

Reporting Intangibles

A Hard Look at Improving Business Information in the U.S.

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Reporting Intangibles

Executive Summary

The U.S. accounting and business reporting system is inadequate to cope with the growing importance of intangible assets. While a framework exists for the recognition (i.e. assigning "book value") of intangibles under U.S. Financial Accounting Standards Board (FASB) SFAS 141 and 142, this framework is incomplete in both its scope (i.e., only those assets acquired from outside the company must be recognized) and its coverage (i.e., certain intangibles, such as R&D and workforce, are specifically excluded). In addition, simply adding intangible assets to a company balance sheet is not the answer to the reporting problem. Many intangible assets are better understood using non-financial measures and other descriptions. Disclosure of non-financial data has increased. A number of steps have been taken and various suggestions for further disclosure made. But important information on intangibles must still be teased out of financial reports from various places – Management's Discussion and Analysis (MD&A), expense reporting and asset recognition. Nor is there any guarantee that information on some assets is disclosed at all, or even collected internally. Efforts are underway to create a more comprehensive framework for expanded business reporting, but no consensus framework exists as of now. If investors, managers, regulators, policymakers and the general public are to gain a true understanding of our economic situation, we must devise better means of reporting companies' circumstances—with an emphasis on better understanding and measuring our intangible assets.

Introduction

American businesses, investors, regulators and policymakers are flying blind. The United States is now in an intangible economy, but financial reporting and accounting systems can't deal with intangibles. Our business reporting system is, in many ways, not even adequate for the Industrial Age, let alone the Information Age. As a consequence, business, investment and economic policy decisions are being made "in the dark" (to quote the title of a recent study).¹

Information, knowledge and other intangibles now drive economic prosperity and wealth creation. Intangible assets—worker skills and know-how, informal relationships that feed creativity and new ideas, high-performance work organizations, formal intellectual property, brand names—are the new keys to competitive advantage. The value of U.S. gross investments in intangibles has been estimated to be at least a trillion dollars annually, covering investments in R&D, advertising and marketing, software, financial activities and creative activities of writers, artists and entertainers. This does not even

count investments in productivity-enhancing changes in business processes, education and employee training.

Yet, report after report describes how accounting standards (known as GAAP—Generally Accepted Accounting Principles) are unable to cope with intangibles.³ Critics point out that GAAP does not, and cannot, provide adequate information to managers, investors and regulators. Because GAAP is "less effective in providing relevant information on intangible assets, such as technology rights, human capital, and innovation," Commissioner Cynthia A. Glassman of the Securities and Exchange Commission (SEC) worries that "the value of huge sectors of our economy may not be accurately reflected by financial reports."

We know that investors want better information. A study by Ernst & Young found that non-financial criteria constitute, on average, 35 percent of the equity investor's portfolio allocation decisions.⁵ But, according to Adrienne Baker, Editor-in-Chief of Investor Relations Magazine, over half of the information investors want is not reported on the balance sheet.⁶ Left out are important items such as growth opportunities, infrastructure, intellectual capital, network effects, workforce and in-process R&D.

We also know that business leaders want better information. According to a recent survey by the accounting firm of Deloitte, "nearly half of respondents (48%) said the company's nonfinancial metrics were ineffective or highly ineffective in helping the board and the CEO make long-term decisions." ⁷

The result of our lack of good information is a distorted picture of the situation. One analyst was recently quoted in the Wall Street Journal as saying when it comes to comparing a company like Google's core financial performance to its rivals, "GAAP is the last thing you'd use." Another critic even claims:

the historically high price-earnings ratios that we see today [2004] are a reflection not of a renewed bubble, or investors' over-optimism, but of the failure of GAAP as a system of financial reporting in the knowledge economy.⁹

If we don't understand what is happening in our economy at the basic level of the firm, then all our business and economic decisions are suspect. Capital may be misallocated, opportunities wasted, resources misused and detrimental policies adopted.

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The current state of affairs isn't due to a lack of study. Interest in this issue of corporate reporting of and accounting for intangible assets has waxed and waned over the past decade and a half. The 1990's saw increased interest in new forms of business reporting and increased attention to intangibles. With the bursting of the Internet stock bubble and wave of accounting scandals based on earnings manipulations, this interest has declined. Part of the decline has been due to other issues taking priority; part is due to the difficult nature of the intangible issue itself. However, concerns over these issues have never disappeared and may be reasserting themselves in the policy arena. ¹⁰

For our purposes, we will begin the story in 1991 with the formation by the American Institute of Certified Public Accountants (AICPA) of a Special Committee on Financial Reporting. The Committee's report (*Improving Business Reporting – the Jenkins Report*) was issued in 1994. At roughly the same time, the Association for Investment Management and Research (now the CFA [Chartered Financial Analyst] Institute) published their own report, *Financial Reporting in the 1990s and Beyond*. ¹²

As a follow-on, the Financial Accounting Standards Board (FASB) issued an "Invitation to Comment" on the AICPA Jenkins report in February 1996. That led to the creation of FASB's Business Reporting Research Project in 1998. At the beginning of 2001, FASB issued the report of its Business Reporting Research Project on enhancing voluntary disclosure. FASB also issued an internal study in April 2001 on challenges of business reporting in the new economy. If

FASB started the process of issuing new standards in 1999 with the issuance of FASB Exposure Draft, *Business Combinations and Intangible Assets*. In June 2001, FASB issued final standards concerning accounting for goodwill and intangibles acquired as part of a merger or acquisition: Statements of Financial Accounting Standards (SFAS) 141 and 142.¹⁵

With the issuance of these standards, FASB began discussing a possible project looking at increased disclosure of intangibles outside of business combinations. The project was officially begun in January 2002 but halted a year later. Rather than continue that project, FASB felt it was more timely to focus on coordinating its existing approach to intangibles with the International Accounting Standards Board (IASB).¹⁶

Over at the SEC, then-Chairman Arthur Levitt in October of 1999 called for a task force to look at the issue of company disclosures. The Garten Task Force Report (named after Task Force Chair Jeffrey Garten of the Yale School of Management) issued its recommendation in May 2001 to "create a new framework for supplemental reporting of intangible assets and operating performance measures."

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Thus, the inadequacy of our accounting and business reporting system is well understood. The problem of finding a solution is not a lack of understanding the need. The problem is inherent in the nature of intangible assets and business reporting. In order to understand the issue of reporting corporate intangible assets, it will be important to keep in mind a few distinctions: between disclosure and recognition; between financial and non-financial information; and between qualitative and quantitative reporting.¹⁸

It is also important to keep in mind the relationship between the asset and the company. A Brookings Institution study on intangibles divided them into three levels:

Level 1 - assets that can be owned and sold:

Level 2 - assets that can be controlled but not separated out and sold;

Level 3 - intangibles that may not be wholly controlled by the firm. ¹⁹

Level 1 includes not only intellectual property (IP) but also items such as contracts and business agreements, licenses and franchise rights, quotas and resource allocations

(airport landing rights, water rights) and employment contracts. Level 2 describes those areas proprietary to a specific firm, but difficult to separate from the ongoing operation, such as business secrets, in-process R&D and business processes. Level 3 includes items often referred to as human capital, core competencies, organizational capital and relationship capital.

So the situation is as follows: many intangible assets can be reported upon and relevant information about those assets disclosed. Some can be discussed only in qualitative terms, such as a company's leadership. Some of those assets can be measured quantitatively, such as customer satisfaction. A much smaller set can be valued and specifically recognized in a company's financial statement.

Major Frameworks

There are a number of general approaches to the issue of improved business reporting that involve intangibles:

- 1) <u>Improved accounting models</u> seek to include intangible assets in book value of a company.
- 2) Non-financial metrics approaches include performance measures and metrics of intangibles (such as customer satisfaction levels and worker skill levels) without necessarily including the value of these intangibles in companies' balance sheets. Such approaches may also include disclosure of non-measurable attributes of intangible assets, such as company leadership.
- 3) <u>Value-creation models</u> seek to tie various process metrics with future financial performance.

Note that these approaches are not necessarily distinct categories, but points on a continuum. Various proposals blend the models in different ways.

Accounting models

As mentioned earlier, for companies that must register with the U.S. SEC, the controlling definitions of what must be recognized as intangible assets are FASB's SFAS 141 and 142 issued in 2001. Further clarifications were issued in 2002 when FASB released Emerging Issues Task Force (EITF) Issue 02-17 that dealt with questions of recognition of customer relationships as intangible assets.²⁰

It is important to note that this requirement to recognize intangible assets only applies to those acquired from outside the company, not those internally generated. Thus a company must recognize the value of a patent acquired from another company as part of a merger or acquisition, but not the value of a patent internally generated. As we will discuss later, this is viewed as a major shortcoming of the standards.

