer disclosures required.
- Simplified redrafting.

For the purposes of IFRS, small and medium-sized entities are those that do not have public accountability (their debt and equity are not traded in a public market) and

18 'IFRS for SMEs'', International Accounting Standards Board, 2009.

publish financial statements for external users such as banks, credit unions, insurance companies, securities dealers, and investment banks.

1. Assets

The IFRS recognize that some assets are intangible but specify that 'An entity shall recognize an asset in the statement of financial position when it is probable that the future economic benefits will flow to the entity and the asset has a cost or value that can be measured reliably'.¹⁹

2. Fair Value

Fair value is defined as 'the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arms-length transaction'.²⁰ This definition will be discussed in some detail in a subsequent section of this study.

3. Intangible Assets Other than Goodwill

This Section of IFRS for SMEs concerns intangible assets, and describes them as follows:

- 18.1 This section applies to accounting for all *intangible assets* other than goodwill (see Section 19 *Business Combinations and Goodwill*) and intangible assets held by an entity for sale in the ordinary course of business (see Section 13 *Inventories* and Section 23 *Revenue*).
- 18.2 An intangible asset is an identifiable non-monetary asset without physical substance. Such an asset is identifiable when:
- a) it is separable, i.e. capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, asset or liability, or
- b) it arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.
- 18.3 Intangible assets do not include:
- a) financial assets, or
- b) mineral rights and mineral reserves, such as oil, natural gas and similar non-regenerative resources.



This section further describes the principles governing when intangible assets can be recognized in financial statements:

18.4 An entity shall apply the recognition criteria in paragraph 2.27 in determining whether to recognize an intangible asset. Therefore, the entity shall recognize an intangible asset as an asset if, and only if:

- a) it is *probable* that the expected future economic benefits that are attributable to the asset will flow to the entity;
- b) the cost or value of the asset can be measured reliably; and
- c) the asset does not result from expenditure incurred internally on an intangible item. [emphasis added]

18.5 An entity shall assess the probability of expected future economic benefits using reasonable and supportable assumptions that represent management's best estimate of the economic conditions that will exist over the *useful life* of the asset.

18.6 An entity uses judgment to assess the degree of certainty attached to the flow of future economic benefits that are attributable to the use of the asset on the basis of the evidence available at the time of initial recognition, giving greater weight to external evidence.

18.7 The probability recognition criterion in paragraph 18.4(a) is always considered satisfied for intangible assets that are separately acquired.

The critical elements in this first part of Section 18 provided a good deal of flexibility to SME managements in the recognition of identifiable intangible assets. That is, it seems to us that there is a bit more freedom to simply classify intangibles in the Goodwill category.

4. **Business Combinations**

When business acquisitions take place, there is an appraisal requirement that was not in place in most jurisdictions:

18.8 An intangible asset acquired in a *business combination* is normally recognized as an asset because its *fair value* can be measured with sufficient reliability. However, an intangible asset acquired in a business combination is not recognized when it arises from legal or other contractual rights and its fair value cannot be measured reliably because the asset either

- a) is not separable from goodwill, or
- b) is separable from goodwill but there is no history or evidence of exchange transactions for the same or similar assets, and otherwise estimating fair value would be dependent on immeasurable variables.

This section, 18.8, is very similar to the main body of IFRS as it applies to the acquisition of a business enterprise. Following the acquisition (or 'business combination'), the total purchase consideration must be allocated to the monetary, tangible, and intangible assets acquired. That allocation is based upon the fair value of those assets. The management's first task is to identify the assets acquired and then to value them and allocate the purchase price to those assets based on their relative fair value.

5. **Impairment**

IFRS for SMEs instructs us that if the carrying amount (the amount shown on the balance sheet) exceeds an asset's recoverable amount (the amount that would be received by disposing of the asset), the amount of the loss must be reflected in financial statements. Recoverable amount is defined as the higher of an asset's fair value less the costs to sell it or its value in use. The IFRS provides guidance about the calculation of the value in use and this will be a subject subsequently covered in this study. This evaluation is to be done at each reporting date (for most this would be annually) and would consider facts such as whether an asset's market value has declined significantly more than would be expected from the passage of time; whether there have been significant adverse changes in the business unit using the asset; whether or not market interest rates or market rates of return have significantly changed; or whether business plans call for a change in the usage of the asset in the future.

Consideration should also be given to factors of obsolescence or physical damage of an asset, adverse changes on the entity such as plans to discontinue or restructure the operation to which an asset belongs, plans to dispose of an asset before the expected date, and evidence indicating that the economic performance of an asset will be degraded in the future.

IFRS for SMEs recognizes that goodwill by itself does not generate cash flows independent of that of other assets and cannot be sold by itself. Therefore the impairment measurements defined above do not apply to goodwill and rather it is to be measured by the fair value of the operating unit of which it is part.

6. Closing the Gap

In Fig. 3 (on page page 24), we noted the difference between dollar amount of the assets as shown on a balance sheet and the aggregate market value of assets perceived by shareholder investors. This difference arises because investors know that a company's earnings are a product of <u>all</u> of the company's assets, even those that are not shown on the balance sheet, such as the workforce, customer and supplier relationships, IT systems, management skills, and intellectual property rights. These are assets that the company has developed internally, and the IFRS prohibits including them on the balance sheet (see IFRS for SMEs, section 18.4 above).



This disparity has been a long-standing issue. There are those, often in the academic or regulatory world, that advocate including self-created intangible assets in financial statements. They argue that this would provide better information and transparency to shareholders, investors and lenders.

The accounting profession has resisted this notion because of the difficulty of relating cost to market value and because market value is continually changing due to a myriad of external factors²¹. In general, corporate managements have resisted the idea because of the difficulty of the issue and also because identifying and valuing self-created intangibles could reveal proprietary accomplishments, failures and strategies and, in addition, increase litigation exposure.

Traditionally, lenders have ignored the issue because they have not been in the habit of lending to develop intangible assets or recognizing intangibles as collateral. Securities markets have not been particularly interested because stock investment decisions are based on earnings models, not the value of underlying assets.

So for the moment, financial statements show intangible assets that are acquired as a part of a business combination ('M&A') but <u>NOT</u> self-created intangibles.

Summary

With this brief overview of the IFRS for SMEs, we are highlighting the additional requirements that company managements will have to comply with. For the first time, SMEs will be required to perform evaluations of intangible assets, or to seek outside assistance to do so. Business acquisitions are very likely to rebound as economic conditions improve. In the end, the preparation of financial statements is the responsibility of company management. Accounting firms perform an audit of those financial statements and their preparation, and can provide assistance in accounting and valuation matters, but at the end of the day this is a management responsibility and will require some new skills.

1.6 Legal Issues and IP Valuation Practice

At present we are not aware of any substantive legal issues that impair the opportunity to perform IP valuations. There are of course the usual exposures to censure from unethical or incompetent behavior and the possibility of civil lawsuit. There are some jurisdictions that may require some form of professional license to value property. Usually these concern the valuation of real property, especially when it is in support of collateral value for financing. Again, these are focused on competency and ethical conduct.

Perhaps something for this section will be exposed in further research.

²¹ We note that in the <u>full</u> IFRS, some (but by no means all) self-developed intangible assets may be reflected on the balance sheet at their fair value (see IAS 38 – Intangible Assets). This "revaluation model" is not an option under IFRS for SMEs.

2. INTELLECTUAL PROPERTY AUDIT

2.1 IP Audit: Why and When

The IP audit is a way for a company or IP rights holder to assess the nature and value of its intellectual property assets. An IP audit is a precondition for the efficient management of IP assets. The results of the IP audit will permit a clear understanding of such assets, including the elements that drive value.

Such assessments may be critical and more commonplace in certain industries, such as IT and pharmaceuticals. However, in the wake of the current economic problems, the potential value in conducting an IP audit may have become clearer for many other industries as well, including the creative industries.

For a manager or holder of IPRs it makes sense to identify and understand those assets that allow a company to create economic value for customers and owners. Today, an increasing number of value-enabling assets are intangible capital. Today it is generally accepted that the majority of public company market value does not identify intellectual capital on the company's balance sheet. Most value attributed to intangibles assets – often comprising intellectual property as well – does not appear on the balance sheet at all. Therefore, companies that rely on IPRs to create economic value should catalog and understand these intangible assets so that they can be better managed and their value can be optimized.

An IP audit is often a good starting point in this process. However, an IP audit is one component of a more comprehensive IP management approach that may also include other elements, such as IP Valuation, IP Strategy and IP Policy. In section 1.3 above we listed a number of reasons and objectives for undertaking an IP Valuation, which are also important objectives for the IP Audit, such as resource allocation and financing, cost saving, transaction support, securitization of IPRs, litigation support, disclose new exploitation and monetization opportunities.

1. When should we undertake an IP audit?

The IP audit should be undertaken regularly in the process of project design and development. The IP Audit will reveal existing (and overlooked) and new IP rights and intangible assets and will enable the IP owner and manager to take informed decisions concerning the use, exploitation and monetization of these assets. As already mentioned, copyright is an automatic right that is vested in its author from the very moment of the creation of the work. And from the same moment copyrights are valid in all countries that are signatories to the Berne Convention.²² You cannot manage or monetize your work until you have identified it and decided whether or

²² Today 166 countries are members of the Berne Convention for the Protection of Literary and Artistic Works



not it is an IPR (and must be handled as such) or simply intellectual capital such as knowledge and information.

The overall importance of intellectual property assets to the business will have a bearing on the nature and timing of the audit. Where such assets are relatively unimportant to the nature of the business as a whole, it might be sufficient merely to confirm the existence of IP rights that are held in the name of the company. As products and services change, IP such as patents, trade secrets or trademarks can fall into disuse, and the sale of such assets is often impractical. Such IPR is 'kept on the books' through its statutory life even though it may not be a contributor to profits. The listing of all IPRs, whether important to the business or not, is necessary and important for the proper management and monetization of the IP assets, in particular in view of the possibilities for selling or licensing the non-core IPRs to other users.

Alternatively, where the company's principal business is heavily dependent on intellectual property, it may be necessary to conduct a more thorough assessment of the company's IP portfolio and IP-based activities. Companies that rely strongly on IP assets (such as start-up or spin-off companies) should undertake an IP Audit as early as possible, which could mean during the first year following the start of their business activities.

IP audits may be either externally or internally driven.

2. General purpose IP audits – internally driven IP audits

General purpose IP audits are internally driven IP audits, and are part of an ongoing IP asset management programme and initiated as a pro-active business practice by the holder of the IP. There are a number of situations in which one might embark on a general purpose IP audit:

- Before establishing a new company a start-up company needs to be aware
 of intangible assets it owns and needs to manage and protect
- When an established business is considering implementing new policies, standards, or procedures relating to intellectual property
- When a business is considering implementing a new marketing approach or direction, or is planning a major reorganization of the company
- When a new person becomes responsible for IP management

The general-purpose IP audit is frequently undertaken to provide a baseline measurement or a snapshot in time so that records can be verified or progress can be measured over time.

Internally driven IP audits or general purpose IP audits can be used to identify:

- New monetization opportunities related to proprietary products, works and licensing opportunities;
- New sources of inputs, capital and funding;
- Strategic positioning/repositioning opportunities;
- Business risks and opportunities related to existing and potential IP rights
 and assets such as copyrights, production rights, audio-visual productions,
 inventions, logos, trademarks, designs, etc. that could be protected and used,
 or securing certain IP rights from employees;
- Business process changes in R&D, product and project development, design, engineering, etc.
- Financial reporting disclosure items related to IP.

An audit may also be performed in the early stages of formation of a technology company to institute systematic procedures for protecting and perfecting intellectual property rights, particularly for core technologies.

An audit may also be performed in the early stages of formation of a creative company (e.g. advertising or publicity, design (interior and industrial)), to institute systematic procedures for protecting and perfecting intellectual property rights, particularly when preparing and implementing business proposals for clients.

An audit may also be used at critical junctures in a company's life cycle to ensure the continuing adequacy of such procedures and to detect defects therein.

An intellectual property audit is also appropriate in conjunction with development of a major new product, particularly if such product carries with it a demonstrable risk of infringement of the IP rights of others. For example, the development of a 'compatible' product often results in additional exposure to infringement claims.

An audit may be necessary to institute, or to review the adequacy of, 'freedom to operate' procedures used in the development of such a product to reduce the risk of infringement of third-party rights.

3. Event-Driven IP Audit

Externally driven IP audits are event driven and performed in response to certain situations, such as infringement litigation, enforcements of IPRs, bankruptcies, funding transactions, or transactions involving the sale of the business or certain assets. In such cases, these IP audits are reactive and performed under pressure and time constraints.



In some cases, such as mergers, acquisitions, divestitures, investments, corporate restructuring, and others, a particular event can trigger the need to perform an IP audit.

An intellectual property audit may be appropriate in response to a number of events or situations. As an example, an audit is appropriate before a significant acquisition of a technology or product or service development. An event-driven IP audit is often called IP due diligence when done to assess the value and risk of a target company's intellectual property assets. It can provide detailed information that may affect the price or other key elements of a proposed transaction.

In fact, IP audits have been known to uncover details that have caused merger and acquisition transactions to be aborted. As an example, the 'due diligence' effort may uncover infringement or validity issues with the target's IPRs, or renewal/maintenance fees that have not been paid. Or it may be simply that the overall economic strength of the target's IPR portfolio may have been overestimated.²³ These facts can reduce the worth of the target company and cause the intended transaction to disintegrate.

An audit is equally appropriate before entering into most financial transactions involving intellectual property, such as licensing, joint-venture, bankruptcy, IP disputes, and outsourcing.

4. Limited-Purpose Focused Audits

An intellectual property audit of limited scope may be initiated for a number of reasons, such as a change in the laws and regulations governing those assets, or perhaps in response to employee turnover.

Change of legislation – A change or development in the relevant IP legislation may require an IP audit to determine the extent of the effect on the rights provided to the portfolio as well as on the potential infringement rights of others. When/if or in anticipation of these laws going into effect, a company should conduct an intellectual property audit to determine the effect of these new rules on its overall business and IP strategy.

Employee turnover – In the case of company layoffs that will impact personnel in research and development, creative or marketing activities, the company will want to know the intellectual property rights these employees have contributed, what they have had access to, and whether their employment contracts are up to date (especially if they are disgruntled employees).

2.2 Forms of Value

1. **Introduction**

Valuation principles form a body of knowledge that was originally developed in connection with the appraisal of real (tangible) property (land and structures). These principles have been refined over the years and are appropriate for many different types of property, including IPRs such as copyrights, patents, trademarks, designs, etc.

In the most general sense, an appraisal is an opinion about the worth, significance or status of something. Herein the terms 'appraisal' and 'valuation' are used interchangeably to mean an opinion of the monetary value of property.

An alternative way of defining a valuation is that it describes an assumed (or 'virtual') transaction. That is, it is an estimate of the consideration (the agreed-upon price) that would be agreed upon in a transaction that has not taken place (and may never take place). Therefore, a valuation must describe the property rights presumed to be the focus of the transaction, the parties involved and the terms assumed in order to make clear the meaning of the consideration estimated. Stated another way, we must completely describe the virtual transaction in order to understand its result. We also know that a value estimate is only valid as of a specific moment in time or, at best, for a rather short period of time.

In this transaction, the seller wants to get the highest possible price and the buyer wants to pay the lowest possible price. But beyond that, we recognize that both buyer and seller may be motivated by a myriad of additional factors. Is either buyer or seller compelled to enter into the transaction? Are there time pressures? Are there other unusual motivations to buy or sell?

It is very important to understand that the only way we would ever know the 'true' price in a transaction would be if the transaction actually took place. Valuations are made because we need that information for one purpose or another, even though an actual transaction has not taken place and may not even be contemplated. Therefore, the price in our virtual transaction is the result of an estimate or an opinion on the part of the valuer.

