PROCESS MANAGEMENT: A STUDY OF ICMS TAX ENTRIES EXECUTED BY THE STATE SECRETARIAT OF FINANCE OF RONDÔNIA

https://doi.org/10.56238/sevened2024.031-047

Euceir Henrique Roos[1] and Lívia Maria da Silva Santos[2]

ABSTRACT

Process Management in the public service is an important tool for the alignment of public management with the standards of current managerialism, enabling the reduction of procedural errors, rework, repetitive and unnecessary tasks, thus increasing efficiency in the provision of public service. The study aims to verify how Process Management can help reduce inconsistencies and rework in the activity of official entry of the Tax on the Circulation of Goods and Services of interstate and intermunicipal transport and communication (ICMS), executed by the State Secretariat of Finance of the State of Rondônia - SEFIN. The study with an applied purpose, based on a descriptive, quantitative-qualitative, documental, participant observation and case study research, was carried out within the scope of the Collection Management, a unit that makes up the State Revenue Coordination (CRE), linked to SEFIN. The survey identified 790 ICMS entries, registered in active debt, with inconsistencies. It was found that the requests for review of entries registered in overdue debt are automated entries, and the inconsistencies refer to the incorrect classification of products by the Border System. It was found that inconsistencies can be reduced through adjustments in the Border System, so that the information contained in the electronic invoices is recognized. Thus, the study resulted in a proposal with 13 adjustment interventions in the automated classification of the Border System, which will reduce by 43.67% the inconsistencies in the ICMS official entries.

Keywords: Process Management. Public Management. ICMS. Taxation. SEFIN.

[1] Master in Public Administration. Federal University of Rondônia Foundation (UNIR). Porto Velho, Rondônia, Brazil.
E-mail: euceir.roos@sefin.ro.gov.br
ORCID: https://orcid.org/0000-0002-0588-9641
[2] Doctor in Accounting Sciences from the Graduate Program in Accounting Sciences at the Federal University of Paraíba (PPGCC UFPB). Federal University of Rondônia Foundation (UNIR). Porto Velho, Rondônia, Brazil.
E-mail: livia.santos@unir.br
ORCID: https://orcid.org/0000-0001-9839-9424

INTRODUCTION

With the technological advances that emerged from the 1990s onwards, followed by the process of economic globalization, organizations were impelled to review their work processes to obtain more significant and relevant results. In the current competitive scenario, the productive sectors seek to improve their business strategies to improve performance and remain in the market. To do so, they have been distancing themselves from the hierarchical functional view and approaching the process-oriented view (Hamanaka & Aganette, 2022). In the public sector, this evolutionary process gradually took shape in the form of structural reforms of the State.

As part of this process of modernization, restructuring and improvement of public management, Process Management began to be adopted in organizations as a new management tool, boosting the model known as Public Management Administration. Process Management in public administration seeks to achieve the principles of efficiency, productivity and entrepreneurship, and its main objective is to restructure processes to better serve citizens, promoting changes related to the debureaucratization of the public machine.

This process of modernization in public management should hit the tax administration more strongly, since the State Secretariat of Finance (SEFIN) that performs the activities of taxation, collection and tax inspection in the State of Rondônia, has the important mission of carrying resources to the Treasury, through the tax release, which is defined by article 142 of the National Tax Code (CTN), such as the "administrative procedure aimed at verifying the occurrence of the triggering event of the corresponding obligation, determining the taxable amount, calculating the amount of the tax due, identifying the taxable person and, if applicable, proposing the application of the applicable penalty".

At SEFIN, the automation of the tax entry process began around 2012; however, bottlenecks are perceived in the form of inconsistencies in the ICMS official entries, generating rework and loss of efficiency. The tax regularity sector of the Inspection Management, which analyzes requests for review of entry not registered in overdue debt, operates with a staff composed of six civil servants who, in the years 2021 and 2022, analyzed the number of 156,658 tax regularity processes dealing with ICMS official entries. Of this total, 790 cases dealt with entries already registered as overdue debt, contrary to the precept of the presumption of certainty and liquidity that is related to overdue debt. Thus, the present study seeks to answer the following question: **How can Process Management help to reduce inconsistencies and rework in the activities of ICMS official entry, performed by the State Department of Finance of the State of Rondônia?**

The records of the lawsuits no. 7008503-54.2023.8.22.0014 and no. 7005883-48.2023.8.22.0021 of the Special Court of the Public Treasury, with a request for annulment of tax debt and suspension of protest, show that the inconsistencies in the ICMS official entries cause misfortunes to the taxpayer, such as enrollment in overdue debt, protest of extrajudicial title, tax foreclosure. It is worth noting the growing understanding of the higher courts in Brazil about the application of the so-called Productive Deviation in civil liability for the unfair and intolerable loss of useful time to seek to resolve an unwanted situation, created by service providers in consumer relations (STJ — REsp: 1634851 RJ 2015/0226273-9, Rapporteur: Minister Nancy Andrighi, Judgment Date: 09/12/2017, T3 — Third Panel, Publication Date: DJe 02/15/2018), and which, by symmetry, may be applied in the relations between public authorities *and* taxpayers, in case of undue denials and protests.

