


## AUDIT'S ROLE: A VIEW FROM TWITTER

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## ABSTRACT

As a way to reduce informational asymmetry and ensure reliability and reliability of accounting information, auditing gained notoriety. However, there is some disagreement in the literature about their roles and responsibilities, this disagreement comes especially from the function performed and what is expected by society. Therefore, this research aims to analyze the perception of the role of external audit based on the confrontation of the concepts of accounting standards and public opinion. This research is characterized as descriptive and quanti-quali when analyzing information collected through 501,533 tweets published between 2007 and 2020 that contained the word “audit” by users whose profile language is Portuguese. The results obtained, despite not clearly identifying the phenomenon of Audit Expectation Gap, suggest that most users who tweet about the audit do so by discussing the audit in relation to public resources and aspects of a political nature. It reinforces the lack of understanding of the real functions performed by the audit. This study contributes by exploring the concept of Audit Expectation Gap in the Brazilian context, providing evidence about the expectations generated by public opinion about the auditing profession in the social media environment, where comments are generated spontaneously by users.

**Keywords:** Audit Expectation Gap. External audit. Responsibilities of the Independent Auditor. Twitter.

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## 1 INTRODUCTION

The accelerated development of organizations, both in number and complexity, resulted in the segregation of ownership and control of capital, generating a new organizational structure and a new format of resource management, and as a result of these a new system of relations, the agency conflict. The agency's theory (Jensen & Meckling, 2008) postulates that there is divergence of interests between owners and administrators, which, due to asymmetry of information, power and authority, can lead to a conflict of interest between them, while both try to maximize their own benefits (Martins, Junior & Enciso, 2018).

A tool for reducing information asymmetry is the hiring of an audit, as a form of external support for the adoption of Corporate Governance measures (Mendes & Oliveira, 2018). For this reason, the Brazilian Institute of Corporate Governance (IBGC) promotes the idea that every organization needs its financial statements to be audited by an independent external auditor, even those that do not have legal obligation.

From the above, it is evident that the hiring of external audit services has become an effective measure in the search for the prevention and resolution of the agency conflict. This is because, in line with Castro, Vasconcelos and Dantas (2017), the work of the auditors is directly related to the need for users of the demonstrations to make decisions in an environment of trust and credibility. Thus, the audit aims to reduce informational asymmetry, making the information disclosed more reliable, besides reliably reflecting the patrimonial situation and the performance of the entities.

Empirical studies in this sense are not conclusive. On the one hand, some show that, in certain circumstances, auditing improves moral hazard for investors (Chen & Liu, 2013) and that a quality external audit has a positive impact on the company's performance indicators (Afza & Nazir, 2013), others cannot confirm these hypotheses (Varici, 2013; Shubita, 2021). However, as much as there is an extensive discussion in the literature about the role of auditing, there are still disagreements regarding the role and responsibility of external auditing, especially on the part of society (Sousa, 2016; Castro et al., 2017; Rocha, 2017, Kwakye, Owusu, & Bekoe, 2018; Pinto & Prado, 2019).

In addition, there is no consensus on what the audit responsibilities are. The results of Pinto and Prado (2019) research, for example, showed that respondents attributed to the external audit the role of increasing the efficiency and effectiveness of the organization, which is currently more tied to the role of internal auditing, since it is responsible for verifying the internal processes of the entity. In general, this difference between expectation and reality has already been researched in the literature with the *term Audit Expectation Gap*, or, expectation gap (Ruhnke & Schmidt, 2014; Fossung, Fotoh & Lorentzon, 2020).

The expectation gap in the audit refers to the differences between the public's perceptions about the role of the audit and the auditor's perception of this role, and this construction is not only due to the expectations of users of financial statements (banks, investors, market analysts, regulatory bodies), but of the users of audit services themselves (Best, Buckby & Tan, 2001; Sidani, 2007; Fossung et al., 2020).

Several regulatory and professional initiatives have been undertaken in recent years to reduce the expectation gap (Sidani, 2007). A useful means, however, little-used yet for the dissemination of the class in relation to its real functions are social media. Soares and Recuero (2017) observe that social media is of paramount importance because they allow greater conversation, interaction, and diversity of information flows between users. Penney (2016) mentions that individuals can use online discussion spaces to produce a public opinion that may be able to evaluate and even guide official decision-making processes.

Based on a questionnaire survey conducted in 2011 in Germany, Ruhnke and Schmidt (2014) conclude that the causes of this gap are related to exaggerated expectations about the responsibilities of auditors on the part of users of audit work, their difficulty in evaluating the performance of auditors, but also to deficiencies in the performance of auditors, who are not fully aware of their responsibilities. The authors conclude the paper by defining the gap in audit expectations as a persistent phenomenon involving complex social aspects. Based on the above, this study aims to analyze the public's perception of the role of external auditing. To achieve this goal, the following research question is: what is the public's perception of the role of external auditing?

