

# Understanding accounting information by internal users: A case study at a brazilian public university



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#### **Maria Arlete Ferreira Alves**

University of Rio de Janeiro Master's Degree in Accounting

#### Tânia Maria de Oliveira Almeida Gouveia

State University of Rio de Janeiro PhD in Business Administration

# Carlyle Tadeu Falcão de Oliveira

State University of Rio de Janeiro PhD in Business Administration

#### **ABSTRACT**

Objective: To examine the understanding of accounting information and its relevance in the decision-making process from the perspective of internal users in the public sector. Method: A case study at the Federal Rural University of Rio de Janeiro (UFRRJ). Data was collected through semi-structured interviews, and the analysis was based on the content analysis method. Results: Budgetary information is the most prevalent and relevant in the decision-making process. Accounting information

related to assets is less utilized and more relevant for meeting external requirements. The main factor influencing managers' understanding is the highly technical language of accounting. Originality/Relevance: Understanding the factors that influence comprehension of accounting information contributes to improving communication between accounting professionals and managers, ensuring that this information is consistently present and appropriately used in decision-making. Theoretical/Methodological Contributions: Considering that accounting is a type of language, the findings of this research indicate that, based on the theory of semiotics, the syntactic aspect is understood by managers. However, the semantic and pragmatic aspects, which are part of the communicative relationship, are not effectively achieved. It is in these dimensions that a satisfactory level of comprehension occurs, representing the accounting events to their users and influencing the quality of managers' actions and decisions.

**Keywords:** Accounting information, Communication theory, Semiotics, Internal user, Public setor.

#### 1 INTRODUCTION

The main function of accounting is to communicate the equity performance, through the financial statements, of organizations to their users. Given this function, it is understood that accounting is a type of language, therefore, it is also exposed to the complexity of processes related to communication, as well as to noise interference that can cause damage to the fulfillment of its scientific objective (BEDFORD; BALADOUNI, 1962; BERLO, 1999; HENDRIKSEN; VAN BREDA, 1999).

In this context, the understanding of accounting information by managers is essential for proper decision-making, which is the process of choosing the most appropriate course that the organization should take in each economic and social situation. At the governmental level, decisions are based on the interpretation of public managers, internal users of the public sector, about the concepts and



accounting standards (BENDER; SILVA, 2020; SHIMIZU, 2010; DIAS FILHO, 2013; MATARAZZO, 1995).

Theories related to communication studies are, therefore, fundamental to the field of accounting information research. The framework of scientific production is distributed in several strands of communication theory, with a significant gap in studies focused on the internal user, as presented in the bibliometric research by Alves, Athayde, Alves and Duque (2022). The authors show greater concentration in the strands dedicated to the understanding of the accounting information of external users, called stakeholders, and as for the internal user, only five studies were dedicated exclusively to its understanding, such as the theory applied in these studies, which was Semiotics. (DIAS FILHO, 2013; HENDRIKSEN; VAN BREDA, 1999; KATAOKA; LEAL, 2020).

As a result of the gap pointed out and given the importance of the proper interpretation of accounting information, it is essential to understand how this information is received by public managers who make decisions based on the financial statements.

This paper aims to evaluate the understanding of accounting information and its relevance in the decision-making process from the perspective of internal users of the public sector. As secondary objectives, the following are listed: (a) to identify the factors that can influence the understanding of accounting information from the perspective of public managers in the decision-making process and (b) to evaluate the relevance of the use of accounting information in the decision-making process attributed by public managers. For the development of this research, the object of case study is the Federal Rural University of Rio de Janeiro (UFRRJ), an autarchy linked to the Ministry of Education (MEC).

The relevance of this research lies in the fact that the knowledge of the factors that influence the understanding of accounting information by decision-making managers has the potential to contribute to the improvement of communication between accounting professionals and managers, so that this information is always present and properly used at the time of decision-making within public institutions. In view of this, the present study can help improve the management of public assets, improve the transparency of accountability and accountability of public agents, as well as help the preparers of accounting information, the standardization bodies and future research focused on the public sector, since the available studies have shown a significant gap in the literature dedicated to internal users and government accounting.

