Developing Intellectual Capital at Skandia

Leif Edvinsson

When you buy a company, what do you buy? The fixed assets? Or do you look for some more sustainable assets? What do you measure? The number of customers? The number of nodes in the network of the virtual corporation? What do you value? The number of working hours? The number of good ideas?

The reason why Skandia started to focus on intellectual capital was, among other things, a need for a new logic regarding the development of knowledge intensive services. This is based on the very simple metaphor of a tree with fruit as well as roots. For the long-term sustainability of an organization it is much more important to focus on nurturing the roots than harvesting the fruit. The long-term idea might even be to get a new balance with a leadership focus on how the tree is flourishing. A focus on intellectual capital provides an effective instrument to manage and develop the company. It will also serve as a useful indicator when benchmarking the company against other companies. It will stimulate renewal and development. It is also a better tool for evaluating the soft assets of the organization. Therefore, in the final analysis, intellectual capital becomes at least as important as financial capital in providing truly sustainable earnings.

The search in Skandia for this new logic started more than a decade ago when both the CEO, Mr Björn Wolrath, and the Deputy CEO, Mr Jan R. Carendi, began to realize the need for a more holistic and balanced perspective of how to develop and nurture service organizations and encourage growth. This is also very much in line with the new insights on quantum management leadership, i.e. a more holistic and balanced view.

Most of this is common sense but the challenge is to turn it into common practice! Skandia’s response was to begin to develop the idea of an intellectual capital function, in addition to the existing traditional functions, such as Director of Finance, Director of Marketing, etc. In 1991, Skandia AFS formally established an Intellectual Capital function headed by a Director of Intellectual Capital—the first ever in the world.

But, going back to Why?, this also needs a broader perspective. The new knowledge era requires a knowledge economy. That is very evident when you look at the major investment streams. In the industrial society, investment used to go into plant, equipment and capital tools. Today, a major proportion of the investment goes into knowledge upgrading or competence development leading to human capital. Another major investment stream goes into the development of information technologies leading to value added networks, global area networks, etc. This is something that is invisible on the corporate balance sheet. One paradox which is emerging is that investing in the areas of human capital and IT leads to a short-term deterioration of profits which in turn reduces the value of the balance sheet, thereby reducing the book value of the organization. To put it briefly, the paradox is that the more is invested in knowledge upgrading and IT, the less is the value of the organization!
A society where a major proportion of the investment stream goes into these intangibles needs another mapping system. To quote Bill Davidow: "There is a need to move to a new level in accounting, one that measures a company's momentum...". In Skandia we call this "the need for a future accounting".

Hidden Values

To this broad perspective could also be added the view of the stock market. A stock market analyst in Sweden observes that the stars on the stock exchange attract more with their knowledge than with their substance. By looking at the market value versus the book value, it is evident that a major proportion of growth companies, such as Intel, Microsoft, Netscape, are valued way beyond book value. Most of the companies going through mergers and acquisitions in the US during the period 1981–1993 were valued at between 2–9 times their book value. See Figure 1, an illustration by Baruch Lev in SEC report 1996.*

This gap could be described as the intellectual capital. Another word for it is Tobins Q, i.e. the ratio of market value to book value.

This leads to another paradox. Today there is a well-defined and well-developed system for measuring of the book value. However, for the gap there are only qualified analyses, i.e. a kind of ad hoc measurement. Another contribution from the SEC Symposium is that such a disclosure should perhaps be presented in some sort of supplement to the financial report in order to increase insight into a corporation's work about prospective renewal and development work. The idea is not to distort the financial information, but rather to supplement it. The SEC Commissioner, Steven Wallman, even envisages that in the future such supplements could constitute the major part of any report about a corporation's future earnings potential, and the financial aspect would represent the supplementary information. The Skandia approach could be seen as a benchmark.