SFAS 141 and 142 are built upon earlier rules governing disclosure of intangibles, specifically AICPA's Accounting Principles Board (APB) Opinion No. 16, *Business Combinations* and Opinion No. 17, *Intangible Assets*, which were first issued in 1970. When FASB replaced APB, these Opinions continued as part of GAAP, supplemented by other FASB standards and opinions, until the issuance of SFAS 141 & 142.²¹

For the most part, the description of what is an intangible asset in SFAS 141 & 142 is simply an extension of Opinions 16 & 17, incorporating in these supplemental rules. ²² This can be seen by comparing the SFAS 141 list of intangible assets in Figure 1 with the

Opinion 17 list in Figure 2. The main difference is the development of a taxonomy in the FASB list.

There is one important difference, however, between SFAS 141 & 142 and Opinions 16 & 17: the treatment of assembled workforce. SFAS 141 specifically states that "assembled workforce shall not be recognized as an intangible asset apart from goodwill." The rationale for this exclusion was that:

the Board concluded that techniques to measure the value of an assembled workforce and the related intellectual capital with sufficient reliability are not currently available. Consequently, it decided to make an exception to the recognition criteria and require that the fair value of an assembled workforce acquired be included in the amount initially recorded as goodwill, regardless of whether it meets the recognition criteria in paragraph 39.²⁴

It should also be remembered that the impetus for SFAS 141 and 142 was only partially intangibles. FASB was concerned with the issue of pooling versus purchase methods for business combinations and the large overhang of goodwill that had accumulated due to increased merger and acquisition (M&A) activities in the preceding decade. SFAS 141 and 142 are specifically designed to address those questions, using the mechanism of recognition and differential treatment of intangibles as separate from goodwill.²⁵

Since the adoption of SFAS 141 and 142, there have been only a few reviews of companies' experiences. However, those reviews have raised a number of concerns about the ability of companies to value intangibles and the scope of what intangibles must be recognized for accounting purposes.

FASB Roundtable

One review of companies' experiences was a FASB roundtable in September 2002, convened as part of the start of its (later-abandoned) intangibles project. The specific topic of the roundtable was the experiences of U.S. companies in assigning value to intangibles under SFAS 141. Two major topics dominated: the issue of determining fair value and the problem of recognition criteria. On the issue of fair value:

The group observed that although there are accepted methodologies for valuing major intangible assets (for example, the cost, income, and market approaches), minor changes in certain key assumptions may result in significant variances in the estimation of fair value. For example, although trade names are traditionally valued using a consistent approach (the relief from royalty approach), the royalty rate applied is often a subjective decision due to the lack of publicly available information. ²⁷

Concerning recognition criteria, the group highlighted the problem of:

Determining which intangible assets meet the separate recognition criterion and the meaning of that criterion in Statement 141. For example, there is significant divergence as to whether customer relationships meet the recognition criteria in Statement 141 and whether the recognition criteria were meant to affect the estimation of fair value.²⁸

IASB Field Study of the U.S.

In 2003, the IASB undertook a field study on experiences with SFAS 141 and 142 as part of their own rule-making process on intangibles.²⁹ The review covered all aspects of business combinations, such as allocation of goodwill to units as well as recognition of intangible assets.

The study found concerns similar to the FASB roundtable over valuation and the ability to separate intangible assets from goodwill or other assets. Three cases illustrate the difficulty facing companies in separating intangibles for goodwill:

Airline landing slots and route authorities: Landing slots and route authorities are granted by the relevant authorities at no cost and can be taken away and given to another airline. Yet, the airline cannot operate without them. Because of this, it is claimed that these assets cannot be valued separately from the acquired business as a whole (and therefore from the goodwill) since the acquired business would cease to exist without them.

Mineral rights: This case concerns rights granted by the government to an undeveloped, untested and unsurveyed property. Since it is claimed that the company is prohibited from selling the rights separate from the business as a whole, the value of the mineral rights cannot be separated from goodwill.

Water acquisition rights: In this case a paper and paperboard products manufacturer claims that the rights cannot be sold other than as part of the sale of a business as a whole and the plant could not be operated without the rights. ³⁰

As the IASB field notes put it, "there was a general consensus amongst the roundtable participants that the assumptions used by independent valuers to measure the above intangible assets were often so highly subjective/debatable that it is unlikely those values represent reliable fair value measures." ³¹

The discussion also raised a consistent problem concerning recognition of customer contracts and relationships. As the field notes state, "of the nine field visit participants that acquired in business combinations customer contracts, related customer relationships, and core deposit intangibles, only one believes it was able to reliably measure the contract-related customer relationships, and only then because it could do so by reference to observable market transactions."

SEC Review of Annual Reports

A different way of getting at the U.S. experience with accounting for intangibles can be seen in the SEC's 2002 review of all FORTUNE 500 annual filings. Accounting for intangible assets falls within the problems facing the SEC in enforcing compliance with GAAP. In the wake of various accounting scandals, SEC took a sharp look at company practices with respect to disclosure of financial and non-financial information. The review was specifically targeted at "disclosure that appeared to be critical to an understanding of each company's financial position and results, but which, at least on its

face, seemed to conflict significantly with generally accepted accounting principles or SEC rules, or to be materially deficient in explanation or clarity."³³

The review accomplished its purpose; comment letters went out to 350 companies asking them to amend their filings.

The SEC review highlighted problems with application of the impairment test under SFAS 142. The summary report by the SEC's Division of Corporation Finance reveals general problems concerning impairment of goodwill and indefinite-lived intangibles, allocation of goodwill among reporting units, and explanations of accounting decisions regarding goodwill and indefinite-lived intangibles.

Interestingly, the summary report did not highlight problems with the ability to separately recognize intangibles. However, conversations with SEC staff indicated that this was not because of a lack of comments back to companies on issues of recognition. Rather, the comments were so company and industry specific that the issue did not rise to the level of a common set of problems.

SEC staff did subsequently comment on the recognition of intangibles: whether a customer-related intangible asset exists separate from the specifics of the contract (such as a real estate lease).³⁴ That comment was specifically meant to provide additional SEC guidance on the issues raised in EITF Issue 02-17 on customer relationships as intangible assets.

Survey of U.S. 10-Ks

As part of a study for the European Commission, Mantos Associates also looked at annual SEC 10-K filings. In this case, they specifically examined filings for 102 companies where an acquisition occurred between December 2001 and April 2003.³⁵ While they found a high level of compliance with the requirement to break intangibles out from goodwill, they:

also found worrying inconsistencies as a result of the freedom companies are allowed in the classification and grouping of intangible assets. For example, take Rights and Licenses. Some companies use a single rights category and combine an array of entirely different rights covering all contracts and marketing assets. Others distribute them over a wide spectrum of asset classes. In the case of patents, some companies single them out individually, whilst others aggregate them with licenses and contracts. If the US experience is any guide, this could be a serious obstacle to aggregating sensible values for individual intangible assets.

Even within industries the picture exhibits wide variations. We looked at two industries within our sample to see whether the picture might be more coherent for companies from the same industry sector. Across our sample of 10 software companies, 11 different classes of intangibles were used in varying degrees. Within the pharmaceutical industry sample (of 5) the number was 6.³⁶ (emphasis in original)

A Valuation Model Alternative

The GAAP approach is not the only model for calculating value of intangible assets. An alternative valuation approach to understanding the financial situation of intangible assets has been developed by Baruch Lev.³⁷ In GAAP accounting, valuation is calculated from the ground up by aggregating the value of all the separate assets—physical, financial and intangible. Lev's expanded valuation model backs out the value of the unreported intangible assets from the whole. In part, this is done by estimating the contribution of intangible capital to normalized earnings (by estimating a certain rate of return on physical and financial capital). Specific intangibles do not need to be identified and independently valued – but the value of intangibles as a whole can be estimated. Using this figure, it is claimed, along with traditional capitalization gives the analyst an undistorted version of traditional financial measures (such as ROE).

It should be noted that Lev also argues for increased disclosure of other financially relevant data, specifically: products in the R&D pipeline; royalty stream (showing that there is a market for the R&D); percentage of revenues coming from new (or recently introduced) products; and the contribution of brand to premium pricing. The purpose is to disclose information that is useful to financial analysts for estimating future earnings, not to find current value of the intangible asset.³⁸

Non-financial metrics

In the area of disclosure, companies have a wide range of experiences. A 2004 study commissioned for the consulting firm Accenture clearly shows that managers believe in the importance of managing and disclosing intangibles, but very few (5%) have any real system for doing so.³⁹ As mentioned earlier, numerous official and quasi-official studies have called for increased disclosure. The FASB Business Reporting Research Project's findings on disclosure of information on intangibles was not very positive. Based on its analysis of the current disclosure practices in eight industries it found that:

companies in the pharmaceutical industry made considerable disclosures about their research and development activities and product development pipeline. Disclosures by companies in other industries were generally sparse. The few disclosures found tended to be somewhat vague and not particularly helpful. 40

The issue of other metrics was also discussed at the FASB September 2002 roundtable:⁴¹ Some participants believe that the disclosure of certain metrics about intangible assets may provide more valuable insights than would disclosure of their fair value. The group generally agreed that users would welcome improvement in disclosures about intangible assets (as has been discussed in various reports, such as the Garten Task Force Report). Some participants noted, however, that any requirement by the FASB to disclose such information might be quite burdensome to smaller companies.

