



Intangible Assets: A Study of Valuation Models

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Abstract

In this Paper discussion about the different valuation models related to intangible assets. A discussion of theory identifies and classifies a number of intangible assets. This paper highlights accounting treatment of intangible assets and related aspect. Different valuation approaches, valuation issues and methodology are explained in this theory.

Keywords: Intangible assets, Valuation models, Legal intangibles, Intellectual capital.

Introduction

Intangibles are all around the business world. What intangible assets are, have been under a lot of study for more than forty years and still there is no generally accepted approach on how to measure their value or what makes them to increase or decrease. In the need of a known reference to build the theory for intangibles, the accounting theory analogies are still being made even though the intangible asset concept has evolved to a broader one, intellectual capital (IC). IC still uses an accounting terminology but is studied by a managerial approach¹.

Intangibles valuation has been a concern since the mid 60's. Hermanson used the term "human asset accounting" trying to measure the value of the company's workers and incorporate that value to financial statements. By not being owned by the business, human assets differed from other categories present in financial statements. He dismissed that approach and concluded that the main difficulty lay in identifying an appropriate model for valuing such assets². Intangibles research has been relevant to management since then because there is the awareness that persons, their knowledge and abilities are of great importance for the competitive advantage of the organizations. Edvinsson defined Intellectual Capital as. "The possession of knowledge, applied experience, organizational technology, customer relationship and professional skills that provides AFS with a competitive edge in the market" AFS represents Intellectual Capital as the difference between market value and its book value³. Stewart used the terms human capital, structural capital and customers' capital⁴. Human capital has as main purpose thinking and innovating processes, it doesn't belong to the organization and it is lost when employees leave. Structural capital belongs to the organization. It can be reproduced and shared as technology, inventions, data, publications, strategy, organizational culture, structures, procedures and systems. Clients' capital is composed by relations between the clients and the organization, customer retention, profit and loss per client.

Intangible assets are defined as intangible non – monetary assets that can not be seen, touched or physically measured, which are created through time and/or efforts and are identifiable as separate assets. Intangible assets include patents, copyright, trade marks, trade names, franchise licenses, government license, goodwill and other item that lack physical substance but provide long term benefit to the company. These are assets that you can't touch or feel but still have economic reality. There are two primary forms of intangibles - Legal intangibles and Competitive intangibles. Legal intangibles are under the generic term intellectual property and generate legal property rights defensible in a court of law. Competitive intangible, whilst legally non own able, directly impact effectiveness, productivity, wastage and opportunity costs within an organization and therefore affect cost, revenues, customer service, satisfaction, market value and share price. The cost of intangible assets are systematically allocated to expense during the assets useful life or legal life, whichever is shorter and this life is never allowed to exceed 40 years.

Categories of Intangible Asset

Marketing-related intangible assets: Trademarks, Trade Names, Service marks, Collective marks, Certification marks, Trade dress (unique color, shape, or package design), Newspaper mastheads, Internet domain names and Non-competition agreements.

Customer-related intangible assets: Customer lists, Order or production backlog, Customer contracts and related customer relationships and Non-contractual customer relationships.

Artistic-related intangible assets: Plays, Operas, Ballets, Books, Magazines, Newspapers, other literary works, Musical works such as compositions, Song lyrics, Advertising jingles, Pictures, photographs, Video and audiovisual material, including motion pictures, Music videos, and television programs.

Contract-based intangible assets: Licensing, Royalty, Standstill agreements, Advertising, construction, Management, Service or supply contracts, Lease agreements, Construction permits, Franchise agreements, Operating and broadcast rights, Use rights such as drilling, water, air, mineral, timber cutting, Servicing contracts such as mortgage servicing contracts and Employment contracts.

Technology-based intangible assets: Patented technology, Computer software and mask works, unpatented technology, Databases, including title plants and Trade secrets, such as secret formulas, processes, recipes. Specifically intangible assets may be defined as

Patents: Patents provide exclusive rights to produce or sale new inventions.

Copyrights: Copyrights provide their owner with the exclusive rights to reproduce and sell artistic works, such as books, songs or movies.

Trademarks and Trade names: Trademarks and trade names include corporate logos, advertising, jingles and product name that have been registered with the government and serve to identify specific companies and products.

Franchise licenses: The purchaser of a franchise licenses receives the right to sale certain products or services and to use certain trademarks or trade names. This right is valuable because they provide the purchaser with immediate customer reorganization.

Government licenses: The purchaser of a government licenses receives the right to engage in regulated business activities.

Goodwill: Goodwill equals the amount paid to acquire a company in excess of its net assets at fair market value. It should be noted that while goodwill is technically an intangible assets, it is usually listed as a separate item on a company's balance sheet.