A new balance is also emerging which could be illustrated as follows (Figure 2): on the asset side is the financial capital, on the debt side the non-financial capital, or intellectual capital. Therefore it is possible to develop a tentative new balance sheet as shown in Figure 2. Here, the intellectual capital is a debt item which is regarded in the same way as equity. It is based on the principle that IC is borrowed from stake-

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holders such as customers, employees etc. The counterbalance, from an accounting viewpoint, is goodwill. The major message is, however, that it constitutes hidden values. But another paradox is that, from an accounting point of view, goodwill is a trash item. As an intangible item, goodwill should be deducted as quickly as possible, thereby actually reducing the value of the balance sheet. From a knowledge value viewpoint however, it could be considered to reflect the intellectual value which grows over time.

It follows that intellectual capital is:
- supplementary information to financial information;
- non-financial capital;
- a debt item, not an asset item.

This kind of thinking led Skandia management to recognize that there is a need to bring these hidden values to the surface. This was especially evident in the rapidly growing entrepreneurial unit: Skandia AFS. So an intellectual capital function was formed there in 1991. The goal of the IC function is to grow and develop intellectual capital as a visible, lasting value, complementary to the traditional balance sheet. The IC function provides a link between other development functions like Business Development, Human Resource Development and Information Technology Development. The operations of the IC function include initiating new measurement tools and ratios, implementing innovative programmes and projects for rapid learning and knowledge transparency and nurturing profitable knowledge sharing.

Mission and Definition

Within Skandia AFS, intellectual capital was initially defined as "the possession of knowledge, applied experience, organisational technology, customer relationships, and professional skills that provides Skandia AFS with a competitive edge in the market". The value of intellectual capital was determined by the extent to which these intangible assets would be turned into financial returns for Skandia AFS as a whole.

According to the CEO of Skandia AFS, the aspiration was to have an accelerated, steep learning curve that would rapidly integrate corporate knowledge into tangible assets and enable AFS to apply it with maximum competitive effect, thereby turning AFS into both a learning and a teaching organization. This was refined later on into the concept of an intelligent organization. The key point in this is that the lead time between learning and teaching should be as short as possible. This ratio might nowadays be measured as organizational float.

The intellectual capital mission at Skandia AFS was defined as follows:

- To identify and to enhance the visibility and measurability of intangible and soft assets.
- To capture and support packaging and accessibility by knowledge transparency and knowledge technologies.
- To cultivate and channel intellectual capital through professional development, training and IT networking.
- To capitalize and leverage by adding value through faster recycling of knowledge and increased commercialized transfer of skills and applied experience.

In 1992, Skandia AFS started a stock-taking of these hidden values. This led to a very long list of items that were valuable, but not disclosed in traditional accounting systems. The list consisted of items such as trade marks, concessions, customer databases, fund management systems, IT systems, core competencies, key persons, partners and alliances, as well as about 50 more items. The list was too long and unwieldy. It was therefore reduced, based on the major decisive characteristics. This led to the simplified definition of intellectual capital as follows:

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\text{Human capital} + \text{Structural capital} = \text{Intellectual capital}
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This definition emerged out of the insights gained when AFS was starting new units around the world. These new units represented mainly human capital, while in those units which had already been in operation in the market for some time had something else as well as human capital. Those dimensions beyond human capital were left behind when the staff went home. They were, for example, the customer database, the concessions, the IT systems, etc. So what was learned from this was that out of human capital grows
some kind of structural capital. Metaphorically speaking, this could even be compared with a tree trunk which shows a number of year rings. For every year, the organization adds something beyond the staff. More and more structure is emerging.

So a key role of leadership is the transformation of human capital into structural capital. Furthermore, the human capital cannot be owned, it can only be rented. The structural capital can, from a shareholder's point of view, be owned and traded. Therefore, human capital is much more volatile, and structural capital can be used as a leverage for financing corporate growth. Consequently, the banks and venture capitalists, amongst others, are more interested in structural capital. Unfortunately, neither the human capital nor the structural capital is visible in the traditional accounting system. Skandia AFS initiated efforts to change this.

