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Accounting Standards Regarding Intellectual Assets

By

Halsey Bullen and Regenia Cafini

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Mr. Bullen recently retired from the Financial Accounting Standards Board. Ms. Cafini is a Project Manager with the Financial Accounting Standards Board. The views expressed in this paper are those of Mr. Bullen and Ms. Cafini. Official positions of the Financial Accounting Standards Board are determined only after extensive due process and deliberation.

Overview

Albert Einstein had a sign in his Princeton office that stated, “Not everything that counts can be counted, and not everything that can be counted counts.” The famous physicist might be surprised to find how well that statement applies to accounting and financial reporting, especially in the area of intellectual assets. Under both international and US financial reporting standards, much information about intellectual assets cannot be accounted for and some information that is accounted for is not necessarily relevant to investment and credit. Improvements in accounting for business combinations, nationally and internationally, have increased the visibility of some of these assets. However, more thought and research is necessary so that relevant information about intellectual assets can be reported. While the costs of acquiring and developing intellectual assets is an important economic measure in terms of how scarce resources are allocated by the company, information that addresses the questions of “what”, “why” and “to what end” may be more useful to users of financial statements.

This paper begins by discussing the objectives and limitations of financial reporting regarding intellectual assets and the special challenges raised by them. It then contrasts accounting for intellectual assets based on historical costs—inputs—with accounting based on measures of value—outputs, discussing the advantages and difficulties of each approach. It then reviews the current state of accounting for intellectual assets in US Generally Accepted Accounting Principles (US GAAP) and International Financial Reporting Standards (IFRS). Finally, it considers the prospects for improvement in accounting for intellectual assets.

1. Objectives and Limitations of Financial Reporting

External financial reporting has a microeconomic focus. The objective of financial reports issued by companies and attested to by auditors is to provide information for investment and credit decisions—whether to buy the company's shares or loan money to it. Accountants are aware that those reports are used by a wider group, including present and potential shareholders, investors, lenders, suppliers, customers, employees and even macroeconomists. But, providing information to that wider group is not the objective. Furthermore, users of these general purpose financial reports are expected to have a reasonable understanding of business and economic activities and the willingness to study the information with reasonable diligence.

Users of financial reports are *not* supposed to be well versed in accounting and the standards used in compiling financial reports. But it has become increasingly more difficult to use financial reports without some understanding of accounting standards with the rising sophistication of the global capital markets, the proliferation of accounting standards to address advances in financial and commercial structures, and interpretations by regulators and courts as to what constitutes acceptable judgment and application of these standards.

For users, not understanding financial accounting standards introduces the risk of misunderstanding the financial reporting information. Financial reporting has significant limitations. For example, not all of the economic resources of an enterprise are recognized as assets for financial accounting purposes. Likewise, not all of the potential

liabilities facing an entity are recognized or reported either. Furthermore, those limitations are not evenhanded-- accountants tend to be conservatively biased. In reaction to accountant's concerns about uncertainty and measurability, it is more likely for assets to be understated or omitted than for liabilities to be. This is especially true for intellectual assets.

The Special Accounting Challenge of Intellectual Assets

From an accountant's point of view, intellectual assets are fraught with uncertainty and measurability issues. Consider the rapid pace of advances in computer chip technology and the mapping of the human genome and the cascading implications of those on the rate of obsolescence and value measurements for related intellectual assets throughout the value chain for the information technology and pharmaceutical industries. One costly project may yield a blockbuster product, but the next two may yield nothing. That boom or bust aspect of investment in intellectual assets differs from most investments and in productive capacity, for which the range of variability in possible payoff is much narrower. The more novel, radical, or theoretical the idea, thought, or innovation, the greater the impact this asset may, or may not, have on the future earnings and value of the company.

Considerable accounting standards debates about intellectual assets have focused primarily on research and development initiatives of scientific, engineering, or return on production. But research and development activities give rise to only part of the intellectual assets that create value. Comparatively, very little attention has been given to

intellectual assets arising from marketing efforts and brand building; customer-focused activities that increase the value of a customer base or list; and authorship, artistic or literary activities. For example, the recent acquisition of the large consumer products company, Gillette, revealed marketing-related assets that vastly exceeded the reported assets. While financial accounting standards will continue to evolve and improve in the financial reporting of intellectual assets, it seems likely that areas will remain that defy meaningful and reliable measurement.

