



# Valuing the future: intellectual capital supplements at Skandia

Valuing the  
future

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**Abstract** *Skandia's intellectual capital supplements are pioneering forms of communication that inform internal as well as external readers of the attempts to manage and create value from intellectual resources. These supplements to the financial accounting statement communicate not only in numbers but also in stories and illustrations about the challenges facing the firm. They help develop a narrative for the path ahead for Skandia as a "capable" firm that thrives through intellectual resources found in humans, structures and relations. In this paper we discuss how this is possible and we suggest that intellectual capital statements are not only new types of communication; they also anticipate new "contracts" between labour and management where employees are persuaded to help managers craft the strategies to be pursued in the marketplace of the future.*

Not many people have been selected as "Brain of the year", but Leif Edvinsson was in 1998. At the time he was Intellectual Capital Director at Skandia AFS and was awarded this prize for his work to develop intellectual capital statements[1]. In 1994, Skandia began to publish a series of intellectual capital supplements in addition to its financial accounting statement. It is rumoured that the intellectual capital supplement has been in tenfold demand compared with the financial accounting statement. But what is it that Skandia has done? How does the statements look? Why was it done? How does it work?

To answer such questions, we have analysed all the supplements and paid particular attention to four issues. One issue is about the whole presentation of the supplements and focuses on their constitution including not only their indicators and numbers, but also their text and illustrations. A second issue concerns the continuity between the supplements over time. The third issue concerns the message presented by the range of mechanisms used to mobilise the supplement, and the fourth issue is the relationship between the supplements and other forms of material published by Skandia on questions of intellectual capital. To this end, the paper is informed by parts of actor-network theory according to which "things" work only insofar as they are part of a network of "things" (Latour, 1986, 1987, 1990). Using this approach, the analysis is oriented towards investigating how many elements are mobilised and held together by the supplements and other published materials to present Skandia as a uniquely "capable" firm that looks after its intellectual resources. It investigates the elements that go into producing credible explanations of

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Skandia's intellectual capital at least to the degree that Leif Edvinsson – the main writer of the texts – has been selected “Brain of the year”.

Intellectual capital statements combine numbering, visualisation and narration to account for organisational value creation (Mouritsen, 2000; Mouritsen *et al.*, forthcoming a). Such statements, which presently are only published by a very limited set of companies, help explain the conditions for future value creation rather than present financial results. They are difficult pieces of communication, however, because there is no generally accepted accounting formula that can generate an intellectual capital result, as is the case for the financial result in the financial accounting context. The financial accounting statement's logic is found in generally accepted accounting and auditing principles, which are largely defined in practice by the auditing profession. But the intellectual capital statement uses other means to craft a credible, cohesive and “true and fair” account. These means include sketches and narratives in addition to numbers, which not only – to some extent – allow direct, formal analysis. They also communicate more “freely” in a narrative mode (Boland and Schultze, 1996; Czarniawska, 1997) to account for the mechanisms of value creation. This communication is directed not merely to the external audience but also – or perhaps primarily – to internal audiences to persuade them about their (new) roles and obligations in the firm, and how they (should) contribute to value creation. This communication talks of “sentiments” more than to “reason”. How is such communication possible and how is it effective?

“Sentiment” is not easily defined. It is a “black box”, with its inside in terms of organisational activities being in the dark. Intellectual capital statements offer one avenue to open this “black box”[2]. It is concerned with the mechanisms that mobilise relationships between employees, technologies, processes, and customers. In intellectual capital statements, the firm's immaterial “hidden values” are presented – in numbers, narratives and sketches – as the interplay between what for Skandia is termed human capital, organisational capital and customer capital (Edvinsson, 1997; Edvinsson and Malone, 1997). Together, the numbers, narratives and sketches form a “language” which ties expression directly, albeit in complex ways, to valuing through “grand stories” of the empowered individual (e.g. Bartlett and Ghoshal, 1997), of the coming of the IT and knowledge society (e.g. Reich, 1991), and of long-term relations with customers and partners (e.g. Heskett *et al.*, 1997). The domain for value creation is extended. Skandia suggests that intellectual capital can be best understood as follows:

The aggregate sum of ... intangible values can be called Intellectual Capital, which comprises both human capital and structural capital. Human capital represents the knowledge, skills and capability of the individual employee to provide solutions to the customers. Structural capital consist of everything that remains when the employees go home: databases, customer files, software, manuals, trademarks, organizational structures, and so on – in other words, organizational capability. Customer capital, i.e. the relationships built up with the customers, is a significant part of structural capital. Structural capital can be owned, which is not the case for human capital (Skandia, 1994, p. 5).

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Value creation is presented as an effect of the connections between human, structural (or organisational), and customer capital. This interplay can only be “productive” if the linkages between the separate forms of capital are made strong[3]. This requires “management” because intellectual resources cannot be “commanded”; they have to be “motivated” to be productive. In Skandia, through “Intellectual capital supplements”, which are supplements to the annual financial accounting statements, management attempts to make such links durable, credible and serious via sketches, stories and numbers. Skandia’s intellectual capital supplements do not “measure” the size of intellectual capital. They are said to craft intellectual capital and help generate value for the future.

To value – or valuing – is a verb, which indicates a process of committing certain organisational traits to numbers. It is a process of transforming a version of the firm into a numeral format that can “stand for” it and represent it to an audience of “stakeholders”. So, to value means to create numbers for certain organisational arrangements. This can be done in at least three ways. One is the financial accounting version where the audited financial accounts constitute a bottom line through the manipulation of the receipts that have been stored in the firm’s financial database via double-entry bookkeeping procedures. Another one is the finance theory version of value, which assigns cash flows to a firm’s future, and then discounts them to the present time. Both of these approaches seek to describe the firm’s value, although in different ways and on different bases, as will be elaborated below.

The third approach to “valuing” suggests that the object of “valuing” is value creation. It does not assume – as the approaches above do – that the firm already has a value, which only has to be uncovered. To value here means to create (more) value, to generate value via the transformation or “improvement” of corporate routines and practices. Numbers in intellectual capital statements do not show the value of intellectual capital; they co-produce value. Let us look a bit more closely at the three forms of “valuing”.

