Three approaches to valuing intangible assets
Two of the world’s most prestigious accounting bodies, AICPA and CIMA, have formed a joint-venture to establish the Chartered Global Management Accountant (CGMA) designation to elevate the profession of management accounting. The designation recognises the most talented and committed management accountants with the discipline and skill to drive strong business performance.

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INTRODUCTION

Intangible assets (intangibles) are long lived assets used in the production of goods and services. They lack physical properties and represent legal rights or competitive advantages (a bundle of rights) developed or acquired by an owner. In order to have value, intangible assets should generate some measurable amount of economic benefit to the owner, such as incremental turnover or earnings (pricing, volume and better delivery, amongst others), cost savings (process economies and marketing cost savings) and increased market share or visibility. Owners exploit intangibles either in their own business (direct use) or through a license fee or royalty (indirect use). The International Glossary of Business Valuation Terms (IGBVT) is a glossary of business valuation terms that defines intangible assets as “non-physical assets such as franchises, trademarks, patents, copyrights, goodwill, equities, mineral rights, securities and contracts (as distinguished from physical assets) that grant rights and privileges, and have value for the owner.”

For financial reporting under US generally accepted accounting principles, the definition simply is, “assets (not including financial assets) that lack physical substance.” The most important difference in this definition is that it excludes goodwill, which is separately defined as “the excess of the cost of an acquired entity over the net amounts assigned to assets acquired and liabilities assumed.” Financial goodwill also includes any intangible assets that do not meet the recognition criteria in the financial reporting standards.

Apart from tangible assets that have financial substance (things like cash, accounts receivable or prepaid expenses) or physical substance (fixed assets such as equipment), intangible assets show several characteristics that are described in box 1.

Box 1: Intangible Asset Characteristics

- **Identifiability.** Intangible assets can be identified specifically with reasonably descriptive names and should see some evidence or manifestation of existence such as a written contract, license, diskette, procedural documentation or customer list, amongst others. The intangible assets should have been created at an identifiable time (or event) and be subject to termination at an identified time (or event).
- **Manner of acquisition.** Intangible assets can be purchased or developed internally.
- **Determinate or indeterminate life.** A determinate life will usually be established by law or contract or by economic behaviour and should have come into existence at an identifiable time as the result of an identifiable event.
- **Transferability.** Intangible assets may be bought, sold, licensed or rented and are subject to the rights of private ownership, ensuring a legal basis for transfer.
CONDUCTING A VALUATION OF INTANGIBLE ASSETS

Valuation assignments must estimate the value of intangibles, recognising the volatility, on-going creation and problems with protection and enforcement. Business valuation analysts have been independently valuing intangible assets for many years, usually in the context of an exchange between owners (transaction), for estate and gift tax purposes or as part of a litigation assignment. Knowledge underlies the creation of value. Some of the questions that need to be answered include the following:

- What would a willing buyer pay to employ the intangible asset?
- What is the useful life of this asset?
- What portion of the operating income does this asset generate?

Financial reporting concepts require measurement of these separable intangible assets from the overall goodwill in a purchase price allocation, attributable to an acquisition (price paid over tangible assets and assumed tangible liabilities) and periodic testing of intangible assets and unallocated residual goodwill for impairment. I’ve included some of the most common types of assignments in box 2.

Box 2: Common Financial Reporting Assignments

In financial reporting, intangible assets are valued on a control basis, and the total value of the intangible is estimated rather than the equity in the intangible. In other assignments, some proportion or fractional interest of the rights or total ownership in equity may be the subject being appraised.

- Financial reporting (goodwill allocation, goodwill impairment and intangible asset impairment)
  - Purchase price allocation
  - Goodwill impairment
  - Accounting for impairment or disposal of long lived assets
- Taxation (all levels of government)
  - Charitable contribution
  - Gift or estate
  - Compensation paid (intellectual property)
  - Basis of transferred assets in partnership
- Transaction, merger, contribution to joint venture, acquisition and fairness opinion
- Financing, loan collateral or securitisation
- Litigation (infringement damage, contract breach, marital dissolution, anticompetitive behaviour and attorney malpractice)
- Transfer pricing (US Internal Revenue Code Section 482 studies—related intercompany parties in different tax jurisdictions)
- Licensing and royalty rate decisions
- Bankruptcy and reorganisation analysis
Is an intangible asset valuation assignment different from a more standard, or traditional, business valuation assignment? Well, yes and no. I just want you to know that I am being very decisive here. While it is true that one particular valuation method might be wrong precisely for a particular intangible asset, there are usually several valuation methods that would be approximately right, and while arguments exist for the use of each of these methods, there may be no clear winner. Doesn’t that make you feel better?

In undertaking the intangibles assignment, there are common planning elements for all valuation assignments, such as the following:

- Purpose and objective of the analysis
- Defining the subject intangible asset
- Understanding the legal rights subject to analysis
- Date of value
- Highest and best use considerations
- Report writing—telling a story analysis should be replicable

However, data collection will probably be different in the intangibles assignment. We need to consider the following:

- History and development of the intangible asset
- Owner or operator, or both
- Licensee or licensor, or both
- Industry operations and pricing data
- Competitive environment
- Commercial comparative intangible assets, cost and treatment

The minor exception to approaches and methods to be used in intangible asset valuation assignments is that the asset based approach will be referred to as the cost approach. There will be a few minor twists in the application of these approaches, but they are similar. As in all valuations, all three approaches should be considered. Here are a few ideas on methodologies and the inherent struggles in using each one.