# 2 THEORETICAL FRAMEWORK

## 2.1 COMMUNICATION THEORY AND SEMIOTICS

Communication became the object of study of numerous multidisciplinary researches, which promoted the expansion of its prominence in the studies of various professional fields, as well as the



expansion of science and technology in the 1940s, which led to an increase in the volume of information. Such factors were considered important contributions to the evolution of the communicative process, thus, information was perceived as "a strategic, economic, and political resource to be managed" (SÁ, 2018, p. 49).

In this sense, the seminal study on the Theory of Mathematics, also called Information Theory, conceived by Claude Shannon and Warren Weaver (1947-1949) in the field of telecommunications engineering, whose main proposal was to "transmit as many messages as possible, in the shortest time, at the lowest operational cost and at the lowest noise rate" (SÁ, 2018, p.53). The authors constituted the scheme of the communicative system intertwined in five elements proposed in a linear way, which became crucial and influential in the process of dissemination and understanding of the theory and its aspects, as shown in Figure 1 (MATTELART; MATTELART, 2011; SÁ, 2018; SHANNON; WEAVER, 1964).

Figure 1 - Schematic Diagram of a General Communication System

TransmitterReceiverDestination

Sinal Sinal Recebido

Mensagem

Noise Source

Source of Information

Moving on to Berlo's (2003) perspective, this in turn emphasizes that attention should be paid to the nature of everyone involved in the communicative channel – for example, the profile of the sender and receiver, established through the sociocultural framework in which they are inserted, as well as the level of knowledge about the communicated theme. The author points out that the receiver is the most relevant element, because it is for him that the entire process of issuing the message, which will be transmitted through a code and an appropriate channel, is motivated.

In this sense, Dias Filho (2000) emphasizes the importance of semantic aspects for the communication process in the field of accounting, reinforcing that the presence of semantic noise can affect the social and business relationship in day-to-day decision-making aspects. In order to be effective, therefore, it is necessary that the receiver and the sender share a favorable level of understanding, since the information produced by accounting has the function of communicating about



the wealth generated by the institutions, in a way that is understandable and useful to its users for decision-making inside and outside the company. For this reason, accounting is considered the language of business and, like any branch of human knowledge, has its specific codes and complexities (HENDRIKSEN; VAN BREDA, 1999; MARION, 2020).

The bibliometric study by Alves et al. (2021) highlights the investigation of the applications of Communication Theory to accounting, cataloguing research in accounting that used the Communication Theory and its strands as a basis, in the period from 2015 to March 2021, as shown in Table 1.

Table 1 - Evolution and trends in accounting research with the application of communication theory and its aspects focused

on accounting information

Year	Signaling Theory	Disclosure Theory	Information	Communication	Semiotics	Total
			Theory	Theory		
2015	1	3	-	-	-	4
2016	3	2	-	-	-	5
2017	2	1	-	1	1	5
2018	2	-	-	-	1	3
2019	1	-	-	1	2	4
2020	7	8	2	-	1	18
2021	3	-	-	-	-	3
Total	19	14	2	2	5	42

Source: Alves et al. (2021, p.14).

It is observed that the production is concentrated in the Signaling Theory and Disclosure Theory strands – there are 33 (thirty-three) articles out of a total of 44 (forty-two) studies –, both strands used in research focused on the external user of accounting, or stakeholder. Semiotics, on the other hand, is present in only 5 studies, which focus exclusively on the internal user.

Semiotics, the science of signs, is applicable to the various sciences of the linguistic context, as well as all those that involve a knowledge and use of language. Since accounting is considered the language of business, it is, therefore, the target of semiotics. In this context, as Dias Filho and Nakagawa (2012, p. 36) point out, semiotics "[...] can provide a useful methodology for interpreting reports and correcting any distortions that may arise in the process of generating and communicating accounting information."

