

Internal Audit and Risk Analysis: The Particular Case of a Public Entity in Portugal

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The purpose of this paper is to present the results obtained by an internal audit unit of a large public sector entity, in the area of education, during 2018, which we will call here Entity X and analyze the impact that developed work had in the management decisions of that entity. The methodology used in the preparation of the article is the case study, where Cervo, Bervian, and Silva (2007, p. 62) define it as “research on a particular individual, family, group or community that is representative of their universe, to investigate the different aspects of life”. The theoretical framework on the theme (secondary sources) was developed from bibliographic and documentary research, which concerns the classification of procedures and are appropriate to the characterization of this study, as an instrument for collecting information on the subject in question (Gil, 2006). The results obtained are related to the activity of the referred internal audit unit in 2018, which proved to be quite fruitful and are developed in points 4, 5, and 6 of the paper. During the preparation of the study, some limitations were found, related to the fact that it was only possible to analyze the year 2018, thus failing to establish a relationship with the department’s activity history. In our opinion, this study is important because it allows other similar entities to verify that it is possible to carry out internal auditing in the public sector (especially in this sector of education), since this practice is not yet disseminated within the area. This study is original in that it uses real data from an internal audit body.

Keywords: internal control, audit, accounting, management

Introduction

In the present economic situation, in which transactions between companies are increasingly significant, there must be a guarantee that the activities carried out occur with integrity, legality, and legitimacy between the company and the others with which it relates (André, 2012; Marques, 2014). In global terms, the need for effective security in processes stands out, especially in accounting terms, due to the increasing rate of fraud carried out by employees and/or managers within organizations, regardless of position or scope.

Internal audit is a tool that is being used by managers to prepare organizations for the monitoring of processes, which are increasingly dynamic in all sectors, regardless of size, be it a multinational, a medium-sized company or a small company.

The audit has increasingly aroused the interest of society and other stakeholders, especially with regard to

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the accuracy of the information generated and is beginning to be used as a tool in the management process by administrators in organizations, who are beginning to show greater concern with the internal control.

In the case of public institutions, internal auditing, even without reaching the degree of interest it has aroused in the private sector, has been receiving increasing attention in the public sector, especially in large entities. The use of auditing techniques is important in order to be able to control public spending.

The present study is based on the need to obtain a greater understanding of how internal auditing is carried out in the control of the activities of a public institution and, consequently, on the results obtained during the course of an economic year, in order to better understand the execution of audits procedures performed at that entity and strive for its improvement.

This article aims to present the results obtained by an internal audit unit of a large public sector entity, in the area of education, during 2018, which we will call here Entity X and analyze the impact that the work developed had in the management decisions of that entity.

The internal audit department of the entity in question, which we will hereafter call DAI, was formally created 14 years ago, has been in operation for 12 years and depends on the highest body of that entity.

Literature Review

Internal Control, Internal Control System and Risk Management

Trends and paradigms related to business models will undoubtedly have an effect on companies' financial reporting and operations. Sustainability, which until recently was considered a rather amorphous concept related to regulatory concerns, is increasingly becoming an important aspect of management decision making. At the same time, with the increasing use of technology in all aspects of business operations, it appears that analysis, especially analytics that allows managers to look ahead, will play an increasing role in an organization's strategic planning.

Auditing and accounting have generally played an important role in the area of business management. Auditors provide reasonable assurance that financial statements issued by organizations are prepared and presented in accordance with generally accepted accounting principles (GAAP) (Berndt, Bilolo, & Müller, 2014; Chen & Lin, 2011).

The COSO (Committee of Sponsoring Organizations of the Treadway Commission) defines internal control as "a process carried out by the Board of Directors, Management and other members of the organization with the aim of providing a reasonable degree of confidence in achieving the following objectives: (a) Effectiveness and efficiency of resources; (b) Reliability of financial information; (c) Compliance with established laws and regulations".

In turn, the Official Accounting Plan for the Education Sector (POC-Educação)¹ notes that the internal control system comprises a set of procedures aimed at ensuring: a) Safeguarding assets; b) The registration and updating of the entity's fixed assets; c) The legality and regularity of transactions; d) The completeness and accuracy of the accounting records; e) The execution of the plans and policies defined above; f) Management effectiveness and information quality; g) The faithful image of the financial statements.

