



#### **Original Article**

# Reconsidering the Management of Distance Education from the Analysis of the Advantages of Business Transformation Projects by means of Processes and Digitization: Focus on Challenges and Opportunities in the Brazilian Scenario.

Reconsiderando la Gestión de la Educación a Distancia a partir del Análisis de las Ventajas de los Proyectos de Transformación de Negocio a través de Procesos y Digitalización: Foco en los Desafíos y Oportunidades en el Escenario Brasileño

Reconsiderando a Gestão da Educação a Distância a Partir da Análise das Vantagens dos Projetos de Transformação de Negócio por meio de Processos e Digitalização: Foco nos Desafios e Oportunidades no Cenário Brasileiro

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#### **Abstract**

This research aims to analyze particular aspects of distance education management and demonstrate how Business Process Management and Business Transformation projects can streamline, innovate and

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improve the effectiveness of operations, and product quality and service. The research was carried out based on the concepts of Business Process Management and Business Transformation, and analysis of the Higher Education market, through the reflection and understanding of the difficulties faced and management challenges in the scope of distance learning. This is a descriptive qualitative research, using a hypothetical-inductive method, accomplished through the observation, recording, analysis and interpretation of the scenario and market of Distance Education, focused on the subjective character of the analyzed object, whose study approaches its particularities and individual experiences. The information and data were obtained through a bibliographical survey of printed and electronic publications, mainly the last three Censuses, Analytical Reports of Higher Education and, specifically, Distance Education. This research does not propose a business process management model, because requires analysis of the structure and strategic planning of an organization.

**Keywords: Distance education. Business process management. Business transformation.** 

#### Resumen

Esta investigación tiene como objetivo analizar los aspectos particulares de la gestión de la educación a distancia y demostrar cómo la gestión de procesos y proyectos de transformación de negocio pueden optimizar, innovar y mejorar la eficacia de las operaciones y la calidad de los productos y servicios. La investigación se realizó en base a los conceptos de gestión de procesos empresariales y la transformación del negocio, y el análisis del mercado de la educación superior, a través de la reflexión y la comprensión de las dificultades y los retos de gestión en el ámbito de esta modalidad enseñanza. Se trata de una investigación cualitativa descriptiva, para el método hipotético-inductivo, llevado a cabo mediante la observación, registro, análisis e interpretación de lo escenario y el mercado de la educación a distancia, enfocado en el carácter subjetivo del objeto analizado, cuyo estudio aborda sus particularidades y experiencias individuales. La información y los datos se obtuvieron a través de publicaciones impresas y electrónicas, especialmente los últimos tres censos, informes analíticos de la educación superior y,

específicamente, la educación a distancia. Esta investigación no propone un modelo de gestión de procesos, porque se requiere un análisis de la estructura y la planificación estratégica de una organización específica.

**Palabras Clave:** Educación a distancia. Gestión de procesos de negocio. Transformación de negocios.

#### Resumo

Esta pesquisa tem como objetivo analisar aspectos particulares da gestão da Educação a Distância e demonstrar como a gestão por processos e os projetos de transformação de negócios podem agilizar, inovar e melhorar a eficácia das operações e a qualidade dos produtos e serviços. A pesquisa foi realizada com base nos conceitos de Business Process Management e Business Transformation, e análise do mercado do Ensino Superior, através da reflexão e compreensão das dificuldades enfrentadas e desafios da gestão no âmbito da modalidade de ensino a distância. Trata-se de uma pesquisa qualitativa descritiva, por método hipotético-indutivo, realizada através da observação, registro, análise e interpretação do cenário e mercado da Educação a Distância, focada no caráter subjetivo do objeto analisado, cujo estudo aborda as suas particularidades e experiências individuais. As informações e dados foram obtidos através do levantamento bibliográfico de publicações impressas e eletrônicas, principalmente dos três últimos Censos, Relatórios Analíticos da Educação Superior e, especificamente, da Educação a Distância. Esta pesquisa não propõe um modelo de gestão por processos, pois exige análise da estrutura e planejamento estratégico específicos de uma organização.

PALAVRAS-CHAVE: Educação a distância. Gerenciamento de processos de negócios. Transformação de negócios.