According to Santaella (1983, p.13), "Semiotics is the science that has as its object of investigation all possible languages, that is, that has as its objective the examination of the modes of constitution of each and every phenomenon as a phenomenon of production of meaning and meaning". For Morris (1976, p. 10-11), "semiotics provides a general language applicable to any language or special sign, and therefore applicable to the language of science and to the specific signs that are used in science".

Santaella's and Morris's definitions carry with them, respectively, the idea that semiotics has the capacity to investigate "all possible languages" (SAN-TAELLA, 1983, p. 13), and, moreover, can



be understood as "the instrument of all sciences". As Accounting is a science and has its own language, which, in turn, makes use of signs, it is feasible and justifiable to apply semiotic theory for its understanding and analysis (MORRIS, 1976).

Morris (1976) proposes the classification of semiotics into three dimensions of the process of semiosis, which means the process of signification and production of meanings: the syntactic dimension, the semantic dimension, and the pragmatic dimension, as shown in Figure 2.

Figure 2 - Three dimensions of the semiosis process

Relação como objeto

SEMÂNTICA

Veículo

do

Signo

Relação com o intérprete

SINTÁTICA

PRAGMÁTICA

Fonte: Morris (1976, p. 129).

Of the three dimensions, syntactic deals with the combinations between signs, a sphere in which signs correlate without considering the correlation between them and objects or between them and their interpreters. In other words, to achieve the meaning of the word for the sake of the word, without interference from the elements of external environments (MORRIS, 1976; MORRIS; GRASA, 1994). Semantics deals with the meaning of signs and all forms of signification, that is, it deals with the relations of signs with the objects to which they are dedicated, instituted as a relation of designation. And, finally, the pragmatic dimension is dedicated to the relationship of the signs to their interpreters, that is, the use and effects of the signs establish conditions for the interpreters, effectively, some type of behavior.

Thus, the syntactic aspect is related to the rules and principles that govern the preparation of accounting information; The semantics are focused on the fidelity of the representation of accounting signs, if the alphanumeric composition of the financial statements is connected with the attributes of the events it seeks to portray; and pragmatic verifies whether the information has met the claimant's expectations, i.e., verifies the level of adequacy that meets the needs of its users (DIAS FILHO; NAKAGAWA, 2012).

From the perspective of semiotics, broadly speaking, communication is a system of production and transmission of meanings between the sender and the recipient, whose objective is not only the emission of messages, but also the production of knowledge among the interested parties. In the accounting aspect, it aims to support the understanding of the constitution, presentation and



communication of accounting information, as well as its interpretation and use (BARBOSA, KLEIN, COLAUTO; BEUREN, 2014).

In view of the applicability of semiotics to the communication process in the field of accounting, it is important to verify the main noises that can interfere with accounting information. In this context, noise can be understood as phenomena that cause loss of information during the transport of the message between the source and its destination. In order for communication to be successful, it is expected that the message reaches the receiver, not necessarily in a perfect way, but with a satisfactory level for its understanding (RASCÃO, 2006).

The study by Rascão (2006) shows that there is no such thing as perfect information, what exists is the level of satisfactory composition among the interested parties, that is, the important thing is how much the information can satisfy the interested parties, and not exactly its fullness, because there are limiting factors that promote imperfect information. Thus, the author points out that imperfect information can be classified into three types: incomplete, asymmetrical and ambiguous. The incomplete is related to the lack of rational perspective and the difficulty of understanding the complexity in its fullness. Asymmetric occurs in a relationship in which one of the parties has more information about a given subject than the other, generating an imbalance in understanding. As for ambiguity, it is subject to several interpretations, occurring when the parties have the same level of information, but understand and apply it in different ways (SATUR, PAIVA; DUARTE, 2017).

This complexity, which encompasses imperfect information, can be considered as noise in the communication channel of accounting information, among them, the technical terms used by accounting stand out, as they are a source of limitations in understanding and, consequently, can promote the inappropriate use of information in the decision-making process by managers.