The internal control system should include basic principles that give it consistency, and which are: a) The

¹ Currently, entities in the Education sector use the Accounting Standardization System for Public Administrations (SNC-AP), approved by Decree-Law 192/2015, of 11 September.

segregation of functions; b) Control of operations; c) The definition of authority and responsibility; d) The methodical recording of the facts.

Audit and Internal Control

In a constantly changing and highly competitive world, internal audit functions are increasingly under pressure to create value in organizations and support effective risk management (Lenz, Sarens, & Jeppesen, 2018). The core of internal auditing and its ability to contribute to the value delivered to shareholders, largely depends on the maturity and robustness of the corporate internal control system. The various levels of maturity place the internal audit in a con that varies between protecting the business value and creating measurable value for the organization (Teixeira, 2020; Sarens, De Beelde, & Everaert, 2009).

To create the value of the function, those responsible for internal audit must consider several actions:

- Develop solid basic skills;
- Coordinate with the corporate risk management functions;
- Consider the emerging risks in the internal audit activities;
- Provide a service different from the traditional audit, linked to verification.

A clear understanding of the internal audit mission, associated with robust methods and in line with the International Internal Auditing Standards, allows a conscious response to these challenges and stimuli. Knowledge of the practices established by the standards referred to above and the sharing of knowledge and experiences are indispensable for this answer.

For Teixeira (2020), there are eight attributes that contribute to the effective development of the internal audit activity and to the added value to the organization:

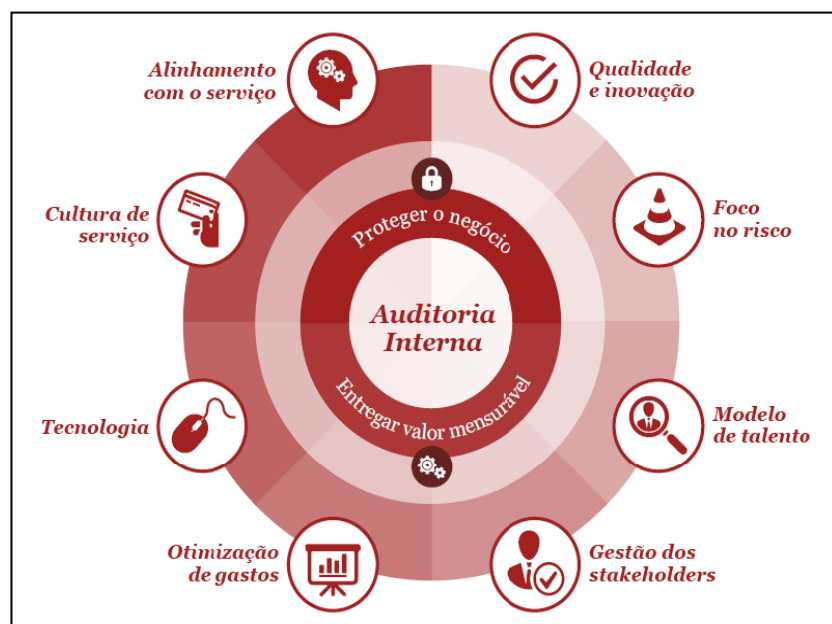


Figure 1. Attributes for the development of the internal audit activity. Source: Teixeira (2020).

The audits, both internal and external, use sampling techniques, stratifications and random selections and based on these quantitative methodologies, together with the internal control tests, the monitoring of internal documents and the interviews, the auditors formulate an opinion on the effectiveness of the internal controls

and the probability of significant errors (D'Aquila, 2012; Marques, 2014; IIA, 2012). In the light of sustainability and analysis, it is essential to obtain as much quantitative and verifiable information as possible, which is why more and more use is made of analytical software in all organizations. Why do auditors restrict themselves to sample selection when, through specific training and the use of appropriate software, it is possible to test virtually all transactions? Those who make business decisions and external stakeholders, demand and expect information to be available in real time, so it is imperative that the audit profession keep up with market changes.