This research is justified due to the distance between the socially generated expectations and the functions effectively performed by the external audit as a persistent phenomenon involving complex social aspects. Based on this, this work aims to study the perception of the auditing role of society represented by social media. Based on this, this research aims to study the perception about the auditing role of society represented by social media. To achieve the results, we chose to use social media for data collection due to the lack of a defined target audience, and the choice was due to the great popularity, availability of opinions and, according to Soares and Recuero (2017), because it is a space for the construction of public opinion. Twitter, more specifically, was chosen as a means of research, because there is a more open circulation of information in it since the profiles are public, also allowing a more accessible data collection (Soares and Recuero, 2017). In addition, in agreement with Couto, Moreira and Carmo (2018), this tool values the expression of the individual, the way he evaluates and positions himself in the face of events and published information.

Furthermore, the choice is justified since this data collection makes it possible to avoid some disadvantages of a survey, as treated by Carneiro, Nagamati, Borinelli, Pereira and Rocha (2015) by pointing out some possible errors associated with a survey, such as intentional distortion of the response, for example. Thus, because questions were not asked directly to users, it is expected that the result obtained is closer to society's view of the analyzed topic. This is because, in this case, the collected data derive from the free expression of individuals.

It is important to highlight that, in addition to a real and unstimulated analysis of the view of individuals on the role of auditing, the theme of this study is of paramount importance, because it aims to identify whether there is a relationship between the real function of the audit and the perception of society about it. The objective is to ensure clarification and, from this, that criticisms that are not appropriate about these professionals are mitigated, and to serve as a warning to the regulatory bodies of the profession and audit firms regarding the need for clarification about their responsibilities to the external public.

Considering the contradictory evidence in the literature regarding the different expectations about the role played by the audit, more research is necessary to represent different and more comprehensive points of view. In this sense, this work aims to contribute to the new and growing flow of literature on The AEG. At the same time, this article is of interest to users of financial statements, including analysts, investors, legislators and auditors, because it represents the expectation on audit work by social media users, thus facilitating the adoption of measures aimed at mitigating this gap, such as educating the public about the functions of the auditor, especially each time a new audit regulation is adopted. The article is a critical reference point for future research on the subject.

The originality of the present study is due to its main contribution. First, as shown in this introduction, traditional literature tries to define the role of auditing according to the opinion of a "technical" audience made up of users of audit work and, comparing these perceptions, defines the AEG. In this article, we take a broader approach, recounting the perception of the auditing role of Twitter users. The methodology used in the present study is a contribution to the accounting

literature. In addition to the possibility of efficiently gathering many observations (not answers!), the intrinsic bias of traditional research (acquiescence, demand characteristics, demand characteristics, order of questions, social desirability, among others) is overcome, without the need for any mitigating tool, providing the genuine point of view of random and spontaneous respondents (Fiesler and Proferes, 2018). This approach is consistent with authors who postulate the distance between the socially generated expectations and the functions effectively performed by the audit as a persistent phenomenon involving complex social aspects (Ruhnke & Schmidt, 2014).

The authors hope to encourage more research by using social media as a tool to empirically test traditional literature on topics of social interest. The present study is not without limitations. Although the sample used in this research is extensive, consisting of the entire population of data flow published on Twitter from 2007 to April 2020, the automated collection of comments from people and their limited number of character counts (passed in 2017 from 140 to 280) prevents a more in-depth analysis of users' thoughts and opinions.

## **2 THEORETICAL FRAMEWORK**

### **2.1 External audit functions and responsibilities**

The audit of the financial statements, also called independent audit, is an activity developed by an independent professional to an entity, the audited. The work developed by the audit aims to attest whether the financial statements were prepared according to accounting standards and principles, and subsequently issuing the results obtained through an opinion (Albuquerque, 2009).

The independent auditor, in this context, performs the role of a neutral and impartial agent in the execution of this work, and although hired by the administrators of the audited entity, should be independent and report not only to these but mainly act as an agent that reports to the market. Therefore, the professional should be fully aware of his/her role as guardian of the interests of the other participants in this market (Medeiros, 2005). Therefore, the professional should be fully aware of their role as guardian of the interests of the other participants in this market (Medeiros, 2005).

Considering the social importance, Medeiros (2005) states that independence should be seen as an essential attribute, therefore it must be preserved and seen as the "holy grail" of the profession, regardless of the person responsible for paying the fees for the services provided. This is because, according to Ibracon Magazine (2015), the audit report is an instrument of paramount importance to guide the decisions of different users of the financial statements, such as company administrators, shareholders, investors, regulators, financial institutions, the press, and even companies that have business relations.

For the Brazilian Accounting Standards, which deal with the Work of the Auditor, NBC TA 200 (R1) (2016), the objective of the external audit is to "increase the degree of confidence in the financial statements by users". And, for this level of confidence to be achieved, the auditor establishes his opinion on the adequacy of the financial statements prepared to the structure of the financial report, that is, whether they comply with the auditing standards and relevant ethical requirements.

After analyzing all the items that make up the scope of the audit, the Opinion of the Independent Auditor is issued, that is, a written report, with a reliable opinion about the analyses carried out. NBC TA 700 (2016) states that the auditor's report is a confirmation of the auditor's work before the financial statements are analyzed. Through this report it is possible to verify that the statements provided by the auditor are adequately presented in all relevant aspects, that is, they present a view of the reports in a fair and true way.

As stated by Rodrigues (2018), "it is understood that the auditor's opinion is the conclusion in the work of the audit professional, because through it, partners, shareholders and investors will have more reliability in the company's statements, provided that the auditor issues his opinion consistently". However, NBC TA 200 (R1)(2016) warns that this opinion is limited by the audit's objectives and does not guarantee the future viability of the entity or attests to the effectiveness of management in business management.

