attainix CONSULTING

WWW.ATTAINIX.COM

What is Intellectual Capital?

And why it should be measured

Abhijit Talukdar
Founder, Attainix Consulting
info@attainix.com

Introduction

Capital, in the business context, refers to any asset that will produce future cash flows. The most well known asset types are tangible in nature. Tangible capital therefore refers to the physical and financial assets of the organization. The value of such assets is disclosed periodically (by publicly listed companies) and can be found easily on the balance sheet of the Company's financial records. Physical assets can mean land, machinery, inventory, plants, trucks, etc. whereas financial assets refer to the shareowners equity, retained earnings, working capital, prepaid expenses, accounts receivables, etc. Intangible assets on the other hand, such as the skills of the workforce and its organization, are increasingly becoming important towards determining future profits. However, they are much harder to determine, harder still to quantify into a value and therefore are never reported. Hence these types of assets remain largely invisible to the external world – and more often than not to insiders as well.

Thomas Stewart, a pioneer in the study of such intangible assets, is credited with having coined the term 'Intellectual Capital' to refer to these assets. After more than a decade of studies by various other scholars in this area, there is general agreement that Intellectual Capital itself is composed of three distinct types of capital - Human Capital, Structural Capital and Relational Capital.

- Human Capital is the availability of skills, talent and know-how of employees that is required to perform the everyday tasks that are required by the firm's strategy.
- Structural Capital is the availability of information systems, knowledge applications, databases, processes and other infrastructure required to support the firm in executing it's strategy.

- Relational Capital is the external linkage of the Company with Suppliers and Customers that enables it to procure and sell goods and services in an effortless manner.

Characteristics of Intellectual Capital

Although Intellectual Capital is similar to tangible assets in its potential for generating future cash flows, it is radically different from tangible capital in the following respects:

- Intellectual assets are non rival assets. Unlike physical assets which can only be used for doing one thing at a time, intellectual assets can be multiplexed. For example, a customer support system can provide support to thousands of customers at the same time. It is this ability to scale with need that makes intellectual assets far more superior to physical assets.
- Human Capital and Relational Capital cannot be owned, but have to be shared with employees and suppliers and customers. Growing this kind of capital therefore requires careful nurturing.
- Structural capital is an intangible asset that can be owned and controlled by managers. However, it cannot be traded easily since no markets exist for this purpose. Moreover, Customers do not care about the Structural capital of their Suppliers since every one likes dealing directly with real human beings rather than with systems.
- Structural capital, in the form of just-in-time procurement processes and real time inventory control systems can be substituted for expensive capital expenditure such as storage warehouses. Hence the knowledge economy has opened up opportunities for every firm to explore whether inexpensive intangible assets can do the work of costly physical assets.
- Firms that leverage their intellectual capital to do knowledge work are able to generate higher margin of profits than those who provide mass-produced solutions.
- Human, Structural and Relational Capital often work together in judicious combinations to give rise to core competencies that assume strategic significance. Hence it is not enough to invest in people, systems and customers separately, but in combinations that produce end value.

So how does it fit in?

In order to understand how Intellectual Capital fits into the scheme of things, let’s look at Figure 1 below to understand the typical business cycle from the firm’s perspective. The objective of a typical for-profit firm is to use its assets for producing goods and services which it can sell for generating cash. Both tangible and intangible assets are used in this process. It is the readiness of the intangible assets that determines the efficiency of this cycle. The cash so generated is used in general in one of three different ways. It is either capitalized into more tangible assets or spent for the development of more intangible assets or paid out as dividends. This is also the reason why tangible assets appear on the balance sheet whereas intangible assets don't.