For this reason, it is important to recognize that the internal audit function is an integral part of the accounting function and that, to produce the quantitative and timely information required by the actors, all employees in this area must be involved (Simpson, Fischer, & Rhode, 2013; Cokins, 2014). Internal auditing requires the creation and tracking of quantitative metrics, and it is consistent to conclude that internal and forensic auditing should play a more active role in making management decisions. Monitoring, developing, and updating metrics in real time, is an objective that encompasses areas such as finance, accounting and internal auditing; in addition to carrying out periodic tests of fraud and distortion, it plays an important role in making these tests increasingly easy and reliable.

Internal audit produces and verifies large amounts of quantitative data and delivers it to interested parties. The participation of the internal audit in this process will guarantee a more consistent work, simpler and less controversial external audits and a more dynamic accounting function in general.

Forensic auditing is also committed to the accounting function, which is a clear reflection of market forces, reinforced by existing research and academic literature. There is an increasing risk that the financial statements may contain fraud operations, which strengthen the value that internal audit systems and forensic professionals bring to the organization (Castanheira, Rodrigues, & Craig, 2010; Soh & Martinov, 2011). The role that accounting systems can play in the risk management of shareholders is interestingly recognized. A more strategic accounting function should, as a rule, integrate the needs of internal and external stakeholders, both in periodic reports and in ongoing operations (Nixon & Burns, 2012).

The future of fraud investigation, forensic accounting and the audit team in general should not be limited to investigating only the financial statements after the fact. Opportunities for future growth include the need for standardization and metrics in the growing field of sustainability accounting, using incremental analysis to create and monitor these metrics and managing information to conduct business more efficiently. This convergence provides a clear timetable for how these professionals can promote the organizational value chain.

However, many internal audit functions are still strongly rooted in the past, auditing financial reports and controls, characteristic of the period prior to Sarbanes-Oxley. But things are changing: the category of strategic, commercial and operational risk is among the areas that most grow within the scope of internal audit.

According to PWC's 2019 global risk, internal audit and compliance survey of 2,000 executives (half in risk roles), it shows that as organizations undergo digital transformation, internal audit functions also become more and more effective ways to support stakeholders to make better decisions and take smarter risks. Whenever organizations undergo digital transformations, these habits help to drive internal audit and overall performance in risk management (PWC, 2019).

Composition of Audit Activities

	%
Financial activity	57
	21
Operational	53
	34
Compliance	33
	30
Information technologies	31
	36
Strategic/business	13
	38
Consultancy	9
	28

Source: Pricewaterhousecoopers (2009, p. 10)

Table 2

Composition of Audit Activities—Chart Subtitle

Percentage of internal audit departments that contribute 25% or more of their resources to key risk categories.
Percentage of internal audit departments that increased coverage in each area during 2008.

Source: Pricewaterhousecoopers (2009, p. 10)

Internal Control System

According to the Audit Guideline (DRA) 410²,

Internal control system means all policies and procedures (internal controls) adopted by the management of an entity that contribute to the achievement of management objectives to ensure, as far as practicable, the orderly and efficient conduct of your business, including adherence to management policies, the safeguarding of assets, the prevention and detection of fraud and errors, the rigor and completeness of accounting records, compliance with laws and regulations and preparation timely and credible financial information.

According to the same Guideline, the internal control system comprises five interconnected components, namely:

- Control environment that means the general attitude, the awareness, and the actions of the management and the management body regarding the internal control system and its importance within the entity and which emphasizes an organization, influencing the control conscience of your staff. It is the starting point for the other components of internal control, providing discipline and structure.
- Risk assessment is the identification and analysis by the entity of the risks relevant to the achievement of its objectives, forming the basis for determining how risks should be managed.
- Control procedures are policies and procedures that help to ensure that management directives are enforced.
- Information and communication are the identification, collection, and exchange of information in order to allow employees to carry out their responsibilities.
- Monitoring is the process that assesses the quality of internal control performance over time.

² Diretriz de Revis115o/Auditoria.

Still citing the guideline, an accounting system is understood as “the series of tasks adopted by the management of an entity through which transactions are processed as a means of maintaining financial records. Such a system identifies, aggregates, analyzes, calculates, classifies, registers, summarizes, and reports transactions and other events”.

The POC-Education establishes that the accounting entities required to use this plan will adopt an internal control system that includes the internal organization plan, policies, methods, techniques, and control procedures, as well as any others to be defined by the respective management bodies.

