DYNAMIC CAPABILITIES AND ENTREPRENEURSHIP

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Abstract: The dynamic capabilities are considered to be the expression of high organizational agility, regardless of the size and purpose of the organization. The theoretical approaches regarding the dynamic capabilities tend to associate them with the ambidextrous organization characterized by an optimal ratio between the exploration and exploitation activities. The dynamic capability is defined by three key elements: learning capacity, integration and coordination capacity and the ability to generate feasible solutions in relation to some optimal criteria. The entrepreneurship is based on innovation, risk-taking and optimal use of the resources available within a lucrative activity. The entrepreneur's appetite for innovation and risk-taking is a specific feature of the exploration activity while the optimal use of resources in a lucrative sense is the expression of the exploitation activity. The purpose of this article is to bring to the fore that the entrepreneurial initiative and its materialization imply the creation and operation by the entrepreneur of one or more dynamic capabilities.

Keywords: Dynamic Capability, Entrepreneurship, Innovation, Management.

JEL Classification: L26, M19.

1. Introduction

The general objective of any economic entity is to position itself appropriately in a competitive environment and to gain a competitive advantage. Competition for market share, public image and financial results has several valences, some of which are most often very little visible. Such a little-seen competition is competition for the generation and use of dynamic capabilities in Schumpeterian economic contexts.

The Schumpeterian economic context is par excellence one in which entrepreneurship manifests itself, regardless of whether it is attributable to an organization or an individual. Dynamic capabilities, as they are identified in the literature, as vectors for generating, capturing and exploiting opportunities are congruent as a way of manifestation and the intended purpose of entrepreneurial activity. This congruence can be identified both in the plan for the allocation, combination and use of accessible resources and in terms of agility and adaptability, as an expression of innovation in accordance with the optimal criteria imposed by the competition.

The existence of an entrepreneurial predisposition - even if it is a predominantly speculative one, will generate behaviors and entrepreneurial profiles through which the attributes of dynamic capability are capitalized. The dynamic capability gives consistency and coherence to the entrepreneurial approach from a managerial perspective, ensuring the convergence between the initial business idea and the tangible result obtained through the economic entity that materializes the entrepreneurial initiative. Basically, entrepreneurship is a form of expression of dynamic capability, whether it is approached at the individual level or at the level of an organization with an entrepreneurial appetite.

2. Dynamic capabilities

The concept of *capability* can be outlined by the simultaneous presence of three key elements: capacity - in a quantitative sense, with direct reference to the resources involved (information / knowledge resources, human resources, material / financial resources); ability - in a qualitative sense with direct reference to the levels of heuristic knowledge and technical expertise held by an economic entity in the main field of activity or in related fields; intention - the manifest action for the lucrative materialization of the capacity and ability held.

Dynamic capability is considered as a pragmatic form of manifestation attributable to an already formalized, functional organization, in which there is a constant concern for innovation, whether it is incremental or radical.

Dynamic capability is presumed to be a specific feature of the ambidextrous organization - in which there is an optimal ratio between exploitation activity and exploration activity.

The dynamic capabilities in the composition of an organization act as facilitators for the implementation of incremental innovation at the exploitation level and ensure the sustainability of radical innovation in the exploration activity, thus contributing to the competitive advantage (Durisin and Todorova, 2003, p.7).

There are a large number of proposed definitions for the concept of dynamic capability and a high heterogeneity in terms of their content. The research carried out on this concept is focused on two major areas of interest: on defining it as comprehensively as possible and, respectively, on identifying the concrete way to operationalize such a capability.

A comprehensive definition of dynamic capability is generable in the conditions in which a set of functions attributable to it can be identified, without a priori conditioning the formalization and functioning of a dynamic capability within an organization, even if it is ambidextrous. The recourse to this approach allows the identification of functions directly associated with dynamic capability from a perspective closer to entrepreneurship than to classical organizational management.

