

# MANAGEMENT OF INTANGIBLES IN THE CERAMIC SECTOR

Lluís Callarisa Fiol, Miguel Ángel López Navarro, Miguel Ángel Moliner Tena,  
Rosa Rodríguez Artola and Javier Sánchez García

IMK

Department of Business Administration and Marketing  
Universitat Jaume I of Castellón. Spain

## ABSTRACT

*The figures of the Spanish ceramic sector have undergone a slight deceleration in recent years. The sector's competitive position has been threatened by increasing competition from the exports of certain emerging countries, especially China, whose companies sell their products at appreciably lower prices than those of their Spanish and Italian counterparts. Though this situation poses an unquestionable threat, it also represents an opportunity in regard to the development of new markets and the modification of production habits, by opting for added value, branding and innovation. In a situation characterised by the maturity of the sector, and in the face of a constant threat of low cost products originating from developing countries with strongly expanding economies, the management of so-called intangible assets becomes the key differentiating element for maintaining the competitiveness of the sector and its capacity to create wealth and employment in the long term. The list of factors catalogued as intangibles is long, and includes elements such as innovation, learning, knowledge management, brand value, flexibility and reputation. The key issue lies in the capacity of the company to manage such assets suitably, taking into account that these are really the ones that drive company value in the present market. However, every sector is different, as is every company, so that in each case there are particular intangibles which are the most noteworthy. In the present paper we seek to delimit the basic factors in the field of intangibles management, especially in regard to their **identification, evaluation and development**. In this sense, the first question that companies operating in the sector need to consider relates to the delimitation of those intangibles that could be considered the keys to their competitive advantage. In our view, elements such as innovation, brand image or reputation can be considered a few of the key intangibles to be fostered in the next few years in the frame of the Spanish ceramic sector. Secondly, the organisation must evaluate appropriately the intangibles identified as key intangibles, establishing the most suitable indicators for this purpose. Finally, these intangibles need to be suitably developed and managed, in order to improve the company's competitive position in the market. The present paper seeks to outline the basic courses of action that the company needs to follow in each of these three stages.*

## 1. INTRODUCTION

In recent years particular attention has been drawn to the unquestionable importance of intangible assets in the business context. Formerly, competitiveness consisted of correctly managing the company's tangible assets: taking the greatest possible advantage of its financial resources and material infrastructure, managing stocks and optimising production. This description fits what ceramic companies are currently doing quite well. The basis of the Spanish ceramic sector is production and its tangible assets. Production and store management are essentially what guide company life. However, at the present time, in the so-called information and knowledge economy, interest largely focuses on the management of intangibles resources (Figure 1). Indeed, there are very valuable companies whose main sources of value lie not so much their physical assets, but in their brand, their reputation, etc. In fact, recommendations continuously appear in the press regarding the most desirable actions that the companies in our business context should undertake to enhance their international competitiveness, and these all point in the direction of improving intangibles and intangibles management. The tough competition looming from emerging countries, especially China, poses threats, but also opportunities to finding new markets and changing production habits, by opting for added value, branding and innovation; that is to say, opting for intangibles.

Spanish ceramic companies have traditionally valued physical features (facilities, production lines, machinery, stocks, etc.). However, in general, they have attached little value to intangibles assets (brand, delivery times, reputation, etc.). However, the tendency that appears to be followed by some of the large Spanish and international companies, especially those listed on the stock market, is that of counting intangible assets, such as the brand. For example, the market value of the Coca-Cola brand exceeds all its physical assets. For Bueno, Aragón and García (2001) intangible assets are nowadays considered critical resources on which company success depends and which are generators of a set of distinctive basic competencies, which enable creating and keeping a competitive edge. Recent works have measured, moreover, that 80% of the market value of a company today lies in intangibles <sup>[5]</sup>, a sufficiently expressive finding to justify the interest in intangibles. Other studies demonstrate that at least 35% of the decision to place investments by portfolio managers is based on intangibles <sup>[9]</sup>. Although it may seem strange, these are facets of business activity that many companies fail to take into account. And the question then becomes: how much additional value could a company generate, if it focused its attention on intangibles and allowed its environment to know exactly what it was doing and why? On the other hand, it is to be noted that clients increasingly demand more information about intangibles: they wish to know what a company is doing to protect or to preserve the environment, and whether some of their products or production processes degrade it or not; whether the products are made in factories with inadequate labour conditions, etc.