Because the term 'value' is used so commonly, it is important to examine its various meanings so that we can be specific when we refer to value in an appraisal. This discussion forms a foundation for more detailed analyses in subsequent sections of this study.



2. Premise of Value

Many have expressed their opinion about the meaning of 'value':

- Value as 'expressible in terms of a single lump sum of money considered as
 payable or expended at a particular point in time in exchange for property, that
 is, the right to receive future benefits beginning at that particular time point.'24
- 'A word (value) is not a crystal, transparent and unchanged; it is the skin of a living thought, and may vary greatly in color and content according to the circumstances and the time in which it is used.'25
- Oscar Wilde described a cynic as 'a man who knows the price of everything and the value of nothing.'²⁶

Value is the representation of all future benefits of ownership, compressed into a single payment. If property rights are exchanged in an arm's length transaction between informed and knowledgeable parties, the agreed upon price is both the market value at that moment and, to the buyer, the 'cost'. Both buyer and seller have considered the future economic benefits of owning the property rights and have come to an agreement about their present value. As time passes, however, the price (of that transaction) never changes, and the cost to the buyer also remains the same. The market value of the rights, however, is subject to continual change as the future benefits increase or decrease with the passage of time. As a result, an opinion of value can be expressed only relative to a given moment in time or 'as of' a specific date.

In addition, the future benefits of ownership cannot be quantified without defining whose ownership is assumed and/or the underlying purpose of the valuation. One cannot, for example, respond with a meaningful answer to the question 'What is your car worth?' because additional information is necessary. Value does not exist in the abstract or in isolation and must be addressed within the context of time, place, potential owners, and potential uses. We need to know, as an example, if we are valuing our car for insurance purposes, for sale to a car dealer, for a tax assessor, or for sale to a dealer in scrap metal. Sometimes identifying the recipient of the appraisal will itself define the value premise, since by custom the requirements of certain users have been defined.

The same situation is applicable to intellectual property rights, such as copyright, trademarks, patents, designs, etc. We briefly explored in a previous section the

²⁴ Henry A. Babcock, *Appraisal Principles and Procedures* (Washington DC: American Society of Appraisers, 1989), Chapter 6, p. 95.

²⁵ Ibid., The Appraisal of Real Estate (1978), p.21, quoting Oliver Wendell Holmes, U.S. Supreme Court.

²⁶ Oscar Wilde, Lady Windemere's Fan, Act III.

questions that we might ask ourselves in trying to determine the best strategy for monetization.

The more that a property is designed, or suited for a special purpose, the more difference there will be in value measured by different premises. This is especially true of intangible assets (including intellectual property rights) that have a very special purpose and that often have their highest value only within that usage.

We will now introduce several definitions of value as well as several types of cost and will indicate for each its most common usage in the valuation process. Examples of valuation concepts applied to physical property are also presented in order to better illustrate the underlying theories.

3. Market Value

When thinking about 'value', most of us have in mind the market value, which is why our description of a virtual transaction makes sense. There are two recognized definitions of market value. The first definition is based on the concept of an exchange of property and it defines the conditions of that exchange; these conditions recognize five basic aspects:

- Market value is the amount at which a property would exchange... (two
 persons are coming together for the purpose of exchanging property for
 money, since an appraisal is made in terms of money)
- ... between a willing buyer and a willing seller... (the two parties both wish to accomplish the exchange)
- ... neither being under compulsion... (neither of the parties is being forced, by the other or by circumstances, to make the transaction)
- ... each having full knowledge of all relevant facts... (both parties understand the property that is to be exchanged, the condition of the property, its history and its possible use and any liabilities against it)
- ... and with equity to both... (the exchange will be the result of open negotiation and neither party will gain undue advantage in the terms of sale).

This is the traditional definition of market value that may be called 'fair market value', 'true value', or perhaps 'exchange value' in appraisal literature, the law, and in court cases.

A second definition of market value is quite important and is based on economic criteria instead of a description of the exchange transaction. This definition instructs us that market value *is equal to the present value of the future economic benefits of ownership*. We will discuss at length in a later section the financial concept of



'present value'. But we have already discussed the concept of copyright exploitation and the meaning of the future economic benefit that results from such exploitation. In simplistic terms, the greater is the possibility of future economic benefit from exploitation, the greater is the amount that someone would be willing to pay in order to acquire that opportunity (so present value is high). If the future economic benefit is perceived by buyers to be minimal or very likely not to materialize, the amount that they would be willing to pay to acquire exploitation rights will be small (so present value is low). In a subsequent section we will describe the tools available to quantify this difference.

4. Fair Value

The concept of fair value was introduced in the previous section 1.5. It is an accounting concept and is defined as 'the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date'.²⁷

This sounds quite similar to the definition of market value above. The concept of fair value undoubtedly had its origin in traditional market value, but it is helpful to recognize that the accounting concept of fair value came to the fore during the economic crisis of 2008-2013. At that time, many financial institutions carried investments and securities on their books that were highly complex and for which there came to be a very small market or, in some cases, no market at all. It therefore became necessary to modify what we had come to know as market value in order to clarify the basis for meaningful values for these assets in a troubled marketplace.

So there are some significant differences. First, the wording of this definition suggests that the value being sought represents an 'exit price'. That is, it tends to focus on the seller in the transaction and implies that the seller has some motivation to view the asset value with a liquidation flavor. Second, we are not free to consider any possible buyer or seller, but we are rather directed to limit the market transaction to 'market participants'. Market participants are taken to be buyers and sellers in the principal or most advantageous market. They are also defined as being independent, knowledgeable about the asset, and able and willing to enter into the transaction. These last characteristics are essentially the same as in the traditional market value definition.

5. Liquidation Value

Liquidation value is a permutation of market value in which the 'compulsion' element has been changed. It implies that there is some form of compulsion (or obligation) on the part of the owner (seller) because the property is no longer useful in its present role or it is incapable of earning an adequate return as an investment. It is a situation

in which the seller wishes to convert the property into money either immediately or within a relatively short period of time. In many cases, the buyer in such a transaction intends to convert the property into another use and will incur costs in doing so. Typically, market value under a liquidation premise is lower than otherwise.

6. **Book Value**

So-called book value refers to the amount carried on a company's balance sheet that represents some type of asset. For a tangible asset, that amount is represented by the original cost of the asset when it was purchased, less some amount of accrued depreciation that is intended to reflect the asset's declining value. The calculation of depreciation tends to be arbitrary and so book value is rarely an accurate representation of market value.

As we previously noted, intangible assets and intellectual property such as copyrights are not reflected on the balance sheet if they are internally-created. If a company has purchased copyrights from a third-party, the amounts paid would be shown on the buyer's balance sheet. Presumably, at the time of the purchase, those amounts represented market value. But, as with tangible assets, and arbitrary amortization amount is also shown, in an attempt to depict a decline in value over time. Again, this tends to be an arbitrary calculation, and in addition we know that intellectual property such as a copyright or trademarks / brands may even increase in value over time.

We must therefore conclude that book values of any sort are rarely a reliable indicator of market value.

7. Cost of Reproduction

Cost of reproduction refers to the cost that would be incurred to construct a replica of the subject property. As an example, the cost of reproduction of a software system would be based on the current expenses to reproduce it including all of the modifications, patches, and perhaps unused portions of code, that are contained in the original, including whatever command language was used to create it. It would be much more complicated, if not impossible, to establish the cost of reproducing of a piece of music (composition) or a novel or a film script.

Thinking back to our example of the sketch of the Eiffel Tower, the cost of reproduction might include some portion of the travel and living expenses required to get us to Paris (only a portion, since we probably made other sketches of the city as well), together with some hourly compensation for our drawing time, as well as the cost of paper, pencils, and so forth. We will discuss in a subsequent section whether this amount would have been appropriate as a guide for pricing our work.



8. Cost of Replacement

Cost of replacement is a cost that would be incurred to obtain a property with the equivalent utility of our subject. In the case of a software system, it would be the cost of software written in the newest, most efficient command language for current hardware. It would be able to accomplish its required tasks just the same as the old system, but it might do so in quite a different, more efficient, manner. That is, we would not be creating a replica software system, but rather a new system which would accomplish the same tasks using the most recent technology. In the case of music or novels or design, calculating the replacement cost may be easier than estimating reproduction cost, since it would mean the creation of a new work with the same utility and appearance (design) or tonality and rhythm (music) or similar characters and scenario (novel, film script).

9. Summary

There are many other representations of 'value', and many have a valid purpose in some specific need. In this study we will focus upon market value and we will further concentrate on market value as defined by the present value of the future economic benefits of ownership.

2.3 Role of the IP Audit

'If you don't know it, if you don't measure it, you can't manage it.'28

A stock audit or stock inventory is an important business management tool used to capture information so that decisions can be made about stock that needs to be produced or ordered, stock for which demand is less than expected and stock that may be out of date or defective. Such information is essential for taking informed and considered business decisions in the best interests of a business seeking to efficiently manage its assets.

An IP audit or IP inventory is no different – an IP audit will capture and analyze information about IPRs and intangible assets owned and or used by the company, so informed and considered decisions can be made.

Intellectual property must be managed. You cannot manage what you cannot measure. Therefore, you need to measure your intellectual property so you can, in turn, manage it.

The IP audit is the first step. The IP audit enables a company or owner to identify its IP assets and understand how they relate to the business of the company. The IP audit enables management to make decisions with respect to those assets. It helps the company understand whether rights have been or should be acquired for various

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assets, or whether they are or should be maintained. Similarly, the IP audit helps companies understand how their assets may best be exploited for the benefit of the company. Finally, the IP audit will also identify IP rights not used by the company in its current or future business activities (non-core and non-essential IP rights), and which could be sold or licensed to third parties, who could apply and use them in a practical and profitable manner.

An IP audit or inventory can be defined as a systematic review of the IP assets owned, used²⁹ or acquired by a business³⁰. The principal objective of the IP audit is to identify the IP rights and assets of a company and how important they are to the company. The economic benefit of the IPR assets cannot be realized unless a business has uncontested ownership or valid licenses for the IPR it uses.

Furthermore, an IP audit will enable a company to identify core and non-core assets and IPRs, including under-utilized IP assets, to identify any threats to the company's bottom line, and will place managers in a position to set-up informed strategies that will maintain and improve the company's market position.

An IP audit will show how the business IP assets are being used or not used, whether the IP assets used are owned by the business or by others, whether these IP assets are infringing the rights of third parties or whether others are infringing on those rights, and will determine, in the light of all this information, what actions are required to be taken with respect to each IP asset, or portfolio of such assets to serve the relevant business goals of the company.

If you are conducting an IP audit for the first time, you may be surprised at how many IP assets your company has and how valuable they are to your business. Furthermore, an IP audit may uncover potential risks to your business related to ignorance about ownership of IPRs or their mismanagement that could ultimately result in costly legal proceedings with employees or third parties.

The IP audit is undertaken in several steps, as described below.

The first step comprises an investigation to identify the IPRs owned, developed, acquired and used by the company. Such IPR assets will include any copyrights on creative works (music, books, publications, computer animations or video games, audio/video recordings, etc.), trademarks, designs and/or patents for inventions, processes, devices or other technologies, proprietary know-how and trade secrets, including, but not limited to formulas (recipes), any licenses to third parties and any licenses from third parties, any publication and distribution agreements, business information, including advertising, promotional materials, customer lists, prospect lists, pricing information, sales figures, financial projections and other materials, etc.

- 29 For example licensed-in or in the framework of cross-licensing agreements.
- **30** See www.wipo.int/sme/en/documents/ip_audit_fulltext.html an article by Ian Cockburn, Australian and New Zealand Patent Attorney, Pipers Patent Attorney, Wellington, New Zealand



Also included in this category are things such as inhouse work manuals, databases, franchise agreements, publications, product/process know-how, intellectual capital (useful knowledge to the company or business).

Once the IPRs are identified, **the second step** is to scrutinize them to determine who owns them – do you own them, or do you have adequate rights over them, or do you have proper and clear licensing arrangements, whether they are still valid and enforceable and whether they are being effectively used? Furthermore, it will be clarified whether adequate steps have been taken to protect the IPR in relation to company staff and contractors and whether there are any restrictions affecting your ability to freely use the IPR, such as joint ownership, or time-restricted licenses.

To illustrate the importance of establishing ownership in IP rights, here are two brief examples:

The actress Marilyn Monroe was, of course, extensively photographed during her career. She came to prefer the work of two photographers and, as a result, they amassed a large collection of photographs of her. These photographers are now deceased and their estates wished to exploit the many images which are protected by the photographers' original copyrights.

This situation was complicated because, following her passing, Ms. Monroe's estate contracted with a large agency to exploit her name and likeness. A dispute ensued, centering around which party had the rights to sell and/ or license photographs of Marilyn Monroe. It was a complicated legal situation that was eventually settled, but it clearly exposes the need to clarify ownership rights, especially in the world of copyright.

In another case, a small Florida software developer struggled for several years without producing an 'app' that found favor in the marketplace. When success finally appeared and their current app began to sell, a former employee filed a request for royalties because, he argued, he had contributed materially to the creation of the new, successful app. Again, settlement ensued, but it was a business distraction caused by inattention in clarifying the ownership of the work product of employees or free-lancers.

The individual components are also given an importance rating – whether they are important or not to the core business of the company, whether they could be of interest to others, the remaining validity of the IPRs, etc.

The third step is to itemize what might be termed external or market influences. These will include the company brand, product brands, goodwill, product certification, export certifications, regulatory approvals, distribution and supply networks, client lists, and marketing and advertising programs, etc.

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In other words, one should clarify the IP interaction with other intangible assets, e.g. is the brand driving sales or is it the customer relationships, distributor network? Does a patented feature make any difference to the end-user in the marketplace? Is it the brand or some certification or supply contract that is driving success? Is it the trade secret or the skill of the assembled workforce?

Then in **the fourth step** the IP audit will address the issue of enforceability by examining the pertinent legal provisions and economics, possible administrative action and legal steps – civil and criminal procedures. All these need to be performed in respect of specific territories.

2.4 Cautions about Undertaking an IP Audit

What is the danger of not knowing and understanding one's intellectual capital and IP holdings/assets?

IPR value is, first and foremost, contextual. The value of IPRs in the hands of one enterprise may be different than the value of the same IPRs in the hands of another company. Knowing one's IP assets and access to the various means of exploiting IP assets is an important factor.

Not knowing the IP assets and the related rights may lead to false conclusions and erroneous decisions concerning IPRs, which will always be detrimental to the business.

For example, investing in the marketing of a product based on an original and attractive logo or trademark which are not registered/protected will make it very difficult to undertake actions against any copycats or free-riders who use them and the goodwill that you have invested to create.

Usually authors, individuals, song-writers, etc. know what they have created; however, small creative companies – designers, advertizing companies, music producers, event organizers, tend to pay little attention to having an up-to-date record of their original creations (many protected automatically under copyright law) and/ or the rights of third parties they are using. This inattention can result in others using their works without permission or paying for using that right. If the third party adopts these neglected rights as its own, the original creator could even be attacked as an infringer.

The IP audit is a management tool – it will provide absolute information on what we own or what we have as specific rights (e.g. to use, to reproduce, to sell, to license, etc.). It will also provide information on the relevance of the various rights to the business, projects, agreements, etc. However, the IP audit and valuation will not give absolute numbers of the value of the IP assets. The IP audit and valuation is a snapshot at a specific moment in time and needs to be updated periodically.



