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Weightless Wealth

Four modifications to standard IC theory

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Expand your view

The Intellectual Capital (IC) movement is relatively young in terms of age, but already rich in history. The battle for acceptance of Intellectual Capital as an important concept for looking at modern organisations has largely been won. According to Richard Petty and James Guthrie (2000), the movement is in its second stage of development, the first focussing on raising awareness. The development of Intellectual Capital theory has primarily been guided by the thinking of a handful of influential practitioners. Especially the works of Karl Sveiby and Leif Edvinsson have influenced the thinking about the non-tangible factors, the ‘weightless wealth’, that determine the success of companies. On this foundation, a solid framework for analysing this hidden capital has been built.

The contribution of these early thinkers to our understanding of the key components for success in the new economy cannot be underestimated. Yet, this mainstream of thought has also limited our view. Now that the number of practitioners within the IC movement is growing rapidly and the results of their work are becoming more relevant every day, we need to look at some of the key assumptions or practices that have shaped the Intellectual Capital discussion until now.

The purpose of this article is to look at some of these practices and their consequences. Not to criticise the work that has been done so far, but to enrich the debate and improve the applicability of IC theory. For each of the practices, I will propose an alternative, based on practical research that has led to the development and testing of a tool called The Value Explorer[®] (Andriessen and Tissen, 2000). The purpose of this tool is to allow management

and stakeholders to make better decisions with regard to the strategy of the organisation and its future success.

This article discusses four practices found in mainstream Intellectual Capital theory. I know it is impossible to talk about “mainstream theory”, and probably none of the works published around Intellectual Capital will be based on all four. Please note that my generalisations are in no way meant to be derogatory. Still, for the transparency of the debate, I would like to address the following tendencies that can be found in many IC publications.

- First, there is a tendency to limit the discussion about the weightless wealth of companies to Intellectual Capital, meaning the intellectual means of production. This causes the discussion to primarily focus on intellectual skills and explicit knowledge.
- Second, in many studies we see the use of classification schemas that break down the total capital of a company into its contributing parts, like human capital and structural capital. This is a very useful way to define what we are talking about, but at the same time it hampers us in seeing the wood from the trees.
- Third, some practitioners have the tendency to treat intangibles the same way we treat tangible assets, by trying to force them into the double-entry bookkeeping system. They forget that the very nature of intangibles contradicts the ground philosophy of this system.
- Finally, the IC movement is very concerned with finding indicators that measure IC flows or stocks, but often forgets to provide the yardsticks that enable managers to judge whether measurements should be seen as too high or too low.

Look beyond the brain

The practice

The pop singer David Bowie has maintained his position in an industry that is known for “here today and gone tomorrow” for three decades. Much of this, of course, is due to his musical skills. But he also has a feel for the mood of the times. The transformations he has undergone, from Ziggy Stardust to the White Prince, show an ability to recreate an image in line with the changing tastes of the market. And this proved to be of market value: he became the first person in the entertainment industry to float a personal bond issue. The investors obviously thought it a good deal; the entire issue was sold within one hour for a total cost of over \$50 million (David and Meyer, 1998). Should we be calling Bowie's unique talent ‘intellectual capital’? To me his skills are more right-side-of-the-brain than left-side-of-the-brain skills.

Many companies enjoy success because their employees share collective values and norms. This is another hidden asset I would not like to call ‘intellectual’. At Microsoft, the culture is so closely knit, that secretaries who, thanks to their shares in the company, are millionaires, still come into work every morning. General Motors, in contrast, has never had such an open exchange of information. In fact, until recently, the information culture within the company concentrated mainly on financial information and the personality of the person presenting any new information. A strong product manager was thought able to convince the market of a new model, even if market research had shown otherwise. And many observers believe that this is one of the root causes for General Motors being unable to harness its full potential as a designer and manufacturer of automobiles. The present CEO, Jack Smith, was able to change this culture and now the emphasis lies more firmly on operational and quality information (Davenport and Prusak, 1998).

Corporate cultures and management styles often have nothing to do with rational behaviour and well thought-out rules and regulations. Ahold, the supermarket giant, has been able to expand worldwide, thanks to a culture of trust, open relationships, and decentralised authority. This is clear example of a valuable company resource that is difficult that cannot be labelled 'intellectual'.

The consequences

So the weightless wealth of companies consists of intangible assets of very different nature. Some can be described as intellectual or knowledge assets, products of the left side of the brain. Others, like corporate culture, the charisma of leaders and many of the talents of employees, are found more on the right side of the brain and in the hearts of people, and should not be labelled 'intellectual'. You might ask: "what's in a word?" The problem is that the word 'intellectual' has many connotations and associations, including 'rationality', 'intelligence', and 'reason'. Stating that the success of companies depends on their intellectual capital shows a rationalistic view on organisations; a view that often proved to be incorrect or, at least, incomplete.