#### I. Introduction

In 1996, the Law 9.394/96 officialized the normative era of Distance Education in Brazil and, in this way, started to be considered as a valid modality and equivalent for all levels of education. Decree No. 5.622, dated December 19, 2005, defines:

[...] Distance Education is characterized as an educational modality in which the didactic-pedagogical mediation in teaching and learning processes occurs through the use of information and communication media and technologies, with students and teachers developing educational activities in places or different times. (Decree No. 5.622, dated December 19, 2005, CHAPTER I Art. 1)

Since its legalization, the Higher Education Institutions have begun investing in Distance Education, a modality that has been growing and transforming significantly in the last two decades, determining new demands on managers. There have been significant changes in the laws that regulate Distance Education, in methodologies and in pedagogical approaches and practices. Barriers were broken, and within a decade, the main institutions of higher education were present in all Brazilian states, facing challenges and seeking opportunities in an increasingly competitive market.

According to Moran (2011, p.1), "all institutions are in the limelight, seeking to position themselves in such a competitive and complex scenario". Innovation in information and communication technologies, devices and forms of interaction, as well as the phenomenon of digitalization, constantly challenge managers and teams to adapt education to the new behaviors and needs of students. Therefore, the management of Distance Education needs to be reconsidered and redesigned, always respecting regulation, based on three factors: constant innovation, flexibility and agility.

Furlan (2016) points out that business transformation projects through processes and digitization enable a flexible and agile organizational structure, in a strategic and innovative way. An organization's process architecture describes how it operates, both in production and service delivery, and must always be aligned with the business plan and strategic planning, with a focus on customer and stakeholder satisfaction. This is a feature that ensures an organization competitive advantage, longevity and customer loyalty.

This research analyzed how business transformation projects through processes and digitization can improve the management of Distance Education and the quality of the courses, to add value and satisfy the

students, generating growth and profit for the institutions and companies that work in this segment and teaching modality.

## 2. Methodology

The methodology used followed the three foundations of research proposed by QUIVY and CAMPENHOUDT (2005): 1) rupture, which consists of breaking with preconceived ideas; 2) construction, to create ideas and new proposals; 3) verification, which refers to the analysis and verification of data and information. The research was carried out in stages grouped to the foundations to which they referred: the formulation of the initial question; the exploration of the initial question (through reading and exploratory data collection); the elaboration of the problem; the data collection; the analysis of information and conclusions.

This is a descriptive qualitative research, by hypothetical-inductive method, which started with the following question: what are the advantages of business transformation projects in the management of Distance Education? The exploring was carried out by observing, recording, analyzing and interpreting the scenario and market of Distance Education in Brazil, with focus on the subjective character of the analyzed object, which study addresses its particularities and individual experiences.

The problem points to difficulties and challenges related to the planning, development and deployment of courses in the distance modality, which compromise the credibility and quality of the teaching-learning process, causing great evasion due to students' dissatisfaction.

The information and data obtained were analyzed inductively through the statistics of Higher Education in Brazil, the bibliographical survey of printed and electronic publications, and especially the last three Census and Analytical Reports of Distance Education.

The research was carried out based on the analysis of the Higher Education market and the concepts of Business Process Management and Business Transformation, through the reflection and understanding of the difficulties faced and the challenges and opportunities of the management in the scope of distance learning.

## 3. Management of Distance Education

Technological innovations and people's behavior changing are creating new paradigms, new channels of communication (omnichannel), new experiences - and this can also be perceived in Education. The service to students increasingly demands flexibility and agility, and a personalized treatment, direct and appropriate to each moment/situation. It is necessary to make interactions easier and more enjoyable to produce the desired result.

In this scenario, Distance Education presents a progressive trend for the strengthening and growth of enrollments in courses offered in this modality of education, and managers need to seek effective alternatives to overcome the new challenges and opportunities in a gradually more globalized and competitive market, fulfilling the social objectives related to any educational institution.

# 3.1. Analysis of the scenario of Distance Education in Brazil

Since 2006, Distance Education has undergone significant changes and growth in Brazil, especially in higher education. According to ABRAEAD<sup>3</sup> research (2006, p.108),

As the fastest growing educational modality in the country, Distance Education (EAD) offers a strong business market, involving companies from various branches converging to a productive chain of great interest and, therefore, has also grown widely. They are companies of branches as different as training, production of content, software, didactic material, services such as hosting, logistics etc. Investigating this market helps measure the impact of the EAD's evolution in the country.

