

Information management for decision making in an institution of private higher education: the experience of Integrated Colleges of Educational Union of Central Plateau (FACIPLAC/DF)

Gestão da informação para a tomada de decisão em uma instituição de ensino superior privada: A experiência das Faculdades Integradas da União Educacional do Planalto Central (FACIPLAC/DF)

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ABSTRACT

Organizations are experiencing the complexity of management due to the large volume of information and requirement for rapid responses that require continuous and taken more assertive decisions. Thus, the use of technologies and systems, although essential for any organization by itself does not guarantee the achievement of competitive advantage if there is a direct relationship between its adoption and achieving results. In this context, we discuss the following issues of research: the decisions of the Integrated Faculties of the Central Plateau of the Educational Union - Faciplac / DF are supported by which information systems? Under this approach, the rationale for the research is the importance that information has for decision making in a Higher Education Institution (HEI) - the International College of the Central Plateau of the Educational Union (Faciplac / DF) so that such decisions can make the organization more competitive in the industry in which it operates. The aim of the present study is to analyze the management of information in decision-making in the Integrated College of Central Plateau Educational Union (Faciplac / DF). The methodology was the descriptive research with methodological approach qualitative and quantitative, that is, mixed and field research, to be developed in situ, using as an interview tool. The data collection technique was performed by using a form structured to research, conducted interviews and direct observations. The results point to the information management model in the institution and allows us to understand the mechanisms for decision-making.

KEYWORDS: Institutional Information Management. Information system. Decision taking.

RESUMO

As organizações estão vivenciando a complexidade na gestão devido ao grande volume de informações e exigência por respostas rápidas que demandam tomadas de decisões contínuas e mais assertivas. Assim, o uso de tecnologias e sistemas, apesar de imprescindível para qualquer organização, por si só não garante a obtenção de vantagem competitiva se não houver uma relação direta entre sua adoção e a obtenção de resultados. Nesse contexto, discute-se a seguinte problemática de pesquisa: as decisões adotadas nas Faculdades Integradas da União Educacional do Planalto Central - Faciplac/DF são apoiadas por quais sistemas informacionais? Sob tal enfoque, a justificativa para a realização da pesquisa é a importância que a informação possui para tomada de decisão em uma Instituição de Ensino Superior (IES) - as Faculdades Integradas da União Educacional do Planalto Central (Faciplac/DF) a fim de que tais decisões possam tornar a organização mais competitiva no setor em que atua. O objetivo do estudo em questão é analisar a gestão da informação na tomada de decisão na Faculdades Integradas da União Educacional do Planalto Central (Faciplac/DF). A metodologia adotada foi à pesquisa descritiva, com abordagem metodológica quali-quantitativa, ou seja, mista e pesquisa de campo, a ser desenvolvida *in loco*, utilizando como instrumento entrevista. A técnica de coleta de dados foi realizada pela utilização de um formulário estruturado para investigação, conduzido por entrevistas e observações diretas. Os resultados encontrados apontam para o modelo de gestão da informação na instituição, bem como permite compreender os mecanismos utilizados para tomada de decisão.

PALAVRAS-CHAVE: Gestão da Informação Institucional. Sistema de informação. Tomada de decisão.



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1 INTRODUCTION

The organizations are experiencing a new reality in which there is much information, which makes the decision making process harder. It is not enough to have information, it is required to have the correct information, at the right time, with a quality demanded, with less cost in order to generate knowledge and then intelligence. For this, it is essential that the organizations structure the information systems to support the process, and that these are integrated so that it can obtain, stores, organize and distribute relevant information in order to assist in decision making.

Information is one of the most important elements in an institution, constituting as a factor which helps in the structuring and management of its processes. And for it to be successful, it is essential that the organization understands the value of information and its informational systems for decision making.

In this approach, the justification for conducting the research is the importance that the information has for decision making in a Higher Education Institution (HEI) - the *Faculdades Integradas da União Educacional do Planalto Central (Faciplac / DF)* in order that these decisions can become the organization more competitive in the sector in which it operates.

The study about information management for decision making can contribute to the area of Information Science, in order to agglutinate more researches about the subject, since it proposes to study elements of their interest such as: strategic information, information management, management activities, information systems, decision making.

The complexity of business requires faster answers from the managers who are responsible for making decisions. At all the time, decisions are made based on information that are also obtained by sundry information systems. In this context, the research problem is discussed: the decisions adopted by the target public of the *Faculdades Integradas da União Educacional do Planalto Central - Faciplac/DF* are supported by what informational systems?

In this study, the general objective was to identify the information systems in the decision making process of the Basic Administration and Support Organs in order to glimpse the information management elements present in *Faculdades Integradas da União Educacional do Planalto Central - Faciplac/DF*. In order to achieve the general objective, the specific objectives were: to identify the main models of information management in the literature; describe the information systems available at the institution; identify which information systems are applied to decision making in the institution; analyze the decision-making processes of the Basic Administration and Support Bodies.

The research is limited to the Communication, Evaluation Committee (EC), Ombudsman, Academic Secretary, Undergraduate Courses Coordination, Graduate

Coordination, scientific initiation and extension; Structuring Teaching Core (STC) and collections. Composing the branches: of the Basic Administration and Support Organs.

From this universe, took part 15 (fifteen) collaborators from a total of 145 (one hundred and forty five) of the Basic Administration and Support Organs composed of: Communication, Evaluation Committee (EC), Ombudsman, Academic Secretary, Undergraduate Courses Coordination, Graduate Coordination, scientific initiation and extension; Structuring Teaching Core (STC) and collections (basic administration and support).

This article is divided into five sections. The first is the introduction composed by the discussion about the subject, justification, research problem and purpose of the study. The second section presents the methodology used to accomplish the research. The third section brings the literature review with the main authors. In the fourth section are the results of the research and the fifth brings the final considerations.

2 METHODOLOGY

To accomplish the study in question, the descriptive research was used and the procedures of qualitative and quantitative methods were applied, that is, a mixed method.