The internal control system to be adopted by public entities includes, inter alia, the organization plan, control policies, methods and procedures, as well as all other methods and procedures defined by those responsible for contributing to the development of the activities of orderly and efficient manner, including safeguarding assets, preventing and detecting situations of illegality, fraud and error, the accuracy and integrity of accounting records and the timely preparation of reliable budget and financial information.

The same plan contemplates that the internal control system is based on adequate risk management, information and communication systems, as well as a monitoring process that ensures the respective adequacy and effectiveness in all areas of intervention. The internal control system aims to ensure:

- a) Safeguarding the legality and regularity of the preparation, execution, and modification of the forecast documents, the preparation of the budgetary and financial statements and the accounting system as a whole;
- b) Compliance with the decisions of the bodies and the decisions of the respective holders;
- c) Safeguarding the heritage;
- d) Approval and control of documents;
- e) The accuracy and integrity of the accounting records, as well as the guarantee of the reliability of the information produced;
- f) Increasing the efficiency of operations;
- g) Adequate use of funds and compliance with legal limits on the assumption of charges;
- h) Control of applications and the computing environment;
- i) Timely registration of transactions for the correct amount, in appropriate information systems and in the accounting period to which they refer, in accordance with management decisions and in compliance with applicable legal rules;
- j) Adequate risk management.

Methodology

The scientific methodology comprises a set of well-defined and orderly steps to be carried out in the study of a phenomenon. As for the objectives, the present study is characterized as exploratory and descriptive (Marconi & Lakatos, 2004; Martins & Theófilo, 2009). According to Gil (2006, p. 43) the exploratory study is used when the topic is little explored, and its main objective is the development of concepts and ideas for the formulation of more precise problems and researchable hypotheses in future studies.

Descriptive research is a characteristic of the approach of the objectives of this study, and can be defined by “describing, narrating, classifying characteristics of a situation and establishing connections between the existing theoretical and conceptual basis or other works already carried out on the subject” (Charoux, 2006, p. 39).

With regard to the investigation procedures, this work is considered as a case study, where Cervo, Bervian, and Silva (2007, p. 62) define it as “research on a specific individual, family, group or community that is representative of their universe, to investigate the different aspects of life”.

The theoretical framework on the theme (secondary sources) was developed from bibliographic and documentary research, which concerns the classification of procedures and is appropriate to the characterization of this study, as an instrument for collecting information on the subject in question (Gil, 2006).

The present study follows the case study investigation method, which, according to Yin (2005), in the case studies, the development of theory as part of the initial phase of a project, is fundamental to see if the purpose of the case study is to develop or test the theory.

In this way, it is intended to answer the following questions:

- What is the activity developed by the Internal Audit Department of a large entity in the higher education sector during 2018?
- What effects did this activity have on the management of the same entity?

In order to give an answer to these questions, data collection was carried out with the audit department, which were analyzed from a quantitative perspective, what is concerned with the objective measurement and quantification of results.

After obtaining the necessary data for the preparation of this paper, they were analyzed by the authors considering the purpose in view, having reached the results shown in this article.

Risk Management

COSO (2004) defines risk as the possibility that an event will occur and negatively affect the achievement of the defined objectives. Events can result from sources internal or external to the organization and can cause positive and/or negative impacts. In this sense, COSO refers that the events that generate negative impact represent risks that can prevent the creation of value or even destroy the existing value. Risks with a positive impact can counterbalance those with a negative impact or can represent opportunities that, in turn, mean the possibility of an event occurring and favorably influence the achievement of objectives.

For the Institute of Internal Auditors (IIA)³ (2015), risk is the possibility of an event that may have an impact on the achievement of objectives. The risk is measured in terms of impact and probability of occurrence.

Risk management involves a very diverse range of activities and initiatives, ranging from those related to business risks and those related to the risks of the organization's operational processes. Management must be integrated and unifying, since decisions made in one area to reduce risk in that area, can increase or create risks in another area.

Risk management means taking corrective measures to change the likelihood that risks will happen, in order to increase the likelihood of positive results and reduce negative impacts. To achieve this objective, the risk management goals must adopt prevention as decision strategies (Castanheira et al., 2010).

According to the Council for the Prevention of Corruption (CPC)⁴,

³ Institute of Internal Auditors.

⁴ The Corruption Prevention Council (CPC) was created by Law, n. 54/2008, of 4 September.