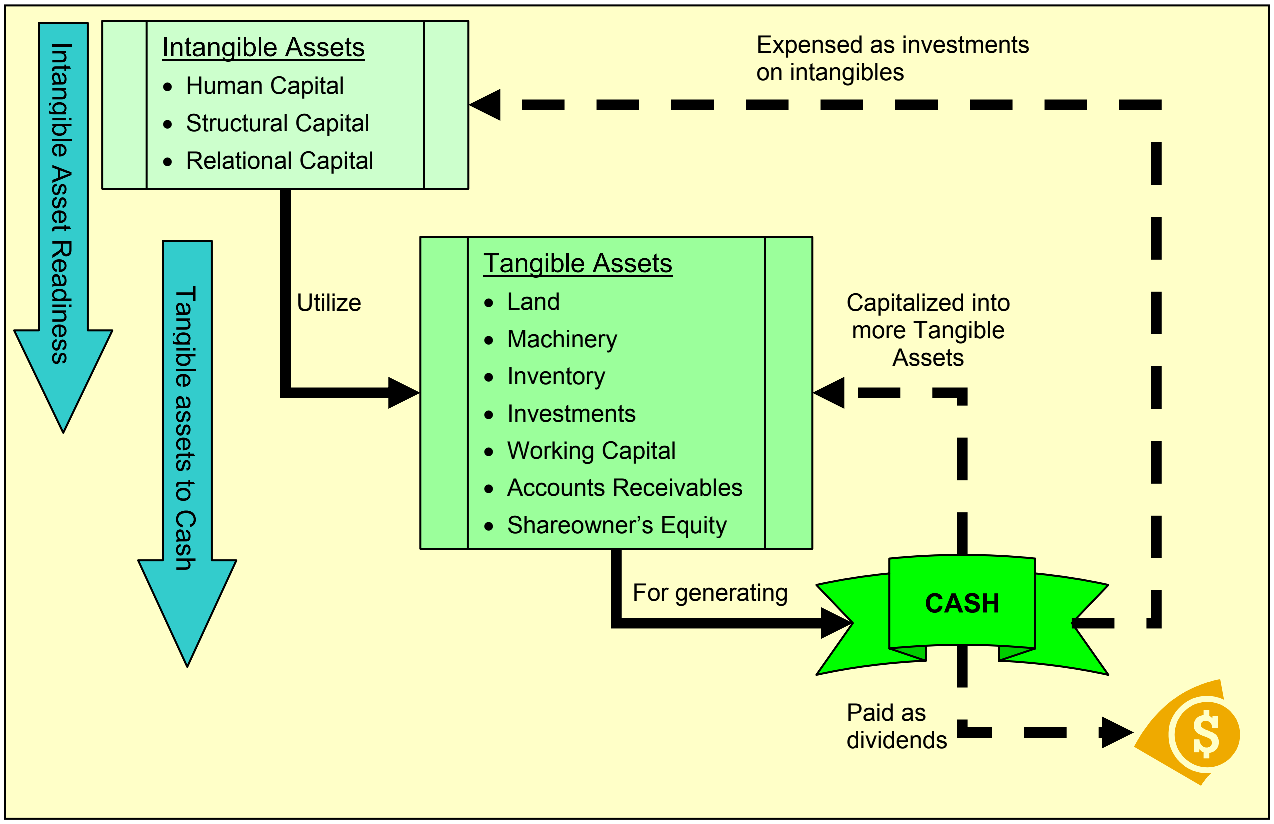

Figure 1: Asset to cash conversion cycle

This picture also reveals one more fact – tangible assets can be acquired by just about any business which has enough money to buy such assets. However, intangible assets have to be cultivated, nourished and nurtured in a planned manner before their yield can be fully harvested. The real differentiator between one firm and the next therefore, is the readiness of the firm's intangible assets for converting its tangible assets to cash in the most efficient manner. This readiness is more commonly known as core competency in business texts and it is the chief source of competitive advantage for companies.

Why should Intellectual Capital be measured?

A review of over 700 papers that studied Intellectual Capital measurement related issues found five generic reasons as the purpose of measuring Intellectual Capital (Marr et al 2003):

- to help organizations formulate their strategy
- to evaluate strategy execution
- to assist in the firm's diversification and expansion decisions
- for use as a basis for management compensation
- to communicate with external shareholders

The first three of these purposes relate to internal decision making - the purpose is maximizing operating performance for generating revenues at the lowest cost and the sustainability of supplier and customer relations and market share. The fourth point relates to the executive incentive scheme and the fifth relates to signaling motivations to external stakeholders. There are various other studies that have concluded likewise that Intellectual Capital measurement is necessary and beneficial for both efficient internal governance and succinct external communications. This is also quite obvious from the diagram in Figure 1. If the primary objective of all for-profit companies is to effectively manage their future cash flows, then they need to manage the ultimate drivers of these cash flows – the intangible assets. Since you cannot manage what you cannot measure, their measurement becomes quite important, if not absolutely necessary.

