

# Business and Virtual Collaborative News Model

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**Abstract**— *This paper aims to demonstrate a business model and management for a virtual collaborative news environment (VNCE), which is being implemented at the Northern Fluminense State University - UENF, in the Postgraduate Program in Cognition and Language. The difficulty of the journalistic business in surviving, in view of technological changes, the growth of the digital environment, the predominance of intangible wealth, the valorization of intellectual capital, among other variables, has raised the question of the real possibility of a journalistic organization surviving in this scenario. Interdisciplinary environment involves research in the area of communication, information system, administration and accounting and seeks to meet the demands of generation, storage, retrieval, processing and transmission of information in this digital era. An increasingly intelligent, collaborative environment with the active participation of all the agents involved, that is, with the total interaction of the reader-user of the internet. A business and management model that has as main differential the recognition of the intangible wealth, besides the traditional tangible gains, in an era of new economy, where the digital business prevails and the primacy of the intangible wealth, recognized in the expectation of future gains of these companies. Governed by the logical intelligence of a control system whose purpose is the congruence of objectives of the agents that form the business, able to measure the contribution of each agent, generating their respective monetary*

*recognition. Through a cyclical process of creation, delivery and capture of value by all the agents involved that allows planning, control, feedback and replanning, the proposed model is supported by a goal congruence control system that will enable management of this environment, ensuring its continuity and expansion of scope.*

**Keywords**— *Industry Journalism, Business Model, Management Model, Intangible Wealth.*

## I. INTRODUCTION

Trends to changes in political, economic and social scenarios have spoken out with increasing intensity and at breakneck speed. Society is constantly changing and adapting, and this process of transformation is partly a reflection of technological changes, especially influenced by the Internet, cyberspace and cyberculture, which have been important disruptive moments since the 1990s.

The transformations that have been taking place in a fast and multifaceted way are influenced by the diverse possibilities offered by a common digital language in different fields, due to its ease of creating interfaces between technological fields that generate, store, retrieve, process and transmit information, in real time or not.

This boiling technological changes, especially influenced by digital media, led to paradigm shifts in the way the information was and / or are treated, generating a

big impact in the business world and, even more incisive and direct way, business-related journalistic organizations.

With this scenario of digital influence, journalistic organizations have been adapting and reinventing themselves, especially after the transformation suffered in their means of distribution and circulation after the popularization of the Internet and the emergence of cyberspace. Through data from the Verifier Institute of Communication - IVC, the National Association of Newspapers - ANJ, the Internet Management Committee - CGI, among others; it is possible to prove the change in the journalistic scenario in Brazil and in the world, so that these organizations now have the following characteristics: migration from print to digital transmission; difficulties in maintaining revenues in print and the need to change the way revenue is generated in the digital environment; interactivity, in which former media consumers have become producers and consumers at the same time; the need to master various media; predominance of the generation of value in intangibles, generating the need to prioritize investments in intellectual capital; a large difference between the book value and the market value of the companies.

This scenario has required the development of new business models and management for digital journalism (COSTA, 2014), since the virtual environment leads us to look at the media business in a new way, which requires innovative businesses that help navigate better in this convergent world (OSTERWALDER, 2011; JENKINS, 2009).

Faced with this reality, where the medium of circulation is no longer printed to be digital, it is believed that an efficient business and management model for journalistic organizations in this digital age becomes increasingly relevant, emphasizing the importance of rethinking what form should be the management in the journalistic organizations of this digital era, aiming its existence and continuity.

To this end, the Center for Research in Communication, Administration and Information Technology (CATI) was created, linked to the Postgraduate Program in Cognition and Language of the Northern Fluminense State University (UENF), which is part of the Education Studies Group, Communication and Information Technology - GETIC, registered at CNPq.

GETIC / CATI has as a research proposal the development of environments and tools that seek to meet the demands of generation, storage, retrieval, processing and transmission of information (news) in this digital era. At the moment a research is being developed to implement a virtual collaborative news environment (VNCE).

In an interdisciplinary way, the implementation of this VNCE involves concepts from the areas of communication, information system, administration and accounting, involving three research fronts: rethinking the logic of news production, structuring a platform that is collaborative and defining how it should be a management and business model that can give sustainability to this environment.

In this paper the objective is to demonstrate how the business and management model should be for a virtual collaborative news environment, since the way of producing information has changed, and the monopolization of the distribution that previously belonged to the journalistic industry no longer belongs, and practically, any individual can produce and distribute information (COSTA, 2014).

A new type of collaborative journalism emerges where citizens or groups of citizens actively participate in the process of collecting, reporting, analyzing and disseminating news and information (BOWMAN and WILLIS, 2003) at all times through social networks.

In this way, in this new era, wealth is no longer centered solely on physical benefits; but mainly in intellectual capital and intangible assets, which generates the need for a business and management model that considers this intangible wealth in the value creation of the journalistic organizations of this digital era.

## II. THE DISRUPTION IN THE JOURNALISM INDUSTRY IN TIMES OF CYBERSPACE AND CYBERCULTURE

It was around 1990 with the popularization of the Internet, which made possible the interconnection of computers in a network, that the term Cyberspace became better known and was defined by Lévy (1999, 94) as "the communication space opened by the interconnection world of computers and the memories of computers, "which already made him predict the revolution that would cause

“This new medium has the vocation to put in synergy and interface all the devices of information creation, recording, communication and simulation. The perspective of the general digitization of information is likely to make cyberspace the main channel of communication and memory support of humanity from the beginning of the next century” Adapted (LEVY, 1999, p. 95)

This new space, called cyberspace, influenced all the dynamics of the newspaper industry, changing mainly the whole process of printing and distribution of news.

With the Internet and cyberspace, the expenses with printing, circulation and distribution of the news

practically disappeared and this generated the need for a new design of business model in the journalistic industry, as clarified by Costa (2014)

“The old way of producing information has changed, the monopolization of distribution, which belonged to an industry called journalistic, no longer belongs. Anyone can now produce and distribute this information. What is happening is a combination of media and communication, thus giving birth to the overdistribution” adapted (COSTA, 2014, p.54).

This new space, called cyberspace, allows a greater interaction between people, deepening social relations and enabling the formation of communities, to what Levy (1999, p.17) calls Cyberculture, that is, "a set of techniques and intellectual, practices, attitudes, modes

of thought and values that develop along with the growth of cyberspace."

For Santaella (2013, p. 136) Cyberspace is a space with its own existence, of a mobile, fluid and liquid nature, where "information circulates in the blink of an eye" and "everything moves in connection", which ended up giving origin of a new form of culture, called cyberculture.