The dynamic capability is subsumed to a lucrative entity, its operation being oriented towards the generation and use of new ways - in relation to optimal criteria, usable for obtaining the competitive advantage. Practically, dynamic capability is a tool through which latent or manifest opportunities in the market can be identified and capitalized, which gives it including a speculative dimension, specific to the background of the entrepreneurial approach.

The definitions generated for the concept of dynamic capability combine the three characteristics associated with capability in general - capacity, ability and intention, contextualizing them depending on the initiator - organization or individual, the adopted reference - internal environment, external environment, and intended purpose organizational agility, competitive advantage, additional income, profit, innovative product.

An interesting aspect of the manifestation of dynamic capability is the duality of the effects possible to be generated by it: in the market of interest - the intensification of the competition; internally - recalibration and optimization of specific internal processes.

In order to emphasize the heterogeneous character of the approaches regarding the concept of dynamic capability, we opted for the exemplification of some of its definitions, according to Table no. 1 below.

It is generally accepted that the formalization and use of a dynamic capability involves a cost and that the intensity of competition visible in the market only partially and unrepresentatively reflects the competition for the generation and use of dynamic capabilities (Călin, 2019, p. 70).

Table no. 1. Dynamic Capability

Authors	Definition proposed		
Teece, D.; Pisano, G. (1994)	Skills or capabilities that allow a company to create new products and process that respond to changing market circumstances.		
Henderson, R.; Cockburn, I. (1994)	The ability to create, develop and recombine resources in order to identify new sources of competitive advantage.		
Zahra, S.A. (1999)	Capabilities that can be used as platforms for generating new goods, products and services when change is the rule in the market.		
Makadok, R. (2001)	An alternative mechanism for generating sources of income.		
Lee et al. (2002)	Dynamic capabilities are designed to sustain competitive advantage in Schumpeterian economic regimes (dominated by creative destruction).		
Zollo, M.; Winter, S.G. (2002)	Functional models of collective activities through which the organization systematically generates and modifies current routines in order to optimize profit.		
Zahra, S.A.; George, G. (2002)	Dynamic capabilities ensure the reconfiguration of the company based on available resources in order to obtain competitive advantage by adapting it to market conditions.		
Helfat, C.E.; Peteraf, M.A. (2003)	An entity that quickly adapts, generates, integrates, and reconfigures resources or other capabilities.		
Augier, M.; Teece, D. (2007)	The inimitable ability, through which a company forms, reforms, configures and reconfigures its asset base to respond to market changes and technological challenges.		
Oliver, C.; Holzinger, I. (2008)	The ability of companies to maintain or create added value by developing and implementing internal skills that allow them to adapt to the requirements of the ever-changing environment.		

Source: ROSSATO, Jaqueline, ZULOAGA, Irati Alkorta, ALGUEL, Pinar (2011. Making use of the Dynamic Capabilities to deal with Complexity. Term Paper,

http://www.dynamic-sme.org/es1/sites/default/files/84375280-TERM-PAPER-Making-use-of-the-Dynamic-Capabilities-to-deal-with-Complexity.pdf., pp. 7-8

It is noted that a dynamic capability recombines in an innovative and lucrative way the resources available or possible to be attracted with the aim of economic success, including through the use of creative destruction. An important feature attributed to the dynamic capability is the difficulty of its replication by the competition. This inimitable character derives mainly from the strictly subjective perception of the initiator on the concrete way of exploiting the identified opportunities.

An interesting approach to the concept of dynamic capability is the one in which it is seen in terms of potential. Thus, for a profit oriented entity, company or individual, dynamic capability is defined as its potential to generate solutions systematically, based on a native ability to perceive opportunities and threats in the environment of interest, to make decisions timely and exploitable in the market and to continuously change the base of usable resources (Barreto, 2010, p. 271).

Basically, dynamic capability encompasses the following key features: the ability to integrate and coordinate resources and processes, the ability to learn, the ability to generate solutions in relation to optimal criteria (Protogerou et al., 2008, p. 4).

3. Entrepreneurship and dynamic capabilities

Entrepreneurship is a concept that takes care of the manifestation of the entrepreneur, regardless of its nature. This concept is studied and debated, in terms of the economic and non-economic perspectives with a many and in terms of the non-economic perspective, with multiple contextual valences: sociological, anthropological, psychological, etc.

