

RESEARCH ARTICLE

Public Management with Focus on Productivity Analysis of Processes

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Abstract

This article broaches the productivity in an external control agency in the Amazon. It studies the productivity in the analysis of the personnel acts in an Auditors Court, as well as survey for productivity factors of the procedural analysis, point out its reflexes and indicate the innovation required for its improvement. The theoretical basis is the Theory of Bureaucracy and the concepts of rationality. This is a case study of qualitative, quantitative and descriptive nature, based on bibliographical and documental research, unstructured interviews and data analysis. As result, it was performed the appreciation of processes pointing out the ideal diagram that simplifies its tramitation and the delay in the analysis. As innovation, it is indicated the development of new procedural diagrams of analysis and registration of the act of personnel, the professional development of public servants, the selection of personnel with suitable profile to the task and the development of a program of reward and incentive for functional motivation. It is a contribution to public managers involved in similar situations.

Keywords: Court of Audits, Productivity, Processes, Acts of Personnel.

Introduction

In a scenario of instability as the country faces nowadays, it grows the importance of the controlling activity exercised by the Courts of Audit, organs to which the Brazilian Constitution granted the noble mission of monitoring the good and regular use of public resources.

The diversity of competences and a reduced personnel staff makes difficult the action of inspection function of the courts. This makes the inspection and registration of personnel actions are the most relevant tasks performed within the scope of these Courts. The question to be answered here is: How does characterize productivity of analysis of personnel actions in the Court of Auditors under study?

The objective of this research is to study the productivity in the analysis of the acts of personnel (admission, retirement and pension) in a Court of Auditors, seeking also as specific objectives surveying the factors that reflect the productivity of the procedural analysis (1), point

out the reflexes of productivity in the face of the Court of Auditors commitment (2) and indicate the innovation required to the improvement of the productivity in study (3).

Methodology

This paper presents a case study, based on applied research of qualitative and quantitative nature, descriptive, bibliographic with interdisciplinary character. In data collection prevails the approach to the quantitative method, once many aspects related to productivity indicators will be worked. The qualitative research was necessary to know the objectives and personal ideologies and organizational, beyond exploring the environment to identify possible ways to incrementing productivity. It was done bibliographic and documentary surveys, analyzing the annual and quarterly reports produced by the Court of Auditors under study and the information provided by the statistical sector of the organ. The procedures are detailed below on Table 1:

Table 1: Procedures of research

Procedures	Descriptives
Bibliographical Research	The study of publications related to the area of analysis of acts of personnel in various Courts of Auditors.
Documentary Research	Analysis of internal documents like procedural diagrams, bulletins, publications in Brazilian official government newspaper, internal regulatory acts related to analysis of personnel actions.
Field Research	Visit to various departments and secretariats of the organ studied to obtain new information about the problem.
Interview	Unstructured interview in which it was surveyed many aspects related to motivation and lack of technical and professional development.
Data Analysis	Analysis of the material collected from the bibliographic and documentary research and the information obtained in the field research.

Source: Data collected *in situ*.

The procedures related in Table 1, allowed pointing out the factual situation and the measures necessary to reach the ideal productivity in the analysis of processes evidenced.

Theoretical Framework

Survey carried out in Dias et al. [1] indicates that the Theory of Bureaucracy appeared due to the dimension and complexity of the moment, when only the organizational aspects relating to the tasks and people were studied, disregarding the focus of organizational structure. Entering therefore the adaptive of sociological practices of bureaucracy proposed by Max Weber for organizational reality. Matias-Pereira [2] relates bureaucracy to the concept of rationality, which in the Weberian sense would be the adaptation of means to ends. The mentioned scholar states that in the second half of the nineteenth century, the bureaucratic Public Administration aims to

combat corruption and patrimonialist nepotism. As a result, the strict control of the processes and the entry into the public career, with rules on admission and the control of spending to prevent abuse, inefficiency and inability become imperative.

Regarding to productivity, Pedro Filho [3] states that this concerns to the optimization in volumes of demanded goods, considering a capacity installed of production, and the modern concept of Keynesian state, as considered by the author. In the Brazilian public sector, productivity can be considered as the challenge to amplify the offer of products and services of public interest due to restrictions of budget. Thus, in the public management system, the productivity can be defined as the relation between the things that were produced and the inputs used. The Table 2 below show the formula for calculating productivity.