Let me give you an example of some of the consequences of this view. In a recent article in the Journal of Intellectual Capital, Leif Edvinsson et al. (2000) promote "the systematic transformation of human capital into structural capital as a multiplier, with much more sustainable earnings potential for the organization." This approach is "(...) very much focused on the packaging of knowledge into recipes to be shared globally and rapidly." The idea is that human capital can only work a limited number of hours a day while structural capital works for you 24 hours a day, thereby being at least 50% more efficient.

But, fortunately there is only a limited part of human talent that can be turned into structural capital. It is the part that is intellectual in nature, but only that part of their

knowledge that can be structured and made explicit. That often is not the part with the most added value with regards to the future success of companies (Tissen et al., 2000).

The alternative

We should therefore broaden our discussion about the weightless wealth of companies to the whole range of intangible assets, intellectual and non-intellectual by nature. But what exactly do I mean by “intangible assets”? The terminology in this field can be very confusing. Some people prefer not to use the word "assets" when talking about intangibles because it reminds them of the meaning accountants place on the word asset: something that is identifiable, is controlled and clearly distinguishable. I will use the term intangibles and intangible assets interchangeably, because with "asset" I mean resource or means of production. There are three types of means of production:

- Tangible assets
- Financial assets
- Intangible assets

We distinguish between five categories of intangible assets (Andriessen and Tissen, 2000):

1. *Skills and tacit knowledge*. This is the talent embedded in people, including their competencies and their know-how.
2. *Collective values and norms*. This is the corporate culture of an organisation that is reflected in ‘the way we do things around here’. It describes what the organisation feels to be important (e.g. client focus, reliability, quality) and is often a crucial factor for success.
3. *Technology and explicit knowledge*. This includes manuals, procedures and intellectual property, such as patents and trade secrets.

4. *Primary and management processes.* This is, in fact, the knowledge embedded within the primary processes of the organisation, plus the processes that are used for management.
5. *Endowments.* This is what a company has inherited from the past, including brand and image, networks of suppliers, the installed base of customers, the network of talent and the ownership of standards.

Reunite the pieces

The practice

In today's economy, it becomes more and more important to be unique. If competition can arise from unexpected corners, the only way to survive is to become one of a kind (Hamel, 2000). It is always a combination of intangible assets that make a company unique and successful. And this is where classification schemas of intellectual capital fail. By separating the human capital from structural capital, customer capital from organisational capital, innovation capital from process capital, we lose track of the correlation and synergy between the categories. It is this synergy between intangibles that creates uniqueness and wealth, not the individual assets. What is the use of owning the Coca-Cola brand without having the knowledge and skills to maintain it and turn it into business value?

Take Disney, for example. Walt Disney is an enterprise with an extremely wide variety of activities. Yet, no matter which activity is developed, it always revolves around a single core competence: family entertainment. And not just any entertainment will do: whatever the company undertakes must be entirely original, perfectly executed, and created to delight a wide audience (Capodagli and Jackson, 1999).

This unique capability is the result of a variety of intangibles. The primary management processes at Disney is directed at generating as much income as possible from each new

project. Even the creative process is a well-planned process. A rigid, nine-step regime for project management was created, through which Disney exercises tight control on the creative process, allowing long-term vision to be aligned with short-term execution. This allows cost cuts and speedy production.

But management guidelines are not the only weapon at Disney. There are two additional structures, which ensure that everybody is involved in “creating the magic.” The first is a structure, which dates back to the fifties: the so-called Imagineering group of creative talent. Here, more than 2000 creative specialists spend their time dreaming up ever more sophisticated thrills for the Disney product. A second structure for harvesting ideas is the Gong Shows, held three times a year, in which anyone who thinks they have a good idea can formally take a pitch to a panel of top executives, including the CEO. These shows help employees understand why some ideas work - and why others don't.

But there is also something else which supports Disney's uniqueness: the collective values and norms, which are summed up in the management philosophy: Dream, Believe, Dare, Do. Walt Disney had a passionate belief in the need for a strong corporate culture, and to this end he instigated a formal training programme that has become known as the Disney University.

This example shows that the uniqueness and success of Disney is the result of the combination of a variety of intangibles, including management processes, know-how, competencies and collective values and norms. It is the entanglement of human and structural capital that does the trick.

