



DESIGNING THE SKANDIA NAVIGATOR TO MANAGE INTANGIBLE CAPITAL: WHAT RELEVANCE FOR MOROCCAN INDUSTRIAL COMPANIES?

Issam Bahnini^{1*}, Sanae Benjeloun²

¹ *Sidi Mohamed Ben Abdellah University, Faculty of Legal, Economic and Social Sciences of Fez, Morocco*

² *Company Alpha, Morocco*

Abstract: In this article, we investigate how the intangible capital of Moroccan industrial companies is managed using Skandia Navigator. In a knowledge-based economy, intangible assets such as skills, innovation and customer relations play a role in value creation. However, their management remains complicated, with traditional tools, especially for companies with little analytical skills. This study aims to design the Skandia Navigator and analyze how it can help companies to manage their intangible capital effectively. The methodology is based on a case study conducted at Alpha, a Moroccan industrial company. To collect data, we opted for direct physical observation, document analysis and interviews with managers. The results indicate that using Skandia Navigator optimizes the management of intangible assets by providing a clear and integrated view of performance. The Skandia model has been adapted for the company with five strategic axes: financial, customer, process, innovation and development, and human. This model enables the company to align its day-to-day activities with its strategic objectives, increase employee satisfaction and strengthen customer relations. This study guarantees the Skandia Navigator's effectiveness as an indispensable tool for managing intangible capital in Moroccan industrial companies.

Keywords: Skandia Navigator, intangible capital, human capital, organization capital, relational capital

* Corresponding author: issam.bahnini@usmba.ac.ma

Issam Bahnini, ORCID: 0009-0005-8266-3848

Sanae Benjeloun, ORCID: 0009-0003-2793-2895

1. INTRODUCTION

In a knowledge-intensive world, companies risk failing at one of the most critical challenges: leveraging their intangible assets. Central to value creation in a world with skills and knowledge at the heart, innovation and customer relationship resources constituting intangible capital, competitiveness is also anchored upon. Therefore, companies must integrate intangible assets into their business management strategies to stay competitive in the long term.

In answering this call, the article discusses the Skandia Navigator developed by Leif Edvinsson, considered one of the pioneers in intangible capital management. This tool includes five focuses to measure and manage intangible capital, and it is presented as a strategic instrument that handles intangibles effectively. This study aims to apply this tool to upgrade the management of intangible resources in a Moroccan industrial company, Alpha. Our Research question is: How do you design a Skandia Navigator to enable a company to manage its intangible assets effectively? In this sense, we seek to assess the efficacy and applicability of this model for Moroccan companies, especially those of industrial origin.

2. LITERATURE REVIEW

2.1. Intangible capital

2.1.1. Attempt at definition:

Intangible capital is a vague concept, as it has been defined differently by different authors and researchers. Indeed, in the literature we find a variety of definitions, such as:

“Intangible capital is everything that cannot be touched but can make money for the company” (Stewart, 1991)

“Intangible capital is a knowledge asset that can be converted into value (Edvinsson & Sullivan, 1996). It is about creating and supporting connectivity between expertise, experience and skills inside and outside the organisation” (Cabrita & Bontis, 2008).

“Intangible capital is the possession of knowledge, practical experience, organizational technology, customer relations and professional skills that give a company a competitive edge in the marketplace” (Edvinsson, 1997).

“Intangible capital is knowledge that can be transformed into future benefits and includes resources such as ideas, inventions, technologies, designs, processes and software” (Sullivan Jr. & Sullivan Sr., 2000).

“Intangible capital is defined as the totality of a company’s capabilities, knowledge, culture, strategy, processes, intellectual property and relational networks that create value or competitive advantages and help a company to achieve its objectives” (Hsu & Fang, 2009).

Based on these definitions, intangible capital is know-how, resources, skills, processes, relationships and intangibles that companies hold and need to create an economic value edge.

2.1.2. Components of Intangible Capital:

One of the most complex steps is identifying intangible capital, which includes a set of different and specific dimensions. This diversity offers a rich and nuanced perspective on an organisation’s intangible assets, providing a valuable framework for assessing its overall value and performance.