However, the responsibility of the audit process in the companies is both auditor who performs the work and of the administrators who provide the information. Therefore, according to NBC TA 240 (R1) (2016), it is important that the auditor contact directly with administrators to make inquiries about the processes to make more visible the risks of fraud and distortions that are found and corroborate the answers to solve them.

In this sense, Kassem and Higson (2016) examine the responsibility of external auditors in relation to corporate corruption, highlighting the implications for regulatory bodies. More generally, because of international corporate scandals (among others: Enron, Tyco, Global Crossing, WorldCom, Xerox) and national (Petrobras), much attention has been devoted to corporate governance mechanisms implemented to safeguard the interests of shareholders (Jiraporn, Chintrakarn, Tong, & Treepongkaruna, 2017) and, among them, auditing in its various facets (internal, external, governmental).

Failures, such as Enron's disastrous collapse, eventually led to a crisis of confidence not only in the audit process but in the entire financial reporting process. Based on extensive research and interviews with insiders, users and experts, Bhaskar, Flower and Sellers (2019) report the deeply disturbing impact of financial failures on corporate and financial responsibility. The authors question whether the profession, its regulators or government watchdogs, are adequately prepared for the challenges of growing regulation, public outcry and political scrutiny in the face of inevitable future financial failures, revealing shortcomings in audit quality, independence, choice and the growing expectation gap.

## **2.2 Audit Expectation GAP**

The concept of Audit Expectation Gap, or simply the difference in expectations in the audit, was initially studied by Liggio (1974). In his seminal article, the author already mentioned questions about the credibility of the work of independent auditors, since the 1960s, as the cause behind constant criticism of the profession. According to the concept of Liggio (1974), there are significant differences between the real performance of auditors and the expectations of users of financial information. That is, there is a divergence between what the public wants from the audit and what auditors understand to be their role to accomplish.

In recent years, Hassink, Bollen, Meuwissen and Vries (2009) conducted research in the Netherlands to identify differences in audit expectations. The study concluded that there were differences in expectations, mainly regarding the responsibility of the auditor in cases of corporate fraud, a topic with relevant attention in the literature and, in professional practice. For Porter (1997), the expectation created regarding the detection of fraud by the auditors, refers to the fact that auditors are the only independent profession with periodic visits to companies, thus having the opportunity to identify possible cases.

Singleton, Singleton, Bologna and Lindquist (2006) address this issue by stating that when it comes to fraud, the external audit seems to be better situated to answer this question, since the external auditor is an independent professional. Based in Gonçalves (2011), "The area where this difference in expectations causes greater problems to the image and reputation of the profession has to do with cases of fraud, because professionals tend to minimize the importance of their role in detecting fraud highlighting the responsibility of management".

However, this aspect is not in accordance with the auditor's main objective (whether the labor partner or the firm) determined by the current audit standards, because in accordance with these, the audit is only concerned with identifying and preventing fraud that substantially affects the financial statements. The auditor's main objective, expressed by excerpt from NBC TA 200(R1), is to increase the degree of confidence in the financial statements by users.

Albuquerque (2009) believes that the expectation regarding the audit, especially regarding the detection and prevention of fraud and bankruptcy, reinforces the idea that there is no clear understanding of users in relation to the role of independent audit established by the standards. Almeida (2004) states that, in general, audit limitations are known to auditors, but unknown by most stakeholders.

For Rocha (2017), the differences in audit expectations have significantly affected the auditors for several years, generating an environment of criticism and litigation, encouraged by the courts, politicians, the press and society in general, regarding their responsibilities and quality of performance. These questions are intensified when cases involving fraud, bankruptcy and other illicit accounting schemes, not identified by independent auditors, are reported. Comparing the criticisms commonly made to the work developed by the audit with the positions of this class, it is perceived the existence of differences in perceptions between them and the users of the financial report (Wanderley, 2017).

While possible differences in expectations are identified, according to Albuquerque (2009), there is a need to propose reasonable solutions to reduce them, either by revisions or changes to the current audit standards or indicating the need to promote measures that collaborate with the expansion of users' knowledge of information about the legally established, that can be carried out by continuing education programs aimed at users and auditors.

In this sense, Wanderley (2017) points out that (inter)national entities that regulate independent audit activity have sought to review current standards, issue certain guidelines and improve available technical materials, thus enabling improvement in communication between auditors and users of accounting information, as well as the quality of the work developed.

On the other hand, Cohen, Ding, Lesage and Stolowy (2017) adopt a more specific position when evaluating the role of the press in the persistence of these differences in expectations, through the analysis of publications about 40 cases of North American fraud, occurred between 1992 and 2011. As a result, the author proposes that improvements in the quality of audits and standards are necessary, but this alone is not enough, because the disproportionate role attributed by the press to the independent auditor greatly hinders the convergence process.

Thus, it is perceived that establishing dialogues with society in general, making changes in the relevant regulations and promoting awareness to audit professionals about what they expect is necessary. Considering the strong influence held by the media, dialogues and clarifications aimed at this audience may be the first step.