Therefore, this study aims to verify how Process Management can help reduce inconsistencies and rework in the activities of ICMS official release, performed by the State Department of Finance of the State of Rondônia. Based on a descriptive research, with a quantitative-qualitative approach, using the methods of the case study, documentary research and participant observation, it will be identified in the period of 2021 and 2022, the tax entries registered as overdue debt, which were changed or excluded due to a request for review of the entry filed by the taxpayer. The inconsistencies in the ICMS official entries that triggered the changes or exclusions will be mapped, and, finally, improvements in the ICMS official entry process will be suggested, aiming at reducing inconsistencies and, consequently, requests for review.

THEORETICAL FRAMEWORK

BUSINESS PROCESS MANAGEMENT

The term Business Processes has its origin in the American school of business administration, with the translation from English *Business Process*, used to differentiate the procedures that produce goods and services from other types of processes (Turra, Juliani & Salla, 2018). The concept of Business Process Management widely recognized by the literature is that of ABPMP - International (Association of Business Process Management Professionals). Created in 2003 in the United States of America, this Association is represented in Brazil by ABPMP-Brazil. In its *Business Process Management Common Body of Knowledge* (BPM CBOK), ABPMP-Brazil defines Business Process Management as:

> "A managerial discipline that integrates an organization's strategies and objectives with customer expectations and needs, through a focus on end-to-end processes. BPM encompasses strategies, objectives, culture, organizational structures, roles, policies, methods and technologies to analyze, design, implement, manage performance, transform and establish process governance". (ABPMP/Brazil, 2013, p.40).

Still with regard to the conceptual aspects of BPM, it is worth noting the difference between process management and process management, although they are written in similar ways, they have different meanings. Process management is understood as the practice of analyzing, modeling and implementing business processes, changing the structure of the organization, disregarding hierarchies and organizational charts. Process management, on the other hand, has a simpler scope, since its application does not involve major changes in structures, only in the way tasks are performed (Sordi, 2008).

BPM PRACTICES, TECHNIQUES AND TOOLS

In this section, the main subdisciplines of Business Process Management will be described: Process Mapping, Analysis and Transformation.

Process mapping

According to Ramos, Montezano, Costa Júnior and Silva (2019), process mapping is defined as the technique used to record a process in a compact way, in order to enable its better understanding and subsequent improvement. It allows the organization to verify end-to-end process workflows, identifying the macro-processes, sub-processes, and activities involved throughout the workflow (Paula & Valls 2014).

This BPM technique enables an in-depth detailing of the production operation of a good or delivery of some service, consisting of the knowledge of the value stream formed by the set of activities that occur from the obtaining of the raw material to the delivery of the finished product (Ramos *et. al.*, 2019). Among the advantages that can be achieved with Process Mapping, Paula and Valls (2014) highlight the documentation and standardization of processes, the integration of processes, the simplification of routines, cost reduction, elimination of rework and activities that do not add value to the result. Along the same lines, Chinosi and Trombetta (2012) assert that, by visually analyzing workflows, it is possible to identify redundant activities, delays, bottlenecks, and other inefficiencies that can be eliminated or improved. Additionally, process mapping is the starting point for process automation, as it provides clear insights into which activities can be automated to increase efficiency and reduce errors.

Process analysis

Process analysis is the phase that aims to understand the functioning of processes, how they occur in their current state, verifying whether they are meeting the expected objectives and goals. The analysis is carried out in conjunction with the modeling of processes, as one understands how organizational activities are executed, it is possible to analyze them and identify which ones need to be improved, which ones are eliminated, and which ones should be maintained (Hamanaka & Aganette, 2022). For Almeida, Portela, and Silva (2021), process analysis involves understanding the organization's processes, encompassing their efficiency and effectiveness.

For Davenport (2013), the importance of process analysis lies in its ability to identify bottlenecks and inefficiencies in existing processes. Weske (2012) highlights that the thorough analysis of workflows allows the identification of redundant activities, unnecessary delays and bottlenecks that hinder operational efficiency. By eliminating or optimizing these bottlenecks, organizations can reduce costs, increase productivity, and improve the quality of the products and services offered.