The consequences

What are some of the consequences of the use of classification schemas that break down the total capital of a company into its contributing parts? In the first instance, it hampers us in seeing the wood from the trees and identify the effects of combining different types of

intangibles. We look at each intangible in isolation, where, in truth, the strength of intangibles is cumulative.

Secondly, since we use the same classification scheme for different companies, every company starts to look the same. On the one hand, this is a good thing, since it allows for benchmarking. But when it comes to making strategic management decisions on how to improve or sustain company success through increased uniqueness, this method has its shortcomings.

An even more important problem arises once we start to look for indicators for each of the categories. Liebowitz and Suen (2000) have shown the enormous array of possible measures for the various categories of intellectual capital. But the problem with most intellectual capital reports that are based on these classification schemas, is that there is little or no connection between the various indicators. As a result, many of these reports leave the reader with a strong feeling of 'so-what?' What does it mean when the share of employees with advanced degrees goes up, and the partner satisfaction index goes down? As a manager, what does it tell me that will help me create my strategy? As a stakeholder, what does it tell me about the future success of the company?

The alternative

Because we were looking for a method to generate information about intangible assets that would help managers with their strategic decision-making, we had to solve the problem of finding those combinations of intangibles that represent the uniqueness of a company. The problem is even more difficult, since we decided to include skills, competencies and even values and norms of employees in our analyses.

The problem is clearly one of demarcation. What intangibles are relevant? If one of your employees loves to go fishing over the weekend, is his knowledge about trout fishing relevant if you manufacture wheelchairs? Probably not. But what if you manufacture fishing rods?

Let's say you enjoy horse riding. Would you use your horse-riding skills, like the ability to lead, to be patient, to give commands, in your managerial work in the office? You probably would. So a first step in analysing intangible assets is to identify what assets are strategically important.

In order to identify the interrelationships between strategically important intangible assets, a link has been made with the company's core competencies. Hamel and Prahalad's (1994) theory of core competencies states that the real future of a company lies not in the products or services that it provides, nor its market share, but in the optimal utilisation and maintenance of unique skills: core competencies. Close analysis of many core competencies shows that they almost always consist of a combination of intangible assets, such as certain knowledge and skills, which flourish in a particular culture (see figure 1). Where tangible assets play a role in core competencies, these are often buildings, such as an office network. Such property then makes a contribution to the core competencies, but does not constitute an essential part of them (Andriessen et al. 1999).

Take in Figure 1: A core competence as a unique bundle of intangible assets

So an alternative to the classification schemas is to start the analysis of intangible assets by defining the core competencies of companies. Generally, a company will have between five and ten. With their identification, we have made an inventory of a company's most important intangible assets. This can be used as a basis to apply measures and to structure the IC report. At least it is then clear what the impact is on the realisation of a company's strategy, if the share of employees with advanced degrees that contribute to a specific core competence goes up.

Create a new paradigm

The practice

The use of the term 'intangible assets' creates a real danger. By calling intangibles 'assets', it seems we can treat them the same way we treat other assets. As a result, some practitioners try to push them in the accounting system we designed for tangible assets. Take, for example, Ian Caddy's discussion on intellectual assets and liabilities (Caddy, 2000).

But the system of double-entry bookkeeping is more than 500 years old. It was popularised by the Italian monk Luca Pacioli, and is based on transactions. A transaction, like the sale of a product, results in changes in the income statement and the balance sheet: sales revenue and cost of goods sold expense will rise, the inventory decreases and cash and owners equity increases. This may be a good system to use on a medieval farm, a trading firm in the 18th century or a steel factory in the 19th century.

The consequences

But intangible assets are a spoilsport. Their unique characteristics do not fit in a transaction-based system (Webber, 2000).

1. Intangible assets or no rival assets. With physical assets, users act as rivals for the specific use of an asset. An airplane can only be used on one route at the time, but the Coca-Cola brand is being used millions of times per day without the brands 'inventory' decreasing.
2. The value of intangible assets can increase or decrease without any transaction taking place (Webber, 2000). The Coca-Cola brand, that according to some analysts has a value of US\$ 47 billion, decreased significantly in Europe when in Belgium some cans of Coca-Cola turned out to be polluted. The same happened to Shell when they announced their plans to sink an oil platform called the Brent Spar (Tissen et al., 1998).

3. The benefits of intangible assets are much more uncertain than the benefits of tangible assets. An office building or a printing press will always give some kind of return, but with intangible assets the return can be zero or even negative.
4. If it is at all possible with intangible assets to talk about depreciation or impairment, it is much more a function of your competitive advantage than is the case with tangible assets (Andriessen and Tissen, 2000). Today's knowledge economy is fast and ruthless. A competitive advantage can disappear virtually overnight. If a combination of intangible assets is no longer unique, it loses its right to exist. It merges with the crowd, where profits are minimal at best.
5. Intangible assets are impossible to add up. An inventory of tangible assets can be counted, intangible assets are difficult to identify and impossible to keep tally of.

