

INTANGIBLE RESOURCES - NEW CREATIVE ENGINES FOR WELFARE IN ORGANIZATIONS

Stan Sebastian¹

Abstract: *Intangible resources are those elements that ensure business progress and they are often the main contributors to the earning power of the organization. The issue that this article begins with is that the literature of the intangible resources, also their reporting regulations indicate a lack of precise or accepted definitions for these concepts. The problem of conceptualization this type of resource is underestimated, which is why it is not surprising that, for an organization, the evaluation, recognition and reporting information on this subject are chaotic, unimportant and without credibility. This article clarifies these issues, in order to avoid confusion and conceptual misinterpretation. In the corporate context, all kinds of intangible resources may represent a potential source of value for their owners. However, the nature of these various forms is very divergent. Thus, taking as starting point the study of literature in this field and especially the ongoing difficulties identified in conceptualizing and structuring intangible resources, in completing this article a taxonomy is developed, by which there are emphasized those elements considered representative to analyze and understand the intangible resources across the organization.*

1. Introduction: tangible and intangible at organisation-level

In the current economic environment, maximising the value of a business over time remains the main goal of any manager. Organisations of all kinds (economic entities, such as: bussiness, firm, company, etc.) attempt to effectively combine the resources they have at their disposal – tangible and intangible – to produce and sell goods or services, aimed at gaining a major part of the market thereby increasing their profitability.

Intangible resources, according to Hall's approach (1992), may be broadly considered as assets, i.e. intellectual property rights, trademarks, certain information technologies such as databases, networks or they may be considered as abilities and skills, such as those in human capital.

The definition of intangible assets currently respects the following coordinates: source of a future economic benefit, they have no physical substance, they are controlled by the company as a result of prior events and transactions (production, purchasing or any other method of acquisition), they are able of producing net profits in the future, they are legally protected.

Intangible assets have gradually become the most important source of competitive advantage. The American consultancy company in the management of intellectual property assets, *Ocean Tomo*, has determined that intangible assets increased from 20% of the value of the companies in 1980, at about 80% nowadays. Hence, intangible assets have now an increasing importance in the market value of modern organisations. An annual survey on market value of intangible assets for the major stock exchange indices worldwide (developed by Ocean Tomo, in 2015), reveals that the market value of the Standard & Poor's 500 (S&P 500 – it is in general, the benchmark index for the American equity market) in 2015, the contribution of intangible assets increased to 84% in 2015, with an increase of four percentage points over the past ten years (see Figure 1).

¹ PhD student, Lucian Blaga University of Sibiu

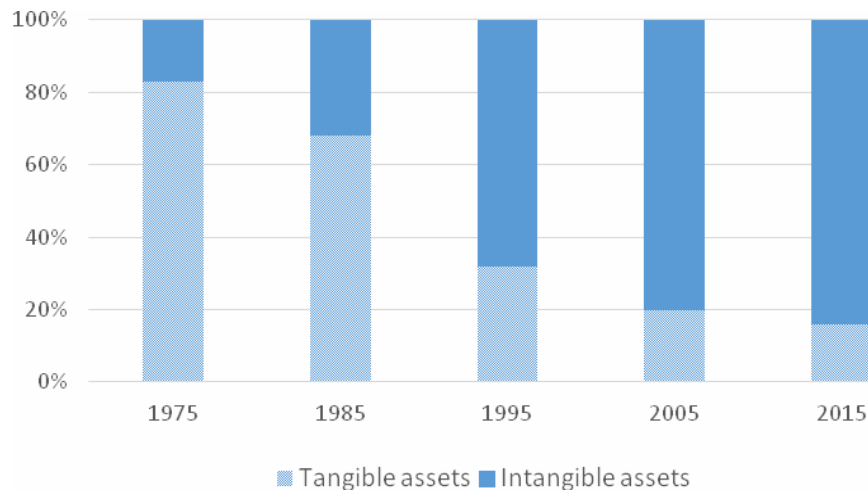


Figure 1. Evolution of market value components of the Standard & Poor's 500
(Source : www.oceantomo.com/blog/2015/03-05-ocean-tomo-2015-intangible-asset-market-value/)

Thus, we can state with certainty that the value of a company is not given only by its tangible resources, but by the weight of intangible resources in the total assets of an organisation. From this point of view, we may talk about a review of the company's value (shown in Table 1), formed, on one hand, by its tangible and intangible assets and, on the other hand, by its tangible and intangible investments.