Table 2: Formula for calculating productivity in Pedro Filho (2015)

$GP = \frac{QP}{CP}$ <p>Where: GP = Level of Productivity. QP = Quantity of produced goods and / or services. CP = Production capacity of goods and / or services.</p>
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Source: Pedro Filho [4].

Krajewski [5] and Pedro Filho [4] define productivity as a basic measure of performance,

which expresses the value of the results divided by the value of the inputs, as in Table 3.

Table 3: Formula for calculating productivity in Krajewski [5]

$P = \frac{\text{output}}{\text{input}}$ <p>Where: P = Productivity. Output = Output of products and / or services produced. Input = Entry of inputs in the production process of goods and / or services.</p>

Source: Krajewski [5].

Process can be defined as the way an activity is done or performed. In this sense, Krajewski [5] explains that the process involves the use of resources of an organization to provide something that is valued, and that no product can be produced or service be provided without a process. The reciprocity is also true, because there is no process that does not result in at least one product or service.

Chiavenato [6] records that usually processes are not known and highlighted in organizations, because people answer by work units, but usually no one is responsible for the process in its entirety. The author points to the need to adopt of the approach by processes from the point of view of the internal or external customer. In the case of public administration, the action of each agent is directed to the next agent in the chain until the external client is benefited.

Innovation is defined by Carvalho [7] as the sum of an idea with the implementation of actions aiming for a creative result and it is not synonymous of invention and that not every invention becomes in an innovation.

Tigre [8] asserts that innovations processes indicate a form of new or substantially improved performance, originated from the introduction of new methods of handling or delivery of products and points out that the results of innovation processes should significantly change the level of product quality and/or reduce costs of production and delivery time. This author also states that organizational innovations are taking place in the management structure of the organization, in the form of coordination between different areas and levels, the expertise of the agents and relationships with stakeholders.

With regard to public administration, it is important to address that the administration of the state apparatus, in order to meet public needs, guided by the principles of legality, impersonality, morality, publicity and efficiency. Professor Matias-Pereira [2] states that the public administration's main purpose is to promote the dignity of the human person and her integral development in freedom. To achieve this goal the administration must act effectively to facilitate and ensure the citizen's rights under the Brazilian Constitution.

Paludo [9] elucidates that management is a gender, in which, are species: the public management and the private one. The author also stresses that there are many convergencies between both, noting that their main differences concern the fact that the government aims to provide greater well-being to society, while the private initiative aims to profit mainly.

Results

The following factors were identified and they reflect in the productivity in analysis of the personnel acts of the cases appreciated by the Court of Auditors, as well as the notes of these reflections and the indication of the innovation required to improvement of the productivity in the study. The organ has studied its competences defined on the Federal Constitution, consisting in monitoring the good and appropriate use of public resources, with an appreciation for registration of personnel, one of acts of its duties. The improving of this action is set out on the Strategic Plan of the Court, driving the Administration to spread within the institutional mission, future vision, strategic objectives, values and goals, defined on Table 4.

Table 4: Specification of the elements of strategic planning

Elements of Strategic Planning	Definition
Mission	The main purposes of the organization (monitor the good and appropriate use and application of public resources).
Vission of future	The organization's vision for the future (to be recognized as a reference institution in controlling of public administration).
Strategic Objectives	It is the form in which the organization carries out its activities, focusing on the objectives to fulfill the defined mission, law, in the case of public organs.
Values	The canons that guide the activities of the organization (transparency, ethics, competence, effectiveness, impartiality, integrity, efficiency).
Goals	Performance measurement instruments of companies or programs.

Source: Adapted from Belluco [10].

The development of productivity indicators allowed the confirmation of the need for improvement in several internal processes,

because from there, it was noticed unequivocally low productivity of various sectors.

The productivity in the processes of records of personnel may be demonstrated by use of the formula of productivity approached by Pedro Filho [3,4]. In this case, the production capacity is obtained based on the number of civil servants involved in the procedural instruction.