Risk activities are considered aggravated, namely, those that include acquisitions of goods and services, public works contracts and concessions without tender, exchanges of State properties with private properties, decisions of spatial planning and management, as well as any others that may provide privileged information for acquisitions by the agents that participate in them or their families.

Entity X prepared its Plan for the prevention of management risks, corruption and related infractions (PPRGIC), in which risks were considered in the following areas, which in turn are subdivided into sub-areas, namely:

- Financial area;
- Students/academic services area;
- Human resources area;
- Projects area.

Within the scope of the audits carried out, the DAI uses a risk matrix that involves the following classification: reduced risk; high risk; very high risk, as shown below:

Table 3

Risk Matrix

Initials	Risk level
A	Reduced risk
B	High risk
C	Very high risk

Source: Elaborated by the author.

The DAI's Role in Assessing Entity X's Internal Control and Risk Management System

Objectives

The implementation of Entity X's internal control system is the responsibility of the responsible government bodies, and DAI is responsible for assessing legal and regulatory compliance. The DAI depends directly on the top manager, and the service is responsible for the evaluation of the internal control and risk management system, in the accounting, financial, operational and human resources domains, contributing to its continuous improvement, competing in particular:

- a) Ensure compliance with rules and processes, through their own routines, and ad-hoc interventions by decision of the Rector or resolution of the Management Council;
- b) Develop the annual audit program that makes it possible to assess the degree of efficiency and effectiveness of revenue collection and the efficiency, effectiveness, and economy of public expenditure;
- c) To prepare an opinion on measures to improve the efficiency of services and modernize their operation;
- d) Define standards for carrying out audits of support and information systems and promoting the performance of such audits;
- e) Analyze the information and internal control systems associated with expenditure and revenue management and identification of risk areas;
- f) Carry out the planned audit actions and other actions that are attributed to it, which allow the assessment of the good management of resources and the level of services provided by the Organic Units, Administration and other Entity Services;

- g) To collect and maintain general and internal standards in databases;
- h) To monitor external audits, whether promoted by the Governing Bodies, or by the supervisory or supervisory bodies, as well as collaborating with the Statutory Auditor whenever necessary;
- i) Coordinate the preparation of contradictory to the external audit reports;
- j) To develop awareness actions with the Organic Units, the Administration and the other Entity Services in order to achieve a further improvement of the adopted procedures;
- k) Carry out audits and carry out the management control of associations, foundations, and companies in which Entity X holds shares.

Human Resources

At the head of the DAI is a Director with the post of middle management of second degree and has two senior technicians and an administrative employee.

2018 Activity—Audit Reports/Opinions

In 2018, in compliance with what was defined in the approved Action Plan (AP), the DAI carried out the actions provided for therein in order to fully implement it.

The AP for the year 2018 contemplates the execution of various actions, namely audits of a financial nature, planned audits of general scope to organic units, audits of the procedures to be observed regarding the internal control in the administration of Entity X, targeted audits and follow-up actions recommendations of the DAI. This department also intervenes in other types of actions, such as analyzing the accounts of associations of public and private law in which Entity X holds stakes in capital and preparing the respective opinion. In some cases, the DAI represents Entity X on the Fiscal Council.

The audit actions promoted by DAI, have as main objective the reinforcement of the internal control mechanisms, assuming at the same time a pedagogical component.

As mentioned, the activity of this department in 2018 covered several aspects, with audits being its main nucleus. A summary of the activity carried out is shown in the following table.

Table 4

DAI Activity in 2018

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	OBS
Number of scheduled audits	4	3	2	1	10	
No. of Audits performed	2	1	2	4	9	
No. of audit reports delivered	2	1	2	2	7	
Opinions for the Supervisory Board and assessment of the accounts of Associations/Foundations						
Rules and regulations		3		3		
Monitoring reports	4	0	3	0	7	
Other reports						
Various actions						

Source: Own elaboration based in data from Entity X (2018).

