



RESEARCH ARTICLE

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MANAGEMENT OF REQUISITIONS AND INCIDENTS IN THE JUDICIARY OF TOCANTINS

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ABSTRACT

This article aims to analyze the implementation of the processes of management of compliance with requests and incidents, based on the Information Technology Infrastructure Library (ITIL), in the Judiciary of Tocantins (PJTO). The description of the compliance management process of requests and incidents will be presented with the presentation of the steps. The study also presents the result of the maturity level assessment defined in COBIT, as well as the benefits of the implementation of ITIL, as well as the improvements arising from the use of good practices in information technology services management and Communication.

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INTRODUCTION

Currently, the vast majority of organizations depend on Information Technology for the development of their activities, making the importance of Governance and Management of Information and Communication Technology greater every day. Within the scope of public administration, the Federal Court of Auditors (TCU) and the National Council of Justice (CNJ) recommend actions aimed at standardizing and improving governance, management and use controls of Information and Communication Technology (ICT). According to Schaefer (2017), this challenge of public organizations to remain in a complex and dynamic environment has caused them to return their energies in adopting management models governed by governance principles, which ensure transparent management and based on results. The solutions applied to the judiciary make it possible to enable a more agile standardized care to the population, regardless of the place of physical provision of the service, and the Judiciary of Tocantins, with the implementation of the judicial process system (e-PROC) and the administrative process system (SEI), has been increasing business

dependence on Information Technology, resulting in the need for investments and increased control of the ICT area. ICT Governance in the Brazilian Judiciary is led by the National Council of Justice (CNJ), which is an organ focused on the reformulation of staff and means in the judiciary, especially with regard to control and procedural administrative transparency. The CNJ was instituted in obedience to that determined in the Federal Constitution, in accordance with art. 103-B (FERNANDES, 2012). In this sense, this work is justified by the need to improve the level of maturity in Governance, Management and Information Technology Infrastructure, and the objective of this study will be to evaluate the Compliance Management Process of Requests and Incidents, based on the ITIL v3 library. ITIL is a grouping of best practices used for managing information technology services.

MATERIALS AND METHODS

This research work was carried out in the Tocantins Judiciary (PJTO), and the classification of the research, with regard to the objectives, is exploratory. As for the approach to the

problem, this research is qualitative and, according to Richardson (2015) can be characterized as an attempt at a detailed understanding of the meanings and situational characteristics presented by the interviewees, rather than the production of quantitative measures of characteristics and/or behavioural. The study aimed at the Process of Management and Compliance of Requisitions and Incidents implemented in the PJTO. Regarding the research strategy or procedures used, bibliographic and documentary research was adopted. Regarding data collection, document analysis, interview and observation of participants were adopted. An interview was conducted with the Director of Information Technology to raise and know all the particularities of the process before and after the implementation of the good practices suggested by ITIL. Also for data collection, the participants were observed, because this research context is directly related to the Implementation Project of the Requisition and Incident Management and Compliance Process in the organization studied. As defined in ITIL, the service center is a role within the Service Operation, making it of great importance for the execution of the Requisition and Incident Management Process, so a model for evaluating the Level of Requests and Incidents was presented Maturity in the management of ICT services. In addition, the flowchart-shaped compliance and incident management process was presented, with the description of the steps. The results of the Maturity Level assessment, as well as the benefits of the implementation of ITIL, as well as the improvements resulting from the use of good practices in ICT Services Management were presented.

Requisition and Incident Management: This section presents an analysis of the Implementation of Requisition and Incident Compliance Management Processes, based on the fundamentals of ITIL v3. The study was carried out in the Tocantins Judiciary, established through Complementary Law No. 10 of January 11, 1996, of the state of Tocantins.

COBIT presents the following Maturity Levels for each IT process:

- Level 0 (Non-existent): Management processes are not applied.
- Level 1 (Initial/Ad Hoc): processes are sporadic and disorganized, with management approaches applied on a case-by-case basis.
- Level 2 (Repetitive but Intuitive): Processes follow a pattern of regularity, with high dependence on the knowledge of individuals.
- Level 3 (Defined): Processes are standardized, documented, and communicated.
- Level 4 (Managed and Measurable): Processes are monitored and measured for compliance with procedures, and actions are taken when results are not effective.
- Level 5 (Optimized): Good practices are followed and automated based on results of continuous improvements and maturity modeling actions with other companies.

According to the maturity model presented in COBIT, the ICT Requisition and Incident Management process was evaluated as Level 2 (Repetitive but Intuitive). The Management of ICT requests and incidents was carried out without defined flow, being via telephone, email, spark software for internal communication, or administrative process system - SEI,

limiting the quality of the service provided by the support area to the tjto user, such as: difficulty controlling the services performed, lack of control over the time of care, lack of standardization in the service and dissatisfaction of the user.

