

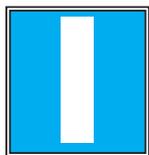
Accounting For The New Economy

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< EXECUTIVE SUMMARY >

◆ In the knowledge based companies of the new economy, intangible assets are being considered as more important than tangible ones. Some of these intangible assets are recognized by the accountants and are also valued and reported as assets in the financial statements. But there are a number of intangible assets that do not satisfy the accountants definition of an intangible

asset. However, such assets are also crucial to the future value creation ability of an organization. Such intangible assets should also be valued and reported to the interested parties along with the financial statements. This article attempts to discuss some of the prospective models of valuation and reporting of all intangible assets in an organization.



It is true that the economy of the 21st century is fundamentally distinct from that of 1950s. In 1950s the tangible capital in the form of land, buildings, machines, raw-material etc. was more important than the intangible capital in the form of brands, leadership ability of managers, the ability of the company to adapt to the fast changing business environment etc. Over the last two decades, there has been an explosion in key technical areas including information technology, the media and communications, providing new tools with which a global economy has been built. These tools bring intangible benefits without which an organization can no longer function. If these intangible assets (besides the tangible ones) are important to an organization's existence, they should be identified, valued and reported in or along with the

financial statements to the interested parties.

At present, all the intangible assets in an organization are not recorded in accounting because these assets do not satisfy the definition of 'intangible assets' as accepted by the accountants for financial reporting purposes. According to AS-26 on 'Intangible Assets' issued by the Institute of Chartered Accountants of India (ICAI), an intangible asset would be recorded in the balance sheet on the satisfaction of three essential conditions viz. Identifiability, Control and Future Economic Benefits. An asset is said to be identifiable if the enterprise could rent, sell, exchange or distribute the specific future economic benefits attributable to the asset without impairing the benefits flowing from other assets. An enterprise controls an asset if it has the power to obtain the future economic benefits flowing from the underlying resources and also can restrict the access of others to those benefits. Future Economic benefits include revenue generated from the sale of goods or services or savings in costs or other benefits resulting from the use of asset by the enterprise. If an intangible asset does not ful-

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fill these three conditions, any expenditure incurred would be treated as an expense for that period. For example, investments made for enhancing employees' motivation level and customer's satisfaction level do not satisfy the conditions of identifiability and control but they do affect the future value creation ability of an organization and thus, the future economic benefits.

The question is whether such investments are relevant for estimating the future performance of an organization? The answer would definitely be positive. Similar views have been expressed in the special report given by the Financial Accounting Standards Board (FASB) in 2001 titled "Business and Financial Reporting, Challenges from the New Economy". One of the significant observations in the report is that 'control' is one of the essential characteristics of an asset and a number of assets like customer satisfaction will never be considered as an asset for reporting purposes. However, the control criterion cannot eliminate the effect of such an asset on the value of other recognizable assets. The report, therefore, has suggested some new models of valuation and reporting of intangible assets.

One of the prospective reporting models as suggested in the report, is given by the Canadian Institute of Chartered Accountants (CICA). The model is called 'Total value Creation' (TVC). TVC includes a highly sophisticated event-based present value model designed to capture and report information about an entity's planned activities. According to the representatives of the CICA, much of the value creation process takes place prior to realization through third party transactions. TVC is designed as a parallel system to traditional financial reporting to enable measurement and reporting of value creation as it occurs. When the value is subsequently realized, it will be captured by the traditional financial reporting.

Another reporting model, given in the FASB report, is the Accounting for the Future (AFTF) value. AFTF value is the present value of all expected future net cash flows discounted at the market cost of capital. The market cost of capital is the yield rate the shareholders require before they will buy the company's stock. The AFTF value at the end of a time period less the AFTF value at the start of the time period (increased at the cost of capital) is the value added during that time period.

The above said two models viz, the TVC model and the AFTF value model are based on the monetary measures only. Two other models for valuing intangible assets based on monetary measures, that have not been included in the FASB report, are the Calculated

Intangible Value (CIV) model given by Stewart and the 'q' measure given by Nobel laureate James Tobin.