Table 1. The balance sheet on the value of the company

ACTUAL WEALTH		INVESTMENTS FOR THE FUTURE	
Intangible Assets		Intangible Investments	
Human-centred assets	INTANGIBLE VALUE OF THE COMPANY	• Supporting research and development	<ul style="list-style-type: none"> • Developing human resource management • Developing financial management • Developing information management • Developing quality management • Performing marketing management • Performing the management of imbalances • Developing the management by exceptions • Developing the management by management and performance centres etc.
<ul style="list-style-type: none"> • employees' ability and creativity • leadership, entrepreneur and manager skills 		• Innovating	
Innovation assets based on intellectual property		• Developing human resource management	
<ul style="list-style-type: none"> • know-how • trade secrets • copyright • patents or other rights 		• Developing financial management	
Infrastructure assets		• Developing information management	
<ul style="list-style-type: none"> • organisation culture • management methods • databases and information on the market or customers • communication systems such as e-mail and modern teleconferencing systems 		• Developing quality management	
		• Performing marketing management	
		• Performing the management of imbalances	
		• Developing the management by exceptions	
		• Developing the management by management and performance centres etc.	

Relational assets <ul style="list-style-type: none"> • customers and their degree of loyalty • distribution channels • networks of contracts and agreements 		
Tangible Assets		Tangible Investments
Long-term: <ul style="list-style-type: none"> • equipments • buildings • land • financial assets etc. 	TANGIBLE VALUE OF THE COMPANY	Long-term: <ul style="list-style-type: none"> • long-term obligations • deferred taxes and duties • rent etc.
Short-term: <ul style="list-style-type: none"> • inventories • debts • commercial paper received • portfolio of securities • liquid assets etc. 		Short-term: <ul style="list-style-type: none"> • commercial loans • short-term bank loans • guaranties for products and services • other current liabilities

To make optimal use of intangible assets as new engines creating wealth in a knowledge-based society, we must move as much as possible away from the old engines of the industrial economy which, in turn, have replaced those of the agrarian economy. In this context, any organisation must become aware of the knowledge it holds, embodied in intellectual assets.

This paper is structured as follows. In Sec. 2, we present a literature review of the previous research in the field. Section 3 describes different models for the classification of intangible resources. In Sec. 4 we describe the new proposal to classify intangible resources. Section 5 concludes.

2. Literature Relevant to Research

After studying a large volume of literature (a selective presentation of this is made in the bibliography of this work), we have noticed that there is confusion and a lot of misunderstanding about the definition and the components of organisation-level intangible resources and related terms (intellectual capital, intangible resources, intangible assets, intellectual assets, knowledge assets, etc.). These definitions may be generally characterised as being "...very abstract ... and therefore of little help for practitioners or researchers" (Kaufmann & Schneider, 2004). Wilkinson (2009) supports the same idea, stating that "the research of intellectual capital is still in the exploration phase, without having reached a consensus on the meaning of this concept and there is little evidence to recommend measuring this type of capital."

The research in the literature on intangible resources (Bontis, 1999; Brennan & Connell, 2000; Canibano, Garcia-Ayuso & Sanchez, 2000; Kannan & Aulbur, 2004; Kaufmann & Schneider, 2004; Petty & Guthrie, 2000), as well as recent studies and regulations on reporting thereof, indicates a lack of agreed or precise definitions for these concepts, although there is the agreement on two important attributes thereof: value and knowledge: "intellectual capital and intangible assets in the form of *knowledge* are considered to be determinants of the *value* in organisations" (Stevens, 2012).

There are also divergent approaches on the content of these terms, since intellectual capital may be treated as a subset of intangible assets or vice versa (Wilkinson, 2009). On the other hand, in other studies intellectual capital and intangible assets seem to be interchangeable since the two terms are often used to refer to the same thing, for example,

to elements such as knowledge, technology and customers, which creates value (Kaufmann & Schneider, 2004). Both of them refer to intangible sources of future economic benefits that may or may not arise within the financial statements of organisations (Petty, Cuganesan, Finch, Ford, 2009). Even if there are legal obligations for companies to submit in their financial statements certain intangible assets acquired (referred to by the international accounting standard IFRS 38 Intangible Assets), they are not required by accounting standards or by law to report the majority of their intellectual capital, but may choose voluntarily to disclose such information. Some authors consider therefore that these terms refer to the same concept.

