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The Maintenance of DNA Startup through the Association between Entrepreneurial and Meaningful Learning

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ABSTRACT

This study aims to analyze how the association of entrepreneurial and meaningful learning can be an important instrument for the development of entrepreneurial skills to assist in the protection of the so-called "DNA Startup". The method used was qualitative and consisted of a literature review through bibliographic research. The analysis identified a growing concern of modern organizations to invest in corporate education programs with a focus on protecting the "DNA Startup" of their leaders and employees to improve the response time of their companies to the constant changes in society and the economy.

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INTRODUCTION:

In the face of constant technological advances and profound behavioral changes, a new economy emerges that challenges the structure of conventional companies in terms of production dynamics, commercial relations, and consumer behavior. In this scenario of disruption of the new economy, not all organizations have managed to adapt quickly and many of them end up having their place occupied by more modern and innovative companies, often startups. If for traditional companies there is a slowness in the ways to keep up with the constant and rapid market transformations for startups, it is a constant practice in their daily lives, a central part of their DNA and it is precisely this distance between the response time to the evolution of the market of traditional companies about startups that have brought these two sectors of the economy closer together.

In a publication made on March 15, 2020, by the blog Kamaleon[1], specialized in technological innovations, Artur Bueno, IoT Expert, reports the perception of the market to the need for rapprochement between the startup community and large conventional companies. It is possible to verify this trend when verifying that renowned companies such as Telefonica, Itaú, Banco do Brasil and Bradesco, among others, have invested in initiatives such as accelerators of startups and internal startups to promote innovations, understand methodologies, improve present processes and knowledge in the startup ecosystem environment and subsequently adopt its innovative practices in the routine of its operations.

Once we understand the need to break paradigms and change the mindset in the way traditional organizations work, using the support of the DNA Startup, it is essential to develop in the employees of organizations that seek to become modern, entrepreneurial skills such as innovation, creativity, initiative, resilience, and speed, to keep up with market changes and maintain competitiveness[1].

Therefore, this study presents a reflection on the impact that the diffusion of entrepreneurial skills aimed at encouraging and protecting DNA Startup can cause within an organization, taking it to a new level of modernity.

THEORETICAL REFERENCE

The impact of startups on the economic market and corporations

Analyzing the impact of the emergence and constant growth of startups for the current economic market is essential for those who intend to have a broader understanding of new ways of working, economic and innovation trends. According to the publication of the website Insight Liga Ventures on January 28, 2020, in addition to presenting new concepts and solutions to the public, one of the main roles of startups is to challenge existing models and insert technology and innovation in products and services to improve people's lives, solving problems and demands that still have no answers. Taking into account the main definitions found in the literature regarding the role of startups, it is possible to assume that the disruption of current processes is causing changes in paradigms that have been perceived by the economic and social sectors in a very significant way[2].

However, what has caught the attention of large companies is the ability of startups to search for these solutions in an agile way, without fear of making mistakes, applying tests, and with the strong presence of technology. In an analysis of this new way of working, large companies realized that this process is only possible due to a significant change of mindset in the work proposal that makes up these companies. From these observations, the main challenge understood by entrepreneurs and managers of large companies to maintain competitiveness in the market has been to better understand these changes and incorporate them into their daily operations. One of the ways found to enable this understanding has been to invest in acceleration programs, for example. Through these and other strategies, there has been an approximation between the sectors, which has made possible an interesting exchange of experiences for both.

In economic and social terms, what justifies the concern of large companies to startups is the significant impact generated by new models of services and solutions present in our daily lives, which have irreversibly impacted large corporations. Giants like Blockbuster, one of the largest movie rental chains in the world that had physical stores in several countries, were replaced by streaming services like Netflix, which offers movies and series without the need for any physical store. Other examples that demonstrate the impact that transformations resulting from solutions supported by simplified technologies and processes can cause in the economy are the

competitions generated by the emergence of startups like Uber and 99, in the urban transport sector and Quinto Andar in the real estate sector.