#### *The financial accounting view on valuing*

Value in a financial accounting statement is constructed via the rules of auditing (Power, 1997). Here, the production of an accounting value in the balance sheet (as well as in the income statement) is predicated on three principles (Ekelöv, 1999). First, the asset has to be separable, and thus it must be identifiable as a unique item. Second, it has to be in the control of the firm which means that the benefits that accrue from the asset are owned by the firm. Third, it has to have a market where its value can be determined. These three conditions make the recognition and auditability of an asset very particular one. Typically, auditability presupposes that a receipt can be produced for the asset. This makes the recognition of internally generated intellectual capital very difficult. The receipt identifies the asset, it shows the controllability of the asset, and it shows a value to be bestowed on the asset. This (purchasing, replacement or market) value is typically different from its value in use because

an asset is only required if it can generate income, which exceeds the investment. Here, the idea of “valuing” is to accumulate the receipts accruing to a firm according to generally accepted accounting principles. “Valuing” means assigning numbers mostly based on historical cost of acquisition, which will typically only with difficulty – if at all – reflect the financial benefits that an asset will generate to the firm.

Intellectual capital has little place in such a framework. Intangibles, however, do have a place as they are the attempt made by the accounting community to construct some accounting measure of immaterial assets. International Accounting Standard no. 38 (IAS 38) defines an intangible asset as an “identifiable non-monetary asset without physical substance held for use in the production or supply of goods or services, for rental to others, or for administrative purposes” (see Ekelöv (1999) for an extended discussion). Such identification requires the asset to be separable, and it is required to possess future economic benefits, or there must be “reasonable and supportable assumptions that represent management’s best estimate of the set of economic conditions that will exist over the useful life of the asset”. Compared to intellectual capital this is – as will be clearer below – a very restrictive definition of immaterial assets. Indeed, some kinds of training and development may satisfy this criterion, perhaps – but more doubtfully – certain marketing-costs, and in some situations, perhaps research and development expenses may comply with these rules. Intangible assets are few and difficult to verify and thus to audit.

*The finance view on valuing*

In finance theory, valuing is a matter of predicting the future cash flows of the firm and discounting them to the present. These are the elements of shareholder value (Rappaport, 1986), or even the quest for value itself (Stewart, 1991). Here, “valuing” means defining and assigning weights to expected cash flows so that each element of cash is discounted by a risk-adjusted required rate of return to create one bottom-line indicator for value. Therefore, value is a trait of the firm, which has to be mobilised by forecasts of its future performance. The production of this value is an analytical inquiry into the financial flows of the firm as financial ratios, flows of investments, movements in productivity levels and the in- and outflows of capital more generally. The model being investigated is constructed around the income statement and the balance sheet, which are unlocked using certain financial ratio analysis techniques. These are, in turn, coupled to a more general analysis of risk and return of the business of the firm in question, and certain statistically based assumptions about risk and return can be made.

Here, “valuing” also means assigning a number to the firm. The number is not based on the verifiability found in receipts, but more in the trustworthiness of the procedures that financial analysts make use of. The future has somehow to parallel the present and the past for this procedure to be intelligible. This requires, in a certain sense, the world to be stable, if not quite to stand still. The

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past has to be a guide – somehow – to the future. “Valuing” through financial analysis reflects a future constructed to be in continuity with the past, albeit under complex and uncertain circumstances.

Immaterial assets, such as investments in R&D and in training and education, play a role as a parameter in the forecast of cash flows. Therefore analysts deconstruct the traditional accounting statement and attempt to qualify it and find the expenses which have effects beyond the year but which still have not been capitalised in the balance sheet. Stewart (1994), for example, argues that the US generally accepted accounting principles have to be changed and modified in about 160 places to create a more proper matching between expenses and their associated income stream. According to this finance perspective, the proper economic value can only be constructed if financial analysts are able to judge the cash-flow implications of expenses on immaterial assets. Consequently, when financial analysts deconstruct the balance sheet, they in turn reconstruct it to fit expected values rather than conservative values. Therefore, according to Stewart (1991), for economic value to become transparent, R&D, training, goodwill and other intangibles have to be put back into the balance sheet in order to account for all assets and thus facilitate an intelligent forecast of cash flows.

#### *The intellectual capital approach*

Intellectual capital is – like the finance approach – oriented towards creating “shareholder value”, but it does not present the firm’s net present value as pre-given – as something that just has to be carved out of the properties of the future. While the finance view is concerned to describe the set value of the firm, the intellectual capital approach is concerned to transform value (Mouritsen, 1998, 2000; Mouritsen *et al.*, forthcoming a). Rather than forming a bottom-line, intellectual capital numbers is a loosely coupled assemblage of financial as well as non-financial indicators that illustrate the flows of action developed in the firm. Edvinsson puts it as follows:

... [intellectual capital] works as a melody, as a continuous flow of tones. To grasp and experience the melody one has to think ahead as well as back; weave together presence with past and future with external and internal relations (Grafström and Edvinsson, 1999, s. 32).

It is concerned to move value and increase it. Its numbers are not constructed merely to describe the world in a set valuation of the firm. These numbers are broad, and in a particular intellectual capital statement they are assembled uniquely. The intellectual capital statement is open-ended and has no logical closure. Here “valuing” refers to identifying the mechanisms by which (net present) value is created and transformed, rather than accounting for how the (net present) value of the firm is to be represented by one number.

Is the intellectual capital statement a conservative calculation of intangibles – i.e. separable immaterial assets – in the financial balance sheet? No, it is a story of coalescence, complementarity and inseparability. Is it a capitalisation of the value of intangibles and tangibles? No. It is not about the financial

balance sheet at all. There is no bottom line. It is not directly about a set value of a firm even if intellectual capital sometimes is defined as market value of a company less its book value[4]. It is a theory of what creates value, and a story of how the resources of the firm are composed and bundled in order to create value.

### Intellectual capital in the case of Skandia

A flower, a tree, a butterfly, a dolphin. Breaking waves. An offshore performance boat. Chess. People. Market value, financial capital, intellectual capital (Images from Skandia's intellectual capital supplements).