However, in our view, we believe that these terms should be used differently because they differ not only in their scope, but also in terms of areas and individuals working with these concepts. Intangible (intellectual) assets is a term used by professional evaluators and by experts in finance and accounting, intellectual capital is a term used mainly in human resources management (Vickery, 1999) and the concept of intellectual property is normally used by legal professionals. Intellectual capital is a broad concept including the concept of intangible assets, and these include the concept of intellectual property (Lopez, 2009). This is owed to the fact that the intellectual capital refers to all knowledge having the potential to create value in the organisation and includes concepts additional to intangible assets, such as human resources (employees' intellectual contribution, experience), customer lists, benefits from contracts, management processes etc. Intangible (intellectual) assets refer to knowledge that creates *the present* value and include concepts in addition to intellectual property, such as public fame, know-how, distribution systems or business and marketing plans, whereas intellectual property covers the knowledge articulated through a legal property (patents, trademarks, trade secrets, copyrights, etc.) (see figure 2).

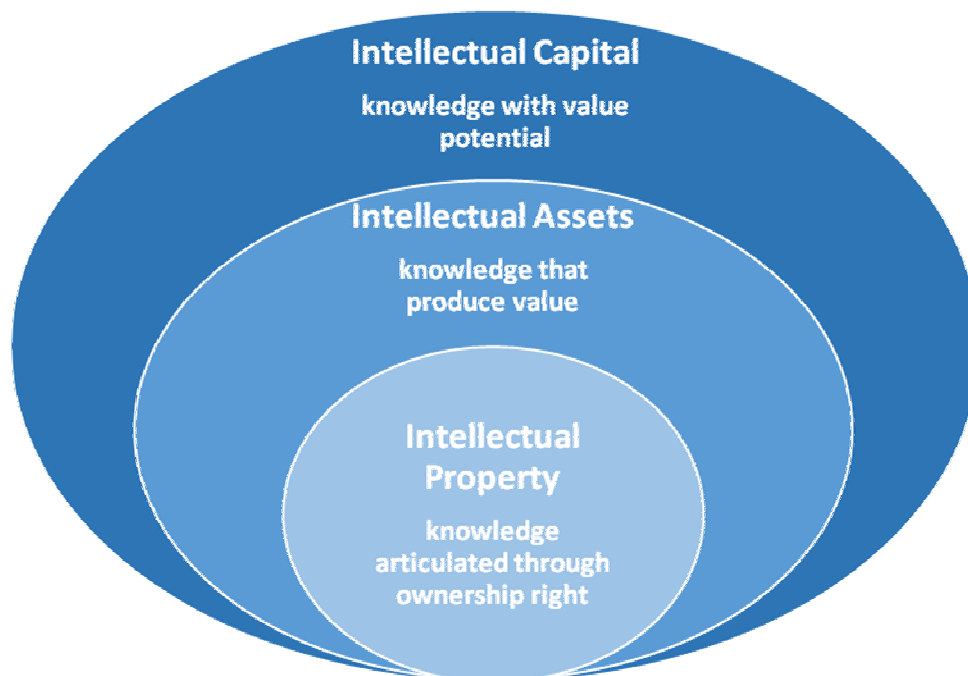


Figure 2. Intellectual capital – Intellectual assets – Intellectual property

3. Classification of Intangible Resources

As regards structural dimensioning of intangible resources, we mention that there is currently no generally valid and accepted taxonomy, which is why literature presents various taxonomies in various forms. The most representative of these are presented below.

Relating to intellectual capital, it generally comprises all intangible resources available to the company and which give them a comparative advantage which, in combination with other possible advantages may lead to benefits in the future (Jianu, Brătianu, 2007). In order to measure and manage it efficiently, it is important to identify its components with the highest possible accuracy. If we compare several models of intellectual capital, enshrined in the literature (Table 2 – items are arranged in chronological order), we will see that many of them are based more or less on the same type of classification.