The survey also highlighted that there is a growing interest in corporate training in distance mode. The possibility of training more

<sup>3</sup> Brazilian Statistical Yearbook for Open and Distance Education

employees at the same time, without interrupting the workforce and reducing costs, has aroused the interest of companies of various sizes. If, on the one hand, organizations need to prepare large numbers of employees quickly to perform their strategic plans, on the other hand, institutions and companies working in the Distance Education segment realized that this was an excellent business opportunity to sell courses on demand.

The latest Higher Education Census present numbers that prove the continuous and considerable growth of Distance Education in Brazil.

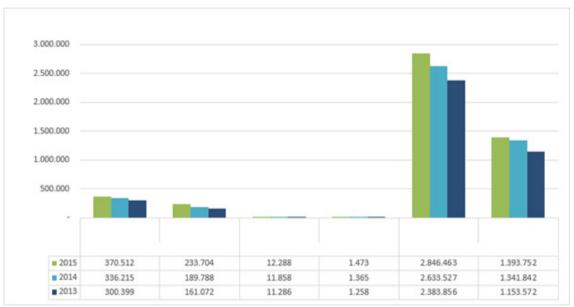


Chart I: Comparison of the Higher Education Census 2013-2015

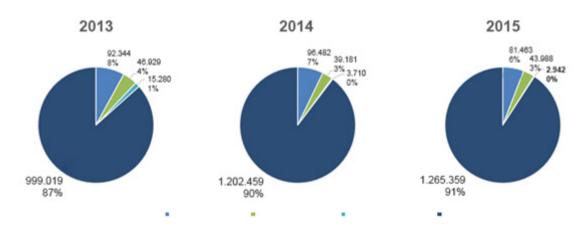
In 2014, it reached 1.34 million, which represents a 17.1% share of total enrollment in Higher Education. Between 2013 and 2014, the number of enrollments in presential undergraduate courses grew by 5.4%, and in the distance mode, the increase was 16.3% (Chart 1), with the highest percentage growth recorded in universities (17.8%).



Chart 2: Offer of distance learning courses in Brazil. Higher Education Census 2013-2015.

Research shows that enrollments predominate in the private chain, which also offers the largest number of distance courses (Chart 2). The courses of bachelor's degree also predominate, academic degree that, in Brazil, allows exercising the teaching in schools of Primary and Secondary Education.

According to the latest Census of Higher Education, private institutions obtained 87% of enrollment in distance courses in 2013; 90% in 2014 and 91% in 2015, which shows a progressive growth and an expanding market (Chart 3). And, according to the statistical notes of the Census of Higher Education of 2014, private institutions presented a total enrollment of 71.9% in the face-to-face modality, that is, lower than participation in distance courses.



**Chart 3:** Enrollment in distance learning courses in Brazil. Higher Education Census 2013-2015.

Between 2013 and 2014, there was a 12.7% increase in the number of enrollments in distance technological undergraduate courses, which represents more than 1/3 of the students enrolled in this type of education.

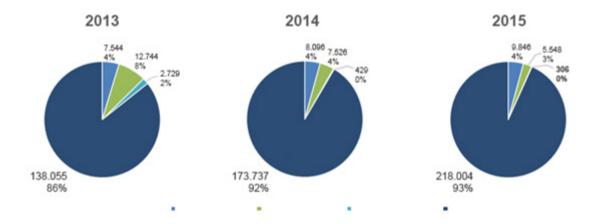


Chart 4: Graduates in distance learning courses in Brazil. Higher Education Census 2013-2015.

According to the latest census statistics, the number of graduates practically stabilized in face-to-face courses, while there was an increase of 17.8% between 2013 and 2014 in distance mode (Chart 4).

On May 26, 2017, a report was published on the website of the Ministry of Education (MEC) on the updating of legislation that regulates Distance Education in the country, noting that

[...] the EAD modality has grown strongly in the country, accompanying the progress of the technological and communication media. According to the Census of Higher Education conducted in 2015 by the National Institute of Studies and Educational Research Anísio Teixeira (INEP), there are 1,473 thousand distance courses offered in the country, which growth is 10% per year, since 2010. Currently, there are more than 1.3 million students enrolled, with growth of 50% between the years 2010 and 2015. (MEC, 2017)

After analyzing the results of the publications of the Brazilian Statistical Yearbook for Open and Distance Education, the analytical reports of the EAD.BR Census and the numbers and statistics of the INEP, it is possible to observe a gradual growth of Distance Education in Brazil. If the gradual development of the research continues, it is possible to predict an increase in the demand for distance courses that may exceed the number of courses in less than five years.