These calls for greater disclosure of non-financial metrics focus on three sets of information: external factors, "value-drivers" and internal performance measures. Intangible assets are included in such disclosures to the extent that they are seen as value drivers.

AICPA Report

As mentioned earlier, in the early 1990's AICPA created a Special Committee on Financial Reporting charged with looking at what information should be made publicly available. Chaired by Edmund L. Jenkins (later the Chairman of FASB), the Committee published its report *Improving Business Reporting – A Customer Focus*, which came to be known as the Jenkins Report, in 1994.⁴² The report makes a number of recommendations concerning ways to improve financial reporting.

The heart is a call for development of a new comprehensive reporting model which would include non-financial metrics. Major components of the new reporting model were:

- I. Financial and Non-Financial Data
 - (A) Financial statements and related disclosures
 - (B) High-level operating data and performance measurements that management uses to manage the business
- II. Management's Analysis of Financial and NonFinancial Data
 - (A) Reasons for changes in the financial, operating, and performance related data, and the identity and past effect of key trends
- III. Forward-Looking Information
 - (A) Opportunities and risks, including those resulting from key trends
 - (B) Management's plans, including critical success factors
 - (C) Comparison of actual business performance to previously disclosed opportunities, risks, and management's plans
- IV. Information About Management and Shareholders
 - (A) Directors, management, compensation, major shareholders, and transactions and relationships among related parties
- V. Background About the Company
 - (A) Broad objectives and strategies
 - (B) Scope and description of business and properties
 - (C) Impact of industry structure on the company⁴³

The section of this new framework on "High-level operating data and performance measurements that management uses to manage the business" would include:

 Statistics related to activities that produce revenues, market acceptance, and quality, such as units and prices of product or services sold; growth in units sold or average prices of units sold; growth or shrinkage in market share; measures of customer satisfaction; percentage of defects or rejections; and backlog.

• Statistics related to activities that result in costs, such as the number of employees and average compensation per employee, and the volume and prices of materials consumed.

- Statistics related to productivity, such as the ratio of outputs to inputs.
- Statistics related to the time required to perform key activities, such as
 production or delivery of products or services and developing new products or
 services.
- Statistics related to the amount and quality of key resources, including human resources, such as the average age of key assets, or the quantity of proved reserves of natural resources.
- Measures related to innovation, such as the percentage of units produced in the current year that were designed within the last three years, or the number of suggestions to improve businesses processes received from employees in the last year.
- Measures of employee involvement and fulfillment, such as employee satisfaction and the rate of change in that measure.
- Measures of strength in vendor relationships, such as vendor satisfaction, and the rate of change in that measure.⁴⁴

Importantly, non-financial metrics are not limited to just the performance measures section of the report. They are woven throughout the model. For example, the section on the new framework calls "Management's Analysis of Financial and NonFinancial Data" should include:

Innovation, such as the percentage of revenues resulting from products that did not exist within the last three years, or the percentage reduction in costs resulting from new processes, and the reasons for changes in those percentages.⁴⁵

FASB Report

As discussed earlier, FASB launched its own follow-up project—the Business Reporting Research Project—and issued its own report (with the same name), *Improving Business Reporting*, in 2001. 46 As part of the project, the team looked in detail at types of non-financial (non-GAAP) information that was voluntarily disclosed in eight industries: Automotive, Chemical, Computer Systems, Food Processing, Domestic Integrated Oil, Pharmaceuticals, Regional Banks and Textile—Apparel.

Because of its detailed look at current industry practices, the report contains a wealth of specific examples of possible non-financial metrics:

- Table of monthly orders broken down by strategic business unit and by product category (Computer Systems).
- Information about the company's sales and marketing teams, including number of experienced professionals, backgrounds, sales force productivity, and image (Pharmaceuticals).
- Quarterly changes in physical volume of product by business group and by geographic location of customer, expressed as percentages (Chemicals).

• Description of products in development and product agreements with strategic alliance partners (Pharmaceuticals).

- The number of physicians prescribing specific products, the total number of prescriptions written for specific products, and the number of patients currently being prescribed for specific products (Pharmaceuticals).
- Plant capacities by product, including the past year's additions to those capacities and the additions scheduled for the upcoming year (Chemicals).
- Productivity gains over several years in terms of sales per employee and earnings before interest and taxes (EBIT) per employee (Chemicals).
- Initial production rates from new fields and test flow rates for new exploration wells (Oil—Integrated Domestic).
- The percentage of garments sewn offshore (Textile—Apparel).
- Disclosure of the company's goals for the percentage of revenue from products introduced within the last three years together with a five-year chart on revenues from products introduced in the last three years (Computer Systems).
- Detailed listing of products, brands, and registered trademarks (Food). 47

Taking its cue from the AICPA Jenkins Report, the FASB report organizes the information into the following categories:

Business data (for example, high-level operating data and performance measurements that management uses to manage the business)

Management's analysis of business data (for example, reasons for changes in the operating and performance-related data, and the identity and past effect of key trends)

Forward-looking information (for example, opportunities and risks including those resulting from key trends; management's plans, including critical success factors; and comparison of actual business performance to previously disclosed opportunities, risks, and management's plans)

Information about management and shareholders (for example, directors, management, compensation, major shareholders, and transactions and relationships among related parties)

Background about the company (for example, broad objectives and strategies, scope and description of business and properties, and impact of industry structure on the company)

Information about intangible assets that have not been recognized in the financial statements.⁴⁸

Note that these are the same general categories as in the Jenkins Report with the important addition of the last category of non-recognized intangible assets.

Other Models

Of course, the U.S. is not the only nation where there are intense discussions about increased disclosure. Over the years, there have been a number of national and

international projects and models. The Scandinavian countries have a long history of developing such models, including the Danish Intellectual Capital Statement⁴⁹ and the Skandia Intellectual Capital Navigator.⁵⁰ Another model that came out of the Scandinavian experience is Karl-Erik Sveiby's Intellectual Assets Monitor.⁵¹ While not focused specifically on intangible assets, the Global Reporting Initiative, an international organization made up of companies, environmental groups, labor organization and others, has developed disclosure guideline for economic, environmental and social factors.⁵²

SEC Guidance on MD&A

The movement toward greater disclosure of non-financial metrics in the U.S. was given a boost when, at the end of 2003, the SEC issued new guidance for the Management's Discussion and Analysis (MD&A) statement required as part of annual corporate filings. MD&A statements were first required by the SEC in 1980 as a way for companies to discuss forward-looking information. This new guidance gave the green light to disclosure of generally accepted industry performance measures. As the guidance states:

when preparing the MD&A, companies should consider whether disclosure of all key variables and other factors that management uses to manage the business would be material to investors, and therefore required. These key variables and other factors may be non-financial, and companies should consider whether that non-financial information should be disclosed.⁵³

The guidance specifically references both the FASB and Jenkins reports for examples of types of metrics that would be permissible. In a footnote, the statement gives further clarification, specifically mentioning the following factors:

- manufacturing plant capacity and utilization;
- backlog, trends in bookings and employee turnover rates;
- customer satisfaction;
- time-to-market;
- interest rates;
- product development;
- service offerings;
- throughput capacity;
- affiliations/joint undertakings;
- market demand;
- customer/vendor relations;
- employee retention;
- business strategy;
- changes in the managerial approach or structure;
- regulatory actions or regulatory environment; and,
- any other pertinent macroeconomic measures.⁵⁴

Importantly, the guidance states that such disclosures are not in conflict with regulations that limit use of non-GAAP compliant financial information:

Because these measures are generally non-financial in nature, we do not believe that their disclosure generally will raise issues under Item 10(e) of

Regulation S-K [17 CFR 229.10(e)] or Item 10(h) of Regulation S-B [17 CFR 228.10(h)]. 55

Regulation G, which restricts the use of non-GAAP financial measures, also specifically allows performance measures by defining them as outside the scope of the restrictions:

We do not intend the definition of "non-GAAP financial measures" to capture measures of operating performance or statistical measures that fall outside the scope of the definition set forth above. As such, non-GAAP financial measures do not include:

- operating and other statistical measures (such as unit sales, numbers of employees, numbers of subscribers, or numbers of advertisers); and
- ratios or statistical measures that are calculated using exclusively one or both of:
 - financial measures calculated in accordance with GAAP; and
 - operating measures or other measures that are not non-GAAP financial measures. 56

U.K. Operating and Financial Review

Others are going even further in the requirement for non-financial measures. As of this writing, the British government is in process of re-writing their basic "Company Law," which will include a mandatory annual operating and financial review (OFR). As the report issued in March, 2005 notes:

The OFR is a new form of narrative report in which companies will need to describe future strategies, resources, risks and uncertainties, including policies in relation to employees and the environment where these are relevant to future strategy and performance. The requirement to produce an OFR represents a further major step forward in improving company reporting and transparency and in promoting effective dialogue on the key drivers of long-term company performance. It also recognises that in a modern economy, those who run successful companies need to develop relationships with employees, customers, suppliers and others which support long-term value creation.⁵⁷

In anticipation of the OFR requirement, the British Accounting Standards Board issued draft guidance last November. It contains an explicit requirement to disclose Key Performance Indicators (KPI):

- 26. The OFR shall provide information to assist investors to assess the strategies adopted by the entity and the potential for those strategies to succeed. The key elements of the disclosure framework necessary to achieve this are:
 - a. the nature, objectives and strategies of the business;
 - b. the development and performance of the business, both in the period under review and in the future:
 - c. the resources, risks and uncertainties and relationships that may affect the entity's long-term value; and
 - d. position of the business including a description of the capital structure, treasury policies and objectives and liquidity of the entity, both in the period under review and the future.