However, Harmon and Wolf (2018) point out that process analysis must be continuous, allowing organizations to identify opportunities for innovation, new technologies, and emerging practices that can be incorporated to improve competitiveness and organizational agility. In the same sense, Rosenthal, Hoffmann and Nickel (2015) assert that analysis is not limited to a single evaluation, but is a constant cycle of identification, analysis, improvement and monitoring of processes. This ensures that organizations remain agile, adaptable, and able to respond to changing business environments.

Process transformation

Process Transformation involves the modification of processes, in a disciplined and idealized way, in order to ensure that the processes continue to support the business objectives (Almeida *et.al.,* 2021). In transformation, the goal is to find the best way for the process to perform its function. It can mean new production equipment, new applications, new information technology infrastructure or new business approaches. Transformation requires a significant investigation of what is feasible (ideas, techniques, concepts, tools), as well as the identification of the necessary organizational support (ABPMP, 2013).

In addition, process transformation allows for the implementation of more effective controls and monitoring mechanisms. For example, the integration of quality management systems can help identify deviations and errors in real time, enabling immediate corrective action to be taken (Rummler & Brache, 1995). Another important aspect is improving

operational efficiency, by eliminating unnecessary activities, streamlining workflows, and introducing automation, businesses can reduce the time it takes to complete tasks and increase overall productivity (Womack, Jones, & Roos, 1990).

By adopting process transformation practices, companies can proactively identify, analyze, and correct errors, ensuring efficiency and quality in their activities. According to Davenport (1993), process transformation involves restructuring and optimizing workflows to achieve better results. One of the main benefits of process transformation is the reduction of operational errors and failures. By reviewing and redesigning processes, organizations can identify vulnerabilities that can lead to errors, rework, or miscommunication. This is critical to ensuring consistency and accuracy in operations (Hammer & Champy, 1993).

METHODOLOGY

As for the purpose, the research is applied, since it aims to generate new knowledge for practical application, aimed at solving specific problems (Gerhardt; Silveira, 2009). As for the objectives, the study is descriptive, since it describes the characteristics of a given phenomenon under study. For Triviños (1987), descriptive research intends to describe the facts and phenomena of a given reality. In the present research, the objective is to describe the characteristics of the inconsistencies of entries, the rework generated by these inconsistencies, as well as the influence of the theory of Process Management in the mitigation of such occurrences.

Regarding the procedures, this is a case study, using participant observation and documentary research for data collection. For Gil (2008), the case study is characterized by the deep and exhaustive study of one or a few objects, in order to allow their broad and detailed knowledge. Triviños (1987), likewise, characterizes the case study as a category of research, whose object is a unit that is deeply analyzed.

The research adopts the quantitative-qualitative approach, regarding the treatment of the proposed problem. Quantitative-qualitative research combines quantitative and qualitative methods to provide a more comprehensive understanding of a phenomenon. The integrated use of these methods allows the limitations of one to be compensated by the forces of the other, enriching the results and ensuring greater validity and depth in the analysis (Creswell & Plano Clark, 2011).

The survey was carried out within the scope of the Collection Management, a unit that makes up the State Revenue Coordination (CRE), linked to the State Secretariat of Finance of the State of Rondônia (SEFIN). The extraction of all ex officio tax entries,

registered as overdue debt, which were subject to a tax regularity process, of the anticipated ICMS, ICMS differential rate and ICMS tax substitution, was carried out.

In this phase, a total of 790 entries were identified in the period of 2021 and 2022 that had the taxpayer's request met, with 650 exclusions of values released and 140 changes of entries. The extraction was carried out by searching the tables of the SEFIN database, selected by means of a query in the *Structured Query Language* (SQL). After selecting the data, a documentary analysis was carried out regarding the legislation that governs the entries, in order to map the inconsistencies that lead to the write-offs or changes, using Microsoft Excel spreadsheets.

RESULTS AND DISCUSSIONS

In the periods of 2021 and 2022, 4,122,939 ICMS official entries were made, of which 156,658 were excluded due to inconsistencies, that is, 3.79% of the ICMS official entries did not prosper. From the survey related to the Electronic Information System (SEI) Processes, sent in the period surveyed, by the tax regularization sector of the Collection Management to the Attorney General's Office of the State of Rondônia (PGE), it was found the number of 790 official entries, registered as overdue debt, which underwent changes or were excluded, as shown in Table 1:

Table 1. Completed postings versus deleted/changed postings in the 2021 and 2022 period

The. Total Ex Officio Entries	4.122.939	100%
B. Deletions/changes to postings	156.658	3.79% (B/A x 100)
C. Deletions/changes to postings enrolled in overdue debt	790	0.50% (C/B x 100) 0.019% (L/H x 100)

The entries questioned by taxpayers, registered in tax overdue debt, represent 0.5% of the entries with inconsistencies that were regularized before the registration in overdue debt. Of the total number of official entries made in the period surveyed, 0.019% were questioned by taxpayers only after being enrolled in active tax debt.