#### 3.2. Distance education quality benchmarks

Based on a discussion with sector experts in 2003, the Ministry of Education (MEC) Secretariat for Distance Education (SEED) produced the first version of the quality references for distance learning courses. In 2007, this version of the document was submitted to public consultation and underwent a review process with more than 150 suggestions and criticisms, most of which were incorporated. These changes were necessary, due to the growth of Distance Education in Brazil and changes that occurred in the legislation. According to the presentation page on the website of the Ministry of Education (MEC), the Quality Guidelines for EAD are "limited to the legal framework in force in addition to the specific provisions of the Education and Guidance Law" (MEC/SEED).

The quality references of Distance Education involve three dimensions: pedagogical aspects, human resources and infrastructure. To reach these dimensions, the document suggests that the Political Pedagogical Project of a course in the distance modality should contain the following main topics: Conception of education and curriculum in the teaching and learning process; Communication Systems; Didactic Material; Evaluation; Multidisciplinary team; Support infrastructure; Academic-administrative management; Financial Sustainability. The authors of the paper emphasize that these topics interpenetrate and unfold in items and subitems.

As explained in the website of the Ministry of Education (MEC), this document has no force of law, and the guidelines contained therein should have an inductive function for the organization of EAD systems in Brazil.

#### 3.3. Organizational structure

All organizations have activities and resources grouped, divided and coordinated according to the strategic planning of the business, aiming to reach the established goals. The organizational structure of a business includes physical, human, financial, legal, administrative and economic resources, correlated with the activities performed in an organization.

The Distance education management, in a comprehensive and multidisciplinary way, manages and coordinates the repository of didactic contents and learning objects, information and communication technologies (ICTs), teachers and tutors, students, teams of technicians and specialists, and support centers. On the website of the Ministry of Education (MEC), it is defined that

Distance Education Pole, or support center, is the place duly accredited by the MEC, in the country or abroad, suitable for the decentralized development of pedagogical and administrative activities related to courses and programs offered at a distance. In such polo, the student will have the activities of classroom mentoring, library, laboratories, video class, evaluation (tests, exams, etc.) and may use all the technological infrastructure for contacts with the offering institution and/or participants in the respective training process. (MEC/SEED)

According to SILVA (2013, p. 34), Distance Education "must be treated as an integral component of the organizational context", but it is not a rule and "does not prevent institutions from having specially constituted sectors for their management."

Many institutions have implemented an exclusive organizational structure for distance learning courses. In other words, coordination of independent courses in the classroom, secretariat, logistics, and information technology sector, human resources sector, among others. What matters is that the organizational structure is aligned with the strategic planning of the institution, or educational group, and the attendance to all involved in the teaching-learning process happens properly.

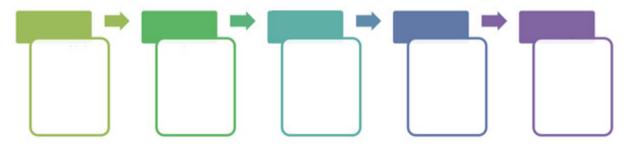
MOMO and BEHR (2015) propose an organizational structure for Management of Distance Education organized under three integrated and interdependent perspectives: Administrative, Structural and Teaching/Learning Process.

The administrative management is correlated with the support to the operation of the Structural and Teaching/Learning management, focused more on the bureaucratic issues that are part of the courses in the distance modality, as well as people management, organizational culture, planning, development, monitoring and evaluation of each step of the work.

The structural management encompasses physical structures, such as buildings, facilities, in-situ support poles and computer systems. The structural management also involves issues such as working conditions and command structures, being correlated with Administrative management as it operates and supports activities, including the Teaching/Learning Process.

And the management of the Teaching/Learning Process comprises pedagogical issues, teacher and employee training, time and space management from the perspective of teachers and students.

MOORE and KEARSLEY (2007) propose a systemic model for Distance Education (Figure 1) with an organizational structure focused on activities, sequentially and focused on the student. Each group of activities is grouped by stages that are interrelated. The authors believe that an in-depth study of these subsystems allows a better understanding of the interrelationships and that the quality of distance courses depends on their integration.



**Figure:** 1. Systemic model for Distance Education (MOORE and KEARSLEY, 2007)

The quality references of Distance Education/MEC suggest an Academic-Administrative Management, correlating organizational and operational activities with those of teaching/learning. According to the authors of this document, the institution that offers Distance Education should clarify its quality referential in its management process, and emphasize that this teaching modality must be integrated to the other processes of the institution, also warning that

the processes of mentoring, production and distribution of didactic material, monitoring and evaluation of the student need to be strictly managed and supervised, otherwise the student will be discouraged from taking the course, or from not allowing the necessary records for the validation of the learning process (MEC / SEED, 2007, p.29).