One possible source of error is to overlook the difference between the IP audit, which should be comprehensive, i.e. it should cover all IP rights and other intangible property (such as contractual relationships, customer/client relationships, knowledgeable and skilled workforce, systems and procedures and the like) and the valuation results, which will depend on the objective of the valuation. The numerical value may be quite different if the valuation has been done for a merger and acquisition, a balance sheet or as support for a financing/funding negotiation.

Consider a song by a song writer or a video-clip created and produced by a team of musicians, artists, a director. The song writer or the video-clip producing team may hold the rights to an important piece of IPR but they lack the means of producing and marketing an audio/video product (recording, CD/DVD, performance, concert, etc.) that embodies that copyright and fully exploits its economic value.

Since the song writer or the video-clip producers are not in the business of organizing concerts or producing and distributing CD/VDVs or organizing public performances, they choose to license their rights. Thus, the valuation issue faced by a song-writer or video clip producer relates more to up-front, milestone, and royalty payments for the use of the IP by others.

They are only a part of the value chain, although as creators they are a very important part of the value chain. However, the generation of income or monetization of the relevant IPRs will depend very much on the cooperation/collaboration of the different actors in the value chain.

A similar situation is that of a university or research laboratory that has developed a medical drug or fertilizer. The university may hold the rights to an important piece of IP but lacks the means of producing and marketing a pharmaceutical product or fertilizer that embodies that patent and fully exploits its economic value.

In any case, a copyright or IPR holder, be it an author (e.g. song-writer), or publisher, producer or event organizer, faces a broader decision as to whether they should

- make and market the product themselves,
- out-license the copyright to another company that might be better-suited to optimizing the monetization of the protected creative content, or
- use the copyright in a more defensive manner. In this case, the copyright holder might consider a valuation analysis as a basis for making this determination.

The situation is more complex for software products. A software developer/designer may assign all his/her rights related to a specific software by selling it to a client or the company having commissioned the software, or may license certain rights to one or more clients. Usually the rights in customer designed products would go

to the company having commissioned the software development. However, the software developer/designer may retain the source code and use it for other software applications.

In the case of software, the author (developer/designer) should always aim to have enough and clear 'freedom to operate' provisions. An IPR audit in a software development company should reveal the 'core' (important) IPRs (e.g. source code, specific design element, database structures, etc.) to support management decisions in respect of licensing, selling or development project under customer specification.

The same would apply to creators (authors, song-writers, script-writers, performing artists) who would treat their creative works as input to future business development and try, to the extent possible, to retain the maximal 'freedom to operate' in respect of their own creations.

2.5 Review of Principal Valuation Methods

An appraisal is an opinion about the attributes of something. An appraisal can address the attractiveness, style, quality, size, weight, or color of an object. Herein the terms 'appraisal' and 'valuation' are used interchangeably to mean an opinion of the monetary value of property. An alternative way of defining a valuation is that it describes an assumed (or 'virtual') transaction. That is, it is an estimate of the consideration (the agreed-upon price) in a transaction that has not taken place. Therefore, a valuation must describe the property rights presumed to be the focus of the transaction and the terms assumed in order to make clear the meaning of the consideration estimated. Stated another way, we must completely describe the virtual transaction in order to understand its result.

However we might choose to describe a valuation, its objective is to estimate the monetary value of property. Even though we might describe a valuation as an 'estimate' or as an 'opinion', we are not free to simply guess at the value and freely follow our feelings as to what the value should be. There are some very specific methods for accomplishing a valuation. They have evolved over many years and they are based on accepted financial and accounting principles. Any competent appraisal should follow these guidelines. There are, in essence, three primary methods for the valuation of any type of property. They are the **Cost Method**, **Market Method** and **Income Method**. Readers may recall having seen lists of multiple valuation methods in the literature. However, once one understands the three basic principles, it will become obvious that the other appraisal 'methods' are but permutations of these basic three and, in many instances, other 'methods' are really mere techniques for obtaining the necessary inputs to execute the cost, market, or income methods.

In the remainder of this section, we will present each of these three primary methods and we will focus on using them to estimate market value, while maintaining our



emphasis that market value is best described as 'the present value of the future economic benefits of ownership'.

1. Cost Method

The cost method measures the future economic benefits of ownership by quantifying the amount of money that would be required to replace the future service capability of the subject property. This was defined above as cost of replacement.

The assumption underlying this is that the price of a new asset is commensurate with the present value of the economic benefit that the property can be expected to provide during its remaining life. The marketplace continually tests the assumption. If, for example, the price of a new machine were set at a level far above the present value of the future economic benefits of owning the machine, then none would be sold. If the opposite were true, then demand would outstrip supply, and presumably the price would rise. The price of a new machine, absent some market aberration, is therefore equal to its market value.

The following diagram illustrates the work flow in the Cost Method:

Figure 4: Schematic of the Cost Method

	Reproduction Cost New or Replacement Cost New
Less: Less:	Physical Depreciation Functional Obsolescence Physical Depreciation
Equals:	Replacement Cost Less Depreciation
Less:	Economic Obsolescence
Equals:	INDICATION OF MARKET VALUE BY THE COST METHOD

Using the cost method, one can begin with *reproduction cost new* or one can begin with *replacement cost new*. These terms were defined previously. There are two paths from these starting-point cost estimates to the final conclusion of market value by this method. We remind the reader that reproduction cost new represents the cost to create a replica, while replacement cost new is the cost incurred to obtain an asset with equal utility.

One is rarely called upon to render an opinion of value on brand-new new property, and therefore the use of the cost approach nearly always requires one to quantify

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the reduction from (new) value. That is done by considering the asset's physical deterioration, functional obsolescence, and economic obsolescence. The proper reflection of all three is essential to estimating market value by the cost approach.

Physical Deterioration

This form of appraisal depreciation is fairly self-explanatory. It is not, however, applicable to intangible assets or intellectual property and so we will not discuss it at length. A copyright, patent or trademark does not 'wear out' in the physical sense.

Functional Obsolescence

The analysis of functional obsolescence is based upon the answer to the question: 'Does this asset perform its function with the same efficiency and effectiveness of a brand-new, state-of-the-art substitute?' We can return to the previous example of computer software. If we were to make an estimate of the current cost to *reproduce* a software system, we would likely be reproducing a system that was created using programming tools and for hardware that is today obsolete. It is also typical that a software system that has been in use for some time has been modified, patched, and probably does not run as fast as it could. Such a software system therefore exhibits some functional obsolescence.

Functional obsolescence is absent if we begin the process with *replacement cost*, because the current cost of replacement provides us with a state of the art system.

Functional obsolescence will partly be applicable to intangibles and IPRs, such as copyright in books, music, pieces of art, designs, etc. We have many examples of works (creative content) created 100 or 200 years ago and which still enjoy the interest and attention of the public.

Economic Obsolescence

Irrespective of which form of value we start with, we must consider the possible effects of economic obsolescence. Again, we can illustrate this analysis by asking a question: 'Is the future economic benefit to be realized by the exploitation of this asset enough to justify paying an amount equal to its replacement cost less depreciation?' Assume for a moment that we have done a good job reflecting the functional obsolescence in our software valuation. We are confident in our estimate of the replacement cost less depreciation of the subject software system. We discover, however, that in fact there is a shrink-wrapped software package³¹ available on the market that will accomplish all of the same tasks that ours does. If the price of that available system is lower than our estimated cost of replacement less depreciation, then there is economic obsolescence. In this case we would probably then discard

31 The term "shrink-wrapped" is used to distinguish mass-produced software products from custom-designed software systems (e.g. a CD containing the software is shrink-wrapped for display and sale in a retail outlet).



the cost method and move along directly to the market method. There is not always a readily available market substitute, however, but there can be other external factors that could lead us to conclude that our calculated replacement cost less depreciation would be a poor investment.

Cost Method Summary

We have included this discussion of the cost method in order to provide a complete survey of valuation methodologies. It should become obvious, however, that the cost method has little applicability to intellectual property such as copyright. It is used for computer software (as we have done to explain the concept), customer relationships, and assembled workforce, and other intangible assets. It is simply not appropriate for intellectual property because the cost associated with the development of intellectual property is rarely relevant to its market value. There have been some remarkably successful innovations that came about because of a fortuitous mishap in a laboratory. There have also been huge expenditures to develop concepts that have come to nothing. And we should not forget that the market value of many creative works – music, audio-visual products, books, poetry, art, performances – depend very much on emotions and the individual perception of the emotional impact of creative works on the individual and mass public, all of which has little relationship to the cost of creating them.

The cost method should only be relied upon in combination with the market and income methods.

2. Market Method

The market approach is the most direct and the most easily understood appraisal technique. It measures the present value of future economic benefit by obtaining a consensus of what others in the marketplace have judged it to be. An arms-length sale transaction in the current marketplace is a strong indicator of the market value of the property that was exchanged. If that property is sufficiently similar to the property we are appraising, then we have a useful valuation benchmark. The primary requisites are: an active, public market and an exchange of comparable properties contemporaneous to the valuation date.

We commonly rely on the market method when we buy or sell our home, our automobile, or some company shares. These are active markets, so we are likely to discover recent transactions, the prices of transactions are available, and there is enough similarity in what is being exchanged to make a meaningful comparison with my property.

The use of the market method does permit us to make reasonable adjustments when the market information does not precisely match the property we are appraising. But such adjustments should not be unduly large and they should be supported in a logical way with factual information.

Market Method Summary

Where there is a good base of information about the sales of properties that are similar to our subject, the market approach can be the strongest indicator of value. When the number of 'comparable sales' or the information about them dwindles, or when the lack of comparability makes adjustments speculative, this approach ceases to be useful.

The market method is a strong tool in cases when or if:

- We have a large number of transactions in an active market,
- We have good information about the terms of the transaction and the parties involved,
- The available transactions relate to property that is sufficiently comparable to what we are appraising,
- The transaction information is contemporaneous with our valuation.

Unfortunately, in our present quest, these 'ifs' preclude in nearly every case our use of the market method to appraise intellectual property such as copyrights. When intellectual property rights change hands, it is nearly always in combination with other monetary, tangible, and other intangible assets as part of a business combination. So the price paid for intellectual property rights alone is not available. The most significant barrier to using the market method for intellectual property rights lies in the fact that intellectual property law and legal precedents are structured to *prevent* meaningful comparability. IPRs are by definition unique.

We may use market information to provide inputs for other valuation methods but it would be a very rare circumstance to be able to strongly rely on market method of valuation of intellectual property rights.

3. Income Method

The income method is based on the capitalization of the income-producing capability of the property. Business assets must provide a *return on* and *return of* the investment required to create or purchase them. As appraisers, our task is to estimate the price at which a virtual buyer would be willing to pay and a virtual seller would be willing to accept for the anticipated returns from IPRs.

The underlying theory of the income method is that the value of property can be measured by the present value of the net economic benefit (cash receipts less cash outlays) to be received over its life.



Present Value Concept

Some background is provided here for the reader who may not be familiar with the concept of the 'time value of money'—that a dollar to be received in the future is worth less today than a dollar to be received immediately. To assist to explain this concept, we provide the following example.

Let us assume that we have developed an 'app' (application software) for mobile devices that can quickly translate the currency of any nation into that of any other. We offer it on the Internet for download at a price of USD\$ 2.99, and we make some sales to international travelers. Our app comes to the attention of Pear Company and Nile Corporation, both large Internet service providers. Nile Corporation offers us a cash payment of USD\$550,000 to purchase our app. Pear Company offers us USD\$300,000 cash and USD\$300,000 a year from now.

Our choice would be clear if both offers were an immediate payment of cash. The proposed delay in Pear's second payment complicates the decision. The additional \$50,000 is certainly attractive, but we must consider the uncertainties of receiving it. Will Pear still be in business a year from now? Will it have the money to make the payment? What if our app turns out to have a flaw and Pear is unhappy with the deal? We must find a way to put the two offers on the same basis so they can be compared.

What is the essential difference between the offers of Nile and Pear? It is the delayed payment. We need to solve the issue of the time value of money as measured by its 'present value.' What is the present value of \$300,000 to be received one year from now? And what do we need to know about the situation in order to calculate it? The first consideration we must address is how confident we feel that the payment will be made, in full and on time. If we feel really confident about the buyer's integrity and ability to pay, our reasoning could be as follows:

1. If I had the \$300,000 today instead of one year from now, I could put it in my money market fund and earn an interest of 2%. At that rate, the \$300,000 would be worth \$306,055 (compounded monthly). This calculation uses the basic formula that we learned in early mathematics schooling:

I = Prt

(where Interest (I) equals(=) Principal (P) multiplied by Rate (r) multiplied by Time (\mathbf{t})).

To calculate the future amount directly, the formula is transformed to:

Future Amount = P(1 + rt)

2. Looking at the other side of the coin, we ask ourselves, how much would I have to put into my money market fund today in order to have \$300,000 in

one year? The answer is \$294,118. This calculation uses another permutation of the basic interest formula:

Present Value = Future Value/(1 + rt)

3. Therefore, the present value of the right to receive 300,000 in one year is \$294,118 at an interest rate of 2%.

If one feels that Pear Company is as financially reliable as the holder of a money market fund, then the analysis is complete. If one is not so confident about receiving the \$300,000 payment on time (or at all), one should seek a greater return for accepting that additional risk. The interest rate in the calculation is the measure of the perceived risk. The present value of \$300,000 to be received in one year at an interest rate of 15% is \$260,870. At a rate of 25%, it is only \$240,000. So now a comparison of the prospective sales looks like this:

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PEAR advantage		\$ 44,118		\$ 10,870		\$ (10,000)
Total		\$ 594,118		\$ 560,870		\$ 540,000
Cash in 1 year	@2%	294,118	@15%	260,870	@25%	240,000
Cash upfront		\$ 300,000		\$ 300,000		\$ 300,000
, , ,						
PEAR Company OFFER						
NILE Corporation OFFER		\$ 550,000		\$ 550,000		\$ 550,000

We can now observe that, depending on how much confidence one has in Pear honoring its commitment to pay the remaining \$300,000 a year from now, its offer might be better or worse than that of Nile. What is required in order to make these calculations? The essential facts are:

- The amount that is to be received
- The time period (duration) over which it will be received
- The pattern of receiving the amount
- The *risk* that any of this will come true

Amount of Income

In the example above, the amount of the payments to be received is clear (\$300,000 now, \$300,000 in one year). In the real world, the 'amount' portion of the equation can be much more obscure. It could depend on the sales of the app by Pear. It could also involve a calculation of expenses connected with collection.



Duration of Income

Realization of the economic benefit might be spread over many future periods. Sometimes the 'when' of receipts or obligations is clear (as when they are to be made according to a prearranged schedule), but more often they are dependent on other events. The 'when' is a very important element in a present value calculation. In this case it is clear, i.e. one year from when the deal is made.

Pattern of receiving income

As we will observe shortly, the present value of income to be received in the near future is higher than the same amount of income to be received in the more distant future. So the present value calculation must take that into consideration. In this case, the pattern is clear – a single payment one year in the future.

Risk of Achieving the Income

A difficult ingredient is the quantification of risk, as measured by the rate of interest, or discount rate. We will use the term 'discount rate' henceforth, because expressing the receipt of future benefits in current terms is a process of discounting. The essence of this, however, is a consensus of returns required by investors on investments of different types in the marketplace.

As an example, investors in United States government securities typically accept rates of return at the lowest end of the range of possible investment returns, currently around 1 to 2%. At the other end of the range, investors in the common stock of a start-up, high technology enterprise may require a rate of return of 30%, 40% or 50%.

Putting all of these factors together, we can observe the effects of a present value calculation:

Table 2.2: Effect of time and rate on present value

Discount Rate	1 Year	2 Years	5 Years	10 Years				
2%	\$294,118	\$288,462	\$272,727	\$250,000				
15%	\$260,870	\$230,769	\$171,429	\$120,000				
25%	\$240,000	\$200,000	\$133,333	\$85,714				
(Future Value = USD\$ 300,00)								

As illustrated above, the relative effect of 'when' is also greatly altered by the rate of interest assumed. At high interest rates, the deterioration in value is accelerated as receipt is delayed. The present value concept is applicable to any pattern of cash flow as well.

