

MANAGEMENT IMPLANTATION OF THE SERVICE CATALOG USING GAIA IT SERVICE CATALOG FRAMEWORK ON A METALLURGICAL INDUSTRY

Wesley Viana Pereira and Rodolfo Miranda de Barros

Departamento de Computação – Universidade Estadual de Londrina (UEL)

Caixa Postal 6.001 – 86.051-980 – Londrina – PR – Brasil

ABSTRACT

This study's goal was to show a metallurgical industry the value of the IT sector - information technology. It was used the Gaia IT catalog of services framework method as the tool of research. By obtaining the data extracted from the questionnaire it was possible to identify the level of this Enterprise's maturity, the results showed the need and relations of the enterprise with the IT sector. Among the items to be improved, it was possible to highlight the need to implement the IT service catalog.

KEYWORDS

IT Service Catalog, ICT Governance, ITIL

1. INTRODUCTION

The object of this study was the IT department of a metallurgical industry. The industry did not have a standard control system for attendance; it was carried out without criteria and standards for users. With this study it was possible to identify that there was no service catalog, the occupation of the IT sector was to meet emergency need, there was no tool and service development. For the initial adjustments of the sector, the Gaia IT Service Catalog framework was used by the ITIL concept.

2. THEORETICAL FOUNDATION

According to Lopes et al. (2014, p.40), the IT service catalog is a list of active services provided to costumers and aims to provide a simple source and information center which is consistent about all available services, ensuring that those in charge can see their attributes; the business processes which they deal and expected quality levels.

The term initially known as IT, has been approached in recent years as Information and Communication Technology ICT, but the difference is only on classifications, according to Weil and Ross (2012, p. 23) ICT governance is a model of how the decisions are made and the responsibilities are directed, in order to obtain a desirable behavior on the use of ICT, in which this behavior refers to the alignment with the organization's objectives and goals and consistent with their culture.

According to Taconi (2014, p. 45), the Gaia IT Service Catalog framework includes the entire development process of an IT service catalog, from the initial positioning of an organization to its full realization. The framework is positioned between the management of IT services and the organization's IT services, because this way it becomes a link that will bring together all the information and details required to make up the catalog of IT services. The overview of the framework represents all the elements that compose it: the diagnostic evaluation questionnaire (QED), the maturity model and framework services.

Information Technology Infrastructure Library (ITIL) is a set of good practices to be applied in infrastructure, operation and maintenance of IT services. ITIL V3 is a framework developed by the British government to ensure the quality of services provided or consumed as (ITSMF, 2007). This framework

suggests a life cycle composed of five phases, Service Strategy; Service Design; Service Transition; Service Operation; Continuous Service Improvement. According Briganó and Barros (2010, p.2-3). ITIL also provides inputs for compliance with ISO / IEC 20000, the activities are organized in processes, which provide an effective framework in order to have a service management for improved IT.

The GAIA framework maturity model has five levels, which present scenarios in which an organization can be located in relation to the catalog of IT services. The QED (diagnostic evaluation questionnaire) is related to both the maturity model and the framework services. After answered the QED issues, positioning the organization are achieved based on the maturity levels. Finally, the framework services will be responsible for presenting the necessary indicators for the level of maturity that is reached, relating to the maturity model, according to Taconi (2014, p.49). The levels presented include five levels, in which organizations can be classified Level 1: No management; Level 2: Partially managed; Level 3: Managed; Level 4: Managed and audited; Level 5: Continuous improvement.

3. CASE STUDY PROPOSAL

The object of this study has as its focus the IT sector of a metallurgical Industry located on the north of Paraná state, Brazil, on this scenario It was possible to identify the absence of a service catalogue and its descriptions.

3.1 Maturity, Data Collection, Identification and Service Description

In order to identify the level of maturity, it was applied the QED on the enterprise, questionnaire that composes the GAIA framework IT's Catalogue of Services. After the level identification, it was possible to identify the scenario for the implantation of the level 1 of the services catalogue, as the industry would not attend to the requirements to fit entirely on this level, being this the first identification to follow the necessary advances to level 1 adequacy. Taconi (2004, pg.51) It shows that the QED unites questions about several aspects of the IT's catalogue of services construction, as example: Suppliers; People in charge; Requirements and Settings.