The images presented in Skandia's supplements to its annual (financial) Reports have a striking feature where associations to nature, performance, people and value are crafted in innovative ways. Skandia is widely known for its intellectual capital supplements, which have featured several times in management magazines such as *Fortune*. The intellectual capital supplements, moreover, have been in great demand. The number of issues provided to interested readers is said to outperform the demand for Skandia's Annual Financial Report tenfold. In addition, the supplements do not go alone: there are two CD-ROMs (1996, 1998), two videos (1996, 1998), and several books and papers published on the Skandia experience. So, there is more to the intellectual capital supplement than a set of pages (between 12 and 24); it is more constituted as a heterogeneous set of media and materials oriented towards presenting Skandia as a uniquely "capable" firm. The various intellectual capital supplements' headlines and titles differ and present uniquely colourful expressions of what Skandia is seen to stand for:

- visualising intellectual capital;
- renewal and development;
- value-creating processes;
- power of innovation;
- intelligent enterprising;
- customer value;
- operating environment focus.

Such images are not merely descriptive terms of the actual conduct of Skandia. They carry extended meaning (Giddens, 1987, p. 100) as they mobilise a strategic agenda about a proposed mode in which the firm could function as an organisational system within and beyond its formal – or legal – boundaries which typically are reflected in its financial accounts. The boundary mobilised in the bottom line or in share prices is still there. However, the way this value is made to count is through the mobilisation of an image of a firm that thrives on relationships far beyond, in time and space, the value in the financial account. Skandia's "future accounting" is different from the financial numbers, as it attempts to mobilise a path towards a future through a variety of indicators

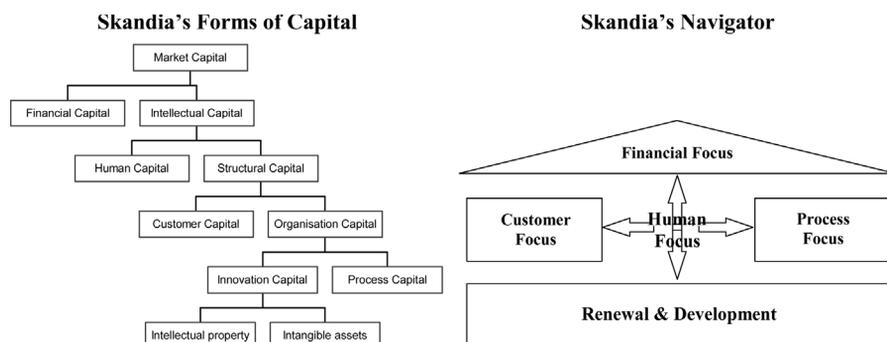
organised around a set of themes which are said to illuminate, if not document, the relationships between the past, the present and the future. However, on inspection, it is more complex than this; it is a constellation of heterogeneous media that in addition to indicators also comprise stories/metaphors/narratives and sketches. It is a complex form of corporate reporting where none of these three elements can account for value creation individually but in concert perhaps they may in some form.

### Sketches and visualisations

The visualisation of value in Skandia takes its departure in two sketches shown in Figure 1 (Edvinsson, 1997).

The typology of different kinds of capitals – or values – to the left illustrates intellectual capital as a complex and heterogeneous phenomenon[5]. It is made up of human capital and structural capital. Here, intellectual capital is conceptualised as people and “everything else”. This is not a narrow definition. However, it works because it presents a view of organisational competence as something more important than financial capital on the one hand, and mystical, elusive and provisional on the other because in a sense the relations stipulated in the sketch are non-additive. It is obvious from looking at the sketch and the definitions provided that there is no easy or obvious way in which such relations can be made mathematically consistent – as in a financial account. The sketch therefore alludes more to an aesthetic argument arrived at by looking at the sketch. It shows that intellectual capital is multifaceted, strange and a Pandora’s box that can – if opened – free or raise all sorts of organisational issues. In addition, the sketch is ambiguous, as is not really obvious whether to be read from the top or from the bottom.

The navigator is another sketch which “provides a more balanced, overall picture of operations – a balance between the past (financial focus), the present (customer focus, process focus and human focus) and the future (renewal and development)” (Skandia, 1988, p. 5). It is a sketch, which promises a new business-planning mode where the long run is integrated with the concerns of yesterday and today. The metaphor of the dolphin with its intelligence,



**Figure 1.**  
Skandia's visualisation  
of value

sensitivity and versatility supports this software being named after this mammal.

In both situations the reflexivity required, however, is aesthetic rather than conceptual or cognitive. The relations in both models appeal but remain technically inexplicable as they are defined in the metaphorical and appear to begin and end everywhere. The measurements cannot be wrapped up in a closed informational system. As Edvinsson and Malone (1997, p. 185) suggest: "Is this a definitive list? Hardly". There is no set formula for the inclusion of measures. They are inspirational and have to be invented *in situ*. This is why measures can only be examples. They never form an integrated model. Skandia's intellectual capital statement is not a set calculation that arrives at one number for the value of a firm's intellectual capital. It is headlines – employees, organisation, and customers are used as headings for a possible extended reporting on a firm's situation beyond the financial. These headings are then be applied and used in each organisational situation and filled in with indicators. They are used to organise an account of Skandia's work, or more precisely they organise the supplements differently. Each supplement tends to discuss primarily one of the three types of capital (as can be seen from their titles) and therefore the continuity between them is fragile. Even if certain indicators have continuity, the stories and emphases differ among the supplements.

### Indicators

The indicators used in Skandia's supplements are said to be non-financial. This means that the indicators used do not feature in the financial statement. They are of a variety of kinds, and in Skandia they are not very complex (see Table I).

Skandia's indicators are, in a sense, very ordinary. Note that they are not typically non-financial. Of the 87 indicators used, 46 are financial. This is more than 50 per cent. They are statements on expenses, on market share or even on operating results.

Can these relatively ordinary indicators really "stand for" knowledge and value creation? Are they the representation of intellectual capital? The indicators do not have labels which connect clearly to intellectual capital. They do not *per se* say much about intellectual capital, which is typically not part of their definition. To be made interesting in Skandia, they are inserted into a story that defines the connections between them. They have to be made relevant by the way they conform to a narrative of corporate development in which the indicators are small items that are part of a multifaceted story.