To be able to disclose these structural capital assets, it was necessary to develop a reporting system. Some of the areas on which information was now required were, for example, customer relations, distribution channels, structural development, human resources, IT and innovation. All this was assimilated into a report, and the idea was to try to get all the information on one page. The ambition was to have a simple overview of financial as well as non-financial data. Such a one-page report was presented to the board of Skandia AFS in 1993. The reception was enthusiastic and encouraging.

The completion of this very first blueprint report was a part-time effort by the Director of Intellectual Capital and Deputy Controller, Mr Åke Freij. To be able to develop this type of reporting further it was evident that a supplementary function had to be created. This led to the recruitment of the first IC Controller, Mrs Elisabeth Gemzell-Mikkelsen, in 1993.

A New Language

Given all these paradoxes and common sense concepts and reporting needs, a new language was required to support the changed approach to reporting what was happening and what should be nurtured. In an article in *Fortune*, Tom Stewart put it like this: "Intellectual Capital is something that you cannot touch, but still makes you rich". This approach has now been developed into a Skandia value scheme as described in Figure 3.

It has become evident that there are a number of building blocks adding to the non-financial value of a corporation, or the gap between book value and market value. The term intellectual capital has its origin in intellectual property, the packaged and legally protected knowledge components in a company. This is of fundamental importance for global trade.

The new world trade organization, WTO, is organized into three bodies: trade in goods, trade in services and trade in intellectual properties. The foresight and complexity of the emerging global trade is very much highlighted around issues related to intellectual properties such as patents, software, copyrights, etc. Therefore the need for a language for value extraction and value creation becomes acute. The findings from Skandia suggest that such a language will have to be supported by numbers. To give an illustration: to report that a customer database is large is not very tangible. To say that the customer database is growing by about 40% over a 12-month period is tangible. Furthermore, numbers are to a large extent a global language that appeals also to financial analysts and shareholders.

A Balanced Annual Report

Balanced annual reporting is shown from the very first page in a new report on Skandia AFS. The concept behind this was the need to have *financial as well as non-financial reporting*. At the same time the balanced score card approach by Kaplan & Norton emerged.

In Skandia, the first balanced annual report was presented in 1994. However, this was an internal document and was not published outside Skandia AFS. During 1995, Skandia as a whole decided to share this information and applied a systematic approach to the whole of Skandia in an appropriate document. The first document was published in May 1995, under the heading—Visualising Intellectual
Capital. This was a supplement to the Skandia Annual Report 1994. As a supplement to the annual report it highlighted the fact that it was not integrated into the traditional balance sheet. Furthermore, it gave expression to the separate documentary approach which was in progress.

This first public report was followed by a supplement to the 1995 Interim Report, 6 months later. The title of that publication was Renewal and Development in Skandia. During the Spring of 1996, the supplement to the 1995 Annual Report was published under the heading Value Creating Processes. During the early Autumn 1996, the supplement to the 1996 Interim Report called Power of Innovation was published.

Phases in the Development of Intellectual Capital

The following major phases can be regarded as a pattern for the development of intellectual capital:

- Missionary
- Measurement
- Leadership
- Technology
- Capitalizing
- Futurizing

The first phase around missionary work focuses on the insights and logic behind intellectual capital. It covers, among others, the area of the metaphor of the tree, as well as the need for a supplementary mapping system.

The second phase around measurement focuses on the development of the data, as well as the language. At Skandia this included development of the IC Controller functions and alignment with the accounting system.

The third phase focuses on the leadership acting upon the new insights from the data. This is also called the navigation dimension to highlight the need for navigation into the future and to nurture renewal and development rather than just management of the past.

Technology focuses on the development of technology tools for the packaging of knowledge as well as communication technologies for rapid knowledge sharing. What could be seen in Skandia were also the evolutionary steps from Admin Technology (AT) with mainframes, to IT with PCs, to Communication Technologies (CT) with Intranets to Entertainment Technologies (ET) with customer amusement technologies, e.g. CD-ROMS.

