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CHALLENGES FOR BUSINESS COMPETITIVENESS FROM MANAGERIAL AND KNOWLEDGE ECONOMY PERSPECTIVES

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Abstract:
The complex and networked economy arises a series of challenges for business competitiveness in order to develop or redefine business models and theories. This paper tries to capture a relevant part of our previous studies by emphasizing the challenges that business competitiveness has to cope and integrate, such as: behavioral model of management, firm competitiveness (leveraging tangible and intangible assets), new models of business (Panarchy Corporation and ambidexterity) and management functions.

Key words: *business competitiveness, challenges, managerial perspectives, management functions*

1. Introduction

Competitiveness, at any level, is an inexhaustible scientific approach because the complexity of the global environment in which it manifests, in fact exogenous influences are able to provide volatility, on the one hand, and the variety of endogenous factors and indicators, that are more and more sophisticated, are able to provide competitive advantage for business. Competitiveness is a very controversial concept with multiple meanings, which generate a number of challenges both individually and globally, because people, companies, society, and nations try to identify those elements of differentiation that take them out of anonymity. From a „dangerous obsession" (Krugman, 1992), competitiveness evolved to the "overall economic performance of a nation measured in terms of its ability to provide its citizens with growing living standards on a sustainable basis and broad access to jobs for those willing to work" (European Competitiveness Report, 2010).

The general reference framework of analysis, decisions and actions regarding businesses, and particularly the global corporations, is exponentially multiply and continually sophisticate nowadays. Within an "ocean" of challenges and uncertainty, one thing is for sure: the ”old” thinking/theoretical models, as well as the ”old” business/practical models can no longer be the appropriate answer to the new problems; or, at least, they has to be refined.

Therefore, the ways that the ongoing transformations are understand, the future evolutions are anticipated, and the decisions are taken (by integrating the positive deviations and avoiding or eliminating the negative ones), while assuring the sustainable competitiveness of businesses, are essential.

2. The development of a behavioral model of management

This particular model incorporates synergistic knowledge management (KM) in the triple bottom line components (economic, ecologic, and social) TBL. The proposed model tries to reveal the importance of the link between the two dimensions: TBL and KM. In order to become sustainable, a firm must implement an efficient behavioral model of management. We also consider that knowledge management is an imperative for the firms who are concerned on TBL. In this case, the elements that make the link between TBL components are (Dyllick and Hockerts, 2002):

(1) Eco-Knowledge: a firm must posed explicit and implicit knowledge in business (economic) and nature (environment) fields;

(2) Socio-Knowledge: a firm must posed explicit and implicit knowledge in business (economic) and society (social) fields;

(3) Ecological-Knowledge: a firm must posed organizational knowledge in nature (environment) and society (social) fields

The behavioral model consider also all nine elements of Excellence Model created by European Foundation for Quality Management (EFQM, 1991), grouped under five enabler criteria and four result criteria (Bou-Llusar et al., 2009)

These interrelations are able to create synergistic effects for a firm and give them a specific sustainable competitiveness (see Figure 1).

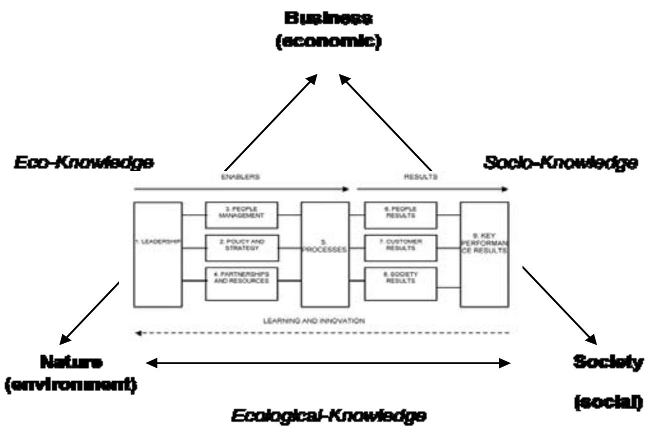

Figure 1. Synergy between TBL, KM and EFQM Excellence Model
(Souce: Adapted EFQM, 1991, Bou-Llusar et al., 2009)

3. The construction of firm competitiveness index by leveraging tangible and intangible assets

According to Davies et al. (2010), ”companies build *competitiveness*: a) from owning better stocks of physical assets; b) by gaining better and lower cost access to financial resources; c) by attracting better human resources”.

Our conceptual model suggests that the tangible and intangible assets which determine firm competitiveness must be reconsidered as follows (Herciu, Ogrean, Belascu, 2012):

Tangible assets:

a. *human resources (HR)*: the reevaluation of the place and role of the human capital by emphasizing its creation and innovation side and its contribution to the growth of the company value, the change of the organizational behavior at a individual, group/ team and company level.
b. *material resources (MR)*: identifying alternatives, less expensive but also more effective resources by using the opportunities offered by the access to the global production.
c. *financial resources (FR)*: finding the average optimum capital cost and the cheapest financing resources in the context of the liberalization of access to the international capital markets.
d. *informational resources (IR)*: the efficiency of information, meaning that there is a large number of information and it is a more and more difficult to select and use only the information which is important for the company.