In times of constant technological changes, it is likely to interrupt the normal path of some process, are the so-called disruptive moments. Increasingly it is possible to perceive an acceleration of occurrence of disruptive events for the journalistic industry. These events did not come to optimize journalistic production activity, but they have altered, and are changing, the essence of what to do, transforming this industry completely. This acceleration can be seen in the figure below:

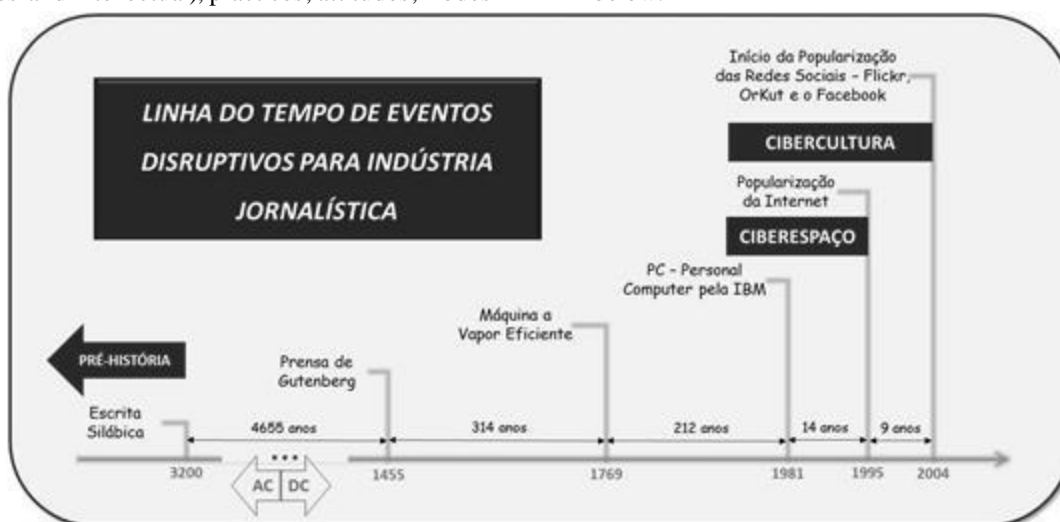


Fig.1: Timeline of Disruptive Events for the Newspaper Industry. Source: Rodrigues (2017)

Costa (2014) points out that the journalistic industry took much more time to understand the disruptive momentum it experienced than other industries such as telecommunications, music or retail, for example.

In this context, the phenomena caused by the insertion of the Personal Computer, the intensive use of the Internet and the popularization of Social Networks, have altered the relations in the journalistic business, as well as the way of measuring the wealth of the companies in this industry, (Kayo, 2002, p.14) as "a structured set of knowledge, practices and attitudes of the company that, interacting with its tangible assets, contributes to the formation of business value".

Oliveira (1999) points out that the formation of intangibles becomes the center of companies that use the logic of the knowledge economy, where creativity, information processing capacity, knowledge, human capital and other intangibles have the capacity to generate wealth much faster.

### III. THE MEASUREMENT OF RESULTS IN ORGANIZATIONS OF THE DIGITAL AGE

With the evolution of the businesses whether or not they are linked to communications, as a result of this technological development, there has been a great increase in the capacity to obtain economic results, which has required the constant development of business and management models capable of helping in managing the different generated wealth in this digital era.

Pereira (in Catelli, 2001, p. 75) explains that the economic result of any company is formed by the results of the areas that compose it, each area being responsible for certain activities, which need to consume resources, which are called costs or expenses depending on the origin of this expense, always with the intention of generating products and services that will enable the constitution of revenues. The comparison between revenues and expenses is that the economic result of a business is determined.

Accounting is the science responsible for this task, because as a science specially designed to capture, record, analyze and synthesize the facts that occurred in the company (IUDICIBUS, 2005), it is through its techniques that it will be possible to determine the economic outcome of the organization, as explained by Iudícibus (2005)

The ability to capture, first, an occurrence of events that impact a particular state of wealth, after a prerequisite, finally, to communicate its strengths, is a challenge to an Accounting is not only preferentially, but of fact, able to face, always relying on related disciplines such as Law, Quantitative Methods and Information Science. (IUDÍCIBUS ET AL, 2005, p. 8)

Constant change has created a dynamic and competitive environment for Iudícibus (2010), where wealth is no longer focused solely on physical benefits but on intellectual capital and intangible assets, which means that managers need to produce better and better results.

In the business world, the fusion of knowledge and available technologies generates intangible benefits, also known as Intellectual Capital. The positive point of this concept is that it represents the junction of the knowledge of its bearer with the materialization of this knowledge in the form of trademarks products and processes. The negative point is that the concept of Intellectual Capital is relatively arbitrary, because because it is intangible, it also represents a gap between the value of the company as a whole and its real financial value (ANTUNES, 2006).

Organizations that have stopped acting alone to act in "synergy, partnership, with the capacity to bring together companies from diverse sectors to generate an independent business" (NASSIF, 2000, p.11) are considered the "new economy". From the 80's with the emergence of the computer and the 90's with the popularization of the internet, Cyberspace and

Cyberculture emerged, definitive for the transformations that occurred in the journalistic industry and for the establishment of the concept of "new economy".

According to Siqueira and Crispim (2012, page 11), the term "new economy" can also be called the digital economy, internet economy or web economy, where "digital networks and communication infrastructures provide a global platform from the which individuals and organizations interact, communicate, collaborate and gather information. "

"New Economy" is the new concept of doing business in the digital age, where the currency is information and the great beneficiary is the customer. Based on the real-time concept of the internet, where distances do not exist and almost everything is a click away, you need to review company-customer relationship policies.

According to Tapscott (1997), the technological revolution that the world has been experiencing does not only encompass new internet technologies, since it is an era of network interconnection, but also encompasses human beings, organizations and societies.

It is in open and porous environments that the living existence of virtual communities can germinate, as well as the more recent views of the meaning of organizations, which is defined as "organic and dynamic processes in which new elements constantly come into play" ( SANTAELLA, 2010, p.278).

#### IV. THE DIFFERENT RICHES IN THE ORGANIZATIONS OF THE "NEW ECONOMY"

In times of New Economy organizations how to measure business wealth, since a portion of wealth is tangible with its quantifiable assets and another great part is intangible as its brands, prestige, reliability and knowledge. It is considered important to analyze wealth in two aspects: Tangible and Intangible.

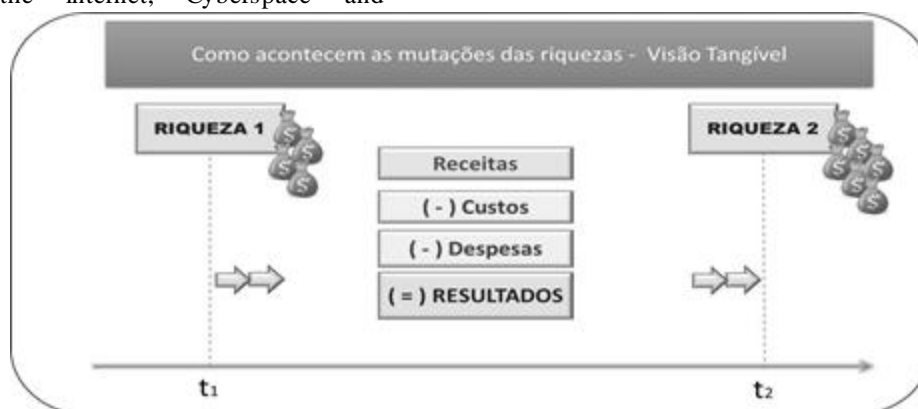


Fig.2: Wealth Mutation in tangible vision

Source: Rodrigues (2017)



Tangible wealth is represented by the traditional comparison of revenues, costs and expenses of a given period, where the result of a certain period is obtained that directly changes the wealth of the business. Such behavior of mutation of the riches can be visualized in the Fig 02:

At a given initial period  $t_1$  one has the initial wealth  $R_1$ . With the development of the activities by the organization is the comparison between the revenues (sales / services) and the costs and expenses acquired in a given period, which is called the result. This economic outcome will change the wealth to a later time  $t_2$  generating wealth  $R_2$ .