Conventional financial numbers do not count much in the Skandia intellectual capital story. They are scorned or ridiculed (apart from their function as ultimate results). From the first Skandia CD-ROM (1996), for example, the financial perspective is represented by a computer simulation programme. It is a game by which it is possible to simulate the influence of various financial parameters (such as exchange rates, interest rates, loan losses, required yield and market value, etc.) on a (estimated) share price, rendering the

	American Skandia	Skandia Real Estate	Skandiabanken	Skandia Life UK Group	Dial	SkandiaLink
Financial focus	Return on capital employed Operating result Value adding/ employee	Direct yield Net operating income Market value Total yield	Operating income Income/expense ratio Capital ratio	Return on capital employed Operating result Assets under management	Gross premiums written Gross premiums written/employee	Gross premiums written Operating result Assets under management
Customer focus	Number of contracts Savings/contract Surrender ratio Points of sale	Customer satisfaction index Average lease Average rent Telephone accessibility	Number of customers	Number of contracts Savings/ contract Service awards	Telephone accessibility Number of individual policies Customer satisfaction index	Number of contracts Surrender rate
Human focus	Number of employees Number of managers Of whom, women Training expense / employee	Human capital index Employee turnover Average years of service with company College graduates/ total number of staff	Average number of employees Of whom, women	Number of employees	Average age Number of employees Time in training	Number of employees Human capital index Shares employees with secondary education or higher Share of employees with three or more years of service <i>(continued)</i>

Table I.  
Skandia's indicators

Table I.

	American Skandia	Skandia Real Estate	Skandiabanken	Skandia Life UK Group	Dial	Skandialink
Process focus	Number of contracts/ employee Adm. expense/gross premiums written IT expense/admin. Expense	Occupancy rate Financial occupancy rate Net operating income/sq. m. Cost per sq. m.	Payroll costs/ administrative expenses	Number of contracts/ employee	IT-employees/ total number of employees	Administrative expenses/gross premiums written IT-expense/ administrative expense
Renewal and development focus	Share of gross premiums written from new launches Increase in net premiums written Development expense/Adm. exp. Share of staff under 40 years	Property turnover : purchases Property turnover: sales Change and development of existing holdings/ Training expenses/ administrative expense	Total assets Share of new customers Deposits and borrowing, general public Lending and leasing Net asset value of funds	Increase in net premiums, new sales Pension products, share of new sales Increase in assets under management	Increase in gross premiums written Share of direct payments in claims assessment systems Number of ideas filed with Idea Group	Number of contracts/ employee Fund switches via Telelink Fund switches via Internet

Source: Skandia (1998, pp. 20-21)

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financial result totally a matter of simulacra. The financial result is presented as easily manipulated by various assumptions, which all may be simulated anew (the list in the Skandia CD-ROM contains 13 parameters). Each assumption is problematical and will constantly change, as this is how financial markets work. So, the implicit, but ironic question is, what is really the value of financial valuation? What happens when the financial report is a computer game? Can it really be about “reality”?

The value of the firm, the CD-ROM continues to suggest, lies in value creation rather than in values. “Valuing” means creating value rather than describing value. The former requires indicators, which direct attention to the growth parameters of the firm, while the latter merely are elements of a computer game. Value creation is more than a computer game, according to Skandia supplements. “Valuing” is a complex phenomenon, which cannot find its way without a story of its production.

### **The story: the tree and the metaphor of futures**

The sketches and the indicators illustrated above are two dimensional and open ended. How do they work? The point is that a metaphor, a story, is needed to account for their relevance:

... [I]f we compare the IC to a tree, the ripe fruit of the season's efforts can be seen in the crown – i.e. in the annual report's income statement and balance sheet. The human core in the trunk is protected by the bark of customer relations and work routines. Research and planning, which the tree needs in order to survive future droughts and cold spells, is carried out in the root system. At a time marked by quick and capricious changes in the business environment, it is in the roots where the most crucial activity may take place, for future fruition (Grafström and Edvinsson, 1999, pp. 29-30).

The story of the tree is powerful in Skandia. It is the master metaphor for intellectual capital and it illustrates very economically the main ideas – if not practices – of intellectual capital. The tree as a metaphor of intellectual capital illustrates not only the relations between past and future, but also that intervention is necessary in order to make fruition maximally efficient. It is a story which quickly captures very complex relations in managing a firm. It talks about experiences that everybody has, and it incorporates everybody in a biological system where what leads to survival must be good, and that which will not turn into fruition is not desirable.

It also appears from the quotation that the metaphor of the tree smoothly translates into both financial capital and intellectual capital. The fruits are financial capital, which leaves the rest for intellectual capital. It is obvious from this story that the work to make the firm function and grow is a matter of trimming the roots, the branches and the bark. These relations are legitimated by matters of biology and in turn a green credo to justify the management through and of intellectual capital. It is poetic story. How can one be against the environment? The drawing of a “happy tree” in the Skandia supplements (see Figure 2) shows us a world in equilibrium irrespective of social status, sex, or intellectual capabilities. It is impossible to be against environmental protection

**Figure 2.**  
Skandia's tree

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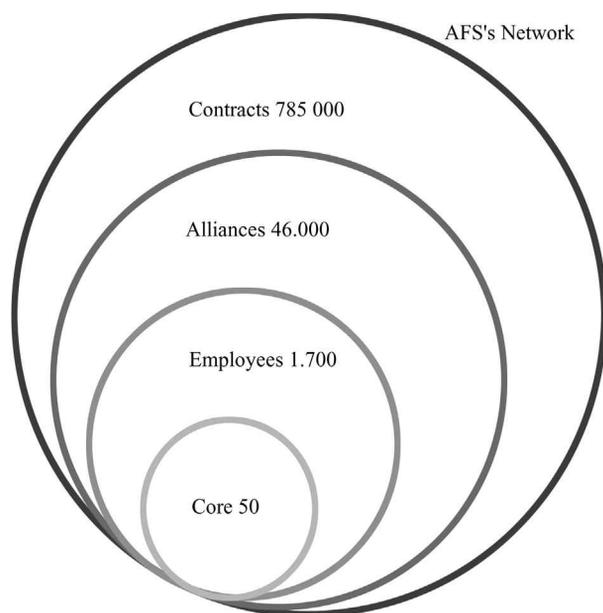


today because to be so is like being against “common sense”. Yes, we need to protect the environment to stay alive, to raise our children and to make society better. We will die if the environment is polluted, our children will be crippled and our society will be a mess of dirt, dangerous water and toxic air. Trees will die, whales will become extinct and the hole in the ozone layer will give us all cancer. This is not a nice prospect. Who can be against environmental protection? Who can be against a tree? It speaks of the continuity between past and present, and it speaks of the functional relations between roots, trunk and fruits. It speaks of common sense.