The information extracted from the annual report of the organ for the year 2011 show the trial of 318 processes of acts of personnel (considered legal or illegal). The Personnel Staff of the department responsible for the analysis of these

processes was composed at the time, by 8 servers. If it is considered that each agent involved can produce up to 50 procedural instructions per year, the production capacity is of 400 cases analyzed annually.

Thus, there is the quantity of 318 personnel acts of proceedings produced before a production capacity of 400 cases of this species in study. Inserting the information mentioned in the formula of productivity, it is observed the contents demonstrated in Table 5.

Table 5: Demonstrative of productivity calculation

$GP = \frac{318}{400}$ <p>Where: PD = Productivity Degree. QP = Quantity of goods and/or services produced = 318 processes. CP = Production capacity of goods and/or services = 400 processes.</p> <p>So: PD = 0,795</p>
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Source: Pedro Filho [3,4].

Considered in percentage, the productivity is 79.5%. The index reflects that the inputs are being used unproductively, that is, with the number of servers and equipment available, productivity could be higher. As the satisfactory level of productivity must be equal to or greater than 1, the index obtained is insufficient.

From the evaluation of the productivity degree of the analysis of processes of acts of personnel, which are below expectations, it was possible to align actions to strategic objectives and the information obtained were used to set priorities and modify work processes in the search of a more effective, efficient and effective performance.

Several factors contribute to low productivity in the analysis of acts of admission, reserve and pension, detaching the existence of an inappropriate procedural diagram, resulting in movements that do not add value to the process

end, the lack of motivation of the public servants and the lack of training professional for the task performance.

It is important to highlight that the ideal would be to study the flow chart of the processes of acts of personnel to point out deficiencies. However, the high complexity involved in such proceedings would undermine the rationale of its form. Therefore, the study of the process diagram in the organ is sufficient to establish the existence of several gaps, and unnecessary tramitation that do not add value to the productive process of procedural analysis.

The following diagram (Figure 1) shows the path taken by the process since its entering in the organ in study until the final analysis of the act.

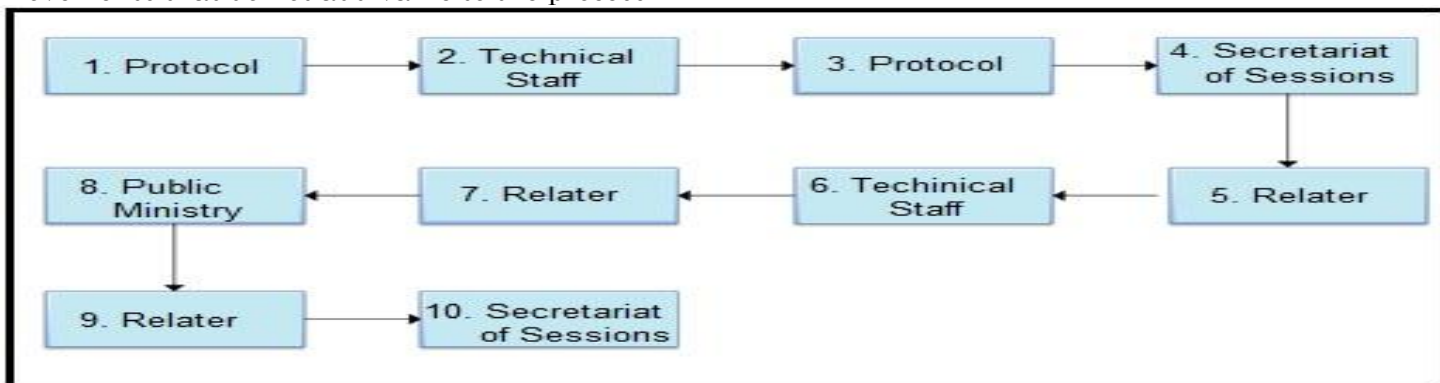


Figure 1: Diagram of processes of personnel acts.

Source: Data collected *in situ*.

The Technical Staff is the administrative organ responsible for analyzing the process of personnel acts and prepare technical reports. The Counselor is the rapporteur of the case. He is the authority responsible for, based on the documents produced

by the Technical Staff and the Public Ministry, prepare of a report and a vote that will guide the discussions about the trial of the case by the collegiate of the organ, according to Table 6.

