A THEORETICAL MODEL FOR DEVELOPING CORE CAPABILITIES FROM AN INTELLECTUAL CAPITAL PERSPECTIVE (PART 1)

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ABSTRACT
One of the basic assumptions associated with the theoretical model as described in this article is that an organisation (a system) can acquire capabilities through intentional strategic and operational initiatives. This intentional capability-building process also implies that the organisation intends to use these capabilities in a constructive way to increase competitive advantage for the firm.

OPSOMMING
Een van die basiese aanname wat geassosieer word met die teoretiese model wat in hierdie artikel beskryf word, is dat ’n organisasie (’n stelsel) vermoëns deur doelgerigte strategieë en operasionele initiatiewe kan bekom. Hierdie voorgenome vermoe-skeppingsproses, veronderstel ook dat die onderneming daarop ingestel is om hierdie vermoëns op ’n konstruktiewe wyse te benut om die mededingende voordeel van die organisasie te verhoog.

The creation of conducive and attractive conditions for enhancing a firm’s capability-building process is central to the theoretical model as described in this article. The key building blocks that create favourable conditions for the development of organisational capabilities from an Intellectual Capital perspective are defined in the theoretical model and consist of the following five constructs:

- A Strategic Architecture that provides guidance on the strategic intent, focus and boundaries of the organisation.
- An Intellectual Capital Framework that creates a basis for a normative, strategic and operational view to stimulate ideas on how to make intellectual capital a practical reality and to utilise these insights in the development of the organisation’s core capabilities.
- A Core Capability Framework that reflects the content and processes related to the identification, description, evaluation and assumptions associated with the firm’s core capabilities. The Core Capability Framework also facilitates the integration of the concepts “core capabilities” and “intellectual capital”.
- An Operationalisation Framework to leverage core capabilities from an Intellectual Capital perspective in a pragmatic way to realise tangible competitive benefits not only from individual capabilities, but also through the conscious collective use of bundles of capabilities.
- A change enablement process that stimulates knowledge flows between the above key constructs of the conceptual model. This creates the basis for cognitive and emotional leverages to increase the potential of an organisation to successfully implement a strategic approach to the management of core capabilities from an Intellectual Capital perspective.

Raising the awareness and capacity of the organisation on the above five constructs creates the basis for an increase in the potential to make positive progress on this strategic journey of discovery to manage the growth of intellectual capital in a holistic way by focusing on core capabilities.

In the second article in this series the other key concepts that define the conceptual model are described. The relationships between the different constructs, key assumptions, boundaries and propositions about the theoretical model are also explored.

BACKGROUND

The theoretical model presented in this article explores two key concepts, namely Organisational Core Capabilities and Intellectual Capital. Organisational capabilities will be described from the perspective of the Dynamic Capability Strategy School. It considers strategic management as a collective learning process aimed at developing distinctive capabilities that are difficult to imitate. The Dynamic Capability School includes the Resource-Based Theory (RBT) perspective on capabilities as well as the Core Competence View (Elfring & Volberda, 2001a; 2001b). Intellectual Capital represents another viewpoint and perspective on how resources in an organisation can be leveraged to create competitive advantage. Intellectual Capital is seen as organised knowledge that can be used to produce wealth (Stewart, 1997).

Sullivan (2000) and Roos, Roos, Dragometti and Edvinsson (1997) showed (see table 1 and figure 1) that intellectual capital management can be approached from two separate, but related, streams of thought:

- A strategic value creation paradigm where the focus is primarily on the creation, development and leveraging of the firm’s knowledge through activities such as organisational learning, conversations and innovation.
- A value extraction and measurement paradigm where the focus is on the realisation of direct economic value from a firm’s unique combination of intellectual capital and tangible resources.

The theoretical model as described here was primarily developed and conceptualised from a strategic value creation paradigm. This implies that the focus of the model is on the establishment, growth and leveraging of strategic benefits for a firm by focusing on core capabilities, utilising the perspectives embodied in the intellectual capital paradigm. The measurement of intellectual capital is part of this process, but not the primary starting point or initial focus. The theoretical model aims to contribute towards the creation and development of an integrated framework and process for developing organisational capabilities from an Intellectual Capital perspective for competitive benefits. Companies that adopt a strategic approach to managing their intellectual capital do so because they see an

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opportunity to enhance their market positions relative to organisations that continue to manage such capital opportunistically. Klein (1998: 2) says, "If indeed knowledge is power, then harnessing it and channelling it make better sense than simply letting the sparks fly." The conceptual model for growing intellectual capital through core capabilities represents an integrated perspective where the focus is not only on the parts of the framework or system, but also on the relationships between the key elements.