### **2.3 Social Media**

According to Couto et al. (2018), the end of the 20th century was marked by strong development of Information and Communication Technologies (ICT), through the expansion of interest in computer science and the popularization of the network. Thus, the constant advance of ICT has generated changes in various areas of society, in the way knowledge is produced, in the creation of new values and understandings, in addition to promoting a redefinition of human relations, whether between people or between people and machines.

In the context of this transformation, social media takes up space. In agreement with Bonsón et al. (2012) and Kavanaugh et al. (2012), social media is about internet-based applications designed to promote social interaction, collaboration, joint learning and rapid dissemination of

information across society. Social media is considered texts, images, audio and video in blogs, message board, and other tools that allow interaction between participants (Romano, Chimenti, Rodrigues, Vaz, & Nogueira, 2012).

Recuero (2009) notes that social media is of paramount social importance, as it allows greater conversation, interaction and diversity of information flows between users. In this sense, Romano et al. (2012) believe that the growing dissemination has added value to the communication process by facilitating the exchange of information on the most varied issues. This is due to Moreo, Romero, Castro and Zurita (2012), because the Internet is now available to most of the population, due to the most affordable computers, thus generating a cultural revolution, because people from all over the world become able to interact with each other expressing their opinions freely.

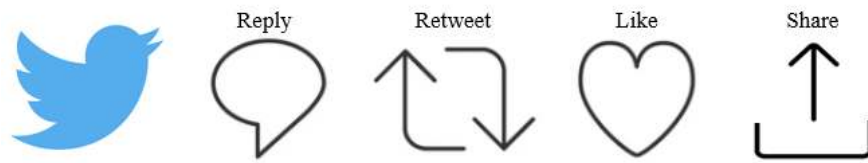
From this, Penney (2016) mentions that these individuals can then use online discussion spaces to produce a public opinion that may be able to evaluate and even guide official decision-making processes. "The formation of the opinion of each individual, considering their biographical experiences, their experiences and their subjectivity, culminates in the formation of public opinion, through the discussion of a particular subject with one or more individuals, who also use their repertoires of life and subjectivity to enrich the discourse." (Candide, 2016, p. 130).

Thus, precisely because they are considered sources of information capable of reflecting the opinion of citizens on various subjects, Yu, Duan and Cao (2013) mention that in recent years the number of academic and corporate research that explores the information contained in these media has increased. However, although finding sources of information is no longer the main problem for researchers, organizations and individuals, since social media has a wide range of content, there is then a great challenge in this scenario regarding the creation and implementation of mechanisms to search, mine and retrieve relevant information of the huge amount of data available and transform it into knowledge (Montoyo, Martínez-Barco & Balahur, 2012). In this sense, Gómez-Carrasco, Guillamón-Saorín and Garcia Osma (2021) highlight the role of social media (Twitter in the case in kind) in corporate communication of corporate social responsibility objectives.

At the same time, it is worth noting that the dissemination in real-time and with worldwide coverage entails the negative aspects of dissemination of fake news that can be an element causing damage, not only moral or material, being visible the hypothesis of social damage and, therefore, of a digital civil liability (Guimarães e Silva, 2019).

Of the most popular social media in Brazil, a research developed by Ituassu et al. (2018) points out that Twitter stands out in the first place. According to Souto (2019), Twitter was launched in 2006 in the United States and is a social media and server for microblogging that allows posts of messages containing up to 280 characters, accompanied or not, by photos or video of up to 60 seconds.

On Twitter, messages are displayed in real-time on both the profile of the person who posted them and in the timeline of their followers. However, the interaction between all users takes place freely regardless of whether followed or followed by those who published the post. This interaction occurs, as shown in Figure 1, through: a) "like" (like): signals the agreement or appreciation of the publication; b) "republish" (retweet): act of disseminating on its own profile a post published by another participant; c) "comment": allows virtual dialogue, also limited to 280 characters, about a given publication; and d) "share"(share):allows the sharing of the post on other social media platforms.



**Figure 1.** Ways to interact on Twitter

Source: prepared by the authors.

Souto (2019) believes that in addition to its functionality focused on connecting people, Twitter has become a source of information in agile time, with its own identity content, being agile, transient and ephemeral. Furthermore, Souto (2019) classifies it as an important means of communication because it allows interaction between different individuals and circulation of different subjects.

Thus, from the components of Twitter presented earlier, according to Araujo (2018), services that use their data for analysis can design and develop database schemes to understand some essential information for exploratory studies that focus on public monitoring. They are the frequency of tweets posted on a particular subject; who posted these tweets; the exposure achieved in terms of followers; the bookmarks or topics discussed in the tweets; where and when they were posted; who was mentioned in them; who answered or reproduced them.

Moreover, when analyzing the works that use social media as a means of research, there seems to be a predilection of the scientific community for the use of Twitter, especially in research in business. Santos, Magalhães, Nascimento, Correia-Neto and Dornelas (2012) developed a study to describe strategies applied by the three largest collective purchasing companies in Brazil in the first quarter of 2011, based on the Hart and Milstein model, to obtain competitive advantage through Twitter. The authors verified that a competitive advantage can be generated using this tool.

