

BUSINESS MODELS BASED ON INTELLECTUAL CAPITAL

MODELE DE AFACERE FONDATE PE CAPITALUL INTELECTUAL

DUMITRAȘCU Roxana Arabela¹, DUMITRAȘCU V.¹
e-mail: dumitrascu_arabela@yahoo.com

Abstract. In knowledge based economy acquire an increasing importance of business models focused on intellectual capital. To explain the influence of intellectual capital on business competitiveness, we agreed to divide in following three categories: conceptual capital, relational capital and functional capital. A business model based on intellectual capital requires intensive use of one of these categories to create economic value. Identify, in this way, three types of generic business model: „Knowledge master“, „Network orchestrator“ and „Execution master“.

Key words: business model, conceptual capital, relational capital, functional capital.

Rezumat. În economia bazată pe cunoaștere o importanță tot mai mare o dobândesc modelele de afacere axate pe capitalul intelectual. Pentru a putea explica influența capitalului intelectual asupra competitivității afacerilor moderne, am convenit să-l divizăm în următoarele trei categorii: capital conceptual, capital relațional și capital funcțional. Un model de afacere fondat pe capitalul intelectual presupune utilizarea intensivă a uneia din aceste categorii pentru a crea valoare economică. Identificăm, în acest fel, trei tipuri generice de model de afacere: „Maestrul cunoașterii“, „Orchestratorul de rețele“ și „Maestrul execuției“.

Cuvinte cheie: model de afacere, capital conceptual, capital relațional, capital funcțional.

INTRODUCTION

The business model is a system of constraints, partially assigned deliberately, partly imposed by the environment, which determines the business success. This system of constraints, which sets out the functioning of the business, specifies the way in which the economic value is being created and the firm's incomes realised. The variables of the business model have decisive repercussions and on long-term on the organizational, commercial and financial dimensions of the firm.

Any business is based on a certain „primary“ model. This model may be a tacit or an explicit one, very simple or very complex, descriptive or rigorously formalized. The rise of the knowledge economy implies, among others, a re-settlement in the foundation of the importance of various categories of resources and competencies in order to create the economic value. The contribution of the intangible resources or of the intellectual capital becomes crucial. It is the main reason for which the re-examination of the traditional business models (based on technical and financial resources) acquires a special significance. This is because the economic behaviors of the elements of intellectual capital are significantly

¹ University „Petre Andrei“ of Iași, Romania

different in relation to the traditional „production factors“. The understanding and the discovery of the business models based on the intellectual capital represents one of the major challenges of the New Economy.

According to Fustec and Marois, the intellectual capital may be explained by a simple phrase (Fustec A., B. Marois, 2006): it is about all the values owned by the firm, which are not included in the financial and accounting situation, although the markets, especially the financial ones, value it for a long time in a intuitive and empirical manner. The characteristics of the intellectual elements are as follows: 1) The intangible nature (immaterial) or the absence of the physical substance; 2) Indefinite economic lifetime; 3) Uniqueness or, at least, very strong specificity; 4) Uncertainty about the generated results; 5) Difficulty of separation from other assets owned by the company.

Without doubt, the best known model of the intellectual capital that presents its tripartite structure (human capital, relational capital and structural capital) is the one offered by Edvinsson and Malone (Malone M., Edvinsson L., 1999). Even if it benefits from the largest notoriety (this ternary structure has been used also by the Intellect model developed by Europhorum) and acceptance, this model leaves open the problem of the composition of the intellectual capital, existing other suggestive modalities of decomposing and understanding the intangible component of the firm.

The essence of the intellectual capital is knowledge, although this chapter can not be reduced entirely to organizational knowledge. However, we can accept as beginning hypothesis that the elements of the intellectual capital represent distinct forms of knowledge. First of all, each immaterial element implies a particular way of acquisition, preservation and enrichment of knowledge, as well as its transformation in economic value.

MATERIAL AND METHOD

The conversion of knowledge in economic value is not possible without the possession of certain capacities of conception and of operation – the competencies. Thus, a competency refers to the firm's capacity to create economic value differently than other firms. This distinction must be relevant and significant from the consumer's point of view (Zyman S. A. Brott, 2008). Broadly speaking, the competencies represent „tablets“ of knowledge, but this knowledge does not have only a conceptual character (in the widest sense of the term) and can be relational or functional in nature (procedural and organizational).

Secondly, it must be understood that, despite the multiple similarities of the shape, between knowledge and information, there are profound differences. In this way, as Karl Erick Sveiby (Sveiby KE, 2000) points out: a) knowledge is synthetic, facilitating the decision and the action, while the information is plethoric, being excessive, superabundant; b) knowledge is difficult to convey, the information may be transmitted easily and cheaply; c) knowledge has value because it is distinguished by a real practical applicability and the information is deprived of real value because it is not integrated directly in a relation of the type aim-mean. Knowledge always represents a way of achieving well defined goals.