#### 2.2 ACCOUNTING INFORMATION

Accounting information is generated by records and control of economic and financial facts that affect the organization's assets, and must be evidenced through the financial statements. These, in turn, provide information to their users so that they can support them in the decision-making process, not only in the organizational environment, but also in the economic, social and political spheres, since heritage is a constant element in all these aspects (IUDÍCIBUS, MARION; FARIA, 2017).

There are several segments of accounting and, therefore, there are numerous interests of users of accounting information. Among these, public sector accounting stands out, a branch of accounting science that governs the asset management of public organizations, which are maintained by the financial resources collected and whose main function is to serve society. As for the users of this segment, the external ones are very numerous, with society being the main one and, as the main internal



user, there are the decision-making managers (CFC, 2016; MARION, 2020; MESSIAH; WALTER, 2018; SILVA, 2011).

According to Silva (2011), accounting applied to the public sector acts as an integrating system of budgetary, financial and asset records, with the purpose of demonstrating the action of all acts and facts that affect public assets, as well as identifying the public agents responsible for such actions, with a view to mandatory accountability for each year that has ended. All acts and facts recorded are data collected by public accounting and transformed into Financial Statements Applied to the Public Sector (DCASP), which are: (a) Budget Balance (BO); (b) Financial Statement (BF); (c) Balance Sheet (BP); (d) Demonstration of Equity Variations (DVP); (e) Cash Flow Statement (DFC) and (f) Explanatory Notes (NE). (CFC, 2016; STN, 2021).

Accounting information has both qualitative and quantitative aspects, the latter expressing the equity components in values. The qualitative aspect, on the other hand, according to Bezerra Filho (2014), does not inquire about the value of the patrimonial elements, but rather their functional quality, that is, they are attributes that make the information useful to its users and support the fulfillment of the main function of accounting (STN, 2021). Among other qualitative attributes, accounting information must have relevance, reliable representation, timeliness and comprehensibility. Relevance lies in the information that is capable of substantially influencing the asset information. Reliable representation is the faithful representation of the economic phenomena of an entity, and is achieved when these phenomena are presented in a complete, impartial manner, and free from material error. Timeliness means making accounting information available to your users in a timely manner to influence their decisions. Finally, comprehensibility, the focus of this study, is the attribute of accounting information that enables users to understand its meanings. Thus, the financial statements must present their content in a way that corresponds to the needs and users' knowledge base (CFC, 2016; STN, 2021).

Regarding the accounting information of public accounting, it is important to emphasize that it is structured in three types of nature, budgetary, patrimonial and control. The budget represents the acts and facts related to budget planning and execution, while the patrimonial portrays the financial and non-financial facts related to the composition of public assets and their qualitative and quantitative variations. Control, on the other hand, demonstrates management acts, the effects of which may produce changes in the entity's assets, as well as those with specific control functions inherent to the public sector (STN, 2021).

In order to contribute to the debate on the relevance of managers' understanding of accounting information, the studies by Hendriksen and Breda (1999, p. 94) emphasize the importance of proper interpretation of information by users and address frequent problems in understanding the terms used. Iudícibus, Mairon and Faria (2017, p. 49) highlight the existence of a gap in the path of accounting



information. The authors' approaches demonstrate that the noise that exists in the communication of this information impairs the understanding of users and consequently impacts decision-making.

The studies by Borges and Matias (2011), as well as those by Messias and Walter (2018), identified that the lack of understanding of the accounting statements by managers discourages them from seeking accounting information from public institutions to make decisions. It was also identified that the predominance of technical terms makes it difficult for managers from various sectors to understand, who then need to look for specialists to interpret the financial statements and convert them into understandable information.

According to Matarazzo (1995), one of the elements of great importance in this [decision-making] process is the analysis of the financial statements, because it is possible to evaluate the effects of the acts and facts reflected in the institution's assets. It is understood, therefore, that the function of accounting does not end with the generation of information for its users. Accounting is complete only when it fulfills the mission of providing the understanding of information by its users and its use in the decision-making process (BEDFORD; BALADOUNI, 1962; BENDER; SILVA, 2020; DIAS FILHO, 2013; SHIMIZU, 2010).