However, the essential point does not lie exclusively in understanding the importance of a company's intangibles, but in taking a further step: in implementing particular plans to set these intangibles to work in strategic and business objectives. In fact, hardly anybody questions the importance of intangible assets as differentiating and value creating elements, but few know, however, how companies go about managing such assets.

The objective of the present work is to put forward some reflections for the ceramic sector concerning the importance of intangibles as key differentiating elements that enable upholding the sector's competitiveness and improving its capacity to create wealth and employment in the long term. Basically, after setting out some considerations regarding the conceptual delimitation of intangibles and noting why these contribute to enhancing company competitiveness and value in the present market, we will address some areas of reflection concerning the management of such assets.

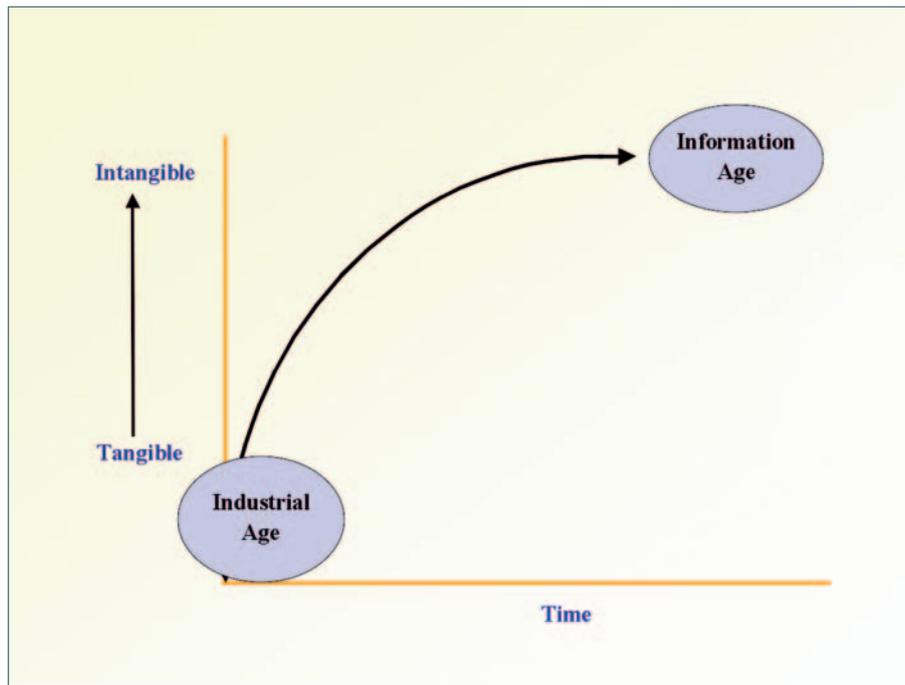


Figure 1. Information economy

## 2. WHAT ARE ¿INTANGIBLE ASSETS?

The conceptualisation of intangibles entails the difficulty of finding a sufficient consensus as to what this term means in the sphere of *management*. Despite its popularity, there is no widely accepted definition. It is an adjective that usually refers to different concepts, such as assets, activities, resources, etc. However, the adjective is often used as a noun, and this demonstrates the difficulties that exist when it comes to establishing an adequate definition <sup>[2]</sup>. However, the wide variety of definitions of intangibles to be found in the literature displays certain common traits:

- There are generally defined as non-monetary sources of probable future economic benefits.
- They lack physical or material substance (they can not, therefore, be touched or perceived in a precise mode).
- They are, generally, the result of internal development processes.
- They are largely based on information or knowledge.

Intangible assets are not something mysterious. Though they may seem invisible, they can be located and situated quite easily in different categories. A first classification, and perhaps the most usual one, characterises intangibles as the combination of the human, structural and relational capital of an organisation (Figure 2):