27. To the extent necessary to meet the requirements set out in paragraph 26 above, the OFR shall include information about:

- a. market and competitive environment;
- b. regulatory environment;
- c. technological change;
- d. persons with whom the entity has relations, such as customers and suppliers;
- e. employees;
- f. environmental matters;
- g. social and community issues;
- h. receipts from, and returns to, shareholders; and
- i. all other relevant matters.

. . .

- 36. To the extent necessary to meet the requirements set out in paragraph 26 above, the OFR shall include the key performance indicators, both financial and non-financial, used by the directors to assess progress against their stated objectives.
- 37. The KPIs disclosed shall be those that the directors judge are the most effective to use in measuring the delivery of their strategies and managing their business. Regular measurement using KPIs will enable an entity to set and communicate its performance targets and to measure whether it is achieving them. 38. Comparability will be enhanced if the KPIs disclosed are accepted and widely used, either within the industry sector or more generally.⁵⁸

As further guidance, the report discusses a number of possible key performance measures, such as: return on capital employed; market position; employee turnover; retention rates; hours spent on training; etc. Detailed examples of how to calculate and disclose were given for the following possible measures:

- Return on capital employed (ROCE);
- "Economic profit;" Market Share;
- Average revenue per user (customer) (for a telecom company);
- Number of subscribers (for a pay TV company);
- Sales per square foot (for a retail company);
- Percentage of revenue from new products;
- Number of products sold per customer;
- Products in the development pipeline;
- Cost per unit produced;
- Customer churn;
- Employee morale;
- Employee health and safety;
- Environmental spillage (for a company involved in the transportation of hazardous materials);
- CO2 emissions:
- Monitoring of social risks in the supply chain (a company that sources its branded products from overseas could face additional risks relating to stakeholders, in particular customers, concerns around local labour practices);
- Noise infringements (for an airport operator);

- Reserves (for an extractive industry);
- Market risk (for a bank);
- "Economic capital" (for a financial institution); and,
- Cash conversion rate.

However, the Accounting Standards Board was very clear in stating that the list is non-exhaustive and that these are illustrative examples of the types of information that would need to be included if this measure was used as a KPI.

Enhanced Business Reporting Consortium

Another boost to reporting non-financial metrics has been creation of the Enhanced Business Reporting Consortium. A project of the AIPCA's Special Committee on Enhanced Business Reporting, the Consortium is bringing together various stakeholders to unite on a set of guidelines and definitions. Launched in Fall 2004, the Consortium is well along in its recruitment phase.⁵⁹

As part of its activities, the Consortium is promoting a June 2004 AICPA study by its Public Company Task Force outlining possible best practices and sample reports. As the document states:

These sample reports are **not intended to be comprehensive**. Rather, certain components of the business reports have been highlighted and presented here where the materials offer significant extensions to current practice. It is the intention of the Task Force that the materials in these sample reports be considered as a collection of ideas for potential enhancements to existing business reports and to offer contrasts with current methods of reporting.⁶⁰ (emphasis in original)

In one of the sample reports, from Lintun Solutions, Inc., specific operational goals are identified (such as "Improved Customer Retention") and tied to a specific value driver or performance measure (Timely Delivery). Specific metrics are developed and tracked:

This value driver is monitored using the average number of days delay between anticipated and actual delivery time. The effectiveness of this value driver is monitored by tracking revenues per customer and customer retention rates (percentage of customers in a given period who were also customers in the preceding period). ⁶¹

While illustrating how a company can use non-financial information in its business reporting, the study also notes a need for industry standards for this type of information:

Much work has been done to define the boundaries of an organization for financial reporting purposes. This is not true for non-financial metrics, making comparison between reported non-financial measures difficult. For example, when disclosing number of personnel – does this include part-time, casual labor, personnel from equity investments, personnel from alliance partners, spouses? When disclosing investments in patents and copyrights and corresponding returns, do these include investments made by joint ventures in which the business does not own a controlling interest?⁶²

Sarbanes-Oxley

An interesting twist has been introduced into the disclosure process by implementation of the Sarbanes-Oxley Act of 2002. Enacted in response to myriad accounting scandals, the law makes significant changes to increase transparency and reduce conflicts of interest. While the law does not specifically address intangibles, Section 302 requires that CEOs and CFOs certify that companies' financial reports do not contain any untrue statements or omissions of material facts. Section 404 requires companies to document and certify their internal financial reporting and control procedures.

As a result, some are saying that companies must make additional disclosures of intangible assets. According to Mark Bezant and Elizabeth Gutteridge of Deloitte, "more often than not, the internal controls needed for Sarbanes-Oxley compliance may include intangibles which do not show up in the financial statements." Liza Vertinsky of the law firm of Wolf, Greenfield & Sacks argues:

The new rules will have a significant impact on how and when a company needs to measure, monitor, and disclose information about its intangible assets. For any company with intellectual property of material value, this will mean understanding, measuring, monitoring and disclosing the relationship between intellectual property rights and the company's financial performance, and translating changes in the scope and strength of those rights into reportable indicators of financial performance. More generally, the requirements will require a rethinking of the role of intellectual property valuations and audits in corporate strategy and will require new systems for ensuring that information about intellectual property is communicated to and understood by top decision makers and translated into appropriate financial reports.

Companies now need to conduct regular audits of their intangible assets and report on material changes that are likely to impact their financial strength and operations.⁶⁴

There are those who have hoped that Sarbanes-Oxley will push companies to make major improvements in their management information systems.⁶⁵ However, the implementation process seems to be moving in the direction of incremental, rather than radical, changes.⁶⁶

Value-creation Models

The AICPA sample reports, SEC's MD&A guidance and the others are simply illustrations of the types of information that might be disclosed. The AICPA Task Force study mentioned above subsequently points out the problem with that approach:

Current reporting models do not explicitly provide information about the underlying relationships between the variety of internal and external value drivers and the company's performance, sufficient to allow stakeholders to obtain a reliable understanding of past performance, current situation and a reasonable basis on which to predict future results.⁶⁷

However, there are a number of specific frameworks that go beyond these lists to create models connecting external factors and inputs with intermediate variables and performance measures and then with ultimate financial outcomes. Some consider the Balanced Scorecard as a first attempt to link performance measures together in a management, rather than a measurement, system. Others see this as a similar model to the Skandia Intellectual Capital Navigator and the Intellectual Assets Monitor models mentioned earlier.

In the Balanced Scorecard, the model seeks to link factors from four areas:

- The Learning and Growth Perspective
- The Business Process Perspective
- The Customer Perspective
- The Financial Perspective

Each of these perspectives has its own set of objectives, measures, targets and initiatives specifically tailored to the organization's unique situation.

A more direct model that links intangibles to company performance is Jonathan Low and Pam Cohen Kalafut's Value Creation Index. ⁷⁰ They base their model on the following intangibles that play a role in business: ⁷¹

- Management: Leadership:
 - Strategy Execution;
 - Communication; and,
 - Transparency.
- Organization:
 - Technology & Processes;
 - Human Capital;
 - Workplace Organization & Culture;
 - Innovation;
 - Intellectual Capital; and,
 - Adaptability.
- Relationships:
 - Brand Equity;
 - Reputation; and,
 - Alliances & Networks.

The model specifically links specific value drivers to intangible assets and then to company financial performance.

The PriceWaterhouseCoopers (PwC) ValueReporting model is another specific value-creation model that attempts to provide linkages between and among various performance measures and measures of intangibles.⁷² This model links the external environment (the market overview) to the company's competitive position and strategy for creating value (the value strategy). It then links that strategy to the financial targets and mechanisms to deliver on them (managing for value) and to the underlying intangibles and value drivers (the value platform).

The KPMG Value Explorer model is another strategic planning model that explicitly builds upon intangibles. This model identifies five types of intangibles:⁷³

- Skills and tacit knowledge, including know-how and competencies.
- Collective values and norms, such as client focus, reliability and quality.
- Technology and explicit knowledge, such as patents, manuals and procedures.
- Primary and management processes, including leadership & control, communications and management information.
- Assets and endowments, including the installed base of customers, brand & image, network of suppliers, network of talent and ownership of standards.

The now defunct accounting firm of Arthur Andersen had its own version, called Value Dynamics. Under this model assets were categorized as physical, financial, customer, employee & supplier and organizational.⁷⁴

Observations and Conclusions

In both accounting (recognition) and disclosure of intangibles, there continues to be ongoing confusion. On the accounting side, SFAS 141 and 142 are clearly not the final words in recognition of intangible assets. A review of the various studies and discussions with those involved in the process reveals three points.

