

INNOVATION STRATEGY: KEY FEATURE OF SUSTAINABLE BUSINESS MODELS

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Abstract

In the business environment there is an increased interest in developing enterprises that are innovative and manage to be competitive in times that are more and more turbulent. In this context, we should take into consideration the fact that the competitiveness of a business organization is highly influenced by the entire ecosystem created by the knowledge, key competences, a certain organizational culture and also the strategies implemented by the top management. Regarding these elements, we state that the innovation strategy as a vector for innovation management represents an issue highly influenced by the top management vision on the long-term development that can be achieved through innovation. The strategies implemented by the management are essential in achieving and maintaining the position in a certain market. Even though there is a common interest in finding the key to success, the way to it is different for each business organization because it is quite difficult to develop a pattern that can be easily followed by all the business organizations in order to achieve a high performance, aspect that is taken into consideration by academics and also by the business community.

Keywords: *business models; business strategy; development; innovation; sustainable*

JEL Classification: *M14, M19, O36*

I. INTRODUCTION

Innovation remains at the forefront of top managers' strategies because of the impact it has on the development of business organizations, regardless of the industry in which they operate. The level of innovation, i.e., innovation capacity/innovation processes, is strongly influenced by the vision of top management, i.e. the extent to which it allocates resources to research activity, employee development (whose contribution is essential in organizations) and other related processes that can support innovative activity, namely the development of new products/services or improvements to existing products/services. Although innovations are sometimes attributed to an unexpected success/failure, most often they are the result of systematic processes within an economic entity/business organization and beyond. Therefore, a clear innovation strategy is needed to support the processes of developing new or improving existing products/services/processes.

The purpose of this paper is to emphasize the role of the innovation strategy for the development of a business organization, namely in implementing sustainable business models. What is a sustainable business? How can innovation reconfigure the way of doing business in an era where sustainable development becomes an essential issue for companies that need to achieve high performance? Can we establish a business model based on innovation and sustainable principles? To find answers to these questions, we propose as subsidiary the following objectives:

O1. To explore the impact of the relationship between the innovation strategy and sustainable development for the performance of business organizations;

O2. To investigate the role of the innovation strategy and sustainable development in developing new business models;

O3. To systematically analyze certain business models that are emphasized in the current literature and to propose new features given the analyzed topic in this paper.

II. INNOVATION STRATEGY AND SUSTAINABLE DEVELOPMENT FOR BUSINESS PERFORMANCE

Innovation is a major concern for academics and practitioners alike, which can be seen from the many papers published on the subject. From the perspective of this paper, innovation will be approached through the perspective of organizational strategies (more specifically, innovation strategy) as the foundation of successful business models. The financial component is the basis for a company's existence; without a strong financial position, companies do not have the resources to undertake large-scale innovation activities, to invest in technical

infrastructure or to recruit well-trained staff. Implementing strategies that encourage creative processes is therefore a benchmark for successful companies. However, the strategy is only one of the factors influencing the performance and competitiveness of business organizations, but it is of major importance as it determines/conditions to some extent the others; more specifically, from this perspective, we are looking at the decision-makers involved in adopting and implementing strategies, regardless of the direction they are aimed at (innovation component, human resources, etc.).

The innovation strategy covers the R&D budget, the investment in infrastructure/efficient equipment, the training of human resources as well as the sustainability component, i.e., a combination of factors that will contribute to the creation/development of new products/services and/or products/services with small improvements. Clearly, the implementation of innovation strategies is closely linked to what innovation management is, which means a vision and an organizational culture in this direction, creativity, knowledge and a series of key competences that support the shaping of an innovative company. Successful innovation management is conditioned by an accumulation of procedures that are integrated into the way the architecture of an innovation is set up, procedures that are improved, updated in such a way as to enhance the knowledge of the business organization. At the same time, these integrated procedures can outline a series of key skills/competencies of the company that allow it to achieve products in a more efficient way, in a shorter time. Essentially, these routines, which are related to innovation management, show that successful innovations are based on a well-founded strategy, are influenced by the firm's internal and external connections, require a series of effective mechanisms to support new ideas and an organizational context that supports the creative process (Tidd and Bessant, 2009).