These five characteristics of intangible assets are the reason why they do not fit in the double-entry bookkeeping system. They explain why it is also impossible to adjust this system, for example, by putting knowledge on the balance sheet. This does not mean we need to get rid of the old system. It still has enormous value and this value will only increase with the increasing standardisation in the field of accounting.

The alternative

Instead, we need to find new methodologies, based on a new paradigm, that will fit the characteristics of intangible assets. The managers and stakeholders should use these methodologies in addition to the information that comes from the traditional bookkeeping system. These methodologies should be able to discover the key value drivers in the business and offer information that supports strategic decision-making.

Put intangibles to the test

The practice

A lot of progress has been made in the field of developing indicators for the various types of intellectual capital. Already, a substantial number of companies use these indicators in appendices to their annual report. Experience shows that these indicators are often difficult to define and even more difficult to measure. Within many companies there is a lack of reliable data, because current management information systems are not suited to report on intangibles. When data does become available, it takes several years before chronological data is on hand to do trend analyses.

Many practitioners and companies are therefore already quite satisfied if there is data to report. The problem is that there are often no yardsticks for the managers and stakeholders to judge whether measurements are too high or too low. Despite the enormous effort put into de intellectual capital report, de resulting data is meaningless.

This situation is improved when indicators are combined into indices. An example is the IC Index TM, developed by Johan and Göran Roos (1998). For each area of intellectual capital, a number of indicators has been put in place, each of them weighted according to three factors: the strategy, the characteristics of the company, and the characteristics of the industry in which the company operates. By consolidating the individual indices, an IC index can be achieved for the total operation.

Although this is an improvement compared to an overview of many individual indicators, a clear yardstick is still missing. The relative weighting of the individual indicators is also a subjective process. The end result will depend heavily on the chosen weights.

The consequences

The main consequence of the absence of clear yardsticks is that it becomes very difficult for management and stakeholders to interpret IC reports. The saying goes: what gets measured gets managed, but what isn't understood is ignored.

The alternative

As stated above, we were looking for a practical tool that can give managerial guidance in the field of managing intangible assets. We felt that the outcome of such a tool should be the strategic management agenda for intangible assets. We wanted to put the intangibles to the test. For this reason, we have drawn up a list of criteria which will help managers to determine the practical strength of each bundle of intangible assets, called a core competence. We believe that the strength of a core competence depends on the following five criteria:

- **It should add value for customers.** You must ask yourself whether the core competence you are analysing creates a substantial benefit for customers, or whether it provides the company with a substantial cost benefit. This is a vital point, since we are now entering a new economy where, according to Kevin Kelly (1998), you need to add more value at less cost.
- **It should give you a competitive edge.** You must ask yourself whether the company is better in this specific competence than its competitors. Does it make it unique? As we have already seen, a competence which is shared by every company in an industry is little more than a skill, unless one company is significantly better in it than other companies.
- **It should offer potential for the future.** The life-cycle of products is decreasing all the time. Only a decade ago, the life-cycle of a PC was calculated in years; now it is frequently calculated in months. For companies, this means that you must get your products onto the market quicker than ever before. Core competencies must be able to

feed innovation, so that one can beat competitors to the market place. They must provide the gateway to the markets of tomorrow.

- **It should be sustainable for several years.** You must ask yourself whether the quality of the competence will stay ahead of the competition for a substantial period of time. Or will it be something which the competition will be able to pick up quite simply, thus destroying the advantage?
- **It should be firmly anchored in the organisation.** It is little use having a competence which is shared by just a tiny group of individuals; they could leave and take the competence with them. A core competence must be rooted in the organisation, shared by the majority of people within that organisation.

To assist in such a testing of intangible assets, we have developed a checklist for each of the five criteria. Each of these checklists provides a series of questions which should be addressed when judging the competencies. The full checklist can be downloaded from our website [1]. The result of applying these tests is then used as input to create a strategic management agenda that enables managers to make strategic decisions about the health of their intangible assets: the weightless wealth of their company.

Conclusion

Intellectual capital is an engaging subject. The theory of intellectual capital is still young. Yet, the amount of ideas and practical research is already overwhelming. We need to resist the temptation to try to come to one unified theory. If we do that too early in the process of theory development, we will end up with rigidities that will seriously hamper its practical use. The general practices that I tried to describe could easily become such rigidities, unless we keep an open mind for new ideas and new approaches.

Notes

(1) www.weightlesswealth.com

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