### Table 1

**Two Views on Intellectual Capital (Based on Sullivan, 2000)**

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Knowledge-based View</th>
<th>Economic-based View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Focus</td>
<td>Value Creation</td>
<td>Value Extraction</td>
</tr>
<tr>
<td>Purpose</td>
<td>To increase employee knowledge in order to create new or improved innovations for commercialisation.</td>
<td>To leverage company innovation in order to maximise profits and/or improve strategic position.</td>
</tr>
<tr>
<td>Focus of Management attention</td>
<td>People as Human Capital</td>
<td>Structural capital or Intellectual assets (ideas on paper)</td>
</tr>
<tr>
<td>Activities</td>
<td>Training and education, Knowledge management and knowledge transfer, Innovation management, Organisation design, Organisational development, Customer and supplier relationships, Culture and organisational values.</td>
<td>Creation of codified knowledge by the firm’s human capital, Establish valuations, decision processes, databases, screening and culling conversion mechanisms and asset management systems and capabilities, Intellectual assets, Intellectual property.</td>
</tr>
</tbody>
</table>

![Figure 2: Conceptual Model for the Development of Core Capabilities from an Intellectual Capital perspective.](image)

**Figure 1:** Conceptual roots of Intellectual Capital (Roos et al., 1997).

The description of the conceptual model for the growth of intellectual capital through the development of core capabilities is presented in the format of "What", "How", "Why", "Who", "Where" and "When" as described by Whetton (1989). The following content aspects (based on Dubin, 1976; Mouton, 2001; Whetton, 1989) are addressed in the theory description:

- The identification and description of key concepts.
- The identification of the relationships and interactions among these concepts.
- The assumptions associated with the theory.
- A description of the boundaries within which the theory is expected to apply.
- A set of logical deductions or propositions about the theory.

### Identification and Description of Key Constructs (What)

The theoretical model consists of the following five key interrelated elements (see figure 2):

- Intellectual Capital Framework.
- Strategic Architecture.
- Operationalisation Framework for leveraging core capabilities from an Intellectual Capital perspective.
- Change enablement processes.

**Intellectual Capital Framework**

The content of the Intellectual Capital Framework emerged as a result of the application of an action research process (see Ungerer, 2004 for a detailed description of this process and a contextual orientation). The Intellectual Capital Framework of the theoretical model consists of three perspectives (see figure 3):

- A Normative view, which answers the questions "What is Intellectual Capital, and why is it important?" and "In what way should we think about Intellectual Capital?" It describes the context and business case for intellectual capital.
- A Strategic view that answers the question: "How should we organise to build and sustain intellectual capital?" The strategic view reflects the main drivers of intellectual capital. It also describes the organisational culture that will support the virtuous growth of intellectual capital in a firm.
- An Operational view, which answers the question "How shall we proceed from here to make it a practical reality for all in a firm?" This view reflects virtuous intellectual capital routines individuals could pursue.
From a normative perspective, intellectual capital is seen as the future source and driving force of wealth in the information-and knowledge-centric economy. Intellectual capital growth is the key to growing the gap between market capitalisation and the wealth that can be delivered by intangible assets. Intellectual capital is also the source for innovation, strategic differentiation and sustainable competitiveness. This view represents a departure from the traditional where organisations only concentrated on the growth of financial capital – growth in the ‘bottom line’. The Intellectual Capital Framework suggests that there is more to manage than just the finances. Value is created through the interaction and explicit bundling of different types of capital. All the organisation’s types of capital should be actively managed - as each contributes to wealth creation.

Intellectual capital is defined in terms of four elements that – through their unique combination – constitute the total concept (Bontis, 1998; Brookings, 1996; Edvinsson & Malone, 1997; Stewart, 1997; Sveiby, 1997):

- **Human Capital**: comprises the unique combination of skills, knowledge and know-how, experience, competences, attitudes and cultural mindsets of the people in the business.
- **Structural Capital**: represents the strategies, processes, systems, procedures, organisational culture (the way we do things around here), and intellectual property (including patents and copyrights) that the organisation possesses.
- **Customer (or relationship) Capital**: includes aspects such as brand equity, market share, customer base and customer information, customer and community relations, customer access points, and trade agreements.
- **Financial Capital**: is created through the unique combination of the above three Capitals (and the capabilities required to be successful), within the specific context that the organisation operates.

The systemic relationships or interplay between the four elements of intellectual capital are reflected in figure 4.