First, there is some continued lack of clarity about what should be included. Both FASB and AICPA have attempted to provide guidelines as to what intangible assets may be recognized. However, as reviews of SFAS 141 & 142 and the earlier discussion on the EITF statement on customer relationships point out, there continues to be a need for specific technical guidance. In April 2004 FASB amended SFAS 141 and 142 to remove mineral rights from the list of intangibles and require them to be treated as tangible assets. (However, the Board made clear that certain speculative mineral rights are financial assets and outside the scope of the amendment.)⁷⁵

At its January 19, 2005 meeting FASB decided to reconsider how intangible assets are amortized, including determination of the useful life, under SFAS 142. The project came about:

in order to address diversity in practice that has developed in determining the useful life of an intangible asset for which a marketplace participant anticipates renewal (hereinafter referred to as "renewable intangible assets"). ⁷⁶

This project clearly recognizes the nature of intangibles and the factors that contribute to their value. The project specifically raises the concern that under SFAF 141, the useful life of an intangible asset may depend on a number of factors, including:

The effects of obsolescence, demand, competition, and other economic factors (such as the stability of the industry, known technological advances, legislative action that results in an uncertain or changing regulatory environment, and expected changes in distribution channels).⁷⁷

As the question of useful life points out, broader valuation methodologies are also a bone of contention. The IASB field study discussed earlier found a consensus on the "highly subjective" assumptions used by valuation experts. However, this may reflect more of a clash between auditors and valuation experts than an inherent problem with classification of intangibles.⁷⁸ Had valuation experts been included in the discussion, they might have disputed that statement and argued that auditors are seeking an unrealistic level of precision. They would also have pointed out that many contested items, such as mineral rights and airport landing rights, have been subject to acceptable valuations for a number of years.⁷⁹

Part of that valuation problem is the ability to value certain intangible assets on a standalone basis. The IASB field study and Brookings Institution study pointed out that certain intangible assets are difficult to separate either from other assets or from the operation of

a firm as a whole.⁸⁰ As Baruch Lev points out, there are intangibles that "cannot be valued on a stand-alone basis because they are enablers and they have strong interactions with various other intangibles."⁸¹ If they cannot be separated out, are they destined to remain lumped together in that catch-all category of "goodwill"?

The accounting profession understands that there may be differences of opinion. The AICPA Auditors Guide, in paragraph 89, specifically recognizes the issue of whether certain intangibles are properly identified (using the example of customer relationships) – and recommends what the auditor should do if those differences cannot be resolved.⁸²

As discussed earlier, the Sarbanes-Oxley Act now requires disclosure of assumptions and methods of accounting as part of disclosing information on internal controls. It also requires a discussion as to why a company used those methods if alternative methodologies exist. Numerous companies have reported material weaknesses in their internal controls. As they fix these problems, there may be an increase in disclosure as to what is a recognized intangible and what is still lumped into the category of goodwill.

Second, there are areas that have been clearly excluded from SFAS 141 and 142 which some feel need to be addressed.

In-process R&D is still covered under SFAS 2, Accounting for Research and Development Costs. SFAS 2 generally treats in-process R&D as an intangible asset if acquired during a merger or acquisition but requires the value to be immediately expensed except under certain circumstances. Some continue to point out that expensing R&D creates a distorted picture of return on equity, corporate profits and corporate productivity:

The reason the corporate profit share fell in the 1997-1999 boom is simple accounting: accounting profits understated economic profits because corporations were making large intangible investments in the late 1990s that they expensed. Adding intangible investments to accounting profits and to accounting investment implies a very different picture of the U.S. economy. 83

Interestingly, economic statisticians are looking at this issue in the context of the System of National Accounts. The Bureau of Economic Analysis (BEA) and the National Science Foundation (NSF) are continuing their work on refining the R&D portion of Gross Domestic Product (GDP) numbers. That work includes looking at the issue of treating R&D as an investment (i.e. capitalizing cost over a number of years, similar to what is already done with plant and equipment) rather than expensing it. ⁸⁴ This movement by economists in charge of macroeconomic statistics toward capitalization of R&D in the national accounts may give a new push for similar capitalization of R&D in business accounting.

It should be noted that U.S. GAAP and the IASB standards differ significantly in their treatment of in-process R&D and the capitalization of development costs. In this case, the Committee of European Securities Regulators recommends that companies listed on EU stock exchanges but who report according to U.S. GAAP procedures be required to disclose a "quantitative indication of the impact of an event or transaction, had this event

or transaction been accounted for following IAS/IFRS provisions. Such quantification should provide the gross and net of tax effect of the difference on the profit and loss or on the shareholders' equity of the issuer, as applicable." These required disclosures will provide a quantitative record of the effect of alternative treatments of R&D on the bottom line. This should provide sufficient evidence to resolve the issue one way or another.

Assembled workforce is also specifically excluded from the list of intangibles. However, valuation experts have been valuing assembled workforce and using it to determine value of other reportable intangible assets.⁸⁶ If a calculation of the value of assembled workforce is used as an input in reporting other intangibles, shouldn't it be reported as well (under the Sarbanes-Oxley Act requirements)?

Finally, as mentioned at the very beginning of this paper, the different treatment of acquired intangible assets and those generated internally is a major area of concern. As the earlier FASB report on accounting for the New Economy stated:

There is no conceptual basis in the definition of an asset for applying different recognition rules to intangible assets purchased from outsiders and the same assets created internally. Different recognition rules, if appropriate, require some other justification.⁸⁷

The lack of such a requirement is both father to and son of the lack of internal accounting system for capturing investments in other intangibles. In many cases, ongoing investments in human capital, such as expenditures on in-house training, mentoring, etc., are not reported separately as either investments or expenses and apparently not even tracked internally.

Inability to capture such information makes recognition of such ongoing investments difficult – and the lack of a requirement to include such data provides no incentives for creation of such systems. FASB requirements clearly drive, and limit, company responses. The 2004 Accenture survey found that half of the respondents limit the definition of intangibles to those defined by the relevant accounting standards board. The Sarbanes-Oxley Act is pushing companies to upgrade their internal accounting systems. However, as discussed earlier, it remains to be seen whether this will provide any significant incentive for revamping these systems to provide better measures of intangibles.

Thus, under current requirements, the value of certain intangible assets must be reported only if those assets are acquired from outside the company and if they can be valued separately – which may be a matter of interpretation. Certain intangibles, specifically assembled workforce, may not be recognized as assets. Others, such as R&D, must be reported as part of expenses. Still others, such as worker training, may not even be captured by internal data.

The abandoned FASB follow-up project on intangibles would have been an attempt to address some of these issues. It was very carefully limited to disclosure of assets that are not currently recognized in statements of financial position but would have been recognized under SFAS 141 and 142 if acquired in a business combination. Clearly, FASB needs to revisit this project – and step up to the plate to address these issues.

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For all these problems, in accounting there are recognized guidelines for what must be recognized and placed on the balance sheet. They may be imperfect and not always followed. But they are agreed-upon guidelines nonetheless. In disclosure of non-financial measures and non-recognized intangible assets, the situation is different. Disclosure is guided by the framework requirements of Regulation S-K, which governs content of SEC-required reports. Those requirements, and SEC interpretations, call for disclosure of information that would be "material" to an investor's decision making. Over the years, there has been guidance from the SEC as to what is considered "material." However, when it comes to performance measures and non-recognized intangible assets, disclosure has been left up to the companies' discretion.

There are numerous variations of a framework for disclosing operating performance and value drivers. Each tries to link non-financial (or alternative financial) information to financial outcomes and the types of information investors and analysts use to make their decisions. As is often pointed out, the very nature of the important drivers – and the performance measures – are industry specific. Thus, no one set of measures is relevant for all companies.

However, the state of play is rapidly changing. First and foremost, investors are demanding more and better information. The Deloitte survey found that "nearly three-quarters (73%) of the executives and board directors said their companies are under increasing pressure to measure nonfinancial performance indicators." The competitive pressures of the financial markets are such that if a company does not disclose information that is being disclosed by its competitors, analysts will wonder why and inevitably draw the conclusion that the information is negative.

The SEC's guidelines on MD&A are only slightly over a year old. Since this guidance is new, it remains to be seen how tightly it is followed by SEC staff in reviewing corporate filings. The opportunity exists to make the MD&A section more relevant. According to SEC Commissioner Glassman:

The current reporting framework—and in particular the MD&A—gives companies flexibility to provide useful information to investors outside the GAAP framework. In that spirit, we would love to see metrics and indicators that the market deems useful. Unfortunately, MD&A disclosure has not reached its full potential because companies view it as an obligation, rather than an opportunity to discuss their business with investors and potential investors. Last year, the Commission's Division of Corporation Finance reviewed the reports of all of the FORTUNE 500 companies. The Division's most frequent comments related to the MD&A, and typically cited instances where companies simply recited financial statement information with boilerplate analysis that did not provide any insight into the companies' past performance or business prospects. That, in my opinion, is a tremendous lost opportunity to fill the gaps in GAAP, and is one of the main reasons programs like this one are questioning the relevance of GAAP.