According to the CIV model, the value of total intangible assets of an organization is measured by the following seven steps:

- i. Calculate average pre-tax earnings for the past three years.
- ii. Take the average year-end tangible assets for the same three years from the balance sheet.
- iii. Divide the earnings by the assets to get the return on assets (ROA).
- iv. Find the industry's average ROA for the same three years.
- v. Calculate the 'excess return'. Multiply the industry average ROA by the company's average tangible assets. Subtract this value from pre-tax earnings in step one. The result is the excess return.
- vi. Calculate the three year average income tax rate and multiply it by the excess return. The result is subtracted from the excess return to get an after-tax number. This is the premium attributable to intangible assets.
- vii. The net present value of the premium is calculated by dividing the premium by the company's cost of capital.

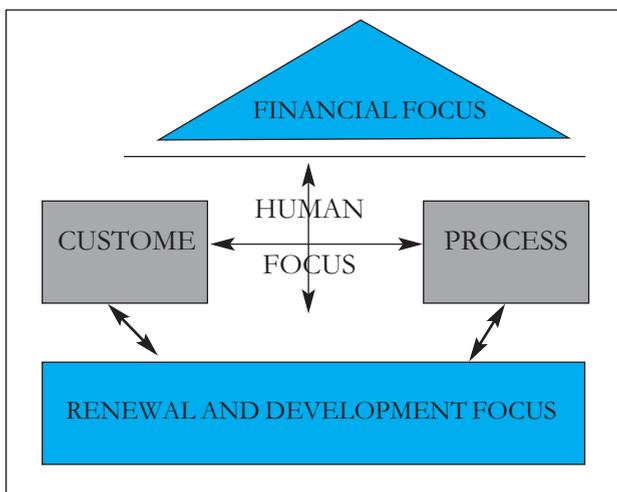
The limitation of this method is that it becomes inapplicable when the company's average ROA is less than the industry's average ROA.

James Tobin, a Nobel prizewinning economist, developed a measure, q, to help predict investment decisions. He hypothesized that the combined market value of all the companies on the stock market should be about equal to their replacement costs. In other words, the ratio of all the combined stock market valuations to the combined replacement costs should be around one. The theory is that if a company's q is greater than 1 and greater than competitors' q then the company has the ability to produce higher profits than other similar companies. The company has something intangible that gives it an advantage. The difference between the market value of a company and its replacement value gives an approximate measure of the intangible assets of that company.

Replacement value of a company can be calculated by taking the book value of a company, adding back accumulated depreciation, and making appropriate adjustments for price changes in different classes of assets from the time of purchase.

It is now being emphasized that besides using the financial measures for valuation and reporting of intangible assets, non-financial metrics should also be used. The leader in the use of non-financial metrics is the Swedish insurance company Skandia AFS, Skandia released the world's first public Intellectual Capital annual report in May 1995 under the leadership of Leif Edvinsson. Intellectual Capital (IC) has been defined by Brookings as 'combined intangible assets which enable the company to function'. According to Edvinsson, IC includes three forms of capital viz. Human Capital, Structural knowledge, skill and experience of the company's employees and managers. It also includes the creativity and innovations of the organizations i.e. how often are new ideas generated in house, implemented and the ratio of their success. Structural capital is described as the embodiment, empowerment and supportive infrastructure of human capital. It includes the physical systems used to transit and store intellectual material. The relationship of a company with its customers is distinct from that of its dealings with employees and strategic partners and this relationship is of absolutely central importance to the company's worth because the cash flow starts from the customer relationship. Indices of customer capital include measures of satisfaction, longevity, price sensitivity, even the financial well being of long term customers.

Skandia has developed a navigational tool called the 'Navigator' to capture the complete value of an enterprise.



OPERATING ENVIRONMENT

The shape of the navigator is essentially a house. The triangle atop the rectangle is the financial focus that includes the balance sheet which is a measure of where the firm was at a specific moment in the past. The walls of the house of IC bring us to the present company activities. These walls are customer focus and process focus. The bottom of the IC house- the rectangle represents the foundation of the house. It looks at the future. The focus is renewal and development focus. The last focus lies at the center of the house since it is the heart, the intelligence and the soul of the organization. It is the only active force in the organization and thus touches all other IC regions. This is the human focus.