As for the 790 official entries, registered as overdue debt, when mapped and categorized, it was identified that 650 entries were excluded and 140 altered, as shown in Table 2. It should be noted that there were other cases of exclusions/changes in the SEI processes analyzed, however, they were not included in the analysis because they were not official entries made by the Department of Finance of the State of Rondônia.

From the analysis of the legal justification that guided the exclusions, 18 types of occurrences were verified; to support the changes, three occurrences, as shown in Table 2:

Table 2. Occurrences of exclusion of ICMS official entry

Posting Exclusion Occurrences	**Incidence**	**Values excluded (R$)**
1 - Article 16 RICMS, use and consumption or fixed asset with a differential of rates collected in SPED	133	676.723,94
2 - ICMS Convention 100/97, agricultural input - exemption	112	338.184,95
3 - Purchase in another state, over-the-counter sale final consumer - no incidence	81	87.893,32
4 - Agreement 93/15, final consumer - non-incidence	61	154.081,79
5 - ICMS Convention 35/77, registered cattle - exemption	56	244.298,72
6 - ICMS Convention 101/97, solar energy equipment - exemption	34	149.119,01
7 - Article 150, item VI of the FC/88 immunity books	31	11.123,27
8 - ICMS Convention 142/18, ICMS-Tax substitution already collected in the registration of substitute or in a national payment guide of state taxes (GNRE)	25	79.101,81
9 - Agreement 93/15, final consumer service provider company - Non-incidence	25	39.606,97
10 - ICMS Convention 52/91, intended for companies under the normal taxation	24	38.857,46
11 - Agreement 45/99, door-to-door resale with GNRE collected	13	1.189,65
12 - Immunity of a public entity Article 150, § 2. CF 1988	12	128.589,59
13 - ICMS Convention 70/92, bovine embryos - exemption	9	14.724,75
14 - ICMS Convention 110/07, fuel already collected by substitution tax or deferred	8	297.119,74
15 - ICMS Convention 66/94, fruit pulp - exemption	7	2.545,65
16 - ICMS Convention 44/75, fruit and vegetables - exemption	7	2.447,38
17 - Article 226 of Annex X of RICMS/RO, shipment for repair - no incidence	6	530.950,16
18 - Registration in duplicate overdue debt	6	11.339,66
Total	**650**	**2.807.897,82**
Occurrences of Change of Entries		
1 - ICMS Convention 15/81, used equipment - reduction of the base of calculation	60	36.232,29
2 - ICMS Convention 52/91, agricultural machinery and implements - reduction Calculation base	45	781.637,07
3 - Article 16 RICMS, ICMS tax substitution and ICMS in advance for ICMS rate differential	35	117.628,07
Total	**140**	**935.497,43**
GRAND TOTAL	**790**	**3.743.395,25**

It is verified that the inconsistency that presented the highest amount of excluded value (R$676,723.94) was also the one that presented the highest number of occurrences, being the entry related to goods intended for use and consumption or fixed asset with differential rates collected in the fiscal SPED. In second place are the exclusions related to the entry referring to goods sent for repair or repair, with a total value of R$530,950.16. It is observed that, even with only six occurrences, this inconsistency reached the second place in the overall value excluded, since these are shipments of capital goods for repair or repair, with generally high market value. The exclusions referring to the entries for agricultural inputs, exempt according to ICMS Convention 100/97, reached the amount of R$338,184.95, third place in total amount excluded and second place in number of occurrences.

As for the amounts excluded by changing entries, there is the highest value attributed to the change in entry resulting from the entry of agricultural machinery and implements contained in ICMS Convention 52/91, subject to the reduction of the calculation basis, reaching the amount of R$781,637.07. The total amount of tax credits excluded in the period analyzed, added to the exclusions and changes in entries, reached the amount of R$3,743,395.25.

PROCESS MANAGEMENT APPLIED TO THE ICMS OFFICIAL ENTRY

The techniques and tools of Process Management were important for the pursuit of the research objective. Based on the ABPMP (2013), the mapping of the tax collection process in the State of Rondônia was made, outlining the macro-processes, processes, sub-processes, activities and tasks performed (Table 1).

After the mapping, the ICMS official entry process was analyzed, in order to identify the causes that generate the inconsistencies in the entries. For Davenport (2013), the importance of process analysis lies in its ability to identify bottlenecks and inefficiencies in existing processes.