In 2018, the ICT Services Center Deployment Project was started. He is currently in the operation phase. Figure 1 shows the graph of calls registered in the service center management system in 2019. It can be noted that the months of February and August the number of calls was between 1500 and 2000. It is also observed that the month of February there was an increase in the number of calls.

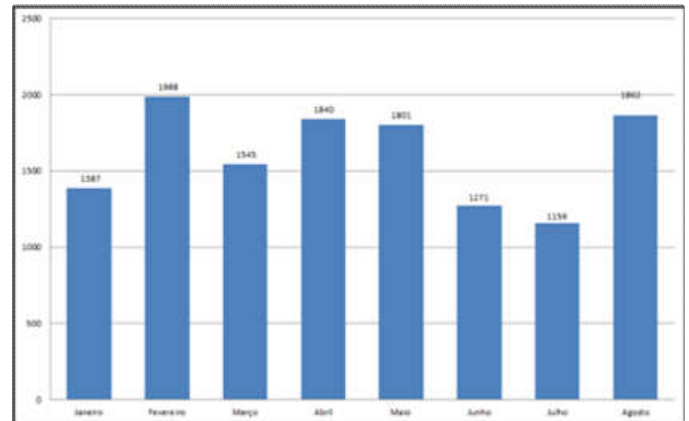
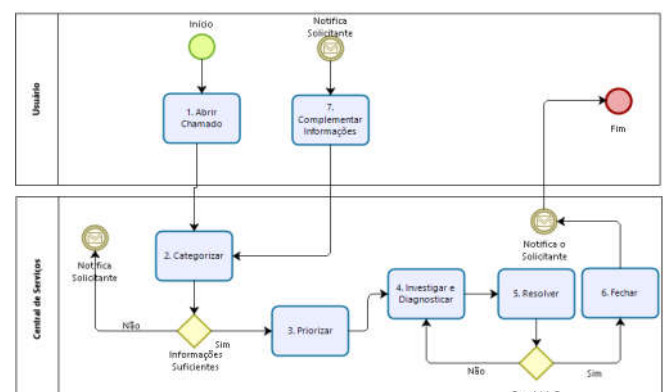


Figure 1. Calls registered in the Service Center Management System in 2019

From the point of view of the best practices of information technology management, the Service Center is a management and also operational level function, which brings together a set of processes, people, technologies and physical infrastructure (FILHO, 2011). The Service Center implemented in the PJTO serves on average 2800 internal users, who are the magistrates, servers, interns and outsourced of the Tocantins Judiciary. Depending on the concept of the life cycle of ITIL-based services, users trigger the Service Center in view of one of the following situations: An incident that occurred in one of the delivered services (failures, interruptions, errors and etc.); A doubt, ignorance about how to use a service or guidance on how to undo or redo a particular procedure. As a new service request, such as software installation, system access request, digital certificate issuance, and etc. Figure 2 presents the flowchart of the procedures of receptive request and incident management services implemented in this work, according to the steps recommended by ITIL, exemplifying the care stage with the interaction between users and analysts at the service center.



Source: authors' archive

Figure 2. Requisition and Incident Management Process

According to an adapted model of (FILHO, 2011), below is the steps of the Requisition and Incident Management Process implemented in the PJTO, demonstrated in Figure:

1. **Open Call:** User logs the call through the calling system or through the Service Center (when the call is opened by phone or when the operator himself identifies any incident).
2. **Categorize:** Verification of the history of adopted solutions and pending.
3. **Prioritize:** Determination and record of the prioritization of the call, according to profile, configuration items and history of adopted solutions.
4. **Investigate and Diagnose:** Location/verification of possible solutions in the base and knowledge.
5. User guidance for demand solution or request for access to the user workstation. Attempted solution of the incident. Unresolved the incident, back to step 4.
6. **Close:** Register the incident solution or understanding of the incident. Sending the registration to the 2nd remote or face-to-face support team, or for technical assistance/warranty.
7. **Supplement information:** If necessary, you can include additional information in the call for a better understanding of the Requisition.