Capitalizing Income

When we have completed our analysis and we have estimated the amount of future economic benefit, the period over which we will receive it, and the pattern by which we will receive it and we have developed our opinion of the risk of receiving it, how do we turn those four critical inputs into present value? We can illustrate the mathematics using three different scenarios.

In the first scenario we have decided on the amount of future economic benefit and we have concluded that we will receive this amount on a periodic basis in perpetuity. We have also come to an opinion about the relative risk that all that will happen. We need to make sure that if, as an example, the amount of future economic benefit will be received monthly, that our risk rate is also reflected on a monthly basis. In this situation the mathematics would be as follows:

In the second scenario we have come to the conclusion that the amount of economic benefits to be received will grow at some consistent rate. Under those circumstances, the mathematics would be as follows:

In the third scenario we have decided that we will receive the future economic benefit in irregular amounts over some future period. In that case we need to calculate a separate present value for each individual future period and add those present values together. We call this a *discounted cash flow* (DCF) technique, and the mathematics are as follows:

The DCF form of the income method is by far the most commonly used for the valuation of intellectual property rights. The reason is clear – the economic benefit flowing from the exploitation of intellectual property rights such as copyrights is rarely unchanging from period to period. Nor can it be expected to last forever (scenario



one). It is also very unlikely for future economic benefit to grow in some consistently steady pattern (scenario two).

Summary Income Method

- Intrinsic value
- Ability to generate cash flow
 - Income Approach: Based on the income-producing capability of underlying IPR asset
 - Seeks to establish the net present value (hence the use of discounted cash flow [DCF])
 - Decision tree analysis (DTA)-based on an underlying DCF analysis and moves further to take into consideration flexibility available.

Variables in Income Method

- An income stream either from product sales or licensing of IPRs
- An estimate of the duration of the IPR's useful life
- An understanding of IPR specific risk factors and incorporating those into the valuation
- A discount rate

4. Discounted Cash Flow (DCF) Method

- Estimates the value of the IPR by computing the present value of cash flows, attributable to that creative piece work or IPR, over the useful life of the asset.
- When used to value a portfolio of IPR, the DCF technique may not capture
 the unique independent risks associated with individual IPRs. All risks
 are lumped together and are assumed to be appropriately adjusted for in
 the discount rate and the probability of success, rather than being broken
 down and dealt with individually (i.e., such as legal risk, technological risk,
 competition risk, piracy, etc.).
- When using the DCF technique, one must take care to reflect all relevant income streams. For example, if one is calculating the present value of future economic benefit associated with the exploitation of a copyright work, one should include any negative or positive income streams stemming from IPRs licensed-in from others in order to accomplish the exploitation.
- Users of this technique often calculate several DCFs to reflect different exploitation scenarios and weight the results based on probability estimates.

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5. Correlation

Valuation practice suggests that all three methods be employed when possible and appropriate. At the very least they should each be considered. This process is often referred to as 'correlation'.

In this process, the appraiser considers such factors as:

- The appropriateness of the method used
- The quantity and quality of information available as input to each method
- The extent to which judgment or alternative assumptions were employed
- The sensitivity of the value indication to various inputs and their relative reliability
- Whether the results of a single method should be relied upon or whether some weighting of results is appropriate

Factors Considered in Trademark Valuation

- Qualitative and quantitative characteristics of the trademark(s)
- Earnings capacity and profitability relating to the trademark(s)
- Market share supported by, or as a result of the trademark(s)
- Market recognition analysis of the trademark(s)
- Legal rights and restrictions to the trademark(s)
- Contracts associated with the trademark(s)
- Competition, barriers to entry and risks associated with the trademark(s)
- Product life cycles and positioning
- Historical growth and prospects for the future
- Exploitation opportunities of the trademark(s) into new markets/products

Factors Considered in Brand Valuation

- Qualitative and quantitative characteristics of the brand name(s)
- Earnings capacity and profitability relating to the brand name(s)
- Market share supported by, or as a result of the brand name(s)
- Market recognition analysis of the brand name(s)
- Legal rights and restrictions to the brand name(s)



- Contracts associated with the brand name(s)
- Competition, barriers to entry and risks associated with the brand name(s)
- Product life cycles and positioning
- Historical growth and prospects for the future
- Exploitation opportunities of the brand name(s) into new markets/products

Factors Considered in Design Valuation

- Originality and usefulness of the design
- Earnings capacity and profitability relating to the design
- The impact of known and similar designs
- Any current or previous licensing of the design
- Legal rights and restrictions to the design, including protection on foreign markets
- Contracts associated with the design
- Competition, barriers to entry and risks associated with the design
- Product life cycles and positioning
- Historical growth and prospects for the future
- Alternative uses for the design

Summary

The cost, market, and income methods are the primary tools of valuation. Virtually any type of property can be valued using them. In the next sections we will discuss at more length some of the critical inputs to the income method specifically as they apply to intellectual property in particular to creative works protected by copyright.

2.6 Economic and Legal Life of Creative Works

Conventional wisdom suggests that creative works are timeless properties that last forever. And there seems to be some evidence in support of that idea. Some works of art, music and architecture have been with us for hundreds of years. Leonardo da Vinci could not have anticipated that his *Mona Lisa* would tour the world, be endlessly reproduced, and attract millions at the Louvre.

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Of course our focus is not on 'great art', but rather on creative works of a more commercial nature that must earn a living and are rarely destined for a museum. For this reason, we must question the conventional wisdom about eternal life and concentrate on creative works that must continually find favor with the buying public.

As we observed in the previous discussion, both the income method and the market value of creative works is dependent upon the length of time that they are able to produce an economic benefit to their owner. This *economic life* is what we are interested in rather than the statutory life for intellectual property in the relevant national legal system. *Economic life* is the period during which it is profitable to use an asset. Economic life ends when (1) it is no longer profitable to use an asset (the future economic benefits are used up) or (2) when it is more profitable to use another asset.

In this study we will explain how IPRs related to creative works, usually protected by copyright, can be exploited and monetized; in this context, it is important to know the term of the statutory legal protection. In most of the cases, that legal term of protection will be longer than the economic life of the creative work; however, in some cases the economic life may be much longer.

The statutory term of protection of copyrights (creative works protected by copyright) varies from country to country. Article 7 of the Berne Convention for the Protection of Literary and Artistic Works fixes the minimal term of protection to the life of the author and 50 years after his/her death. The individual countries are free to provide for longer terms of protection for copyright works as well as for other creative works –





cinematographic works, photographic works and works of applied art, etc.³² Today in most countries the term of protection for copyrights is minimum 70 years following the death of the author.

Wikipedia provides a table showing the term of protection for copyright in the different countries.³³

So what range of conditions and events can affect the economic life of creative works such as copyright? We have observed factors that seem quite similar to our description of functional obsolescence used in a cost method.

- 32 Berne Convention for the Protection of Literary and Artistic Works www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html#P127_22000
 - Article 7- Term of Protection: 1. Generally; 2. For cinematographic works; 3. For anonymous and pseudonymous works; 4. For photographic works and works of applied art; 5. Starting date of computation; 6. Longer terms; 7. Shorter terms; 8. Applicable law; "comparison" of terms
 - (1) The term of protection granted by this Convention shall be the life of the author and fifty years after his death.
 - (2) However, in the case of cinematographic works, the countries of the Union may provide that the term of protection shall expire fifty years after the work has been made available to the public with the consent of the author, or, failing such an event within fifty years from the making of such a work, fifty years after the making.
 - (3) In the case of anonymous or pseudonymous works, the term of protection granted by this Convention shall expire fifty years after the work has been lawfully made available to the public. However, when the pseudonym adopted by the author leaves no doubt as to his identity, the term of protection shall be that provided in paragraph (1). If the author of an anonymous or pseudonymous work discloses his identity during the above-mentioned period, the term of protection applicable shall be that provided in paragraph (1). The countries of the Union shall not be required to protect anonymous or pseudonymous works in respect of which it is reasonable to presume that their author has been dead for fifty years.
 - (4) It shall be a matter for legislation in the countries of the Union to determine the term of protection of photographic works and that of works of applied art in so far as they are protected as artistic works; however, this term shall last at least until the end of a period of twenty-five years from the making of such a work.
 - (5) The term of protection subsequent to the death of the author and the terms provided by <u>paragraphs (2)</u>, (3) and (4) shall run from the date of death or of the event referred to in those paragraphs, but such terms shall always be deemed to begin on the first of January of the year following the death or such event.
 - (6) The countries of the Union may grant a term of protection in excess of those provided by the preceding paragraphs.
 - (7) Those countries of the Union bound by the Rome Act of this Convention which grant, in their national legislation in force at the time of signature of the present Act, shorter terms of protection than those provided for in the preceding paragraphs shall have the right to maintain such terms when ratifying or acceding to the present Act.
 - (8) In any case, the term shall be governed by the legislation of the country where protection is claimed; however, unless the legislation of that country otherwise provides, the term shall not exceed the term fixed in the country of origin of the work.

Article 7bis – Term of Protection for Works of Joint Authorship

The provisions of the preceding Article shall also apply in the case of a work of joint authorship, provided that the terms measured from the death of the author shall be calculated from the death of the last surviving author.

33 en.wikipedia.org/wiki/List_of_countries%27_copyright_length

That is, are there reasons why our copyrighted creative work simply does not contribute the same economic benefit today that it did in times past?

- If a copyright is so closely tied to another form of intellectual property or a physical product or service, its economic life could be controlled by the market viability of other IPRs or tangible assets. As an example, and app for mobile devices could be rendered valueless or obsolete if technology were to advance to the point at which the owner of a mobile device could easily create his or her own apps. Even more narrowly, an app for a specific device could live or die according to the market life of that particular device.
- Many of our creative works are 'dated'. That is, they are connected to life
 which changes simply because of the passage of time. Remembering that
 we are just as much concerned about the total length of economic life as we
 are the pattern by which it will occur, it is useful to think in terms of a diagram
 such as the one shown below:

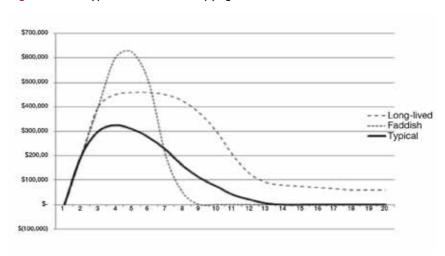


Figure 5: Typical Patterns of Copyright Economic Life

In this illustration, we present typical economic life and pattern for different kinds of copyrighted material. By 'faddish' we refer to copyrights with a short but intense popularity such as might be associated with a popular song, advertising slogan, or YouTube video clip. The 'typical' category refers to works such as motion pictures, books, or apparel designs. The 'long-lived' category represents those typical exploitations that become 'classics', for example the so-called 'evergreens'.



There are other influences on the economic life of creative works that could be characterized as economic obsolescence:

- Unplanned events can occur that can have a dramatic effect on the economic
 life of copyrighted material. In the past few years we have experienced
 bankruptcies of a number of retail organizations that had well-developed
 advertising campaigns and materials. The merger or acquisition of one
 business by another can immediately render obsolete a large body of
 copyright material.
- There are cultural issues as well that reflect our increasing sensitivity to points of view as well as religious, ethnic, and gender-related issues. Even environmental and health issues can impact the economic life of copyrighted material. Think of all of the copyrighted advertising material that was created for the cigarette and tobacco industry in the United States. And today we must consider all of these issues in an international context.

Faced with the task of developing an opinion about the total economic life and power of a creative work, we suggest that strong consideration be given to observing the historical life patterns of products or services similar to that which we are studying. Look to the recent past and gather information about the dollar sales or unit sales that are logically tied to the existence of copyrighted material that is relevant to our task. This information can serve as a very useful benchmark by which to estimate remaining economic life.

2.7 IP Audit and Valuation as a Management Tool

As mentioned earlier, IP audit and IP valuation are very important for efficient management of IPRs and IP portfolios. Systematic IP audit and valuation will enable management to improve the management and accountability of resources:

- Know what IPRs are owned
- Know what IPRs result from new development projects
- Know what IPR is core, secondary or surplus asset

Furthermore, the IP valuation will contribute to improved financial performance, unlock hidden or under-performing value of IPRs, reveal opportunities to generate cash from licensing or sale of non-earning IPRs.

Periodical valuation of IP and inclusion of IP assets on balance sheet is a tool of measuring the efficiency of IP management.

It is a means to enhance the competitive advantage and 'freedom of action' of the business by capturing the creative works and innovations that distinguish the business from the competition.

IP audit and valuation also contribute to improved risk management, by

- minimizing risk of failing to identify, protect IPRs and renew their protection on a timely basis and thus preserving the opportunity to use and commercialize the IPR
- minimizing the risk of infringing third-party IPRs.

The risks include not only potentially significant damages and legal costs if an adverse decision is made, but damaged corporate reputation, products recalls or redesign, wasted marketing costs, executive down time and even royalty payments to competitors.

And last, but not least, regular IP audit and valuation will enable management to capture and open opportunities for growth and strategic investment through

- enhancing the business' reputation as an innovator, market leader, employer of choice for recognizing staff creativity and innovation, and profitable business
- enhancing access to debt or equity funding to continue strategic initiatives by protecting, valuing and even mortgaging IP assets
- attracting business partners for alliances or joint ventures based on the IP assets generated, owned and protected by the company

2.8 Value Synergies between Forms of IPRs

In 1958, Wilbur Lee Gore and his wife founded a company in order to develop a process for insulating electric wires. About 10 years later, his son, who was now working for the company, perfected the means to manufacture a waterproof, breathable plastic fabric. They called it 'Gore-Tex'. Sometime after that, this fabric came to the notice of apparel manufacturers. They discovered that, for waterproof outerwear, the material had the unique property of shedding water while allowing the garment to 'breathe'. These garments were much more comfortable than the impermeable rainwear then available.

Gore's company, W. L. Gore and Associates, Inc. is still in existence manufacturing Gore-Tex. Its underlying patent protection has long ago expired and there are competitive insulating films and materials on the market. Mr. Gore, however, was an astute businessman. When he agreed to sell his Gore-Tex film to apparel manufacturers, he required them to notify retail purchasers that the garment included Gore-Tex fabric. This was done by means of a 'hang-tag' on each garment. In doing



so, the buying public became aware of this new fabric that otherwise would have been hidden and unknown inside a jacket or coat. We became educated to look for Gore-Tex products because they were effective. The Gore-Tex brand extended the economic life of the manufactured product far beyond what it otherwise would have been.

This situation is not unlike Intel Corp.'s 'Intel Inside' trademark that we see on our personal computers. It alerts us to a brand name that would otherwise be buried unknown inside the device. Presumably, if we are happy with the device, Intel Corp. enjoys some enhancement to its own brand.

Pfizer Inc. is a manufacturer of the cholesterol fighter Lipitor, which was the topselling drug of all time. Lipitor is effective and it built a very strong brand reputation during its period of patent protection. Pfizer's strategy now is to continue to sell Lipitor as a prescription as well as over-the-counter pharmaceutical, using the brand's reputation to soften what is often an abrupt drop in sales following the expiration of the patent.