In the analysis, it was evidenced that the requests for review of entries registered in overdue debt are the result of automated entries, and the inconsistencies refer to the incorrect classification of products by the Border System. Products without ICMS incidence, exempt or immune, are classified as if they were taxed. At this point, there was an inefficient alignment between SEFIN's IT area, which performs the programming of the Border System, with the ICMS automated letter entry process.

By examining the information contained in the invoices that cover the operations taxed by the ICMS official entry, which were questioned by taxpayers through the tax

regularity process, it was verified, in many occurrences, that the entry could be inhibited, or made with the due reduction, taking into account the information regarding the NCM, CST and CFOP contained in the tax documents.

According to the Taxpayer Guidance Manual - Overview (2020) published by the National Meeting of Tax Coordinators and Administrators (ENCAT), the NCM, or Mercosur Common Nomenclature, is a code used to identify the nature of goods traded between Mercosur member countries. It consists of eight digits and serves to standardize the classification of products, facilitating international trade and the application of tariff policies.

Equally important for taxation, the Tax Code of Operations and Benefits (CFOP) is a system used in Brazil to classify the circulation of goods and services for tax purposes. It is composed of four digits and defines the nature of the business operations carried out by a company. Each CFOP code indicates whether the operation is inbound or outbound, whether it involves goods or services, whether it is within the same state or between different states, among other characteristics. The CFOP assists in the correct taxation of commercial transactions and in the fulfillment of tax obligations (Taxpayer Guidance Manual - Overview, ENCAT 2020).

With regard to the Tax Situation Code (CST), this is a fundamental element for the correct classification and taxation of ICMS, since it is used to classify operations and determine the tax rates to be applied. The CST has several categories that indicate the nature of the transaction and its particularities in relation to taxation. In the ICMS, for example, the tax situation codes represent internal, interstate, import operations, indicate exemptions, reductions in the calculation basis and other special taxation conditions. Each CST has a specific rate or a form of calculation determined by tax legislation (Taxpayer Guidance Manual - Overview, ENCAT 2020).

Finally, the Tax Substitution Specifier Code - CEST is a numerical code used in Brazil to identify and classify products subject to the ICMS tax substitution regime. It was created to facilitate the identification of products and define the responsibility for collecting the tax among taxpayers, thus simplifying the tax collection process and inspection. Each product has a specific CEST, determined by tax legislation, and its correct use is essential to ensure compliance with tax law (Taxpayer Guidance Manual - Overview, ENCAT, 2020).

The agreements that exempt or grant tax benefit from the reduction of the ICMS calculation basis bring, in their text, the description of the products that enjoy the tax benefit. Some agreements, such as ICMS Convention 101/97 (solar energy equipment) and ICMS Convention 52/91 (Agricultural machinery and industrial implements), even bring the NCM of the products to which they refer.

The Tax Situation Code (CST) was another important indicator verified in invoices with tax benefits. Products with CSTs in positions 40 (exempt) indicated that they were exempt from ICMS. On the other hand, products with CST in positions 20 (with a reduction in BC) had the indication of a reduction in the tax calculation basis.

Other operations contained CFOP 6107 (sales of industrialized products in the establishment, intended for non-taxpayers) and 6108 (Sale of merchandise acquired or received from third parties, intended for non-taxpayers) indicating that the receipts of goods were destined for final consumers who were not ICMS taxpayers, with the non-incidence of ICMS on the entry into the State of Rondônia, regulated by ICMS Convention 93/2015.

Thus, it is found that the inconsistencies in the automated ICMS entries can be reduced through adjustments in the Border System, causing the information contained in the electronic invoices (NCM, CFOP, CST) to be recognized, and thus, the taxation of products with an indication of exemption, immunity or non-incidence, does not occur. Making adjustments to computerized systems in process management is an essential practice to ensure the efficiency, adaptability, and continuous optimization of organizational operations (Davenport, 2013). Based on the data collected in the research, specifically the information contained in the invoices, and the laws that govern the taxation of ICMS, Table 3 was prepared, with the proposals for adjustments in the Border System:

Table 3. Proposals for adjustments to the Border System

Case 01: ICMS Convention 100/97, agricultural input - Exemption	Inhibit the launch for products with NCMs listed below, whenever it is intended for CPF with state registration (rural producer) and the CST is included in positions 020 and 040 (120, 220, 320, 420, 520, 620, 720, 820; 140, 240, 340, 440, 540, 640, 740 and 840) that indicate exemption or reduction of the calculation basis: 28365000; 25010019; 30049059; 5111000; 12019000; 12099900; 28365000; 25010019; 25102010; 23032000; 31059090; 31051000; 31055900; 10064000; 52029900; 12019000; 25182000; 12092900; 12092900; 25174900; 25010019; 25010019; 28332520; 28170010; 12072900; 12149000; 23099090; 25010019; 30044090; 25280000; 29304090; 10059010; 25010090; 25030090; 10059010; 28429000; 63051000; 12072900; 84451922; 28342190; 30045090; 30049059; 10059010; 30044090; 12099900; 30023070; 25182000; 25010019; 23099010; 29362190; 12081000; 38089199; 31055900; 29041020; 38089999; 31059090; 30049046; 31059090; 38089299; 12011000; 28365000; 28365000; 5119999; 25010090; 12011000; 30024280; 28352500; 23024000; 28299032; 12149000; 10059010.

