



LUND UNIVERSITY

Introducing intellectual potential

Nilsson, Carl-Henric; Ford, David

Published in:
Journal of Intellectual Capital

DOI:
[10.1108/14691930410550372](https://doi.org/10.1108/14691930410550372)

2004

Document Version:
Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (APA):
Nilsson, C.-H., & Ford, D. (2004). Introducing intellectual potential. *Journal of Intellectual Capital*, 5(3), 414-425.
<https://doi.org/10.1108/14691930410550372>

Total number of authors:
2

Creative Commons License:
Unspecified

General rights

Unless other specific re-use rights are stated the following general rights apply:
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00



Introducing intellectual potential – the case of Alfa Laval

Carl-Henric Nilsson

*Assistant Professor, Technology Management, School of Economics and
Management, Lund University, Lund, Sweden*

David Ford

Alfa Laval Group, Lund, Sweden

Keywords *Intellectual capital, Corporate strategy, Management*

Abstract *Intellectual capital has gained increasing attention concerning both research and more practically oriented applications during the past five years. Intellectual Capital and other knowledge management tools are topics that have emerged in the light of a broader trend of redirecting the foundation of competitive advantage from the company's tangible assets to its intangibles such as knowledge base, brands and the content and structure of computer-based systems. In this paper, the concept of intellectual potential is introduced. Intellectual potential is a further development of intellectual capital, using four principles: strategy basis; management orientation; process orientation; and context sensitivity. The concept is a tool for the strategic management of an organisation's intangible assets in order to increase its long-term revenue-generating capabilities. The case of Alfa Laval is used as an illustration of how intellectual potential can add value as a management tool.*

Introduction

The idea of emphasizing knowledge in organisations, for instance by referring to certain companies as knowledge companies or knowledge-intensive companies, has gained popularity among both practitioners and scholars (Alvesson, 1989; Davenport and Prusak, 1998; Edvinsson and Malone, 1997; Grant, 1999; Nonaka, 1994; Sveiby and Riesling, 1986)[1]. Based on this growing awareness that knowledge can add significantly to the competitiveness of a company, management is showing an increasing willingness to identify and create knowledge within organisations.

Within this context of emphasizing knowledge, intellectual capital, as a theory and as a practical application, has attained much attention. The number of companies, the value of which is largely dependent on their intangible assets, has increased dramatically (Sullivan and Sullivan, 2000), and intellectual capital seems to offer a solution to company valuation problems as well as answering the need to manage the intangibles of the company.

However, research, as well as practical applications, based on intellectual capital is still in its infancy and thus suffers from some shortcomings.

- The theoretical domain of intellectual capital is mostly accounting, while the practical application has two domains, accounting and management. The simple conclusion we can derive from this is that there exists a gap between the approach of academic researchers to the subject and companies' practical application of the idea.
- The ambition of researchers and practitioners has mainly been to produce a framework that will encompass all organisations in all situations (Sveiby, 2001).



However, bearing in mind the fact that companies and industries are very different, this general approach to intellectual capital is difficult, if it is at all possible, to achieve with a satisfactory level of credibility and usability.

- An important goal for the work with intellectual capital has been to measure and report a more correct value of the company. The assumption of these methods being that the intangible assets account for the difference between the book value of a company and its market value (Stewart, 1997). Consequently, much research on intellectual capital is aimed at finding a monetary value of intangible assets (Guthrie, 2001). Herein lies one of the major shortcomings of intellectual capital. In the effort to define a monetary value, intellectual capital runs the risk of turning the valuation of intangible assets into an accounting exercise. Furthermore, accounting is primarily a measure of the past, while the value of the intellectual capabilities of the company lies in the future.

Hence there is a mismatch between the inherent qualities of the intellectual capabilities of a company and the intellectual capital concept. To be successful in the economic environment of today a company needs to recognise its intellectual capital and also learn how to manage it (Carroll and Tansey, 2000).

To overcome the shortcomings of intellectual capital we introduce four principles that serve the purpose of strengthening the theory as well as the practical application of intellectual capital. To emphasize the substantial change we propose here the concept intellectual potential (IP).

The four principles are:

- (1) strategy basis;
- (2) management orientation;
- (3) process orientation; and
- (4) context sensitivity.