These are examples of technology/trademark synergies that have extended the economic remaining life of intellectual property rights. We believe that this strategy is equally applicable to other intellectual property pairings, such as copyright/trademark. One of the reasons we believe this is true is the very wide latitude of copyright exploitation possibilities:

Figure 6: The many forms of exploitation

DVD

MERCHANDISE

MOTION PICTURE

TELEVISION SERIES

BOOKS

THEME ATTRACTION

RECORDINGS

ADVERTISING CAMPAIGN

CHARACTERS

BOARD GAMES

VIDEO GAMES

TRANSLATIONS

ORIGINAL WORK

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This 'exploitation circle' can be entered at several points by means of the book, screenplay, musical composition, character, and so forth. From that point, continuing around the circle, multiple exploitation possibilities exist. Many of these ancillary exploitations can be protected by IPR titles such as patents, trade secret, or trademarks in addition to copyright.

Combining forms of intellectual property protection enhances market value by increasing the amount of future economic benefit, by enhancing its longevity, and by reducing its risk.



3. VALUING COPYRIGHT ASSETS – APPLYING THE PRINCIPLES

The basic principles of the Cost, Market, and Income methods of valuation were presented in Section 2.5. In this section we demonstrate techniques for applying these principles in the valuation of copyright assets.

3.1 Cost Method

A market valuation by the cost method begins with an estimate of either *reproduction* cost new or replacement cost new. The reader may wish to refer to the schematic presentation in Section 2.5. There are several tools available to assist with these estimates.

Trended Original Cost Technique – this technique is utilized when the historical costs of development are known. It involves a restatement of costs incurred in the past to current levels. As an example, assume that we are valuing the copyright associated with a small video production. This production took three years to complete and began in 2011. The total expenditures on the project in each year were as follows:

Table 3.1: Original	Develo	opment	Cost
----------------------------	--------	--------	------

Year	Original
	Development
	Cost
2011	131,000
2012	35,000
2013	16,000
	\$ 182,000

One needs a mechanism for restating these costs to the appraisal date, assumed to be sometime in 2013. Price indexes are utilized for this purpose. Many governments, private agencies, and consulting firms track the costs of labor, commodities, and finished products and publish them in the form of price indexes. One therefore needs to know something about the nature of the costs incurred for this video production in order to obtain the proper price index(s). Such an index might appear similar to the following:

Table 3.2: Price Index

Year	Price Index
2005	1.00
2006	1.09
2007	1.12
2008	1.43
2009	1.66
2010	1.78
2011	1.92
2012	2.05
2013	2.13

This price index suggests that if the price a unit of labor or material was one dollar in 2005 that unit would cost \$2.13 in 2013. To be a usable, it is necessary to convert this price index to a series of 'translators' by dividing each of the annual indices by the 2013 index:

Table 3.3: Calculation of Price Index Translator

		Translator
Year	Price Index	2013 = 1.00
2005	1.00	2.130
2006	1.09	1.954
2007	1.12	1.902
2008	1.43	1.490
2009	1.66	1.283
2010	1.78	1.197
2011	1.92	1.109
2012	2.05	1.039
2013	2.13	1.000

One can then multiply the original costs by one of these translators in order to restate them to the 2013 level. As shown in the calculation below, the video production that originally cost \$182,000 would require an expenditure of \$197,694 at the appraisal date in 2013.

Table 3.4: Calculation of Trended Original Cost

Year	Original		Т	rended
	Development	Translator	C	Driginal
	Cost	2013 = 1.00		Cost
2011	131,000	1.109		145,328
2012	35,000	1.039		36,366
2013	16,000	1.000		16,000
	\$ 182,000		\$	197,694



It is important to note that this represents the *reproduction cost* of the video. If, as an example, this was our first video production, we might have been less efficient than a producer with experience. The restated cost estimate would then be overstated, compared with what today's typical cost might be. On the other hand, we might have enjoyed unusually favorable conditions during the production and our restated cost might be unusually low.

Aggregated Cost Technique – in this technique, we essentially plan a project that will produce the same copyright asset (video) under current-day conditions and at current costs, using current equipment and methods:

Table 3.5: Aggregating Current Cost to Calculate Replacement Cost

			Direct	Indirect	Total
	Hours	Rate	Labor	Costs	Cost
Site location	30	\$ 150.00	\$ 4,500	30%	\$ 5,850
Film crew	600	120.00	72,000	30%	93,600
Talent	60	500.00	30,000		30,000
Editing	300	90.00	27,000	30%	35,100
Travel & living expense	-	-	-		37,000
-	990		\$ 133,500		\$ 201,550

This technique produces an estimate of the video's *replacement cost* because we have re-created the production using current day methods which may or may not be the same as the methods actually employed three years ago.

Whether we have estimated reproduction cost or replacement cost, it is necessary to reflect the appropriate forms of depreciation and obsolescence in order to obtain an indication of the market value of the video.

Physical Depreciation – physical deterioration would not be relevant to a copyright asset.

Functional Obsolescence – in the schematic of the cost approach presented in Section 2.5, we noted that when starting with an estimate of *replacement cost new*, an adjustment for functional obsolescence is not necessary because it is assumed that the current replacement activity has produced a state-of-the-art asset. When starting with an estimate of reproduction cost, a functional obsolescence adjustment may be required if the asset reproduced is not state-of-the-art. As an example, if our video was not recorded in a high definition mode, it might reflect some functional obsolescence, if that quality is customary for current video products.

For simplicity, we will assume that our example video is not afflicted with functional obsolescence at present. However, we note, in the discussion of economic obsolescence below, that functional obsolescence may appear in the future.

Economic Obsolescence – as we noted in a previous section, the estimation of economic obsolescence requires us to question whether the future economic benefit to be realized by the exploitation of the video in our example is sufficient to justify paying an amount equal to the reproduction or replacement cost estimates. To expand our example, let us assume that the video is of a 'documentary' type that would be primarily useful in an educational setting. We therefore must analyze the various avenues for exploiting the video and come to some conclusion as to the opportunity which presents the largest future economic benefit. Exploitation options might include selling copies of the video, renting the video to users, licensing the video to educational television outlets, or perhaps making it available on the Internet for a fee.

For the purpose of this example, assume that our analysis indicates that the best opportunity would be to sell copies of our video. From the prices of similar videos we conclude that we should be able to sell 10 copies per year at a price of \$2000 per copy. We further anticipate that after about five years, the subject matter of our video will no longer be of interest because of changing conditions. If the income producing capability of this video is \$20,000 per year for five years, would a willing buyer pay \$200,000 for this copyright asset?

The answer is clearly negative.

As we noted previously, financial principles instruct us that investors require both a return *on* and a return *of* investment. An investor paying \$200,000 for this copyright asset would receive neither. Given the estimated future economic benefit that this copyright asset is capable of producing, a willing buyer would only conclude a purchase at an amount substantially below the \$200,000 reproduction or replacement cost estimate.

A substantial amount of economic obsolescence would be present.

In essence, the estimation of economic obsolescence that is a necessary part of the cost method is, in fact, very similar to the capitalization of income principles that form the basis of the income method discussed previously and expanded below.

3.2 Market Method

As previously noted, the market method directs us to seek out information about armslength sales of property similar to that which we are appraising. In this case, we would be searching for sales of copyrights to documentary type videos. Of course, it is highly unlikely that our search will reveal any sales of a video identical to ours. While it is unlikely, we might discover sales of documentary video copyright that are sufficiently similar to make them potentially useful.

The market method permits us to make reasonable adjustments to the selling prices of assets that are similar to the property we are appraising, but not identical.



As an example, we might discover the sale of a portfolio of documentary videos in connection with a business acquisition. Perhaps we might be able to allocate the total price among the videos if we can discover enough facts about them such as their subject matter, running time, or their market place. Such adjustments are a matter of judgment and are difficult to make. Obviously, these adjustments cannot be drastic. There is no reasonable way to assume that the sale of 30 half-hour episodes of a television series could be made informative as a market value indication for our documentary video.

As a practical matter, it is very unlikely that the market method will be appropriate in a valuation of copyright assets. One reason is the lack of comparability between copyright assets. In addition, copyright assets are most commonly exploited via licensing and so the market for individual copyright assets is relatively thin.

3.3 Income Method

The basic financial principles of the income method are presented in Section 2.5. These financial principles are based on the definition of market value as 'the present value of the future economic benefits of ownership'. The income method requires four inputs:

- The amount of future economic benefit expected from exploitation
- The *duration* of exploitation
- The pattern by which the economic benefits will be received
- The *risk* of receiving the future economic benefit as expected

Amount of Future Economic Benefit

All valuations and appraisals are forward-looking. Therefore forecasting is inevitable, irrespective of the valuation method employed. Estimating economic obsolescence in the *Cost Method* requires us to look forward at the potential exploitation of the subject asset. Using sales data as a benchmark in the *Market Method* incorporates the future expectations of buyers and sellers in the market place. From the discussion of present value in Section 2.5 it is obvious that the *Income Method* is firmly based on forecasts.

Most often the starting point is a forecast of sales of products or services in the marketplace. If there is to be any economic benefit from the exploitation of a copyright asset, it must ultimately come from marketplace buyers who are willing to pay to buy it, rent it, listen to it, play with it, read it or view it.

With a sales forecast in hand, the second task is to estimate the proportion of sales revenue that is attributable to the copyright asset in question. Few, if any, copyright

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assets can be exploited without incurring expenses, such as for development, delivery, or marketing. If a copyright asset is but one of a portfolio of all types of assets that make up a business enterprise, winnowing out its particular income contribution can involve considerable investigation and analysis.

The future economic benefit of IP, in general, results from either an enhancement of future revenues or a reduction of future expenses, or both. Vis-à-vis all other forms of IPRs, the sources of economic benefit for copyright works is limited. As 'revenue enhancers', copyright assets can (1) create a new income stream (as in our documentary video example above), (2) contribute an enhancement to an existing product or service enabling premium pricing, or (3) be a source of licensing income. As an 'expense reducer', the economic benefit of a copyright asset can also be measured by the fact that its ownership can relieve a company of the expense of buying or licensing that copyright asset from an outside party.

Duration and Pattern of Future Economic Benefit

Section 2.6 presented a discussion on the distinction between the legal life of a copyright asset and its economic life. It is economic life that is an input to the income method. In the real world, copyright assets rarely enjoy an economic life equal to the period of their legal protection. Yes, there are classic books, motion pictures, musical works and sculptures that have proved to be timeless, but that is rare in the context of the number of works protected worldwide by copyright.

The economic life of technology IPRs is to a large extent driven by objective commercial factors. The economic life of trademark IPRs is too, but it is also influenced by societal changes. The economic life of copyright assets is influenced to a much greater extent by human feelings, culture, and constantly varying tastes. It is therefore much more difficult to forecast the duration and pattern of economic life for a specific copyright asset.

In 1961, Life Magazine in the United States reported that Ian Fleming's book 'From Russia with Love' was one of President John F. Kennedy's 10 favorite books. This caused a surge in the sales of Fleming's books which had been popular for some time. Such events can greatly influence the economic life of a copyright asset but, of course, are impossible to foretell.

In 1954, the Metro Goldwyn Mayer studio released a musical motion picture, 'Seven Brides for Seven Brothers'. As is common, the popularity of its background musical works waned after the picture left theaters. Then Philip Morris Company launched an advertising campaign for its Marlboro brand of cigarettes, using a musical fragment from the motion picture as background for its 'Marlboro Man' commercials. This was a long-running campaign and royalties to the music owner increased dramatically. Again, an unpredictable event.



Currently, Imagem Music Group, a music publisher in the Netherlands, is aggressively acquiring rights of well-known composers of the 1930s, 40s, and 50s, such as Sammy Cahn, George Gershwin, and Richard Rodgers and Oscar Hammerstein. Their famous songs are being marketed as advertising background music to companies such as Bank of America, Royal Bank of Canada, Emirates Airline, and Campbell's soup.³⁴ Presumably, the steady but moderate royalty stream of these 'standards' will rise to new levels as a result.

Some forecasting considerations:

Direct estimates – this technique results in discrete estimates for each future year based upon all of the facts that we can discover. Many valuers base such an estimate on a calculation of a compound annual growth rate. This calculation requires a beginning value that is multiplied by (1 + rate), as is each year's amount that follows.

Extrapolation of historical data – this is a technique that can be used when there is some 'track record' of income from the subject copyright asset. Of course it is necessary to satisfy oneself that the historical pattern will continue and that there were no unusual circumstances that led to the past behavior.

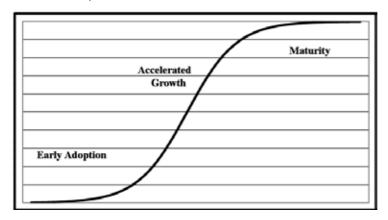
Surrogate data – the first year is to discover actual growth data from some works protected by copyright IPR that is judged to be reasonably comparable to our subject. There is often data reported in business media regarding box office receipts for motion pictures, sales of musical works, books, CDs, and the like. The pattern of these data can be illustrative of what could be expected for a new copyright asset.

Model Growth Patterns – life cycle theory assumes that the diffusion of a product or service into the economy follows a pattern of introduction, growth, maturity, and decline. Graphically this is typically illustrated by a curve in the so-called S-shape. There are other families of growth curves that have been developed from actual data.³⁵

³⁴ Cohen, Stefanie, "A New Push for Old Chestnuts", Wall Street Journal, May 31, 2013, page D5.

³⁵ See Smith & Parr, "Intellectual Property – Valuation, Exploitation, and Infringement Damages", John Wiley & Sons, Hoboken, NJ, 2005. Pages223-234.

Figure 7: Typical 'S curve' (sigmoid) growth pattern of a new technology or entertainment product or service



Risk of Receiving Future Economic Benefit

The core of the income method is a calculation of the present value of future stream attributable to the subject copyright asset. One ingredient of that present value calculation is a reflection of risk that is embodied in a single value ('discount rate') expressed as a percentage. This percentage is representative of all elements of risk and considers:

- Whether the income will grow at a rate as expected
- Whether the income will last as long as expected
- Whether the income will be steady or volatile
- Whether more investment will be necessary for marketing and promotion
- Whether there will be a delay in receiving the potential income
- Economic factors such as the expected rate of inflation and the financial marketplace

The estimation of a discount rate can be a complex subject and a full discussion is beyond the scope of this paper³⁶. It can be said, however, that the discount rate to be used in the income method for the evaluation of copyright assets is derived from the financial marketplace. That is, there is no abstract method by which to directly calculate the discount rate. It is estimated based on market data, tempered by judgment and knowledge of the copyright asset in question.



Every hour of every day, investors worldwide are making financial decisions relative to the purchase of a multitude of investment opportunities. These purchases are made for the purpose of obtaining investment income. The price that investors are willing to pay is directly related to the perceived risk of the investment income. Some examples of typical return rates required by investors in early 2013 are shown in the table below³⁷:

Table 3.6: Typical Market Rates of Return

0.5 – 1%
0.75 - 1%
0.5%
3 - 5%
4 – 6%
10 – 12%
12 – 14%
30 - 50% +

As shown, where the risk is low (such as for a U.S. government bond) the rate of return (discount rate) is also low. Where the perceived risk is high, such as venture capital invested in a start-up company, the return requirement is high. Estimating a discount rate for the evaluation of a copyright asset is, in essence, based on a selection within this spectrum of rates of return from the financial marketplace. One seeks an investment type whose perceived risk profile is representative of the risk associated with the forecasted income stream of the subject copyright asset.

The reader will recall from Section 1 the discussion about the components of a business enterprise. With respect to investment risk, we can note the following:

Monetary assets – are generally acknowledged to be the most liquid assets within a business. One of the elements of monetary assets is cash and the marketable securities which of course lend liquidity to this asset. In addition, accounts receivable and inventories are usually turned over within a matter of months. Given these characteristics, the investment risk in monetary assets is inherently low and in the range of investments in short-term securities of low risk.

Tangible assets – these are typically comprised of production equipment, buildings, land, office equipment, and the like. The purchase of these assets is often financed by commercial banks, and corporate bond rates typically reflect the investment risk associated with these assets.