Figure 3: Intellectual Capital Framework as part of the Conceptual Model.

**Normative View of the Intellectual Capital Framework**

The information age has radically changed what creates value in organisations. Within this wave or era, there is a clear emergence of “intangible aspects” – such as “service” – rather than tangible aspects (such as physical products), as the things that unlock value in the economy. Intangible aspects (knowledge, intellectual assets, key organisational processes, brand, customer loyalty, etc.) have become progressively important to organisations and it is acknowledged that future sustainable business performance increasingly depends on an organisation’s ability to leverage the hidden value of intangible assets (Davis, 1996; Davis & Meyer, 1999; Davis & Meyer 2000; Edvinsson, 2002; Lev, 2001; Stewart, 1997).

Intellectual capital management has become a key process to unlock this hidden value (Bontis, 1998; Brennan & Connell, 2000; Edvinsson, 2002; Harrison et al., 2001; Klein, 1998; Roos & Roos, 1997; Roos et al., 1997; Stewart, 2001; Sullivan, 2000; Sveiby, 1997).

In conclusion: intellectual capital is created through the collaboration of different types of capital. All the key organisational processes, brand, customer loyalty, etc.) have become progressively important to organisations and it is acknowledged that future sustainable business performance increasingly depends on an organisation’s ability to leverage the hidden value of intangible assets. Intellectual capital growth is, however, not only equal to intellectual capital. Human capital is a prerequisite and root cause for creating customer and structural capital. Human capital is however not only a necessary condition, but is not sufficient on its own to create sustainable business value. There is a logical flow of enabling: if you have human capital you can build structural and customer capital, which result in financial capital. An organisation needs appropriately talented people who can delight their customers before customer capital can truly emerge. But human capital needs tools; therefore people need access to the infrastructure of structural capital to leverage their efforts in creating customer capital. A growth in customer capital is created through the individual and collective effects of human- and structural capital respectively. A growth in customer capital leads to a growth in financial capital over time, so if the organisation’s customer capital/relationship capital is strong and built on the enabling foundations of human and structural capital, it provides the basis for a positive change in the organisation’s financial capital. In turn, financial capital provides the means for employing people – who are at the centre of human capital – to unlock value in the organisation. In conclusion: intellectual capital is created through the interaction and explicit bundling of human, structural and customer capital to increase the value of financial capital.

A growth in intellectual capital is, however, not only dependent on the interaction of the above four core elements. To achieve strategic differentiation a company needs to bundle its core capabilities in unique combinations, given a specific context. Contextual factors include the type of industry, the firm’s Strategic Architecture and the firm’s internal ability to mobilise organisational efforts and energy to execute its intent.

The business rationale for engaging on the subject of intellectual capital shows that human capital is a prerequisite and root cause for creating customer and structural capital. Human capital is however not only a necessary condition, but is not sufficient on its own to create sustainable business value. There is a logical flow of enabling: if you have human capital you can build structural and customer capital, which result in financial capital. An organisation needs appropriately talented people who can delight their customers before customer capital can truly emerge. But human capital needs tools; therefore people need access to the infrastructure of structural capital to leverage their efforts in creating customer capital. A growth in customer capital is created through the individual and collective effects of human- and structural capital respectively. A growth in customer capital leads to a growth in financial capital over time, so if the organisation’s customer capital/relationship capital is strong and built on the enabling foundations of human and structural capital, it provides the basis for a positive change in the organisation’s financial capital. In turn, financial capital provides the means for employing people – who are at the centre of human capital – to unlock value in the organisation. In conclusion: intellectual capital is created through the interaction and explicit bundling of human, structural and customer capital to increase the value of financial capital.

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The logic of the business case for intellectual capital from a systems thinking perspective is as follows:

- Differentiation is the basis for increased competitiveness. The lower the imitability of offerings (ability to copy), the higher the potential for differentiation.
- A high differentiation potential is directly dependent on a robust innovation capacity.
- Innovation is enabled by access to a superior stock of intellectual capital.

1 A study of Bontis and Fitz-enz (2002) confirmed these basic relationships between the four variables of elements of intellectual capital. 2 The term core capability is described as part of the strategic view on intellectual capital. 3 The concept Strategic Architecture is described in part two of this article series as a key construct of the theoretical model.
• To attract, build and retain intellectual capital requires a positive organisational image.
• Image and position in the market remains dependent on positive and sustainable financial performance.
• The image of the organisation is also dependent on the reputation of leadership.
• The goal is growth in all capitals (financial-, human-, structural- and customer capital).