The concept of entrepreneurship has evolved from the speculative dimension attributable to the creative destruction invoked by Schumpeter to a societal dimension, through the direct and indirect effects produced by entrepreneurial manifestations.

An overview of the evolution of this concept can be captured by invoking some representative definitions from the perspective of a possible correlation with dynamic capability, thus (Lanstrom, 2005, p. 11):

- Peter F. Drucker (1985): innovative act that ensures the generation of added value, based on resources development process;
- William B. Gartner (1988): a process of operationalizing for-profit entities:
- Jeffry A. Timmons (1997): a way of thinking, a form of reasoning and a way of action, guided by opportunity in a holistic approach valued by leadership;
- Sankaran Venkataraman (1997): is the way in which, by whom and with what consequences are discovered, created and exploited the opportunities through which novelty goods and services can be generated.

The societal dimension of entrepreneurship is derived from its socio-economic character by the fact that entrepreneurship is a dynamic and social process, where individuals, alone or in co-operation, identify opportunities and do something with them to reshape ideas to practical or aimed activities in social, cultural, or economic contexts (Berglund and Holmgren, 2013, p. 18).

The recourse to the societal dimension of entrepreneurship is best represented by the concept of sustainable entrepreneurship, defined as transforming market opportunities into a gain, with economic and non-economic value, with addressability at the level of individuals but also at the macro economic and socital level (Hisrich et al., 2017, p.20).

The definitions presented outline that the entrepreneurship can be approached from a processual perspective: input - transformation - output - recalibration.

Entrepreneurship is seen as a process through which changes can be initiated and generated at the level of an organization or at the level of various social domains [Hope, 2016, p. 104].

Entrepreneurship as a process, as represented in the figure, is correlated with the attributes of dynamic capability, both in the initial phase of entrepreneurial activity and later, as the entrepreneur becomes the manager of the initiated business.

The potential entrepreneur, based on a business idea and in accordance with his own profile (education, motivation, personality, etc.) becomes a committed entrepreneur. The transition from the status of potential entrepreneur to that of a committed entrepreneur is made based on his intention to capitalize on the opportunities seized and to take the latent risks in the environment of interest.

The involved entrepreneur materializes the business idea by operationalizing a lucrative economic entity, usually a company. This involves both ability and skill, as they were associated with dynamic capability.

Considering entrepreneurship as a multi-valence process, it can be shown as in the figure below:

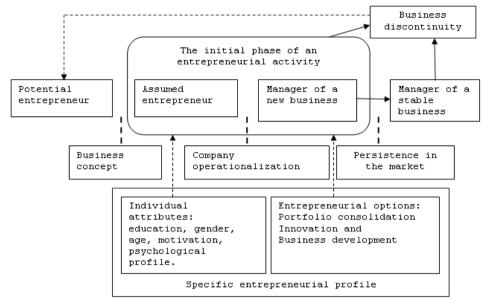


Figure no. 1. The Entrepreneurial Process

Source: adaptation after Niels BOSMA & Donna KELLEY, Global Entrepreneurship Monitor 2018/2019 – Global Report, p.16.

Basically, the initiation and development of the activity through which the business idea is valued involves the allocation and attraction of available resources. The efficiency and effectiveness of the entrepreneurial effort is given by the entrepreneur's ability, both in terms of the speculative dimension of the entrepreneurial approach and in terms of the decision-making process, with emphasis on the size and way of combining resources, both in the initial phase of running the business, as well as later, from the position of manager of a business that has become stable.

The ability, from the perspective of heuristic knowledge and expertise, at the level of the entrepreneur is most often reflected by the evolution of entrepreneurial options.

Thus, the entrepreneurial process can usually be directed in two directions, each of them facilitating or not facilitating a qualitative leap: consolidating the current business portfolio or its innovation and development at another level.

