Deep Analysis of ITIL Framework for Improvement of Indian IT Services in Industries

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Abstract: This research article proposes a model of management based on the methodology that the Infrastructure Library of Information Technologies (ITIL) raises through the life cycle of the service. In the development of this investigation, areas, groups interdisciplinary and tools that satisfy the problem of complex relationship between business and technology. As part of the methodology of this study, a bibliographic inquiry was carried out and analyzed operational experiences of the object of study, which were related to the alternatives and disciplines that the ITIL methodology proposes. As a result of the investigation, a model of management that relates areas, groups, roles, processes and functions in a organizational team oriented to the quality of the service in information.

Keywords: Quality, Knowledge, Management, ITIL, Business, Roles, Service, Technology.

1. Introduction

Given the increasing complexity that the management of information technology (IT) 1 and its information systems, it is pertinent to study the best practices and the standards that have been positioned and are used by information technology organizations, as expressed by the index of competition of the World Economic Forum, which compares 80 countries between the year 1998 and 2003, and analyzes the companies that have had successful experiences through IT. Taking into account the need to align the business with the use of IT, it is requires optimizing technology at any level in order to maintain efficient processes, and in this way, grow at reasonable costs and predictable. At present, for organizations the concept of quality transcends the physical and functional characteristics of the goods and services. This idea is framed in a competitive environment, which requires a management culture oriented towards processes, people and services by improving keep going. Some investigations found on technical and functional quality of companies, quality measurement scales, quality models (expected and received quality), among others. Through research and scientific debate these schools have established some reference methods and models. For the purposes of this research, the ITIL methodology, which is a library of best practices in which propose methods tested by organizations that have been successful cases for the management of computer services? An organization is composed by people, objectives, resources and processes, among others; your culture organizational, goals, dynamism, human talent, knowledge and methods have a significant impact on your ability to produce a quality service for the user. Through observation, analysis and logic, a model of generic service management that is applicable to any organization that works information systems, through theoretical exploration and analysis of the operational practice of an object of study. By using the ITIL methodology in the model, the novel practice of an existing theory, through the bibliographic study of concepts, analysis of variables and organizational structures; role-based, collaboration, teamwork and responsibilities, the model is proposed for the provision of a service, considering the development of its life cycle during the application.

The primary objective of this theoretical model is to be a guide for any company or organization in information systems that you want to implement a management tool based on service quality, to enhance your human capital, the knowledge resulting from its operation and the control of its activities aimed at customer satisfaction. Through the text you can see the parameters that induced the proposition of this alternative, the state of the art found regarding the practice of service quality models, the method used to achieve as a result the definition of a structure based on the life cycle arranged by components, which in turn are disciplines considered as the best practices currently in relation to the subject.

Statement of the problem

For any organization concerned with quality today, it is done disturbing the best way to apply your experience, expertise, knowledge, human talent and resources to offer its clients, services with quality, and exercise control over the needs, requirements and challenges in your business, your customers and end users at reasonable costs. As is well known, one of the general characteristics of the companies of services is that the demand is greater than the supply. This indicates that the problem for efficient service management lies in the impossibility of meet customer needs harmoniously between resources customer's business and response time. Some authors agree that not all problems in the management of the efficient service are solved by applying methods and tools innovative, since it is wrong to think those costs, personnel and the amount of requests decrease. It is necessary to recognize that only through a judicious diagnosis of the organization can determine the true needs improvement and its application can last several periods of time so that it gives the expected fruits. Through the management model, an approach is made between the set of disciplines proposed by the ITIL methodology, combined in the life cycle of the service and the proposed logical operation that must exist between three large management areas in an organization, a scenario is recreated with the conditions required by best practices in order to apply the theory in the solution, by evaluating variables, answering questions and definition of roles.

2. Literature Review

[1] Proposed an overview of the market effects and the modeling of crucial IT service management events. They also described the service problems and the major effects on the activities of The support organisations in order to better handle accidents and improve the service. In order to reduce the market effect of big commotion resources it is very challenging challenge, which go beyond IT metric optimization, to the importance and enhancement of the event response approaches in place. HANNIBAL, a judgment framework for review of market consequences and enhancement of the emergency response process is described in this article. According to HANNIBAL, the IT support committee will determine prospective schemes for delivery of high-service activity. They produce the test outcome of HANNIBAL 's research and optimization efficacy. And HANNIBAL improves in efficiency depending on their comparative analysis as optimization is motivated by awareness of market effect rather than IT. The paper argues that HANNIBAL is a tool to help the study of market effects and the development of the management process. The HANNIBAL program gathers data in a practical case study to prove that optimization focused on market impacts goes beyond the conventional optimization driven by outcomes.