Thirdly, a firm may develop the knowledge in two different ways: buying it or creating it internally, through its own effort. The purchase involves the acquisition of a

person, of a right or of another firm that possesses or incorporates the knowledge in order to extend this knowledge to the whole organization. But the firm cannot be certain of the fact that the purchased elements of knowledge are exactly the necessary ones. Likewise, it is not easy to disseminate this knowledge within the organization. On the other hand, the internal development is possible especially by the means of research – development or of the improvement of the skills and abilities of the staff, process named „organizational learning“. Both ways require, of course, investments. But there isn't, on short term, a direct correlation between the volume of the investments in these areas and the results. The pronounced uncertainty is a fund feature of the investments in creating the knowledge.

Fourtly, it is important the awareness of the fact that where the knowledge is not shared, it cannot be created knowledge because almost the entire knowledge is „stored“ in the minds of the employees. Therefore, in order to share the knowledge and, as a consequence, to develop it, the members of the organization must communicate efficiently. The most difficult task is to provide an internal environment to facilitate the communication. Without doubt, the communication and the knowledge can also emerge only from the organizational behaviors based on the availability to share and divide. At their turn, this type of behaviors cannot manifest without the existence of a strong sense of confidence. Only confidence may streamline the flow of knowledge within the firm, generating an environment based on shared experiences.

Finally, the elements of the intellectual capital, despite their nature – conceptual, relational or functional – may manifest in two essential ways: as explicit knowledge or as tacit knowledge. The distinction between the two categories comes from the fact that, in many situations, we may know more than we may say. The tacit knowledge is personal, highly contextualized and, therefore, difficult to formalize and communicate. That is way this type of knowledge must be distinguished from the explicit knowledge, namely the knowledge that can be formalized, respectively, codified and communicated systematically using some formal languages. Explicit knowledge is that type of knowledge that remains in the firm after all the employees go home at the end of the day. Nonaka and Takeuchi emphasize the importance of the „translation“ of the tacit knowledge in explicit or formal knowledge, this conversion representing, in fact, the essence of the organizational learning processes (Nonaka I., Takeuchi H., 1995).

This synthesis of the main research in the field may constitute a starting point in the approach of configuration a methodology of elaboration of the business models based on the intellectual capital.

RESULTS AND DISCUSSIONS

Further, we propose the following classification scheme of the elements of the intellectual capital, structure which, in our view, meets better our needs of foundation of the business models:

The conceptual capital formed of elements of tacit and explicit knowledge which offers us an image of all the things that the firm knows and can do in order to improve from a quantitative and qualitative point of view, the created economic value, defining, at the same time, its potential of learning, storage and transmission of knowledge, development and innovation. This capital includes all the concepts held by the firm, regardless of the nature and characteristics, and also the means of storage, communication, adaptation and their invention, including the portfolio of information and accumulated data. In this category of the intellectual capital, we include the intellectual and practical skills of the

employees, the capacities, experience and their creativity, brands, patents, licences, various rights, databases, informatic systems, formal and informal communication structures, organizational culture, other elements that directly support the learning and the organizational knowledge. The conceptual capital represents, therefore, „the computational intelligence“ of the firm.

The relational capital composed of the totality of the relational competencies and abilities of the firm, which determine the quality and the density of its collaborative networks, thus explaining with who the firm intends to do what it knows and can do or who are its partners in the process of creating the economic value. The portfolio of clients, the actioneers/investors, the partners, the suppliers, the ecological capital (in the broadest meaning of this term) and societal, the accessibility of the locations/sites are common elements of the relational capital. Also, the firm's image is part of this category of the intellectual capital. Thus, the relational capital represents „the social intelligence“ of the firm.

The functional capital or procedural-organizational, represented by the operational competencies of the firm, shows the way in which the firm acts in order to extract the economic value and is formed of the flows, methods, procedures, rules and the operating system and management of the resources. The systems of organization of the production, quality assurance and cost monitoring, reporting and controlling, organizational structures, decision-making procedures, operational processes, circuits of materials, work and finances, distribution network, management practices of human resources constitute the main elements of the functional capital of the firm. Therefore, this capital is the equivalent of the „pragmatic intelligence“ of the firm.

This classification answers to the question „How does each class of intangibles intervene in the process of generation and supply of the economic value?“, indicating the function of each category of intellectual capital in the global context of the business conducted by the firm. The conceptual capital has the role of „stock“ of knowledge and basic competencies for the firm's business field, but also the role of potential of refreshment of this knowledge. The relational capital has also the function of attracting from the socio-economic environment of the firm the knowledge and the necessary competencies, but the one that lack. The functional capital is responsible of the typical approaches and modalities selected by the firm in the approach of building and maintaining the own device of generation and creation of the economic value.