#### 3 METHODOLOGICAL PROCEDURES

This study has a qualitative approach, through a case study, with data collection through semi-structured individual interviews. The case study was carried out at UFRRJ, an autarchy linked to the Ministry of Education (MEC), this public institution of higher education, research and extension offers undergraduate and graduate courses in different areas of knowledge (YIN, 2015; UFRRJ, 2022).

The survey of the university's decision-making managers was carried out based on its organizational structure and its statute. The structure of the university consists of central administration, administrative units and academic units of higher, basic, technical and technological education. The central government is responsible for institutional management, being composed of the Rectory, the highest body for the execution, coordination, supervision and superintendence of all the university's activities – and which includes the academic and administrative pro-rectories. The pro-rectories play an important role in the institution's decision-making process, especially those of Financial Affairs (PROAF) and Planning, Evaluation and Institutional Development (PROPLADI), whose specificities are the planning and execution of budgetary, financial and patrimonial resources (UFRRJ, 2012).

In this sense, it was observed that managers who make managerial decisions based on accounting information make up the central administration of the university, and 8 internal decision-makers were identified, 5 of whom granted individual interviews. The interviews were scheduled by sending an e-mail to each manager.



It is worth remembering that in order to define the number of respondents in a qualitative study, the researcher should not stick to statistical representativeness, as in quantitative studies. According to Maykut and Morehouse (1997), qualitative studies do not aim to represent a certain population, as occurs with quantitative studies, but are intended to deeply understand a certain phenomenon experienced by a carefully selected group. The size of the research corpus varies according to the saturation of the data. According to Gil (2018, p. 139-140), this occurs "when the increase in new observations does not lead to a significant increase in information", that is, when no new information is observed as similar cases are experienced by the researcher.

In order to preserve the identity of these subjects, they are represented in this article as G1 manager; G2; G3; G4 and G5, and it should be noted that none of them works directly with the accounting area. The interviews were conducted face-to-face or via videoconference, from May to July 2022.

As a data analysis technique, Content Analysis was chosen because, in addition to providing the interpretation of verbal communication data that are not clearly exposed, according to Bardin (2016, p. 44), it also allows the "inference of knowledge relating to the conditions of production (or, possibly, of reception), an inference that uses indicators (quantitative or not)".

The analysis process was initiated through a systematic organization of the data, seeking to identify patterns and trends, resulting in the creation of categories, according to the protocol suggested by Bardin (2016). In order to assist in the answers to the questioning of this research, each category was divided into subcategories and their connection with the content dealt with in the theoretical framework, as shown in Table 2.

Table 2 - Connection between categories and theoretical framework

Category	Subcategory	Theoretical	Authors
		Framework	
(1) Accounting information	Nature of the accounting information used	Accounting and Accounting Information	CFC (2016); DIAS FILHO; NAKAGAWA (2001); UFRRJ (2012); HENDRIKSEN; VAN
	Relevance of accounting information in decision-making	Noises and Effects of Imperfect Information	BREDA(1999); RASCÃO (2006); UFRRJ, (2021); SANTOS (2006); SATUR; PAIVA; DUARTE (2017);
	Relationship of accounting information with <i>accountabillity</i> in the public sector		SILVA (2011); STN (2021);
(2) Process for interpreting the Accounting Information	Understanding of accounting information	Communication Theory and Semiotics	ALVES et al. (2021); BARBOSA etal. (2014); BERLO (2003); DIAS FILHO (2000); DIAS FILHO (2013); DIAS FILHO;



	NAKAGAWA (2013); GUEDES;
Accounting Information	ARAÚJO JÚNIOR (2014);
Noise	HENDRIKSEN; VAN BREDA (1999);
	IUDÍCIBUS; MARION;
	FARIA (2017); ILUFI (2000);
	KATAOKA; LEAL (2020);
	MARION (2020); MERKL-
	DAVIES; BRENNAN (2017);
	MESSIAS; WALTER (2018);
	MORRIS; GRASA (1994); SÁ (2018);
	SHANNON; WEAVER
	(1948)

Source: Survey Data (2022).