Intangible assets generate competitive differentiators:

a. *the organizational culture (OC)*: the increased importance it has as a company asset in the conditions in which the image – brand, logos, public relations – brings a durable and distinctive competitive advantage;
b. *the intellectual capital (IC)*: which reflects and uses the company’s past and present memory, in the form of the two components – the human capital and the knowledge capital.
c. *social responsibility (SR)*: related to all the categories of stakeholders, considering the different types of interests that must be satisfied by the company.

In this context, we propose the following linear model in order to calculate the firm competitiveness index:

$$FCI = k_1 \times HR + k_2 \times MR + k_3 \times FR + k_4 \times IR + k_5 \times OC + k_6 \times IC + k_7 \times SR$$

Where,

K_1, k_2, k_3, k_4, k_5, k_6, k_7 represent parameters (coefficients of importance)

For each resource we tried to identify at the firm level some indicators which are able to reflect them in a realistic mode. Therefore,

- for HR: the number of employees engaged in research and development activities of all employees;

- for MR: material costs in total expenditure;
- for FR: MVA (market value added) from the total capital;
- for IR: expenditure with maximum efficiency information of the total expenditure;
- for OC: expenditure with goodwill of the total expenditure;
- for IC: expenditure with wages in the total expenditure;
- for SR: expenditure with social responsibility in the total expenditure.

4. The raise of Panarchy global corporation

The Panarchy corporation is a ”model of socio-ecological systems that is able to capture more accurately the "surprise" or uncertainty inherent in such systems. Further, levels in a panarchy are not static states, but rather adaptive cycles that are interconnected to other adaptive cycles in the panarchy. Each cycle operates over a discrete range of scale in both time and space and is connected to adjacent levels (adaptive cycles)” (Ahjond et al. 2008, Allen et al. 2014). That is why a panarchy corporation is a company that integrates two major characteristics: stability and change.

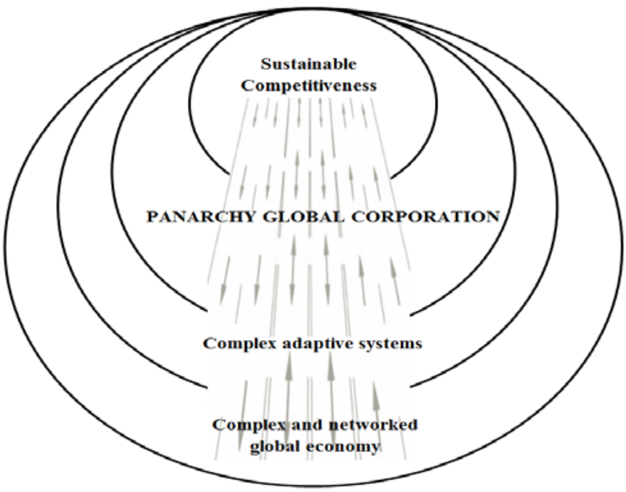

Figure 2. Panarchy corporation

Due to the complexities of relationships (generated by complex and networked economy), multiple solutions (complex adaptive systems), and inevitable surprising outcomes (sustainable competitiveness), there is no fixed optimal strategy, or mixture of strategies, for seeking sustainability (Gunderson and Holling ed., 2002).

5. Ambidexterity – exploit and/vs. explore

Ambidexterity is the firm capacity to simultaneously exploit their core competences (alignment-focused) and explore other opportunities (adaptability-focused) (Gibson and Birkinshaw, 2004). Ambidextrous capabilities are based on exploitation and exploration capability (Yang, 2012). Companies must combine both types of capabilities and achieve organizational ambidexterity (Jansen et al. 2008) and have to identify the assets (tangible or intangible) that will be able to provide the best approach of ambidexterity. In other words, it is about structural ambidexterity or contextual ambidexterity. Structural ambidexterity refers to separate exploit from explore, while contextual ambidexterity is based on exploit and explore in the same time (O`Reilly III and Tushman, 2004) (See Table 1).

Table 1. Structural Ambidexterity vs. Contextual Ambidexterity

Structural Ambidexterity		Contextual Ambidexterity
	How is ambidexterity achieved?	
Alignment-focused and adaptability-focused activities are done in separate units of teams		Individual employees divide their time between alignment-focused and adaptability-focused activities
	Where are decisions made about the split between alignment and adaptability?	
At the top of the organization		On the front line (by salespeople, plant supervisors, office workers)
	Role of the top management	
To define the structure, to make trade-offs between alignment and adaptability		To develop the organizational context in which individuals act
	Nature of roles	
Relatively clearly defined		Relatively flexible
	Skills of employees	
More specialists		More generalists

Source: Birkinshaw and Gibson, 2004.