Speaking of common sense, the tree is able to communicate many more ideas of a proposed practice than words can do. And when even thoughts cannot carve out the propositions in the first place, the tree by allegory communicates a strategic proposal much more complex than a conventional strategy concerned with stipulating objectives of corporate growth or corporate market share. It communicates more broadly and more widely. It speaks with a visualisation – a drawing.

This drawing has consequences. The firm has to be presented and appraised in novel ways. The visualisation of the firm’s organisational form is one of circles within circles, which reach out from a core towards a relationship with a customer. This presentation illustrates how Skandia sees itself to be a “specialist in co-operation” (*Skandia*, 1998, p. 14). The model of the firm presented here is one where Skandia may be seen as a loose assemblage of fragile relations, which constantly have to be rehearsed and reproduced. A preferred picture of the Skandia organisation is not an organisational chart, which identifies the departments of the firm constructed as a hierarchy. Rather, the image of the Skandia organisation is one of circles where relationships constantly evolve and adapt to the conditions, just as the circles suggest that Skandia can always develop further layers of relationships to expand its presence in the world (see Figure 3) (*Skandia*, 1995, p. 14).

Such an organisational form is a so-called “imaginative organization with a wealth of intangible resources that cannot be quantified by traditional metrics”



**Figure 3.**  
Skandia's layers of  
relationships

(Skandia, p. 14). It develops by the relationships constantly being crafted on the margins of the organisation by the margins rather than by the core. From the circles, it is obvious that the core – presumably the set of top managers – is divorced from the work of the firm, which is delegated to employees via empowerment. Or put differently, the work of the firm relative to customers is situated on its margins. Interestingly, this is not the work, which is important to top managers. They do other things, possibly more important things – they craft the stories that communicate this perspective to interested parties.

How are the circles supposed to work? The “fishing net-organisation” is the metaphor for this arrangement. From the first Skandia video (1996) we are told that organisations are increasingly not governed from the top, which is where “the saddest people” of the firm are situated. In contrast, the action takes place at the edges – rather than at the centre – of networks, or fishing nets, where people continuously and incessantly form new, fragile and provisional hierarchies when certain people and business teams make themselves centres to corporate business issues. Always at the edges, and always temporarily. New hierarchies develop all the time. Such a proposal for an organisational form is one, which heralds individuals. People can be at the centre or periphery in their own lives if they dare to take responsibility and carve out their position. It is a tale of how empowered individuals define and solve the firm’s problems. A new commercial agenda (Munro and Hatherly, 1993) is crafted where top managers are partly removed from the spaces of action where each person sees him- or herself as providing a service to others in a network of activities.

How does such a firm work? A look at the second Skandia video (1998) provides one answer. Its story contrasts industrial society with the information

society – a grand story of the transformation of the sources of power relevant to craft value. From a story of industrial society to one of information society: the contrast between the old-fashioned typewriter and the modern computer. The video portrays industrial society in black-and-white pictures of steam engines, mass production systems and goods, while the information society is in coloured pictures of PCs, communication and information.

The PC as an icon of the new world is also very visible in the Skandia supplements. Examples of ways to translate human capital into structural capital are typically portrayed as information systems and databases which make certain organisational procedures stable and transportable, and which can be utilised also at times when people are not present. Knowledge is never captured in a definition, but always communicated in examples where the PC stands for it. On the one hand it is the individual's responsibility to constantly renew and develop him- or herself, and on the other the organisational structural capital offers the opportunity for individuals to develop rather than posing a threat to consume people.

The image is clear. The multifaceted alliances and networks between people and technologies are important for renewal and development both for individuals and for organisations. This condition makes individual empowerment and power important. The multifaceted positions held by people going in and out of numerous networks make it impossible to tell people what to do in their jobs; they have to be motivated. The productivity of motivation only works if it is possible to privatise the firm's problems and make employees "naturally" take on new forms of responsibility at the edges of the firm: they have to invent services and products in co-operation with customers.

### **The productivity of motivation**

The grand story of the Skandia supplements, the CD-ROMs and the videos is only there in metaphorical terms, and the firm is made governable partly through visual and linguistic expressions. Skandia is an expressive organisation in the sense that it communicates to its employees a new sense of urgency, and new organisational story where their individual contributions are essential. Nobody can state in advance what a good job is. Nobody can say in any detail what the critical issues facing the firm are. Nobody can explain with any degree of certainty what the future will bring – apart from the proposition that it will be different from the past.

Under such conditions, the firm is not presented as a hierarchy where top-management at the centre can tell people what their tasks are. The Skandia presentation is that the firm is a fishing net, a network and a system of alliances, which are mobilised at the edges. The particular way in which such mobilisation is possible is impossible to state with any degree of certainty. Therefore the story is that individuals have to take new kinds of responsibility which involves a completely new agenda of empowerment and direct linkages and alliances with customers. The Skandia story is thus not a plan for the firm's future; it is more a set of principles by which an organisational form is

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seen to work. These principles presuppose a person. Somebody has to put it in motion. An individualised organisation (Bartlett and Ghoshal, 1997) is one where individuals are accorded this role, but for individuals to do this, they have to be motivated.

Motivation is only productive, however, when certain conditions make knowledge sharing, minding of innovation and interest in changing things a continuous principle of organising. The Skandia intellectual capital supplements dramatise a story where individuals are accorded power, and they show a firm which is committed to the idea of empowerment. The continuous repetition of the role of human capital presents an image of a firm where individuals do not wait for directions: they are seen to be self-directing. If this idea can be internalised, there may a role for motivation as a mechanism of productivity. Only in such a situation will individuals disclose their own human capital and let it be a resource in collective decision-making and problem solving activities.

