

# TCU adopts data analysis models and tools to improve its audits

**A**nalyzing both data and information is a routine task for an auditor of the Federal Court of Accounts of Brazil (TCU). This is what happens, for example, when the auditor compares prices offered in a public bid to those seen in the market, or whenever assessing whether the administrative acts performed by

civil servants comply with current legislation. Nowadays, most of the administrative acts and facts - the object of analysis of auditors - are digital and are registered in often flawed and inconsistent information systems. This situation demands a new way to work, since analyses of information tend to become both more comprehen-

sive and difficult. In such cases, in order to improve the efficiency of our work, it is essential to use specialized methods and technology tools to improve effectively our assessments.

In order to face the increasing complexity of public administration problems, TCU has been investing to become an even more intelligent



## Highlights

institution that plans and executes its oversight activities with the help of data analysis techniques and tools. Among such measures, it promotes the strategy known worldwide as Data Analytics. We are positive that the combination of technical expertise in the area of oversight and the skills to use technology tools will allow the oversight tasks of the Court to be performed in a faster, cheaper and more sophisticated way.

Rainerio Rodrigues Leite, Secretary-General of the External Control Secretariat (SEGECEX), sees this field as one of the greatest advances of external control history. "The digital revolution has provided the world with a radical change in the treatment of information. Data and information that were once only available to few people or were virtually impossible to assess are now a thing of the past. Any and all information available in digital form - whether structured or not, in large or small amount - can be accessed and analyzed by computers. It was virtually impossible for an auditor to carry out this work alone. Now, auditors can use a series of analyses that can be interpreted and used in their work," the secretary states.

TCU is an extremely stimulating environment for the development of these tools and methods. Rodrigues points out that besides including the improvement of technology tools in the Court's Strategic Plan ("Improving the use of Information Technology-IT as an innovation tool for control"), TCU's current administration, especially its president Mr. Aroldo Cedraz, has provided all necessary support for training, appointing and allocating expert civil servants to provide





technological tools for the improvement of the Court's line of work.

The Secretary adds that some departments of the court have already started to perform data analysis aimed at improving external control, thus, fostering more effective actions. Among such departments are the Departments of External Control - Environment and Agriculture (SecexAmbiental), Government Procurement (Selog), Personnel Actions (SEFIP), Information Technology (Sefti) and Social Security, Labor and Welfare (SecexPrevidência), among others. "Just to give you a concrete example, SecexPrevidência has already begun to carry out a systematic and automated control of social benefits in the areas of Social Services, Labor and Social Security such as the Family Grant, Continued Payment for the Elderly Benefits (BPC), retirement, pensions, federal aids, unemployment benefits, salary bonuses."

Secretary Fabio Barros, from SecexPrevidência, points out that the automatic control of social benefits - also known as Continuous Monitoring - represents the systematic and routine control of the granting and maintenance of benefits that currently represent approximately R\$ 500 billion/year. Moreover, this new system allows the secretariat to define its control actions in a more selective way and also with a more error-risk based approach. It also helps prevent frauds and deficiencies in transactional systems and internal controls.

Encouraging the use of such technologies and methods is part of a strategy that seeks to spread such skills among all technical units of the court, so they are no longer restricted to a small group of civil servants.

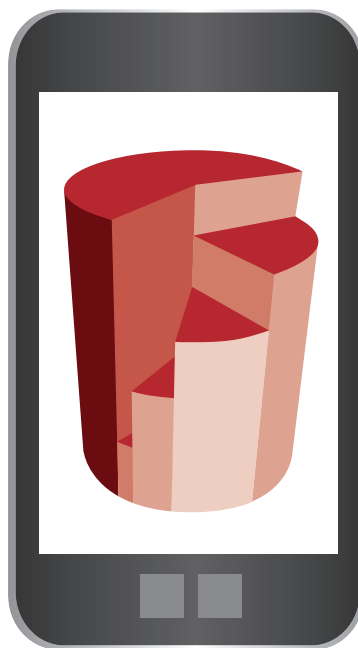
“This is not about a need to change institutional structure nor the skills of the technical units. What matters is that TCU auditors have access to user-friendly technologies so they are able to, use new methods, techniques and tools in their daily work, each according to their own abilities,” states Wesley Vaz, Head of TCU’s Department of Information Management for External Control (Seginf). According to him, the purpose is to use the technological tools available to better solve the problems, be they related to the planning of a technical unit, to obtaining inputs to inform cases or the planning and execution of audits.

Seginf supports the technical units in a number of projects that demand intensive data analysis. Among its duties, it is in charge of answering questions about information available for auditor review, as well as the search for new tools related to data analysis and the training programs for each department. “In addition, we have helped the technical units identify auditors who have the abilities and interest in developing data analysis with the use of technology, so that, within the work of the departments, auditors are able to have the information and technical tools that help their tasks”, says Vaz.

The use of large sets of information and technology to improve efficiency in external control is not something new at TCU. However, according to the Head of Seginf, “the growing complexity of the problems of public administration coupled with the growing use of technology and the increasing volume of digital information creates a challenge for the court. We must be prepared to face it. Therefore, it is necessary to train constantly our auditors so they can exercise their

duties as best as possible. This guideline has been adopted, for example, by encouraging training programs in financial, public works and data audit, etc. Furthermore, I believe that the more complex the challenge of control, the more appropriate it will be to face it with multidisciplinary teams (experts or not in the use of Analytics) will become, comprising a group of professionals, each with their own talent, that can work in effective collaboration towards better results for external control. In this sense, it is clear that it is not necessary that all auditors have such knowledge. The important thing is that there are enough civil servants using these tools, so they can produce useful and appropriate information for the work that they aim to develop.”

In the same context, the Center for Research and Innovation (Cepi) of the Serzedello Corrêa Institute (ISC) also plays an important role.



Cepi offers training programs for civil servants so they can become experts in the subject. It also enters into partnerships with universities and negotiates cooperation agreements. “We believe that the court’s staff that when a TCU team does field work after having analyzed the data base of a future audit, they will act with greater insight and better defined targets, thus providing improved results,” argues Fabiana Ruas, director of the center. She says a community of practices was created in which civil servants can exchange information and, based on this, Cepi can find new talents and professionals interested in the topic. The idea is that auditors that who do not work at either Seginf or Cepi, but who know the subject, can assist colleagues in other departments. “We believe that the best way to disseminate the data analysis culture is not by centralizing its demands, but allowing everyone to collaborate and help one another, making access to technology more democratic, so the Court will become more and more intelligent “, emphasizes the director.

TCU, as well as other Supreme Audit Institutions, have made it one of its priorities to invest in the training of its team to foster data analysis in their oversight work. In addition to offering courses since the beginning of 2015, Cepi also launched the Data Analysis Training Program, which includes a series of educational initiatives to address the gaps concerning skills. Our goal is to make the courses inclusive and that they provide contact with data technology to those who have no experience in the area as well as to those who are specialists and will have the opportunity to improve their skills.