Another study directed in this sense was that of Sérgio, Christopoulos and Prado (2017) who analyzed the way financial institutions use social media as an information and communication technology (ICT) tool and how these ICTs have contributed to the formation of the image of their brands. We analyzed the behaviors of the profiles of the key accounts and those destined to the functions of Customer Service (SAC) of five major Brazilian financial institutions on Twitter, demonstrating that the use of this tool can contribute to the positive development of a brand.

In addition to these, Mota and Pinto (2017) also collected data from the official Twitter accounts of Brazilian publicly traded companies, which adhered to the differentiated levels of Corporate Governance of BM&Fbovespa, to analyze their level of voluntary disclosure, since they have greater concern about the transparency of information and that social media allows access to information with lower disclosure costs. The hypothesis raised was that companies with better levels of corporate governance would have better levels of voluntary disclosure on their official Twitter accounts.

Pacheco, Silva, Luperi, Melo and Nicolau (2018), finally analyzed how Fintechs are using Twitter as a communication channel with their customers. To this end, a research was developed in this media about three Fintechs (Nubank, Banco Inter and Digió), analyzing the messages published between the key accounts and SAC of these institutions. Thus, the results showed that these Fintechs are actively present in this microblogging and use it to relate to customers. Finally, several studies have proposed the objective of analyzing the feeling of social media users on a topic (Maia, Tommasetti, & Silva Macedo, 2021) or even to "reconstruct" a definition of a theoretical construct from the perception of this of social media users (Tommasetti, Leite, Maia, & Macedo, 2021), highlighting the nuances potentially little researched in the literature.

In this sense and given the above by this reference, on the role of the audit, the Audit Expectation Gap and the potential of social media, this research aims to analyze the perception of the work of the audit and the reality performed based on the confrontation of the concepts of accounting standards and public opinion. The procedures used and the results are expressed in the following sections.

### **3 METHODOLOGY**

To achieve the objective of this research, which is to analyze the perception of the role of external audit based on the confrontation of the concepts of accounting standards and public opinion, this research is characterized as descriptive, as the approach is a quantitative and qualitative research. The first approach was applied to verify more popular opinions and characteristics (based on engagement indexes and more used words in the context) and, from this, a qualitative investigation was made regarding the aspects observed previously.

To achieve the results, we chose to use social media for data collection due to the lack of a defined target audience, and the choice was due to the great popularity, availability of opinions and, according to Soares and Recuero (2017), because it is a space for the construction of public opinion. Twitter, more specifically, was chosen as a means of research, because there is a more open circulation of information in it, since the profiles are public, also allowing a more accessible data collection (Soares and Recuero, 2017). In addition, in agreement with Couto et al. (2018), this tool values the expression of the individual, the way he evaluates and positions himself in the face of events and published information.

Furthermore, the choice is justified since this data collection makes it possible to avoid some disadvantages of a survey, as treated by Carneiro et al. (2015) by pointing out some possible errors associated with a survey, such as intentional distortion of the response, for example. Thus, because questions were not asked directly to users, it is expected that the result obtained is closer to the society's view of the analyzed topic. This is because, in this case, the collected data derive from the free expression of individuals.

The means of data collection used for this work was Twitter due to its popularity in the research medium, as well as its varied benefits offered. This microblogging was chosen due to its functionalities that allow users to express what they are thinking, in small texts, for others to see, share and give their opinion on a particular subject.

This limitation of characters allows obtaining a more compact database that contains a stronger feeling in the publication, because if there was a large text, the probability of ambiguities being generated could be higher (Attux, 2017). Moreover, this social media allows the observation of public opinion on a given subject, becoming, then, of great value for studies of this type.

Furthermore, this approach has its benefits over other methods, such as allowing some of the disadvantages of a survey to be avoided. Carneiro et al. (2015) point out some of the possible errors associated with the use of the survey approach; they are: the sampling does not effectively represent the population, the choice of the sample not being random, and the error associated with the answers found, which may be generated by the poor understanding of the questions addressed or by intentional distortion of the response, with the objective of seeming more appropriate.

Thus, when using the data extracted from tweets, one can disregard the risks mentioned above, especially regarding the lack of understanding regarding the points addressed and the intentional distortion, since no direct questions were made, and the posts can usually be thought of as the free expression of individuals.

Another factor that motivated twitter's choice for this study is because there is a more open circulation of information in it, since all profiles are public, also allowing a greater and more

accessible data collection possibility, especially about public information. And then, this is an easy-to-access tool, both for use and for performing analysis, in addition to providing its free use.

Moreover, according to Attux (2017), Twitter is the social media less affected by filtering algorithms that "hide" information, as is the case of Facebook, for example, where information only circulates if there is network action, while on Twitter the action is dependent on a circulation made in an active way by retweets and mentions (@), making it potentially more democratic and public.

A Web Crawler, developed in Python, was used to extract the information contained in the tweets, to collect initial data. According to Moraes (2019), Web Crawler is an application created to access and extract data from web pages automatically, by copying the information found on the pages visited, and is usually used by search engines such as Google, Bing and Yahoo, although its use has spread in recent years to several other areas such as marketing and database generation, for instance.

The web crawler employed is based on twitter's advanced search for tweet extraction. Tweets containing the term "audit" and responses to those tweets in Portuguese during the period 2007 (social media release) until April 2020 were collected, resulting in a total of 501,533 tweets. Together with the textual content expressed in each tweet extracted, a series of information was obtained for this analysis such as: date and time of posting, number of retweets and likes and link of the respective publication.