For the purpose of this paper we use the case of Alfa Laval as an illustration of the concept of IP and in an exploratory manner to understand the practical issues of working with IP. Alfa Laval is an example of an engineering-based company that has chosen to work with IP and it is interesting to see how the concept is being integrated into the existing management system of the company in order to allow the management to focus better on value creation and increase the pace of change. Also, the consideration of intangibles has been widely recognised in companies such as web designers and mobile phone content providers, but as the Alfa Laval case shows, the concept is just as relevant to traditional industries.

Towards intellectual potential

As pointed out in the introduction, we find theories on intellectual capital to have some shortcomings. There are several approaches which all, more or less, try to synthesize financial and non-financial measurements into one management tool. To obtain an overview Sveiby categorizes the different methods according to their ambition to assign a dollar value and their level of detail (Sveiby, 2001). The validity of these approaches varies considerably and among the most recognized are the intangible assets monitor (Sveiby, 1997), the Skandia navigator (Edvinsson and Malone, 1997) and the balanced scorecard (Kaplan and Norton, 1992). These approaches are classified

as scorecard methods for providing more qualitative way of measuring intellectual capital. Among the more straightforward methods the most important are market-to-book value (Stewart, 1997) and Tobin's q (Stewart, 1997).

The most interesting of these are undoubtedly the scorecard methods, which the IP introduced in this paper should also be classified. The most prominent of these deserves a more thorough explanation. The intangible assets monitor was developed by Sveiby (1997) and he uses a conceptual framework based on three groups of intangible assets: external structure (brands, customer and supplier relations); internal structure (the organization, management, manual systems, attitudes, R&D, software) and individual competence (education, experience). According to Sveiby, the purpose of measuring these three indicators of intangible assets is to provide management control. Three measurement indicators are identified for each of the intangible assets. They are referred to as growth and renewal, efficiency and stability (Sveiby, 1997). The intangible assets monitor will then consist of nine "squares", three for each intangible asset each with three measurement indicators. Sveiby recommends that two or three measurements be developed for each "square".

Skandia is considered to be the first company to have made an attempt to measure intellectual capital components (Bontis, 2000). The first internal intellectual capital report was presented in 1985 and the first external report in 1994. The original "navigator" consisted of five areas of focus of which the two that can be assigned to intellectual capital were human capital and structural capital (Bontis, 2000). The intellectual capital was said to consist of these two combined. The Skandia value scheme consists of both financial and non-financial parameters, which together provide an estimate of the market value of the company. Edvinsson developed a myriad of measures for the intellectual capital components all of which could not be considered relevant for valuation or management. Edvinsson also states that the measures are not of equal importance (Edvinsson and Malone, 1997).

The balanced scorecard is known more as a management tool than as an indicator of intellectual capital. However, if measures are developed for each of the four perspectives of balanced scorecard (customers, internal processes, renewal and development and financials) they will be quite similar to intellectual capital measures. This will make the balanced scorecard a possible method of measuring intellectual capital (Bontis, 2000).

In the scorecard methods the various components of intellectual capital are identified and reported in scorecards. When applying the scorecard methods the main purpose is not to put a dollar value on the intellectual capital. The purpose is rather to indicate the most important parts of the intellectual capital and to analyse the development over time of the relevant measures. This should be compared with more direct methods where the goal is to calculate a definite dollar value of the intellectual capital. Scorecards, however, have a tendency to provide too much information and too many measures, making the analysis of intellectual capital difficult. Many metrics are not valid in determining the size and growth of the organization's knowledge base (Liebowitz and Suen, 2000).

IP adds some valuable aspects to this field. First of all, IP is strategy based (the resource based view of strategy), thus providing a consistent theory for the identification of the intellectual potential of a firm. Furthermore, IP recognises that resources are more often resource configurations and need to be activated to be valuable, and for this purpose we introduce business processes as the analytical object of IP.

Adding strategy and business processes as components of IP provides us with tools and methods of describing the analytical object (process mapping) and for the identification of the intellectual potentials in the process (VRIO), i.e. a more management-oriented approach. A discussion is presented below on the four principles we suggest as valuable additions to the field. This discussion is followed by a description of the IP model.

Strategy basis

The literature on intellectual capital describes several methods and procedures for defining the intangibles of a firm (Sveiby, 2001). On some level they all do what they promise, but a solid theoretical foundation is lacking. Essentially, the objective is to define a firm's most important and valuable intellectual assets (intangibles), and if we by "important and valuable" mean those which form the basis for competitive advantage, we could turn to theories on strategy.