Case 02: ICMS Convention 93/15, Final consumer - non-incidence	Inhibit the automatic entry when the recipient is a CPF or CNPJ not registered or CFOPs 6107 and 6108 appear on the invoice.
Case 03: ICMS Agreement 35/77, registered cattle - Exemption	Inhibit automatic launch for products with NCMs 1022190; 1022990; 1022919; 1029000 for CPF with state registration (rural producer) and the CST is included in position 040 (140, 240, 340, 440, 540, 640, 740 and 840) which indicates products exempt from ICMS.
Case 04: ICMS Convention 101/97, solar energy equipment - Exemption	Inhibit automatic launch for products with NCMs 85013220; 85414032; 85017210 with CSTs in heading 040 (140, 240, 340, 440, 540, 640, 740 and 840) which indicates products exempt from ICMS.
Case 05: Article 150, item VI of CF/88 immunity books	Inhibit the automatic entry for a product with NCM 49019900 and with CST in heading 040 (140, 240, 340, 440, 540, 640, 740 and 840) which indicates products exempt from ICMS.
Case 06: Immunity from public entity, article 150, § 2. CF 1988	Inhibit the automatic entry when the recipient is a CNPJ not registered and the CFOPs 6107 and 6108 are included in the tax document.
Case 07: ICMS Convention 70/92, bovine embryos - Exemption	Inhibit the automatic entry for products with NCMs 5111000; 5119910 and with CST in position 040 (140, 240, 340, 440, 540, 640, 740 and 840) which indicates products exempt from ICMS.
Case 08: ICMS Agreement 110/07, deferred biodiesel	Inhibit the automatic entry for products with NCM 38260000 and CST in position 051, which indicates deferral of ICMS levy.
Case 09: ICMS Convention 66/94, fruit pulp	Inhibit automatic posting for products with NCM 20089900 and CST in heading 040 (140, 240, 340, 440, 540, 640, 740 and 840) indicating products exempt from ICMS.
Case 10: Convênio ICMS 44/75, hortifruti (coco in nature)	Inhibit the automatic entry for products with NCM 8011200 and with CST in position 040 (140, 240, 340, 440, 540, 640, 740 and 840) which indicates products exempt from ICMS.
Case 11: Article 226 of Annex X of RICMS/RO, shipment of goods	Inhibit the automatic entry for operations with CFOPs 6915, 6916, 2914 and with CST in positions 040 and 041 (140, 240, 340, 440, 540, 640, 740 and 840; 141, 241, 341, 441, 541, 641, 741 and 841) which indicates products exempt from ICMS.
Case 12: ICM Agreement 15/81, used equipment – reduction of the calculation basis	Enter the rate differential with the calculation basis reduced by 80% whenever it comes to operations with CFOPs 6551 and 6552 and CST in headings 020 and 040 (120, 220, 320, 420, 520, 620, 720, 820; 140, 240, 340, 440, 540, 640, 740 and 840) that indicate exemption or reduction of the calculation basis: Enter the rate differential with the calculation basis reduced by 95% whenever it comes to operations with CFOPs 6551 and 6552 and CST in headings 020 and 040 (120, 220, 320, 420, 520, 620, 720, 820; 140, 240, 340, 440, 540, 640, 740 and 840) that indicate exemption or reduction of the calculation basis and the NCM of the product indicates vehicles (NCM 8703).
Case 13: ICMS Convention 52/91 Agricultural machinery and industrial implements - reduction of the calculation basis	Insert the NCMs contained in Annexes I and II of ICMS Convention 52/91 and apply: Rate differential of 3.66% for NCMs of Annex I from the south and southeast regions, except Espírito Santo, when intended for rural producers or simple nationals; Rate differential of 1.5% for NCMs of Annex II from the south and southeast regions, except Espírito Santo, when intended for rural producers or simple nationals; Inhibit the launch of Annex I NCMs from the North, Northeast, Midwest and Espírito Santo regions; Inhibit the launch of Annex II NCMs from the North, Northeast, Midwest and Espírito Santo regions; Inhibit the entry of the ICMS in advance for both annexes, whenever the recipient is a taxpayer under the normal tax regime.