Regardless of the model and reference adopted, it is possible to observe that common sense points the student as the focus of Distance Education management, and that the organizational structure should allow the integration and interaction of all participants and activities involved in this teaching modality.

#### 3.4. Challenges and business opportunities

Over the last three decades, the evolution of information and communication technologies has made it possible to digitize and create new structures, changing people's behavior patterns and sharing information.

This process of digitalization has generated a series of challenges and business opportunities in the area of Education, such as fast and radical changes in behavior and in the forms of communication; ease of access to innovative technologies and diverse information; global competition; holistic knowledge; ability and competence.

In this scenario of the digital age, Silva (2013) specifies that Education has the challenge of selecting the appropriate information, choosing what to read and how to interpret the information generated, use knowledge to solve problems, contextualize individual and cultural diversities, and situate the plurality of different worlds that intertwine in the digital sphere.

Silva (2013) emphasizes the potential of distance education for speed, flexibility, breadth, internalization and inclusion (social and digital), and that a few years ago the challenge of Distance Education management was to transpose practices and materials teaching methods for virtual learning environments (VLEs). In the era of mobile devices, the challenge is dynamic planning because of mobility.

This challenge has a direct impact on the Information Technology (IT) sector, which needs to follow, propose and implement new technologies, and the sectors that involve the production of content, for the development of interactive learning objects that are accessible, flexible and durable. In addition, the contents must enable reuse and interoperability for other systems, courses, and classes. These activities require multidisciplinary teams, and people management is another relevant challenge in this business segment. According to Vieira (2013, p.16),

Since it involves a multidisciplinary team, it is essential to define the roles and functions of each professional involved and it is essential to define the processes and flows and the forms or procedures in order to achieve the defined objectives. The detailing of actions should prioritize the degree of importance, strategies, routines and academic and administrative activities.

According to the 27<sup>th</sup> Annual Survey of Administration and Use of Information Technology in Companies, held by the Fundação Getúlio Vargas (Foundation) of São Paulo (FGV-SP), in 2016, Brazil reached the number of 2 computers for every 3 inhabitants and reached 168 million of

smartphones in use - a 9% growth over 2015 (CAPELAS, 2016). Statistics on mobile phone use in Brazil, published in 2016, show that Brazilian people use mobile devices (smartphones and tablets) more than the personal computer to access the Internet. Considering 3G and 4G accesses, mobile broadband closed the year 2015 in Brazil with 191.8 million accesses versus 25.4 million fixed broadband (OPUS, 2016).

The Brazilian government - through the Ministry of Science, Technology, Innovations and Communications - has also invested in digital inclusion projects. The Digital Cities project aims to modernize management, expand access to public services and promote the development of Brazilian municipalities through technology (MCTI/Portal Brasil, 2016). In the planning of the project it is provided that internet access points for free use in public spaces of great circulation, such as squares, parks and bus stations are provided. This and other similar initiatives contribute to the increase of digital inclusion.

This scenario presents excellent opportunities for the growth of Distance Education. In addition to undergraduate and postgraduate courses, there is a growing demand for free, technical and professional improvement courses, always observing the current legislation.

# 3.5. Difficulties faced in management in Distance Education

Availability of technologies and Internet access required for the performance of teaching/learning activities; coordination of multidisciplinary teams for the design and development of distance learning courses; logistics for storing, managing and transporting stocks of printed materials and equipment, as well as agility in attending the student are some of the relevant difficulties for the management of Distance Education, which is extremely complex.

The implementation of EAD courses requires a constant study and research, such as: analyzing what the market is looking for, identifying the audience that will be served, as well as apprehending all legal, structural, operational and managerial aspects. (TAVARES and GONÇALVES, 2012, p.1260)

Another important and impacting difficulty for the management of Distance Education is the accelerated obsolescence of technologies. The term obsolescence refers to the outdated state of one product or service by another with innovative features and resources. This difficulty is directly related to the challenge of accompanying, proposing and implementing new technologies and the EAD/MEC quality benchmark regarding financial sustainability.