It is also important to mention that the scalable characteristic of startups allows the application of solutions created globally, reaching different audiences and moving the economy to different parts of the world. This possibility has been perceived by professionals, investors, government entities, and users globally, which has resulted in the insertion of these companies on the radar of investment possibilities by different sectors of the economy.

Entrepreneurial skills: the starting point for the culture of innovation

The market's perception of the growth of companies that develop a new business model based on a culture of innovation, also called DNA Startup, has led several sectors of the economy to look for ways to implement this new culture in their organizations.

Once the need for a transformation in organizational cultures is realized, the focus becomes to understand the functioning of these ecosystems capable of generating continuous innovation associated with great value generation. Rodrigo Goecks and Fernando Lorenz[3] identified, after a few years of observing the evolution of innovation ecosystems that startups operate in a very different model from conventional companies. Characteristics such as network thinking, random connections, the creation of ideas in a pyramidal form, the ability to balance in environments of extreme uncertainty, and adaptation to changes were perceived as the main factors to support and facilitate the generation of innovation.

Having understood the characteristics of DNA Startup, it becomes necessary to understand which of these characteristics could be absorbed by conventional companies and by what means it would be possible to act to initiate these transformations. Rodrigo Goecks and Fernando Lorenz[3] proposed a path for the creation of an organizational transformation process. Working from the integrated view of organizations, they proposed to divide the view of the organization into four levels: identity, relationships, processes, and resources. According to Goecks and Lorenz[3], “awareness and action at the 4 levels bring the ways for organizations to build a culture of innovation.” For there to be awareness and consequent action at the four levels of the organization, it would be necessary to better understand each of them, how the action would be performed on them, and the expected results of these actions.

Thus, it is possible to affirm that the change in mindset required for the adoption of new practices in the organizational environment only occurs after generating an impact on organizational culture and behavior as well as on people's daily lives. Therefore, for significant changes to occur in organizational behavior, as well as in the culture of the corporation, using the strategy of developing employees' skills that support and assist in this process becomes essential to achieve the expected results.

Then, the competencies to be developed were identified, to train the professionals involved in the transformation process necessary for the implementation of the innovation culture (DNA Startup). For that, the table 1, adapted from the material published by the consultancy Adigo Desenvolvimento was prepared.

Table No. 1: Skills to be developed by the level of organization to transform Conventional Companies into Modern Companies

Level of organization	**Conventional company**	**Skills to be developed**	**Modern company (DNA Startup)**
Identity	Some owners	Independence / self-confidence / search for opportunity / initiative	Everyone feels like they own
	Inside-out view	Information search and contact networks	Outside-in view
	Wealth management	Search for opportunity / initiative / creativity	Creating wealth
	Assurance	Take risks	Uncertainty
Cultures and Values	Strategic planning	Independence / Self-confidence / Search for information / Network of contacts / Search for opportunities / Taking risks	Strategic thought

Relations	Technical skills	Planning / monitoring / initiative / persuasion / commitment / Networks / Information search	Self-development
	Management	Persuasion / commitment	Engaging leadership
	Expert group	Contact networks	Diversity
	Focus on the problem	Information search / Networks / Creativity	Focus on the solution
Leadership and Motivation	Technical skills	Planning / monitoring / initiative / persuasion / commitment / Networks / Information search	Self-development
Processes	Standard Processes	Persistence (Reassess / Insist / change when necessary)	Fast creation and customer-validated cycles / flexibility
	Processes created by the manager	Initiative / Independence / Self-confidence / Continuous improvement / Creativity	Processes created by the team
	Financial targets	Establish goals and objectives / Look towards the market / Continuous improvement	Growth and development goals
Information and Activities	Economic incentive	Persistence / Initiative / Independence / Self-confidence / Goals / Looking towards the market / Continuous improvement / Creativity	Responsibility incentive

Resources	Technology purchase	Continuous improvement and updating / self-development / independence	Use of technology
	Focus on resources	Persistence / Information search / Contact networks	Focus on the intangible
	Property value	Commitment / Efficiency / Initiative	Value in use
	Plenty of resources	Creativity / Commitment	Shortage of resources
Materials and Equipment	Large stocks	Continuous improvement and updating / self-development / independence / Persistence / Information search / Networks / Creativity / Commitment / Efficiency	Reduced resources

Source: Adigo Desenvolvimento, adapted by the authors.