The capitalizing phase focuses on packaged organizational technology for recycling, as well as intellectual properties.

The futurizing phase focuses on the continuous renewal and development and the nurturing of the innovation capital. This is illustrated, among other things, by the establishment of the first of Skandia’s Future Centers. The above phases are the steps that have been covered during the last five years at Skandia, on a pioneering basis. The logic is sequential, but the implementation is parallel.

Valuation—the Skandia Value Scheme

The process of evaluating intellectual capital is shown in Figure 3. The model illustrates the major building blocks of intellectual capital and builds on a reduction approach. This approach starts with the stock market value and deducts the financial capital. This leaves intellectual capital as the balancing item. Considering the simplified definition of intellectual capital, the next step shows the two building blocks of human capital and structural capital. Deducing the value of the human capital from the intellectual capital leaves structural capital as the balancing item.

Within structural capital, the major component left behind when the employees go home is customer capital. Deducing the value of the customer relationships from the structural capital leaves organizational capital as the balancing value. Within organizational capital the value of processes could be extracted leaving innovation capital as the balancing value. Within the innovation capital it is possible to identify the value of intellectual properties such as patents, trade marks, etc. This leaves intangible assets as the balancing value.

This simplified value scheme can be refined and elaborated, and it helps management to define the values and relationships in each box. One interesting ratio emerging from this exercise is that in established units, usually the human capital is a smaller component than the structural capital.

One of the implications of such an observation is the need for the leadership to focus on the value of the structural capital and on its renewal and development. This also goes for human capital. The balance between human and structural capital leads to valuable insights regarding long-term stakeholder value extraction. Is there a lot of idle, untapped potential within the boundaries of structural capital? If this were the case with 'physical' capital, it would attract the immediate attention of the leadership and management. As the structural capital, to a large extent, is invisible in traditional accounting, the important

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question of value extraction does not gain the same immediate attention.

Navigation and the Skandia Navigator

The metaphor of navigation constitutes a search for another language of dynamic reporting beyond management. It aims to highlight the continuous process of adding to the long-term sustainability of the organization and nurturing the roots for sustainable value generation.

With the reporting format, mentioned earlier, of a one-page report of non-financial items emerged the Skandia Navigator (see Figure 4).

This very simple metaphor emerges out of the need for a new balance between financial and non-financial issues. It is also a balance between information on past financial performance, information about today, including human resources and processes, and about tomorrow’s renewal and development. It also takes into account the external operating environment. Summarizing all these dimensions into one reporting format leads to the Skandia Navigator. There are six different focus areas. The expanded leadership responsibility is immediately clear.

This model could also be viewed as a house. The financial focus is the roof. The customer focus and process focus are the walls. The human focus is the soul of the house. The renewal and development focus is the platform. With such a metaphor, renewal and development becomes the critical bottom line for sustainability.

The Skandia Navigator also has similarities with the balanced score card approach developed by Kaplan and Norton. However, the layout of the Skandia Navigator amplifies the renewal and development dynamics, as well as the operating environment. These different focus areas all add up to the intellectual capital value of the organization.

Within each such focus area it is possible to develop what Skandia calls indicators. The definition of these indicators is general rather than being defined as precise ratios. However, they are numerical. The indicators are developed from a strategic traditional approach. It starts with the business concept, core mission and ambition. These strategies lead to critical success factors. The critical success factors are translated into data which are further developed into indicators. Such indicators can act as target indicators, as well as follow-up indicators. They are summarized into the Navigator.

This summary gives the balanced overview between financial and non-financial dimensions. Experience shows that there are restrictions on how many indicators can be handled. It would appear that an ideal number of indicators is about 3-4 per focus area. For the time being, therefore, there are no plans to aggregate the data from individual units into a corporate Navigator. In Skandia, the present reporting development uses the Navigator more and more, both as a planning tool and as a follow-up tool. As experience grows, it might be possible later on to consolidate some indicators on a corporate level.