Intangible wealth is the value added to the knowledge of the company about a product or process, and in this conception of business, knowledge has greater value than physical patrimony. With the advent of the digital age, the intangible becomes the most valuable part of a company (KAYO, 2002).

In this context, where companies need to seek new ways of generating value, which will define the effective value of the company, it is the best interaction between tangible and intangible assets, since it is difficult to dissociate one from the other. (PEREZ and FAMÁ, 2006).

Authors such as Kayo (2002), Lev (2001), Stewart (1998) and others have stated that wealth generation in companies would be directly related to intangible assets, as these assets would be responsible for higher economic performances and for generating shareholders, and also that a greater presence of unaccounted intangible assets could explain the gaps between the market value of the companies and the amount reflected by traditional accounting, a term known as goodwill.

In this new digital world, there are many examples of companies with this profile to be cited: Instagram that was acquired by Facebook for a billion dollars in 2012, with only 13 employees (FERNÁNDEZ,

2017), Snapchat, refusing to offer US\$ 3 billion and Facebook, buying Whatsapp for US\$ 19 billion (COSTA, 2014).

According to Moreno (2016), AirBnB, an online community marketplace for people to advertise, discover and book accommodations around the world, is raising money to make new investments and pursue new growth opportunities, after becoming the third most valuable startup in the world, \$ 30 billion dollars, according to The New York Times, behind only Uber and Xiaomi.

Mamona (2014) cites in the magazine's review report entitled 20 companies traded above the equity value on the stock exchange, the survey done by Ativa Corretora that shows which companies are worth much more than their equity value. The result of this survey confirms that the market pays far more than the companies are worth, as is the case of Cielo in which the equity value of the share is US \$ 2.24, while the market value is US \$ 36.92 , worth 16.5 times more.

Quantifying this intangible value, which is the gap between the balance sheet of a company and its market value, goodwill is one of the great challenges of our time, especially for companies that hold high technical knowledge, as explained Catelli (2001) :

It is the goodwill that constitutes, mainly, the capacity of the company, as subsystem, to interact effectively as the macro-system environment. It is this capacity that leads to the right decisions, by which the company, already in the present, anticipates in some way the future creation of value, increasing the value of its patrimony. (CATELLI, 2001, p.31).

Such behavior of wealth and value mutation is represented by the future flow of benefits that can be visualized in Fig. 03

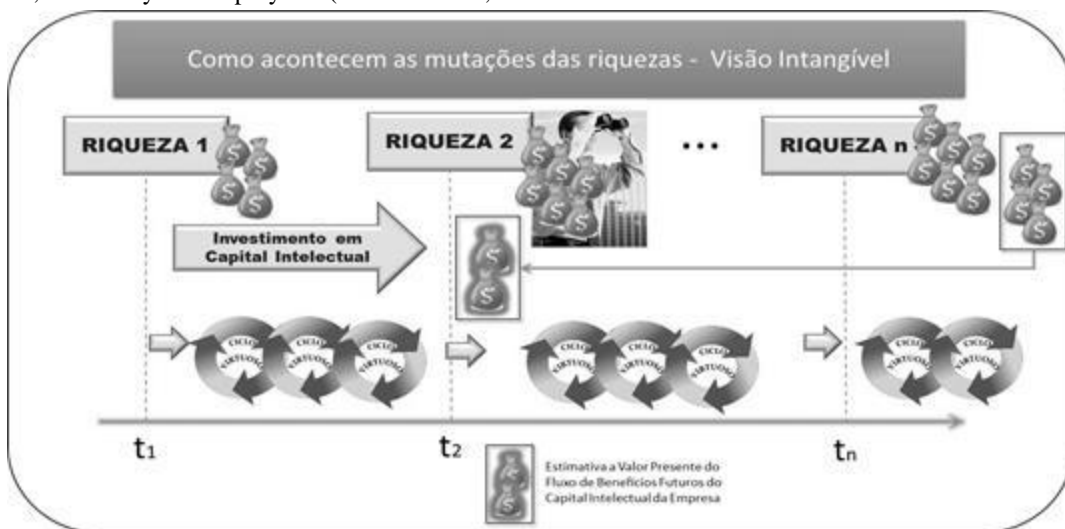


Fig.3: Mutation of Wealth in the intangible vision

Source: Rodrigues (2017)

Fig. 3 describes the tangible ( $t_1 \times t_2$ ) and intangible ( $t_2 \times t_n$ ) richness variations of a supposed organization that already engaged in the scenario of the organizations of the new economy systematically makes investments in its intellectual capital, which gives it in a vision medium-term growth of tangible wealth.

Considering intellectual capital as a set of intangible benefits that add value to organizations, with the capacity to generate future profits, what is important to highlight is that at some future time it will be converted into monetary value (MARTINS and ANTUNES, 2002).

In this context, migration of economic results generated through tangible assets that happens to occur through intangible assets, stands out the journalistic industry that originally as a traditional organization had its wealth change based on large tangible assets of its industrial (revolving), moving to the use of low-value tangible assets (computers in networks) through cyberspace and cyberculture. With this, it has acquired a great capacity of distribution and circulation, which receives to it an intangible asset of extreme potential of generation of future benefits, to which we call wealth.

This new form of wealth has revealed the need to rethink the business of the journalistic industry, which is already occurring in a timely manner throughout the world, as there are innumerable changes in journalism arising from the new digital era: rapidity in production and advertising spread and content collection, loss of paying readers, among others (PENA, 2008).

The journalist Caio Túlio Costa, in his postdoctoral research at the Columbia University Graduate School of Journalism, confirms that there is this need for change, since what he attended to the printed product no longer serves the digital: "newspapers need to shake their way relate to people and respect the new ways they consume related information and services" (COSTA, 2014, 55).

The new value chain in the news industry is totally different from the traditional value chain. One must understand that the traditional way of doing journalism has changed. Costa (2014) even recognizes some attempts at change, however, based on the old value chain of the journalistic industry:

Its executors only transposed to the digital media the old Gutenbergian form, the same model of the business. First, they published on their websites the very production of journalistic content. Second, they filled

this production with advertising (or what was left of it) and, third, the distribution of the product began to be made through the commercialization of digital signatures (COSTA, 2014, 54).