Thus, the intangible capital can be broken down into three components: Human capital, which includes the skills, knowledge and experience of individuals within the company. Organisational capital is subdivided into innovation and process capital, including organisational structures and information systems. In this regard, Edvinsson has defined it as “All that’s left when the employees go home”. The third component is the relational capital, which comprises relations with the company’s customers and external stakeholders (Edvinsson, 1997; Sveiby, 1997).

An often-overlooked aspect of developing intellectual capital is the interdependence of different types of knowledge and their impact on each other’s value and performance within an organisation (Seemann et al., 2000). Edvinsson (1997) highlights that the components of intellectual capital are interconnected and continuously interact. Building on this idea, Stewart (1997) asserts that intellectual capital is not just the sum of its parts; its value arises from the synergy and dynamic interplay among its three main dimensions: Structural, customer, and human capital.

Thus, in their article, Abdelhai and Lebzar (2018) conducted an exploratory case study within the company LMDC to understand the interaction between intangible capital components. By examining the link between human, organizational and relational capital. It turns out that these elements are linked. Human capital, with the skills and know-how of employees, enables internal operations to be fine-tuned. Organizational capital supports the organization and dissemination of this knowledge. At the same time, relational capital enables the integration of external information that strengthens the organization and the skills of its members. These three components work together to enhance the company's performance and learning.

This study indicates that intangible capital is an integrated system in which all the elements are interdependent and that the advantage it provides is a sustainable competitive advantage for the company. According to this framework, the interaction of intangible capital components determines the company's capacity to produce and create value. By bringing these components together, organisations can leverage their internal know-how on a large scale, becoming integrated and linked to the outside world for innovation, customer satisfaction, and dominance over the competition.

Therefore, we conclude that organizations must identify and nurture these relationships between the different elements of intangible capital to survive and succeed in a dynamic environment.

2.2. Skandia Navigator

Many tools and approaches have been developed to work with intangible capital to ensure strategic governance of these assets and to manage them effectively and comprehensively. One such tool is Skandia Navigator, which organizes and evaluates a company's intangible assets. This part looks at this tool and the stages involved in its design and implementation.

2.2.1. Presentation of the tool:

The Skandia Navigator is an important leap in strategic management. It was developed by Leif Edvinsson and Michael Malone in 1997 and uses intangible capital as a core element of value creation. Structured around five interdependent focuses, this model follows a temporal (past, present, future) and systemic logic, symbolised by the architectural metaphor of a “house” (see figure below) (Bontis, 2001). At the top, the financial focus reflects past performance using

traditional indicators such as return on investment or net margin. What sets it apart, however, are the other four focuses, which highlight the intangible performance factors.

The walls of the house, representing the Customer and Process focuses, anchor the company in the operational present. The Customer focus assesses current satisfaction and the depth of partner relationships, reflecting the company's relational capital. At the same time, the Process focus measures the effectiveness of organisational routines, a key element of structural capital. The base of the model, embodied by the Innovation & Development focus, projects the organisation into the future using forward-looking indicators such as R&D expenditure, the patent portfolio and skills renewal rates. This forward-looking dimension sets Skandia Navigator apart from traditional tools by explicitly preparing for future disruptions (Edvinsson, 1997).

The Human focus is at the centre of this conceptual structure, which Edvinsson describes as “the living soul of the organisation”. This transversal focus encompasses individual skills, collective learning dynamics, cultural alignment, and the capacity for disruptive innovation. Its centrality underlines that intangible value emerges from interactions between employees and other assets (Bontis, 2001).