Objective and Accounting Treatment of Intangible Assets

The objective of IAS 38 is to prescribe the accounting treatment for intangible assets that are not dealt with specifically in another IAS. The standard requires an enterprise to recognize an intangible asset if, and only if, certain criteria are met. The standard also specifies how to measure the carrying amount of intangible assets and requires certain disclosures regarding intangible assets. The accounting treatment for intangible assets has been a controversial topic. Under companies act 1985 intangible assets is a main heading that should appear on face of the balance sheet. Intangibles may be classified by a company according to whether they are purchased from others or internally developed. Walker concludes that it is difficult to find

any stated purpose for classification in many papers that do classify intangibles⁵. However, one purpose seems to be for management purpose. In order to manage successfully one has to make visible and put labels on different resources; one way to do that is to put them into different categories⁶. From a marketing point of view Guiding and Pike classify Intangible assets into four categories based on a conceptual representation of the series of events that lead to the creation of a competitive advantage: value creators, marketing assets, value manifestations and the synthesis of marketing assets: competitive advantage⁷. Classification of Intangibles based on source like purchased and internally developed. It is also based on useful life as following-

Intangible assets with finite life

The cost less residual value of an intangible asset with a finite useful life should be amortized on a systematic basis over that life. The amortization method should reflect the pattern of benefits. If the pattern cannot be determined reliably, amortize by the straight line method. The amortization charge is recognized in profit or loss unless another IFRS requires that it be included in the cost of another asset. The amortization period should be reviewed at least annually. The asset also should be assessed for impairment in accordance with IAS 36.

Intangible assets with indefinite lives

An intangible asset with an indefinite useful life should not be amortized. Its useful life should be reviewed each reporting period to determine whether events and circumstances continue to support an indefinite useful life assessment for that asset. If they do not, the change in the useful life assessment from indefinite to finite should be accounted for as a change in an accounting estimate. The asset should also be assessed for impairment in accordance with IAS 36.

Measurement Subsequent to Acquisition: Cost Model and Revaluation Models

An entity must choose either the cost model or the revaluation model for each class of intangible asset.

Cost model- After initial recognition the benchmark treatment is that intangible assets should be carried at cost less any amortization and impairment loss.

Revaluation model- Intangible assets may be carried at a revalued amount (based on fair value) less any subsequent amortization and impairment losses only if fair value can be determined by reference to an active market. Such active markets are expected to be uncommon for intangible assets. Under the revaluation model, revaluation increases are credited directly to "revaluation surplus" within equity except to the extent that it reverses a revaluation decrease previously recognized in profit and loss.

The Valuation of Intangible Assets

Intangible assets, the strategic key to a business enterprise's future, are invisible with respect to traditional bottom-line thinking and corporate practice⁸. Current accounting methods do not convey the relevant and timely information that is critical to the survival and success of today's business enterprises⁹. Prior to the knowledge era, businesses lived in a world of tangibles, which work well with current accounting practices; however, things are different in today's world of intangibles. The framework of intangible valuation areas (FIVA) allows a business to identify and link performance measurements /indicators to its intangible value drivers. It supports the capture and subsequent evaluation of leading and lagging indicators in the achievement of a knowledge management strategy¹⁰.

The proportion of intangible assets as part of the overall total assets of the company is often greater than that of the tangible assets. However, the value of the majority of them do not appear on the financial statements, as the lack of transparency or the absence of a benchmark market makes it difficult to value them¹¹. Acceptable methods for the valuation identifiable intangible assets and intellectual property falls into three broad categories. They are market based, cost based or based on estimates of past and future economic benefits. In an ideal situation, an independent expert will always prefer to determine a market value with reference to comparable market transactions. This is difficult enough when valuing assets such as bricks and mortar because it is never possible to find a transaction that is exactly comparable. In valuing an item of intellectual property, the search for a comparable transaction becomes almost futile. This is not only due to lack of compatibility, but also because intellectual property generally not developed to be sold and many sales are usually only a small part of a larger transaction and details are kept extremely confidential. There are other impediments that limit the usefulness of this method. Cost-based methodologies, such as the "cost to create" or the "cost to replace" a given assets, assume that is some relationship between cost and the approach has very little to command itself other than case of use. The method ignores changes in the time value of money and ignores maintenance. Past and future economic benefits can be broken down in to four limbs.

The capitalization of historic profit While this capitalization process recognizes some of the factors which should be considered, it has major shortcomings, mostly associated with historic earning capability. The method pays little regard to the future.

Gross profit differential methods are often associated with trademark and brand valuation. This is the difference in the sale prices, adjusted for differences in marketing cost. That is the difference between the margin of the branded or patented product and an unbranded or generic product. This formula is used to drive out cash flows and calculate value.

The excess profits method looks at the current value of the net tangible assets employed as the benchmark for an estimate rate of return. This is used to calculate the profits that are required in order to induce investors to invest into net those net tangible assets.

Relief from royalty considers what the purchaser could afford, or would be willing to pay. The royalty stream is then capitalized reflecting the risk and return relationship of investing in the assets.