Motivation is not only internal to the person. It has to be demonstrated. If it is not demonstrated in the course of day-to-day conduct, the person does not show commitment to the firm. What is at stake is employability. The person has to demonstrate that he or she is willing to commit to a firm designed in the image of networks and fishing nets and therefore demonstrate the ability to let motivation – and initiative – be the marker of his or her organisational conduct.

### **The economy of creativity**

Human capital development resides in the productivity of motivation. The whole organisational or social economy of creativity, however, rests uneasily in the possibly anarchistic movement of liberal human capital. It requires a strong element of continuity in the sense that organisational or social systems have to be manageable, as the Skandia material consistently points out. Therefore, the transformation of human capital into structural – and ultimately financial – capital is a theme which underlies the logic of the proposed organisation. It is important to see how individuals link together both with each other and not least with technology. The stories in the Skandia material about capital are about relationships. Any form of capital is only productive if related to another. Human capital is leveraged by structural capital. If there are improvements in human capital, the productivity of structural capital will increase (if people go to PC classes, the value of computer technology increases). Such complementarity between assets makes it very difficult to distinguish between their individual worth. The paradox therefore is that creativity is never an individual thing. It is dependent on a system of capabilities and competencies. The value of creativity lies in the combinability and complementarity of technologies and skills – not in each of them. The economy of creativity is therefore not merely – or primarily – human, although it requires human motivation. It is a particular organisational system, which insists not on valuing existing services and products. It is, in contrast, a system, which sees relevant future services and products as impossible to anticipate in detail.

Therefore, what is at stake is the ability to construct an organisational system always capable of re-inventing itself. It is not attempting to predict the future; it is attempting to “make the future an asset”, as Skandia says, rather than a threat.

*Individual capital – organisational capital*

Since intellectual capital is a process where some assets support the productivity of other assets, the management concern is to tie and bundle together various forms of capital and put them on such a form that they can be managed and acted upon. Intellectual capital is more than merely the sum of individuals’ capabilities. Management is concerned to tie individual capital together with technologies, procedures, and customers.

The paradox is that firms are interested in both setting the individual “free” and at the same time doing this in a structured manner. Individuals are empowered to look for the firm’s problems and solve them individually; top management is too far removed from the marketplace to be able in any effective way to manage it. In a sense, intellectual capital is used to persuade employees what the world is via metaphors, stories and expressions which state that firms thrive through flexibility, empowerment, demanding customers and a continual adaptation to markets and technology. The strategy is that individuals have to mind strategy, and firms’ problems are privatised such that individuals strive to find and solve management’s problems (Bartlett and Ghoshal, 1997). Managers try to suggest “strategies” that cannot be put into words simply because the new world cannot be known. The individual is persuaded to craft him- or herself as appendices to, or at least part of, corporate (as yet not utterable and unknowable) strategies. They have to craft them as employable by showing commitment to be part of the experiment to find the firm’s strategy. That is, employability refers to commitment to change; commitment to undertake extra training; commitment to mind the firm’s business and not just one’s own. Or: people, who count, co-produce strategy on markets, customers and products. Top management craft a competence strategy about the mode of organisational functioning where empowerment, sharing of knowledge, and alignment between individuals and organisational procedures and routines are central imperatives.

Implementing such imperatives, an important part of the management of intellectual capital, is the modularization and packaging of individuals and technologies to tie free-floating individual capital to organisational capital that is more available to management intervention. Through packaging people and technology, certain individual capabilities are rendered re-usable when information systems and/or organisational procedures accompany them. This is attempted by creating new, stable relations between people, technology and customers in such a way that no particular person or group of people will be critical. By putting knowledge into information technology, personal knowledge is rendered structural and can be re-used in many places simultaneously. This is, for example, the case for packages of knowledge

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transfer to newly acquired subsidiaries in the administrative area which allows it to be inserted in the corporate budgeting and accounting procedures within a very short time: people, manuals, technologies and procedures are packaged and exported to new subsidiaries. In the case of Skandia, this has reduced uptake time by 60-70 per cent! One example of the effects of such modularization is the formation of a subsidiary in Austria. Here, organisational structure and procedures were imported from Germany, the services and products were invented in Sweden, the information systems and accounting procedures were fabricated in the UK, and the management principles were from the Swiss Skandia operation.

### **Valuing Skandia through intellectual capital**

The Skandia experience tells us that organisations can be transformed through expressive media and narrative forms of knowledge rather than through analysis and paradigmatic forms of knowledge (Boland and Schultze, 1996). Skandia is an expressive organisation, which communicates to its constituencies to show how the firm sees its basis for future competitive power (Mouritsen, 2000). For Skandia, expression is important in showing how metaphors and allegories can anticipate a future not known, and how it can be conditioned by empowerment and complementary between material and immaterial assets. By making such a statement public, it is made serious. What is at stake is corporate competence strategy and how it is to be achieved.

Skandia's intellectual capital consists of three elements that together constitute "valuing". Indicators create seriousness because they are published. Stories create comprehensiveness of the strategy proposed although it cannot be defined in its details. Sketches, which visualise the relations in the story, are produced, and suggest the connectivity in the indicators reported. This three-dimensional package of communication writes, draws and numbers organisational aspirations. These, however, cannot be communicated in their details, nor can they be defined as concretised strategies relative to its markets. In contrast, rather than possessing directive qualities, expressive aspects of organisational communication carry extended meaning because they talk about much more than can be put into words, and about much more than can be codified as procedures. Together the three dimensions visualise a world of organisational practices, which, if they work, will make the firm function in a post-modern world of fragmented markets and uncertain relations between "what is" and "what will be". The stories and metaphors produced present a possible identity about the firm's work, but do not present a plan for what its results should be. They have to be invented *in situ*.