However, the main difficulty faced in the management of Distance Education is the division of this type of teaching with that of the classroom and the direct impact on the challenges and opportunities of business. The laws that regulate Distance Education are still in the process of being built, and lack clarity in some aspects. Moran (2011, p.2) points out that

There is a legal (of the regulatory bodies) and real (of the institutions, society) separation between distance and classroom teaching, which makes it difficult for us to have relevant academic and management advances. The teams, in most of the higher institutions, are different, the curricula are not integrated, the larger investments are made in face-to-face courses. Lack of strategic vision for many managers. It is still difficult to plan very profound changes, because this involves rethinking education in an integrated, more flexible, less bureaucratic way.

In 2005, the Working Group on Distance Education for Higher Education (GTEADES), created by the Secretary of SESu/MEC, prepared a document highlighting the concern with the laws that regulate Distance Education and recommend that they can ensure quality and expansion of this type of education, as well as treating "Distance Education and Presential Education in an equitable way: equal where they are equal and unequal where they are unequal". The group also proposes "that the infrastructure needs be determined by the pedagogical objectives; that they can provide subsidies in the technological mapping for the creation, support and management of a distance course or program", considering the research and pedagogical practice and the

training of human resources as a necessary condition for the implementation of Distance Education. The document also proposes amendments to the preliminary draft of the REFORM ACT OF HIGHER EDUCATION, which allow greater integration of the modalities of face-to-face and distance education.

Currently, as provided in Art. 80 of Law 9.394/96 (LDB), and posted on the website of the Ministry of Education, the institution interested in offering distance courses must apply for specific accreditation to the Union. The ideal would be to have a single course project with possibility to meet the disciplines in the face or distance mode. That is, the curriculum and syllabus content would be the same for both modalities.

According to Moran (2011, p.3),

The road is convergence in all fields and areas: buildings (EAD also within presential units - poles); integration of digital platforms; digital content production (the same materials for the same subjects of the same curriculum). [...] The Ministry of Education needs to evolve quickly and end this separation of modalities and support that each institution adapts its project to the different types of students: the same pedagogical project of a course can be offered with different emphasis of presence for students with different needs.

The purpose of the requirements of the current laws is to guarantee the quality of the courses offered, however, "it is observed that, despite the valid concern, many of the perspectives are in fact the result of a secular culture centered on the physical presence" (SILVA, 2013, p.26). Thus, it becomes inevitable that the Ministry of Education promotes the revision and change of the laws that govern Education in Brazil, because "legislation is retrograde, bureaucratic, restrictive" (Moran, 2011, p.4).

Decree No. 9.057/2017, published in the Brazilian Official Federal Gazette of May 26, 2017, updates the legislation on the subject and regulates Distance Education in the country, which changes minimize some of the difficulties presented in this research.

The management of Distance Education through transformation projects through processes, digitization and virtualization, especially in what concerns the development and execution of the courses, allows to anticipate solutions to difficulties, problems and inevitable changes in the future.

## 4. Process management

Process-based management integrates an organization's goals and strategies with the needs and expectations of customers using information technology tools. According to The BPM CBOK Guide (2013, p.33),

Business Process Management (BPM) represents a new way of visualizing business operations that go beyond traditional functional structures. This view encompasses all work performed to deliver the product or service of the process, regardless of which functional areas or locations are involved.

Business processes include human (manual) and machine (automated) work, managed by information systems for data collection and transmission that allow for substantial improvements in organizational performance. Improving processes enables greater productivity and innovation of products and services for customers and, therefore, generate growth and profit. In this context, if process management is capable of transforming a business and adding value to its customers, then it can be considered as a fundamental competitive differential in a globalized and competitive environment.

Process modeling should complement management, flexibilizing and streamlining a business's activities to solve problems and face challenges that involve multiple end-to-end functional units with the goal of better meeting the needs and expectations of customers. However, process management does not eliminate the hierarchy and functions defined in the organization chart. Gonçalves (2000, p.14) states that

[...] companies are usually organized as sets of vertical functional units isolated from one another, operating in parallel, without much interconnection. In this model, processes need to cross the boundaries between functional 'chimneys', with significant loss of time, quality, and serviceability.

Every business is a system composed of inputs, products and tasks to generate value results. Process modeling should reconsider all sequences of point-to-point activities, from ordering/contracting, through different departments/sectors that make up the business structure, to delivering the product or service to the end customer. Each activity sequence is a process, defined according to the initial and final limits, and understanding how all resources (human, technological, material, financial, etc.) are used, in the best possible way and combination, to generate value for their customers and stakeholders.