Strategy, is by definition, a body of theory that describes the basis of the competitive advantage of firms (Barney, 1986; Porter, 1980, 1985). It has been argued convincingly in recent years that the source of these competitive advantages is knowledge (Davenport and Prusak, 1998; Grant, 1999; Prahalad and Hamel, 1990). This argument is also the background to intellectual capital, but intellectual capital has still been developed without a clear connection to existing theories on strategy. It appears that a large and solid body of theoretical work has been ignored.

Although there are several schools of thought of strategy in which the perspective and supportive economic theories differ, there are two that are closely related to each other as well as to intellectual capital; the resource-based view on strategy (Barney, 1986; Grant, 1999) and the network theory of competitive advantage (Dyer and Singh, 1998). These two perspectives on strategy share the notion that resources in combination are the key to competitive advantage, and with the understanding that resources in recent discussion has been condensed to knowledge, we have a theory with which to describe and analyse a firm's specific intellectual capital (intangibles). Consequently, by integrating a resource-based view of strategy with intellectual capital we have at our disposal a solid theoretical basis for defining the IP of a firm. This is the first characteristic of IP.

Management orientation

Most of the academic and theoretical work on intellectual capital has been aimed at finding a monetary value of intangible assets, which has resulted in two kinds of methods that employ either (Bontis, 2000; Sveiby, 2001):

- a complex system that includes analysing metrics to obtain a "true" monetary value; or
- a more straightforward approach, which lacks credibility, as a measure of intellectual capital, or does not add any significant value to already existing ways of measuring and managing a company's value.

It seems that such efforts are largely motivated by established practice in accounting and auditing. The importance of dollar values and precise and "scientific-like" measures corrupts the inherently sound concept of intellectual capital, which runs the risk of turning into another accounting exercise (Figure 1).

While the accounting perspective is valid and important in firms, it has two major shortcomings. Focus on dollar values is one, and the other major shortcoming is that accounting is primarily “past tense” while the greatest value of intellectual capabilities in a company lies in the future.

Consequently, when the focus is on the accounting perspective, there is a tendency to neglect the future and the real value of intangibles. Without trying to anticipate what the future holds there will be little or no meaning in evaluating what you have today. The correct way to address this consists of employing a strategy base and a management orientation. Strategy adds focus on the future and a solid theoretical basis for identifying the intellectual potential of a firm (as discussed in the previous section). Management orientation adds another vital component, i.e. the ability to work in practical terms with the concept, to be able to manage for the future. This is the second characteristic of IP.

Process orientation

In intellectual capital the firm as a whole represents the analytical object. In practice, when organisations work with intellectual capital for valuation and management purposes, the analytical object becomes subgroups of the company. It is important to recognize and discuss this difference in analytical level because we must know which object we are talking about when trying to describe and manage it with a model or a theory.

We turn to the resource-based view on strategy for the answer (Barney, 1986, 1991). Within the resource-based view on strategy the analytical object is the resource configuration of the firm; not just the resource configuration, but also the activation of this resource configuration. Resources need to be activated to generate value and become the basis for competitive advantage. This activation of the resource configuration can be described as a business process. Therefore, we claim that the business process is the analytical object for IP. This is the third characteristic of IP (Figure 2).

Context sensitivity

The last, but not least important, principle is “context sensitivity”. The concept of IP introduced in this paper does not seek to establish a standard or the one “true” model. The content of IP is very dependent on the type of company and industry (we use strategy theory to identify the intellectual potential of a firm, and from Pettigrews’s (1987) work on strategy we know that context and content are connected).

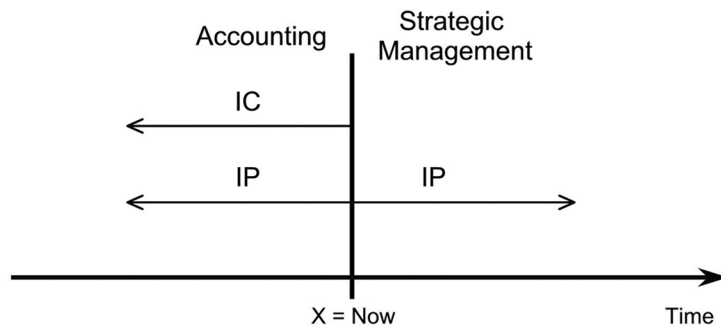


Figure 1.
The management orientation of intellectual potential



Figure 2.
The process orientation of
intellectual potential

A research-intensive company will value the human capital involved in its research very highly as well as the patents and innovations that the business produces. On the other hand, a company with production as its main activity will value other aspects of the company, perhaps relationship issues. It is our conviction that we must leave ample room in the generic model for adjustment to the specific context. This context-sensitive perspective is the fourth characteristic of IP.