Numbering is not important here because numbers faithfully represent the world of affairs. Indicators can never be defined exhaustively. They never "cohere" relative to an independently given "reality". There is no exhaustive list of indicators in Skandia's Navigator. They are never interpreted in the supplements as sets of statistics that can bring "reality" forth in a set of ratios. Indeed, there is hardly any mention of indicators in the stories given. They are

always at the back of the Supplements. This does not mean that they are not important, however. They are there to demonstrate the seriousness of top management. They show that top management is not afraid to back its propositions about the tree and the empowered human capital with some indicators that could be said to indicate the relations postulated in the navigator and in the idea of intellectual capital proposed. The indicators make the talk about intellectual capital durable. They can be brought forth again and again, and they can be compared across time and – to a lesser extent – across organisational units. They point out where the management actions are since they inscribe what is meant by, say, employee development, customer relations and technology and because it makes the path durable; it can be called forth again and again and made the object of debate and inquiry. They can be made an object of inquiry in particular into whether middle managers do what they say their aspirations are. The indicators presented in the supplements allow inquiry into the question whether management “really” implements a strategy, which is future-oriented. Is it “really” so that managers do what they say is strategically important? In this sense indicators are there for policing the implementation of corporate competence strategy.

The stories/narratives carry a meta-metaphor about the tree, about the long perspective needed to understand how a tree grows and how it produces its crops. The story of the tree is one that presents the relationships between the past, present and future and thus makes for a long-term perspective on value creation. There is the possibility to get beyond short-term financial values. “Valuing” is here not about assigning certain financial values to an object called “the firm”. It is about “valuing” organisational processes and procedures in their transformation. “Valuing” is about creating values for the future, and “valuing” is the process of assessing the worth not of results but of the procedures which may generate results for the future. “Valuing” is about the constellation between roots, trunk, leaves and fruits. Here, the tree not only provides a rationale for the importance of each element in the tree; it also dramatises that each element has to be re-aligned with the other, and that each element is nothing without the other. Such systemic relations give intellectual capital its “valuing” power: the focus is on relations between assets more than on the asset itself. Stories are thus created which are about the wellbeing of the firm beyond profit and market share. They focus on issues pertaining to the future but without having to estimate cash flows of the future. It is concerned with the “value driver” – both in the form of individuals’ consciousness and in the form of structural enablers – in creating tomorrow’s (financial) results.

The sketches illuminate connectivity between the indicators used to report on intellectual capital development. They are drawings, which create a certain aesthetic representation of the power of the indicators; they craft them as connected and substitute a mathematical relationship between them. This aesthetic appeals to “wholes” and persuades readers of the logic of the indicators. Both the system of capital which “explains” market values by financial and intellectual capital and the Navigator that addresses issues of

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managing between the past and the future are illustrations which make a certain connectivity because boxes are related by arrows or lines. The pretence of rigour is manufactured from the sketches, which convince by their simplicity and their reasonable argument. It makes sense to talk about the past, present and future. It makes sense to say that we have to explain the difference between market values and book values, and it makes sense to say that management conduct is about framing a future. This is what the sketches do. They craft in one picture complex and difficult-to-explain points of view.

In combination, the three-dimensional communication consisting of indicators, stories and sketches crafts a company language and accentuates priorities which, in being measured and reported, create the possibilities to follow up on management's words and promises concerning the firm's strategic development. The identity of a decentralised and close-to-market firm is constantly driven by intellectual capital's preferred story. That is, the relationship between writing, sketching and indicating forms a continuous and never-ending story about the way the firm is thought to function as a system. It is not about conventional strategic matters such as competition, products and markets, or organisational structures for that matter. It is about the procedures and relations needed to make the firm prepared for the future as an organised system of evolving competence.

It uses indicators to point the elements of strategic change out; and thus it uses them to enable a discussion of the firm's path towards its strategy. Intellectual capital demonstrates that "abstract" strategizing has to be made durable via technologies of representation and managing which point out what the identity means in practical daily experience of organisational life. Indicators, stories and sketches show a way "forward" rather than represent a set economy!

### **Intellectual capital as "capital"**

Intellectual is hardly in continuity with common, ordinary conceptions about what capital is. First of all, it is grounded in a form of aesthetic reflexivity (Lash, 1994) where the conventional coherent grand scheme of organisational development is supplanted by local, step-by-step mediations of the problems of the day. That is, the grand cognitive scheme of planned strategy is replaced by the local small scheme of empowerment. Aesthetic reflexivity involves mediators, which do not stand for and do not fill out the properties of the future. The mediators of aesthetic reflexivity are local, loosely coupled, complex relations between different materials of reflexivity executed as networks between numbers, stories/narratives and sketches/drawings/pictures. These media are expressive because they cannot create a cognitively satisfactory explanation of the delicate connections between them. One has to be "thrown" into the situation to understand and participate in constructing the possible "meaning" or "importance" of the whole array of "messages" conveyed by the network of mediators. Intellectual capital is expressive because it allows people

to construct a practice, which is only metaphorically supported by the “design” of the mediators, the images, the stories, the sketches, and the numbers.

Second, intellectual capital is significant because it crafts stories at different levels simultaneously. It carries extended meaning (Giddens, 1987, pp. 100 ff.) because it talks of the local and the practical on the one hand, but it also dramatises – in its interpretation – that there are wider conditions of possibility to be served. One example is that the requirements of “shareholder value” have to be part of the practices given space by intellectual capital. This influences the games that can be played, the interventions that can be found relevant, and the propositions that are acceptable. It thus also constructs a framework, which structurates the playfulness engaged in the practice of intellectual capital development. This is where attention to structuring human capital comes in, and this is where the privatisation of the firm’s challenges is not a haphazard move.

Third, intellectual capital informs a new mode of accountability where a responsible person is one that commits “psychic energy” or “motivation” to identifying and solving the firm’s problems. The playfulness allowed by intellectual capital creates its own limits, however, since it requires – and tests for – employability. Here, people commit themselves and demonstrate ability and willingness to be part of the team. This kind of accountability goes beyond the formal labour contract and specifies not only “results” as the driver of recognition but more the commitments to the rules of the game, to the rules of the community, to the rules of corporate identity. The employable person is the one that can be trusted to co-develop the rules of the game and make them count in new ways in new contexts.

Fourth, the narrative mobilised via intellectual capital is one which creates linkages and makes sequences in organisational storytelling. The plot is mobilised by expressive media, which makes it one to be interpreted again and again. The plot, and the whole intellectual capital account, is fabricated on three pillars: One is the sketch, which creates the boundaries of the objects to which intellectual capital refers. It thus identifies the “whole” that it is about. The second is the story line, which creates the legitimacy of the intellectual account, and in particular it mobilises the norms and possibly sanctions inscribed in intellectual capital. The third pillar is made of the numbers which create a sense of seriousness on the part of management because they – even in their incomplete form – allow critique of too blatant transgressions of the rules and norms of the games suggested by stories and sketches. The numbers capture the seriousness of the whole idea of intellectual capital. This is where management is on the test: will they allow the fruition of the story they themselves have espoused? The numbers act as reference points to this question.