It is necessary to seek new ways of managing, more adherent to a new reality in which clients are more demanding, there is greater competition, uncertainty and complexity in operations, intellectual capital is increasingly valued and the intensive use of information technology conditions the business. (JESUS and MACIEIRA, 2014, position 416)

The management needs to be rethought, digitizing and virtualizing processes to the maximum, for continuous improvement and for agility, flexibility and adaptability.

To make a digital process is to reinvent it completely, often leaving obsolete what exists today. It is rethinking it from the widespread use of digital technologies, making them faster, cheaper and better. [...] In the digital world, we migrate from design to performance, and performance allows us to go back to evolve design. The monitoring takes place in real time, allowing to intervene in the execution and constantly improve the design. Cycles will therefore be much shorter and more dynamic. [...]

Static and cast solutions give way to new management approaches, agile, flexible and strongly enabled by digital technologies. (JESUS, 2016, p.8-9)

It is necessary to anticipate the future and propose solutions and innovations as soon as possible, and thus drive changes to build a business in tune with the new times and technologies. And these factors are fully aligned with the needs of distance education management presented in this research.

According to Silva (2013, p. 59), "the management by processes presents itself as an interesting alternative", considering the management of Distance Education as a system that should have the processes aligned with the mission and instructional objectives, "which include learning, teaching, communication and creation".

# 5. Advantages of Business Transformation Projects

Transformation projects promote changes in how businesses are conducted to track or anticipate trends and opportunities in the market environment, impacting a company's ability to build and maintain successful relationships with customers.

According to Furlan (2016), the need for business transformation may be caused by external changes in the market, such as outdated products or services, funding or income flows being changed, new regulations coming into force, or competition in the market becoming more intense. This management approach incorporated into business process modeling aims to increase revenue and market share, improve customer satisfaction and value, and cut costs.

Recognizing the need to change through consensus among all stakeholders in an organization is the first step toward business transformation, which occurs successfully if there is systemic vision, looking from another perspective and projecting the look into the future.

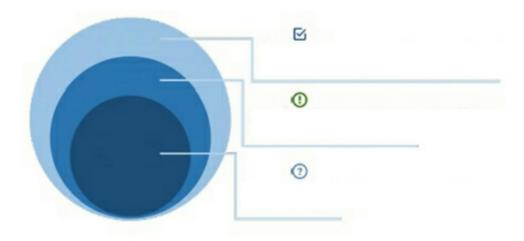


Figure 2: Golden Circle of Business Transformation. (Furlan, 2016, position 2339)

Silva (2013, p.42) points out in the book "EAD Management" that "the great merit of the systemic vision lies in the search for solutions that are effectively applicable to reality," and that "in practice, the management by processes complements this vision". The author also points out that these principles are also essential for the management of Distance Education, since "a failure in any sector can jeopardize all the work of the institution".

The next steps are to set goals and targets to be achieved for this change; realign the way people work; restructure the organization; renew and/or update the portfolio of products or services and implement new technologies. In this way, it is possible to expand business possibilities leading to new ideas and solutions, to develop new skills and to leverage existing ones, which can also be seen as forces of transformation.

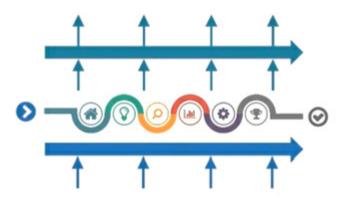
Furlan (2016, position 1305) points out that "Business Transformation is not limited to improving efficiency, eliminating errors, doing the same thing a little better or solving immediate crises. It is about having a new vision, rethinking the business and redefining the market".



Figure 3: Business Transformation. (Furlan, 2016, position 630)

The business transformation requires leadership and building new ways of generating value, changing the organizational DNA and shifting paradigm, always casting a glimpse into the future, to visualize trends and opportunities. Leadership needs to be in tune with teams, with new structures and behavior patterns, properly planning PEOPLE, PROCESSES and PRODUCTS/SERVICES. The process management model requires a shift in thinking to facilitate management, streamline customer service, and minimize problems and costs.

Furlan (2016) points out that it is necessary to have a "purpose" (the reason why) clear and connected with values and the "portrait of the future" (where). The "future portrait" has to do with the reason for the existence of the organization, i.e., what is believed and that directs choices and behaviors, showing the way to be followed and uniting people to achieve common goals. The growth and success of an organization depends on a clear understanding of the "the reason why" and the "where do you want to go".