In the new value chain of the digital environment, it is necessary to share distribution and advertising. Costa (2014) still points out that journalistic organizations need to transform themselves into technology companies as well, as the new model breathes in with social networks. For him, the issue is not just being on Facebook or Google, is knowing how to be in each of these networks, in each of the digital platforms, and for this there is technique, that is, you have to modulate for each network; and this is what he calls the superdistribution (COSTA, 2014).

## V. CONCEPTUAL BASIS FOR MANAGEMENT AND CONTROL OF VNCE

The way organizations seek to generate value, also called a business model, has undergone numerous transformations due to the technological disruptions that have occurred in the last decades. For Osterwalder and Pigneur (2011, p.15), the business model shows "the logic of creation, delivery and capture of value by an organization", that is, how to create value for all its stakeholders, be they stakeholders or shareholders. The authors further explain that the business model "is a scheme for strategy to be implemented through the organizational structures of processes and systems" (OSTERWALDER, 2011, p.15).

On the other hand, the management model defines the logical and rational form of the process of transforming the objective into result, by setting priorities and setting goals, going beyond the numbers, valuing agents and people and providing convergence to business goals (KUGELMEIRER, 2014 ).

In order to delineate a business model and management for a collaborative virtual news environment, an interactive view of the planning, execution and control process is considered important. Planning and control are inseparable and only differently distinct, both integrated by feedback (OLIVEIRA, 1999, p.162).

According to Catelli (1999, p. 128), "the process of economic management is, in reality, a great process of control, aimed at ensuring business efficiency". For the model proposed here, management control is extremely

important, in view of its purpose, which is to influence the behavior of the members of a formal organization.

In a systematized model it is necessary to observe the actions of the people, since it is a system of human activities. To be effective a management model and its control system focused on achieving economic results, it is much more necessary to motivate people to achieve organizational goals than simply to ascertain what is currently occurring.

A control system seeks to promote an identity between the goals of the organization's members (individuals as well as groups) and the goals of the organization as a whole. Unfortunately complete congruence is hardly achieved. Thus the goal of the control system is to increase the degree of Goal Congruence (FLAMHOLTZ, 1979).



Fig.4: Partial Goal Congruence Scheme

Source: adapted from (Flamholtz, 1979)

Maximizing the likelihood that people are motivated to achieve organizational goals is the main

purpose of Goal Congruence, which through Flamholtz's (1979) approach deals with the issue of the influence of systems on the behavior of those involved.

In this way, a business and management model for journalistic organizations of the "new economy" needs to use Logical Intelligence of Goal Congruence in defining the roles of all agents involved in the business. Through Flamholtz's (1979) approach to the issue of system influence on stakeholder behavior, Goal Congruence's main purpose is to maximize the likelihood that people will be motivated to achieve organizational goals.

It is also considered important that this business model and management use a method of solving problems, which will be adopted here the PDCA cycle, a management tool that promotes the maintenance and continuous improvement of processes, through a circuit of four actions : Plan , Do, Check and Act (CAMPOS, 1992a).

The PDCA Cycle can be used to maintain and improve the "control guidelines" of a process, from two perspectives: maintenance (viable and sustainable goals) and improvement (the goals are challenging). Through the PDCA cycle it is possible to control whether the efforts are actually delivering the expected results.

Fig. 05 seeks to harmonically demonstrate the main concepts of the business area, considered the most appropriate to create a business model and management that helps in the management of a virtual collaborative news environment.



Fig.5: Concepts used in business model and management for VNCE

Source: Adapted from Rodrigues (2017)

Through the management model, the strategy to be implemented, defined by top management, based on the attributes of scenarios and markets, is established. For the implementation of this strategy and the scope of the competitive advantage, the model is used of the organizational structure, mediated by the actions of planning and control of the Controllership. Controllership, in their measurement models, defines the decision support variables, which aim to guide the convergence of the business objective and its transformation into competitive advantage.

**VI. ASSUMPTIONS OF THE BUSINESS MODEL AND MANAGEMENT FOR THE VNCE**

From the new scenario outlined for the journalistic organizations of the "new economy", the most appropriate concepts were identified to control this new way of generating value in journalistic organizations of the "new economy", in order to make its existence feasible and continuous. In this way, six premises were outlined that are the basis of the business model and management for a collaborative virtual news environment:

- ✓ Logic of creation, delivery and capture of value by the organization;
- ✓ Increase in tangible and intangible wealth as value;
- ✓ Integration and convergence of agent objectives through Goal Congruence;
- ✓ Management control system through the PDCA cycle;
- ✓ Establishment of a virtuous cycle;
- ✓ Growth through a range improvement cycle.

When defining a business model, you have to keep in mind that this business needs to create value for someone, deliver that value to someone, and also capture the monetary value to keep it running. This is the logic of Osterwalder and Pigneur (2011) and was used to operationalize the business.

In this way, with the first premise, the agents that form this environment, here called Portal de Notícias (reader, publisher, advertiser and the portal itself) were defined, as well as the function performed by each one of them and their relationships, a process of creating, delivering and capturing value.

*Table.1: agents forming the new journalistic business*

BUSINESS AGENTS			DESCRIPTION
FORNECEDOR	WAY	Publisher	Responsible for generating the reports that will be made available to clients (readers).
	ENDING	New Portal	It will act as responsible for providing advertising spaces for customers (advertisers, large news portals and e-commerces).
PRODUTO	WAY	Report	Responsible for the connectivity of the client (reader) to the portal.
	FIM	Portal - Advertising Space	Responsible for the receipts of the client (advertiser) regarding the use of advertising space of the portal.
		Portal - Digital Shopping *	Responsible for the customer's (advertiser) receipts regarding the use of Shopping Digital* advertising space and commissions on sales originated in the portal.
		Advertising Portal Portal for Affiliates	Responsible for the receipts of customers (large news portals and e-commerces) referring to commissions on sales originated in the portal.



CLIENTE	WAY	Reader	Responsible for the use of the Product (reports) which, through the frequency of connectivity, will provide an intangible wealth increase to the business.
	FIM	Anunciantes	Responsible for the use of the product (advertising space of the portal).
			Responsible for the use of the Digital Shopping product.
		Great News Portals and E-commerces	Responsible for the use of the product (advertising space for affiliates) where their products and ancillary services are displayed.

Source: Rodrigues (2017)

Fig. 06 demonstrates the logic of creating, delivering and capturing value, by the agents that form the business and their respective actions, both in the MEIO process and in the tangible wealth consolidator process.