The IP model

The IP model presented below provides a basic structure for practical use in the management of intellectual potential in a business setting.

Four components of potential

Intellectual Potential consists of four components. The first three – human, structural and relationship potential – originate from intellectual capital. The finance potential is an extension of intellectual capital which represents the notion that financial potential is an important production factor as well as a means of developing competitive advantage. A model for the management of IP that does not include the finance potential is not management oriented, and thus less useful in practice.

In order to obtain a better description of the business the first three components of IP can be divided into two or more sub-categories. The number and kind of sub-categories must be considered carefully so as to suit the business setting in question. The relationship potential could be described in terms of suppliers, strategic partners and customers, while process and innovation could capture the essence of the structural potential. The finance potential indicates the outcome of the first three components as well as representing the basis for them to prosper, and could be measured in terms of efficiency (productivity), i.e. supply chain productivity, and effectiveness, i.e. market productivity (Figure 3).

Drivers and indicators

In the work on IP we identify measures that allow us to manage IP, in terms of business drivers and indicators.

The business drivers answers the question of what the organisation must excel at throughout the business process. To capture the essence of a business driver we can identify one or more relevant indicators. The requirement for an indicator is that it

should be an appropriate measure of the IP and therefore represent something that adds value in the company. Together, the indicators should cover both object and process quality (Ljungberg, 2002), i.e. answer the question of what is to be delivered and how it is to be delivered. An indicator can be either qualitative or quantitative and should preferably be objective and measured by others. It must also be precise and understandable as well as future oriented. The number of indicators for each kind of potential varies depending on the characteristics and relative importance of that component. Since the indicators are intended to indicate the total IP, they have to be chosen carefully and they should not be too large in number since the results will then be difficult to interpret.

Four generic steps towards IP

Once the framework of the IP is decided, usually by top management, the IP team, which will work with IP at business unit level, is formed. The members of the team should represent all functions involved in the business, i.e. sales, marketing, R&D, production, purchasing, logistics, customer service, controlling, IS/IT and HRM. In some situations it could also be valuable to include customers, suppliers and partners in the team (Figure 4).

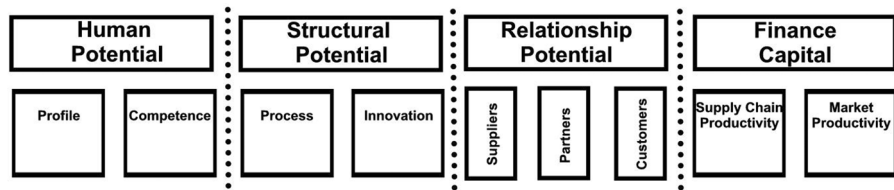


Figure 3.
Example of the IP framework

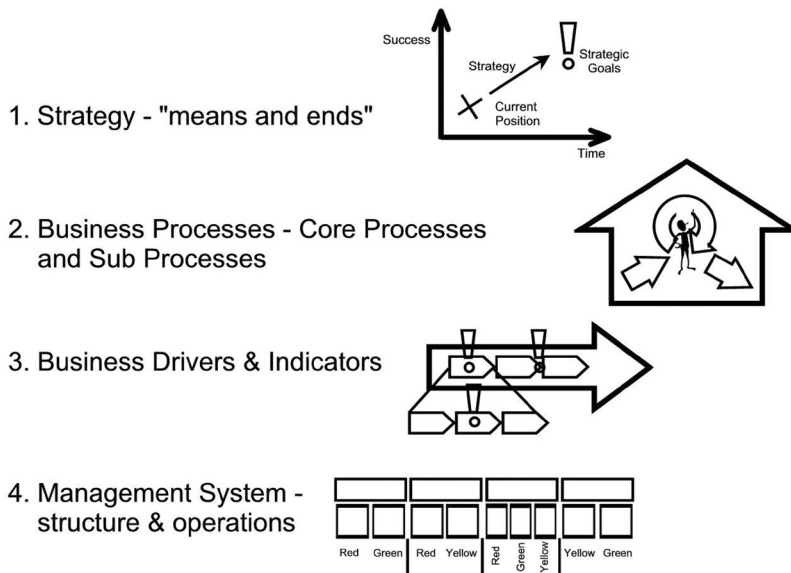


Figure 4.
The generic steps towards intellectual potential

The first step for the IP team to take in the process of working with IP is concerned with understanding the business strategy. To accomplish this we use, as discussed above, the resource-based view of strategy, giving us a consistent theory with which to analyse and establish the basis for competitive advantage. This step aims at gaining a common understanding of the strategy within the team.