At some point in the future, all IC, if it is to have value, must convert into currency. A new technology may take months to develop and years to convert to a real product, but at some point it must turn into revenues for the enterprise. The indices of customer satisfaction, employee morale and the like must also manifest themselves as higher revenues, lower overheads or greater profits. As that conversion occurs, a particular measure moves up from renewal and development, to customer and process, to at last- an entry in the financials- and then, into the company's financial history.

The value of IC, according to the Skandia model is equal to the product of an absolute value of IC in rupees (C) and that organization's co-efficient of efficiency (i) in using that absolute value i.e. $IC = iC$. The absolute value (C) indicators are the investments made by an organization in intangibles under the process focus, customer focus, research and development focuses and human focus of the Navigator. The efficiency co-efficient (i) indicators are the percentage indices achieved by the company at present under the above said four focus. In the valuation of IC, both absolute and efficiency indices under the financial focus are not considered because they represent the past and not the future earning capabilities of a company. The absolute (C) variable emphasizes an organization's commitment to the future and the efficiency (i) variable grounds those claims in present performance.

Examples of the absolute value (C) and efficiency (i) indicators are shown in the table below.

Focus	Absolute Indicators (C) in Rs.	Efficiency Indicators (i) in %
Customer	Customer support/training investment	Market share, Customer satisfaction index
Process	Change in I.T. inventory, upgrades To Electronic Data Interchange or Electronic networking system	Ratio of IT expenses to administration expenses
Human	Employee training and development Investment	Leadership Index, Motivation index, Employee retention index
Research and Development	New markets development Investment new patent or copyright investment	Ratio of R&D resources to total resources, Index of employee training hours

The value of 'C' is the average of the rupee value of all the 'C' indicators and 'i' is average of the percentage value of all the 'i' indicators. The value of IC, as already said, is the product of 'C' and 'i' and can be interpreted as the sum of the value of human, customer and structural capital expressed in terms of rupees.

The Skandia model rests heavily on the non-financial information for the valuation purposes. One of the observations in the FASB report is that non-financial information is inherently idiosyncratic to particular industries and perhaps to individual enterprises. This militates against any detailed accounting standards, but not against standards for form, presentation and disclosure of the underlying assumptions.

A number of other alternative valuation and reporting models of intangible assets have also been suggested by various researchers professional bodies and companies but there is no consensus on any particular method. However, what is important is that the complete issue of intangible assets has been recognized the world over. Standardization of the complete framework of valuation and reporting of intangible assets would require testing of reports generated over a sufficiently long period of time. With the efforts of professional accounting bodies and researchers in consultation with the industry such a comprehensive framework would be evolved in future that will change the present accounting practices drastically. ■

**All India CPE Modular Training Programme on Internal Audit hosted by the CPE Committee and the Internal Audit Committee of ICAI
Coordinated by Madurai Branch of SIRC of ICAI**

The CPE Committee and the Internal Audit Committee are pleased to announce a four days residential CPE Modular Training Programme focusing on Internal Audit at Kodaikanal, Tamilnadu. The details of the venue, exact dates of the programme, and the programme schedule will be hosted in the Institute's website and will be published in The Chartered Accountant May 2004 issue.

The number of participants for this programme will be restricted to 50 (FIFTY) only. Appropriate CPE Credit will be available for the members of the Institute.

Advance Intimation of Schedule of the CPE Teleconference Programmes for the Period May 2004-March 2005

The Continuing Professional Education Committee of the Institute intends to organise CPE Programmes through Teleconferencing Mode during third Saturdays of every month from May 2004-March 2005. Members and Students who desire to attend the programmes may get in touch with their nearest Regional Councils/Branches of Regional Councils/CPE Chapters/CPE Study Circles/CPE Study Groups. Topics and duration will be announced through the Institute's website and Newsletters of Regional Councils/Branches etc.