After data collection, based on the analysis made by Haro-de-Rosario, Sáez-Martín and Caba-Pérez (2018) to measure the involvement of users in publications, the number of tweets, retweets and likes per year was counted for the calculation of two indexes: (1) Popularity – can be seen as a light engagement because it originates from the average likes of a given year; and (2) Virality – considered as a harder engagement because it derives from the average retweets, since when a user "retweets" a post means that he not only became interested in her content, but also that it is present in his timeline, because he is in encounter with his ideology.

Once the evolution of engagement over the years (from 2007 to 2020) was calculated, it was possible to analyze and explain their fluctuations. The objective of this step was to capture events and conditions that may have reflected in increased or decreased relevance of the topic studied, in this case, the audit.

The next step was to clean up the unnecessary content of publications to apply a qualitative approach to analyze the most relevant words. At this stage, the strange characters were eliminated, that is, that have no meaning, such as hashtags, "@" and "rt" (retweet), for example, in addition to the scores. And from this, the words that form each publication were counting to identify how often they appear, allowing the identification of a pattern that demonstrates the most present terms on the subject.

However, at this stage, a 99% sparsiveness index was determined to eliminate words that appear in less than 1% of the collected publications, i.e., any term that appeared less than 5,015 times was discarded from the analysis because it was considered low impact. Furthermore, words were eliminated that, by themselves, are considered meaningless (stop words), being present in the sentences only to complement their meaning, such as "a", "that" and "de", for example. It is worth mentioning that the word "audit" was also eliminated because it is the term searched.

Based on the treatment presented, it was possible, then, to unfold the results obtained by identifying which terms are most present in the published discourses and classify them into groups according to their similarity of meaning, according to methodological procedures used in previous studies (Ciasullo, Troisi, Loia, & Mayonane, 2018).

Thus, in accordance with the quantitative analysis of segregated word groups, we sought to understand qualitatively how individuals describe the audit and what they think about it.

## 4 DATA ANALYSIS

The first stage of the analysis consisted of the analysis of variations in popularity and virality indices, together with the understanding of events that may have caused such oscillations. For this, we analyzed the data presented in Table 1 referring to tweets containing the word "audit", in Portuguese, between 2007 and April 2020.

Table 1  
**Engagement Rates**

Year	Extracted Data			Engagement Rates	
	No. of Likes	No. of Retweets	No. of Tweets	Popularity	Virality
2007	0	0	39	0.00	0.00
2008	10	43	305	0.03	0.14
2009	123	194	7769	0.02	0.02
2010	377	4611	25944	0.01	0.18
2011	557	7377	45306	0.01	0.16
2012	715	7397	41094	0.02	0.18
2013	1523	11699	45755	0.03	0.26
2014	33703	52864	66724	0.51	0.79
2015	26221	29070	49062	0.53	0.59
2016	40664	30460	43644	0.93	0.70
2017	75166	39976	37541	2.00	1.06
2018	257564	76834	47355	5.44	1.62
2019	693038	164319	62140	11.15	2.64
2020*	378152	98666	28855	13.11	3.42
<b>Total</b>	<b>1507813</b>	<b>523510</b>	<b>501533</b>	<b>3.01</b>	<b>1.04</b>

**Note.** \* Data from 2020 collected until the month of April. Popularity = Likes/Tweets; Virality = Retweets/Tweets.

Source: Prepared by the authors.

From Table 1, it is observed that the year 2014 initially presents a more marked growth of both indexes (popularity of 0.51 and virality of 0.79) in conjunction with the expansion of posts. Comparing the year 2014 to the previous year, there was an increase of 46% in the number of tweets published, generating jumps of almost 2113% in the number of likes and 352% of retweets. Although it is not the moment of greatest oscillation of the analysis, it is important to understand the context of this period by pointing out the first significant increase in the number of engagements on the audit theme.

In general, two remarkable events stand out in Brazil in 2014: Operation Lava Jato and the Presidential Election. Operation Lava Jato was, according to the website of the Federal Police (2014), an investigation to discover criminal organizations that carried out money laundering in several states. This investigation was widely discussed by the media and took large proportions due to the arrest of several defendants, including the broker Alberto Youssef, in addition to the involvement of schemes through Petrobras (Petróleo Brasileiro S.A.).

Because this is a subject that is correlated with corruption schemes, it is possible that this was one of the factors that resulted in more posts and engagement in tweets with the word audit. That's because Twitter is used by its users to discuss issues that have some social relevance, as stated in the previous section.

The next considerable jump in popularity (from 0.51 to 2.00) and virality (from 0.79 to 1.06) occurred in 2017, from the 123% increase in the number of likes, despite a 44% reduction in

posts and 24% of retweets compared to 2014. Among the remarkable events of this year, there are: a) arrest of businessman Eike Batista through the Operation Efficiency of the Federal Police, due to an active corruption scheme with the former governor of Rio de Janeiro, Sérgio Cabral; b) disclosure of the list of politicians investigated by the Attorney General's Office (Janot's list); c) operation of the Federal Police in refrigerators, known as "Carne Fraca (Weak Meat)", which revealed fraud in the sale of meat; d) conviction of former President Luiz Inácio Lula da Silva for money laundering and passive corruption in the case of the Guaruja triplex, investigated through Operation Lava Jato; e) arrest of Paulo Maluf for embezzlement while he was mayor of São Paulo.