2. Inputs or Outputs—Historical Cost or Measures of Value

Much of the accounting underlying today's financial reporting is based on historical costs in completed transactions. The price in the transaction that acquired the asset or incurred the liability is the basis for recording it. Assets wear out or become obsolete, and accountants established conventional depreciation or amortization procedures to expense the cost of assets over the expected service life. For assets that lose their worth sooner than expected, impairment write-downs are used to reflect the decreased value. However, the fact that the value of some assets go up, rather than down, over time was, and still remains, largely unrecognized in US financial reporting. Furthermore, under US GAAP, internally developed intellectual assets are generally not recognized as assets, even though at some point they meet the definition of an asset. Instead, the costs incurred to develop and maintain them are expensed as incurred. Those internally developed intellectual assets that are recognized, for example, patents, are

recognized and recorded at the cost to register and protect the asset, not the value of the asset itself.

Additionally, accounting systems in general must deal with the agency problem associated with commercial models that separate management from ownership. Financial reporting provides a partial basis for accountability of management to the capital owners but gives limited insight to the daily decisions made by management regarding levels of investment levels in intellectual assets. The limited information on internally developed intellectual assets creates a gap for owners and other users of financial reports that in the absence of improved financial reporting must be bridged with other sources of information.

The advantages accounting based historical transactions (inputs) and lie in the verifiability of the recorded transaction values. In addition, advocates of the historical cost model argue that it is cost efficient. The disadvantage is that without a well-defined economic event or transaction, some assets and some liabilities escape the financial reports. Additionally, the historical cost system is better at recognizing when an asset's utility to the company has decreased rather than when it has increased or when a new asset has materialized within the company. In terms of management accountability, historical cost accounting can often result in a conservative view on the value maintained or added over time.

Accounting based on regular fair value measurements (outputs) would provide the most relevant information on the current underlying economics at a point in time. Reflecting on common individual investments like a house, absent tax concerns, the most relevant economic information is not what was paid for the house, but what it is worth

today. However, it may be costly to regularly assess the fair value. Also, some doubt that the corresponding benefits of full reporting under fair value or current values will justify the costs involved.

Accounting for intellectual assets exemplifies a struggle between reliability and relevance. While the historical cost convention may not represent the most relevant information regarding the economic conditions at a point in time, this convention is built on verifiability and cost-benefit considerations. Users have managed to bridge the relevance gap with other information in order to make their own value assessments. A system of accounting based on current values would increase the relevance of the information reported about economic realities for intellectual assets but would introduce difficulties in verifiability and might be more costly. There is considerable debate whether accounting for intellectual assets at fair value would provide information of sufficient value to justify the increased cost.

Current State of Financial Reporting for Intellectual Assets

International financial reporting in the area of intellectual assets is basically similar to US reporting, with three notable differences. First, International Accounting Standard 38, *Intangible Assets*, does allow for the recognition of some internally developed intangible assets during the development stage, once certain criteria are met. However, those criteria have been criticized as overly subjective so much so that a company that does not want to recognize its intellectual assets can find a way around the standard's recognition requirement. Also, the initial recognition is still based on incurred

costs (inputs)—not resulting fair value (outputs). Second, under IFRS business combinations guidance, acquired research and development assets that are identifiable and able to be **reliably measured** are recorded as intellectual (intangible) assets. [Emphasis added.] In contrast, under US GAAP, the acquired research and development assets are valued at fair value under the purchase method, but if those assets do not have an alternative use, the amounts are immediately written off to expense--consistent with existing US treatment of internally developed R&D. Third, IFRS allows for revaluation of certain intellectual assets (intangible assets) that have determinate lives, such as those arising from licensing, royalty or standstill agreements; lease agreements; operating and broadcast rights; use rights such as drilling, water, air, mineral, timber; or employment contracts.

However, IAS 38 restricts the revaluation to those assets for which an active market exists. The revaluation model also does not allow the revaluation of intellectual assets that have not previously been recognized and does not allow the initial recognition at amounts other than cost. While IAS 38 acknowledges it may be possible for an intellectual asset to have an active market, it states that that would be uncommon. The standard also explicitly states that an active market **cannot** exist for brands, newspaper mastheads, music and film publishing rights, patents, or trademarks, because each such asset is unique. [Emphasis added.] Intuitively, one would expect to see more intellectual assets reported under IFRS guidance, but IAS 38 is relatively new and we are not aware of sufficient information to assess whether the apparent differences between US GAAP and IFRS will or will not give rise to material differences in practice.