³⁷ These rates of return are representative for the United States capital markets in mid-2013. They are taken from a wide variety of readily-available sources of published financial data.

Intangible assets – must be considered to be the most risky asset, because these assets have little liquidity and versatility and this enhances the risk of these assets. Investment rates of return are therefore at the high end of the spectrum reflected in the marketplace. The development of these assets is typically financed by equity investment and therefore equity return rates usually represent the floor for discount rates employed in a valuation.

3.4 Valuation Examples of Copyright Works

Valuation of Copyright Asset Using the 'Relief from Royalty' Technique

The so-called relief from royalty technique is often used in a valuation of copyright assets. It is not a distinct valuation method, but rather a permutation of the income method. It is a tool by which one can estimate the *amount* of future economic benefit, one of the ingredients of the income method. The underlying theory is that a company which is exploiting a copyright asset that it created is 'relieved' from having to license-in those rights from others and having to pay a royalty for that use. Therefore, the company's profitability is enhanced by not having to pay a royalty to others for the copyright that it owns.

This technique assists appraisers in quantifying the amount of future economic benefit that can be attributed to the copyright asset. The duration, pattern, and risk elements of the income method must still be estimated by other means.

The example that follows illustrates a valuation of a 'character' copyright. This character could have been created as part of a book, motion picture, a cartoon, or some other form of digital media. The copyright owner has elected to incorporate this character in its line of consumer products, or perhaps use it as a 'spokesperson' for its product range.

In one sense, the relief from royalty technique encompasses some elements of the market method in that the royalty rate used in the calculation should have some basis in actual royalties for comparable property evident in the licensing marketplace. The mathematics begin with a calculation of revenue attributable to the copyright asset.

Table 3.7: Calculating Revenue Using a Royalty Rate

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	TOTAL
Estimated Sales Revenue	50,000	90,000	140,000	250,000	400,000	930,000
License Royalty Rate	8%	8%	8%	8%	8%	
Royalty Revenue	4,000	7,200	11,200	20,000	32,000	74,400

This example illustrates how this method would be employed in the case of a new copyright asset that is to be introduced to the marketplace. The forecast of sales revenue is based upon the steep increase exemplified by a typical S-curve. This



forecast is of sales revenue related to the product or service that embodies the new character copyright.

Please note that this example could also be employed in the case where the owner of the character copyright elected to exploit it only by licensing it to another company. In that case the sales forecast starting point would be an estimate of the sales of the licensee that would serve as the basis for calculating the future income stream to the copyright owner.

This method utilizes a royalty rate from the marketplace as the means to estimate the amount of revenue attributable to the copyright asset being appraised. For this example, we obtained data relative to several transactions in which copyrighted characters were being licensed for incorporation into various kinds of consumer products.³⁸ There were 12 transactions in this group and the royalty rates ranged from 2% to 12% of the wholesale price of the product. The average royalty rate was 7.9%. A sample of one of these licensing transactions is included as Annex B.

In the calculation shown above, we utilized a royalty rate of 8% to estimate the amount of sales revenue attributable to the copyright asset.

Continuing with this relief from royalty valuation, we must consider whether there will be expenses incurred in the exploitation and then calculate the present value.

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	TOTAL
Estimated Sales Revenue	50.000	90.000	140.000	250.000	400,000	930.000
License Royalty Rate	8%	8%	8%	8%	8%	,
Royalty Revenue	4,000	7,200	11.200	20.000	32,000	74,400
Administrative Expense @ 15%	600	600	600	600	600	
Taxes @ 25%	850	1,650	2,650	4,850	7,850	17,850
License net income	2,550	4,950	7,950	14,550	23,550	53,550
Present Value of After-Tax Income	\$ 2,388	\$ 4,067	\$ 5,729	\$ 9,198	\$ 13,059	
Total Present Value	\$ 34,442					

 Table 3.8:
 Calculating Present Value Using the Relief from Royalty Technique

As shown in these calculations, administrative expenses are estimated at 15% of the royalty revenue and taxes at 25%. The present value of the after-tax income has been calculated in each year by multiplying the net income by the formula shown in Section 2.5 using a discount rate of 14%. This discount rate was adopted because it represents the high end of the range of small company capital stock rates of return. The facts and circumstances of this example did not warrant, in our judgment, the

³⁸ These license transactions were obtained from RoyaltySource, a service of AUS Consultants, Mount Laurel, New Jersey. Royaltysource.com

reflection of a higher risk than that, although that situation is not uncommon with intellectual property rights.

Valuation of Copyright Asset Based on Premium Pricing

We previously noted that one of the ways in which a copyright asset can enhance economic benefit is by enabling premium pricing of a product or service. Building on the example above, we could assume that whatever product or service this company is selling in the market place, identifying that product with a well-known character might enable the company to charge a higher price. That higher price is a direct result of the copyright asset. We might therefore calculate income attributable to the copyright asset as follows:

Table 3.9: Using Premium Pricing to Calculate Revenue

	1	2	<u>3</u>	<u>4</u>	5	•	TOTAL
SALES OF PREMIUM PRICED PRODUCT	_	_	_	_	_		
Unit Sales Forecast (millions)	3,344	6,020	9,365	16,722	26,756		
Price per Unit	14.95	14.95	14.95	14.95	14.95		
Sales Revenue (millions)	\$ 50,000	\$ 90,000	\$ 140,000	\$ 250,000	\$ 400,000	\$	930,000
SALES OF GENERIC PRICED PRODUCT							
Unit Sales Forecast	3,344	6,020	9,365	16,722	26,756		
Price per Unit	9.95	9.95	9.95	9.95	9.95		
Sales Revenue	\$ 33,278	\$ 59,900	\$ 93,177	\$ 166,388	\$ 266,221	\$	618,963
REVENUE ATTRIBUTABLE TO IP	\$ 16,722	\$ 30,100	\$ 46,823	\$ 83,612	\$ 133,779	\$	311,037

The first step is to convert the sales revenue forecast into a forecast of unit sales. This allows us to price the unit sales with and without the enhancement of the copyright asset. The difference between those two sales forecasts indicates the sales revenue attributable to the copyright asset.

We can then make a similar present value calculation after reducing the premium price advantage for income taxes, again utilizing a discount rate of 14%.



Table 3.10:	Calculating	Present Value	Using the	Premium P	ricing Technique
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	1	<u>2</u>	3	4	<u>5</u>	TOTAL
SALES OF PREMIUM PRICED PRODUCT	_					
Unit Sales Forecast (millions)	3,344	6,020	9,365	16,722	26,756	
Price per Unit	14.95	14.95	14.95	14.95	14.95	
Sales Revenue (millions)	\$ 50,000	\$ 90,000	\$ 140,000	\$ 250,000	\$ 400,000	\$ 930,000
SALES OF GENERIC PRICED PRODUCT						
Unit Sales Forecast	3,344	6,020	9,365	16,722	26,756	
Price per Unit	9.95	9.95	9.95	9.95	9.95	
Sales Revenue	\$ 33,278	\$ 59,900	\$ 93,177	\$ 166,388	\$ 266,221	\$ 618,963
REVENUE ATTRIBUTABLE TO IP	\$ 16,722	\$ 30,100	\$ 46,823	\$ 83,612	\$ 133,779	\$ 311,037
Less: Income Taxes @ 25%	4,181	7,525	11,706	20,903	33,445	
ter-tax Income Attributable to Copyright Asset	\$ 12,542	\$ 22,575	\$ 35,117	\$ 62,709	\$ 100,334	
Present Value of After-Tax Income	\$ 11,746	\$ 18,547	\$ 25,308	\$ 39,643	\$ 55,639	
Total Present Value	\$ 150,883					

It is important to note that one must carefully consider whether such a premium price is entirely the result of incorporating the character copyright. This is true any time a 'subtraction' logic is being employed. For example, one might conclude that the inclusion of the character copyright would not result in a premium price, but rather in an increase in sales volume. The arithmetic would be similar to that shown above, but one would be subtracting one sales forecast from another (i.e. sales with the character vs. sales without the character). The cost of goods sold and other operating expenses would have to be taken into account as well.

Valuation of a Copyright Asset – 'All Reasonable Exploitations'

If we were appraising that most basic type of property – land – it is essential to come to a conclusion about its 'highest and best use'. Is it farmland? Is it suitable for residential development? Is it appropriate for commercial or industrial development? We must ask these questions because a willing and knowledgeable buyer will be asking them. And, obviously, the value of the land will vary considerably based on its potential use.

The same sort of questions arise in a valuation of virtually any type of property, including copyright assets. Our questions concerned the most advantageous forms of exploitation. This becomes a more complicated task with intellectual property, because intellectual property is capable of simultaneous exploitation by multiple entities. The example license shown in Annex B is for exploitation in the UK, Channel Islands and Ireland. Presumably other geographical areas are available. Below we illustrate a series of present value calculations of multiple exploitations:

Table 3.11: Calculating Present Value of Multiple Exploitations

·		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL
PRIMARY EXPLOITATION	Discount						
Income Attributable	Rate	1,200	1,300	1,500	1,600	1,700	
Present Value of Income Attributable	16.0%	1,114	1,041	1,035	952	872	5,013
SECONDARY EXPLOITATIONS							
Similar Product Extensions							
Income Attributable		650	700	800	900	950	
Present Value of Income Attributable	17.0%	601	553	540	520	469	2,683
Dissimilar Product Extensions							
Income Attributable		150	250	400	450	500	
Present Value of Income Attributable	20.0%	137	190	254	238	220	1,039
Licensing Income							
Income Attributable		50	60	70	80	90	
Present Value of Income Attributable	20.0%	46	46	44	42	40	218
Speculative Extensions							
Income Attributable		100	300	500	800	1,200	
Present Value of Income Attributable	25.0%	89	215	286	366	440	1,396
				TOTAL PRI	ESENT VAL	.UE	10,348

Note that in these present value calculations we have utilized different discount rates to reflect the increasing risk associated with exploitations that are more distant and speculative than the primary exploitation. It would also not be unusual to delay the receipt of the forecasted income due to the necessity of marketing and organizing additional exploitations. One might utilize a similar calculation if there are multiple licensees.



4. IP AUDIT AND VALUATION CHECKLIST

Undertaking an IP audit and/or IP valuation needs a systematic approach. To facilitate that work we provide in this chapter a checklist of items / activities which should be considered in such an exercise.

Establish a clear understanding of the specific intellectual property rights to be appraised.

Clearly establish the ownership of the specific intellectual property rights to be appraised. Especially with copyright assets, there can be a lack of clarity about ownership. As an example, the subject asset may have been created through the efforts of several individuals or by an employee working for a company or on some other contractual basis.

In estimating the economic life of a copyright asset, carefully consider the characteristics of the end market, because that will control economic life.

If the primary exploitation is through licensing-out, the economics of the transaction will be controlled by the economics of the licensee's business, not the owner's business.

There are nearly always expenses associated with exploitation income streams. At the very least income taxes must be considered.

When estimating the future economic benefit from the exploitation of copyright assets, all reasonable exploitations should be considered, even if the current owner is not employing all of them.

Be clear about the income stream that is to be appraised. As an example, in the case where a copyright asset owner is internally exploiting the asset as well as licensing it out, there may be multiple income streams involved. The question is *whose interest* in the copyright asset is being valued.

- The income received by the owner in self-exploitation
- The income received by the owner from multiple licensees
- The income received by the licensees from their own exploitation

Consideration should always be given to the possible use of all three valuation methodologies – the cost, market, and income methods. One or more of these may be rejected or their results not relied upon, but they should be considered.

4.1 Steps in IP Audit and IP Valuation

First Step: Investigation and Prospection

List all works, products, designs, services, etc., created, developed or used by the enterprise, such as: inventions, formulas, processes, devices or other technologies, creative works, such as music, books or computer video games, business information, including advertising, promotional materials, customer lists, prospect lists, pricing information, sales figures, financial projections, quality control and compliance procedures and other materials.

Second Step: Identification

List the existing intangible assets, including IP rights such as copyrights, trademarks, designs, patents, product/process know-how, proprietary knowledge and trade secrets.

Identify the intangible assets for which IP protection should be sought or which should be protected otherwise.

Third Step: Categorisation of the identified assets

Establish the ownership for all intangible assets developed and owned by the enterprise, developed and owned by staff, acquired from third parties, joint ownership, etc.

Core IP assets (very important to the business)

Non-core IP assets (not important to the business – it can develop without them)

Fourth Step: List impact of external or market factors

company brand

product brands

company and product dress (logo and design)

goodwill

regulatory approvals

product certification

export certifications



Fifth Step: Examine Enforceability

Legal Provisions and economic importance

Administrative Action

Legal Steps

Civil Procedures

Criminal Procedures

Sixth Step: Establish value for IP assets

Establish value of core IP assets (to be used for balance)

Establish value of non-core IP assets (to obtain a value for licensing or selling to 3rd parties)

A summary of the contents of an appraisal report is shown in Annex C.

Once the first IP audit is completed, the results should be reflected in an Inventory of IP Audit which will be a management and assessment tool. An IP Audit should contain at least the following information:

- Are the IP rights registered or not;
- Are there any problems with intellectual property issues and how they are addressed;
- Who owns the rights (IPRs, production rights, distribution rights, etc.) and, for those that you do not own, identify the conditions that apply to their use;
- An assessment of whether the IPRs are being used effectively;
- Whether your rights are being challenged, threatened or infringed by 3rd parties;
- Assessment of the efficiency of the IP management and maintenance plan;
- Records of the IP creation and ownership.

4.2 Content of an IP Audit Report

• Inventory issues

A listing of intellectual property assets, including disclosures, patents, copyrights, trademarks, trade secrets, contracts, agreements, etc.

Rights issues

Description of IPRs that have been created or acquired, and whether they have been properly maintained; description of rights that have not been acquired and explanation under what conditions such IPRs should be acquired.

Ownership issues

Does the company have clear ownership over these IP assets? Have IPRs been properly assigned by employees/consultants/subcontractors?

Infringement issues

Does the company use IPRs for which the company does not have rights? Have proper and clear IPR clearance procedures been adopted and are they implemented?

Strategic issues

Are these IPR assets being properly managed and exploited in line with the strategic objectives of the company? Any restrictions to their use?

Deficiency issues

Do you have patentable technologies /research results that are not protected, and why? Are there trademark and design registrations applications to be filed? What provisions have been adopted for the continued use of trademarks, maintenance fees to keep patents and designs in force, etc.?

A Sample IP Audit and Valuation Checklist is attached in Annex D.

4.3 Internet Valuation Resources

Today one can find on the internet many sites and pages that give advice and guidance on the audit and valuation of companies assets, including intangibles and intellectual property rights, but also offer data and statistical and financial information which is useful for the valuation of various assets and for different objectives. In Annex E we have listed some links to some important information and data sources used for IP valuation. We welcome any suggestions for additional links to internet-based IP valuation resources.

The list is open-ended and we will welcome any proposals and suggestions for adding new reference and information sources which are useful for IP audit and IP valuation.

5. IP VALUATION PRACTICE – THE FUTURE

5.1 Future Trends

Valuation professionals skilled in the appraisal of intellectual property are in demand worldwide now and that demand will increase in the foreseeable future. Several conditions support that opinion:

The global character of business will increasingly be dependent on intellectual property rather than on bricks and mortar and commodities. Existing enterprises, even those connected with natural resources or in so-called heavy industry, will continue to expand their reliance on intellectual property as a driver of earnings and added value. The emergence of new forms of business, exemplified by Google, Amazon, Facebook and e-Bay, which are nearly totally dependent on IP, will continue at an increasingly rapid pace.