These actions resulted in a risk matrix with the following composition:

Table 5
Risk Matrix Composition

Report/risk	
No. 1	Academic management
Reduced risk	10
High risk	28
Very high risk	24
Total	62
No. 2	Social action
Reduced risk	12
High risk	38
Very high risk	40
Total	90
No. 3	Attendance and punctuality
Reduced risk	
High risk	
Very high risk	
Total	
No. 4	Sport
Reduced risk	5
High risk	22
Very high risk	17
Total	44
No. 5	Sport-external relations
Reduced risk	1
High risk	1
Very high risk	2
Total	4
No. 6	Reproduction contracts
Reduced risk	6
High risk	25
Very high risk	8
Total	39
No. 7	Hotel activities
Reduced risk	5
High risk	33
Very high risk	7
Total	45

Source: Own elaboration based in data from Entity X (2018).

In summary, the risk matrix for all actions developed is as follows:

Table 6
Risk Matrix for All Actions (2018)

A	Reduced risk	39
B	High risk	147
C	Very high risk	98
	Total	284

Source: Own elaboration based in data from Entity X (2018).

The following graph traces another perspective, in which it can be seen that the actions in which a high risk was detected were the most prevalent (147), followed by those with very high risk (98) and those with reduced risk were in number of 39, compared to a total of 284.

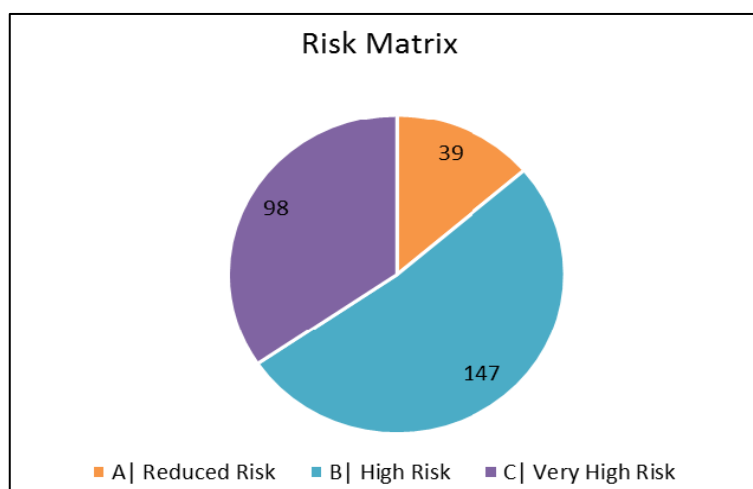


Figure 2. Risk matrix graph. Source: Own elaboration based in data from Entity X (2018).

The risks mentioned above were duly reported to the entities involved and the respective recommendations were formulated.

Follow-up Reports

It is part of the activities of the DAI to monitor the recommendations made when delivering the audit reports. In 2018, the responsible parties were asked to report the audit follow-up reports from previous years, involving seven departments: treasury, research, purchasing and logistics, international relations, tourism and building management.

In relation to these requests for reporting on the implementation of the recommendations made by the DAI, it was found that in general the recommendations were met, and the anomalies corrected. However, in some bodies, due treatment was not given, nor was the priority that the same issues deserved. Therefore, the senior managers were given due note, and new audits were determined for the departments involved.

Conclusions

Internal audit is a tool that is increasingly being used by managers in order to prepare organizations for the monitoring of processes, which are increasingly dynamic in all sectors and companies, regardless of their size.

The audit has increasingly aroused the interest of society in general and is beginning to be used as a tool in the management process by the administrators, who show greater concern with internal control.

In 2018, the DAI followed the action plan approved by the superiors. In its interventions, the department analyzed several areas, with a view to assessing the internal control and risk management system and formulated the necessary recommendations in view of the anomalies detected, which were classified according to the risk underlying it.

Regarding the monitoring of the actions of previous years, assessing the degree of compliance with the recommendations made at the date of the audits, it was found that, in general, they were satisfied. From time to

time, the directors and officers of the audited departments did not provide the DAI with the necessary clarifications on the implementation of the measures formulated by this Department. However, the entity's top manager and certain new audits were warned.

In addition to the opinions that the DAI regularly issues, in the year under review, the accounts of various Associations and Foundations participated by Entity X were analyzed, with a view to analyzing their compliance with the adopted accounting standards and the regularity of management operations.

The exercise of internal audit in a large entity such as the one we have been analyzing is of great importance, having proved to be an effective mechanism in different aspects of the activity performed by Entity X.

It is desirable that the DAI will be endowed with the resources that are indispensable for the exercise of its activity, namely with the most recent computer tools at the service of the audit.

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