IAS 38, and IFRS 3 (*Business Combinations*) do, however, raise a concern that alternative treatments may arise due to the perceived subjectivity of the recognition criteria that include a reliability threshold. Alternative treatments in accounting standards, whether granted implicitly or explicitly within a standard, complicate the use and understanding of financial statements by potentially introducing bias in recognition influenced by the risk tolerance or aversion of a particular company or management team. The state of affairs is even further complicated, some believe, by a lack of clear guidance regarding fair value measurement, especially where there may be little or no observable marketplace activity for the assets concerned, which could result in noncomparable values for similar types of assets.

In contrast, recent improvements in accounting for business combinations under international and US accounting standards have generally resulted in more acquired intellectual assets being transparently recognized at their fair value cost at the time of acquisition and fewer being opaquely subsumed into goodwill. The business combination standards eliminated the "pooling" method of accounting for business combinations (the adding together of each participant's previous account balances) and stressed the importance of recognizing the intellectual assets acquired, even though they may not have been previously recognized by the acquired company.

3. Prospects for Change in Financial Reporting of Intellectual Assets

Improvements in international and US accounting standards have increased the visibility of intellectual assets and their impact on the value of a company. More work

remains to further enhance the visibility of these assets and make the recognized value more relevant to users. The 2005 financial reporting year is the first full financial reporting cycle that mandates the use of the International Financial Accounting Standards. The Securities and Exchange Commission has put together a research group to access the quality of all foreign filings and assess their consistency with IFRS and US GAAP. Additionally, the Australian Accounting Standards Board is conducting a research project aimed at discovering ways that financial reporting might be improved for intellectual assets. Finally, the FASB staff is currently conducting research to determine what steps toward convergence of US and IFRS standards for intangible assets should be proposed and what considerations may be relevant beyond convergence to perhaps improve accounting for intellectual assets, especially internally developed assets, prospectively. We hope the reviews and assessments currently under way will give us additional information about the nature and extent of internally developed intangibles and illuminate next steps to be considered in US standards for intellectual assets whether in the form of enhanced recognition criteria that strikes an acceptable balance between reliability and relevance or increased disclosure information.

Appendix A

How an intellectual asset is acquired affects whether an asset is recognized in the financial reports, which results in a lack of parity between an internally developed intellectual asset and one acquired via purchase or a business combination. Most internally developed assets remain unrecognized in the company accounts. Those that do get recognized are recognized at an amount representing some aspect of the cost of that asset, such as the legal costs for obtaining a patent. More often than not, those costs are only a small fraction of the total amount expended to get the intellectual asset to its current state and generally bear little resemblance to its value or relative importance to the company. Under US GAAP, the cost of research and development, or the pursuit of intellectual assets, is generally not recognized as an asset and is expensed as incurred. Exceptions include:

- Capitalization of certain development stage costs for internally developed software; and
- R&D spending that results in an asset that has an alternate future use.

International Financial Reporting Standards allow for earlier recognition of some internally developed intangible/intellectual assets and research and development activities that are in process at the time of acquisition, if certain criteria are met, somewhat similar to the US standards regarding recognition of internally developed software. In addition to the reliability threshold required by IFRS 3 in business combinations, IAS 38 requires

intellectual (intangible) assets to meet certain additional criteria before being recognized. An internally developed asset is recognized when the following criteria can be demonstrated:

1) Technical feasibility of completing the intangible asset so that it will be available for use or sale;
2) Its intention to complete the intangible asset and either use it or sell it;
3) Its ability to use or sell the intangible asset
4) The mechanism by which the intangible asset will generate probable future economic benefits;
5) The availability of adequate technical, financial, and other resources to complete the development and to use or sell the intangible asset; and
6) The entity's ability to reliably measure the expenditure attributable to the intangible asset during its development.

Development is defined by IFRS as the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems, or services prior to commencement of commercial production or use. A couple of important matters to be aware of are:

- Identifiable assets that result from research and development activities are classified as intangible assets because the tangible prototype or model is

considered secondary to the knowledge that is the primary outcome of those activities.