Table 2. Models of intellectual capital

Model	Components
Balanced Scorecard (Norton and Kaplan)	Intellectual capital is not presented by components, but includes the perspectives of groups of customers, internal processes of the organisation, prospects of learning and growth (tying them into a coherent system of financial factors), structure that largely resembles with some of the classifications by components of intellectual capital later developed.
Sveiby (Sveiby's Intangible Assets Monitor)	Internal structure; external structure; individual competences
Skandia (1994)	Human capital; structural capital (which is divided into customer capital and organisational capital – consisting of innovative capital and processes capital)
Ross et al (Intellectual Capital Index)	Human capital; structural capital (relational, organisational and innovative / development)
Bontis (2001)	Human capital; structural capital; customer capital
Brooking (1996)	Human resources related capital; intellectual property, market linked capital; infrastructure related capital
Edvinsson, Malone (1997) Saint-Onge (1996) Stewart (1997)	Customer capital appears as the main capital
Cohen, Prusak (2001) Davies, Magowan (2002)	Human capital; structural capital; customer capital; social capital

Thus, based on different concepts presented in literature, intellectual capital can be defined as the economic value of an entity given by three categories of intangible interdependent elements (see figure 3) such as:

1. human capital (Bontis, 1999, 2001; Stewart, 1997; Van Buren, 1999; Dzinkowski, 2000; Roos et al, 1997; Saint-Onge, 1996; Stewart, 1997; Kong, 2007);
2. structural capital (infrastructure) (Bontis, 2001; Grasenick & Low, 2004; Kong, 2007; Roos et al, 1997; Stewart, 1997; Dzinkowski, 2000; Saint-Onge, 1996; Stewart, 1997; Kong, 2007);
3. relational capital (Bontis, 1999; Fletcher et al., 2003; Grasenick & Low, 2004; Ross et al., 1997; Dzinkowski, 2000; Saint-Onge, 1996; Stewart, 1997; Kong, 2007).

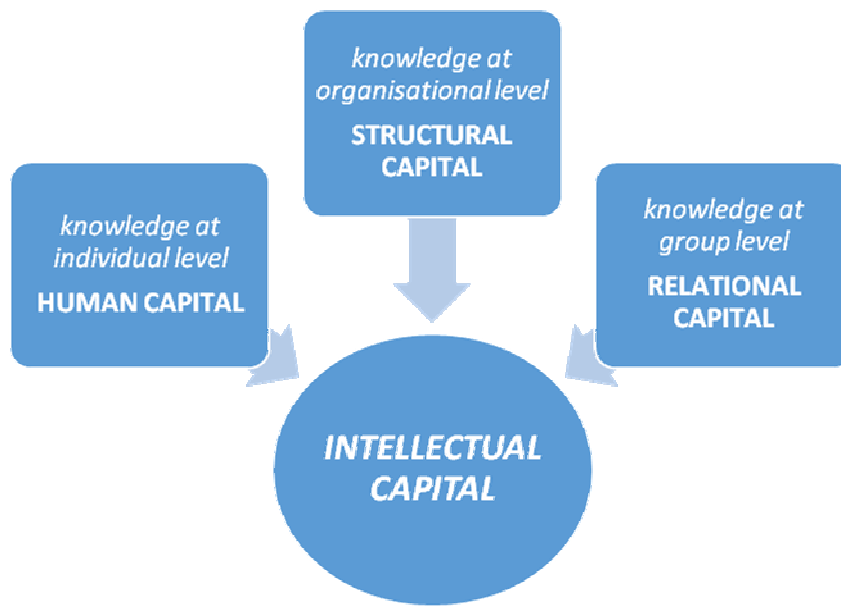


Figure 3. Intellectual capital components

All these three elements, seen as a whole, produces economic benefits to the entity. Whilst most rages of the intellectual capital use these components, others show slight variations (Wang, 2007).

4. A New Proposal to Classify Intangible Resources

In the corporate context, all kinds of intangible resources may represent a potential source of value for their owners. However, the nature of the various forms thereof is very divergent. Thus, taking as its starting point the study of literature in this area and especially the ongoing difficulties identified in conceptualising and structuring intangible resources, we have considered to develop a taxonomy (see Figure 4) through which we emphasized the elements we considered representative for analysing and understanding organisation-level intangible resources.