Entrepreneurial success can be evaluated from multiple perspectives, depending on the motivation that was the basis of the initial approach. Business development is often associated with the longevity and market persistence of the economic entity that embodied the initial business idea. This sustainable remnant of the economic entity in the market presupposes an entrepreneurial approach supported by the recourse to the attributes of dynamic capability.

Table no. 2. Specific Features related to Dynamic Capability and Entrepreneruship

Specific Feature	Related to Dynamic Capability	Related to Entrepreneurship
Capacity – quantitatively (resources)	Yes	Yes
Ability - in qualitative sense (expertise, risk management)	Yes	Yes
Intention – speculative and profit oriented	Yes	Yes
Integrating and coordinating resources and processes	Yes	Yes
Learning / assimilation capacity	Yes	Yes
Generating competitive solutions	Yes	Yes

Source: own conception

Successful remaining in the market and conducting a stable business through a mature economic entity involves the generation of competitive solutions in relation to optimal criteria. Basically, the entrepreneur, within his options - consolidation of current portfolio or innovation and business development, will be forced, in a natural way to integrate and coordinate processes and resources, to learn about the field of activity or related fields and to generate more solutions that reality will test for validity. An optimal solution for the entrepreneur can be represented by leaving the business and resuming the entrepreneurial process with another business idea, absolutely new or complementary to the previous one.

4. Conclusions

Both dynamic capability and entrepreneurship are intensely debated concepts and characterized by a high heterogeneity in terms of the specific elements attributable to each of them. These characteristic elements are most often dependent on the context and reference taken into account in theoretical research.

For both concepts there is a core characteristic: the orientation on capitalizing on opportunities in order to generate added value, either through a novelty product, or through innovative ways / processes, superior to those already known.

Both entrepreneurship and dynamic capability are two versatile concepts in terms of utility. Both can be identified as working tools at the level of socio-economic organizations or systems.

Dynamic capability involves a certain type of behavior of the economic entity through which the initial business idea is operationalized. Basically, the dynamic capability is embedded in the economic entity through which the entrepreneurial process is expressed in the market.

However, regardless of the speculative predisposition and risk appetite of the entrepreneur, the formalization of the initial business idea and the persistence in the market in the medium and long term require from him a behavior assimilable to the concept of dynamic capability.

References:

- 1. Barreto, I., 2010. Dynamic Capabilities: A Review of Past Research and an Agenda for the Future. *Journal of Management*, 36(1), pp. 256-280.
- 2. Berglund, K. and Holmgren, C., 2013. Entrepreneurship education in policy and practice. International Journal of Entrepreneurial Venturing, 5(1), pp. 9-27.
- 3. Bosma, N. and Kelley, D., 2019. Global Entrepreneurship Monitor 2018/2019 Global Report. Gráfica Andes, Chile.
- 4. Călin, I.E., 2019. Organizatia Ambidextră. Iasi: Tehnopress.
- 5. Durisin, B. and Todorova, G., 2003. The Ambidextrous Organization: Managing Simultaneously Incremental and Radical Innovation? Working Paper N. 96/03. [pdf] Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.201.2835&rep=rep1& type=pdf> [Accessed 22 March 2020].
- 6. Hisrich, R.D., Peters, M.P. and Shepherd, D., A. Entrepreneurship. 10th Ed. New York: McGraw-Hill Education; 2016.
- 7. Hoppe, M., 2016. The Entrepreneurship Concept: A Short Introduction. Högre *Utbildning*, 6(2), pp. 95-108.
- 8. Lanstrom, H., 2005. Pioneers in Entrepreneurship and Small Business Research. Boston: Springer Science+Business Media, Inc.

- 9. Protogerou, A., Caloghirou, Y. and Lioukas, S., 2008. Dynamic Capabilities and Their Impact ob Firm Performance. DRUID Working Paper No. 08 – 11. Danish Research Unit for Industrial Dynamics.
- Rossato, J., Zuloaga, I.A. and Alguel, P., 2011. Making use of the Dynamic 10. Capabilities to deal with Complexity Term Paper, [pdf] Available at: [Accessed 22 March 2020].