Ortt and Van der Duin (2008) point out that a common practice in business organizations is to configure specific innovation management practices according to the business environment or context in which they operate. Thus, we can assume that the innovation strategy of a successful firm can be influenced by the external environment of the firm, i.e., other collaborators/partners of the firm and other similar factors. In this respect, we recall the term open innovation referred to by Henry Chesbrough when considering the issue of innovation. Thus, according to this author, the intensification of innovation activity can also be achieved through interaction with the firm's external environment, in the sense that ideas and knowledge from outside an organization can be of great interest in organizational innovation processes. More specifically, the interaction between the firm's resources and ideas from the external environment should be integrated into the organization's architecture in such a way as to contribute to the removal of its limitations in a particular segment/direction (Chesbrough, 2003). The predisposition for open innovation, rather a clear strategy in this direction, can have significant benefits for a company as a result of the broad knowledge input that can come from the external environment, but more so from the synergy between the organization's ideas and those from the external environment. A company's innovation strategy should therefore focus on openness, flexibility and cooperation in order to achieve good results that will be reflected in long-term performance.

Regarding the sustainable innovation issue, some authors make some quite useful clarifications for this paper. Thus, in the sustainable innovation approach, innovation management should take into account ethical, social and environmental aspects (recycling of materials, CSR, etc.), to aim that the results of the application of such a management should be directed towards the improvement of environmental and societal aspects or to ensure more sustainable variants of products already on the market and, at the same time, to develop partnerships in order to have access to knowledge, skills, networks that can foster the emergence of sustainable innovations (Aagaard, 2018). At the same time, there is an interest in developing new products that have integrated sensors and technologies to ensure sustainable resource/energy consumption. At the same time, IoT (Internet of Things) and the emergence of so-called smart products contribute to the development of sustainable behavior, thus with a reduced environmental impact (Bocken et al., 2019). In fact, there is an openness for entrepreneurs when it comes to sustainability, which can be seen from the development of such products that include various technologies that allow a reconfiguration of the resource consumption plan.

According to Drucker, management must pay particular attention to the impact that the activities of the organizations they lead have on the environment, both physically and socially. In other words, organizational policies and strategies must be in line with the new challenges of changes in society. Furthermore, the same author argues that the social impact of business organizations' activities is greater than the contribution they make to the market, in which sense he points out that social change and social innovation can be as important as technology when it comes to business development. It is therefore necessary to point out that social problems encountered in society can sometimes become opportunities for the business environment, opportunities that will not always materialize in new technologies or products (Drucker, 2008). Based on these considerations, we deduce that a company's innovation strategy should be in line with the needs of society and the environment (thus two important elements aimed at sustainable development, i.e., the social and environmental component) and also take into account the intangible part of innovative activity, which is therefore more difficult to quantify. In addition, these constraints that may arise at a given moment, in terms of the two components highlighted, can be transformed into opportunities for innovative business organizations and beyond.

Changes in resource consumption have made it clear that innovation is to some extent conditioned by what sustainability is, or simply put, sustainability has become a source of innovation for companies trying to reconfigure their business models in line with sustainable development principles. In fact, business organizations are challenged to rethink their processes and activities in such a way that they make more efficient use of resources, whether we are talking about a company producing certain goods or providing certain services. The solutions that may arise in this case may be process, product, organizational or marketing innovations, as classified by the OECD (OECD, Eurostat 2005), each of which has a positive effect on firm performance through improved financial and other results (e.g., an organizational innovation may have a positive impact on employees, which will ultimately also have a positive impact on the financial component). The assumption in this scenario is that these innovations will also consider the principles of cost-effectiveness, i.e., efficiency in the use of resources, which can mean lower production costs and subsequently a higher rate of return. Simply put, several issues may arise in the company's approach to innovative processes that are relevant to the sustainable component of the business. Conversely, a business organization's high interest in the sustainability component may, at some point, contribute to the emergence of innovations in a particular area, in the sense that out of a desire to meet demands in this direction, a company will develop new, more sustainable products. Sustainability and innovation can be interdependent in the sense that sustainability can be a source of innovation and vice versa, innovative products made by a company can contribute to sustainable development.