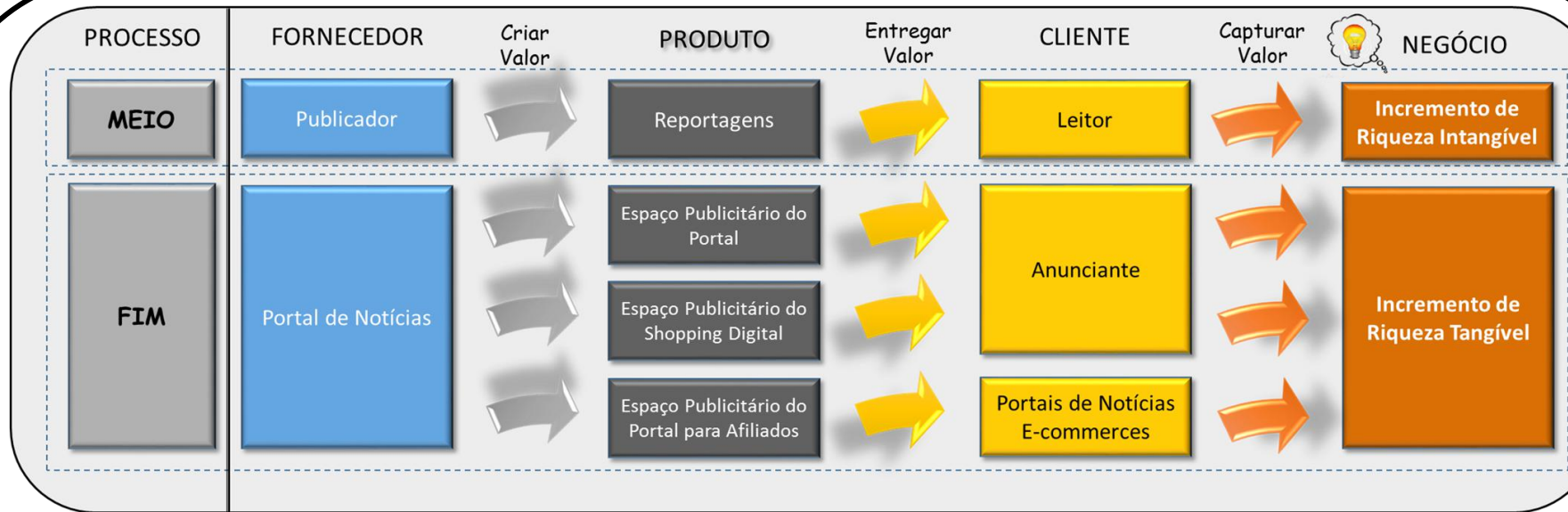
From the perspective of the two processes visualized, process middle and end, it is important to describe the logic of value creation by the supplier, delivery of value to the customer and capture of value by the business for a better understanding.

In the medium process of generation of intangible wealth represented by the multiplication of accesses to the portal, one has the publisher as the agent of creation of value, who realizes the generation of wealth through the elaboration and posting of his reports. The reports will act as attractors of access by readers (clients) who, according to their judgment (enjoy, share and follow) will increase the number of accesses via digital medium, resulting in greater potential for tangible wealth, and consequent appreciation of advertising space.

At the end process of tangible wealth generation represented by the entry of monetary resources, there is the News Portal providing advertising space in three different ways:

- ✓ for advertisers who just want to make their ads on the portal;
- ✓ for advertisers wishing to be part of the Digital Shopping space - having to pay a monthly bond fee (fixed amount), in addition to remunerating the portal with a commission on all sales that they make via portal;
- ✓ and a third type of use of ad space that will occur when the portal decides to join other larger portals to better optimize its ad slots.

Affiliation is a strategy used by many journalistic organizations, especially the beginners, as a way to optimize their spaces not contracted by advertisers, which brings an increase of revenue and, mainly, visibility for the new journalistic enterprise.



Processo	Fornecedor	Criar Valor	Produto	Entregar Valor	Cliente	Capturar Valor	Negócio
MEIO	Publicador	Elaborar e postar	Reportagens	Acessar e ler	Leitor	Curtir , compartilhar e seguir	Incremento de atratividade do Portal referente ao crescimento de acessos (riqueza intangível)
FIM	Portal de Notícias	Disponibilizar	Espaço Publicitário do Portal	Usar e efetuar vendas	Anunciante	Adquirir e Pagar	Ingresso monetário referente a venda de espaços (riqueza tangível)
	Portal de Notícias		Espaço Publicitário do Shopping Digital		Anunciante	Adquirir e Pagar Vender e Pagar	Ingresso monetário referente a venda do espaços e taxas de comissões sobre vendas (riqueza tangível)
	Portal de Notícias		Espaço Publicitário do Portal p/Afiliados		Portais de Notícias e E- commerce	Vender e Pagar	Ingresso monetário referente a taxas de comissões sobre vendas (riqueza tangível)

One of the main points of support for this model is the consideration of increases in tangible and intangible wealth for the purpose of measuring value growth. Such a focus should enable ideas, knowledge, the capacity to process information, and other intangibles, such as human capital, to be identified and quantified as a form of wealth, given that these increases now anticipate, in some way, the future creation of tangible value.

With the second premise, measures will be proposed to measure the performance of all stakeholders in relation to tangible and intangible wealth. Below are some examples of measures to measure the increase in intangible wealth for attribution of performance to reports and recognition of the publisher:

1 - Findability in Search Engines (qualitative) - refers to the positioning of search engines and the various factors that can cause a report to appear on the first, tenth, or hundredth page of results. In this way, it is understood why this measurement is valued, since it will be directly responsible for the optimization of accesses and, consequently, for the visibility of the Portal.

It is common to find specialized applications in this measurement. One of the main applications is the "SEMrush" tool available at <https://www.semrush.com>, which provides a number of attributes of your domain.

An interesting example of investing in intellectual capital would be to offer such courses to publishers of the Portal de Noticias, so that publishers learn how Google's algorithm works, thus seeking the first places of appearance in their system of the search.

2 - Geographic locality of access (qualitative) - the proposal of the business model and management for news portals, presented here, defends a growth strategy starting from a locality focus, close community, to then gaining superior coverage through the Improvement Cycles and reaching new markets such as neighborhoods, city regions, nearby cities, a region of a state, and so on.

Within this context, as the Portal's expansion phase occurs, the geographical origin of the connection will receive a differentiated performance attribute. Thus, in the initial phase of implementation, a connection having as geographical origin China will have a lower value assignment than a connection that has as geographical origin the district of location of the university.

3 - Origin of access in cyberspace (qualitative) - refers to the qualitative origin of navigation. A verification of the reader's source access will be performed before accessing the portal / report. The purpose of this verification is a qualitative evaluation of this access, based on a categorization of the site predecessor to the access to the Portal.

As an example, the Norton categorization table can be used as reference in the model in question, for the

construction of the evaluation of intangible wealth increase, an access coming from a site of the negative category (subjects related to alcohol, crime, drugs, hate, among others) would receive negative qualitative scores, while positive sites (subjects related to advertising, art, government, news, etc.) would receive positive qualitative scores.

4 - Access Abandonment Index (qualitative) - refers to the quantification that the reader left the Portal of News in a certain report. This will negatively punctuate the report/publisher.