When evaluating the maturity level of the incident management process and requisition fulfillment implemented in the PJTO, in relation to ITIL, it was concluded that by 2018 the support structure for ICT users was complex, with no defined process of management of requests and incidents, making it difficult to manage ICT demands. After the implementation of the Service Center, there was a significant evolution in the management processes of the ICT Services Center, being classified as Level 4 "Managed and Measurable", since the incident management process was established in all levels of the organization and the function of the service center was established in the appropriate organizational units. Tools and techniques are automated with a centralized knowledge base. Procedures for communication, escalation and resolution of incidents are established and communicated. The study shows an improvement in the maturity of the IT service management process of the Tocantins Judiciary, requiring the management of reported incidents, acting on the root cause of problems, allowing the implementation of the other ICT service management processes, as defined in ITIL. The Service Center Management System has indicators to be monitored periodically by managers, and some improvements are necessary to increase the level of maturity of the process:

- Knowledge Base Generation with the availability of User Manuals, Technical Manuals related to systems and equipment, since the call management system needs constant updating;
- Monitoring of SLA (Service Level Agreement);
- ICT Asset Inventories;
- Monitoring of performance indicators;
- Monitoring of the User Satisfaction Index;
- Review of the Service Catalog;
- Preparation of self-service tools such as FAQs, with the questions most questioned to the support team, and which, therefore, are available in a prominent way.

Finally, it was identified that the implementation of ITIL through the new incident and requisition management process, among others, achieved the following benefits:

- Standardization in the process of requests and incidents;
- Creation of indicators to measure the execution of calls;
- Definition of Service Level Agreements;
- Management of demands at all levels of service and others.

Thus, within the scope of the Service Operation, it will be possible to implement new tools that may support the OPERATION of the ICT Service, such as:

- Self-help tools for the user;
- Integrated Configuration Management System;
- Remote control of stations;
- Diagnostic tool;
- Implementation of Software with Virtual Assistants;
- Preparation of reports and dashboards of indicators.

Final Considerations

The objective of this work was to analyze the implementation of the Processes of Compliance Management of Requisitions and Incidents, based on the ITIL v3 library, aiming at meeting the requirements defined in the Governance, Management and ICT infrastructure of the National Council of Justice. According to a case study presented, it was found that the process of management of requisitions and formalized incidents was found, making it difficult to manage ICT demands. Thus, a macro flowchart of the process of compliance management of requests and incidents implanted in the PJTO was presented, taking into account the dimensions of the user and service center. Finally, it was identified that the implementation of ITIL through the new incident and requisition management process, among others, achieved the following benefits:

- Standardization in the process of requests and incidents;
- Creation of indicators to measure the execution of calls;
- Definition of Service Level Agreements;
- Management of demands at all levels of service and others.

It was observed that the implementation of the Service Center in 2018 has represented a major advance in the management and quality of service offered by the ICT area. However, there are still great opportunities for improvement to achieve the result expected by the National Council of Justice. As a suggestion for future research, studies on the other processes suggested by ITIL are not addressed in this study. In addition, the tool for managing service center calls, after the implementation of the knowledge base, enables an advance in customer service, with the possibility of implementing self-service tools, resulting in agility in the Service.

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REFERENCES

- BRASIL, 2019. Conselho Nacional de Justiça. Portaria 46 de 27 de Junho de 2017, Institui o Selo Justiça em Números e estabelece seu regulamento. Disponível em: <<http://www.cnj.jus.br/files/conteudo/arquivo/2017/06/a9b6ab6a6c3f0b4dc6cf91b407c897e3.pdf>>. Acesso em 14 de Janeiro de 2019.
- BRASIL, 2019. Conselho Nacional de Justiça. Resolução 211 de 15 de Dezembro de 2015, Institui a Estratégia Nacional de Tecnologia da Informação e Comunicação do Poder Judiciário (ENTIC-JUD). Disponível em: <<http://www.cnj.jus.br/busca-atos-adm?documento=3052>>. Acesso em 14 de Janeiro de 2019.
- FERNANDES, Aguinaldo Aragon, 2012. et al. Implantando a Governança de TI: da Estratégia à Gestão dos Processos e Serviços. 3. Ed. Rio de Janeiro: Brasport.
- FILHO, Rubem Melendez (2011). Service Desk Corporativo: Solução com Base na ITIL V3. 1. Ed. São Paulo: Novatec.
- ISACA 2019. Cobit 5. Disponível em: <http://www.isaca.org/COBIT/Pages/COBIT-5.aspx> acesso em 15 de Janeiro de 2019.
- RICHARDSON, Roberto Jarry (2015). Pesquisa Social: Métodos e Técnicas. 3. Ed. São Paulo: Atlas S.A.
- SCHAEFER, Eduardo Dullius (2017). Estudo da Governança de TI Interinstitucional em um ambiente de Gestão de Projetos de TI em órgãos públicos. 122 f. Dissertação (Mestre em Administração) - Programa de Pós-Graduação da Faculdade de Administração, Contabilidade e Economia, Universidade Católica do Rio Grande do Sul, Porto Alegre-RS.