**Figure 4:** From purpose to future portrait. (Furlan, 2016, position 2352)

Based on these premises, business transformation projects in Distance Education management make it possible to minimize, mainly, problems and delays in the planning and production process of distance courses. The focus is to move from one state or condition to another, and to have anyone engaged with the purpose of the institution/organization, to flexibilize and facilitate the accomplishment of multidisciplinary activities by small/lean teams.

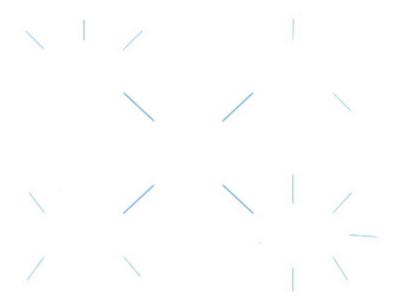


Figure 5: Navigating Towards Success, by John D. H. Greenway, in Leaders' Map. (Furlan, 2016, position 2474)

The purpose is to create end-to-end cross-functional processes and define the roles related to process management, organizing skills, which are characterized by specialization and technical knowledge in a given function, seeking to balance what customers value with the product or service offered.

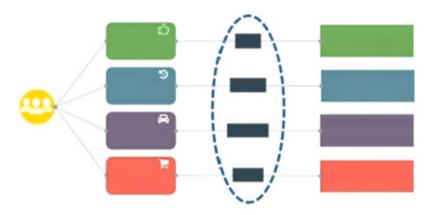


Figure 6: What customers want. (Furlan, 2016, position 3107)

If, for educational institutions, customers are students, then students should observe the quality of the teaching/learning process, considering their perspectives, promoting easy and enjoyable experiences and interactions to achieve their life and career goals.

Simplifying, facilitating, streamlining and flexibilizing processes for interaction, service and decision making is fundamental to improving the results in an organization, and these are constant challenges in Distance Education, which can be overcome through information and communication technologies, and digital processes.

For example, the implementation of a content management system associated with operational processes allows the organization of teaching materials and digital learning objects for reuse in other courses or classes, facilitating the adaptation and instructional design of virtual learning environments. If this system is developed for multiplatforms, with responsive design, it also allows overcoming the mobility challenge, accessible in any type of device.

From the point of view of opportunities,

A transformation project does not identify and implement process improvements, but uses process orientation

to understand what is expected of a product/service and how the work should be organized to meet expectations and needs. (MACIEIRA and JESUS, 2014, p.9)

In 2017, there were significant changes in the legislation that regulates Distance Education (Decree No. 9.057/2017, published in the Brazilian Official Federal Gazette 26, 2017), and the main one, published on the website of the Ministry of Education (MEC), is "the creation of poles of ODL by the institutions themselves and the accreditation of institutions in the ODL modality without requiring the prior accreditation for the presential offer". According to a publication on the website of the Ministry of Education (MEC), "all the changes had as objective, besides expanding the offer and the access to the superior courses, to guarantee the quality of the education" (MEC, 2017).

These changes undoubtedly broaden the business opportunities for institutions and companies that work in the Distance Education segment, including for offering distance courses for high school and for technical secondary professional education.

Based on the analysis of the data and information obtained in this research, it is possible to affirm that the flexibility of business transformation projects through processes and digitalization, scalable and resilient, contribute positively to optimize all the resources involved in the management of Distance Education and make it possible to improve the quality of the offered courses and the service/support to the students, as well as to anticipate the opportunities to obtain competitive differential.

#### 6. FINAL CONSIDERATIONS

This research contextualized the management of Distance Education and, in this way, inquired about new perspectives and ideas for this business area. Through the analysis carried out, it is observed that the educational system needs to be reconsidered to follow new technologies, face accelerated obsolescence and allow adaptation to new lifestyles and growing socio-environmental demands. It is not enough to just adopt new tools; it is necessary to take on new behaviors as well as innovate

structures and business practices. We must seek new ways of managing. Making digital and virtual processes enable continuous improvement, agility, flexibility and adaptability.

In the last decade, there have been several changes in the laws that regulate Distance Education in Brazil, and others will happen soon, probably integrating the modalities of education. When this happens, new challenges and opportunities will emerge, and the competitive edge will be a more flexible and easily adaptable management structure that is adaptable to future changes, with the maximum of digitalized, scalable and resilient processes that are easy to access and strongly enabled by technologies information and communication to support management and pedagogical actions.

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