Step number two is concerned with the identification of the business processes. The work involves identifying the core business processes and the sub-processes that the previously established strategy defines as critical. After this, the team will have a common understanding of the business processes and new relationships across functions will probably have been formed.

The third step involves two things: defining drivers of the intellectual potential and identifying relevant indicators of these drivers. To accomplish the first, again we use the resource-based view of strategy, to help us understand which kind of potential in the process are the most important. This work gives the team a common understanding of the crucial factors needed to secure the strategic goals as well as a common understanding of which processes are under control and which require action.

The final step focuses on establishing systems and a structure enabling management to use the IP model in their daily operations. The team defines from where, how and when the data will be collected. Based on the data gathered, they decide on the “traffic light” colour of each indicator and aggregate each potential/capital. A red light indicates that the future is at risk and improvements must improve. An amber light tells us that some things are good and some must be improved, while a green light indicates that we have confidence in our future abilities. Through the IP “traffic lights” the management team will gain a common purpose as well as a useful tool for clear and consistent follow-up of their business. Top management can also review strategy and business plans using IP traffic lights to focus on the key issues (Figure 5).

Intellectual potential at Alfa Laval

Alfa Laval is a Swedish multinational company with over 9,000 employees. The company is over a hundred years old and its core business lies in supplying engineered equipment and services to process industries.

Alfa Laval's context

Recently successfully introduced onto the Stockholm stock exchange (Börsen) in May 2002, Intellectual capital seemed to offer Alfa Laval's management the means with which to analyse the potential that intangible assets represented for stakeholders.

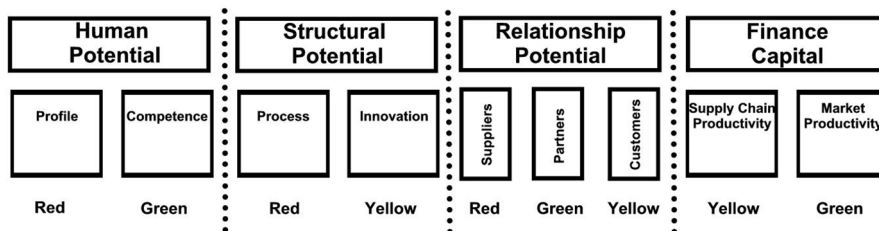


Figure 5.
The IP traffic lights

They studied the way in which other companies had used intellectual capital to analyse and communicate to the stakeholders about the value of intangible assets. It quickly became clear that few engineering product companies had published intellectual capital reports and that service and IT companies had had most experience of intellectual capital. A key issue for Alfa Laval was whether the methodology could be transferred to the context of Alfa Laval.

Alfa Laval has a customer-oriented mission: “To optimise the performance of customers’ processes – Time and time again”. The mission is founded on the fundamental belief that good, long-term business only results from adding value to customers. Alfa Laval’s management have developed four visions, which are internal statements of the preconditions that Alfa Laval must satisfy in order to achieve their mission.

The initial analysis showed that three of the four visions of Alfa Laval corresponded approximately to the three kinds of intellectual capital (relationship, structural and human). This gave the management confidence that there was an alignment between intellectual capital analysis and the existing method of communicating the direction of the company internally.

Alfa Laval’s management recognised two key factors that lacked emphasis in the intellectual capital measurement models studied. The first was the importance of the rate of change in modern business and the second was that any model had to be not only academically sound but at the same time easily understood in the organisation.

The context sensitivity and future orientation of IP addresses the key shortcomings of existing intellectual capital models. Thus, Alfa Laval’s management decided that step-by-step implementation of IP would be undertaken with the main criteria for success being that line managers should find that the model and methods added value to their own management processes.

Before any implementation was undertaken, considerable work was carried out to set IP within the context of Alfa Laval. The link with the mission and the visions was essential. However, alignment with the culture of the company and the cultural change are required to achieve the visions, was also regarded as critically important.