- The International Accounting Standards Board (IASB) has not specified whether mineral exploration and evaluation assets should be considered as tangible or intangible. This classification is currently left to the judgment of the reporting entity.
- Internally generated intangible assets must also meet the general recognition requirement for all other assets-- that it is probable that future economic benefits will flow to the reporting entity. This operates similar to an "on-off" switch. If the future economic benefits (cash flows) are more likely than not (51%) to occur, then it can be recognized. Anything less and the asset is not recognized.
- The internally generated intangible is recognized at cost (not fair value). To be more accurate, it is recognized at "partial cost" because all costs incurred up to the point in time that the six criteria above can be met are expensed as period costs (similar to US GAAP treatment of R&D). Capitalization of the costs ceases at the point when the intangible asset is ready (capable) to be placed in service in the manner initially intended by management. Costs incurred in using or redeploying the asset are not considered part of the cost of that asset (similar to US GAAP for self-constructed assets). This is another comparability issue endemic to both US GAAP and IFRS that generate differences between reported book values and market values for a company.

- Recognition criteria change when an intellectual asset (or intangible asset) is acquired during a business combination under IFRS and US GAAP. In a business combination, under the fair value method, the "more probable than not" (or "on-off switch") criteria are automatically assumed to be met. If no active market exists for the asset, the value recognized is based on the probability of the future cash flows or the present value of the discounted cash flows. This is an important distinction between the valuation for internally generated intangible assets and acquired intangibles that results in two different recognition and measurement bases and introduces noncomparable values for otherwise similar classifications of intangible/intellectual assets between company statements prepared using IFRS and between IFRS and US GAAP statements. Additionally, because neither set of standards specifically requires the expected values method, alternative measurement methods may introduce differing values.

Appendix B-Resources

International Financial Reporting Standard 3, *Business Combinations*, effective March 31, 2004.

International Accounting Standard 38, *Intangible Assets*, effective March 31, 2004.

Financial Accounting Standards Board, FASB Statement No. 2, *Accounting for Research and Development Costs*, effective January 1, 1975.

Financial Accounting Standards Board, FASB Statement No. 86, *Accounting for the Costs of Computer Software to be Sold, Leased, or Otherwise Marketed*, effective December 15, 1985.

Financial Accounting Standards Board, FASB Statement No. 141, *Business Combinations*, effective June 30, 2001.

Financial Accounting Standards Board, FASB Statement No. 142, *Goodwill and Other Intangible Assets*, effective December 31, 2001.

Business and Financial Reporting, Challenges from the New Economy, Wayne S. Upton Jr., Financial Accounting Series, FASB Special Report, April 2001.

Accounting Standards for R&D and Intellectual Assets

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Halsey Bullen, FASB Senior Project Manager (Retired)
Regenia Cafini, FASB Project Manager

Disclaimer

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Agenda

- Objectives and limitations of financial reporting
  - Special Challenges with Intellectual Assets
- Historical Cost and Fair Value
- Current state of Accounting for IA
  - Prospects for Improvement

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On-Going Research

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Objectives and Limitations

"Look beneath the surface, let not the several quality of a thing nor its worth escape thee."

Marcus Aurelius Antoninus

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Objectives and Limitations

- Objective of General Purpose External Financial Reporting
  - Information useful for investment and credit decisions
  - Also may be useful for other purposes but that is not the objective.

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Objectives and Limitations

- Limitations
  - Not all assets and liabilities reported
  - Conservatively biased
  - Market complexity
  - Standards complexity

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Special Challenges of IA

- Boom and bust nature of investment
- Prior focus mainly
  - Scientific
  - Engineering
  - Production operations
- Debatable causality

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Special Challenges of IA

- Accounting Consequences
  - Most spending on IA is expensed
  - Very important assets go unreported
  - Changes in those assets go unreported
  - Financial reports are woefully incomplete

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Special Challenges of IA

Gillette Financial Report-2004

$11B assets

($ 8B liabilities)

$ 3B carrying value

Gillette Acquisition Price-2005 - **$54B**

What's the other $51B?