#### 4 RESULTS AND DISCUSSION

The category "accounting information" refers to the types of accounting information used in the day-to-day life of managers and the relevance of this information in the decision-making process, as well as the relationship between accounting information and accountability in the public sector. Budget information emerges as the most present and important in the day-to-day institutional activities of the interviewed managers. The interviewees point out that they also make their decisions based on the budget statements, as indicated by the following excerpts from the managers' statements:

Table 3 – Interviewees' reports on decision-making

(G1)	"The Balance Sheet does not, not for strategic decision-making. In fact, for no decision-	
	making at all. I think the only report we actually use is the	
	budget."	
(G2)	"For decision-making, it's more the budget and financial balance."	
(G5)	"I think the most important thing is the report that we monitor the execution of the budget, that's what I ask for the most. There is the budget allocation, the available credit, the	
	unavailable, committed, settled, that is the most important thing for me here when I am	
	managing the budget.	
	laughing."	

Source: Survey data (2022).

This finding was also found by Borges and Matias (2011), who state that managers rely almost exclusively on budget execution information to make their decisions in the public entity.

Although budget information is considered predominant in their daily lives, managers also mention information regarding contracts, unpaid remainders, works in progress and costs as recurring in their daily lives. In this context, it is important to note that this information is also part of the equity statements, therefore, it is equity information.

Still on the subject of equity accounting information, managers G1 and G2 pointed out that "the use of equity financial statements is not routine at the university. Its use is small and, in most cases, stimulated by external questions" – it should be clarified that the external one, in this case, refers to another sector of the university itself, (such as the ombudsman's office, graduate students and students).



graduation, deliberative councils), or control bodies from outside the university, be it the Office of the Comptroller General of the Union (CGU) or the Court of Accounts of the Union (TCU).

It is inferred that managers use budget information, most of the time, as a basis for their activities and decisions during the year until its closure. However, it is possible to observe the presence of accounting information of an equity nature as part of its decisions. In this sense, there is a tendency to expand asset information as external demands increase.

Moving on to the relationship between accounting information and accountability, the interviewed managers highlighted that the information most demanded by the control bodies is of a budgetary nature, but also the patrimonial and control information linked to contracts for goods and services is required. Still on accountability, it is worth mentioning that the transparency and publication of accounting information were pointed out by the interviewed managers as a primary requirement for the information that makes up the rendering of accounts to society. However, it was pointed out that the publication of the latest financial statements is not updated on the university's website, which goes against the principle of quality of accounting information in the public sector, according to which all public information must be properly disclosed in a place that is easily accessible to its users (BRASIL, 2011).

The category of analysis that deals with the "process of interpretation of accounting information" evaluated the managers' understanding of accounting information, how access occurs and the process of interpretation of this information. The technical language of accounting emerges as the main factor that influences the understanding of accounting information by managers, according to the arguments of the following interviewees:

Table 4 – Interviewees' reports on the interpretation of accounting information

(G1)	"I need to have someone from accounting to translate the financial statements."	
(G2)	"It's a very technical language [] Only the raw data comes, only the report comes to us, there is	
	no more detailed explanation of what that result means."	
(G5)	"The table almost always arrives very polluted, with a lot of information, a lot of columns and a	
	lot of rows. [] The language of accounting is highly technical, and it's a factor that makes it	

Source: Survey Data (2022)

These reports demonstrate a gap in managers' understanding of the information represented by accounting reports. It is also observed that there was no mention of the use of explanatory notes to clarify these reports. Reports of this nature were also identified by the studies by Borges and Matias (2011) and Messias and Walter (2018), who highlighted that the predominance of technical terms makes it difficult for managers to understand, who, most of the time, need to seek specialists to interpret them.



In this sense, it is inferred that the main factor that influences the understanding of UFRRJ's internal decision-makers is the highly technical language of accounting. Therefore, it is possible to observe that this is asymmetric information, in line with Rascão (2006).