The data collection (after the pre-test realized in 2015 for better alignment of the research) occurred through the use of the tools: structured interview and observations, between February and March, 2016, in flexible schedules, between 1PM to 5PM and 7PM to 10.30PM, according to the working schedules and availability of target audience for research.

To accomplish the study in question, an *in loco* research was performed, or field research in order to achieve the proposed objectives. And, the techniques used for the data collection were: a) Structured interview: conducted from a predetermined script with questions delineated in forms; b) Forms with closed questions (which were formulated for use of Likert scale), semi-open and open; c) Observations.

3 LITERATURE REVIEW

3.1 The Organizations and the Management Activity

The organizations are defined, according to Maximiano (2009, p. 4), as "resource systems that seek to achieve some kind of objective", therefore, to know the reality of an organization is preponderant to the adoption of information systems that contribute to the achievement of its mission.

Tarapanoff (2001) affirm that many professionals, starting from great discoveries throughout history, like those of Taylor, with the scientific administration in 1911, Fayol, with the classic administration in 1916, through the theory of the human relations in the 1930s, bureaucracy theory with Max Weber and the operational research around 1940, strategic planning from 1950s to 1970s, behavioral theory of organization in 1947,

contingency theory in the 1970s, total quality (1980), and management of information and knowledge (1990), pass through transformations in the way of organizing and managing the business.

Organizations as open systems, constantly changing, influencing and suffering influences from the environment in which they are inserted (VARAJÃO, 2005).

A system is composed of elements that relate with each other in a flexible way of inputs, passing through transformations, generating outputs and being fed by feedback. The organizations are seen as complex, requiring a global understanding of their operation structure, as well as understanding their relationships with society, economy, politics and other agents, leading them to adopt decisions that reflect their capacity to adapt to change and market trends.

3.2 Higher Education Institutions (HEI)

According to Cunha (1980), the higher education in Brazil developed differently from the rest of the South American continent. With the Spanish colonization creating the first university in 1538. The history of higher education in Brazil began in 1572 with the conception of the courses of Arts and Theology in the *Colégio dos Jesúitas* in Bahia. In 1759 occurred the expulsion of the religious order, creating an opportunity for the opening of classes of isolated subjects and in 1776 was created a college in Rio de Janeiro and, in 1798, in Olinda.

Sampaio (2000) says that is possible to affirm that liberal politicians wanted to see the state gradually withdraw from the educational field in the name of the opinion and belief freedom and to consecrate the freedom of the primary and secondary education. Then in the Republic that occurred the decentralization of higher education for delegation to state governments, creating private institutions.

In fact, according to Trindade's position (1998), the higher education in Brazil during a long time was focused on the children of rich families.

Cunha (1980) reports that, after many conflicts of interest, it was in the 20th century that the first institution was created, the University of Rio de Janeiro. And from that moment, others emerged, such as the University of Minas Gerais in 1927 and the University of Rio Grande do Sul in 1932, although they kept working as part of isolated schools.

According to Barreyro (2008), in 1931, in Getúlio Vargas' government and one year after the creation of the Ministry of Education, were put into practice standards for the higher education organizations with the promulgation of the Brazilian Universities Statute (Law decree 19.851/31, valid until 1961). Universities could be maintained by the federal

government or by the states, therefore official, or "free", maintained by private foundations or associations.

Bicalho (2004), says it is important to emphasize that the expansion of higher education in Brazil, through the private initiative, may have had a bias towards democratization, because it is indisputable that it increased the access to university level, however, it is worth emphasizing that this expansion is a "commodification factor of teaching", since many institutions offer teaching of dubious quality.

In Picanço's opinion (2003), many groups identified in the education the possibilities of a large and lucrative market. For these, it is difficult to distinguish knowledge of the commodity, because the students have become clients and the institutions are constituted in companies with purely lucrative purposes.

In reference of the characterization of HEI, it can be stated that, according to the Law 9.394/96, they can be linked to the federal education system or to state and municipal systems. The federal education system is composed, according to article 16, Law 9.394 / 96 (TANEGUTI, 2013): a) educational institutions maintained by the Union; b) higher education institutions created by private initiative; And, c) the federal education institutes, subordinate to the Union, organized as public autarchies or foundations.

3.3 Information management

Many areas have been increasing and diversifying their strategies to solve the difficulties related to the organization, treatment and use of the information, starting a worry with questions related to the planning and the implantation of managerial systems of information and knowledge in the companies.

According to Tarapanoff (2001), the fundamental objective of the IM is to recognize and strengthen the information resources, preparing the organization for a process of learning and smart adaptation to the changes of the internal and external environment.

The Information Management can be understood as a set of six different processes that maintain a close and cyclical relationship that must be constantly nourished: identification of informational needs; information acquisition; organization and storage of information; development of information products and services; distribution of information; and use of information (CHOO, 1998).

Taylor and Farrel (1995) emphasize that the concept of Information Management (IM) is still under development and talk about three categories of definitions that are shown from the literature: existential category; operational category and hybrid category.

In Wilson's view (2002), there is an ambiguous use of the expression Information Management in the literature of many areas of knowledge. For him, it is the application of the principles of administration to the acquisition, organization, control, dissemination and use of relevant information to the effective operation of organizations of all kinds.

In Fairer-Wessels' opinion (1997), Information Management receives a focus on planning, organization, direction and control of information in the organization. An interesting definition is proposed by White (1985), in which the IM allows to improve the performance of the organization through the effective economic coordination of production, control, storage, recovery and dissemination of information from internal and external sources.

Another important contribution that must be addressed is the Rowley (1998), who considers that the IM generates the organizational effectiveness through the maximization of the company's capabilities in dealing with demands of information from their internal and external environments in dynamic and stable conditions.

In addition to Rowley (1998), Davenport (1998) adds that it is necessary to think strategically about information management, because the organizations are endowed of information environments and poorly allocated information resources. The use of information strategies can help the companies to adapt to changes by using the most appropriate information.

3.4 Information Systems

It is possible to say that information system, from an organizational perspective, translates as a group of components that relate and present features that allow transferring information from one point to another, that is, from the generator to the user, according to compatible rules that allow connections in different areas (AUDY; ANDRADE; CIDRAL, 2005).