Alfa Laval’s culture has previously been characterised as a predominantly expert culture (Driver *et al.*, 1993) where the values were engineering excellence, quality and rational, logical thought. Much of this represented some of the value in the intangible assets of the company and so the management wished to retain the “old” strengths while complementing them with the potential of additional “softer” values hidden in intangible assets, such as brand management, customer process competence and industrial design. The presentation of IP had to appeal to the engineering, rational mind, but at the same time move the culture towards the recognition that perception and intangible values also have their place in business.

Strategic fit

The management decided to retain the existing “one mission, four vision” structure but found that by dividing each vision into two or three kinds of potential the essential requirement of IP could be satisfied (Figure 6).

While the definition of each kind of capital is specific to the context of Alfa Laval’s mission and culture, it is perhaps worth expanding on the team vision as an example.

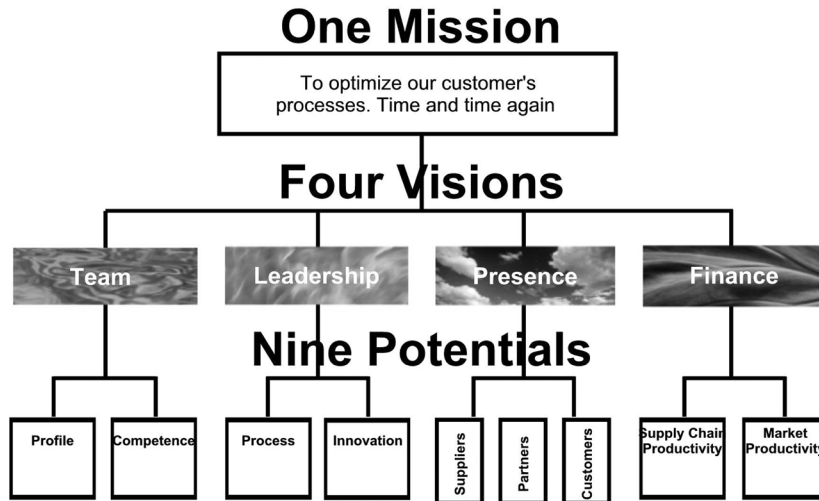


Figure 6.
The framework of intellectual potential at Alfa Laval

Team vision is most closely aligned with human capital in intellectual capital. In the team vision, the two kinds of potential are profile and competence. Regarding the potential of profile, the indicators should be focused on issues such as the change of in age distribution, employee education and team structure, which are needed to realise the potential of the business. The potential of competence reflects the change in knowledge and skills of the team related to their goals. The key phrase here is rate of change. IP is used as a measure of how the indicators change with time, based on the assumption that change is an important factor in the development of IP.

In Alfa Laval, the eight components of potential/capital make up a logical chain. The measures in each kind potential/capital support each other in such a way that the final result is of a financial nature.

“Profile” aligns the composition of the team to the business needs. By developing the teams’ “competence” productivity improves. “Process” development reflects employees’ increased competence in the processes, which in turn releases employee’s time for more “innovation”. Combining these factors with those of strategic “partners” enables the company to meet the customers’ needs. As a consequence, we can be confident that when we combine these measurements with traditional financial measurements we should see a continuous development of supply chain productivity and sales productivity (Figure 7).

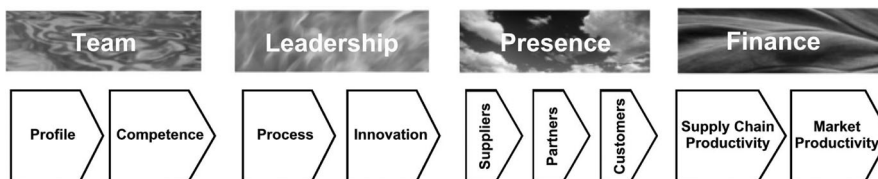


Figure 7.
The logical chain of the intellectual potential at Alfa Laval

Conclusions

We have argued that intellectual capital cannot stand as a theory by itself but should be an important extension of existing theories. Historically the academic habitat of intellectual capital has been accounting, while we propose it should (also) be resource-based strategy. By doing so we gain a consistent theory for the identification of the intangibles in a specific context. Also, to overcome the focus on “correct” dollar values we add a management perspective to IP, thus focusing more on business-driven management issues and the future.