Another potential force for change is the continued push by AICPA, under the rubric of the Enhanced Business Reporting Consortium, to develop a common framework for disclosure of value drivers and performance measures. As discussed earlier, the consortium's goal is to "drive the development and acceptance of enhanced business reporting." Needless to say, should the consortium succeed, it could dramatically change the way in which intangibles are reported.

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Everyone agrees that accounting rules do not capture all the relevant information on intangible assets. Debate continues over the merits of recognition versus disclosure among accountants, auditors, valuation experts, financial analysts and scholars. Questions linger about what should be recognized on a company's balance sheet (and therefore valued) or simply disclosed. And questions linger about the accuracy and validity of valuations and assumptions used in valuation methodologies. Yet the investor community and corporate management continue to demand more qualitative and quantitative information on intangible assets, performance measures and value drivers.

Increasing availability of information on intangibles will take time and effort. There are many issues to unravel. However, at a minimum, there are some steps that can be taken in the near term. First, FASB and IASB must confront the disparity in treatment of acquired versus internally generated intangibles. Second, the accounting profession should address the issue of expensing R&D.

More importantly, we must focus on the goal of better disclosure. Even if all the accounting problems can be fixed, there is too much important data and information that can never be reduced to an accounting valuation. In that regard, we need to go beyond simply adding more to MD&A. It is too easy to lose important information there or simply fill the space. As Alan Beller, Director of SEC's Division of Corporation Finance said, "I believe that some of the boilerplate and 'elevator music' seen in too much MD&A can be safely eliminated." Instead of adding more "elevator music," there needs to be a comparable framework for mandatory disclosure of material non-financial metrics.

Mandatory disclosure is generally justified in terms of:

the informational asymmetries that exist between companies and investors. The logic is that by arming investors with information, mandatory disclosure promotes informed investor decision making, capital market integrity, and capital market efficiency. ⁹⁵

However, increased disclosure also forces better information collection by companies. It is not just the asymmetry in information between the parties, but the lack of information altogether. Such a framework would be as useful to management as to investors.

That is not to say that there should be a one-size-fits-all framework. Any framework must be tailored to important factors for the specific industry sector—but still allow for cross-company and cross-industry comparisons. The Mantos study for the EU suggests that at a minimum the following measures be included: investment in training; investment in

R&D; investment in information and communications technology (ICT) infrastructure; new products ratio/ turnover; patent approval rate/profile; employee turnover; and employee productivity. 96

Going beyond cross-industry comparison, the framework also needs to be a management tool. It needs to tie the metrics directly to corporate financial performance, management's financial rewards and management accountability.

Likewise, it needs to deal with problems of information overload. An "everything-including-the-kitchen-sink" approach is more likely to confuse and obfuscate, rather than illuminate. As Troy Paredes of the Washington University School of Law puts it:

Meaningful, effective disclosure does not simply mean more disclosure. Because of information overload, in some cases, more disclosure can mean less effective disclosure. 97

The SEC MD&A guidance discussed earlier was an attempt to focus on "material" information and remove the extraneous.

Getting to such a framework will be a difficult task. As the Deloitte survey points out, "the two biggest obstacles to enabling the board and senior management to track nonfinancial vital signs of the business are the lack of sophisticated measures and doubts that they truly matter."

That is a good description of our ongoing research and creative task, beginning with a new look at measures. In order to create new, more sophisticated measures, we must first take a hard look at what companies actually disclose and what investors are asking for. We must go beyond discussion of potential frameworks that were reviewed in this report to look at specific measures. This will be our next research task.

We must also look for new measures at the macro-level. For example, as we have noted elsewhere, the U.S. does not have a set of innovation measures. ⁹⁹ We collect data on science and technology (such as patents) but not directly on innovation. Other countries are well ahead of us in this regard; we must update our statistical system to make better economic policy.

Finally, we need to better understand the role of intangibles in financial markets. How the market values, and potentially trades, intangibles is another area of ongoing research.

With these and other studies by numerous organizations, we can create a corporate reporting system that is an accurate reflection of the intangible economy.

APPENDIX

Figure 1: FASB List of Intangibles¹

- a. Marketing-related intangible assets
 - (1) Trademarks, tradenames
 - (2) Service marks, collective marks, certification marks
 - (3) Trade dress (unique color, shape or package design)
 - (4) Newspaper mastheads
 - (5) Internet domain names
 - (6) Noncompetition agreements
- b. Customer-related intangible assets
 - (1) Customer lists
 - (2) Order or production backlog
 - (3) Customer contracts and related customer relationships
 - (4) Noncontractual customer relationships
- c. Artistic-related intangible assets
 - (1) Plays, operas, ballets
 - (2) Books, magazines, newspapers, other literary works
 - (3) Musical works such as compositions, song lyrics, advertising jingles
 - (4)Pictures, photographs
 - (5) Video and audiovisual material, including motion pictures, music videos, television programs
- d. Contract-based intangible assets
 - (1) Licensing, royalty, standstill agreements
 - (2) Advertising, construction, management, service or supply contracts
 - (3) Lease agreements
 - (4) Construction permits
 - (5) Franchise agreements
 - (6) Operating and broadcast rights
 - (7) Use rights such as drilling, water, air, mineral, timber cutting, and route authorities
 - (8) Servicing contracts such as mortgage servicing contracts
 - (9) Employment contracts
- e. Technology-based intangible assets
 - (1) Patented technology
 - (2) Computer software and mask works
 - (3) Unpatented technology
 - (4) Databases, including title plants
 - (5) Trade secrets, such as secret formulas, processes, recipes.

ⁱ Financial Accounting Standards Board (FASB), *Statement of Financial Accounting Standards No. 141: Business Combinations*, June 2001, paragraph A 14, pp. 28 & 29

Figure 2: AICPA 1999 List of Intangibles

- Airport gates and slots
- Bank customers, including deposits, loans, trusts and credit cards
- Blueprints
- Book libraries
- Brand names
- Broadcast licenses
- Buy-sell agreements
- Certificates of need
- Chemical formulas
- Computer software
- Computerized databases
- Contracts
- Cooperative agreements
- Copyrights
- Credit information files
- Customer contracts
- Customer and client lists
- Customer relationships
- Designs and drawings
- Development rights
- Distribution networks
- Distribution rights
- Drilling rights
- Easements
- Employment contracts
- Engineering drawings
- Environmental rights
- FCC licenses
- Favorable financing
- Favorable leases
- Film libraries

- Food flavorings and recipes
- Franchise agreements
- Historical documents
- HMO enrollment lists
- Insurance expirations
- Insurance in force
- Joint ventures
- Know-how
- Laboratory notebooks
- Landing rights
- Leasehold interests
- Literary works
- Loan portfolios
- Location value
- Management contracts
- Manual databases
- Manuscripts
- Medical charts and records
- Mineral rights
- Musical compositions
- Natural resources
- Newspaper morgue files
- Noncompete covenants
- Options, warrants, grants, rights
- Patent applications
- Patents (both product and process)
- Patterns
- Permits
- Prescription drug files
- Prizes and awards
- Procedural manuals
- Production backlogs
- Product designs

- Property use rights
- Proposals outstanding
- Proprietary computer software
- Proprietary processes
- Proprietary products
- Proprietary technology
- Publications
- Retail shelf space
- Royalty agreements
- Schematics and diagrams
- Securities portfolios
- Security interests
- Shareholder agreements
- Solicitation rights
- Stock and bond instruments
- Subscription lists
- Supplier contracts
- Technical and specialty libraries
- Technical documentation
- Technology-sharing agreements
- Title plants
- Trade secrets
- Trained and assembled workforce
- Trademarks and trade names
- Training manuals
- Use rights (air, water, and land)

ENDNOTES

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¹ In the Dark: What boards and executives don't know about the health of their businesses, a survey by Deloitte in cooperation with the Economist Intelligence Unit, October 2004,

² Leonard Nakamura, "Intangibles: What Put the New In the New Economy?" *Business Review*, Federal Reserve Bank of Philadelphia, July/August, 1999, pp. 3-19; and Leonard I. Nakamura, *What Is The U.S. Gross Investment In Intangibles? (At Least) One Trillion Dollars A Year!*, Working Paper No. 01-15, Federal Reserve Bank of Philadelphia, October 2001, http://www.phil.frb.org/files/wps/2001/wp01-15.pdf.

³ See Baruch Lev, *Intangibles: Management, measurement, and reporting*, Brookings Institution Press, Washington, D.C., 2001; Margaret M. Blair and Steven M.H. Wallman, *Unseen Wealth: Report of the Brookings Task Force on Intangibles*, Brookings Institution Press, Washington, D.C., 2001; Wayne S. Upton, Jr, *Business and Financial Reporting: Challenges from the New Economy*, Special Report, Financial Accounting Series No. 219-A, Financial Accounting Standards Board, April, 2001, http://www.fasb.org/articles&reports/sr_new_economy.pdf; and Peter J. Wallison and Robert E. Litan, *The GAAP Gap: Corporate Disclosure in the Internet Age*, American Enterprise Institute Press, 2000, http://www.aeibrookings.org/publications/abstract.php?pid=95.