For Oliveira (2009), over time, systems theory has undergone transformations and, due this context, the modern systems approach, looks for to develop a technique to handle with the complexity of organizations, a more interactive view of the entire group, a study of the relations between the component elements in function of the processes and their arrangements.

Based on this assumption, Laudon and Laudon (2001) affirm that every information system is composed by three dimensions: organization, people and technology. They also emphasizes that systems are part of organizations and that the main elements are people, structure, procedures, policies and culture.

Oliveira (2009) emphasizes that the systems are endowed with components, such as: objectives, inputs, transformation process, outputs, controls and evaluations and feedback. "System is a group of integrant and interdependent parts that, together, form a unitary whole with a certain objective and perform a certain function" (OLIVEIRA, 2009, p.7).

Araújo Júnior and Alvares (2008) consider pertinent to approach about the need to plan the system to be used by the organization, starting from the diagnosis of the current situation, and, from it, select the system that best suits the strategic context organizational, encompassing the mission, vision and values of the organization.

3.5 Decision Making

One of the key issues, if not the most important in a decision, is the internal conflict in each decision maker about what to do and what needs to be done.

Bechara, Damasio, Damasio and Lee (1999) and Bechara, Damasio, Tranel and Damasio (1997) explain that, more specific brain regions are activated to combine and integrate the signals that are received during a decision. To justify these allegations, neuroscience shows that regions of the brain responsible for emotions stimulate decisions based in action that do not address long-term interests and that the areas of the prefrontal cortex can neutralize immediate wishes and make higher value options.

Given the considerations, the evidences by the emotional appeal are more intense when analyzing one alternative at a time, and that more logical and pondered decisions will be more intense when the alternatives are evaluated against each other.

Through these understandings, it is possible to argue that most organizational professionals adopt decisions that fall short of objectively rational behavior. Aiming to correct these deficiencies, Bazerman; Moore (2010) developed six concrete and complementary strategies to make better decisions:

- a) Use tools to analyze the decision;
- b) Achieve experience and technical knowledge;
- c) Get rid of the contradictions of judgment;
- d) Use reason when relating facts or situations;
- e) Look at the other side, analyze from the viewpoint of the other- of the external agent;
- f) Understand the contradictions of the other.

In relation to the use of tools to analyze the decision, the suggested techniques require that both the preferences and the value that is placed in each of the decision options are quantified, using the logic of the expected value that is calculated by multiplying the value of the decision by the probability. For similar decisions that occur repeatedly, a suitable tool is the linear model, calculated by a formula that weighs and sums the relevant predictive variables in order to make a quantitative prediction.

Another strategy is to achieve experience and technical knowledge to optimize decision making, besides the need to look for feedback on previous decisions. It is notable that life experiences help to improve many skills, leave bad habits and learn responsively.

On the other hand, Dawes (1988) argues that the experience and knowledge can be costly and that learning through an experience of failure, in general, is learned as being "expensive."

In Bazerman's, Moore's (2010) view, the human mind groups phenomenal power, because it makes it possible to perform activities ranging from simple tasks to complex and sophisticated ones. It addresses the anatomy of a decision and uses the term "judgment" to refer to the cognitive aspects of the decision-making process, besides to analyze the six steps that must be followed in applying a rational decision-making process:

- a) Define the problem: if you do not seek to specify and understand well the problem, you can start by solving another problem.
- b) Identify the criteria: for most part of the decisions, more than one goal needs to be achieved.
- c) Consider the criteria: rational decision-makers must know how to assign appropriate values to each criterion.
- d) Generate alternatives: alternatives must be generated, but care must also be taken not to waste time or money in order to generate all possible alternatives, not least because not all alternatives will be chosen.
- e) Classify each alternative according to each criterion: the decision-maker must be able to evaluate the potential consequences of choosing each solution according to the criterion.
- f) Identify the ideal solution: according to the author's suggestion, after completing all the steps previously suggested, multiply the classifications of step five by the weight of each criterion, add the weighted classifications of all the criteria for each alternative, and Select the solution whose sum of the weighted classifications is the highest.

Through the model mentioned above, it is possible to infer that decision makers define the problem, identify criteria, accurately judge all criteria according to their priorities, know all the important alternatives, accurately evaluate each alternative based on each criterion, computing alternatives with accuracy and selecting the one with the highest added value.

4 RESULTS

Starting from the profile mapping, it was possible to obtain the data, as shown in graph 1:

Profile: Age, Sex, Schooling and Company Time

Company time – Over 05 years

01 to 05 years

Schooling – Masters

Higher Education

Sex – Female

Male

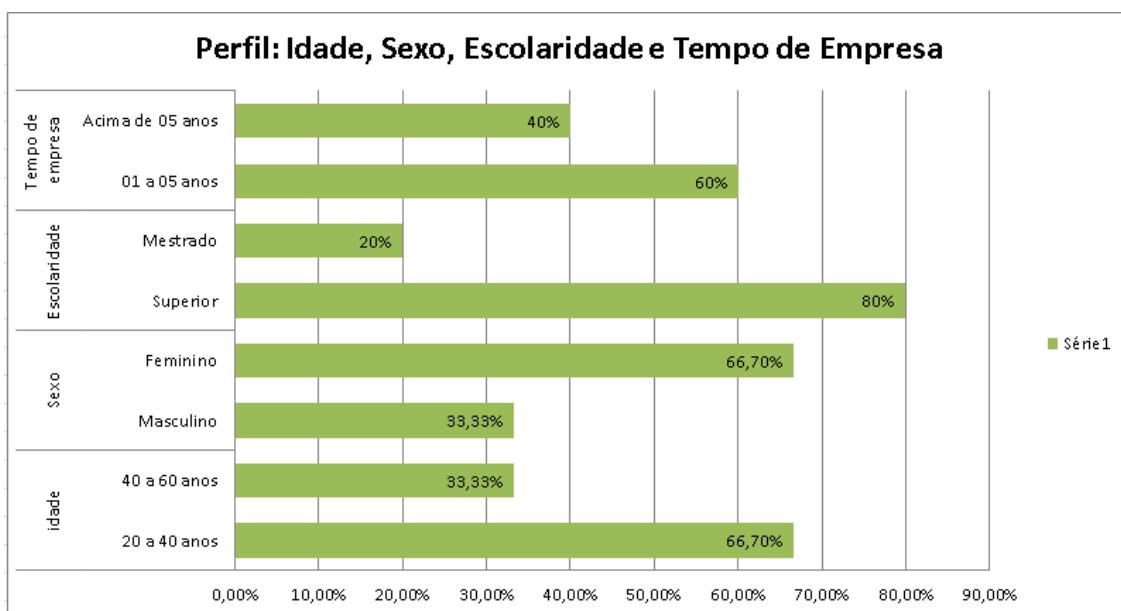
Age – 40 to 60 years

20 to 40 years

Participated of the interview 15 (fifteen) collaborators from the following areas: Communication, Evaluation Committee (EC), Ombudsman, Academic Secretary, Undergraduate Coordination Courses, Graduate coordination, scientific initiation and extension; Structuring Teaching Core (STC) and collections from the *União Educacional do Planalto Central - Faciplac/DF* that represent 10% of the universe of these areas, by mapping it is identified that it is a young audience, mostly female, with a college degree and with short time in the institution.

After the mapping of the profile, the interview was conducted following the steps of the form construction:

- a) Part I: information about the institution's proceedings;
- b) Part II: information about the communication vehicles used in the dissemination of information;
- c) Part III: storage of information;
- d) Part IV: general evaluation and Part V - evaluation of the importance of the information and information systems for decision-making.



Part I: Information on the Institution's processes

Source: Author, 2016.

Starting from the proposal to reach complementary proposals to the study, questions were

elaborated about the sharing of information, in which it was possible to identify that some areas share information with others: maintainer, academic director, coordination, secretary,

library, human resources, technology information, educational development nucleus, communication, evaluation committee, collegiate and ombudsman, among others. However, there are areas where sharing occurs with a smaller number of areas.

Below is a drawing prepared by the researcher as a matrix detailing the network of relationship between the areas, Table 1:

TABLE 1 - Matrix of relationship between the areas that took part in the research

WITH WHAT AREAS DO YOU SHARE INFORMATION FOR PERFORMING YOUR DAILY ACTIVITIES?													
Target Audience	Maintainer	Academic Directorac	Coordenation	Secretary	Colletion	Human Resources	Communication	Collegiate	AC	EDN	IT	Ombudsman	Financial
Nucleus of Scientific initiation and extension / monitoring	x	x	X	x	x	X	x	x	x	x	X	x	
EDN		x	X										
Coordenation		x	X	x		X		x				x	
IT	x	x	X	x	x	X	x	x	x	x	X	x	x
Collections	x	x	X	x	x	X					X	x	
Academy Secretary	x	x	X	x		X					X	x	x
Ombudsman	x	x	X	x	x	X	x	x	x		X	x	x
AC	x	x	X	x			x	x	x		X	x	x

Source: Author, 2016.

When questioned about if the information sharing is enough, 26.7% answered yes, while 73.3% answered that it was not enough, and the main claims presented by the research participants were:

- a) There is a lack of investment in infrastructure, such as the improvement of equipment (switch, structured cabling);
- b) Problems in the dissemination of course actions that end up being damaged, because they do not become known in the organization;
- c) A large volume of printed information, little information is available digitally in the system, making the areas dependent on others or even overloading them;
- d) The information is centralized, those who perform the activities have difficulty performing them, for lack of information; and, e) information is not always accessible.

Part II: Information about vehicles used in the dissemination of information

The first questions were select the most used communication vehicles to receive and transmit information are: meetings, verbal communication and mainly email. Some areas also use the intranet, the institution's telephone. The communication area uses besides these: mural, newspaper, social networks, outdoor, fairs and events, stands in malls and direct mail. When asked about these channels, which is the most used to receive and transmit information, the answer was: email, mostly, followed by verbal communication and applications like whatsapp. The internal communication flows among areas, with subordinates and with learners.

The external communication is not made by all the areas, and, the areas which have external information exchange accomplish it with: service and/or products providers, commercial representatives, community, likely candidates to join the institution.

And, regarding the question of what can be improved about the channels for the information can reach the target audience, were listed: a) Generate protocols to receive and / or send documentation among some areas; b) The IT argued that the areas do not use the available technology in the TOTVS system; c) Some areas mentioned that they should be more used to social networks.

Part III: Information Storage

According to the information obtained, not everyone archives all the information. The most used media to storages are: digital (in folders in the TOTVS system); suspended folders; appointment book; email; backup; storage: cited by the IT area, as other means for storing information.

An important fact beyond storage is the security of the information in the system. During the research, 80% of the participants reported having stored information in the system and subsequently lost that information. From this public, 46.7% could not rescue the information.

About the institutional memory to seek information about previous identical problems to the current ones for decision making, 73.3% fully agreed that there was a need to return to the system to seek information earlier for current decision making.

One of the main contentions of the participants is that the TOTVS system currently used does not allow access to all the information they need to make decisions. Due to the fact that some variables are not available or certain factors are not visible, Choo (2003) considers the need to use flexible methodologies to access, represent and connect information.

Part IV: General Evaluation

When asked about the main difficulties in the information access / availability process, the answers were: the volume of data is excessive; the information is "stuck" in certain areas; the existing systems do not provide the necessary information; there is a lack of

a specialized area in information management; and the channels of communication between the level of coordination and direction are insufficient.

Of all the answers the one that appeared most frequently was that there is a lack of a specialized area in managing information.

In order to get a better understanding about the issues related to the biggest difficulties in the information access / availability process, when asked if these difficulties are being solved, the answer was that, for 13.3% of the participants, the difficulties are being solved in a partial way, but promising, while 86.70% answered that in a partial but not in a very effective way. After the general evaluation, the last block of questions follows below, was used to assess the importance of information, of the informational systems in the decision-making process.

Part V: Evaluation of the importance of information and information systems for decision-making

About the participation of the areas with the Board of Directors, in the strategic, tactical and operational definitions, follows the following results: Yes: 13.30%; No: 40%; And, Sometimes: 46.70%.