[2] Study on how to use an IT contract control tool to enforce service level agreements. The authors have merged the management of IT services to research the issue. Their solution. This analysis has been conducted with the KISMET research project at the University of Eastern Finland (Key for IT Process Transformation and Successful Business Transition). This paper discusses steps in applying SLA rules for the IT service management framework and presents lessons learned from the development of service level management activities . The major contribution. The investigators used a mixture of the management of IT resources and the management of information to examine the research issue. They adopted the central practices of information management: information recognition, development, preservation, sharing and using. Test findings are beneficial for staff participating in the administration of service rates or who have SLA instruments. For workers at all levels involved in the ITSM programme, the list should be seen as a guideline. Thirdly, this work is carried out with the assistance of Chinese experts and primarily represents ITSM 's applications position in China, which can be supported by ITSM. The results of this analysis are primarily

focused on the 15 experts with substantial practical experience in the execution of ITSM projects which can be useful in academic research.

[3] Presented a paper outlining the approaches, viewpoints, application, transition and major challenges for e-government. Dubai e-government has selected the areas of assistance and service delivery for adopting authors directly. You also discussed the e-government and ITIL and also explored how the infrastructure and facilities can be enhanced by both. They also built an appraisal plan to evaluate the standard of Dubai e-government by evaluating best practices in ITIL and by developing understanding in management and control challenges that can further increase the overall process capacity. The test was concluded by using a standardized structure. In this evaluation, eleven different types are being examined, six of which are being delivered and five other are being serviced. After a comprehensive review of 11 categories support and service distribution writers found that service support output stands at 81.5 percent, but with the implementation score not more than 20 points. The categories evaluated include release management, update administence, configuration management , task management You claimed that e-government in Dubai needs to boost service provision.

[4] Suggested IT service management operation analytical approach automation. They use ontological connections between process objects and resource objects in order to build data-conscious processes to combine highly automated and human-centric process models in an efficient automated approach. This approach explores the needs of the IT enterprise to work together between increasingly advanced systems and human decision-making. They have also introduced a difficult model that helps recognize the automation gaps while maintaining the need for continual change and cost-effectiveness. The complexity of IT management used in this paper depends on the difficulty of execution, difficulty of actions, complexity of teamwork and complexity of market problems. The paper illustrates that combining humans with automated processes allows for this insight to be integrated into a blended approach. CMDB is the central part of deception which acted as a conduit between two worlds for establishing genuine databases for configuration objects, procedure objects which interactions between cis and systems.

[5] The most common "best practices" system for the management of the IT (IT) resources was submitted to the IT IT Library (ITIL). In this article, she suggested a model for maturity to analyze adoption of ITIL and provide an progress plan focused on goals, addictions and recommendations. It also illustrates functional implementation with a questionnaire of the conceptual model for the assessment of a real-world crisis response method of ITIL. Action analysis technique is the research technique selected by the scientist. The approach succeeds as it is based on concrete practice that seeks to solve an urgent circumstance of problems and at the same time educate theory carefully. She also reviewed other approaches to maturity models, gathered ample knowledge to develop a new ITIL maturity model. This model defines, aside from a process model and a continuous model, what organisations should do and how they can, to provide businesses with more alternatives. However, with the completion of the stage model, it became an analytical study and also a business idea, the testing of the stage model is difficult in this process. In a Portuguese company, the part of the continuous model that was planned at this point was tested and showed very good results.

3. Method

The hypothesis raised by a management model is the result of a previous work of the authors, which originated the proposal of which the present research article. The first phase approached to achieve such the objective was to define the methods[6] to be used for the analysis of the information collected, that is, observation, deduction and observation. The object of study was a management unit and technological development. Initially it conducted an internal and external analysis of the services provided through the compilation of its historical review, subsequently the definition of the areas of the service, the evolution of its organizational structure and the services provided by applying a SWOT matrix. Once the SWOT had been defined, we proceeded to establish a portfolio and identify customer assets. Definition of current information flows and issuance of a concept of service quality based on interviews made to users and

operators of the service to enrich the SWOT. In the third stage, the disciplines proposed by the ITIL methodology, the reasons that affect the efficiency of the service provided in accordance with the requirements of the methodology and the needs for a better management of service; that is, information flows, process organization and responsibilities, creation of a knowledge base, definition of areas, roles and responsibilities, among others[7].