⁴ Financial Reform: Relevance and Reality in Financial Reporting, Speech by Commissioner Cynthia A. Glassman, U.S. Securities and Exchange Commission, National Association for Business Economics, Atlanta, Georgia, September 16, 2003, http://www.sec.gov/news/speech/spch091603cag.htm.

⁵ Measures that Matter, The Ernst & Young Center for Business Innovation, 1997.

⁶ Presentation at the 2003 Thomson IntangiblesIQ conference, *Innovation and Shareholder Value*, http://www.intangiblesiq.com/conf_events.html.

⁷ *In the Dark*, op. cit., p. 3.

⁸ Kevin J. Delaney, "Heard on the Street: Options Accounting Aids Google" *The Wall Street Journal*, April 20, 2005, page C1, http://online.wsj.com/article/0,,SB111396204075711625,00.html

⁹ Peter J. Wallison, "Accounting Lags behind a Knowledge Economy," American Enterprise Institute for Public Policy Research, Briefing 2004-8 #16505, March 2004, http://www.aei.org.

¹⁰ For example, the OECD is launching a new program of work on "intellectual assets and value creation," beginning with a Forum on Business Performance and Intellectual Assets

in September 2004. See http://www.oecd.org/document/39/0,2340,en_2649_33703_33725863_1_1_1_1_1,00.html.

- ¹¹ AICPA Special Committee on Financial Reporting, *Improving Business Reporting A Customer Focus (The Jenkins Report): Meeting the Information Needs of Investors and Creditors*, 1994 http://www.aicpa.org/members/div/acctstd/ibr/index.htm.
- ¹² AIMR, *Financial Reporting in the 1990s and Beyond*, 2003, available from CFA Institute at http://www.efastcom.com/CFABookstore/control/productdetails?item_id=935001.
- ¹³ FASB, *Improving Business Reporting: Insights into Enhancing Voluntary Disclosure*, Steering Committee Report, Business Reporting Research Project, 2001, http://www.fasb.org.
- ¹⁴ Upton, op. cit.
- ¹⁵ FASB, Statement of Financial Accounting Standards No. 141: Business Combinations, June 2001 and Statement of Financial Accounting Standards No. 142: Goodwill and Other Intangible Assets, June 2001, http://www.fasb.org.
- ¹⁶ According to discussions with those involved, the decision to halt the project was made for two reasons: resource constraints and a recognition that any work to expand the reporting framework on intangibles needed to be done in a coordinated fashion with other standard setting bodies, especially IASB. The project of coordinating SFAS 141 & 142 with International Accounting Standard (IAS) 38 was seen as the first step in what might become a broader project on disclosure of intangibles and fair value sometime in the future.
- ¹⁷ Strengthening Financial Markets: Do Investors Have the Information They Need? Report of an SEC-Inspired Task Force, May 2001, p. 2, http://www.fei.org/download/SEC-Taskforce-Final-6-6-2k1.pdf.
- ¹⁸ It should be noted that this discussion refers only to reporting and accounting treatment of intangibles. It does not deal with issues of reporting and treatment of intangibles for tax purposes. Internal Revenue Service rules treat intangibles different from FASB and SEC requirements.
- 19 Blair and Wallman, Unseen Wealth, op. cit.
- ²⁰ EITF Issue 02-17, *Recognition of Customer Relationship Intangible Assets Acquired in a Business Combination*, http://www.fasb.org.
- ²¹ Other FASB Statements concerning the recognition and accounting treatment continue to apply in certain cases, such as that concerning treatment of in-process R&D and capitalization of recording masters.

"Prior to the release in 1970 of APB Opinion No. 17, *Intangible Assets*, generally accepted accounting principles (GAAP) recognized intangible assets as having either a **limited** or **indefinite** life; the former were amortized over their remaining useful lives and the latter were not amortized at all. APB Opinion No. 17 states that "the value of intangible assets at any one date eventually disappears and that the recorded costs of intangible assets should be amortized." This required that *all* intangible assets be amortized over a period not to exceed 40 years. With SFAS No. 142, the treatment of indefinitely lived intangible assets has come full circle." (emphasis in original) Michael Mard, James Hitchner, Steven Hyden and Mark Zyla, *Valuation for Financial Reporting: Intangible Assets, Goodwill and Impairment Analysis, SFAS 141 and 142*, John Wiley & Sons, 2002. pp. 1-2.

²² For a description of the state of play prior to SFAS 141 & 142, see Shyam Vallabhajosyula, "Accounting Rules and Regulations for Intangibles," Appendix A in Lev, op. cit., 2000.

²³ SFAS 141, op. cit., paragraph 39, p. 17.

²⁴ Ibid, paragraph B169, p. 72.

²⁵ With respect to the treatment of intangibles, it is interesting to note, according to Mard, et. al.:

²⁶ One of the largest impacts of the issuance of SFAS 141 & 142 was not specific to the measurement of intangibles, but the financial restatements required under the new treatment of goodwill and intangibles, as certain portions of goodwill that had previously been amortized over 40 years were shifted to either shorter amortization periods or subject to an annual impairment test rather than amortized.

²⁷ FASB, "Minutes of the September 5, 2002 Roundtable Discussion about Disclosing the Fair Value of Intangible Assets," September 25, 2002, p. 2.

²⁸ Ibid, p. 4.

²⁹ Part of IASB's issuance of ED 3 and the revisions to IAS 38.

³⁰ IASB, "Project Summary – Business Combinations Phase I Field Visits," pp. 14 & 15.

³¹ IASB, "Project Summary – Business Combinations Phase I Field Visits," p. 13.

³² IASB, "Project Summary – Business Combinations Phase I Field Visits," p. 12.

³³ SEC, "Summary by the Division of Corporation Finance of Significant Issues Addressed in the Review of the Periodic Reports of the Fortune 500 Companies – Monitor of the Fortune 500 by the Division of Corporation Finance," February 27, 2003, http://www.sec.gov/divisions/corpfin/fortune500rep.htm..

³⁴ The comments were made as part of a speech at the annual AICPA meeting, which is traditionally a time when staff provides insights and non-binding views to the accounting profession. See Chad A. Kokenge, "Speech by SEC Staff: 2003 Thirty-First AICPA National Conference on Current SEC Developments," Washington, D.C., December 11, 2003, http://www.sec.gov/news/speech/spch121103cak.htm.

http://europa.eu.int/comm/enterprise/services/business_related_services/studies_brs/vol_4_04.pdf.

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- http://smgnet.bu.edu/smgnet/css/staff/pub/GetFile.CFM/Gu,_Feng_05.pdf?did=182&File name=Gu,_Feng_05.pdf.

³⁵ Mantos Associates, *Report on the Feasibility of an Enterprise Data Repository on Intangible Assets: Volume IV, Appendix 2*, Report to the European Commission, DG Enterprise, November 2004,

³⁶ Op. cit., Volume III, p. 11.

³⁸ Presentation at the 2003 Thomson IntangiblesIQ conference, *Innovation and Shareholder Value*, http://www.intangiblesiq.com/conf_events.html.

³⁹ *Intangible Assets and Future Value*, An Accenture survey, conducted by the Economist Intelligence Unit, 2004, http://www.accenture.com/xdoc/en/services/sba/hotidea/fva_summary.pdf.

⁴⁰ FASB, *Improving Business Reporting: Insights into Enhancing Voluntary Disclosure*, Steering Committee Report, Business Reporting Research Project, 2001, p. 11.

⁴¹ FASB, "Minutes of the September 5, 2002 Roundtable Discussion about Disclosing the Fair Value of Intangible Assets," September 25, 2002.

⁴² AICPA Special Committee on Financial Reporting, *Improving Business Reporting – A Customer Focus (The Jenkins Report): Meeting the Information Needs of Investors and Creditors*, 1994 http://www.aicpa.org/members/div/acctstd/ibr/index.htm.

⁴³ Ibid, Appendix II.

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ FASB, *Improving Business Reporting*, op.cit.

⁴⁷ Ibid, pp. 6-10.

⁴⁸ Ibid., p. 6.

⁴⁹ "Intellectual Capital Statements" Danish Ministry of Science and Technology http://www.videnskabsministeriet.dk/cgi-bin/theme-list.cgi?theme_id=100650&_lang=uk.

⁵⁰ Leif Edvinsson and Michael Malone, *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower*, HarperBusiness, 1997.

⁵¹ See http://www.sveiby.com/articles/IntangAss/CompanyMonitor.html.

⁵² See www.globalreporting.org.

⁵³ Securities and Exchange Commission, *Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations*, 17 CFR Parts 211, 231 and 241, [Release Nos. 33-8350; 34-48960; FR-72], December 19, 2003, http://www.sec.gov/rules/final/33-8350.htm.

⁵⁴ Ibid., compiled from footnote 27.

⁵⁵ Ibid., footnote 27.