Modern accounting systems however are designed exclusively, barring a few exceptions, for measuring and reporting tangible assets. This creates the phenomena of the invisible Balance Sheet. Look at the Figure 2 below, showing the balance sheet of a typical firm.

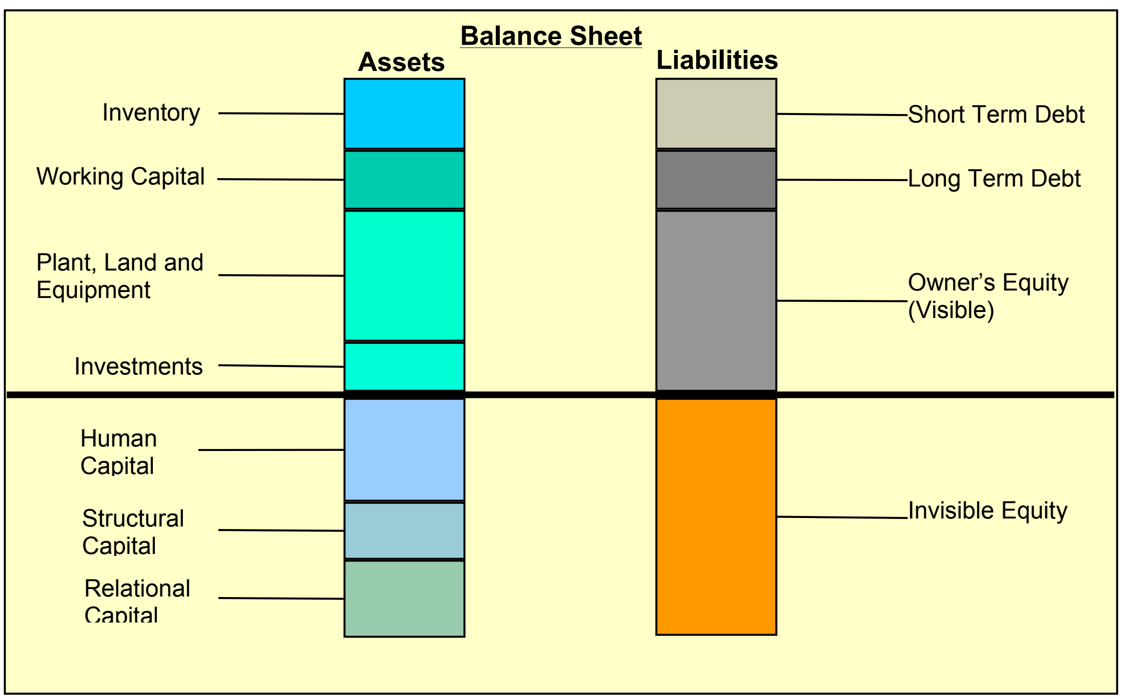

Figure 2 : Market valuation of a firm equals visible plus invisible equity

Everything that appears below the solid horizontal line represents the invisible assets of the firm. This is balanced on the right hand side by a corresponding invisible equity. We already know that that the market value of most public companies is considerably higher than their corresponding book value, which represents only the tangible assets of the firm. Looking at Figure 2, we can now easily understand why this is the case.

The invisible equity of a firm can be considerably large depending on how effectively the firm is harnessing its intellectual capital. For companies in the services sector, it is disproportionately large in comparison to physical assets. Even for companies in the manufacturing and agriculture sectors, investments in intangible assets is increasing as compared to those in tangible assets, signaling the increasing importance of intellectual capital as a key growth driver in the knowledge era.

Summary

The Intellectual Capital of a firm is the sum total of its Human Capital, Structural Capital and Relational Capital. These assets form a source of distinct competitive advantage and distinguish the performance of one firm from the other. Having control on such assets enables effective internal governance on the one hand and succinct external communications on the other. Hence it makes sense for firms to measure, monitor and report their Intellectual Capital.

Attainix Consulting focuses on providing software and consulting services that enable firms to convert their strategies to measurable actions. Attainix Consulting was founded on the premise of enabling organizations to manage their intangible assets. For more information, please contact us at info@attainix.com or visit our web site at www.attainix.com.