We also observed a worldwide thirst for 'content'. By content we refer to words, music, and images, both still and in motion. As technology continues its exponential development, one result will be more and more ways to process and deliver content to the buying public. Copyright assets, as one form of intellectual property, will be central in this development. National intellectual property legal systems may be lagging behind this content explosion, but they will catch up.

These business conditions will inevitably result in increasing commerce and business based on intellectual capital and IPRs on a global scale. Where there is commerce, there arises a need for independent valuations. This has been evident in developing as well as newly-privatized business communities.

Everywhere we travel, national governments and members of national or regional business communities express a strong desire to monetize their creativity and innovative products and services, whether it is in the form of technology or 'softer' IPRs such as brands and copyright works. It is a natural progression away from dependence upon material/tangible property and natural resources.

We believe there are two parts to this monetization issue. First, there is the need to obtain capital resources to develop innovations and creative ideas into IPRs that can support commercialized products and services. Second, there is the objective to maximize the economic benefit of those products and services in the marketplace.

Essential elements in the interface between the creators of intellectual property and the capital marketplace are (1) a robust intellectual property legal system and well trained practitioners, and (2) accounting and financial reporting standards that enable effective global communication about the 'numbers'.

Monetization of Copyright Assets by Creative Enterprises

The third essential element is a competent and unbiased valuation profession.

These three professional elements lubricate the interface between 'the inventor or creator and the money' by enabling communication between business entities that normally do not interact with one another and by providing professional expertise to both parties. These skills are not required to the same extent throughout all levels of economic activity. As an example, a multi-national pharmaceutical company (MNE) possesses the skills and resources both to finance the development of its essential IPRs and to monetize them after successful development.

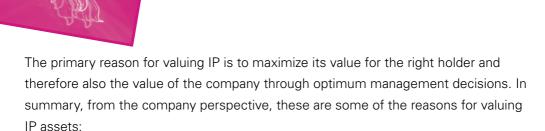
However, in the world of small and medium sized businesses (SMEs), the need for these skills and services is more than evident. This is especially true with respect to copyright assets which are very often created by individuals, within small businesses, or by small groups or individuals. For these constituencies, access to financial resources and capital markets may be difficult or impossible.

These trends and the growing need for competent and ethical professional valuation services lead us to conclude that there is a growing future for the profession.

Unfortunately, and due to the scattered, patchy and uneven experience with IP valuation and appraisal in different countries and regions, there exist significant differences and discrepancies in valuation and appraisal results prepared by different appraisers and appraisal firms in different countries. Therefore, one of the major challenges for the valuation and appraisal profession is to agree on and arrive at universally acceptable valuation standards and criteria that would facilitate the reaching of comparable and universally acceptable valuation results.

5.2 Benefitting from IP Valuations

In the last 15-20 years we have seen a constant growth of companies which have become market leaders through the effective creation, use, acquisition and leveraging of their IP assets through efficient IP management. Nevertheless, in many cases the fact is that the role of IP in business is insufficiently understood. Small and medium companies, the backbone of national economies, have been slow to realize the potential of IP management in increasing their competitiveness. Understandably, many governments have taken a stand in the promotion of such IP management business practices.



• Fund raising (bank loans, venture capital, investment):

to finance their own development plans, many creative and innovative companies have only their own IP assets to offer as collateral. There are a number of creativity-based companies that have used their IPRs (e.g. copyrights) as collateral in both cash-flow-based financing and asset-based financing. Due to insufficient knowledge about IP and valuation, banks continue to be reluctant to accept such assets. In the future, this type of collateralization will be more accepted in the industry and IP valuation will become a standard process. Financing through venture capital is also important for many (especially knowledge-based) companies. When making decisions about possible investment and associated risks, these organizations must be clear about the value and commercial viability of the IP assets belonging to the benefactor and often the reason for investment.

• Company valuation (transactions, IPOs, joint ventures, mergers and acquisitions, management buy-out or buy-in, bankruptcy):

IP is a fundamental component of company value. An accurate IP valuation is required for buying or selling a company, establishing joint ventures, and executing mergers and acquisitions. In such transactions, each party will need to know the value of IP assets being bought or sold as part of the company. If company bankruptcy or reorganization occurs, an assessment of the company's value is required, and this must include the value of IP assets and the assessment of the impact of proposed reorganization plans.

• Efficient management:

The successful exploitation of IP assets can contribute to a company's success. IP exploitation and the creation of business strategies require effective management based on proper and sufficient information. Research, development, legal protection and commercialization decisions involve high but measurable levels of risk. IP valuation facilitates cost effective decision-making and helps to understand and deal with the risks involved.

- Corporate valuation for shareholders,
- Privatization of public entity

• Financial reporting / balance sheet / accounting:

Accounting standards are generally not helpful in representing IP in company accounts and as a result these are often under-valued and mismanaged. Accurate IP value is needed for many aspects of reporting and accounting, including the reporting of fair value estimates in annual reports.

Taxation planning and compliance:

For legal entities, knowing the value of their IP is important for possible tax deductions and tax compliance.

• Assignment or acquisition of an IP asset; licensing in or out an IP asset:

Before a company buys or sells IPR, it must be aware of its worth. Likewise, when negotiating a license contract, both parties must be clear about the values involved. Often, a due diligence report is required outlining the details of the IP being purchased, sold or licensed.

- Investment in the IP asset (e.g. for further development)
- Litigation support and dispute resolution:

Accurate IP appraisal is required in the event of IP rights infringement or breach of contract.

5.3 Maximizing the Value of Copyright Assets

The objective of effective management of any business asset is to increase its value. As an example, if we were the manager of an apartment building, we would work to increase the owner's economic benefit in a number of ways. We would make the building as attractive as possible in order to command higher rents, and we might work to reduce expenses as well. We might reduce the owners risk by negotiating longer leases or reducing tenant turnover. A reader can think of a number of ways in which a good manager could enhance the value of this asset.

We suggest that whatever those observations are, they will bear a great similarity to the four elements of the income method for valuation:

- The amount of future economic benefit expected from exploitation
- The duration of exploitation
- The pattern by which the economic benefits will be received
- The risk of receiving the future economic benefit as expected

All of this is equally true for a copyright asset, although the specifics are unique.



Amount

Achieve the broadest possible range of exploitation opportunities.

As an example, a musical work written exclusively for the harpsichord is unlikely to be widely distributed or sold. The same musical work orchestrated for more common instrumentation has more potential. A member of a musical group might compose a song for the band. A decision needs to be made as to whether to keep the song exclusive to the group or permit it to be distributed more widely. The essence of that decision is whether the band's engagement fees would exceed royalty income.

Versatility can be a strong economic advantage for intellectual properties of all types. Technologies with many potential applications, brands that can be an umbrella for many products or services, or copyright assets that have many forms of expression are much more valuable than those narrowly defined.

Look through the potential exploitations to the end user (buyer). How many of them are there? What is their ability and/or inclination to pay? Every photographer feels that his or her images are superlative, but the buying public may not agree. There is always this tension between art and commerce, but it is an element to consider in the commercial setting.

Duration & Pattern

The most valuable copyright assets have a 'timeless' characteristic. Creating into a current trend can be tempting because of the attraction of rapid recognition, but the economic benefit may be short-lived.

Recalling the concept of present value, it is clear that economic benefit to be received sooner is more valuable than economic benefit delayed.

Risk

Every form of IP exploitation poses some risk, of course. If the owner of a copyright asset elects to exploit it internally in an enterprise (such as the character example discussed in section 3), an investment may have to be made for plant and equipment to make the products with which the copyright asset is associated. That can present some financial risk as well as reduce time to market. The copyright owner might decide to subcontract the product manufacture, which could create quality and delivery problems. If the owner decides to exploit by means of licensing, then of course the selection of appropriate licensees becomes important.

As with trademarks, copyright assets can be endangered by extending them into exploitations of poor quality or which are unacceptable in the marketplace. As an example, an author with a successful series of published books might sell the rights for a television series that turns out to be very unsuccessful. This could have a deleterious effect on future sales of the author's existing and yet unwritten books.

5.4 Final Thoughts

The monetization of copyright IPRs represents, to us, somewhat of a 'new frontier' for entry into world markets. It seems so because:

The creation of copyright intellectual property typically does not require the huge investment of, say, a new drug or technology breakthrough. It does not require a laboratory or highly-specialized education.

The digital age has brought an order-of-magnitude enhancement of the ability to distribute copyrighted works at low cost.

The digital age has vastly widened the forms of exploitation available for copyright works.

The digital age has created an enormous thirst for 'content' of all sorts, worldwide.

We are reminded of the Beatles of 1960, creative young men who began by writing and playing songs in their Liverpool homes. That creativity had a massive influence on the pop music genre, which continues even today. Meteoric as their rise was, their path was funded by substantial investments (by others) for organizing concerts and tours and distributing and publicizing their works. We cannot help but wonder how even their historic success would have played out today.

Monetization is a neologism circumscribing the 'making money out of something'.

Copyright assets, including creative works, music, audio-visual works, advertising scripts and publicity slogans, video-shots, etc., have a lot of hidden potential for generating income for their creators and owners.

However, to be monetized, copyright assets have to be identified and seen in a market and business context.

And one must have an idea of their face and hidden value. Establishing the value is a complex undertaking which needs to be done professionally and updated periodically so as to reflect new circumstances and developments affecting the asset.

Recognizing the rapidly growing importance of copyright assets in today's world, we feel it is useful to present the tested and traditional principles of valuation as they apply to copyright assets in the commercial world.

We hope that the reader agrees that effective management of copyright assets requires their identification, protection, cultivation and, often, their valuation. And we trust that our readers also understand now that a value opinion is not something arrived at with the aid of a crystal ball, but is rather the culmination of a rigorous and unbiased process.



ANNEX A – THE NEW MUSIC STREAMING BUSINESS

(short presentation)

With the development of technology, we see every day new and unexpected opportunities for monetizing copyrights. For example, in the music and audiovisual industry since 2008-2009 there has been a very rapid growth in online music streaming and access services, such as YouTube³⁹ and Last.fm⁴⁰, Spotify⁴¹, Pandora⁴² etc. There exist a number of web-sites where musicians can upload their music, allowing listeners to stream and/or download their music. Some sites do not commercialize the music but just serve musicians to create a profile, upload tracks and have a web presence.

- **39 YouTube** (www.youtube.com) is a video-sharing website, created by three former PayPal employees in February 2005, on which users can upload, view and share videos. The company is based in San Bruno, California, and uses Adobe Flash Video and HTML5 technology to display a wide variety of user-generated video content, including movie clips, TV clips, and music videos, as well as amateur content such as video blogging, short original videos, and educational videos.
 - Most of the content on YouTube has been uploaded by individuals, although media corporations including CBS, the BBC, Vevo, Hulu, and other organizations offer some of their material via the site, as part of the YouTube partnership program. Unregistered users can watch videos, while registered users can upload an unlimited number of videos. Videos considered to contain potentially offensive content are available only to registered users at least 18 years old. In November 2006, YouTube, LLC was bought by Google for US\$1.65 billion, and operates as a subsidiary of Google. source: Wikipedia
- 40 Last.fm (www.last.fm) is a music website, founded in the United Kingdom in 2002. It claimed 30 million active users in March 2009. On 30 May 2007, CBS Interactive acquired Last.fm for UK£140m (US\$280m).
 - Using a music recommender system called 'Audioscrobbler', **Last.fm** builds a detailed profile of each user's musical taste by recording details of the tracks the user listens to, either from Internet radio stations, or the user's computer or many portable music devices. This information is transferred ('scrobbled') to Last.fm's database either via the music player itself (Rdio, Spotify, Clementine, Amarok) or via a plugin installed into the user's music player. The data is then displayed on the user's profile page and also compiled to create reference pages for individual artists. By April 2011 Last.fm reported more than 50 billion scrobbles.
 - The service is free for users in the UK, US, and Germany; users in Canada, Ireland, Australia, New Zealand and Brazil require a subscription to use the radio service (€3.00 per month after a 50 track free trial). The site offers numerous social networking features and can recommend and play artists similar to the user's favourites. It also uses a Wiki system analogous to Wikipedia where users can share information about artists, tracks, and more source: Wikipedia
- 41 Spotify (www.spotify.com) is a commercial music streaming service providing DRM-protected content from a range of major and independent record labels, including Sony, EMI, Warner Music Group and Universal. Launched in October 2008 by Swedish startup Spotify AB, the service had approximately 10 million users as of 15 September 2010, about 2.5 million of whom were paying members. Total users reached 20 million by December 2012, five million of whom pay a monthly subscription fee that varies based on locale. As of April 2013, the service is available in many countries around the world. source: Wikipedia
- 42 Pandora Internet Radio (www.pandora.com) (also known as Pandora Radio or simply Pandora) is an automated music recommendation service and 'custodian' of the Music Genome Project. The service, operated by Pandora Media, Inc., is fully available in the United States, Australia and New Zealand. The service plays musical selections of a certain genre based on the user's artist selection. The user then provides positive or negative feedback for songs chosen by the service, which are taken into account when Pandora selects future songs. source: Wikipedia

Monetization of Copyright Assets by Creative Enterprises

In the early 2000s Apple revolutionized the music world with its iTunes store, and less than 10 years later the industry is subject to another digital transformation as users are moving away from CDs and downloads towards streaming services like Spotify, Pandora and YouTube.

Spotify has 20 million users in 20 countries, with 5 million of them paying \$5 to \$10 a month to eliminate the advertisements popping-up on the screens of those who use the free service.

The services are not yet available in all countries, but, as purveyors of legally licensed music, they have been largely welcomed by an industry that is still suffering piracy. However, as the companies behind these digital services swell into multibillion-dollar enterprises, the relatively small trickle of money that has made its way to artists is causing anxiety about their fate.

For the biggest pop stars, hit streams can provide substantial revenue. According to a Google executive, an example is the Korean singer Psy, who in 2012 created a viral video sensation 'Gangnam Style' that was uploaded to YouTube and had been watched over 1.2 billion times yielding a royalty of about 0.67 cent a viewing and generating an income of \$8 million. This is exceptional and proves the power of the new internet dissemination tools. However, the majority of authors, musicians and performers whose works are not at the top of the charts, do not benefit from such and exceptional income.

In January 2013 the *New York Times* published an article⁴³ about direct commercialization and monetizing of music over the internet. The author confirms that although legal streaming services thrive, many artists are not sharing in the wealth. These services are in tough competition, as witnessed by a 26-year-old from New York City who pays \$10 a month for premium service on Spotify – 'The only time I download anything on iTunes is in the rare case that I can't find it on Spotify.'

The *NYT* article quotes Zoe Keating, an independent musician from Northern California, who in 2012 shared her experience in an unusually detailed way. In voluminous spreadsheets posted on her Tumblr blog, she revealed the royalties she earned from various services, down to the ten-thousandth of a cent.

Even for an under-the-radar performer like Ms. Keating, the numbers painted a surprising picture of what it is like to be a working musician these days. After her songs had been played more than 1.5 million times in over six months on Pandora, she earned US\$1,652.74. On Spotify, for 131,000 plays in 2012 she received \$547.71, or an average of 0.42 cent for each play.



'In certain types of music, like classical or jazz, we are condemning them (the artists) to poverty if this is going to be the only way people consume music,' Ms, Keating said.

The way streaming services pay royalties represents a major shift in the economic gears that have been underlying the industry for decades.

From 78 rpm. records, vinyl discs, audio cassettes and CDs, to the age of iTunes, artists' royalties have been counted as a percentage of a sale price. According to music business professionals, on a 99-cent download, an artist might earn in the US 7 to 10 cents after deductions for the retailer, the record company and the songwriter. One industry joke calls the flow of these royalties a 'river of nickels.'

In the new economics of streaming music, however, the river of nickels looks more like a torrent of micro-pennies, concludes the author of the *NYT* article.