There are no „pure elements“ of the intellectual capital under the aspect of the clear and neat membership to one of the three categories. All the elements of the intellectual capital display a certain degree of „crossbreeding“. Always any element of intellectual capital is accompanied and completed by at least one element from other category. Unquestionably, any firm that uses intensive intellectual capital in order to create economic value has elements of all three categories. However, it can be identified a certain „intellectual specialization“ or a certain „intellectual profile“ depending on the emphasis on the one of the three forms of the intellectual capital. The equal utilization of all the elements of intellectual capital is, with very few exceptions, economically prohibitive. The

specialization or the intellectual profile specifies the kind of reputation (prestige, fame, appreciation) which the company aspires to. Precisely, the reputation represents the means by which the internal efficiency is projected outside the firm and transformed into present and future economic value. The reputation convinces the environment that the firm is really good.

A business model based on intellectual capital requires the intensive use of the various forms of organizational knowledge, materialized in conceptual, relational and functional competencies, in order to create economic value. We distinguish three generic business models focused on the intellectual capital, structured according to the primary exploitation of one of the categories of competencies mentioned: Masters of knowledge, Network orchestrator and Masters of execution.

The masters of knowledge build their business around a solid conceptual capital. They are the most „intellectuals“ of all those who base their business on the intellectual capital. The masters of knowledge produce, develop, accumulate, convey and disseminate concepts. The economic value created by this category of business models has almost entirely an intangible character. The houses of lawyers, consulting firms, professional expertise and projection, universities, the business focused on advanced or disruptive technologies, research institutes etc., but also the owners of the brand portfolios (for example, Unilever) or the specialists in communication are part of this category.

The networks orchestrators draw their force from the redoubtable relational capital. They represent true „connecting nodes“ in the „texture“ of the business, bringing together various partners able to contribute efficiently to the achievement of a certain economic project. The network orchestrators find business opportunities, identify the potential participants, select them, bring them together, distribute the tasks and coordinate the so-created network. In other words, they facilitate the cooperation, which, in their absence would be very difficult or extremely inconvenient from the economic point of view. Their competency focuses on building and administering groups of autonomous economic actors, groups more or less temporary, more or less formal in order to conduct some business that require a wide variety of resources and skills. The providers of logistic services (for example DHL) are a good example of orchestrators of some networks consisting of multiple chains of supply-delivery.

The masters of execution excel in the virtue of owning a functional capital extremely robust. They know to operate to very high standards of quality and efficiency. But the masters of execution are good also due to the flexibility of the business systems, which allows them to formulate some quick responses and reliable to the changes that interfere in the operating requirements. This type of business models aim at the economic value extracted from the operational expertise. The accuracy and the quality of the execution represent the distinctive advantages of the masters of execution. To equip with such advantages, the masters of execution project and implement structures, systems and internal processes characterized by a higher efficiency. The industrial firms with an exceptional reputation in terms of quality products and service (for example Toyota) undoubtedly practice this type of business model.

A formidable economic force however have the association of the business models based on different types of intellectual capital. The synergies generated by such associations may, in their turn, rise some extremely prolific sources of economic values. But the highest energy may be obtained when all the three models unite their advantages to create economic value.

CONCLUSIONS

1. In our opinion, the origination of a business model based on the intellectual capital implies running through the following phases: a)defining the economic value to be created; b)identifying the essential necessary competencies to create the desired economic value; c)identifying the elements of intellectual capital which generate the necessary competencies; d)establishing „the specialization“ or „the intellectual profile“ of the business, including: the way of creation/purchase of the elements of the intellectual capital, the way of measurement/evaluation and control of the elements of intellectual capital, the way of stimulation/reward of the intellectual capital; e)identifying the elements of technical and financial capital which complete and support the intellectual capital; f)the correlation of the flows of technical/financial capital with the flows of intellectual capital.

2. We consider that the projection and the functionalization of the business models focused on the intellectual capital represents an approach centered on the objective of focusing all the organizational efforts in order to create and consolidate the materialized knowledge in the three categories of competencies – conceptual, relational and functional.

Acknowledgement. This work received financial support through the project, “Post-Doctoral Studies in Economics: continuing professional development program of the elite researchers – SPODE”, financing agreement no. POSDRU/89/1.5/S/61755, project financed from the European Social Fund through the Sectoral Operational Programme for Human Resources Development 2007 – 2013“.

REFERENCES

1. Fustec A., Marois B., 2006 – *Valoriser le capital immatériel de l'entreprise*. Editions d'Organisation, Paris.
2. Malone M., Edvinsson L., 1999 – *Le Capital Immateriel de l'Entreprise*. Ed. Maxima, Paris.
3. Nonaka I., Takeuchi H., 1995 – *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.
4. Sveiby K. E., 2000 – *Knowledge Management – La nouvelle richesse des entreprises – Savoir tirer profit des actifs immatériels de sa société*. Edition Maxima, 2000.
5. Zyman S., Brott A., 2008 – *Sfârșitul advertisingului aşa cum îl stim*. Edi. Publica, Bucureşti.