The year 2018 also showed a significant increase, bringing the popularity rate to 5.44 and the virality rate to 1.62, with an increase of 26% in the number of tweets, 243% of likes and 92% of retweets compared to 2017, demonstrating the expansion of engagement for the audit topic. This effect on the indexes can be related to some events that occurred in that year, such as: a) the arrest of former President Lula; b) arrest of former governor Luiz Fernando Pezão for crimes of corruption, money laundering and criminal organization; c) national elections with the victory of President Jair Bolsonaro.

The following year 2019 is also marked by an increase in engagement rates to 11.15 popularity and 2.64 virality in 2019, associated with a 169% increase in the number of likes, 114% of retweets and 31% of tweets. In this period, the following events stand out: a) the conviction of former President Lula for passive corruption and money laundering related to the works of the Santa Barbara site in Atibaia, funded by contractors OAS, Odebrecht and Schahin; b) arrest warrant for former President Michel Temer, former Minister of Mines and Energy, Moreira Franco, and former minister of the civil house, Elisha Padilha; c) investigation of Cruzeiro for irregular transactions, use of shell companies to regularize operations and sale of underage players, in addition to disclosure of irregularities in the club's balance sheet; d) investigation by Flávio Bolsonaro on atypical financial transactions made by his parliamentary advisor, Fabricio Queiroz.

The second stage consisted of the analysis of the words that appeared more often in the collected tweets, considering a 99% sparseness index and the elimination of stop words: 53 words were obtained. To facilitate their interpretation, these words were segregated into 4 (four) different types of groups linked to the possible meanings identified (government audit, elections, internal and external audit). However, some words could not be segregated exclusively to a group because they were various topics and, therefore, were repeated.

Table 2  
Grouped Words

Group 1: Elections		Group 2: Government Audit		Group 3: Internal audit:		Group 4: External Audit	
Word	Number of obs.	Word	Number of obs.	Word	Number of obs.	Word	Number of obs.
PSDB	13156	Debt	26867	Company	17854	Company	17854
Government	13615	Account	25982	Management	14161	Millions	13187
Millions	13187	Company	17854	Internal	14029	External	10636
Brazil	12025	TCU	14367	Millions	13187	Petrobras	8902
Polls	11867	Public	13831	Petrobras	8902	BNDES (Brazilian National Bank for Economic and Social Development)	8826
Elections	10645	Government	13615	BNDES (Brazilian National Bank for Economic and Social Development)	8826	Irregularities	8380
TSE	10398	Millions	13187	Irregularities	8380	Consulting services	7940
President	10266	Brazil	12025	Companies	7168	Fraud	7494
Court	9325	Petrobras	8902	Fraud	7494	Companies	7168
Health	9066	BNDES	8826	Contracts	7031	Contracts	7031
Election	8820	Irregularities	8380	Money	6756	Money	6756
Female Citizen	8791	Companies	7168	Accounting	6531	Accounting	6531
Result	8536	TCE	7840	Report	6458	Report	6458
System	8183	State	6919	Safety	6043	Safety	6043
Votes	7756	Money	6756	Cash	5317	Independent	5950
SP	7143	City Hall	6058			Cash	5317
State	6919	Safety	6043				
Bolsonaro	6329	Public	5527				
City Hall	6058	Cash	5317				
Safety	6043	Tax	5285				
Dilma	6027						
River	5977						
Social Security	5607						
PT	5573						
Ministry	5492						
Lula	5209						
<b>Total</b>	<b>222013</b>	<b>Total</b>	<b>220749</b>	<b>Total</b>	<b>138137</b>	<b>Total</b>	
<b>Percentage</b>	<b>31.03%</b>	<b>Percentage</b>	<b>30.86%</b>	<b>Percentage</b>	<b>19.31%</b>	<b>Percentage</b>	

**Note.** The percentage calculated is due to the proportion of the number of observations of each group in relation to the total of the four groups.

Source: Prepared by the author

The first group, representing the highest index of terms "tweeted" (31.03%), was composed of 26 words that bring the idea of audit in the context of the elections and were segregated, in its words such as "PSDB" (Brazilian Social Democracy Party), "ballot boxes", "elections", "TSE" (Superior Electoral Court), "president", "votes", "PT" (Workers' Party), among others,

demonstrating that, in many of the collected posts, the meaning being attributed is that of auditing as a fact-finding and validation of the outcome of the elections. There is no connection with the meaning of accounting audit proposed by this work.

Group 2, on the other hand, addresses the government audit, as can be seen in Table 2. In it, some terms such as "debt", "TCU" (Federal Court of Auditors), "public", "government", "Brazil" "TCE" (State Court of Auditors), "state" represent the audit of public or budgetary accounts, as analyzed in the bibliographic reference through the concepts of Pinheiro and Cunha (2003) that describe it as the type of audit that observes compliance with tax obligations and examines the legality and adequacy of public accounts.