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Special Challenges of IA

- What's the other $ 51B?
  - **Maybe it's Intellectual Assets?**
- +/- differences in book value and fair value of recognized assets
- +/- value of internally developed intangibles (patents, brands)
- +/- strategic plans, opportunities and risks
- +/- market psychology
- + capitalized management adrenalin

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Accounting Models

- Historical Cost
  - Based on inputs
  - Event and transaction driven
    - **Investment**
    - **Amortization**
    - **Impairment**

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Accounting Models

- Fair Value
  - Based on outputs
  - Original cost is only starting point
    - Changes in substance
    - Changes in market prices

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Current State-IA Assets

- IA acquired in business combinations or individually are reported, at cost
  - Some are specifically identified
  - Others are subsumed into goodwill
- Internally developed IA generally is not reported
  - R&D expenditures are disclosed
  - Other expenditures are less visible
- Users are bridging the gap, but…

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Current State-IA Assets

- Reporting IA assets acquired from others has been improved by :
  - Eliminating the pooling method
  - More detail on IA assets acquired
  - Widespread adoption of IASB standards
  - IAS 38 calls for recognition of certain internally developed IA

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Current State-Development Assets

IFRS **requires** capitalization of development **costs** when all criteria below are met:

1. **Technical feasibility**
2. **Intent to complete for use or sale**
3. **Ability to use or sell**
4. **Probable future economic benefits**
5. **Ability to complete**
6. **Ability to measure revenue and expenditure reliably**

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Financial Statements

- IFRS specific disallowances (also US):
  - Internally generated assets:
    - Brands
    - Mastheads
    - Publishing titles
    - Customer lists
    - Items similar in substance

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Current State-IA

More improvements needed:

- Reporting still incomplete for IA assets
- Recognition dependent on how acquired
- Recorded at cost of inputs not value of outputs
- Further convergence between IASB and FASB

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Financial Statements

- Core Issues for improved standards on Intellectual Assets
  - Parity between an internally developed intellectual asset and an acquired one
  - Better disclosure about unrecognized assets
  - Consistency in applying the standards
  - Unify under one measurement method

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Looking Ahead

- ***Everything is worth what its purchaser will pay for it."***

Publius Syrus, 50 BC, Moral Sayings

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Looking Ahead

- FASB is performing additional research to be used with SEC information to determine a recommended way forward to further convergence with IAS on
  - R&D
  - Intangibles
  - Impairment

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In Summary

- Information regarding IP assets in financial reports
  - is available and improving but still limited
- Users are ‘bridging the gap’ but…

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Summary

- Objectives and limitations of financial reporting
  - Special Challenges with Intellectual Assets
- Historical Cost and Fair Value
- Current state of Accounting for IA
  - Prospects for Improvement
- Questions?

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Special IP Issues

How do we disclose an IP asset without diminishing or destroying its value?

How important is reliability in measurement?

How does collaboration impact valuation?

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Special IP Issues

How do we define the asset to ensure that its value is captured only once?

Stacked patents

gene fragments

Multiple owners

universities and drug companies

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Special IP Issues

Are IA Patents Patently good? Maybe.

- Global differences in protection
- Blackberry/Rim
  - process or product
- Stacked Patents
  - Gene fragments
- Co-ownership
  - Universities and Pharma's

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Special IP-Issues

- Collaboration
  - Research databases collaborative agreements
  - Cross licensing
  - Wikipedia
  - Clickworkers (NASA)

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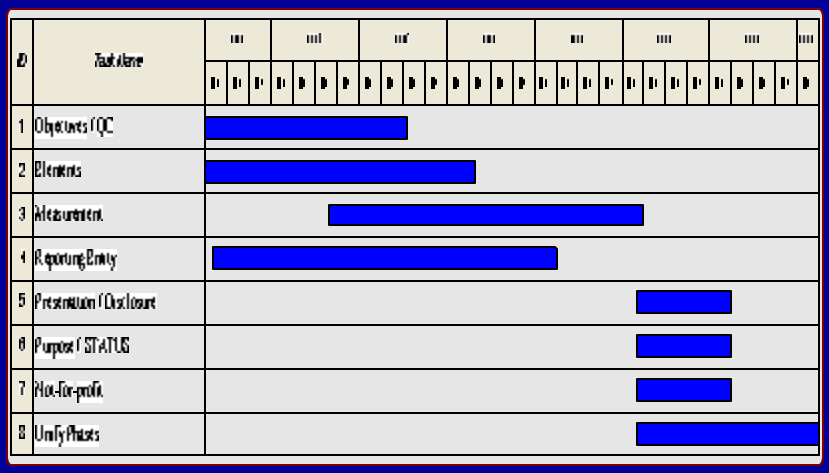
Conceptual Framework



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