Table 6: Descriptive of the procedural diagram

Sector	Task
1. Protocol	Receives the documentation of the origin organ and then sends to the Technical Staff for a conference.
2. Technical Staff	Analyzes whether the documentation is complete.
3. Protocol	Files the process and sends it the Secretariat of the Sessions.
4. Secretariat of the Sections	Draws and distributes the process to the Rapporteur.
5. Rapporteur	The Counselor who presides the procedural instruction, acknowledges of process distribution and sends it to the Technical Staff.
6. Technical Staff	Analyzes the process in light of the Constitution and legal rules and produces its report. It is a continuous act, sends the process to the Rapporteur.
7. Relater	Becomes aware of the Technical Staff report and sends it to the Public Ministry at the Court of Auditors.
8. Public Ministry	Makes suggestions and restores the process to the Rapporteur.
9. Rapporteur	Prepares the report and votes considering the manifestations of the Technical Staff and Public Ministry, and then guides the process that will be considered by a collective organ.
10. Secretariat of the Sections	After the decision of the collegial organ, it adopts other legal and regulatory measures. The case is closed.

Source: Data collected *in situ*.

A research conducted by the Court of Auditors demonstrated that the diagram presented unnecessary tramitation actions, once it did not add value to the productive process, that is, it was not important the analysis of the personnel act. This contributed to the delay in the tramitation of the process, as well as unnecessary work, because each time the process comes and goes in certain

department, it must be verified, and this takes time. The best would be if the process went only once to each sector/department, resulting in time savings and work, thus simplifying the production of process (a procedural analysis), as shown in Table 7.

Table 7: Procedural Analysis of the Diagram

Tramitation	Justification of the tramitation	Diagnosis	Suggestion
From the Protocol to the Technical Staff and <i>vice versa</i> (tramitation 1, 2 and 3 of the diagram)	For the conference of the technical staff and verification if the process meets the requirements of sending the important information before of the receiving by the Protocol.	The referral to the Technical Corps is time consuming, resulting in redundant dispatches, in which it is necessary to work an average of three days to prepare, file the process and send to tramitation.	Prosecuting the case immediately. For this, it is necessary to train the public servant of the protocol in order to verify compliance of the requirements.
From the Protocol to the Secretariat of the Sessions (tramitation 4 of the diagram).	For the Secretariat of the Sessions, by lot, to distribute the process to a Rapporteur.	No illegal impediment or regimental so that the protocol itself makes the distribution. The submission to the Secretariat of the Sessions is unnecessary for not adding value to the process.	Electronical distribution of processes to the Rapporteurs performed by the Protocol.
From the Secretariat of the Sessions for the Rapporteur and from him to the Technical Staff (tramitation 5 and 06 of the diagram).	For the acknowledgement of the Rapporteur of the distribution and then send the process to the Technical Staff for analysis.	It is unnecessary the tramitation to the Rapporteur, once the process will return to him after the issue of the legal opinion of the Public Ministry.	Deletion of this conveying to the Rapporteur. The process registered and distributed in the Protocol should be immediately forwarded to the Technical Staff for analysis.
From the Technical Staff to the Rapporteur and from him to the Public Prosecutor at the Court of Auditors (tramitation 7 and 8 of the diagram).	For the acknowledgement of Rapporteur about the contents of the analysis done by the Technical Staff and then sends the process to the preparation of the technical opinion of the Public Ministry.	It is unnecessary the tramitation to the Rapporteur, once the process will return to him after the issue of the technical opinion of the Public Ministry.	Deletion of the procedure of sending the process to the Rapporteur. Therefore, the Technical Staff sends the process to the Public Prosecutor directly.

Source: Data collected *in situ*.

In attention to the suggestions brought in the survey done by the Organ, it was studied the routine steps of the procedure. The assessment of each process concerning acts of the personnel of

the Court researched, resulting in an ideal diagram indicated in Figure 2 below.