5 - Number of Accesses (quantitative) - refers to the quantification of accesses that a given report obtained in a certain period of time. This will positively and directly proportionate the number of hits.

6 - Length of stay (quantitative) - refers to the quantification of the reader's dwell time in a given report, in a given period of time. This will score, positively, and directly proportional the access time.

In order to make due recognition of the News Portal and advertisers, it is important to relate some examples of measures to measure the increase of tangible wealth for attribution of performance to the Portal - advertising space and Portal - digital shopping:

1 - Billing by period - time (quantitative): refers to the billing in monetary units that a certain advertising space obtained in a certain period of time. This measurement will positively score and directly proportionate the billing.

2 - Number of transactions effected in the period - time (quantitative): refers to the number of transactions effected in a given period of time. Thus, it is possible to verify how many transactions the advertising space generated in the billing of a determining period. This measurement will positively and directly proportionate the number of transactions effected.

3 - Quotient between billing and number of transactions effected in the period - time (qualitative): refers to the number of invoicing per transaction effected in a given period. This number will answer the question whether the advertising space generated the billing through many or few transactions. This measurement will score positively and inversely proportional to the index number.

It is considered as better or more positive a construction of billing through many transactions, many customers, because this brings less risk to the continuity of billing.

It is important to emphasize that this was not the objective, nor was it expected to exhaust the possibilities of measurements with the above measures. It is understood that any good logical model development project should have its implementation carried out in

phases. For the effective completeness of measurements, one has to at least go through the development phases of a prototype and test its effectiveness.

Measures to measure the creation of value, both tangible and intangible, associated with news products and advertising space, have become important to the respective acknowledgments that will be given to the agents (publishers, portal as advertising space and digital shopping portal), as a way of providing the convergence movement of the objectives of all the agents involved, according to the third premise.



Fig.6: Reservations to the News Portal agents

Source: Rodrigues (2017)

Initially, bookings will be established for publisher, Portal - advertising space and Portal - digital shopping, as shown in Fig. 06. For these reserves the following calculations and estimates will be used:

- Calculations of estimates of the potentiality of increasing intangible wealth to present value, based on the attractiveness report of the reports, according to the measurement of intangible wealth, previously presented.
- calculations of tangible wealth increase, based on the billing report for the period, segregated by advertising space for general advertisers and digital mall advertisers.

Subsequently, the agents involved in this value creation, publisher and news portal (advertising space and digital mall), should initially receive recognition through levels of performance, illustrated in this research with the categorization of gold, silver and bronze. It has been very common in current business models to use categorizations as a means of customer loyalty and / or bring benefits to participants. Some examples of companies that follow this proposal are: Airbnb, Accor hotel chain, multiplus system and others.

In the case of this environment, performance levels (gold, silver and bronze) will be responsible for the following levels of capture of tangible monetary value:

- Publisher: participation in distributing the publisher reservation;

- Portal - advertising space: reserve for investment in the Portal;
- Portal - digital shopping: participation in the reserve to reduce commission rate on sales passed on to the Portal.

The relative holdings in the respective reserves will be calculated by means of an apportionment mechanism that will maintain direct proportionality to its levels of performance, so far categorized like bronze, silver or gold.

The fourth premise foresees a management control system that, through the use of the reasoning method of the PDCA cycle, will establish the necessary adjustments, both through the PDCA of Maintenance - maintenance of the operation in the short and medium term - and of the PDCA of Improvement - wide spread establishment perpetuating long-term operation, as shown in Fig. 07:

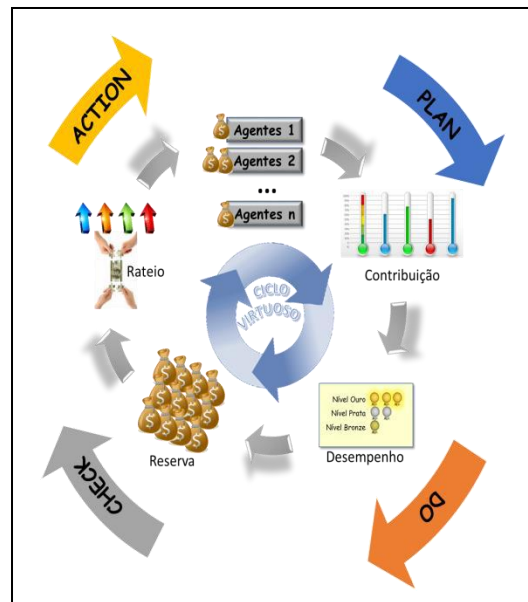


Fig.7: Management control for the VNCE using the PDCA cycle

Source: Adapted from Rodrigues (2017)

The central idea is the controlled evolution of the organization, through a virtuous cycle in which, through the efforts of all the agents involved, governed by the logical intelligence of Goal Congruence, we have the intensification of intangible wealth.

The establishment of the virtuous Cycle, according to the fifth premise, would be as follows: investment in intellectual capital (those intangible benefits that generate value for the company), through an efficient management control system that allows the recognition of agents, will increase intangible wealth. This growth of intangible wealth will increase the attractiveness of the organization (of the Portal de Notícias or VNCE), bringing in the present not only a

greater number of advertisers and clients and growth of scope, but also a greater added value of the services offered, which will materialize in tangible revenue growth, which, fed back in new investments in intellectual capital, would bring the perpetuity of the cycle, which Fig. 08 seeks to elucidate:



Fig.8: Virtuous Enhancement Cycle

Source: Adapted from Rodrigues (2017)

The model proposed here aims to help: segmented regional markets, a community, a neighborhood, a region of the city, a city, a region of a state, a state and so on, and this movement would be called the Improvement Cycles of Scope, as shown in Fig. 09:

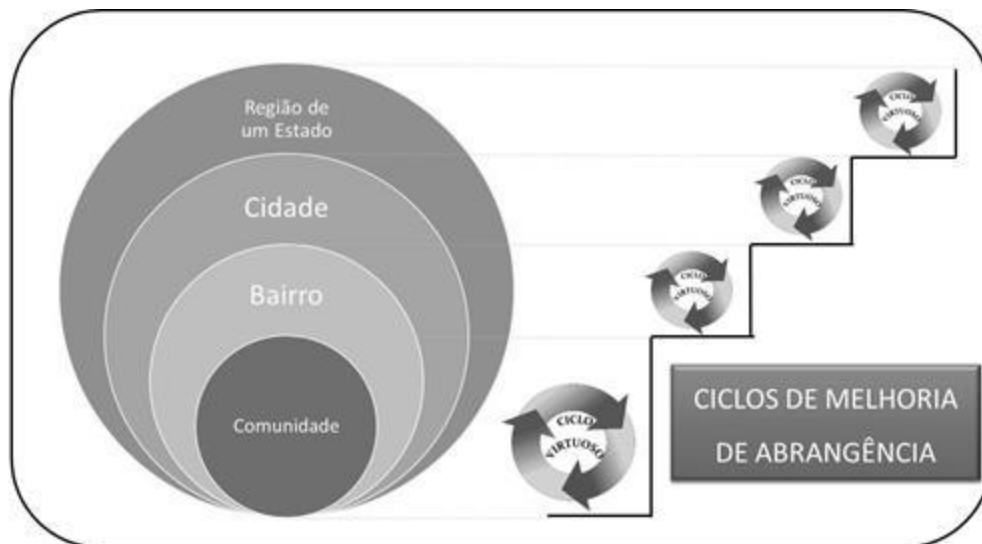


Fig.9: Enhancement Cycle Improvement

Source: Adapted from Rodrigues (2017)

Through the various cyclical movements of PDCA in the management of all stages of the Model (development of environmental activities), new areas of coverage are being achieved; thus establishing the Cycle of Improvement of comprehensiveness, that starts from a focus of locality, near community, to then reach higher reaches, as foreseen in the sixth premise.