It is noteworthy that, of the 790 cases analyzed of inconsistencies in the ICMS official entries registered as overdue debt, 345 would not occur with the implementation of the proposed adjustments in the Border System, with a correction rate of 43.67%. Considering that, in the years 2021 and 2022, the tax regularity sector of the Inspection Management analyzed 156 thousand inconsistencies in official entries not registered in overdue debt, with the implementation of the proposed adjustments in the system, the sector would have a reduction of almost 68 thousand inconsistencies in ICMS official entries.

It should be noted that 56.33% of the inconsistencies analyzed correspond to situations beyond SEFIN's control, either due to error or absence of data in the filling out of the tax document by the issuer, concerning the CST, CFOP and NCM, or situations in which the recipient taxpayer, by its liberality, disposes of the acquired and taxed products as if they were for resale. to its use and consumption or to its fixed assets, with the incidence of ICMS differential rates, in accordance with article 16 RICMS.

Adjustments in computerized systems are characterized as process transformation (Womack *et al*., 1990). By making adjustments and transforming the automated posting process, SEFIN will proactively minimize errors, ensuring efficiency and quality in the official posting activity (Davenport, 1993). The adjustments in automation will ensure a substantial increase in efficiency, since it will reduce, by 43.67%, the rework arising from requests for review of entries, and, consequently, by 43.67%, the undue enrollments in overdue debt, the protests of titles and the tax foreclosures of undue ICMS entries.

FINAL CONSIDERATIONS

The survey reported that, in the years 2021 and 2022, 4,122,939 ICMS official entries were made, of which 156,658 were excluded due to inconsistencies, that is, 3.79% of ICMS official entries did not prosper. Regarding the entries registered in tax overdue debt, 790 entries with inconsistencies were observed, of which 650 were excluded, in the total amount of R$2,807,897.82, and 140 entries were changed, with a reduction of R$935,497.43 in the amounts posted. The total amount of ICMS write-off due to inconsistency, between exclusions and changes, was R$3,743,395.25. As for the legal justifications that guided the analyses, 18 types of occurrences of inconsistencies for the exclusions and three types of justifications for the changes were verified.

It was evidenced, in the research, that the requests for review of entries registered in overdue debt are automated entries, and the inconsistencies refer to the incorrect classification of products by the Border System. Products without ICMS incidence, exempt or immune, are classified as if they were taxed. After compiling the data contained in the

invoices, it was found that the errors in the classification of the products, by the Border System, originate from the non-recognition of the information referring to the NCM, CST and CFOP of the electronic tax documents. Therefore, a misalignment was found between SEFIN's IT area, which performs the programming of the Border System, with the process of launching an automated ICMS letter.

Based on the data collected, it was found that inconsistencies can be reduced through adjustments in the Border System, so that the information contained in the electronic invoices (NCM, CFOP, CST) is recognized, and the taxation of products with an indication of exemption, immunity or non-incidence does not occur. Thus, through Process Management, a proposal was prepared, in the form of a Service Order (OS No. 77377), with 13 adjustments interventions in the Border System, with the aim of transforming the ICMS official release process, aiming at assertiveness and efficiency in the launch process, with full alignment with the managerial public administration and the constitutional principle of efficiency.

CONCLUSION

With the implementation of the proposed adjustments, there would be a reduction rate of 43.67% in inconsistencies in ICMS official entries, that is, 345 of the cases that generated rework and inconvenience to taxpayers, would not occur. Considering, also, that, in the years 2021 and 2022, the tax regularity sector of the Inspection Management analyzed 156 thousand inconsistencies in official entries not registered in overdue debt, there would be a reduction of another 68 thousand inconsistencies in ICMS official entries. Thus, the research achieved the proposed objective of verifying how Process Management can help reduce inconsistencies and rework in the activities of ICMS official entry, carried out by the State Department of Finance of the State of Rondônia.

As contributions of this study, it is highlighted, for society, a greater legal certainty in the performance of the State Tax Authorities. The increase in the assertiveness of the automated ICMS official entry will reduce the incidences of denials, tax foreclosures and extrajudicial protests related to improper entries. For the Public Administration, there will be a relevant reduction in the flow of tax regularity processes, thus reducing the rework related to the analysis of the entries subject to questioning by taxpayers. In this way, the tax regularity sector will be able to operate with a smaller workforce, relocating professionals to work in more productive activities in the State of Rondônia. For the academy, the study showed that Process Management is an important tool for increasing efficiency in the activity of automated ICMS official entry.