Based on the studies of Morris (1976) and Dias Filho; According to Nakagawa (2012), the syntactic aspect of accounting language is related to the rules and principles that govern the preparation of its statements, a well-defined dimension in this context. On the other hand, the semantic and pragmatic dimensions are not well positioned. It is important to remember that the semantic dimension in the accounting aspect seeks to connect the alphanumeric composition of the statements with the events that it seeks to portray to its users, while the pragmatic dimension verifies whether the information has reached the claimant's expectations, that is, it verifies whether the level of adequacy of the accounting information meets the level of satisfactory understanding of its managers. so that this information can be used in your decisions.

The contribution of semiotics to accounting stands out, especially, in the semantic and pragmatic dimensions, since they deal with the relations of signs with the objects to which they are dedicated, that is, the communication between accounting and its user internal decision-maker. In this way, the encoding and decoding of the technical language of accounting information can be improved when considering the dimensions of the semiosis process – for example, considered in the preparation of the Explanatory Notes (NE) by the accounting professional.

The interviewed managers also highlight that the priority has been to meet the requirements of the external control bodies and operational demands. Therefore, the accounting analysis within the university is done in a simple way, it does not require deepening the information contained in the reports. This fact is in line with the study by Messias and Walter (2018), who highlighted the deviation of accountants' activities due to the demands of control bodies, which instituted the function of sectoral control.

In view of the arguments exposed, it is observed that accounting is not playing its role in the actions of the university's internal administration. It is associated with numerous regulations and external requirements, seen as important for the transparency of the institution, but which do not effectively contribute to decision-making.

### **5 FINAL THOUGHTS**

This study aimed to evaluate the understanding of accounting information and its relevance in the decision-making process from the perspective of internal users who are decision-makers in the public sector, based on the case study of the Federal Rural University of Rio de Janeiro.



The results showed that the presence of accounting information of a budgetary nature predominates over that of a patrimonial nature in the daily life of managers, since they are considered more relevant in the decision-making process within the university.

Other information of an equity nature – for example, the balance sheet, the cash flow statement and others, including explanatory notes, are not routinely accessed, only by external demands, by external control bodies or citizens. This information is little used by managers, which can cause losses in the performance of their decisions, since accounting it represents the set of budgetary and patrimonial acts and facts that form the infrastructure of the university for the provision of services to society.

As for the main noises that can impair the understanding of accounting information by UFRRJ's decision-making managers, the highly technical language of accounting stands out. For this reason, the interviewed managers reported the little use of financial statements, especially those of an equity nature, in their day-to-day decisions and actions.

Bearing in mind that accounting is a type of language, therefore, it interacts with the science of signs and is part of the semiosis process under the syntactic, semantic and pragmatic dimensions. Considering the interviewed managers, it is understood that the syntactic aspect is the set of standards issued by the accounting bodies that standardize the way of processing and presenting accounting information, in a combination of signs with no correlation between them and their interpreters.

As for the semantic and pragmatic aspects, which integrate the communicative relationship between the signs and the parts, these are not being effectively achieved. In these dimensions, the satisfactory level of understanding that accounting events seek to represent to their users and the conditions to influence managers' decisions can occur.

In this sense, semiotics brings together the theoretical foundation capable of improving the communicative process between accounting and its internal users. Based on these studies, it is understood that the Explanatory Notes are a relevant instrument in this context, as they have the function of bringing clarity and meaning to the accounting information presented in the statements to internal users who make decisions.

One limitation of this research is the representative gap in studies on accounting information aimed at internal users who are decision-makers within the public sector. One factor that contributes to this aspect is the fact that the available literature on the subject is still incipient.

In view of the elements listed, future research can be responsible for expanding the scope of the analysis, investigating decision-making managers from other public agencies, as well as about the understanding of internal users about the information from the perspective of the accounting professional who prepares the financial statements in the public sector. It is also possible to explore citizens' understanding of accounting information applied to the public sector.

# 7

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