**Market Approach**

Observable (one might say “findable”) market based transactions of identical or substantially similar intangible assets recently exchanged in an arm’s length transaction are often difficult to obtain. Publicly traded data usually represents a market capitalisation of the enterprise, not singular intangible assets. Market data from market participants is often used in income based models, such as determining reasonable royalty rates and discount rates. Direct market evidence is usually available in the valuation of internet domain names, carbon emission rights and US Federal Communications Committee licenses (for radio stations, for example). Consider the following:

1. Search for sale/license transactional data
2. Issue of comparability and timing
3. Selecting/adjusting price multiples
4. Selecting/adjusting royalty rates

**Income Approach**

Income based models are best used when the intangible asset is income producing or when it allows an asset to generate cash flow. Just as in other valuation assignments, an income approach technique converts future benefits (such as cash flows or earnings) to a single, discounted amount, usually as a result of increased turnover or cost savings. We have the traditional two choices of either capitalising a single period of benefits or discounting a future stream of benefits. One of the primary difficulties within an income approach method is distinguishing the cash flows uniquely related to the intangible asset from the cash flows related to the whole company. Income models examine a discount rate from either (1) a weighted average cost of capital (WACC), (2) a weighted average return on assets (WARA), or (3) an internal rate of return (IRR) to the investor. Among the most common income based methods is the relief
from royalty method, where one directly estimates cost savings (or income enhancement) from using an intangible such as a trademark or patent. Under the relief from royalty method, value is based on the avoided third party license payment for the right to employ the asset to earn benefits. A multi-period excess earnings model begins with an estimate of total income reduced by contributions from all other tangible and intangible assets, yielding residual income (or excess) that is then discounted to present value. Income based methods are usually employed to value customer related intangibles, trade names, and covenants not to complete. Consider the following with regards to the income approach:

1. Separation of revenue streams and related expenses
2. The expected useful life of the intangible asset
3. Alternative measures of income
4. Operating earnings of the intangible asset
5. Royalty rate income that might be earned by the intangible asset
6. Direct capitalisation methods
7. Residual value considerations
8. Discount rate selection
9. Alternative valuation methods including real options techniques and Monte Carlo models
10. Tax amortization benefit (more controversial)

Cost Approach

Cost based analyses are based on the economic principle of substitution and usually ignore the amount, timing and duration of future economic benefits, as well as the risk of performance within a competitive environment. Historical cost reflects only the actual cost that had been incurred to develop the asset. Reproduction cost new implies the current cost of an identical new property. Replacement cost new implies the current cost of a similar new property having the nearest equivalent utility to the property being valued. In most cases, replacement cost new is the most direct and meaningful cost based means of estimating the value of an asset. Once replacement cost new is estimated, various forms of obsolescence must be considered, such as functional, technological and economic. Physical deterioration is common for tangible assets, but not for intangibles, although overuse or deterioration of tangible assets could affect value of specific intangibles and the business enterprise. You might reflect upon the following formula:

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\text{Reproduction Cost New} - \text{Curable functional and technological obsolescence} = \text{Replacement cost new} - \text{Incurable functional and technological obsolescence} - \text{External economic obsolescence} - \text{Physical deterioration} = \text{Pre-tax value of the intangible asset (absent any depreciation benefit)}
\]

Cost based models are best used for valuing an assembled workforce, engineering drawings or designs and internally developed software where no direct cash flow is generated. Consider the following:

1. Hard and soft costs are included
2. Cost measurements
3. Reproduction cost new (exact duplicate)
4. Replacement cost new (equal utility)
5. Measuring functional and economic obsolescence
6. Replacement cost new less depreciation

While different valuation analysts may approach the valuation assignment differently, the following table illustrates how I believe you should approach the valuation for certain types of intangibles.
TABLE 1: Intangible Valuation Approach Summary

<table>
<thead>
<tr>
<th>ASSET</th>
<th>PRIMARY</th>
<th>SECONDARY</th>
<th>TERTIARY</th>
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<tbody>
<tr>
<td>Patents</td>
<td>Income</td>
<td>Market</td>
<td>Cost</td>
</tr>
<tr>
<td>Technology</td>
<td>Income</td>
<td>Market</td>
<td>Cost</td>
</tr>
<tr>
<td>Copyrights</td>
<td>Income</td>
<td>Market</td>
<td>Cost</td>
</tr>
<tr>
<td>Assembled workforce</td>
<td>Cost</td>
<td>Income</td>
<td>Market</td>
</tr>
<tr>
<td>Internally developed software</td>
<td>Cost</td>
<td>Market</td>
<td>Income</td>
</tr>
<tr>
<td>Brand names</td>
<td>Income</td>
<td>Market</td>
<td>Cost</td>
</tr>
<tr>
<td>Customer relations</td>
<td>Income</td>
<td>Cost</td>
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The Association of International Certified Professional Accountants, a joint venture of AICPA and CIMA, established the CGMA designation to elevate the profession of management accounting globally.