Various models for analyzing factors influencing the activity of economic entities have been developed in the literature, such as PESTEL (a tool used to study political, economic, social, technological, environmental and legal factors specific to the macro-environment of the organization). The focus of this paper is on environmental factors, which address issues such as climate change and pollution, two major challenges facing society. The legal constraints that may arise in order to reduce pollution, reduce waste of resources may imply additional costs for companies. However, the same constraints can become opportunities if properly exploited, as illustrated by the companies that are starting to develop in the field of phone recycling (Whittington et. al, 2020). Thus, concern for sustainable development can also contribute to the development of new businesses, new business models that focus solely on the environmental component of sustainable development, but whose effects are also felt in economic and social terms.

In the studies dealing with the theory of the firm, we have identified a work by Stuart Hart that addresses the issue of the firm's competitive advantage through the perspective of sustainable development. The same author clarifies two important elements that reshape the way firms do business, namely pollution prevention and product management (reflected in the entire production cycle). While pollution prevention focuses on limiting waste and pollutant emissions, product management can consider, for example, the inclusion of green raw materials in the production process or the establishment of standards (Hart, 2011). At the same time, from an economic perspective, pollution prevention can benefit the firm by reducing production costs, simplifying some operations and limiting losses. With regard to sustainable development, the author states that the natural environment has a significant influence on how a firm strengthens its competitive advantage; equally, the need for sustainable development will require changes in the activities of companies in that it will lead the business environment to identify new ways of producing that can be implemented in the long term, taking into account existing resources and their intensive use (Hart, 2011).

III. BUSINESS MODELS THAT APPROACH INNOVATION AND THE SUSTAINABLE DEVELOPMENT

In the business environment there is a high interest in finding solutions for current and future challenges, meaning new ways of doing business adapted to certain consumption patterns, but also to the needs of the entire society. Nowadays, there are certain issues that need to be addressed by the economic entities in order to overcome the changes that can occur and also change the entire image of the way a company works in order to maintain its performance and competitiveness. Therefore, finding and developing smart business models becomes an important objective for the organizations that are addressing a worldwide market. Therefore, managers must innovate in order to identify the right business model for the companies they run. In fact, they need to develop a business ecosystem that fosters sustainable development for companies, society and the environment as a whole. This is because business models are important for both companies and society (if we consider the social and environmental component of sustainable development models).

There are several approaches to the characteristics of a business model in literature, in which sense Henry Chesbrough's perspective follows. According to this author, a business model should aim to create value (in terms of the products/services offered, i.e. the value created for customers), identify/identify the market segment to which it is addressed, set up a network of partners/collaborators who contribute directly/indirectly to the creation of the products (this aspect involves identifying suppliers of raw materials, materials, etc.), intermediaries and other actors that are present along the entire value chain, from the procurement/processing of the raw material to the use of the product by the final consumer), determining how it will facilitate the attraction of new financial resources

(how it will contribute to increasing the firm's revenues), positioning the firm in the market compared to other competitors in the market and the strategy that will strengthen the firm's competitive advantage (Chesbrough, 2007).

Given these aspects we have identified a number of business model proposals, in the existing literature, that should point some direction for business decision makers when they seek to reconfigure the architecture of the organizations they lead.

A. Open innovation business model (Henry Chesbrough, 2003)

We have previously mentioned the concept of open innovation referred to by Henry Chesbrough, to which we return to make a series of additions, respectively proposals in the direction of the theme under analysis. The author to whom we referred proposes a new type of business organization, one that promotes the concept of open innovation and recognizes the benefits of collaboration and partnerships with actors outside the firm. In fact, this type of organization highlights the benefits of business networks, i.e. clusters that encourage cooperation between different entities at the macroeconomic level (universities, firms, state institutions such as chambers of commerce, etc.). This model emphasizes that successful/good ideas can come from both inside and outside the firm; in terms of importance, ideas from the internal environment are on the same level as those from the external environment, i.e. they are equally valuable for the organizational innovation processes (Chesbrough, 2003).