Analyzing the skills listed as essential to assist in training employees who will be responsible for the changes that will result in the implementation of the new culture of innovation, it was possible to identify several characteristics present in entrepreneurial skills. Thus, we move on to the next phase of the study, which aims to understand what is the best way to develop these skills.

Combining entrepreneurial and meaningful learning concepts as a means to spread entrepreneurial skills

From the realization of the importance of developing entrepreneurial skills as an essential tool in the process of transforming the organizational culture and maintaining the organizations' DNA Startup, it is vital to explore ways of disseminating these skills among employees.

Research carried out by Feuershütte and Godoi[4] and Filho[5] demonstrated that the development of competencies is directly associated with the learning process. Thus, from the studies verified in the existing literature, the direct relationship between the learning process and the development of skills became evident[6]. According to Bitencourt[7], the development of competencies is based on a continuous learning process. According to the author, competence and learning are complementary approaches.

Once it is understood that the basis for the development of competencies lies in the learning process, it is essential to understand and discuss the characteristics of the learning processes that are best suited to the development of the competencies required by the innovative business model.

According to Pozo[8], learning can be seen as a dynamic process, which generates qualitative changes in the way in which a person sees, experiences, understands and conceptualizes something. This dynamic characteristic favors behavioral changes through eventual changes in the environment. Still, according to the author, learning is essential for the individual to adapt to the environment. When directing the learning process in the context of the development of entrepreneurial skills, the experience and the possibility of using this skill as a way of disseminating knowledge as the main factor to be observed are noted.

According to Politis[9], entrepreneurial learning is "a continuous process that facilitates the development of the knowledge necessary to be effective in creating and managing new businesses". It is also possible to state that it is a process where individuals acquire, organize and assimilate newly formulated knowledge based on pre-existing structures.[10 11 12]

According to Fleury and Fleury[13], two predominant theoretical aspects support the main learning models. They are the behaviorist aspect, which has behavior as its main focus, and the cognitive model, which is more comprehensive and better explains more complex phenomena such as problem-solving, for example. For this study, we chose to address the significant aspect of learning.

According to Ausubel, Novak, and Hanesian [14], the process of meaningful learning implies the interaction of new content or information with previous knowledge present in the individual's cognitive structure. Such interaction would be carried out through the so-called “cognitive

bridges", which are links between what the learner already knows and what he intends to learn. The teaching process must necessarily make some sense for the learner and he must be predisposed to acquire the new knowledge. It also presupposes the use of previous organizers that will serve as an anchor for new learning [14]. Finally, for the process to be developed and completed successfully, it is expected that cognitive conflicts capable of generating changes both in new concepts and in previous concepts will arise from the comparison of previous schemes with new concepts.

Man[15] describes the study of entrepreneurial learning under three approaches: experimental, cognitive, and networking. By observing these three approaches used to describe entrepreneurial learning, it was possible to identify several points in common between them and the significant learning process proposed by David Ausubel[16], as we will see below.

The experimental approach, based on the learning cycle of Kolb[17], describes the entrepreneurial learning process as a continuous cycle of four stages: reflecting, conceptualizing, applying, and acting. Three of the four stages of this approach - reflecting, conceptualizing, and applying - could perfectly be correlated and complemented with the concepts of assimilation, use of previous organizers for reflection, and creation of new knowledge that would be essential for the subsequent application of these new contents.[6] The cognitive approach is based on a mental process of knowledge acquisition and retention and its long-term use. The study of networking, in turn, considers the knowledge and skills acquired by micro and small entrepreneurs throughout their personal or professional trajectory, a process impacted by countless other factors of attitudinal, motivational, or emotional order, among others. This approach, considering the knowledge and skills acquired by apprentices throughout their trajectory, can be considered a basis for the acquisition of prior knowledge necessary for the meaningful learning process.