Identified needs were related to the theory of methodology studied and proposed the general approach of the model and communication in three major management areas and interdisciplinary groups. It was also sought align the proposal to institutional policies, that is, it was considered vital articulate the benefit of the proposed management with the general purpose of the organization, its mission and vision[8]. For the approach of the model, the units of the business and service units of the organization; the areas were articulated and proposed groups with the ITIL disciplines and their participation in the service life. Finally, based on the surveys and interviews carried out, in the concepts of quality and service studied and in the analysis of the entire information collected, a definition of the set of variables that allowed characterizing the management of the service combining experience and lessons learned from the object of study with ITIL best practices. Once the variables were identified, a new survey was carried out to qualify the degree importance of each one in the current provision of the service. This analysis allowed the definition of the model and the proposed processing routes around the service life cycle[9].

4. Results

The results obtained allow identifying key points for the creation of a model, that is, those vital aspects to establish the relevance of the model in any organization with similar characteristics. For effects of the contribution of this article, the results will be described in general most relevant and that led to the creation of the model by studying previous; According to the stages developed, it should be noted that said Results[10] produced information and data that did not exist in the organization. The following results through a conclusive and descriptive analysis they support the end result which is the model itself. They also base the conclusions of the article. After tabulating and examining the information product of each stage of work on the project, the general needs required were determined by the model.

Service structure

Value creation is a complex and extensive process that can make a traditional service model is inappropriate. In relation to this aspect, the following questions play an important role in the construction of the service management model[11]:

a) Who are the participants in the service: Participants in the service are represented by users in their levels of complexity, areas, groups, people or set of dependencies and service operators.

b) What are the patterns in changes and transactions: Patterns are represented in those design artifacts related to transactions, change registers, logs or management of versions. For the model based on ITIL, the service level agreements, initial diagnosis of the status of the information systems and data flow, communication channels[12] and media representation on which it is administered, also possible future changes and adjustments to the software or the service as such.

c) What is the impact or what are the products to be released from each transaction and each participant: In this aspect the catalog and the portfolio of services play a vital role, the internal documents defining responsibilities, the documents that establishes the service level agreements, the quality manual, the policies and organizational guidelines and, in general, all the information that guide and define every aspect of the service.

d) What is the best way to generate value: The best way to generate value is the one undertaken by the organization focused on improving its products and services in order to satisfy proactively meet the needs of its users, and provide its employees with the optimal tools that allow them to achieve their objectives for the achievement of the mission. For the purposes of this study, the tools provided by ITIL in achieving value taking into account customer assets, service lifecycle and service management process-based.

The service life cycle

The service strategy is the axis of the service life cycle that runs all phases, such as creating policies and objectives. The design phases, transition and service operation implement this strategy, they continue the theme to adjust and change it. The continuous improvement phase is maintains to learn and check and cover all phases of the cycle of lifetime. This phase begins by providing programs and projects, and prioritizing them with based on the strategic objectives of the organization. The life cycle of the service includes a strategy phase represented in the model by the area of strategy and planning and continuous improvement[13], there the development and implementation of service management is done as strategic resource. The service design phase is reflected by various factors such as consulting and business, product and service engineering, service management and strategy and planning, it can then be seen that there is feedback on the model and that the participation of these roles allows find current and future business requirements. The transition phase of the service determines the development and use of capacities for the new transition and production of services when these are updated; knowledge management participates in it, technology and information systems, product and service engineering, consulting and business. The operation phase of the service must carry out efficiency and effectiveness in the provision and support of the service in order to ensure value for the client, the model raises consulting and business, service management and product and service engineering to do so. The continuous improvement of the service is proposed throughout the model togrow and maintains customer value. Variables[14] were evaluated by expert users of the service and staff involved in providing it. According to the data yielded it is concluded that in the diversity of roles and responsibilities of the organization agrees that the size of the client population, the degree of staff involvement in service delivery and degree of contact with the client are the aspects that most influence the management of the service. So itself, for the provision of the service the nature of the interaction between the client and the organization was the one with the lowest score, since it is thought that while the necessary mechanisms exist to meet the needs of the service and clearly stated commitments is not high impact The life cycle of the service includes a strategy phase represented in the model by the area of strategy and planning and continuous improvement, there the development and implementation of service management is done as a strategic resource.

5. Conclusion

The service design phase is reflected by various factors such as consulting and business, product and service engineering, service management and strategy and planning, it can then be seen that there is Finally, in the creation of the model we identify the areas and teams or interdisciplinary working groups that will carry out the functions focused on existing service and those that ITIL contemplates for efficient agreement of the information systems service. Eleven feedbacks on the model and that the participation of these roles allows find current and future business requirements. The transition phase of the service determines the development and use of capacities for the new transition and production of services when these are updated; knowledge management participates in it, technology and information systems, product and service engineering, consulting and business. The operation phase of the service must carry out efficiency and effectiveness in the provision and support of the service in order to ensure value for the client, the model raises consulting and business, service management and product and service engineering to do so. The continuous improvement of the service is proposed throughout the model to grow and maintain customer value.

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