In order to identify the IM model applied to Faciplac / DF, a question was elaborated with all the models mentioned in this study, prepared by the authors Choo, Taylor and Farrel, Wilson, Fair-Wessels, White, Rowley and Davenport, in order to identify which is (are) applied in the institution. The results were:

- a) Proposal presented by Taylor and Farrel (1995): 20%
- b) Proposal presented by Fairer-Wessels (1997): 46.70%
- c) Proposal presented by Rowley (1998): 20%
- d) Proposal presented by Davenport (1998): 13.33%

There were different views on the application of the IM models in the institution. The option selected by the participants most frequently was to Fairer-Wessels's proposal (1997) that affirm that Information Management has a focus on planning, organization, direction and control of information in the organization.

About the fact that there is a group of professionals responsible of managing the information, following results: 70% argued that there is no, whereas; 30% argued that there is and that the areas responsible for managing information are: Board of Directors, IT and Communication.

About the technological supports to access information, the participants answered that they use: the own cell phone and internet; computer and internet from the institution; intranet; TOTVS system.

Complementing, about the fact that the users received training, the results were: received training: 33.33%; did not receive training: 66.67% (reported having learned from pairs, day to day).

In relation to decision making, as each one has a profile, adopts decisions according to their experiences, knowledge or following the cultural format of the institution.

After gathering the information about the steps taken for decision making, the model was simulated by the professionals who participated in the research, to make decisions. This model follows, according to figure 1:

Problem – Information – Analysis – Real Alternative - Decision

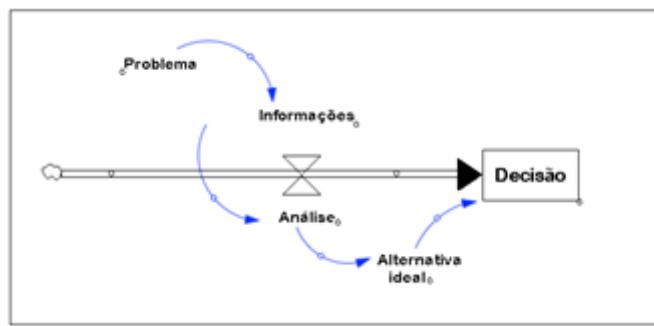


FIGURE 1 - Decision-Making Process Model at Faciplac / DF
Source: Author, 2016.

Based on the evaluation of efficiency, effectiveness or effectiveness of the decisions process, 80% of the participants claimed that after the decision they did not use any evaluation process, while 20% said that they follow the actions; communicate with the people involved in the decisions; and prepare reports.

In order to finalize the discussion of the issues, there are 04 (four) suggestions pointed out by the participants, with a view to improving efficiency, effectiveness and effectiveness in evaluating decisions: to increase the level of communication between management and other areas; focus on monitoring decisions; stimulate personal contact to promote information exchange about decisions taken in a given area that can help others; and, invest in infrastructure.

In summary, during the accomplishment of this study and at the end, were identified: the information systems; the main models of IM adopted in Faciplac / DF; and, the decision-making process, as shown in Figure 2:

Information Systems – Information Management Information Model – Decision-making - Information that subsidized the elaboration of the research in the HIE

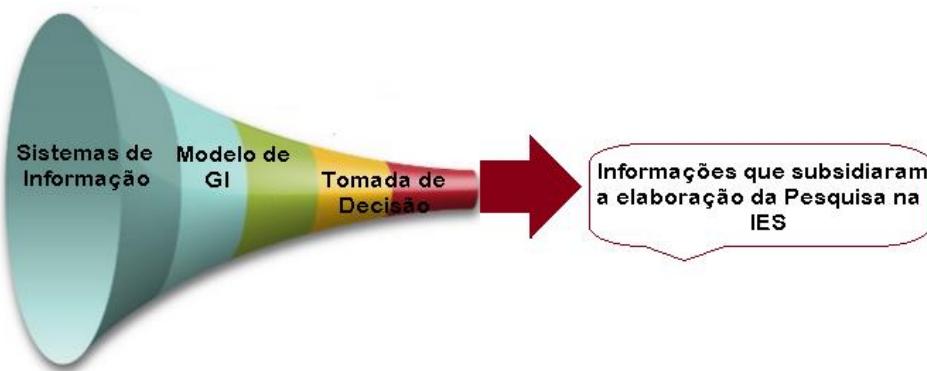


FIGURE 2 - Information that subsidized the elaboration of the research in HIE

Source: Author, 2016.

5 FINAL CONSIDERATIONS

This research had as main objective to identify the information systems present in the decision making process of the Basic Administration and Support Organs to glimpse the information management elements present in the HIE - *Faculdades Integradas da União Educacional do Planalto Central – Faciplac/DF*. To that end, the efforts were directed to four specific objectives. The identification of the main models of information management resulted in the achievement of the first objective, achieved by bibliographical and field research. The second one was intended to describe the information systems available, which was reached through the use of field and bibliographic research. The main systems found were: verbal information system (informal conversations, telephone); written information system (memorandum, mural, newspaper, e-mail); visual information system (outdoor, stands in malls, fairs and events); meeting information system; and, technological information system (TOTVS information system, intranet). The third was to identify which systems are used for decision making. Regarding the identification of information systems used for decision making, the results obtained in this research were achieved by the adoption of field research - as a research method and by individual interview and observations - as a source of data collection. Finally, the fourth objective was to analyze the decision-making processes in the Basic Administration and Support Bodies. This objective was reached through the field research, using as data collection sources: Individual Interview (form) and Observations. And to conclude the considerations, a question perceived during the observations was the need to empower the areas in the decision-making processes, as well as to use technologies that favor the monitoring and analysis of the actions, providing a good information management.