As a limitation to the study carried out, it is highlighted the impossibility of ascertaining the costs arising from the cancellations of notary protests and the payment of the burden of loss in the collections/executions of undue ICMS tax credits. The impossibility resulted, firstly, from the fact that the collection and management of tax credits registered as overdue debt are the responsibility of the Attorney General's Office of the State of Rondônia (PGE/RO), and, secondly, because these costs are presented in a global amount, not differentiating the collection of tax and non-tax overdue debt.

For future studies, research on the results of the implementation of the suggested changes in OS 77377 is recommended. In addition, it is recommended to study the critical success factors (CSF) in the implementation of solutions based on Process Management in the State Secretariat of Finance of the State of Rondônia, in order to evaluate the technological resources and tools, the support of senior management, communication and *feedback* between team members and agencies, the centralized management culture and the propagation of the culture of Process Management in the Agency.

REFERENCES

1. ABPMP Brasil. (2013). *Guia para o Gerenciamento de Processos de Negócio Corpo Comum de conhecimento (CBOK)* (3rd ed.). Association of Business Process Management Professionals.

2. Almeida, A. S., Portela, E. N., & Silva, D. M. (2021). Fundamentos da Gestão de Processos de Negócio. *Revista Processus de Políticas Públicas e Desenvolvimento Social*, 3(6), 121–130. https://doi.org/10.5281/zenodo.5657943

3. Brasil. (1966). Lei n. 5.172, de 25 de outubro de 1966. Dispõe sobre o Sistema Tributário Nacional e institui normas gerais de direito tributário aplicáveis à União, Estados e Municípios. *DOU*, 27 de outubro de 1966.

4. Chinosi, M., & Trombetta, A. (2012). *BPMN: Introduction to the Standard*. Springer.

5. Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research*. Sage Publications.

6. Davenport, T. H. (2013). *Process Innovation: Reengineering Work Through Information Technology*. Harvard Business Press.

7. Davenport, T. H. (1993). *Reengenharia de processos* (2a ed.). Campus.

8. ENCAT. (2020). *Sistema Nota Fiscal Eletrônica: Manual de Orientação do Contribuinte – Visão Geral Versão 7.00*.

9. Gerhardt, T. E., & Silveira, D. T. (2009). *Métodos de Pesquisa* (1ª ed.). Editora da UFRGS.

10. Gil, A. C. (2008). *Métodos e técnicas de pesquisa social* (6ª ed.). Atlas.

11. Hamanaka, R. Y., & Aganette, E. C. (2022). Metodologias BPM em instituições de ensino superior: Um estudo comparativo. *Informação em Pauta*, 7, 1-19. https://doi.org/10.36517/2525-3468.ip.v7i00.2022.61704

12. Hammer, M., & Champy, J. (1993). *Re-engineering the corporation: A manifesto for business revolution*. HarperBusiness.

13. Harmon, P., & Wolf, C. (2018). *Business Process Change: A Guide for Business Managers and BPM and Six Sigma Professionals* (3rd ed.).

14. Paula, M. A., & Valls, V. M. (2014). Mapeamento de processos em bibliotecas: Revisão de literatura e apresentação de metodologias. *RDBCI: Revista Digital de Biblioteconomia e Ciência da Informação*, 12(3), 136–156. https://doi.org/10.20396/rdbci.v12i3.1598

15. Ramos, K. H. C., Montezano, L., Costa Júnior, R. L., & Silva, A. C. A. M. (2019). Dificuldades e benefícios da implantação da gestão de processos em organização pública federal sob a ótica dos servidores. *Revista Gestão & Tecnologia*, 19(4), 161-186. https://doi.org/10.20397/2177-6652/2019.v19i4.1593

16. Rosenthal, U., Hoffmann, M., & Nickel, S. (2015). *Business Process Management: Basics, Techniques, and Tools*. Springer.

17. Rummler, G. A., & Brache, A. P. (1995). *Improving Performance: How to Manage the White Space on the Organization Chart*. Jossey-Bass.

18. Sordi, J. O. (2008). *Gestão por processos: uma abordagem da moderna administração* (2ª ed.). Saraiva.

19. Triviños, A. N. S. (1987). *Introdução à pesquisa em ciências sociais: a pesquisa qualitativa em educação*. Atlas.

20. Turra, M. E. D., Juliani, L. I., & Salla, N. M. C. G. (2018). Gestão de Processos de Negócio – BPM: Um Estudo Bibliométrico sobre a Produção Científica Nacional. *Revista Administração em Diálogo - RAD*, 20(3), 46–68. https://doi.org/10.23925/2178-0080.2017v20i3.36961

21. Weske, M. (2012). *Business Process Management: Concepts, Languages, Architectures*. Springer.

22. Womack, J. P., Jones, D. T., & Roos, D. (1990). *The Machine That Changed the World: The Story of Lean Production*. Free Press.