Spotify, which began streaming music in Sweden in 2008, is increasingly seen as representing the future of music consumption. Along with Pandora and other similar services, it pays small fractions of a cent to record companies and publishers each time a song is played, some portion of which goes to performers and songwriters as royalties. Unlike the royalties from a sale, these payments accrue every time a listener clicks on a song, year after year.

The question dogging the music industry is whether these micropayments can add up to anything substantial. The *New York Times* article quotes M. Hartwig Masuch, chief executive of BMG Rights Management, who emphasizes that 'no artist will be able to survive to be professional except those who have a significant live business, and that's very few.'

The United States, the largest music market in the world, has been a critical proving ground for streaming companies, but competition is also quickly spreading globally. **Deezer**⁴⁴, a French on-demand service, is available in over 200 countries and territories, according to its website, reaching nearly three dozen places in the Asia-Pacific region, including Australia, Hong Kong, Indonesia and South Korea.

⁴⁴ Deezer is a French web-based music streaming service. It allows users to listen to music on various devices online or offline. It currently has more than 25 million licensed tracks, over 30,000 radio channels and 30 million users, 4 million of whom are paying subscribers. A list of countries can be found on Deezer's developer website.

And localized streaming services have also sprouted up: **Anghami**⁴⁵, for example, serves listeners in the Middle East, and the Indian music market has **Dhingana**⁴⁶ and **Saavn**⁴⁷. Elsewhere in Asia, there is **KKBox**⁴⁸ in Taiwan, **Wowloud**⁴⁹ in Malaysia and **Douban.fm** in China.

Each type of service pays different rates to individual artists. Pandora's rates are set by local laws. According to a number of music professionals, Spotify generally pays 0.5 to 0.7 cent a stream (or \$5,000 to \$7,000 per million plays) for its paid tier, and up to 90 percent less for its free tier.

The companies behind streaming are growing quickly. Pandora, with 67 million regular users, is publicly traded, with a market value of nearly \$2 billion, and Spotify's investors have reportedly valued the company at \$3 billion.

For those whose income depends on royalties, the biggest concern has been whether streaming cannibalizes CD and download sales by offering a cheap or free alternative.

Cliff Burnstein of QPrime,⁵⁰ the music management company which manages Metallica and other many other artists, said that even if streaming hurt sales, all was not lost as long as the number of paying subscribers continued to climb rapidly. Metallica recently announced an exclusive deal with Spotify. 'There is a point at which there could be 100 percent cannibalization, and we would make more money through subscriptions services,' Mr. Burnstein said. 'We calculate that point at approximately 20 million worldwide subscribers.'

- **45 Anghami** Music. Unlimited is a new digital music app that offers listeners in the Middle East unlimited Arabic & International music to stream and download. Anghami provides access to millions of songs on iPhone, iPad & iTouch.
- **46 Dhingana** is an online music streaming service founded in 2007 that provides a variety of Indian music to listeners worldwide. Its current library offers over 1 million free on-demand songs, in over 42 Indian languages and genres. As of May 2012, Dhingana had over 15 million active visitors. *Dhingana* is a word from the Marathi language which means joy, zeal and frenzy.
 - A report in late 2012 announced that Dhingana averages 200,000 new users who join each month, contributing to a monthly total of 100 million minutes of music streamed on the site.
 - In addition to fighting piracy, founder Snehal Shinde has stated 'we allow our users to easily discover music and share it with their friends, in a very social way. Also, we provide personalized music recommendations based on music that is already being enjoyed by users and their friends, to improve their music experience.'
- **47 Saavn, LLC** is a digital distributor of Bollywood and Tamil Cinema music, with rights to over 2 million music tracks.[3] Saavn is an acronym for 'South Asian Audio Visual Network.' [4] In Hindi, saavn is the season of monsoon, which is often associated with music.
- **48 KKBox** is the largest digital music service provider in Asia, having over 200 music labels' legitimate authorization. You can enjoy music on KKBox anytime and anywhere with different kinds of new albums as well as classic songs and music videos.
- 49 Wowloud is a digital music service that gives instant access to millions of songs. Discover all of today's chart topping hits as well as yesterday's forgotten favorites through one of the biggest collections of music there is!
 - **Wowloud** is open to work with music labels as well as independent artists unattached to any existing music labels.
- 50 The music management company QPrime was created in 1982 by Peter Mensch and Cliff Burnstein. Their first client was Def Leppard. Q Prime has managed the careers of a large number of multiplatinum acts; their roster includes Metallica and Red Hot Chili Peppers, Muse, Josh Groban, Snow Patrol, Jimmy Page and many others. The Financial Times has called Q Prime 'One of the most admired artist management companies'.



It is expected, however, according to Donald S. Passman⁵¹, a music lawyer and the author of the book *All You Need to Know About the Music Business*⁵² that 'if those subscriber ranks grow, royalty rates will also climb, recapitulating a process seen whenever new technologies have been introduced.'

'Artists didn't make big money from CDs when they were introduced, either,' Mr. Passman said. 'They were a specialty thing, and had a lower royalty rate. Then, as it became mainstream, the royalties went up. And that's what will happen here.'

- 51 Donald S. Passman, (www.donpassman.com/allabout.html) one of the most trusted US music lawyers, author of 'All you Need to Know About the Music Business', a book called 'the industry bible' by the Los Angeles Times
 - D.Passman, a graduate of the University of Texas and Havard Law School, practices law with the Los Angeles law firm Gang, Tyre, Rarner & Brown, and has specialized in the music business for over 30 years. Frequently cited as one of the most influential people in the entertainment industry. He count among his clients major entgertainers, publishers, record companies, songwriters, film companies, managers, producers, and other professionals of the music industry.
- 52 See interesting interview with the author at www.donpassman.com/music-interv.html and www. billboard.com/biz/articles/news/1082811/video-donald-passman-on-all-you-need-to-know-about-the-music-business-and

ANNEX B - SAMPLE LICENSING TRANSACTION

RoyaltySource Intellectual Property Database – A service provided by AUS Consultants-

Character Licensing

Licensee:	RADICA U.K. LTD
Licensee Business:	

PEAK ENTERTAINMENT LTD
Telephone Communications, Except Radiotelephone
8

Royalty Rate, % (low range):	8
Royalty Rate, % (high range):	10
Upfront Fee:	\$30,000

Licensed Property:

License Agreement: MIMP010 (Issued 12TH December 2003).

Licensee under this Agreement the British Licensor grants to the British Licensee an exclusive license to apply the Property to the manufacture, marketing, distribution and sale of the Products in the Territory in accordance with the Specifications and the Style Guide and under the terms of this Agreement in the Territory.

The Products: Hand held electronic games trade marked as Skannerz and Battle Discz for Skannerz Battle Orbz (please note the hand held electronic games will not conflict with any other electronic games and for the avoidance of doubt this will include console games and hand held categories such as, but not limited to, GameBoy).

The Property: Monster in my Pocket. Monster In My Pocket are miniature pocket-sized monster characters based upon the history and heritage of 'Monsters' from Medusa, Minotaur and Cyclops of mythological times to the modern classics of Frankenstein, Dracula and Werewolf. Channels of Distribution: Mass market (including, but not limited to, hypermarkets, cash and carry, toy specialty stores, department stores, stationery, gift stores, specialty chain retailers, supermarkets, the internet), Catalogue/ Direct Mail house, Duty Free.

The Territory: United Kingdom, Channel Islands and Eire and then the first option within this category on all worldwide territories upon placement of TV. Terms to be agreed on a territory-by-territory basis.

The Term: 3 years from signature of contract.



Title: Monsters In My Pocket Series One Content: Fully rendered 3D CG Children's action/adventure.

Jason, our young hero, and his friend Diana team up with the immortal wizard Warlock in order to defeat Warlock's evil twin brother Morlock in a magical quest to capture monsters of myth and legend. The monsters (e.g. Vampire, Werewolf, Mad Scientist, Invisible Man) have been scattered all over the globe and shrunk to just six inches tall. A human scream causes them to grow. The two groups are now in a desperate race to capture all the Monsters, for whoever captures all the monsters will win the Quest for Ultimate Power!

Compensation Detail:

Upfront Fee: Advance Royalty: (GBP) 30,000 + vat. (GBP)20,000 on signature of contract, balance paid upon receipt of design materials necessary.

Royalty: 10 % of net selling price FOB, 8% of net selling price DOM.

Guaranteed Royalty: (GBP) nil.

Source: Form SB-2 PEAK ENTERTAINMENT HOLDINGS INC EXHIBIT 10.7,

02/02/2004

www.sec.gov/cgi-bin/srch-edgar?text=0001144204-04-

000794&first=1994&last=2020

The source of information provided in this report has been gathered from public financial records, news releases, and other articles and references, and also includes all of the Licensing Economics Review (LER) issues. While we believe the sources to be reliable, this does not guarantee the accuracy or completeness of the information provided. Copyright© AUS Consultants, Inc.

ANNEX C - CONTENTS OF AN APPRAISAL REPORT

(Valuation reporting standards)

A valuation is, in the end, an opinion. It should be based on a thorough and unbiased gathering of relevant facts, a careful analysis of those facts, and a logical and understandable progression to a value conclusion.

Reporting standards are therefore important, on the one hand because they become a checklist for the appraiser, and on the other, because adherence to them produces a document by which third parties can assess the quality of the valuation.

A competent appraisal report must include the following functions:

Identify and fully describe the assets appraised

State the purpose and intended use of the appraisal

Define the premise of value

State the effective date of the appraisal and the date the report was prepared

Describe the appraisal process employed

Describe the assumptions made, hypothetical conditions, if any, and any limiting conditions

Describe the reasons for the valuation methods used and not used.

It must be signed by the responsible appraiser and any other individuals who provided significant assistance or input in the valuation, with a Certification similar to:

'I certify that, to the best of my knowledge and belief, that the statements of fact in this report are true and correct; the reported analyses, opinions and conclusions are my personal, impartial unbiased professional work product; that I have no bias to the property or to the parties involved with this assignment; and that my compensation is not contingent on any action or event resulting from this appraisal.'



ANNEX D – SAMPLE IP AUDIT AND VALUATION CHECKLIST

Undertaking an IP audit and / or IP valuation needs a systematic approach. To facilitate that work, we offer here a checklist of items / activities which should be considered in such an exercise.

Readers should establish their own checklist depending on the objective and scope of the IP audit / valuation

Establishing the objectives/aim of the IP Audit

Why are you undertaking the IP audit?

Establishing intangible assets list/database

Assessment of core and non-core intangible and IP assets

Preparing for a sale, acquisition or license

Better management of intangible assets (procedures)

Adjusting / upgrading the company value

In contemplation of litigation

What will be the scope of the IP Audit?

Broad

Overall review of management procedures and policies applicable to intangible assets Developing an index of all intangible and IP assets

Narrow

Focusing on a specific asset for purposes of sale, purchase or license

Generic - Specific IP categories

Copyrights

Trade marks, distinctive signs and brands

Designs

Patents for inventions

Registered plant varieties

What will be the Final Product of the Audit?

Comprehensive snapshot of all intangible assets and their management

Index or catalogue of all intangible assets for:

Reevaluation of company portfolio

Merger and acquisition (M&A)

New business strategy

Objective of the IP valuation

Establishing the value of an IP asset / IP portfolio for

Increasing the company capital

Accounting / company balance sheet

Obtaining a bank loan (collateral)

Selling the IP asset

Licensing the IP asset

Apport to a joint-venture

Managing cost

Merger or acquisition

Financial reporting

Identifying the intangible asset

Investigation and Prospection

List all works, products, designs, services, etc., created, developed or used by the enterprise / owner, such as:

Inventions (products or processes), formulas, compounds,

Know-how, trade secrets, maintenance know-how

Prototypes, devices or other technologies,

Specialized manufacturing and testing equipment

Manufacturing information,

Operation and design manuals, calculations

Creative works (individual and collective), such as music; books; computer programs (software), source code; computer video games;

Designs, drawings, diagrams and artwork; sketches and plans;

Laboratory notebooks and experiments, experimental, analytical and design data, R&D information, reports,

Technology and business information; sales & marketing information; customer lists; confidential customer information; computer printouts, operating reports, administrative & managerial information,

Key decision-makers,

Internal organization reports and analyses including pricing information, sales figures, budgets & forecasts, financial projections and information; forecasts & plans; quality control information, procedures, manuals and records; compliance procedures;

Vendor & supplier information; cost, price, profit, loss & margins data, reports & analyses;

Advertising and promotional materials, prospect lists,

Other printed or recorded materials



Identification of IPRs (existing and potential)

List all existing intangible assets (incl. ownership, date of registration, duration of protection, territory of protection, etc.) including IP rights such as:

Copyrights (i.e. publication rights, performance rights, broadcasting rights, distribution, rights, translation rights, software, source codes, audio-visual recordings, databases, etc.)

Question – Is it a fixed and original work of authorship?

Trademarks, brands and distinctive signs

Industrial designs

Patents for inventions, product/process

Know-how, proprietary knowledge and trade secrets

Identify the intangible assets for which IP protection should be sought or which should be protected otherwise

Identify all creative works

Identify all potential marks for company products/services (packaging, marketing literature and advertising)

Identify all potentially proprietary ideas resulting from R&D and creative efforts

Identify all potentially proprietary information, reports, data & analyses resulting from processes, R&D, management, marketing, and customer relations

Relationships

Inputs and internal relations impacting on the various IPRs and intangibles Identify all agreements related to or having an impact on the IPRs between the Company and any third party

License agreements

Assignment agreements

Maintenance agreements

Distribution agreements

Government contracts

Employment agreements

Consulting agreements

Joint development agreements

Technology transfer agreements

Sponsored research agreements

Non-disclosure agreements

Non-competition agreements

Work for hire agreements

Contracts with independent contractors

Categorization of the identified assets

Establish a clear understanding of the specific intellectual property rights to be appraised

Clearly establish the ownership of the specific intellectual property rights to be appraised

Developed and owned by the company/enterprise single author/owner multiple authors/owners any assignment of rights

Developed and owned by staff single author/owner multiple authors/owners any assignment of rights

Acquired from third parties purchased licensed Joint ownership, etc.

List the Core IP assets (very important to the business)

List the Non-core IP assets (not important to the business – it can operate and develop without them)

Assessment/statement of the effective use of the identified IP rights

Have the identified rights been challenged, threatened or infringed by 3rd parties

Assessment of the efficiency of the IP management and maintenance plan



Estimating the economic life of the intangible asset

Consider the characteristics of the end market (influence on economic life)

Has the asset been licensed

If yes, obtain information on the economics from the licensee

Expenses associated with exploitation of the asset

What taxes must be paid

Publicity / advertising charges

Distribution cost

Royalties (to be paid to authors)

List all possible and reasonable exploitation options

Those envisaged by the owner

Other exploitation options (non-envisaged by the owner)

What is the income stream that is to be appraised?

The income received by the owner in self-exploitation

The income received by the owner from multiple licensees

The income received by the licensees from their own exploitation

List impact of external or market factors

- Company brand
- Company reputation / goodwill
- Product brands
- Company and product dress (logo and design)
- Author / inventor reputation
- Regulatory approvals
- Product certification
- **Export certifications**

Examine Enforceability of the IP Rights

- Legal povisions and economic importance
- Administrative Action
- Are there problems with the IPRs and how they are addressed?
- Legal steps
- Civil procedures
- Criminal procedures

Establish value for the IP assets

- Establish value of core IP assets (for example to be used for the balance sheet)
- Establish value of non-core IP assets (to obtain a value for licensing or selling to 3rd parties)

Consideration should always be given to the possible use of all three valuation methodologies – the cost, market, and income methods.

One or more of these may be rejected or their results not relied upon, but they should be considered.



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For more information contact WIPO at www.wipo.int

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