Figure 5: The Business Case for Intellectual Capital.

Strategic View of the Intellectual Capital Framework

The strategic view describes how an organisation can organise the building and sustaining of intellectual capital. Focusing the strategic energy in an organisation on the main drivers of the building and sustaining of intellectual capital. The strategic view describes how an organisation can organise its intellectual capital in a way that begins and ends with the firm’s key stakeholders (Long & Vickers – Koch, 1995). The effective deployment of core capabilities raises the barriers of imitation and substitution and creates competitive advantages for a firm. The roots for sustainable success are the capabilities – the requisite abilities and routines – an organisation possesses, cherishes and grows. Clarity with regard to the core capabilities a company require for success is an important building block to create a focus approach for the development of intellectual capital.

Intellectual capital growth, from a strategic perspective, is however not only about the core capabilities an organisation possesses, but also about the access a firm has to the capabilities of alliance partners. This creates the basis for an extended enterprise where the repertoire of capabilities a firm can leverage includes both owned and non-owned.

Knowledge Management. Given the context of the information age where knowledge has become the pre-eminent economic resource (Ackoff, 1993; Naisbitt & Aburdene, 1985; Stewart, 1997), organisations need a knowledge management capacity to enable knowledge flows related to human, structural, customer and financial capital. Knowledge-centric organisations need to unleash the knowledge that is locked up inside them. They frequently innovate their processes and practices but fail to capture the knowledge that they gain in the process, thereby continuing to reinvent the proverbial wheel. Knowledge management is a planned, structured approach to manage knowledge as an organisational asset throughout its lifecycle (create, gather, share, leverage) to enhance the organisation’s ability, speed and effectiveness in delivering products and services for the benefit of clients, in line with its business strategy and business processes. It is a holistic solution incorporating a variety of perspectives, namely process, people and culture, structure and technology perspectives, all of which carry virtually equal weighting in managing knowledge. Knowledge management takes place on three levels, namely the individual level, team level and organisational level (Dawson, 2000; Demarest, 1997; Snowden, 2000; Snowden, 2002). A strategic knowledge management capacity increases the flow and stock of intellectual capital in a firm and is stated by various experts (Bontis, 1998; Bontis, 1999; Bontis & Fitzenz, 2002; Stewart, 1997; Snowden, 2002; Roos & Roos, 1997; Roos et al., 1997) as an integral part of the dynamics related to intellectual capital. The increased importance of knowledge does not simply add an additional variable to the production process of goods: it changes substantially the rules of the game (Bontis et al., 1999: 392).

• Innovation capacity. Closely linked to the other three drivers of Intellectual capital is the capacity to innovate. A robust company-wide innovation process is part of the required structural capital infrastructure to increase the knowledge extraction ability of a firm. A culture of innovation as “the way we do things around here” supports and enhances differentiation and value creation. Innovation represents the fire that ignites the creative potential embedded in the firm’s human capital. This capacity enables an organisation to continue providing the products and services that delight its customers in unexpected ways. Organisations without this capacity will always be an “also ran” in the marketplace, having to feed off those firms that keep on creating new offerings. It is therefore a key contributor to the creation and reinforcement of a progressive organisational image. Sullivan (2000) supports the above view when he states that a goal (Amit and Schoemaker, 1993: 35). A capability is, in essence, a routine, or a number of interacting routines (Grant, 1991: 122). An attribute of organisational capabilities is that they are collective and cross-functional (Stalk et al., 1992).

Core Capabilities. An organisation needs to be very clear on the capabilities it wants to cultivate to achieve not only immediate success in the marketplace, but also long term sustainability. Clarity on which organisational capabilities will be required to achieve strategic and operational success contributes positively to strategic focus. This creates the basis for continuous organisational learning, feedback and proactive strategic re-positioning.

Organisational capabilities are repeatable patterns of action utilised by assets to create, produce and/or offer products to the market. Capabilities are regarded as an important special category of intangible assets because they determine the way a firm uses its tangible and intangible assets (Sanchez, 2001). Capabilities are a firm’s capacity to deploy resources, usually in combination, using organisational processes, to affect a desired
knowledge-centric company has only two fundamental sources of value:
- the innovations that can be commercialised; and
- the complementary business assets of the firm that are applied to the commercialisation of its innovations.