These four points suggest how intellectual capital helps to move value. Expressions such as the ones found in intellectual capital statements are communicated internally as well as externally to the firm. The internal motive is to explain how the firm is to work towards one or the other realisation of

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capabilities and competencies. The external move is not only to show the capabilities of the firm to customers, investors and partners; it is also there to show internally that the propositions made in the stories are taken seriously. The external communication is thus not only there for the external audience; it is also – and perhaps more importantly – one of the mechanisms used to transform the firm from within. By being externally available, it may have a more pronounced effect internally, because it is not easy to neglect. Management can more easily be held accountable to it, thus it may be considered to be more than “mere words”.

### **Conclusion**

Intellectual capital is concerned with value creation for the long-term development of capabilities and competencies, which are said to be needed in a society of demanding customers and empowered employees. The numbers in intellectual capital statements are not a coherent whole beyond the justification found in sketches, metaphors and stories that connect intellectual capital to a future.

Intellectual capital statements do not attempt to form one bottom-line expression of value. Rather, they attempt, through networks of sketches, stories and numbers, to form paths along which new value-creating activities can be supported. Sketches about the management of relations between employees, customers, technologies and organisational routines and procedures; stories about the effects of bundles of human capital, structural/organisational capital and customer capital; and configurations of loosely coupled numbers that accompany and make the implementation of the story-line accountable and thus serious. These constitute in concert the “unmediated mediators”, which craft the leaps whereby employees can help to identify and solve the firm’s problems. Obviously, there are mediators (sketches, stories and numbers), but they are more or less “unmediated” because they do not claim to uncover a hidden truth about the value of intellectual capital. In contrast, they are always tangential to value creation and are powerful only to the extent that they bring the discourse of intellectual capital on. They are thus “unmediated” because their “content” has to be determined in use.

Intellectual capital statements are media of expressive firms. Through storytelling and a variety of different inscriptions intellectual capital incorporates an aesthetic dimension to account for the direction of corporate activities. A whole range of different elements is lined up in the Skandia narrative of the tree. Through the story of the tree employees are offered roles, feelings, and ways of relating themselves to the technologies, the customers and even the financial result of the company in the metaphoric language of the intellectual capital statement. Through suggesting that capital is a process rather than a stock, it claims that assets come in bundles or in networks of relationships, and that they cannot be separated without loss of value. The constant attempt to subsume individual capital under structural or

organisational capital illustrates that management is important in organising, fostering and enhancing intellectual capital to make it productive.

The interplay between stories, sketches and numbers is important: stories provide the promise of mechanisms by which intellectual capital is allowed to work. Sketches provide the wholeness that legitimates a certain set of numbers. Numbers, in turn, provide seriousness because they allow the promises made to be followed up and acted upon if they are not abided by. Together they outline a whole world, an epic of competitiveness, innovation, intellectual capital, and value and value creation. The sketches and the numbers of the IC statements are directed both at inscribing competencies to the characters of the stories and stabilising relations between them, thereby not just “reporting” on past events, but actively offering a whole version of the world to all related to the company.

These are central elements of the system of intellectual capital supplements in Skandia, the pioneer of intellectual capital statements in the world. This is what allows Leif Edvinsson to be selected as the “Brain of the year”.

#### Notes

1. In the case of Skandia, there is a lot of published material. Seven intellectual capital supplements have been produced, and Leif Edvinsson has published his ideas widely (e.g. Edvinsson, 1997; Edvinsson and Malone, 1997). His influence in thinking and practising intellectual capital is enormous, and he has been on numerous committees in connection with the EU, OECD and other institutions that are concerned with intellectual capital. But what is his project? What has Skandia been doing? These are some of the questions raised in this paper.
2. The presentation of intellectual capital offered here is typically “Scandinavian” as it focuses on the detailed exploration of the strategies and motives managers mobilise, when they direct attention to intellectual capital (e.g. Bukh *et al.*, 2001; Roos and Roos, 1997). This stands somewhat in contrast to the typical “American” approach which is focussed on the outside of intellectual capital through statistical analyses of its correlation with profitability (e.g. Bontis, 1998).
3. It may be debated whether the different types of capital exist as independent sets of resources, which are related in practical situations, or whether they exist only in bundles of non-reducible flows of activities (Mouritsen *et al.*, forthcoming b).
4. When writers such as Edvinsson and Malone (1997) and Stewart (1997) introduce the idea of market-to-book values they only do so very rudimentarily. When they go on to talk about how intellectual capital works, they never return to it again. It is simply no coherent description of how intellectual capital can work at least for the individual firm. This is not very surprising because the rigour of the market-to-book value is questionable. Intellectual capital is in this formula a residual value, which is market value less book value. First, it is a poor identification of intellectual capital merely to say what it is not. The residual between market value and book value is anything. It has been proposed to be reputation, brand value and competitive position. Therefore the market-to-book ratio does not have a “referent” *per se*. Second, this formula says that a change in accounting rules would also change the value of intellectual capital. If a change about the items that could be capitalised in the balance sheet or if depreciation of fixed assets were accelerated and so construct a different accounting result, a different value of intellectual capital would come about. Or in other words, in such a situation, intellectual capital would be a function of the accounting rules used to construct book value. This is obviously absurd, as intellectual capital is argued to be outside financial capital. Third, the formula is also problematic because it assumes that intellectual capital “fills out” the gap between market value and

book value. This is a problem because then intellectual capital information would have no value because typically more appropriate information would influence the financial markets' choices and thus the market value of the firm. In all, the market-to-book value is a problem as an accounting issue. There may be other possible uses of it in the financial markets.

5. There is a problem here in the Skandia model because it tends to separate the elements of intellectual capital to arrive at an increasingly purified set of autonomous functions that pertain to the individual element of intellectual capital. This tends to make the interrelationships between the elements of second priority and to take intellectual capital away from their organisational contexts. This is a paradox (see also Mouritsen *et al.*, 2001)

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