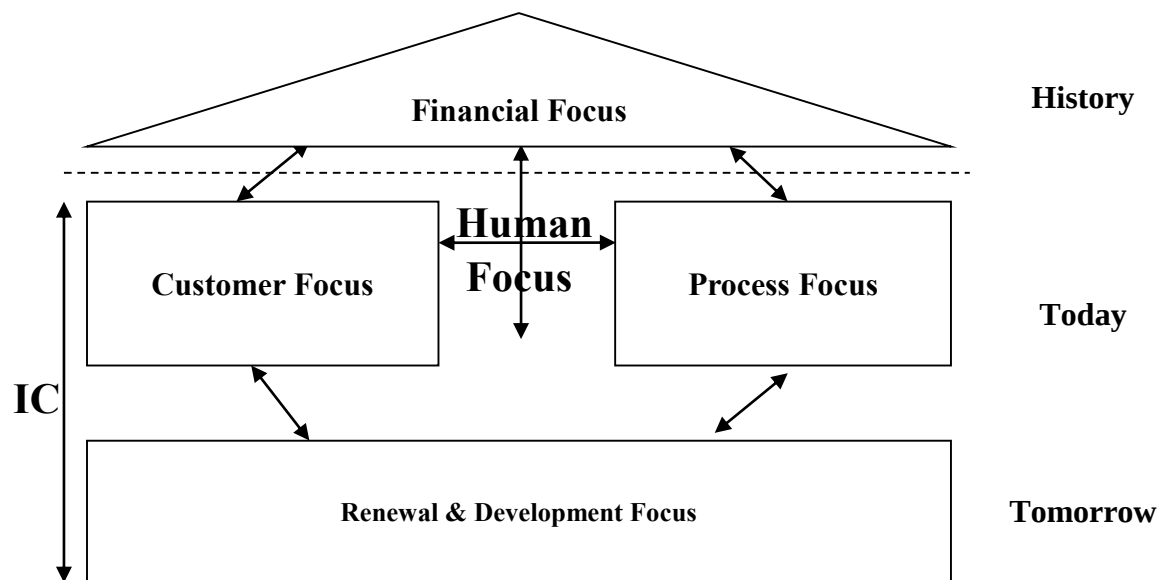


Figure 1. Presentation of the Skandia Navigator (Edvinsson, 1997)

2.2.2. Steps of conception

In their article “Implementing Strategic Planning with the Skandia Navigator,” Ryden and Bredahl (2003) outline the steps necessary to develop the Skandia Navigator. The process starts with a model and requires a clearly defined company vision before implementation. This model transforms the company’s vision and strategy into measurable indicators and activities. It is broken down into several steps to ensure a practical and straightforward translation process.

Combining these steps within a strategic framework enables the organisation to develop in an organised and measurable way. Firstly, a foundation of core values creates a solid organisational culture early on, linking day-to-day behaviour to long-term strategy. Secondly, a clear vision and strategic objectives leave nothing to be desired. The organisation can then measure itself using success factors and indicators to make progress in the areas where progress is significant. Furthermore, where the visualisation of objectives and implementation timetables is envisaged, these indicators should accompany them to monitor performance continuously;

we need to have action plans to implement the agreed objectives. Finally, dissecting the cause-and-effect relationships between the strategic plan's different aspects will help us stay on track and adjust actions if we deviate.

In short, these strategic steps will enable the organisation to stay on track and adapt its actions according to the results. Defining objectives, measures and the action plan should be done similarly so that objectives are managed consistently and efforts and resources are used effectively.

3. METHODOLOGY

3.1. Progress of the study

Our theoretical framework was enhanced by an exploratory study, using the case study method, which involves systematically collecting sufficient information about a person, event, or social system to enable the researcher to understand how it operates or manifests in real-life situations (Chevalier et al., 2018). According to Yin (2003), the case study helps address research questions of the "what," "how," and "why" types, especially when research conditions demand avoiding manipulation of variables and when access to both dimensions of the phenomenon and its context is limited.

For our study, we completed a six-month internship at Alpha Company. This involvement allowed us to employ various methodological techniques to collect diverse and rich data for our work. Specifically:

First, we witnessed the daily activities across all company departments through direct observation. This enabled us to comprehend the tasks and missions of each department and the interactions among teams, leading to a holistic understanding of the organization's operations, beyond just formal procedures.

We then conducted six semi-structured interviews with managers from several departments, including management controllers, human resources and the IT team. These interviews provided essential data for our research.