LA EXPERIENCIA DE LA UNIÓN DE COLEGIOS INTEGRADO DE LA EDUCACIÓN MESETA CENTRAL (FACIPLAC/DF)

RESUMEN

Las organizaciones están experimentando la complejidad de la gestión, debido al gran volumen de información y necesidad de respuestas rápidas que requieren decisiones más assertivas y continuas tomadas. Por lo tanto, el uso de tecnologías y sistemas, aunque esencial para cualquier organización por sí sola no garantiza el logro de una ventaja competitiva si existe una relación directa entre su adopción y el logro de resultados. En este contexto, se discuten los siguientes temas de investigación: las decisiones de las Facultades Integradas de la meseta central de la Unión para la Educación - Faciplac / DF son compatibles con los sistemas de información, que? Bajo este enfoque, la justificación de la investigación es la importancia que tiene la información para la toma de decisiones en una institución de educación superior (IES) - Colegio Internacional de la meseta central de la Unión para la Educación (Faciplac / DF) para que tales decisiones pueden hacer que la organización sea más competitiva en la industria en la que opera. El objetivo del presente estudio es analizar la gestión de la información en la toma de decisiones en el Colegio Integrado de la Unión Central de Educación Meseta (Faciplac / DF). La metodología fue la investigación descriptiva con enfoque metodológico cualitativo y cuantitativo, que la investigación es, mezclada y el campo, a desarrollarse in situ, utilizando como herramienta de entrevista. La técnica de recolección de datos se realizó mediante el uso de una forma estructurada a la investigación, llevó a cabo entrevistas y observaciones directas. Los resultados apuntan al modelo de gestión de la información en la institución y nos permite comprender los mecanismos para la toma de decisiones.

PALABRAS CLAVE: Gestión de información institucional. Sistema de información. Toma de decisiones.

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REFERENCES

ARAÚJO Júnior, Rogério Henrique de; ALVARES, Lillian. **As necessidades informacionais dos usuários no planejamento e modelagem de sistemas de informação.** Revista IberoAmericana de Ciéncia da Informação, v. 1, p. 201-221, 2008.

AUDY, Jorge Luis Nicolas; ANDRADE, Gilberto Keller de; CIDRAL, Alexandre. **Fundamentos de Sistemas de Informação.** Porto Alegre. Bookman, 2005.

BARREYRO, Gladys Beatriz. **Mapa do Ensino Superior Privado.** Brasília: Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira, 2008. Disponível em: <http://each.uspnet.usp.br/gladysb/Mapa%20do%20ensino%20superior%20privado.pdf>. Acesso em: 12/03/2016.

BAZERMAN, Max H., MOORE, Don. **Processo decisório.** 7. ed. Rio de Janeiro: Elsevier, 2010.

BECHARA, A.; DAMASIO, H.; DAMASIO, A. R. e LEE, G. P. **Different contribuition of the human amygdala and ventromedial pré-frontal córtex to decision-making.** Journal of Neuro-science, 1999.

BICALHO, Maria Gabriela Parenti. **Ensino superior privado, relação com o saber e reconstrução identitária.** 2004. 194 f. Tese (Doutorado em Educação) – Faculdade de Educação, Universidade do Estado de Minas Gerais, Belo Horizonte, 2004.

CHOO, Chun Wei. **Information management for the Intelligence organization; the art of scanning the environment.** 2. Ed. Medford, N. J. Information Today, 1998 (ASIS Monograph Series).

CHOO, Chun Wei. **A organização do conhecimento:** como as organizações usam a informação para criar significado, construir conhecimento e tomar decisões. Tradução de Eliane Rocha. 2. ed. São Paulo: Editora Senac, 2003. 425 p.

CUNHA, Luiz Antônio. **A universidade temporâ:** o ensino superior da Colônia à era de Vargas. Rio de Janeiro: Civilização Brasileira, 1980.

DAMASIO, H.; TRANEL, D.; DAMASIO, A. R. **Deciding advantageously before knowing the advantageous strategy.** Science, 1997.

DAVENPORT, Thomas H. **Ecologia da Informação:** porque só a tecnologia não basta para o sucesso na era da informação/Thomas H. Davenport, Laurecnce Prusak, tradução Bernadette Siqueira Abrão. São Paulo: Futura, 1998.

DAWES, Robyn M. **Rational choice in an uncertain world.** Fort worth, TX: Harcourt Brace, 1998.

FAIRER-WESSELS, Felicité A. **Information management education:** towards a holistic perspective. South African Journal of Library and Information Science, v. 65, n. 2, p. 93 102, 1997.

LAUDON, Kenneth; LAUDON, Jane Price. **Gerenciamento de Sistemas de Informação.** 3. ed. Rio de Janeiro: Editora S.A, 2001.

MAXIMIANO, Antônio César Amaru. **Teoria Geral da Administração.** São Paulo: Atlas: 2009.

OLIVEIRA, Djalma de Pinho Rebouças de. **Sistemas de Informações Gerenciais:** estratégias, táticas operacionais. 13. ed. São Paulo: Editora Atlas, 2009.

PICANÇO, Alessandra Assis de. **Educação superior para professores em exercício:** formando ou improvisando? In: Reunião da Associação Nacional de Pesquisa e Pós-graduação em Educação, 26, Caxambu, 2003. Anais. CD-ROM.

ROWLEY, Jefferson. **Towards a framework for information management.** International Journal of Information Management, v. 8, n. 5, p. 359-369, 1998.

SAMPAIO, Helena. **O ensino superior no Brasil:** o setor privado. São Paulo: Hucitec, Fapesp, 2000.

TANEGUTI, Luiza Yoko. **Relatório técnico contendo estudo sobre a atual relação oferta/demanda de cursos de graduação no Brasil, como subsídio ao Conselho Nacional de Educação para a formulação de políticas públicas que possibilitem a melhor distribuição da oferta de vagas no ensino superior de graduação.** PROJETO CNE/UNESCO. “Desenvolvimento, aprimoramento e consolidação de uma educação nacional de qualidade”. MINISTÉRIO DA EDUCAÇÃO CONSELHO NACIONAL DE EDUCAÇÃO CÂMARA DE EDUCAÇÃO SUPERIOR. 2013. Disponível em: http://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=13948-produto-2-oferta-demanda-educ-superior-pdf-pdf&category_slug=setembro-2013-pdf&Itemid=30192. Acesso em: 20 mar. 2016.

TARAPANOFF, Kira. (Org.). **Inteligência organizacional e competitiva.** Brasília: Editora Universidade de Brasília, 2001.