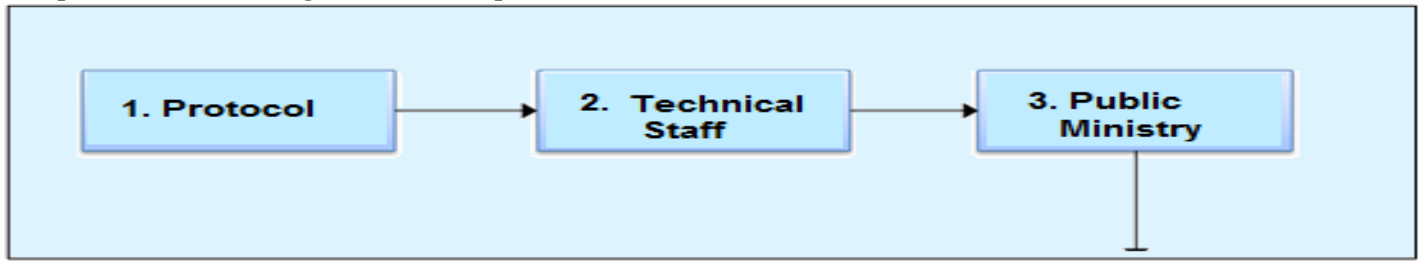


Figure 2: Ideal Diagram

Source: Data collected *in situ*.

Table 8: Description of the ideal diagram.

Sector	Task
Protocol	Receives the documentation of the origin organ, checks whether the documentation is complete, files the process and distributes it to the Rapporteur, who sends the process to the Technical Staff.
Technical Staff	Analyzes the process based on the standards and laws, draws up the technical report in accordance with routine procedures and then sends to the Public Ministry at the Court of Auditors.
Public Ministry	Makes recommendations based on relevant legislation and sends the Process to the Rapporteur.
Rapporteur	Prepares the report and vote considering the manifestations of the Technical Staff and the Public Ministry and then guides the process that will be analyzed by a collective organ.
Secretariat of the Sessions	After the decision of the collective organ, adopts other legal and regulatory measures. The case is closed.

Source: Data collected *in situ*.

The appropriate diagram simplifies the tramitation of the process (the productive process) and makes the analysis of the acts of personnel faster. In the processing of the data, it was

identified four principal causes of lack of motivation, according to Figure 3, as well as the elements of the causal relation (Table 9).

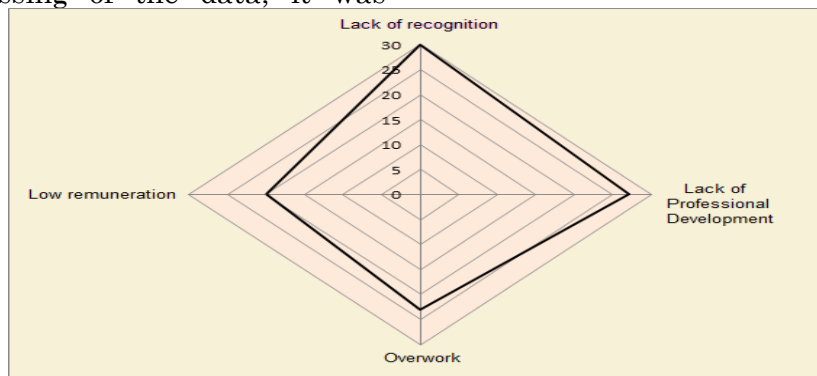


Figure 3: Performance graphic considering the motivation.

Source: Data collected *in situ*.

Table 9: Elements of the causal relationship on motivation in the studied team

Motives	Descriptive of the reasoning
Low remuneration	The lack of a plan for career and salary plan causes the servers do not have perspectives for improvements in pay, which becomes a discouragement eventually.
Lack of recognition	There is no institutional program of recognition for civil servants. This situation is aggravated by the fact that the civil servants, in most cases, do not perceive the effects of their work in society, due to the delay in the analysis of the processes.
Excess of work	Lack of computerization of the process, the increasing of the work load, boosted by the increasing number of contracts and retirement, the small number of public servants involved in the analysis of personnel acts and rework caused by procedural flow that makes the process return multiple times to the same sector, without adding value to the analysis.
Lack of Professional Development	Despite major investments of the organ in study and professional development, no formal training program is designed for servants that act on the analysis of personnel acts.

Source: Data collected *in situ*.