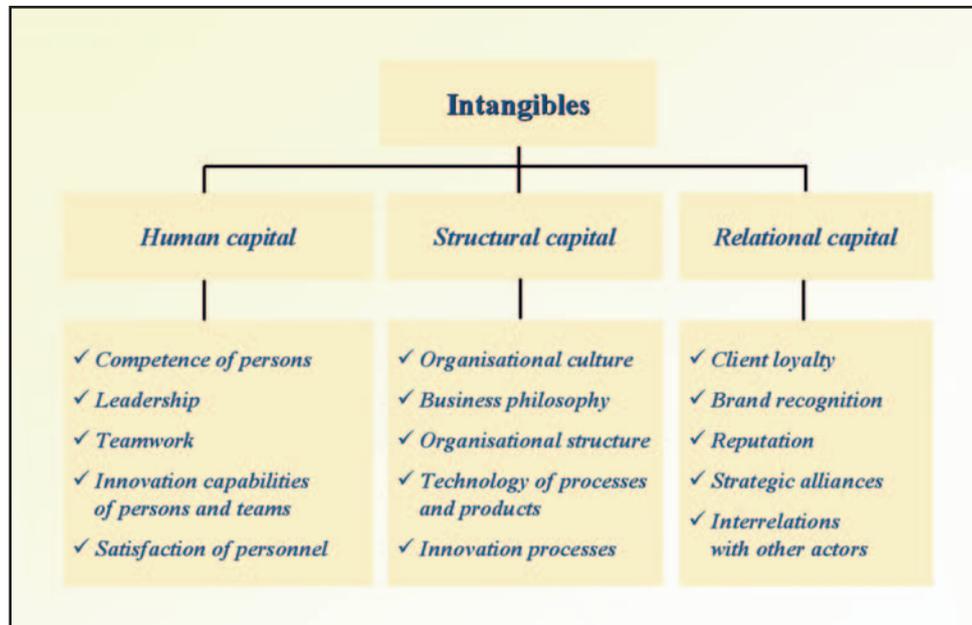


Figure 2. Classification of a company's intangible assets

1. The human capital refers to the useful knowledge (explicit or tacit) for the company that its professionals has; it can be defined as the knowledge that the employees take with them when they leave the company. Examples are creativity, the capacity to work in a team, flexibility, tolerance to ambiguity, the capacity to learn, loyalty or education.
2. The structural capital can be defined as the knowledge that remains within the company when the workday ends (which is generated by the employees but is the property of the company). It comprises the organisational routines, acting procedures, culture, organisational flexibility, use of information technologies, capacity for organisational learning, etc.
3. The relational capital is defined as all the resources linked to the company's external relations with clients, suppliers or *partners* in strategic alliances. Examples of this category are the image, client loyalty, client satisfaction, bonds with suppliers or the capability for negotiation with financial organisations. It also includes the brand image or company reputation. The value of the assets of the external component depends, mainly, on how the company manages its relations with its *stakeholders*.

A second classification, which would display a certain equivalence with the foregoing one, would lead us to classify intangibles assets in three categories: competence of personnel, external component and internal component <sup>[13]</sup>:

1. The competence of personnel measures individuals' ability to act in a great variety of situations and to create both material and intangible assets. The competence of individuals is not just one of the three intangible assets of

a company: it is simultaneously the origin of the internal and external components. For Sveiby, the competence of an individual depends on 5 factors: explicit knowledge (formal education), practices (knowing how to do things), experience, values (beliefs regarding what is right) and social networks (relations with other individuals within an environment and culture).

2. The internal component includes patents, ideas, operating structures, as well as the administrative and computer organisation of the company. These elements are created by personnel and are usually company property.
3. The external component includes relations with clients and suppliers. It also includes the names of products, proprietary brands and the reputation or image of the company.

### 3. WHY ARE INTANGIBLE RESOURCES STRATEGICALLY IMPORTANT?

We have indicated above that intangible resources are the main source of sustainable competitive advantages in the business frame. What, then, are the reasons for the strategic importance of these resources? Fernández, Montes and Vázquez (1998: 90-93) give the following reasons:

- *They are an important heterogeneity factor among companies.* An essential condition for a situation of competitive advantage to materialise is for the competing companies to be different in terms of the resources they have, and the importance of intangible resources lies precisely in their decisive contribution to the creation of that heterogeneity. These types of resources are usually unavailable in the market and can only be created in the company itself, so that by being created internally their idiosyncratic character turns them into an important differentiating factor between companies.
- *They do not depreciate by use.* Contrary to what occurs with material resources, which depreciate by use, intangibles resources are not consumable goods, so that their value increases by use, by repetition and experimentation.
- *They are difficult to imitate.* On the one hand, resources that are separable and defensible in a legal context are protected by rights that assure their exclusive use. The others are usually protected by their tacit complex character. Tacit knowledge is hardly accessible, since it is not articulated or codified in information hardcopy, nor is it incorporated in any material element. Thus, a company can hardly copy the organisational routines of another. Moreover, hiring of key individuals of the other company would not solve the problem either, since the tacit component of these routines is not readily identifiable and separable from the group of individuals that have created and used it for the first time (the group learns things and acquires knowledge that none of its members can replicate separately). And even when the whole group is hired, the collective knowledge the group has may lack value outside the context in which it was created.
- *They are unavailable in the market.* Thus, we may note that there is no reputation, capacity of innovation or brand image market. The availability of intangibles in the market is notably reduced as a result of their high co-specialisation with other company resources. Generally, intangible assets do not generate value by themselves, but are the result of combinations between several