Through this questionnaire, all of the necessary information to compose the maturity level identification was acquired, that now validating the level that the enterprise finds itself as seen on the figure 1. So that the Gaia IT framework of technology gets applied and built, It's recommended that some minimum requirements are followed, such as, access to the documents of the organizations chart; access to the invoice of the IT department; access to the contracts between the enterprise and the suppliers; business area supervisors participation; access to the servers and work stations.

In order of identification of the IT services, the workflow proposed by Gaia IT framework of technology was followed therefore identifying the following data after each workflow: Identification on the data center; identification by e-mail; identification through new operations analyses; external identification towards the organization; identification on the process department; identification sector to sector; identification on the work sites; identification through patrimony inventory and programed continuous identification. There was little difficulty to map and identify the services, because the enterprise owned parallel controls of the IT equipment.

Adding over the absence of difficulties on the services identification, there was a history with the used software, because the computers are on Windows Server domain, and not being permitted for the users to install a software, they needed assistance and permission from the IT staff for that kind of setup. It was possible to identify and describe the IT's services available on the industry. The services of the level 1 of maturity have as objective the identification and description of all the organization's IT services.

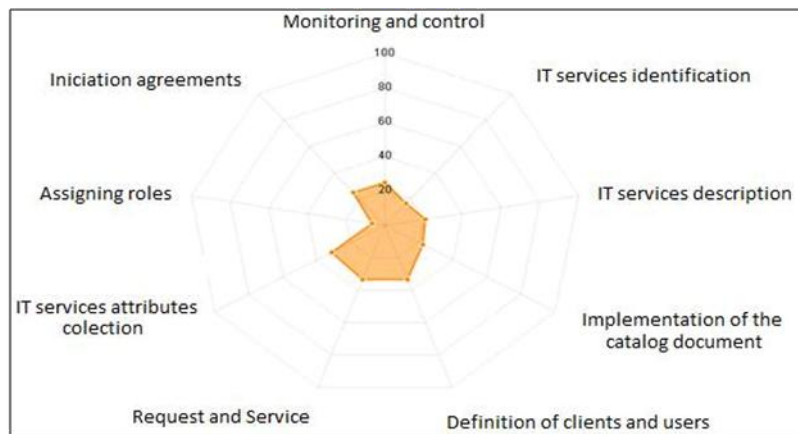


Figure 1. Result of the diagnosis evaluation

On the other hand, one thing that drew attention from the IT services was the absence of a register of operations for the information gathering. A database historic to collect information for example, a Service Desk service would have help to hasten the information collection on the operations done, making the identification and description of the services faster, once these IT services have such data.

On the conclusion of the identification and description of the IT services, all of the available services were reviewed, so it was possible to identify the services that were no longer used. After this review, the enterprise was ready to answer again the QED, making it possible to verify if it complied with 100% of the necessary requirements to fit on the Gaia framework IT services catalog level 1 of maturity.

4. PRESENTATION AND RESULTS ANALYZES

After applying the Gaia framework IT services catalog, the IT sector of the enterprise, object of this study, managed to conclude the identification and description of all the services on this area that the enterprise has and provides to its stakeholders as on figure 2.