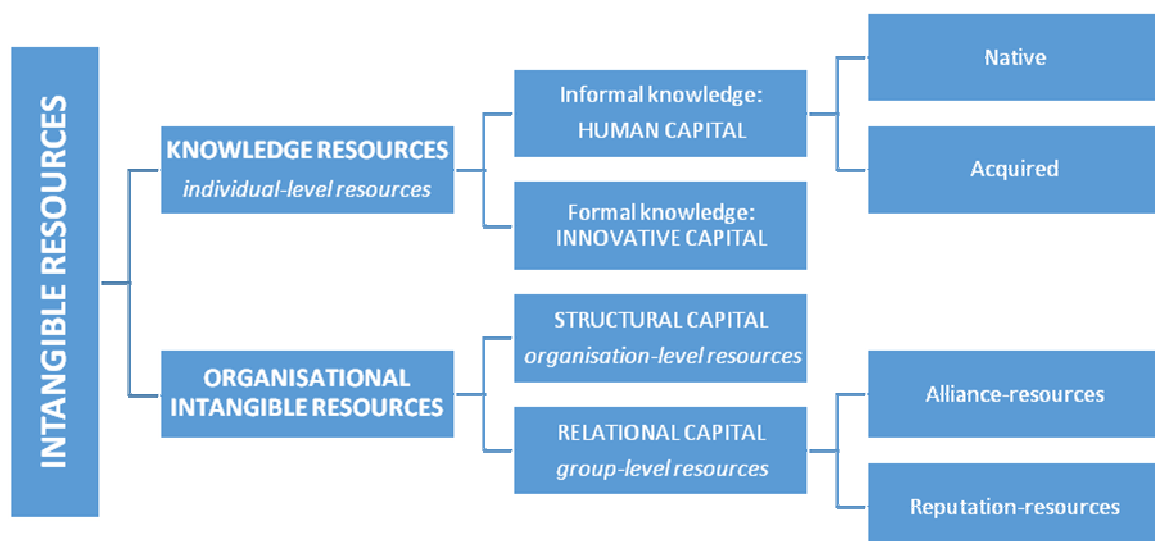


Figure 4. A new proposal for intangible resources components

A first component of intangible resources is the knowledge resources. In our proposed structure, we have started from the type of knowledge (cognition) that underpins knowledge resources. The two definitions of knowledge are distinguished by the type of knowledge, namely informal and formal. Each type of knowledge should be treated separately.

Informal knowledge refers to ideas, facts, assumptions, meanings, questions, decisions, myths, stories and viewpoints. All these elements are included in human capital. Informal knowledge involves certain risks – the employees who have information may be injured, making rendering information impossible, or a key employee may leave and cause leakage of information for prospective employers. Informal knowledge can be created by:

- native values (genetic heritage, creativity, skills, intellectual ability, moral principles and values);
- acquired values (knowledge and skills, experience, education, attitude capacities, skills and abilities).

Formal knowledge, on the other hand, are encoded - recorded in books, manuals and other forms of documentation - and represents the "organisational intelligence" or Innovative Capital. Formal knowledge is an asset created by the conversion of knowledge from a cerebral entity to one being expressed in a permanent form, which can be more easily identified and shared. Another benefit of formal knowledge is that in this form, their eligibility for protection of intellectual property can be assessed. The resources on intellectual property rights include trademarks, copyrights, patents etc. Within its all three phases, knowledge resources have great importance, relevance and value for the corporation.

The second largest group of intangible resources consists in organisational intangible resources. Approaching Brătianu's vision (2006) who states that the structure is part of an organisation, and not vice versa, a first component of organisational intangibles is given by structural capital (organisation-level resources). It refers to human capital infrastructure, including organisational capabilities to adjust to market needs (information systems, organisational culture, management processes and procedures, research projects). The other component, Relational Capital (group-level resources), is defined by the totality of relationships between an organisation and its stakeholders. It is divided into alliance-resources, focused on relations external to the organisation leading and developing the business (relationships with various stakeholders – suppliers, partners, financiers, partnerships, cooperation, concluded contracts – including networks and partnerships with universities) and reputation-resources (stakeholders' loyalty and satisfaction, image of the entity, brand, advertising).

5. Conclusion

For an organisation to be effective, the issue of efficient allocation of resources and the transformation of intellectual resources into economic value equally arises. At the same time, investment in intangible assets leads to quick and flexible adaptation of companies in the market (Dobre, 2013) since they have gradually become the most important source of competitive advantage.

According to the new perspectives supported by endogenous growth theory and other approaches, the traditional factors of production (natural resources, labour and capital) have gradually decreased their importance. At the same time the importance of intangible assets such as information, knowledge and creativity has increased. Investments in intangible assets are important factors of competitiveness and convergence. Whereas land, capital and labour are subject to the law of decreasing returns, knowledge and information induce increasing returns. (Suciu, 2008).

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