In addition, words such as "irregularities", "companies", "public" and "fiscal", for example, refer to the inspectors of government agencies such as the so-called "auditors of the Internal Revenue Service", corroborating the mentioned by Ibracon Magazine (2015) as to the existence of confusion on the part of lay people between the functions of the auditor and the fiscal.

The third group shown in Table 2 presents the conceptualization of one of the types of accounting audits addressed, the internal one. In this category, the terms "company", "management", "internal", "irregularities", "fraud" and "accounting", for example, seem to be in line with the concept of internal audit addressed by Pinheiro and Cunha (2003). This is because, based on the above terms (and in line with the concept of the authors mentioned), this type of audit can be translated as that performed by the company's own employees to assist management in the implementation and evaluation of internal controls, aiming to identify irregularities and prevent fraud.

Another grouping that was obtained through the collected data is the external audit, thus converging with the main object of this research. In this group, terms such as "company", "external", "irregularities", "consulting", "fraud", "contracts", "accounting", "report", "independent", among others, allow to formulate the concept of external audit as a system that is not part of the audited entity, but has the objective of verifying the existence of irregularities in accounting information, including fraud, and issue an independent opinion on the adequacy of the financial report to the standards and pronouncements in force.

This concept is reasonably in accordance with the functions and responsibilities of the external audit analyzed by some authors such as Pinheiro and Cunha (2003), Medeiros (2005), Albuquerque (2009), among others, in addition to NBC TAs, which approaches it as an independent figure responsible for expressing an impartial opinion to the market about the adequacy of the financial report to applicable standards and generally accepted accounting principles.

However, it is also worth mentioning that, only with this analysis, it was not possible to affirm whether the detection and prevention of fraud are attributions given preferably to the external audit, since this term occupies only the 8th position of this category, not demonstrating such a strong predominance when compared to others. Although group 4, that is, what corresponds to the audit functions, was the least developed group in proportions of words, which are already indications of lack of clarification about their functions.

In addition to these grouped terms, presented in Table 2, some others were identified as "course", "vacancies", "Paulo" and "club" that were not segregated because they did not have relevant meanings for the analysis in question. However, some of them demonstrate that one of the possible topics addressed through tweets is about job opportunities and courses available in this area.

When analyzing people's reaction to these posts, it turns out that in addition to being the most "tweeted" topic, it is also the most liked and shared, confirming that user engagement is mostly focused on auditing in a political context. The prevalence of discourses about the need to audit the results of the elections and the accounts of political parties was highlighted.

Demonstrating, once again, that society's greatest concern has been regarding political affairs, not the accounting audit itself, which once again highlights the expectation gap, namely the audit expectation gap, revealing that this gap is existing due to the lack of a clear understanding of audit functions, and which positions can carry the same name, but are not related to accounting auditing, the focus of this study.

Thus, based on the analyses made, it was not possible to understand clearly what the population understands regarding the role of external accounting audit, since only 18.80% of the data collected, as presented in Table 2, had some relationship with auditing and only 3 (three) tweets that had the content read. Thus, and with this amount of information it cannot be emphatically stated that there is a difference in expectation between the function performed by the external audit and what is expected socially of it, but rather that there is a lack of clear understanding about its real function.

Furthermore, this analysis allowed us to identify that this subject is not the most relevant for society in terms of discussions on Twitter, because, in reality, the great concern of individuals has been regarding the proper allocation and use of public resources. Thus, in this context, the subject most addressed by them is the need to audit, that is, to analyze possible irregularities in relation to the allocation of public money.

## 5 CONCLUSIONS

The present research, as well as others focused on the diagnosis and understanding of the AEG, aims to analyze the public's perception of the role of external auditing. This type of analysis is essential to expand the knowledge of the public about the scope, responsibilities and limitations related to audit work, in addition to contributing to the promotion of a productive dialogue with other sectors of society and, if necessary, to improve the quality of work developed by these professionals.

The results obtained showed that the audit is present in public discussions, but in Brazil's social media it has been discussed in a political sense. A substantial issue regarding the results is the possibility of reflection generated with these to reinforce to the regulatory bodies of the profession and audit firms the existence of a gap of expectation with the public, that is, with society. This study contributes by exploring the concept of AEG in the Brazilian context, providing evidence about the expectations generated by public opinion about the auditing profession in the social media environment, where comments are spontaneously generated by users.

However, it is important to point out that this, like any other type of research, has inherent limitations. This research, because it is based on data extracted from social media, presents an external factor that cannot be changed, but that directly affects the results obtained, that is, not all individuals have a Twitter account or internet access, in addition to situations in which, despite having access, they do not yet use this space to express their opinion on the analyzed topic. Therefore, the greater the number of active and engaged users, the better the results obtained.

Based on the limitations found, it is necessary a deeper analysis of public opinion regarding the functions and responsibilities of external auditing through other forms of research, whether in social media or not. A similar path to that employed in this research would be the use of Dirichlet's Latent Allocation for the creation of analysis word groups, thus focusing on a creation of knowledge from the bottom up.

Additionally, the research may cover other languages, to compare the results and analyze the nuances of them from different sociocultural perspectives. Another possible study is the analysis of the opinion of researchers and professionals in the area and even members of the regulatory bodies of this profession about possible differences in expectations and ways to align

the interests of information users with aspects determined by the norms, if necessary, or even possible changes in current regulations.

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