assets: reputation, for example, is associated with matters like the company's capacity to innovate, or the quality of its products, etc., so that intangibles cannot readily be separated from each other.

- *They generate important externalities and synergies.* The origin of these external effects lies in the fact that the cost entailed in extending the use of intangible resources is lower than their creation costs. Thus, the brand can risk favouring the introduction of a new product, thus noting its superior quality with relatively inferior costs to what a competitor would need to bear who was not known in the market. In the case of technological know-how, its transverse character means, precisely, that it can be used in different products and industrial sectors.

#### 4. MANAGEMENT OF INTANGIBLES

At this point the key question becomes: What do ceramic companies do or what should they do to manage their intangibles appropriately? Managing intangibles requires identifying them and relating them to the business strategy, evaluating their interrelations, measuring their value and, finally, being able to manage efficiently the activities that make their development and improvement possible.

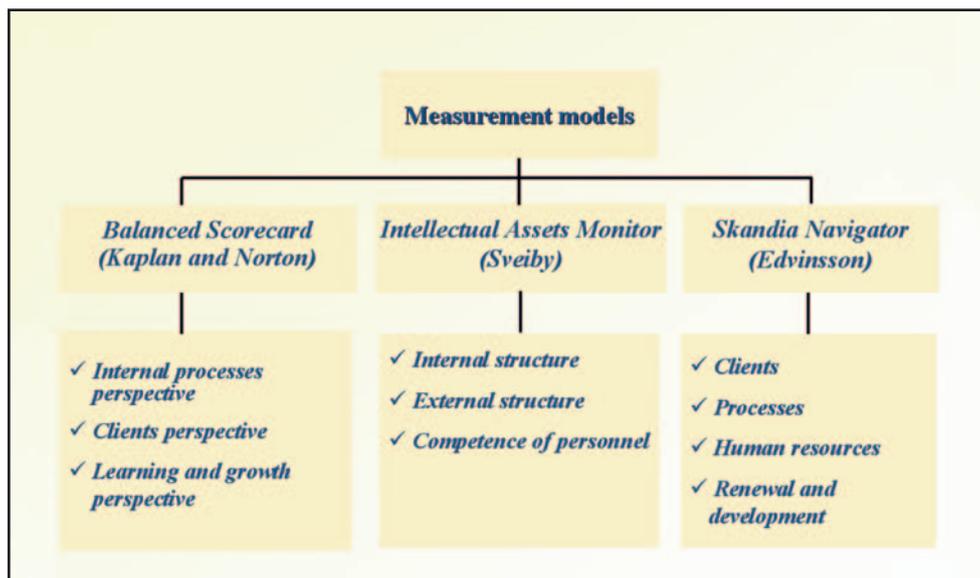


Figure 3. Models for measuring / managing intangibles

Normally, intangibles are not presented to us externally, nor are they integrated in the internal accounting management of the company. However, they are somehow taken into account in the planning–control process, albeit in an informal way. Companies with good practices may be expected to be aware of the importance of critical intangibles for the success of the organisation. And, therefore, these companies may also be expected to identify, measure and evaluate the important intangibles in the planning–control process. There are several intangibles measurement and management models. Probably, the first attempt to address the problem raised by intangibles, albeit in an indirect way, was undertaken by Kaplan and Norton, when in 1992 they published their study *The Balanced Scorecard*. In this study, the authors maintain the financial

dimension as fundamental element of company management control, but they add three new dimensions: the client domain, the process domain and the learning and development domain. The introduction of these three additional perspectives enables controlling the capabilities construction process and the acquisition of intangible assets needed for future growth. But perhaps the two most famous models are the Skandia Navigator, developed by Leif Edvinsson (a kind of control panel with 5 dimensions in regard to intangibles management: finances, clients, processes, renewal and development, human resources); and the 'intangible assets monitor' developed by Karl Sveiby, who focuses his attention on three types of intangible assets: competences of personnel, internal component and external component.