The organisational culture that supports the growth of intellectual capital is a performance-based culture. This culture is rooted in practices that foster co-operative teamwork, co-creation and mutual support. A performance-based culture encourages the ability to apply regulated flexibility to ensure the application of robust processes and discipline. Regulated flexibility creates the combined conditions of discipline and flexibility for innovation and value creation to happen. This assists with the unique bundling of capabilities, which contributes to a performance culture and financial success. A performance culture is essential to sustain innovation and consistent financial performance over time.

**Operational View of the Intellectual Capital Framework**

This view explores different intellectual capital practices that focus on individuals. At its core, the operational view attempts to find answers to the question: "How could an individual think differently about her or his work life and work experience in a firm to contribute positively to the growth of intellectual capital?" The guidelines are presented in the three views – normative, strategic, and operational – on the level of the individual with the focus on daily work routines. Individuals in a firm can use these guidelines to enable thinking, strategising and operationalising about the implications of an intellectual capital paradigm.

At the **normative individual** level, a mindset of *ownership, commitment and connectedness* is required.

- Ownership: This represents a mindset where people in the firm – individually and collectively – work and act as co-owners. Thinking about the firm from the perspective of an owner is quite different to thinking about it as "just another employee" – people start to recognise that each and everyone is critically responsible for unlocking and growing value.

- Commitment: The “inseparable twin” of ownership is another vital part in growing intellectual capital. Without commitment, people are present at work, without being engaged. Commitment is, therefore, about people understanding what is expected of them – and then delivering more than expected. It’s about engaging fully in an organisational role – and about walking the proverbial ‘extra mile’ to delight customers and co-owners. If everyone in the firm does that, then generating the “bigger result” – growing intellectual capital – becomes an everyday reality.

- Connected: The worldview of the information age is: *We are connected and must cooperate* (Maynard & Mehrten, 1996: 38). This thinking supports a systemic approach and accepts the notion of holism and interconnectedness. Such a mindset also facilitates natural co-operation between people and entities to focus outcomes on the mutual interest of all parties concerned.

At the **strategic individual** level the concept of value is paramount: Each co-owner must create a personal understanding of this concept by asking (and answering) a number of questions:

- The first question is, what is **value for my organisation**? If people do not know what value is for the organisation, how will they know when value increases or decreases?

- Secondly, **how is value created?** Knowing how it is created enables individuals to focus their energy on the things that will create the most value.

- Thirdly, the question is **how do I contribute to creating value?** This brings the concept of value to an individual and personal level. It focuses on what an individual **does**, rather than on what she or he allows to happen.

- The next question, **what is the value chain of my contribution?** This explores the way in which an individual contributes – are my efforts adding value, or am I consuming more than I add?

Creating an own understanding of value enables people in a firm to participate and lead each other in two aspects:

- Everyone in the firm has to **create new knowledge by sharing** (and learning from) best practices with people working in the same field or being involved with related subject matter. Knowledge is not something that can be “given” to someone – individuals take all the inputs they receive from others and the environment, add their own understanding given the environment that they work in, and then create the knowledge that they need for application within their own particular local situation. For this process, individuals or teams need the inputs from others who have been confronted by the same challenges. In this way individuals and teams can learn to improve on what was “best practice” in other circumstances by adapting the best practice solutions to local, unique circumstances without regarding the solution input as a recipe for exact duplication.

- The second thing individuals can do – that actually feeds the previous aspect – is to **actively network internally and externally**. This will bring them into contact with a diversity of new ideas and practices that will broaden their thinking. It will enable them to apply innovative solutions when facing new challenges with a diverse repertoire of actions.

At the **operational individual** level, the new knowledge that individuals receive through either creating it themselves, or through learning from best practice, will help them to deliver *world-class benchmarked performance*. This needs to be a natural process where, irrespective of geography, seniority or role type, everybody will actively seek opportunities for innovation every day in everything that they do. This is the heart and spirit of the philosophy of continuous improvement. It is not only about revolutionary transformation in a role, but also about making small enhancements every day to improve the firm’s offering to customers.

This concludes the description of the constructs associated with the Intellectual Capital Framework. The four other elements of the theoretical model for the development of core capabilities from an Intellectual Capital perspective will be described in the second article.

**CONCLUSION**

In this first part of a two-part series on a conceptual model for the development of core capabilities from an intellectual capital perspective the key constructs associated with the term “intellectual capital” were described and presented in an integrated framework. The Intellectual Capital Framework as described is a platform for viewing intellectual capital from a normative, strategic and operational perspective. These multiple perspectives stimulate ideas on how to make this concept a practical reality in an organisation.

The other key concepts associated with the theoretical model that will be explored in part two of this article series.

**REFERENCE**