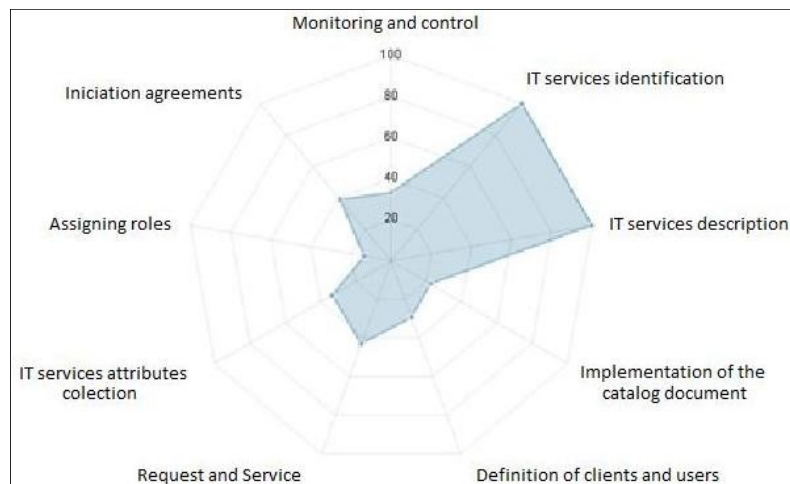


Figure 2. Result of the diagnosis reevaluation after using the GAIA framework

On the final identification and description step of the IT services it was reapplied the QED to assure if the enterprise really fulfils the level 1 of maturity and so is able to continue the development to reach the following levels.

As on the similar situation to the one found on Taconi (2014) one of the difficulties found was the absence of the Service Desk on the enterprise and the resistance from the users towards the IT sector pattern. The industry that was studied has a mixed scenario of IT equipment and services. Upon the IT services identification and description, it was possible to list 157 services and 29 suppliers that relate with the enterprise's IT. The material produced through this study was documented and is located on the enterprise's file server within the data server for exclusive IT personal use.

There is a service catalog on the IT server for the other documents generated on this process. Which is available for query on the public folder of the enterprise's intern network for all of the collaborators, on a simple non-technical language for easy comprehension of the information there found.

This case study objective was concluded. It was shown the value to the IT through the identification and description of the services, making it clear how much the enterprise relies on its IT services, looking for to vanquish the thought that IT is only a support for emergency situations.

5. CONCLUSION

The studied enterprise had the need to modernize and establish a pattern on the IT sector and with that, it attempted to suit the sector to the best exercise of it, utilizing the ITIL concepts and applying the GAIA IT catalog of services framework. On the first step the objective was to have the identification and description of the services from this area on the enterprise. On the beginning of the process, there was resistance towards the changes, but as the development of the enterprise does not reach just this sector, the staff mandatorily has to accept these changes.

As it is known, the ITIL presents no tool for the IT adequacies, but it present the concept of what can be done. However, it is up to the leaders to define how it is going to be done. The GAIA catalog of IT services framework was chosen, which during the studies showed itself adherent mainly by the fact of complying with the studied scenario, independently the area of business that the enterprise acts. This study focus was reached, this metallurgical industry site found itself on the level 1 of maturity. Before the study it was not entirely suited, but through the use of the GAIA IT catalog of services framework it was possible to raise the Enterprise to comply with 100% of the level 1 of maturity, validating the usage of the tool, and preparing the enterprise for the next step of maturity.

Considering this study, it was possible to start a knowledge base to continue with the necessary changes, the usage of the GAIA IT catalog of services framework brought knowledge about the good exercise related with IT and ITIL. The industry, making usage of this implantation, correctly updating itself, will have a possibility on the future of reaching projects to incorporate the management from ICT and to search for more advanced concepts of better exercises.

REFERENCES

- Briganó, U. Gabriel, Barros, M. Rodolfo. 2010. *A implantação de um Service Desk: Um estudo de caso aplicando conceitos do ITIL e PMBOK*. Ceará, Brazil, pp. 02-11.
- GAIA Soluções em TI. 2016. *Sistema de Avaliação Diagnóstica*. http://gaia3.uel.br/projetos/gaia_ad/, Accessed. June, 2016.
- ITSMF - Information Technology Senior Management Forum. 2007. *ITIL v3 - Service Design*.
- Lopes, S. M. C.; André, V. G.; Neves, J. M. S. 2010. *Governança de TI – um estudo sobre ITIL e COBIT*. Rio de Janeiro, Brazil, pp.27-43.
- Taconi, H. Luiz. 2014. *Gaia Catálogo de Serviços de TI: Um Framework Para Construção de Catálogos de Serviços de Tecnologia da Informação*. Paraná, Brasil, pp.25-80.
- Weill, P.; Ross, J. 2006. *Governança de tecnologia da informação*. M. Books do Brasil Ltda. São Paulo, Brazil, pp.22-25.