The advantage of this initial locality is the optimization of the availability of advertising space with the audience of an appropriate target audience, assertively, at an affordable cost to local merchants, since the digital advertising market via the web and mobiles on the days of today for having dominant brands, for

example in Brazil, we have the Portals UOL, G1, Terra, Yahoo, among others; presents a still very high cost.

Regional markets and their segmentations do not support such large investments and cost optimized benefit, and it is in this niche that the collaborative news virtual environment intends to act.

An interesting example of how greater reach (or visibility) can bring in more revenue is the Metro newspaper, which was launched in 1995, attracting a lot of readers as it was distributed at no cost to train and bus stations throughout Stockholm. According to Osterwalder (2011) this strategy attracted advertisers and quickly it



became profitable, and can now be found in many large cities. (OSTERWALDER and PIGNEUR, 2011).

Costa (2014) in his report "A business model for digital journalism" presents as an alternative to increase revenues the sale of local advertising, made by the company itself, in addition to the offer of value added services, which would be all services that orbit the business and that the company can afford.

The growth strategy to be adopted in the model proposed for the VNCE will be to initiate its activities with the academic community of the partner institutions UENF, UFF and IFF. Being its target audience: publishers (students and teachers of partner institutions), affiliates / advertisers (community of surrounding neighborhoods and commercial establishments of the city of Campos dos Goytacazes with activities of interest to the university public) and reader (students and teachers of partner institutions, community of surrounding neighborhoods and commercial establishments of the city of Campos dos Goytacazes).

A first step of growth, which should happen through university connections and academic use, will be the change of coverage for the North and Northwest region of the State of Rio de Janeiro, where its target audience would be: publishers (students and affiliates / advertisers (communities from all cities in the north and northwest of the state of Rio de Janeiro with activities of interest to the university public) and the reader (students and students from different universities in the north and northwest region of the state of Rio de Janeiro) professors from various universities in the north and northwestern region of the state of Rio de Janeiro, as well as communities from all cities in the north and northwest of the state of Rio de Janeiro).

From this point on, it is understood that the academic nature is no longer assured and the cycles of growth become less predictable, since they can skip steps of State, Country, Country, Mercosur, South American Continent, American Continent, American continent and Europe, passing through Asia and other continents, reaching worldwide reach. This enlargement can be even greater, due to cyberspace, jumping to global reach, because in this digital age everything is possible, with no physical borders for growth.

## VII. FINAL CONSIDERATIONS

In view of the new scenario in which today's journalistic organizations fall into place, new business and management practices are needed that provide real possibilities for the existence and continuity of these organizations, providing convergence and attendance both to the business objectives and the personal objectives of all the agents involved.

In this way, this article aimed to demonstrate a business model and management for a virtual collaborative news environment - VNCE, whose main differential is the recognition of intangible wealth increases in addition to traditional tangible gains.

As a main contribution, the model brought recognition and the possibility of measuring intangible wealth increases in companies in the new economy, where the digital business and the primacy of intangible wealth prevail in the goodwill of these companies.

Based on the selection of management and business concepts, such as controllership, business model, management model, management control system, goal congruence, PDCA cycle, among others, to make it possible to control this new way of generating value in organizations journalism of the "new economy", is that these concepts were harmonically integrated, determining six premises for the model.

In order to meet the new reality of journalistic business in this era of cyberspace, the model presupposes the recognition of the agents involved in the business and proposes measures to measure its contribution as a great intangible value, establishing monetary reserves for these agents, be they reader, publisher, advertiser, or the news portal itself.

Through a management control system, it was possible to measure, evaluate and recognize the participation of each agent involved in the VNCE, in order to obtain the congruence of the objectives of all involved, using the logical intelligence of Goal Congruence and ensuring, in this way, the expansion of the scope and continuity of the operation of the business.

The initial focus of the model is a locality view for the availability of advertising and ancillary services, attending to a specific and qualified target audience, where through the valorization of the agents that increase the attractiveness of the business the revenues will be increased and this will expand its area of comprehensiveness.

Thus, the conceptual proposition of this model comes against the current reality of journalistic organizations, which need to rediscover a profitable way of surviving the challenges represented by the development of new technological platforms.

The limitations of this research are directly related to the intangibility factor and speed in the transformations. Intangible wealth is often difficult to identify and evaluate effectively, but once discovered and exploited, it provides a competitive advantage. And the speed with which the themes related to digital communication change is surprising, for some time they were media convergence, interface, cyberspace, interactivity, etc.; today in full Web 2.0 already entering

the stage of web 3.0, the new keywords become blogosphere, wikis, digital social networks, mobile communication and in the future, closer and closer what awaits us?

According to the above, it is suggested that research be continued in order to deepen the issues raised here, as a way of improving the proposed model.