TAYLOR, A.; FARREL, S. **Information Management for business.** Metuchen, London: Aslib, 1995. 169p.

TRINDADE, Hélgio. **Universidade em perspectiva:** sociedade, conhecimento e poder. In: REUNIÃO ANUAL DA ANPED, 21. Trabalho apresentado. Política de Educação Superior. Caxambu, set. 1998. Disponível em: <http://www.anped.org.br> Acesso em: 20/03/2016, 11:55h.

TOTVS. **Institucional.** Disponível em: <https://www.totvs.com/a-totvs>. Acesso em: 28/03/2016

VARAJÃO, João Eduardo Quintela. **A Arquitetura da Gestão de Sistemas de Informação,** FCA, 2005.

WHITE, M. **Intelligence management.** In: CRONIN, B. (Ed.). *Information management: from strategies to action.* Londres: Aslib, 1985.

WILSON, T. D. **Information management.** In: FEATHER, J.; STURGES, P. (Ed.). International Encyclopedia of Information and Library Science. Londres: Rout leg, 2002.



APÊNDICE A

QUESTIONÁRIO

Caro(a) senhor(a), participante do estudo,

Este levantamento faz parte da pesquisa de mestrado realizada no Programa de Pós-Graduação em Ciência da Informação da Universidade de Brasília, com o apoio das Faculdades Integradas da União Educacional do Planalto Central (Faciplac).

Cabe esclarecer que, por meio de Entrevistas, ele será respondido.

O título da pesquisa é "Gestão da Informação para a Tomada de Decisão em uma Instituição de Ensino Superior Privada - A Experiência da Faculdades Integradas da União Educacional do Planalto Central (Faciplac/Df)" tomando como ponto de partida diversos modelos, entre eles, o Modelo de Choo (1998) e tem como principal objetivo identificar como ocorre o processo de gestão da informação e quais sistemas de informação são aplicados para a tomada de decisão na Administração Básica e Órgãos de Apoio.

Para alcançar o objetivo a pesquisa prevê como instrumento: entrevista estruturada por meio de formulário.

É importante ressaltar que os dados serão usados única e exclusivamente para fins acadêmicos e científicos.

Sua contribuição será muito importante.

Agradeço desde já a presteza em colaborar com a pesquisa.

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1. Dados de identificação do respondente:

Nome: _____

Idade: _____ Sexo: () M () F Escolaridade: _____

Cargo ocupado na empresa: _____

Anos de trabalho na empresa: _____

I - Informações sobre os processos da Instituição

1) Há compartilhamento de informações da sua área com demais áreas.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

2) Com quais áreas compartilha informações para execução de suas atividades diárias?

() Mantenedora () Diretoria acadêmica () Coordenações

() Secretaria () Biblioteca () RH () TI () NDE

() Comunicação () CPA () Colegiados () Ouvidoria

De todas as áreas cite as 03 (três) principais áreas de compartilhamento informacional:

3) Esse compartilhamento de informações é suficiente? () Sim () Não

3.1.1) Caso não seja, relate problemas/dificuldades enfrentadas:

4) Há compartilhamento de informações da sua coordenação para seus subordinados.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

4.1) Esse compartilhamento é suficiente para execução das atividades entre a coordenação e seus subordinados.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

4.1.1) Relate problemas/dificuldades enfrentadas ou marque () Não aplicável:

5) O Sr.(a) depende mais de informações internas para suas decisões do que informações externas.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

5.1) Sr.(a) se comunica com o público-alvo externo? () Sim () Não

5.2) Quem é esse público? _____

6) A divulgação de informações internas na empresa atinge os objetivos, pois alcança todos que dela necessitam.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

6.1) Comentários acerca de questões que possam ser melhoradas:

7) Quando o Sr.(a) recebe alguma informação (da diretoria, secretaria ou demais áreas) precisa tratá-las/ajustá-las antes de repassá-las.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

7.1) Cite o tipo de tratativa/ajuste que são necessários: _____

8) O Sr.(a) precisa com frequência ir atrás da informação, porque ela, geralmente, não chega em tempo hábil para suas decisões.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

9) As informações para sua tomada de decisão são fáceis de serem obtidas e estão sempre disponíveis.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

9.1) Quais informações você necessita e não estão disponíveis?

10) O Sr.(a) precisa com frequência consultar a veracidade das informações recebidas de outras áreas antes de utilizá-las ou repassá-las.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

II – Informações sobre os veículos de comunicação utilizados na disseminação da informação:

1) Por meio de quais canais o Sr.(a) recebe informações:

() Reuniões () Intranet () Comunicação verbal () Memorando

() e-mail () Sistema () Outros: _____

De todos os canais, o Sr.(a) recebe mais informações de qual?

2) Por meio de quais canais divulga/repassa as informações:

() Reuniões () Mural () Intranet () Comunicação verbal

() Memorando () Jornal () e-mail () Sistema

() Outros: _____

De todos os canais, divulga mais informações por meio de qual?

3) Os canais usados para o Sr.(a) divulgar/repassar as informações internas atinge o público-alvo.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

3.1) O que pode ser melhorado? _____

4) Os canais usados para divulgar as informações externas atinge o público-alvo externo.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

4.1) O que pode ser melhorado? _____

4.1.1) Canais usados externamente:

() Jornal televisivo () Outdoor () Facebook/redes sociais

() Feiras e eventos () Stände em shoppings () mala direta

() Outros: _____

III – Armazenamento da Informação:

1) O Sr.(a) arquiva ou guarda as informações que você recebe ou transmite, para posterior consulta ou comprovação?

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

2) Quais são os meios usados para armazenar informações?

() Digital () Backup () Pastas suspensas

() Sistema Faciplac () HD externo () e-mail () Outros: _____

3) O Sr.(a) já armazenou informações no sistema e posteriormente elas desapareceram.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

4) O Sr.(a) conseguiu resgatar informações que haviam desaparecido do sistema.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

5) O Sr.(a) já precisou acessar o sistema para buscar informações em relatórios acerca de problemas anteriores idênticos aos atuais para tomada de decisão.