Finally, the company's internal documents, such as annual reports, organisation charts, etc., are essential for understanding its strategy and internal workings.

3.2. Field of Study and Approach Used for Design

Alpha, a Moroccan industrial company, struggles to find appropriate tools to monitor and maintain intangible assets. Production metrics are what most managers seem to monitor and can often overlook the more important areas of employee morale, staff motivation, innovation and customer satisfaction. Compounding this problem is the management control department of finance management accounting, which is overly focused on financial data. In addition, today's dashboards are more often than not mere rituals and are rarely, if ever, used in practice. For Alpha, Skandia Navigator's solution responds directly to this need.

The implementation strategy begins with analyzing the company's environment using the SWOT matrix to determine the strengths, weaknesses, opportunities and threats that influence its activities. We followed this up with an analysis of the current strategy, looking at the mission, vision and values. We then tightened up the company's strategy. This has enabled us to formulate an integrated strategic vision that supports the organisation's long-term objectives. We mapped this vision as a goal-oriented objective on the Alpha strategy map, which is essential for explaining the relationships between the performance drivers. In the next

step, we established key performance indicators (KPIs) by strategic dimension; these are very important for assessing the effect/impact of our initiatives.

4. RESULTS AND DISCUSSION:

Table 1. Skandia Navigator of Alpha Company

Financial Focus	Customer Focus	Process Focus	Renewal & Development Focus	Human Focus
Return on Investment	Number of Clients	Employee satisfaction level regarding computers	Training expenses per employee (activity 1)	Motivation index
4,69%	1 Client	95%	11.000 MAD	44.67%
Investment in IT	Customer satisfaction rate	Computers per employee	Number of training sessions per employee (activity 1)	Leadership index
2.000.000 MAD	99%	1 computer	1 Formation	58%
Revenue per employee	Total number of product returns	Staff workload	Training duration per year (activity 1)	Turnover rate
234744,18 MAD	1 return	205.000.000 MAD	1 year	1.37%
Value added per employee	Number of complaints rate	Staff workload relative to Revenue	Training expenses per employee (activity 2)	Absenteeism rate
72671,48 MAD	10 complaints	27,26%	20.000 MAD	4.42%
Total assets per employee	Complaint resolution rate	Number of contracts per employee	Number of training sessions per employee (activity 2)	Average years of service in the company
164100,51MAD	96%	3203	30 Formations	10 years
	Market share	Estimated value of obsolete IT equipment	Training duration per year (activity 2)	Number of female managers
	36,87%	250.000 MAD	60 days	13 females
			Number of employees under 40 years old	Number of managers
			2100 employees	71 managers

Analysing various indicators for Alpha Company highlights several key aspects of its performance across different domains.

Financial Aspect: Indicators such as revenue per employee (234,744.18 MAD), value added per employee (97,203.64 MAD), and assets per employee (655,102.04 MAD) demonstrate efficient use of human resources and solid profitability. A return on investment (ROI) of 4.69% and an IT investment of 2,000,000 MAD underscore the company's commitment to improving infrastructure to support innovation and growth.

Customer Aspect: The company excels with a low merchandise return rate (one per year) and fewer than 10 complaints annually, reflecting high product quality. Customer satisfaction is at 99%, with fast delivery times. Additionally, its market share of 36.87% far exceeds the 15-20% target, indicating a dominant position in the industry.

Internal Process Aspect: The company boasts efficient IT equipment (one PC per employee) and a skilled IT team (14 members). The personnel expenses of 205,000,000 MAD and a personnel cost to revenue ratio of 27.26% indicate significant investment in human resources.

Innovation and Development Aspect: The company invests in employee training, with substantial spending on seamstresses and administrative staff. A young workforce (2,100 employees under 40) is an asset for innovation and adaptation to new technologies. The company employs 3,203 people, divided as follows: 2,817 on permanent contracts, 206 on fixed-term contracts, and 180 interns. This distribution shows a preference for stability with a majority on permanent contracts, reflecting a long-term talent retention strategy. Fixed-term contracts provide flexibility for temporary needs, while internships represent an investment in training future talent.