⁵⁶ Final Rule: Conditions for Use of Non-GAAP Financial Measures, Securities and Exchange Commission, 17 CFR PARTS 228, 229, 244 and 249 [Release No. 33-8176; 34-47226; FR-65; FILE NO. S7-43-02] RIN 3235-A169, http://www.sec.gov/rules/final/33-8176.htm

⁵⁷ *Company Law Reform*, Presented to Parliament by the Secretary of State for Trade and Industry by Command of Her Majesty, March 2005, p. 10, www.dti.gov.uk/cld/review.htm

⁵⁸ Reporting Standard 1: Operating And Financial Review, British Accounting Standards Board, London, November 2004, p. 17-19 http://www.frc.org.uk/images/uploaded/documents/OFREDweb.pdf

⁵⁹ See Enhanced Business Reporting Consortium, *Business Plan*, http://www.ebrconsortium.org/download/EBRC_Business_Plan.pdf.

⁶⁰ Report of the Public Company Task Force to the Special Committee on Enhanced Business Reporting, AICPA, June 2004, http://www.ebrconsortium.org/pctf_report_Introduction.htm, p. 3.

⁶¹ Ibid, p. 39.

⁶² Ibid, p. 8.

⁶³ Mark Bezant and Elizabeth Gutteridge, "The changing landscape of IP governance," Managing Intellectual Property, September 2004, http://www.legalmediagroup.com/mip/includes/print.asp?SID=2611; See also Marie Leone, "Courts and Torts: Touching on Intangibles," CFO.com, February 22, 2005, http://www.cfo.com/article.cfm/3686823.

⁶⁴ Liza Vertinsky, "Expanded Role of IP Audits in the Aftermath of Sarbanes-Oxley," IP Newswire, November 2003, www.Ipnewswire.com.

⁶⁵ See John Parkinson and Stewart Bloom, "Surviving Sarbanes-Oxley: Wall Street, Congress, and your CFO, too, soon will demand real-time answers to financial questions, data security guarantees, and insight into intangibles. Can you deliver?," Optimize Magazine, June, 2003, Issue 22 http://www.optimizemag.com/issue/020/law.htm.

⁶⁶ See Ben Worthen, A Funny Thing Happened on the Way to Compliance, CIO Magazine, December 1, 2003 http://www.cio.com/archive/120103/oxley.html.

⁶⁷ AICPA, Report of the Public Company Task Force, op. cit., p. 6.

⁶⁸ See Robert Kaplan and David Norton, *The Balanced Score Card*, Harvard Business School Press, Boston, MA, 1996, http://www.balancedscorecard.org

⁶⁹ For a discussion of the three, see Karl-Erik Sveiby, "Measuring Intangibles and Intellectual Capital - An Emerging First Standard," http://www.sveiby.com/articles/EmergingStandard.html.

⁷⁰ Note: Jonathan Low is a member of the Board of Directors of Athena Alliance.

⁷¹ See Jonathan Low and Pam Cohen Kalafut, *Invisible Advantage: How Intangibles are Driving Business Performance*, Cambridge, MA: Perseus, 2002, http://www.predictiv.net; and Jonathan Low, "The Invisible Advantage" presentation to Athena Alliance, January 23, 2003, http://www.athenaalliance.org.

⁷² Robert G. Eccles, Robert H. Herz, E. Mary Keegan and David M.H. Phillips, *The Value Reporting Revolution: Moving Beyond the Earnings Game*, John Wiley & Sons, New York, 2001; and Samuel A. DiPiazza, Jr. and Robert G. Eccles, *Building Public Trust: The Future of Corporate Reporting*, John Wiley & Sons, New York, 2002.

⁷³ Daniel Andriessen and René Tissen, *Weightless Wealth: Finding your real value in a future of intangible assets*, Financial Times Prentice Hall, London, 2000.

⁷⁴ Richard E.S. Boulton, Barry D. Libert and Steve M. Samek, *Cracking the Value Code*, HarperBusiness, New York, 2000.

⁷⁵ See FASB Staff Position Nos. FAS 141-1 and FAS 142-11, http://www.fasb.org/fasb_staff_positions/fsp_fas141-1&fas142-1.pdf, issued pursuant to Board action of March 31, 2004, http://www.fasb.org/board_meeting_minutes/03-31-04_eitf.pdf.

⁷⁶ See http://www.fasb.org/project/intangible_assets.shtml.

⁷⁷ FASB, "Project Updates: Useful Life and Amortization of Intangible Assets," http://www.fasb.org/project/intangible_assets.shtml#decisions.

⁷⁸ In its revisions to IAS 38, IASB did take note of the concern that while an intangible asset may be identifiable, there may not be an ability to determine a fair value (and therefore it should remain part of goodwill). The revised IAS 38 will note that uncertainty exists in the valuation of intangibles assets. IASB is seeking to set a high enough standard of reliability to force the recognition where feasible but still allow for an understanding that some asset can not be reliably measured.

⁷⁹ The concern over valuation models is not, however, one sided. Concern over the validity of the valuation models is being driven by both tax and accounting issues. Both the Internal Revenues Service and the Congress have taken an aggressive stance on the valuation of IPR donations, to the point of changing the tax laws to restrict what they consider over-generous valuations.

⁸⁰ Blair and Wallman, op. cit.

⁸¹ "Intangibles Update: John Wood and Baruch Lev face off over non-financial measures," *IR Magazine*, December 2002, http://www.ironthenet.com/feature.asp?articleID=2371.

⁸² See Auditing Fair Value Measurements And Disclosures: Allocations Of The Purchase Price Under FASB Statement Of Financial Accounting Standards No. 141, Business Combinations, And Tests Of Impairment Under FASB Statements No. 142, Goodwill And Other Intangible Assets, And No. 144, Accounting For The Impairment Or Disposal Of Long-Lived Assets, A Toolkit For Auditors, AICPA, http://www.aicpa.org/members/div/auditstd/fasb123002.asp.

⁸³ Ellen R. McGrattan and Edward C. Prescott, *Productivity and the Post-1990 U.S. Economy*, Federal Reserve Bank of Minneapolis, Research Department Staff Report 350, November 2004, http://research.mpls.frb.fed.us/research/sr/sr350.pdf.

⁸⁴ According to research by BEA economists, our current treatment of R&D as an expense underestimates our national rate of savings by approximately 2 percentage points. See Barbara M. Fraumeni and Sumiye Okubo, *R&D in U.S. National Accounts*, Paper Prepared for the 28th General Conference of The International Association for Research in Income and Wealth, Cork, Ireland, August 22 – 28, 2004, Bureau of

Economic Analysis, U.S. Department of Commerce, www.bea.doc.gov/bea/about/background/1104/R&D_National_Accounts.pdf.

⁸⁵ Committee of European Securities Regulators, *Draft Technical Advice On Equivalence Of Certain Third Country GAAP And On Description Of Certain Third Countries Mechanisms Of Enforcement Of Financial Information*, Consultation Paper, April 2005, http://www.cesr-eu.org

⁸⁶ This is known as the Multiperiod Excess Earnings Method (EEM) for calculating the value of intangibles. See Mard, Hitchner, Hyden and Zyla, op. cit.

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⁸⁸ Intangible Assets and Future Value, op. cit.

⁸⁹ Peter Loftus, "Software for Sarbanes," Wall Street Journal Technology Report, April 25, 2005; page R8, http://online.wsj.com/article/0..SB111401066634112037,00.html

⁹⁰ Regulation S-K, US Securities and Excannge Commission, SEC 1845 (11-2004) http://www.sec.gov/divisions/corpfin/forms/regsk.htm

⁹¹ In the Dark: What boards and executives don't know about the health of their businesses, a survey by Deloitte in cooperation with the Economist Intelligence Unit, October 2004, p. 3, http://www.deloitte.com/dtt/cda/doc/content/dtt audit InthedarkFINAL2 101304.pdf.

⁹² Obstacles to Good Financial Reporting, Speech by Commissioner Cynthia A. Glassman, U.S. Securities and Exchange Commission, American Enterprise Institute, Washington, D.C., September 3, 2003, http://www.sec.gov/news/speech/spch090303cag.htm.

⁹³ http://www.aicpa.org/innovation/scebr.htm.

⁹⁴ Speech by SEC Staff: Remarks before the Rocky Mountain Securities Conference, by Alan L. Beller, Director, Division of Corporation Finance, U.S. Securities and Exchange Commission, given at Denver, Colorado, May 17, 2002, http://www.sec.gov/news/speech/spch563.htm.

⁹⁵ Troy A. Paredes, "Blinded By The Light: Information Overload And Its Consequences For Securities Regulation," *Washington University Law Quarterly*, Vol 81, No. 2, Summer 2003, p. 418, http://law.wustl.edu/WULQ/81-2/Paredes.pdf.

⁹⁶ Mantos, op.cit., Volume II – Final Report, p. 7.

⁹⁷ Paredes, op. cit., p. 446.

⁹⁸ *In the Dark*, op. cit., p. 4.

⁹⁹ Kenan Patrick Jarboe, "National Innovation Policy: An Urgent U.S. Need," New Technology Week, May 3, 2004, http://www.athenaalliance.org/apapers/NatInnovpolicy.html