Thus, analyzing the two statements listed above, there are reasons for the lack of motivation of public servants involved in the task under study, and the cause of low productivity prevailing today, emphasizing the lack of recognition of the work of servers by the Court of Audit. It was also found that the organ under study invests heavily in technical and professional training of its servers of different specialties. However, in relation to the workforce engaged in the analysis of personnel acts, it lacks specific training in Social Security Law and Administrative Law with a focus on activities that they develop. Generic

knowledge of the subjects listed do not help such servers in their job, because the area where they work is very specific. The diversity of the organization of the Special Social Security Systems of each federal entity makes difficult the preparation of training courses in the area, once there is the Union, the Federal District, 26 States and approximately 5500 municipalities, and each has its own regulation of their civil servants system. On the Court's Annual Report in 2011, it was consolidated the Table 10 below, which contains the activities done for professional training and their respective characteristics.

Table 10: Pedagogical and training activities carried out by the organ in 2011.

Activities	Quantity	Participants	Instructors	Hours of work/study
Courses/Workshops	43	2.282	47	949,0
Seminars	1	149	3	8,0
Lectures	39	2.687	30	44,4
Professional Development	2	10	6	180,0
Special Session	1	11	-	2,0
Forum	1	184	8	16,0
Total	87	5.323	94	1.199,4

Source: 2011 Annual Report of the Court under [11].

Thus, it is observed that no specific formal program met the requirements of the training needs, in 2011, of servers that act on the analysis of the processes of the personnel acts. This directly affects the production process, since the lack of adequate technical capacity to carry out functional activities, compromise the quality of work, causing demotivation on the servers. It was found that there was an excessive delay in the analysis of the processes in question, therefore reflecting negatively to the society. It was noticed

that the delay causes legal uncertainty for servers and retirees whose cases are under review and in many times, it was fair the appealing for judicial interference. It should be mentioned also that the delay in analysis prevents agents from practicing other enforcement actions in areas such as Procurement, Supervision of public works, revenue, grants.

It is evident, therefore, that the low productivity of these processes affects the legal certainty in relations of the Public Administration with servers and makes it difficult, in part, the deepening of the inspection activities of the Court of Auditors.

The delay in the analysis of the act of admission, retirement and pension causes harm to the servers, who wait years to see their consolidated legal position. The worst happens when the act is

taken as illicit and brings financial consequences for the person concerned. In such cases, the more delays for the appreciation of the processes, the bigger is the difficulty for the servers presents the documents proving the legality of their admission, retirement, or boarder proves the legality of the pension. Given this impossibility, it is necessary to appeal to the Judiciary Power to stop the late action of the Audit Court.

On the other hand, if the analysis of personnel actions is done swiftly and efficiently, it is obvious that the simplification of procedures will liberate the servers, so that they can focus on other control activities. Thus, the existence of an inappropriate diagram, the lack of technical capacity and demotivation of the servers impede the agents involved in the various stages of the productive process of analysis of acts of personnel of engaging in other subjects. The Table 11 below summarizes the effects of low productivity as discussed.

Regarding to the innovation required to improvement of productivity in the Audit Court, it is possible to conclude: a) the need for development of new procedural diagrams that include only the steps and departments needed to analyze and register the act; b) the need to provide opportunities for technical and vocational development to servers involved in the procedural analysis; c) bigger actuation of the Human Resources Sector in order to try to select people

with more appropriate profile to the task, and also to develop a program of rewards and incentives to

keep motivated servers.

Table 11: Consequences of the low productivity.

Main points considered	Descriptive
Legal insecurity	The delay in the analysis of the administrative process causes legal uncertainty and provokes the action of the Brazilian Judicial Power, which reinforces the vicious circle: slow Public Administration, Judiciary Power overloaded, administrative and jurisdictional action inefficient and so population dissatisfied.
Impracticability of other supervisory activities	The complex and inappropriate diagram, the lack of technical training for the performance of procedural analysis and the lack of motivation makes the process more slow to be analyzed and involves the work of more servers than the necessary. This improper use of manpower hinders the actuation in other tasks of the Control of Public Administration.

Source: Dados collected *in situ*.

Concerning to the ideal diagram, it was adopted suggestions mentioned on the research done by the Audit Court. As a result, the process no longer has 10 tramitation and now it has only 5 influencing the increase of the productivity.