#### REFERENCES

- [1] ANDERSON, C. W. BELL, E. SHIRKY, C. *Jornalismo Pós-Industrial: adaptação aos novos tempos*. Tradução de Ada Félix. Revista de Jornalismo ESPM. [S.I.], v.5, pág. 30 – 89, abr/mai/jun, 2013;
- [2] ANJ. Associação Nacional de Jornais. Relatório de Atividades da ANJ de agosto de 2014 a agosto de 2016. Available at <http://www.anj.org.br/wp-content/uploads/2016/08/RELAT%C3%93RIO-DE-ATIVIDADES-2014-a-2016.pdf> access date at 05/12/2016;
- [3] ANTUNES, M. A Controladoria e o Capital intelectual: um estudo empírico sobre sua gestão. R. Cont. Fin. – USP, São Paulo, n.41, p. 21- 37, Maio/Ago, 2006;
- [4] BATTELLE, J. A. *Busca: como o Google e seus competidores reinventaram os negócios e estão transformando nossas vidas*. São Paulo: Editora Campus, 2006;
- [5] BOWMAN, Shayne; WILLIS, Chris. **We Media**. How audiences are shaping the future of news and information. The Media Center at The American Press Institute: Califórnia, 2003. Available at: <<http://www.hypergene.net/wemedia/download/wemedia.pdf>> Data do acesso: 25 mar. 2018;
- [6] BRASIL. Ministério do Planejamento, Orçamento e Gestão. Instituto Brasileiro de Geografia e Estatística. Pesquisa Nacional por Amostra de Domicílios Contínua (PNAD). Available at: <<http://www.ibge.gov.br/home/default.php> > access date at 01/11/2016;
- [7] CATELLI, Armando (Org.) *CONTROLADORIA: Uma abordagem de Gestão Econômica – GECON*. São Paulo: Atlas, 1999;
- [8] CATELLI, Armando. Gestão econômica da atividade financeira na empresa. In: Anais do VI Congresso Brasileiro de Custos.1999;
- [9] CATELLI, A. SANTOS, E. S. Internet: desafio para uma Contabilidade Interativa. Revista Contabilidade & Finanças – FIECAP/FEA/USP. São Paulo: FIECAP, v.14, p. 24-41, Jan/abr, 2001;
- [10] CATELLI, Armando (org.). *Controladoria: uma abordagem da Gestão Econômica – GECON*. 2ª ed. São Paulo: Atlas, 2001;
- [11] COSTA, Caio Túlio. *Um modelo de negócio para o jornalismo digital*. São Paulo: Revista de Jornalismo da ESPM, 2014. Available at: <[http://observatoriodaimprensa.com.br/imprensa-em-questao/um\\_modelo\\_de\\_negocio\\_para\\_o\\_jornalismo\\_digital/](http://observatoriodaimprensa.com.br/imprensa-em-questao/um_modelo_de_negocio_para_o_jornalismo_digital/)>. access date at 05/10/2015.
- [12] FERNÁNDEZ, M. Empresas buscam o funcionário digital. El País. Madri, 2017. Available at: <[https://brasil.elpais.com/brasil/2017/03/10/economia/1489165785\\_466140.html](https://brasil.elpais.com/brasil/2017/03/10/economia/1489165785_466140.html)> access date at 18/06/2017;
- [13] FLAMHOLTZ, Eric. Organizational control systems as a managerial tool. California Management Review, v.22, n. 2, p. 50-9, 1979;
- [14] GIOVANNINI, Giovanni. *Evolução na Comunicação: do sílex ao silício*. Rio de Janeiro: Nova fronteira, 1987;
- [15] INFOGLOBO. *O GLOBO, EXTRA e EXPRESSO se integram em uma redação multimídia*. 29 jan. 2017. Available at: <<https://oglobo.globo.com/brasil/oglobo-extra-expresso-se-integram-em-uma-redacao-multimidia-20840004>> access date at 20/04/2017;
- [16] IUDÍCIBUS, S. MARTINS, E. CARVALHO, L. N. *Contabilidade: aspectos relevantes da epopeia de sua evolução*. Ver. Cont. Fin. USP, São Paulo, n.38, p. 7 -19, maio-ago, 2005;
- [17] IUDÍCIBUS, Sérgio. *Contabilidade Introdutória*. 11ª. Ed. São Paulo: Editora Atlas, 2010;
- [18] IVC. *Posição participação e evolução das publicações*. 2007 a 2016;
- [19] JENKINS, Henry. *Cultura da Convergência*. 2ª. Ed. São Paulo: Aleph, 2009
- [20] KAYO, Eduardo Kazuo. *A estrutura de capital e o risco das empresas tangível e intangível-intensivas: uma contribuição ao estudo da valoração de empresas*. Tese de Doutorado e Administração. FEA/USP. São Paulo, 2002;
- [21] LEV, Baruch. *Intangibles: management and reporting*. Washington:Brookings, 2001.
- [22] LÉVY, Pierre. *A Inteligência Coletiva*. São Paulo: Ed.34, 2000;
- [23] \_\_\_\_\_. *Cibercultura*. São Paulo: Editora 34, 1999;
- [24] MAMONA, K. *20 empresas negociadas acima do valor patrimonial na Bolsa*. 2014. Available at: <<http://exame.abril.com.br/mercados/20-empresas-negociadas-acima-do-valor-patrimonial-na-bolsa-2/>> access date at 11/06/2017;
- [25] MARION, J. C. *Contabilidade Empresarial*. 16ª. Ed. São Paulo, Editora Atlas: 2012

- [26] MARTINS, E. ANTUNES, M. A. *Capital intelectual: verdades e mitos*. Rev. Cont. Fin. USP, São Paulo, n.29, p. 41-54, maio-ago, 2002;
- [27] MORENO, F. O. Airbnb agora vale inacreditáveis US\$ 30 bilhões. StartSe, 2016. Available at: <<https://conteudo.startse.com.br/startups/felipe/o-airbnb-agora-vale-inacreditaveis-us-30-bilhoes/>>. Acessado em: 17 jul. 2017;
- [28] NASSIF, L. A nova economia. Folha de São Paulo, 2000. Available at: <<http://www1.folha.uol.com.br/fsp/dinheiro/fi1207200008.htm>>. Acessado em: 13 jan. 2017.
- [29] OLIVEIRA, Antônio B Silva. *Contribuição à formulação de um modelo decisório para intangíveis por atividade – uma abordagem de Gestão econômica*. Tese de Doutorado. FEA/USP. São Paulo, 1999;
- [30] OSTERWALDER, A. PIGNEUR, Y. *Business Model Generation – Inovação em Modelos de Negócio: um manual para visionários, inovadores e revolucionários*. Rio de Janeiro, RJ: Alta Books, 2011;
- [31] PEREIRA, Carlos Alberto. *Ambiente, Empresa, Gestão e Eficácia*. In: CATELLI, Armando (org.). *Controladoria: uma abordagem da Gestão Econômica – GECON*. 2ª ed. São Paulo: Atlas, 2001;
- [32] PEREZ, M. M. FAMÁ, R. *Ativos intangíveis e o desempenho empresarial*. Revista de Contabilidade e Finanças. USP, São Paulo, no. 40, p. 7 – 24, Jan/Abr. 2006;
- [33] RODRIGUES, F. D. *Modelo de negócio e gestão para portais de notícias da nova economia: proposta conceitual*. Tese de Doutorado. UENF, 2017;
- [34] SANTAELLA, L. *A Ecologia pluralista da comunicação: conectividade, mobilidade, ubiquidade*. São Paulo: Paulus, 2010;
- [35] SANTAELLA, L. *Comunicação ubíqua: repercussões na cultura e na educação*. São Paulo: Paulus, 2013;
- [36] SIQUEIRA, L. D. CRISPIM, S. F. Modelos de negócio na era digital. Revista Espacios. Vol.33, 2012, pág. 21. Available at: <http://www.revistaespacios.com/a12v33n07/12330721.html>
- [37] STEWART, Thomas A. *Capital intelectual: a nova vantagem competitiva das empresas*. 2 Ed. Rio de Janeiro : Campus, 1998;
- [38] Taspcott, D. *Economia Digital: Promessa e perigo na era da inteligência em rede*. São Paulo, Makron Books, 1997;