One of the major aspirations underlying the Navigator is to develop an accounting language for the sustainability of the organization. This language is, furthermore, a global language as it is numerical. It also leads to a stronger leadership focus on the non-financial dimensions.

Recently, Skandia has also used the Navigator for individual performance appraisal, as well as rewards assessment. This makes it possible to have a balanced reward system emerging with a focus on financial as well as non-financial dimensions.

Future Accounting Methods

Given the information contained in the Navigator, the leadership will now have a broader perspective on the value potential of the organization. As Tom Johnson says, “Intellectual capital looks far beyond the more ineffable assets, such as the ability of a company to learn and adapt”. The focus is on renewal and development as well as on its interaction with the operating environment and the internal environment. It is a kind of ‘edge accounting’ which might concentrate on value extraction, but perhaps more so on value creation. Therefore it could be said that human capital is no longer the major asset in comparison with structural capital. However, it is the most dynamic value. This led some Skandia executives to question the role of the controller. What will be the label on the business cards of the controllers of tomorrow? Some of
the answers might be Value Finder, Navigator, Pathfinder, etc. Recently in Skandia the controllers and the internal auditors are working together to search for source of innovation. This further highlights the need to feed the roots of the organization, which will ensure its future.

ICM—Intellectual Capital Management

From what was said above, it is evident that ICM is more than just knowledge management. ICM is leveraging human capital and structural capital together. It is multiplying the interaction between human capital and structural capital. Intellectual capital value emerges out of these connections and relationships as described in Figure 5.

The challenge is to manage the process of developing intellectual capital from the creation of values to gathering, capturing and knowledge sharing to leveraging and capitalizing of the values. The goal of knowledge management is to improve the company’s value creation capability through the more effective use of knowledge. The goal of intellectual capital is to improve the company’s value generating capabilities through identifying, capturing, leveraging and recycling intellectual capital. This includes both value creation and value extraction.

One of the critical components of this is the ‘organizational capital’. This can be defined as the use of structural competence and knowledge for recycling, leveraging and sustainability. The value-creating process should produce organizational capital which adds value. The Navigator focuses on value creation, while organizational capital is more focused on value extraction.

IC management provides an organization with many benefits:

- a steeper learning curve;
- a shortened lead time to application;
- savings in costs and investments, or the recycling, of structural capital and organizational capital;
- higher value added because of improved interactions;
- new value creation through new connections and new combinations.

The Process Developing Intellectual Capital

Intellectual capital has many dimensions. These might be summarized as the appreciation of those collective human and structural assets which have knowledge as a component. It involves off-balance sheet values. It measures the unmeasurable. It is a search for relationships among people, ideas and knowledge. Intellectual capital is therefore a relationship issue not a thing not an objective. It is a renewable, as well as renewing resource, that must be cultivated in a context. The management of intellectual capital is a process that can be facilitated, but which is not easily controlled. It is a network of connections. It works through collective effort. It results from match-making and the exchange of ideas among people. Complex intellectual capital might have a simple elegance and could be represented and visualized in the graphical patterns. The Internet provided clues about how intellectual capital may be developed in the future. There may be a new art of knowledge leadership in managing the tension between internal and external worlds, between words and numbers, between differences and similarities, and between the development of intellectual capital cultivation and cost rationalization. A new organizational balance might emerge with a focus on maximizing value relationships. This will involve value creation, value extraction and value exchange. A web of new dimensions will emerge based on: rethinking leadership, reinterpreting the role of finance, the new logic of value creation and value extraction, a new view of work, new information that can be accessed globally, a new focus on core skills based on innovation; the transparency of organizational boundaries, and a new interpretation of society’s rules, i.e. the nourishment of life based on what is valuable.
References