Valuation Model

Intangible assets valuation can be carried out in a number of ways. Intangible business considers all approaches for all intangible assets valuation, including brand valuations, business valuations, share valuations, contract valuations, for valuing customer relationships, valuing shares, valuing patents and for all other intangible assets valuations¹². The most appropriate intangible assets valuation method is then selected for the specific asset and purpose. Generally there are three main approaches intangible business uses when valuing intangible assets:

Income valuation

Further earnings that are attributable to the brand or other intangible asset are forecast over its useful life and discounted to its net present value. This requires an appreciation of market trends, competitive dynamics, and the nature of the intangible assets and their relationship with the consumer.

Market valuation

Transactions are analyzed for comparability, including licensing arrangement which can be investigated to benchmark an appropriate royalty rate.

Cost valuation

The cost of recreating the intangible asset is considered alongside the historic cost of the initial creation. Generally, intangible business uses the income valuation approach of the relief-from-royalty methodology for intangible asset valuation. This is because it is the most economically in-line with commercial reality and can be benchmarked most accurately, resulting in a valuation with as much objectivity as possible. The resulting brand values an intangible asset values can be used in a number of ways including: compliance financial reporting standards such as IFRC. IAS and US GAAP, inter-company reporting, tax planning, ROI analyses, licensing arrangements. MandA, brand transactions, dispute resolution and investor relations. There is one other method of valuation of intangible assets.

The Discount Method of Valuation

In the discount method of valuation, the goal is to determine for a specific asset, what the future cash flow would be over its

projected economic life, and thereby derive what the net present value of the asset. Every asset tangible or intangible has a given economic life over which it provides the vast majority of its income to the owner. For some patents and copyrights the remaining economic life can be as long as 20 years. For others it may be as short as six months.

Valuation methodology

i. Choosing an appropriate valuation methodology. Although market methods are best where available, the lack of market evidence means that income methods are more often applied. ii. The determination of appropriate assumptions requires experience and judgment due to the subjectivity involved. iii. The process of selecting an appropriate royalty rate range based on market evidence needs to be rigorous, as the value implications of a small change in the royalty rate can be significant. iv. The determination of the cost of capital requires experience and judgment. The cost of capital should be consistent with the risks and rewards of the intangible asset being valued. v. Projections need to be carefully reviewed as this will impact on the value of the intangibles and will have a bearing on future impairment reviews. vi. Avoiding double counting of intangible value as two or more intangible assets may contribute to the same stream of earnings e.g. a well known trade mark and the underlying technology.

Value of Intangible Asset not yet released

To value productions or new works not yet produced and marketed, one may follow basically the same rules as presented above, but with some notable exceptions. First, he must investigate with great care what the projected economic life will be on the new asset. That means asking question, how much use has been realized out of similar rights, licenses, lists or other assets. The estimate of a usable economic life should not just be some "wild guess". If the asset is to have a long economic life, costs are to be factored into update the asset to keep it valuable. Since one does not have a track record on this asset, sales projections and cost projections must be made to forecast, as best and a conservative net operating income for the asset. This is called a "proforma" in financial circles. Once he has completed a Proforma on the new asset, divide the forecasted net income by its proposed economic life and divide by the anticipated capitalization rate—and he will have the estimated present value of that intangible asset. Any accurate valuation of a single asset or a whole company must include some discussion as to terms under which it might be sold and the market it is being sold to, supply and demand still rule pricing in the free market in the industry to find out if the asset is in great supply, high demand or neither.

Valuation Models can be used to value intangible assets such as patents, copyrights, software, trade secrets, and customer relationship. valuation of intangible assets are often necessary for financial reporting and intellectual property transactions. There

have been several new tools developed recently adding in the valuation of intellectual property. The 25% tool, Monte Carlo analysis, and derivative revenue model are just a few of these tools. Also, traditional methods such as net present value, internal rate of return, and discounted cash flow can also be used.

Conclusion

Intangible assets cannot be seen and physically measured but have immense value for the business. There are two primary forms intangible and competitive intangibles. Intangibles assets have four major characteristics. They have no physical substance and future economic benefits but the value of those benefits are difficult to determine. Their useful life can't be readily determined. They generally have operational use v/s investment use in the business.

Although yet there are a number of intangibles assets but a few are very popular in the parley of intangible assets such patents, copyright trademark and trade names, franchise licenses, government licenses and goodwill. The intangible assets a primary classified in five category i. Marketing related intangibles assets ii. Customer related intangible assets iii. Artistic related intangible assets iv. Contract- based intangible assets v. Technology based intangible assets. The paper also highlights accounting treatment of intangible assets related aspects. Besides this paper also explain different valuation methods, approaches and valuation methodology.

Further research may be carried out considering a comparative study of valuation models of intangible assets, a critical study of valuation models of intangible assets, a study may be also be organized considering categories of intangible assets with there related valuation model and so on.

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