Companies normally use a common model when it comes to developing their system of intangibles management. In the so-called MERITUM Project three stages are envisaged in relation to the development of an intangibles management model: identification of intangibles, measurement, monitoring and action <sup>[11]</sup>. The ideas set out below are based, exclusively, on the guidelines of this project.

#### 4.1. IDENTIFICATION OF INTANGIBLES

This involves identifying the intangibles related to the strategic objectives and the activities that affect these resources; the objective is the creation of a network of intangibles.

The starting point needs to be the definition of the business vision, i.e. an evaluation of the organisation's mission and the related strategic objectives. Companies need to identify the intangibles that are critical in relation to their strategic objectives. These intangibles are the ones that contribute most to the value creation process and which are different in each organisation. When the strategic objectives have been identified, management should identify the intangible resources and define the activities that will affect these resources. Furthermore, it is also necessary to identify those activities that enable appropriate supervision and monitoring of all the intangible activities that contribute to the development or improvement of the crucial intangible resources. As a result of this process, a so-called network of intangibles emerges, which provides the company with a map of the present critical intangible resources, of their interrelations, and of the activities related to the strategic objectives.

Figure 4 depicts an example of a network of intangibles. At the highest level, the company has identified that to obtain its strategic objectives it needs to be able to adapt to changes, to hold and to attract key personnel and to be able to satisfy client demands. All these categories are a consequence of other intangibles. For example, the capacity to adapt to changes depends, among other things, on the company's capacity to innovate. And this variable, in turn, depends, for example, on flexibility.

The concept of an intangibles network is important, because unlike tangible assets, intangible assets hardly ever create value by themselves. They need to combine with other assets. For example, the investments in information technologies have little value unless they are combined with human resources training and incentives programmes. And, inversely, human resources training programmes have little value unless they are combined with modern technology tools. Investments in human resources and information technologies must be integrated and coordinated with business strategy, so that the organisation can materialise all its potential.

It is furthermore important to note, as mentioned above, that the key intangibles differ in each industry (and even in each company). Thus, for example, if we analyse from this point of view the companies that commercialise mainstream consumer goods (Coca-Cola, for example), it is reasonable to assume that their intangible assets are primarily their brands (external component) or their operating policy (internal component). The intangible assets of companies in the pharmaceutical sector consist of their research and development portfolio (internal component) and their brand (external component), since their production systems are not very complex. The value of a consultancy company lies mainly in the competence of its personnel, and in the quality of its relations with its clients (external component). Hence, depending on its strategic objectives, each company will obviously identify certain specific critical intangibles.

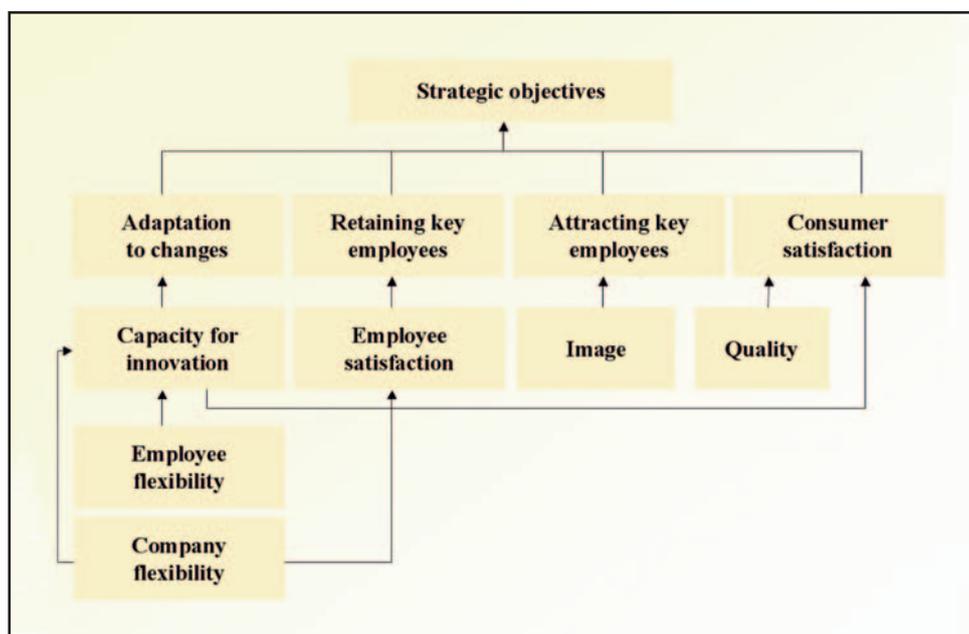


Figure 4. Network of intangibles (an example) - Source: Sánchez, Chaminade and Olea (2000)

#### 4.2. MEASUREMENT OF INTANGIBLES

The definition is involved of specific indicators that serve to measure approximately each intangible; the objective is the creation of a stable measuring system that allows comparability.