Human Aspect: The company has 3,202 employees, including 71 managers, but the proportion of female managers is low (18.30%). The leadership index is 58%, and although employee motivation is low (44.67%), an average tenure of 10 years indicates notable employee loyalty, despite challenges related to turnover and absenteeism.

Based on the results obtained from designing the Skandia Navigator and calculating the key indicators we selected, it can be stated that they provide leaders with a transparent and comprehensive view of intangible asset management at all levels. This enables them to make more informed decisions, seamlessly align daily activities with long-term goals, and accurately assess progress. All this is made possible through the integration of five dimensions with both financial and non-financial indicators. Therefore, our findings indicate that the Skandia Navigator can be considered an effective tool for managing intangible capital at the Alpha Company.

At this point, we can address our issue: “How do you design a Skandia Navigator to enable a company to manage its intangible assets effectively?”. The Skandia Navigator helps Alpha Company to effectively manage its intangible capital by providing a single interface for intangible capital management. By combining financial and non-financial indicators, this tool integrates a company's day-to-day management with its strategic objectives, increases employee comfort and commitment, enhances customer loyalty, facilitates innovation and contributes to fund performance. The Skandia Navigator forms the basis of any sound strategy around managing Alpha's intangible assets and is essential to its long-term success and competitive advantage. For the Alpha Company team to operate effectively and implement the Skandia Navigator, it is also essential to make several recommendations. Start with Skandia Navigator: The most important tool for directing performance management in the company. Managers should leave no stone unturned in explaining the value of Skandia Navigator and how it radically affects business performance. The recommended approach is to proceed in stages, to minimise the effects of change and get the team to embrace this new management practice, encouraging employee engagement in using Skandia Navigator to do real work to achieve the organisation's goals. The fact that employees know how using Skandia Navigator will improve their day can be a motivating factor and help achieve the organisation's objectives. Secondly, the strategy needs to be communicated. Managers should schedule regular meetings to explain the company's strategy in detail, highlighting the objectives and each employee's specific role in achieving them. Introducing a reward system, such as bonuses, is important to recognise and motivate teams to meet or exceed targets.

Thirdly, it is recommended that Skandia Navigator be integrated with appropriate software to facilitate the rapid visualisation, analysis and interpretation of key performance indicators. This integration will enable managers and employees to monitor progress effectively, identify trends and deviations, and make informed real-time decisions. Easy access

to critical data will help Alpha adjust its operational strategies and focus on achieving its long-term goals.

5. CONCLUSION

This study highlights the strategic role of intangible assets for companies, in particular the under-exploited or poorly understood intangible capital assets in Morocco and its industrial sector. The use and valuation of intangible assets was explored using the Skandia Navigator model on the Alpha company called Skandia Navigator. The dual financial and non-financial indicators integrate performance orientation by providing a comprehensive view of the business's health, going beyond conventional measures to gauge relative success in the business, focusing on issues such as employee satisfaction, customer loyalty, and innovation.

I hope this model will apply to Alpha, as it shows that Skandia Navigator correctly records and monitors the intangible capital that occurs, enabling better management of consistency that aligns with Alpha's vision of direction. However, specific recommendations would need to be implemented to communicate the strategy to all employees, a progressive plan to reduce resistance, and integration of the model into software tools for a more visual and standardised analysis.

The results of this study open up some intriguing prospects for the future. Conducting a similar analysis for other Moroccan companies and several Skandia Navigator sectors would be interesting. This could shed light on where this model fits about others and where it should or should not be applied.

Advanced technologies in artificial intelligence and big data management systems can improve the analysis of Skandia Navigator indicators. By transforming data in real time using these technologies, companies can be much quicker in predicting and reacting in the market by automating certain analytical activities. Finally, what effect would Skandia Navigator have on corporate culture? Another thought-provoking point. Integrating intangible capital into a company's strategy could change how employees and managers perceive the value of their contributions and the role of intangible assets in an organisation's success. This transition could lead to more collaborative, innovative and employee-centred performance management practices.

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