Dionello, Langhi, and Okano[6] analyzed, from the elaboration of a reflection about the common points between the entrepreneurial and significant learning processes, the existence of interrelations and possible complementations between both processes.

METHOD:

For a better understanding of the topic of study, a bibliographic review was carried out, which, according to Fonseca[18] "is made from the survey of theoretical references already analyzed, and

published by written and electronic means, such as books, scientific articles, website pages". Such a choice visits the theoretical references already published on the topic as well as collects previous information and knowledge that could support the problematization. In other words, the words provide knowledge of what has already been studied on the subject and are based on the analysis, results, and discussion on the topic.

RESULTS AND DISCUSSION:

The studies carried out identified as preponderant factors for the good performance of the startup's characteristic present in the so-called DNA Startup, that is, a culture of innovation. Based on this observation, it was concluded that to create this new culture, it would be necessary to invest in a process of organizational transformation.

Rodrigo Goecks and Fernando Lorenz[3] identified the integrated vision of organizations as a way for this process of organizational transformation, which divides the organization's vision into four levels: identity, relationships, processes, and resources. Performing an analysis of the four levels of the integrated view, it was possible to state that in order to achieve the expected result, a new organizational culture based on the diffusion of the culture of innovation, a change of mindset is required which will be responsible for the adoption of new practices in the organizational environment. These new practices, in turn, can only occur after generating an impact on people's culture, behavior, and daily life.

Therefore, it is possible to intuit that, for significant changes to occur in organizational behavior as well as in the culture of the corporation, it is essential to resort to the strategy of developing collaborators' skills that support and help this process.

Given the above, the study sought to work on identifying the competencies to be developed, to train the professionals involved in the transformation process, necessary for the implementation of the innovation culture (DNA Startup). As a result, entrepreneurial skills were perceived as the main driver of changes in the organizational environment in favor of the diffusion of this new culture.

Knowing that also according to the literature visited, the development of competencies is based on a continuous learning process and that competence and learning are complementary

approaches, some correlations were elaborated between the concepts of meaningful and entrepreneurial learning as well as an interrelation of these learnings with the development of entrepreneurial skills.

From this process, it was possible to suggest complementarity between these models of learning. It is concluded, therefore, that a methodology based on the fusion of meaningful and entrepreneurial learning would be able to figure as an important tool for the diffusion of entrepreneurial skills and encourage the implementation of a culture of innovation in conventional organizations.

CONCLUSION

Based on the results of this study, it was possible to identify a movement from different sectors of the economy, especially from conventional companies, towards an approach with the so-called modern companies or startups. Such approximation has happened due to a market perception regarding the importance of the startup ecosystem for innovation, leading several sectors of the economy to organize themselves, promoting initiatives and investments in these companies, to make them act as a source of inspiration and creativity, as well as encouraging a culture of innovation, to renew and innovate its products and services, as well as incorporating methodologies and good practices.

Through this approach, the need to break paradigms and change the mindset in the way of work of conventional organizations became evident, using as support the spread of the so-called DNA Startup. Through a more detailed assessment of the characteristics that make up this new culture, it was found as an indispensable tool to develop in the employees of these organizations the characteristics present in the so-called entrepreneurial skills. For the development of these skills, the study suggests the use of a methodology based on the fusion of entrepreneurial and significant learning, to assist in the diffusion of entrepreneurial skills and consequent incentive to the culture of innovation, which would result in the protection of DNA Startup.

As a suggestion for new studies, based on the growing interest of large corporations in understanding and implementing the culture of innovation in their daily lives, the deepening of research that fosters discussion around the best teaching-learning processes aimed at assisting in the process of transformation of organizational culture, aiming to achieve a culture of innovation

based on the diffusion of entrepreneurial skills. It is intended, from future discussions, the generation of new methodologies and training more and more efficient to encourage innovation, a fundamental element for the survival of both corporations and professionals in an economy increasingly based on technological evolution.

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