Discordo Totalmente	Discordo Parcialmente	Não concordo, nem discordo	Concordo parcialmente	Concordo totalmente
1 ()	2 ()	3 ()	4 ()	5 ()

6. O sistema da Faciplacf utilizado hoje permite que o Sr.(a) acesse todas as informações de que necessita para tomada de decisão?

() Sim () Não.

Quais informações o Sr.(a) acessa via sistema? _____

Quais informações o Sr.(a) precisaria acessar via sistema? _____

PARTE IV – AVALIAÇÃO GERAL

1. Em sua opinião, essas dificuldades estão sendo corrigidas?

- Sim, sempre;
- De forma parcial, porém promissora;
- De forma parcial e pouco efetiva (algumas sim, outras não)
- Não.

APÊNDICE B

PARTE V – Avaliação da importância da informação e dos sistemas informacionais para a tomada de decisão

A entrevista a ser realizada com o público-alvo da pesquisa seguirá o roteiro abaixo e será usada como ferramenta de avaliação da informação e de sistemas no processo de tomada de decisão na empresa.

1) Sobre quais os processos o Sr. (a) toma decisões diariamente?

- () contratação () desligamento () divulgação do curso
() atividades operacionais () treinamento () recebimento e repasse de informações
() Outros: _____

1.1) Quais decisões mais comuns, precisa adotar em seu dia-a-dia?

2) Das informações que recebe para tomar decisões, o maior volume está relacionado a quê?

- () problemas de grade de aluno () demandas para divulgar o curso
() problemas com carga horária de professores
() Outros: _____

3) O Sr.(a) participa junto à Diretoria, de definições estratégicas, táticas ou operacionais?

- () Sim () Não () Às vezes.

Quais: _____

4) Cite fatores a serem melhorados para o processo anterior.

5) Em sua opinião, Gestão da Informação (GI), na Faciplac/DF pode ser identificada por meio de uma rede de processos que:

- a) () que permitem obter, gerar, organizar, distribuir e utilizar informação. Os processos são definidos pela: identificação das necessidades de informação; coleta de informação;

organização e armazenamento de informação; disseminação da informação (desenvolvimento de produtos e serviços de informação); uso da informação e comportamento adaptativo (Choo, 1998).

- b) () partem primeiro de definições voltadas para as origens e os elementos da Gestão da Informação; segundo, na gestão de recursos de informação para alcançar os objetivos corporativos estratégicos e, por fim, definir as respostas organizacionais para os desenvolvimentos em tecnologias de informação (Tayloy e Farrel, 1995).
- c) () se relacionam com a aplicação dos princípios da administração voltados à aquisição, organização, controle, disseminação e uso da informação relevante para operação efetiva das organizações de todos os tipos (Wilson, 2000).
- d) () que ganha um foco voltado para o planejamento, a organização, a direção e o controle da informação no âmbito da organização (Fairer-Wessels, 1997).
- e) () permite melhorar a *performance* da organização por meio da coordenação econômica efetiva da produção, controle, armazenamento, recuperação e disseminação da informação de fontes internas e externas (White, 1985).
- f) () permite ter duas dimensões: 1. Voltada à gestão do processo informacional e outra 2. voltada a gestão de recursos de dados (Rowley, 1998).
- g) () estruturado de ações que abarcam a maneira como as organizações: adquirem, entregam e utilizam a informação e o conhecimento (Davenport, 1998).
- 6) Quais características as informações que o Sr.(a) usa para tomada de decisão, possuem hoje, na empresa?
- () Facilidade de uso () Qualidade () Velocidade
- () Precisão (ajuda o usuário a encontrar exatamente o que precisa em meio a um leque de opções)
- () Adaptabilidade (é fácil de adaptar às minhas necessidades)
- () Nenhuma das alternativas.
- 6.1) O que pode melhorar para que possa adotar decisões mais assertivas?

7) O Sr.(a) busca informações acerca da concorrência (estratégias que estão sendo usadas em outras instituições) para tomar suas decisões?

() Sim () Não. Quais? _____

8) Há na organização um grupo de pessoas responsáveis por gerir todas as informações?

() Sim () Não. Quem são esses profissionais? _____

9) Quais suportes tecnológicos o Sr.(a) usa para acessar informações?

() Meu celular () Computador da instituição () Internet da instituição

() Intranet () Sistema Faciplac () Outros: _____

10) O Sr.(a) recebeu treinamento para usar os suportes tecnológicos para acessar informação necessária à execução de suas atividades?

() Sim () Não. Como foi o treinamento? _____

11) Quando vai tomar uma decisão quais os passos que segue?

12) Após a tomada de decisão o Sr.(a) utiliza algum processo de avaliação de eficiência, efetividade ou eficácia da decisão? Qual(is)?

13) Sugere algo para melhorar a eficiência, efetividade, eficácia para avaliar as decisões?

APÊNDICE C

TERMO DE AUTORIZAÇÃO DE USO DE IMAGEM E VOZ

Neste ato, e para todos os fins em direito admitidos, autorizo expressamente a utilização da minha imagem e voz, em caráter definitivo e gratuito, constante em fotos, filmagens ou gravação de áudio decorrentes da minha participação na pesquisa de mestrado sobre - Gestão da informação para tomada de decisão realizada por Gleiciane Rosa da Silva, tendo como orientadora a professora Doutora Lillian Maria Araújo de Rezende Alvares, para o Programa de Pós-Graduação em Ciência da Informação (PPGCInf) da Faculdade de Ciência da Informação (FCI) da Universidade de Brasília (Unb).

As imagens e a voz poderão ser exibidas: nos relatórios parcial e final do referido estudo, na apresentação áudio-visual do mesmo, em publicações e divulgações acadêmicas, assim como disponibilizadas no banco de imagens resultante da pesquisa e na Internet.

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Por ser esta a expressão de minha vontade, nada terei a reclamar a título de direitos conexos a minha imagem e voz ou qualquer outro.

Brasília, _____ de _____ de 2016.

Assinatura

Nome: _____

RG.: _____ CPF: _____

Telefone1: () _____ Telefone2: () _____