After identifying the critical intangibles and constructing the relational network, the following step lies in the definition of the most appropriate specific indicators that serve to evaluate the various intangibles. In regard to the classification of the intangibles used it would be desirable to distinguish between human capital, structural capital and relational capital. Most companies can clearly distinguish these three groups of variables. However, it is also clear that, in some cases, it is difficult to classify these in categories. In this sense, it might be said that these three groups are not mutually exclusive but are intended to be operational.

With regard to the indicators, they need to be clear, feasible and useful for the company. Clear means that they need to be defined to avoid ambiguity; feasible means that the company needs to be able to provide the information required by the indicator;

and useful means that they must be significant for the company. On the other hand, it is convenient to distinguish between general indicators (which can, therefore, be compared in companies and industries), industry-specific indicators and company-specific indicators. The indicators may be financial or non-financial.

The group of indicators used by the company has a dynamic character. Consequently, it may be necessary to redefine these frequently. At the same time, if the company and its *stakeholders* are to visualise the dynamics of the situation, it may be necessary to perform comparisons between periods. Therefore, a basic and stable set of indicators should be maintained for a relatively long period of time.

#### 4.3. MONITORING AND ACTION

This involves executing the intangible activities and evaluating their resulting impact on the company's stock of intangibles resources.

The model should be understood in a dynamic sense. Theoretically, the company begins by identifying and measuring its intangibles resources at moment  $t$ . It subsequently pursues different activities that may affect these resources and measures again its intangible resources at moment  $t+1$ . In this way, the company supervises the different changes in its levels of intangible resources as a result of its management actions. The process ends when the intangibles management process has been integrated with the company's other management routines.

And all this leads, in time, to a process of accumulation of intangibles, the result of a combination of present and future strategies. Through the present strategy, the company constructs intangible assets, extending the stock of intangibles, generating the resources needed to develop the future strategy. On the other hand, the future strategy needs to use efficiently the stock of intangible assets developed, as well as to extend it (Figure 5).

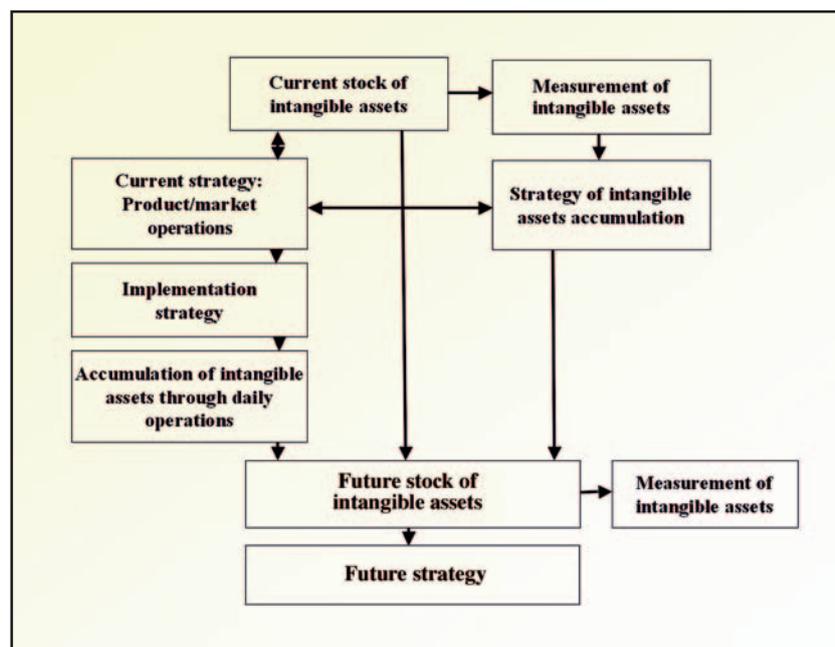


Figure 5. Dynamic synergies stemming from intangibles management - Source: Adapted from Ordóñez de Pablos (2002)

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