Furthermore, we draw attention to the dilemma of a theory’s analytical object, where we note that intellectual capital has no clear message. The activation of a resource configuration in a business process is suggested as the object of study in theoretical and practical work on IP.

The contribution of the IP model, as described in this paper, is a basic framework that guides our thoughts towards the practical issues involved in describing and managing the intellectual potential of a firm. Through the Alfa Laval case we have illustrated the adaptation of the concept to a specific context, as well as briefly discussing some implementation issues. Implementation must naturally be adjusted to the context of the particular business. A large company such as Alfa Laval has many different contexts, requiring adaptation within the company as well.

Note

1. Furthermore, main journals have had special issues on the subject (for example, *Strategic Management Journal*, 1996, “Knowledge and the Firm”) and new journals have been established (for example *Knowledge, Technology Journal* and *Journal of Knowledge Management*).

References

- Alvesson, M. (1989), *Ledning av kunskapsföretag*, Nordstedts Förlag, Stockholm.
- Barney, J. (1986), “Types of competition and the theory of strategy – toward an integrative framework”, *Academy of Management Executive*, Vol. 11 No. 4, pp. 791-800.
- Barney, J. (1991), “Firm resources and sustained competitive advantage”, *Journal of Management*, Vol. 17 No. 1.
- Bontis, N. (2000), “Assessing knowledge assets: a review of the models used to measure intellectual capital”, McMaster University, August.
- Carroll, R.F. and Tansey, R.R. (2000), “Intellectual capital in the new Internet economy – its meaning, measurement and management for enhancing quality”, *Journal of Intellectual Capital*, Vol. 1 No. 4.
- Davenport, T.H. and Prusak, L. (1998), *Working Knowledge – How Organizations Manage What They Know*, Harvard Business Press, Boston, MA.
- Driver, M.J., Brousseau, K.R. and Hunsaker, P.L. (1993), *The Dynamic Decision Maker – Five Decision Styles for Executive and Business Success*, Jossey-Bass Inc., San Francisco, CA.
- Dyer, J.H. and Singh, H. (1998), “The relational view: cooperative strategy and sources of interorganizational competitive advantage”, *Academy of Management Review*, Vol. 23.
- Edvinsson, L. and Malone, M.S. (1997), *Intellectual Capital – The Proven way to Establish your Company’s Real Value by Measuring its Hidden Brainpower*, HarperBusiness, New York, NY.

-
- Grant, R.M. (1999), "Prospering in dynamically-competitive environments: organizational capability as knowledge integration", in Zack, M.H. (Ed.), *Knowledge and Strategy*, Butterworth-Heinemann, London, pp. 133-53.
- Guthrie, J. (2001), "The management, measurement and the reporting of intellectual capital", *Journal of Intellectual Capital*, Vol. 2 No. 1.
- Ljungberg, A. (2002), "Process measurement", *International Journal of Physical Distribution and Logistics Management*, Vol. 32 No. 4.
- Nonaka, I. (1994), "A dynamic theory of organizational knowledge creation", *Organization Science*, Vol. 5 No. 1.
- Pettigrew, A. (1987), "Context and action in the transformation of the firm", *Journal of Management Studies*, Vol. 6, pp. 649-70.
- Porter, M.E. (1980), *Competitive Strategy*, The Free Press, New York, NY.
- Porter, M.E. (1985), *Competitive Advantage – Creating and Sustaining Superior Performance*, The Free Press, New York, NY.
- Prahalad, C.K. and Hamel, G. (1990), "The core competence of the corporation", *Harvard Business Review*, Vol. 68, pp. 79-91.
- Stewart, T.A. (1997), *Intellectual Capital: The New Wealth of Organizations*, Doubleday/Currency, New York, NY.
- Sullivan, P.H. Sr and Sullivan, P.H. Jr (2000), "Valuing intangible companies: an intellectual capital approach", *Journal of Intellectual Capital*, Vol. 1 No. 4.
- Sveiby, K.E. and Riesling, A. (1986), *Kunskapsföretaget*, Liber Förlag, Sweden.
- Sveiby, K.E. (1997), *The New Organizational Wealth: Managing and Measuring Knowledge Based Assets*, Berrett Koehler Publisher, San Francisco, CA.
- Sveiby, K.E. (2001), "Methods for measuring intangible assets", available at: www.sveiby.com/articles/IntangibleMethods.htm