With regard to professional development in 2013 and 2014 the Court of Audits developed training for the specific area of analysis of personnel actions for over 150 civil servants, and 50 of these servers of the Court of Auditors and the others from the jurisdictional units of the State and the Municipalities.

The actuation of the Human Resources Sector made possible the development of a public tender in 2013, which resulted in the hiring of more than 50 named servers.

In 2014, it was offered the financial incentive aid to the formation of the corresponding effective server, corresponding to 5%, 10%, and 15% of basic salary to servers who submit diploma legally recognized of completion for specialization, master's and doctorate, respectively.

From the gradual implementation of the measures mentioned, there was a substantial increase in productivity of the analysis of personnel actions. Based on the annual organ report, it was observed that the considered productive capacity is of 400 processes of personnel acts analyzed per year, as explained in the formula proposed by Pedro Filho [3,4] in Table 12.

Table 12: Evolution of productivity in the researched organ

Year	Process acts of personnel analyzed (legality or illegality)	Productivity Level	Percentage Productivity	of
2012	366	0,915	91,5%	
2013	399	0,997	99,7%	
2014	405	1,012	101,2%	

Source: Data collected *in situ*.

Analyzing the table above, it is observed that productivity percentages have been evolving since 2012; and in 2014 has exceeded 100% of the results. Considering the degree of productivity achieved in 2011 of 0,795 (or 79.5%), it is also observed that, after the implementation of the measures listed above, the productivity increased considerably, reaching the level of 1,012 (or 101.2%) in 2014, which reveals an increase of more than 26% compared to the level of productivity of 2011.

Conclusion

The study of productivity may stimulate the actuation of public organs. Concerning to the studied organ, it was revealed the inefficiency that blocks the development of a new form of team performance, resulting in significant performance,

considering the investment made by the organ with hiring of personnel, cost of qualification of those involved, quality in the physical structure of the task environment and the guarantee of public employment provided by law.

In this case under analysis, the Court of Auditors, after setting, observing the precepts contained on the Federal Constitution, its mission, vision, values and strategic objectives, verified the need for subdivision of these into goals and the creation of indicators that allow measuring productivity aiming at monitoring institutional performance. Identified the low productivity and, consequently, inefficiency, the administration of the organ surveyed all the causes and elaborated a set of measures to enable the fulfillment of objectives and institutional goals.

This work is a tool capable of providing information to the high management of the organ studied, about the failures and inadequacies in

the productive process (analysis of personnel actions) and it indicates possible measures to be adopted to overcome difficulties and increase the productivity [12].

References

1. Dias Reinaldo (2013) Introduction to the administration of competitiveness to sustainability. Campinas: Alínea.
2. Matias-Pereira José (2010) Course of Public Administration: focus on institutions and government actions. São Paulo: Atlas.
3. Pedro Filho, Flávio de São (2015) Handout of Public Management. Program of Professional Masters in Public Administration. Porto Velho: UNIR/PROFIAP.
4. Pedro Filho, Flávio de São (2015) The validation and the ethics in the management research. Available in: <https://www.administradores.com.br/flavio1954/>. Accessed on February 2015.
5. Krajewski Lee J (2010) Production and Operations Management. São Paulo: Pearson Prentice Hall.
6. Chiavenato, Idalberto (2014) Administration: theory, process and practice. Barueri: Manole.
7. Carvalho Hélio Gomes de (2011) Innovation Management. Curitiba: Aymar.á.
8. Tigre Paulo Bastos (2014) Management of Innovation: the economy of the technology in Brazil. Rio de Janeiro: Elsevier.
9. Paludo Augustinho (2013) Public Administration. Rio de Janeiro: Elsevier.
10. Belluco Clênio Guimarães (2012) Productivity indicators applied to criminalistics of the Federal Police. Master's Dissertation - Brazilian School of Public and Business Administration - Center of Academic Formation and Research. Rio de Janeiro: EBAPE.
11. Brasil. National Congress (1988) Constitution of the Federative Republic of Brazil.
12. Siena Osmar (2011) Standards for the preparation and presentation of academic papers: design, thesis, dissertation and article. Porto Velho: PPGMAD/UNIR.