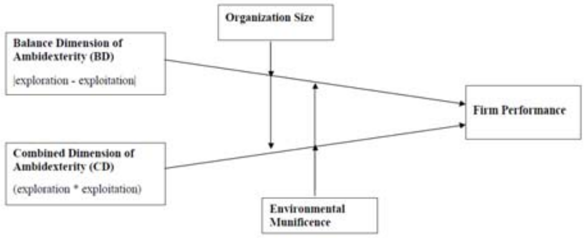

Figure 3. Two Dimensions of Organizational Ambidexterity
Source: Cao, Gedejlovic, Zhang (2009)

Even if, some authors argue that “in the open innovation paradigm, specialized organizations that outsource innovation and focus on exploitation can be more competitive than ambidextrous organizations” (Ferrary, 2011), others indicate the need for organizations to achieve a balance between exploitation and exploration in order to capitalize the positive effect of ambidexterity on firm performance (He and Wong, 2004) or to solve different tensions that arise within an organization (Nosella, Cantarello, Filippini, 2012).

6. Redefining managerial functions

Reevaluating and redefining the functions of management becomes a necessity in this context, thus: the forecasting function becomes the proactive function of the company’s management; the organization function becomes the restructuring function; the coordination function turns into the function of intensive communication; the training function will be defined as the reciprocity function (the reciprocal offering of chances and opportunities between the firm and the employee); the control and evaluation function will be called the function of economic watchfulness.

Meeting the future would be, in our opinion, the best definition of the forecasting function. In a broader sense it could be defined as: the first function of the management process, representing the whole of the actions undertaken by the company managers and by their collaborators, in order to set the strategic and tactical objectives of the company, as well as the financial resources or other resources necessary for their achievement. Through the materialization of the forecasting function, the company’s future activities (for a given period of time) as well as the conditions necessary for their realization and the results expected are established.

In this framework, the forecasting function of the company becomes its *proactive function*, capable of coping with the challenges of the future, and more than this, capable of triggering and foreseeing the future that is the market demand, which would generate huge profits for the company.

Another conclusive example in this respect is represented by the theory of behavioral finance, in which the psychological factor, intuition, means, in one form or another transformation of uncertainties into certainties. Of course, the theory of regret can act in this case too, but the company's proactivity will lead the company in most cases to high profits, which can ensure certain sustainability. The proactive function cannot act in an autarkic way from the other functions of management, which needs to be reconfigured, too.

Reorganization or restructuring, as a second function of company management at work in the context of the knowledge society, has been for a long time the supreme solution of management.

Companies have entered an unprecedented period of challenges and uncertainties. As a consequence, leaders are increasingly looking for various structural variants, as the traditional functional models don't seem to be as efficient as they used to be in today's dynamic environment.

The stage of transition towards the knowledge-based economy, characterized by a reconsideration of the role of management as a main element of socio-economic efficiency, brings communication between managers and their subordinates to the forefront, as being a catalyst of managerial processes, and at the same time a condition of an organizational and motivational climate which is appropriate for reaching the objectives. Deep mutations will take place, triggered by this transition, and change and the implementation of the economic, managerial, technical and technological NEW will become the mood of the organization, with considerable consequences for the complexity and configuration of communications.

The intense coordination and the visionary leadership will be the functions by which the managers will manage to adapt to change, to implement the new firm model- the firm of the future- and to attract the financial resources necessary for the achievement of these objectives.

Financial resources are necessary in order *to motivate the staff* - the fourth function of management, which will turn into the function of reciprocity- of feed-back or pay-back or what is already known, the social responsibility of the company. The managers will be interested in the fate of their employees as long as these prove to be profitable for the company and the costs they generate are lower than the profits they bring or can bring. The motivation system in the firm of the future is one in which inputs represent outputs for another system, thus seeking continuous performance. Usually, in order to make sure that their human resource investment is a profitable one, managers resort to the pay-back system so as to keep their good employees, with significant results. All these redefinitions and reconsiderations will involve turning the control and evaluation function into the function of economic watchfulness.

The relationships between the management, the control and the financial management, in the conditions in which the capital sources, their use and the purpose in mind are totally different, necessitates an appropriate and thorough study.

When placing control in the framework of the competition mechanism, we shouldn't neglect M. Gervais' theory, according to which control must help you ***"contain*** *yourself in order to adapt to the unpredictable and to maintain yourself in activity in line with your objectives"*

In conclusion, the hyper-competitive era in the last few decades has created the need for an explicit management of competitiveness. Consequently, considerable research has been undertaken on competitiveness issues at different levels (Ambastha, 2004). Systematic frameworks such as World Competitiveness Yearbook, Global Competitiveness Report and National Competitiveness Report at the country level are examples of useful tools that have been developed through research. The literature review identified that the firm level has received the maximum attention among the three levels. Most of the frameworks or models are useful to evaluate some specific dimension of competitiveness; their utility in other context becomes limited due to low flexibility.

7. Conclusion

It is generally accepted that *a firm* might be defined as a *combination of tangible and intangible assets.* Finding the optimum between *enablers factors* (leadership, people management, policy and strategy, partnerships and resources, processes) and integrating *the results* (people results, customers results, society results, key performance results) in a behavioural model of management (by capitalizing triple bottom line) will drive to the new model of organization. These new types of organizations (Panarchy corporation and organizational ambidexterity) that have as main characteristics stability and change, revolutionary and evolutionary change, adaptability and alignment, exploratory and exploitative innovation must redefine the management function in order to achive or to increase their competitiveness and to move forward.

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