The issue considered in this model is clearly about the importance of innovative activity, i.e. the development of new or improved products/services that bring value to the market and hence to the firm. Thus, the epicenter of this model is innovation and several elements that business decision-makers should take into account when shaping their innovation strategy. We note that the author stresses the importance of knowledge, of ideas for the whole creative process, highlighting not only a successful business model, but also a way to implement that model.

B. RESTART: a sustainable business model innovation (Jorgensen and Pedersen, 2018)

This model was developed by Jorgensen and Pedersen based on the premise that the development of new business models, and therefore the development of sustainable business model innovation, should take into account the issues of information technology, i.e. digitalization, sustainable development and changing customer needs and preferences. Starting from these aspects they established the framework for RESTART, an abbreviation for a number of specifications that the authors believe a business model should target, namely RE - redesign and experimentation, STA: service logic, the circular economy and alliances and RT: results and three-dimensionality (Jorgensen and Pedersen, 2018).

The authors try to suggest a way of integrating sustainable development aspects into innovative activities, which promotes the development of products that meet the current demands of society, in line with a set of principles that support a more efficient way of conducting activities and limiting the negative impact of operations carried out by business organizations in the environment, respectively society. The specifications of the proposed business model suggest, to some extent, that business organizations can be innovative, successful and at the same time sustainable. We note a number of similarities with the previously presented model, namely the innovation component and the component on partnerships, collaborations with different entities. This model clearly addresses the issue of sustainability, highlighting the fact that technological progress such as information technology innovations can play an important role in making production processes more efficient, reducing resource consumption and limiting the impact of economic activities on the environment.

C. The business model navigator (Gassman, Frankenberg and Csik, 2014)

It is in fact a business modeling method that was developed by Gassman, Frankenberg and Csik and encompasses 55 business models that can be combined by business organizations to improve the efficiency of their operations or to leverage their advantages over their competitors. Thus, depending on the field of activity, market position, experience and resources (material, human, knowledge, etc.) managers can design new ways of running the operations of the companies they manage.

The authors' central idea is that successful business models can be developed through creative imitation and recombination/reconfigurations of existing resources/methods/techniques within a company. The innovation part lies in identifying, understanding, adapting, and re-configuring existing aspects/elements of the organization. The innovation part lies in identifying, understanding, reorganizing/recombining and transferring successful models from the field in which they operate. This aspect allows a firm to learn from other players in the market and subsequently reconfigure the industry in which it operates (Gassman et al., 2014). The accumulation of models highlighted by the authors covers different aspects within a business organization and proposes a number of different views on how decision makers can shape new business models. Of the 55 models referred to by the three authors, of interest for this paper is the digitalization model, reverse innovation, open business and circular business models because they are more responsive to the research objectives in that they support sustainable development through different tools such as digitalization, innovation and collaboration with third parties, i.e. actors outside the firm. We note that the aspects considered in the two previous models are also included, with the addition that a number of elements related to information technologies, including e-commerce, are also highlighted.

IV. A BUSINESS MODEL FOR THE FUTURE

Based on the issues highlighted in relation to the problem under analysis, including those related to various business models, we will suggest below a number of guidelines on the essential elements that a company's business architecture (i.e. business model) should include in order to be successful and competitive. Of great interest remains, without doubt, innovation, as an essential characteristic for any business organization that aims to be successful and, implicitly, all the elements that reinforce innovative activity (knowledge, key competences, learning orientation, etc.). At the same time, digitalization has become an increasingly common specification for companies that manage to address a changing market with increasingly diverse needs. Therefore, the adoption of information technologies in the activities of business organizations is a mandatory option for improving the efficiency of some operations and achieving better performance. Last but not least, embedding the principles of sustainable development in the organizational culture and implementing them is a natural step when considering long-term development issues, given the changes taking place in the environment and society as a whole. In the figure below, we outline the elements that a business model should include, based on the elements emphasized:

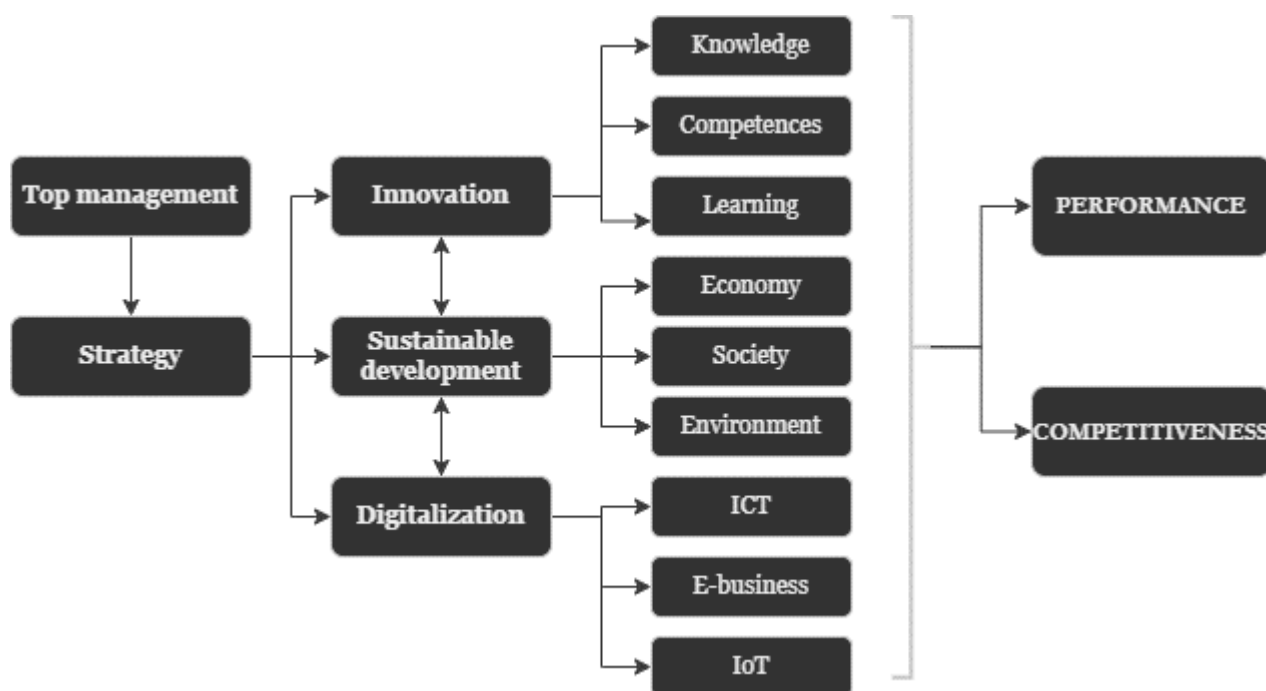


Figure 1 - A model for business organizations
Source: Author's own creation

As can be seen, we have referred to the management component as well, since the direction of development of a business organization is dependent on the strategies implemented by the decision-makers, and therefore we have considered this to be the basic element, i.e. the foundation of a business model. Subsequently, we captured the three essential characteristics, from the perspective of this paper, for the organizational framework (innovation, sustainable development and digitalization) and then a series of specific elements for each of these specifications. We have also tried to highlight that there are a number of connections between the three characteristics, as their interdependence is essential for organizational progress. Thus, the suggested business model includes three main pillars which in turn have three factors (the number of pillars, including factors can be extended depending on the specifics of the organizations; certainly, the performance and competitiveness of a company is influenced by a much larger number of factors, which differ from company to company and cannot be accurately captured in any one model); their action reflects on organizational performance and thus on market competitiveness. From the suggested model we can deduce that the trinom innovation-digitalisation-sustainability is the foundation for the future development of successful business organizations.

V. CONCLUSIONS

It is quite difficult to establish a business model that responds in a uniform way to the needs of business organizations in an increasingly unstable and constantly changing business environment. While conceptually it

can sometimes be easy to outline a business model, its implementation at company level poses significant problems for managers. This is because each organization has its own characteristics, its own experience in a particular market, its own organizational culture, all of which influence how different frameworks are implemented. Organizational strategies for innovation should take into account elements that can facilitate new approaches to business operations in order to prepare business organizations for new challenges. Building a flexible architecture, open to change, adopting information technologies, leveraging the benefits that IoT brings to business is a solution to the problems that managers have when designing a business model.

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