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Practices in project management according to Charles Handy’s organizational culture typologies

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Abstract

This research intends to examine some practices in project management applied to organizational culture typologies developed by Charles Handy. The literature review was made through the Capes databases, Scientific Electronic Library Online - SciELO, Scopus and ISI Web of Science to understand through scientific academy building the thought of applicability of the research already observed in the professional field. As a result, this work analyzes the results across the existing organizational culture in organizations with project management practices commonly used in the Brazilian market. The sample was composed of 12 respondents to the questionnaire: the data collected indicated that the object of this study is aligned with the project management market. Therefore, the results also showed that the speed of evolution in project management area may require more study of pragmatic alignment of the academy in the humanistic area.

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Keywords: Charles Handy; organizational culture; project management.

1. Introduction

The need to identify the organizational culture of a locus where a project carried out, is crucial to obtain the best management practice for the chosen project.

Project management is a practice in which companies invest in order to obtain the best strategic option for the development of their final activity, and to optimize their intermediate activities. It applies to both the objective quality and subjective quality of a company, given that products and services are developed through it.

Considering that the organizational culture influences how the work of a project is undertaken in a company, it is important to analyze the best way to associate project management practices to the existing organizational culture. For as has been widely reported by the Project Management Institute [17] in its researches published in

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Brazil, communication failures continue to be the most impactful obstacle to the realization of projects in Brazilian companies.

Identifying the organizational culture that is most closely aligned to a project management practice, and the way to implement it, can be considered as an advance in the understanding of the project development work carried out within companies.

1.1. Structure

This work study of the applicability of Charles Handy's typologies (2003) to project management practices is divided into the following sections:

- The literature review, which lays out a review of the literature and analyzes the texts based on the bibliography published in Brazilian journals indexed in the CAPES and SciELO databases, and in international journals in Scopus and ISI Web of Science, in order to provide the theoretical foundation for the development of the methodological tool used in this study.

- The methodology, which describes the employed methodology, highlighting the criteria for the development of the questionnaire; the steps of the study; the object of study; the construction of the data collection instrument; the realization of data collection with the users; the universe and sample of the study; the analysis of the collected data; the analysis of the results regarding the degree of performance and degree of importance; and, finally, the cross-examination of performance and importance.

- The conclusion, which lays out the conclusion in alignment with the objectives, answering the research questions through a questionnaire presented to employees who work in project management, in addition to suggestions for future work.

2. Literature Review

2.1. Organizational Culture

First, a review of the literature was developed in this study, using the subjects organizational culture and project management on the text database of the CAPES portal on August 15, 2014. Then, works were looked up through the Scientific Electronic Library Online - SciELO, Scopus and ISI Web of Science databases, at different times, both to enrich the search, and to wait for the publication of more work according to the availability of the databases. Through the attended classes in the disciplines of the Masters course in Management Systems, however, some of the articles submitted by the professors proved to be effective with respect to the conciliatory search for pragmatism in the study of project management and organizational culture. This resulted in a search for books in the field that combined these items mentioned above.

Companies are increasingly using methods and tools, such as project management, to remain on the market and achieve their objectives when the perception of the project becomes multidimensional, because people have different visions in each project phase. To this end, efficiently and transparently defining the communication scope of a project, according to the research performed in this publication, is the most significant critical success factor [24].

When the research on project management began in 1960, the humanities, which concerned themselves with human resources and the leadership in projects, including their elementals and subjects, had only a timid approach. It is worth pointing out that until 2004, the approach of fundamental concepts in the field of human resources in project management still needed to improve. This despite the fact that the 1990s saw the first publications of behavioral studies in projects with a focus on project management [13].

In 2004, the PMI - Project Management Institute - stated in PMBOK - A Guide to the Project Management Body of Knowledge - that the organizational culture is one of the areas where the knowledge of the project
manager should focus for the interactions between projects and organizations to be successful. As such, the cultural influence also stands out in the relationships, expectations and interests of the various stakeholders involved in the conduct of the project [19].

In addition to the pragmatic and humanistic approaches that cover project management practices, these practices can also be divided by performance criteria into operational performance - which includes the cost, time and quality archetypes, and into strategic performance, which includes definitions that are external to the projects, including the organizational environment in which the project is inserted [14].

The organizational culture must be studied and related to other items so as to culminate in an organizational strategy, because the evolution in the way how organizational culture has been positioning itself as a subject of strategic analysis in companies over the course of the decades, especially in Latin America, where there have been major changes, either by market positioning, transnational strategies or the decomposition of the variables of organizational culture with individual or collective characteristics [23].

The theory on organizational cultures has evolved over the years. In the 1960s it was viewed with some reluctance as a tool to improve organizations, but not as a competitive advantage. In the 1980s it was already seen as a management strategy and competitiveness variable, which led to new models in organizational theory. And in the 1990s, the typologies of organizational cultures were absorbed in a pragmatic way into the strategic analysis of companies, as exemplified by the paper on typology by Charles Handy - which identified four categories of organizational cultures where the ideology and organizational character affected and undermined the organization and its goals. [20]

The organizational culture theme has been driving studies in the academic world for some time: Geert Hofstede presents the different views between Frederic Taylor and Henry Fayol, arguing that the cultural contexts determine the approaches regarding where the organization fits [10].

In contrast to the American academic world, and even before the American academic production, French publications had already addressed the imaginary dimension of organizations, the existence of a project to achieve the collective adherence of its members and the way in which the subconscious processes of individuals are captured to respond to these organizational demands. This appeal to psychoanalysis has therefore enabled an understanding of imaginary and symbolic aspects of the subconsciousness that had been neglected until then in the context of clinical sociology. In this current, the French scholar Eugene Enriquez states that organizations try to build systems to shape thoughts and, as such, to induce the essential behaviors for its dynamics, trying to replace the individual's identification with the nation-state with an identification with the organization [7].

Handy used the work by Roger Harrison, who classified cultures into bureaucratic, task-oriented, power-oriented and democratic cultures, to draw up a cultural typology that considers the power channels reflected in organizations by certain cultural categories, affecting the behavior of employees and their interactions with the environment [20].

Charles Handy’s [9] associations were based on the personality profiles of the Greek gods: Zeus, Apollo, Athena and Dionysus, who possessed the impactful personalities that represented the pillars of wisdom and on which the description of organizational cultures could be based. Charles Handy also made it clear that no culture is better than the other, that different cultures can operate in the same work environment - with one standing out as the "leading" culture - and that there is no good or bad culture among the four analyzed.
The Zeus culture, the first culture studied and also known as the culture of power or club culture, is represented by a spider web where power is concentrated at the center, in Zeus. This culture does not have any rules - or if it has, they change all the time in accordance with the whims of Zeus - and the decisions are based on Zeus' logic, without procedures, without respect for rules and laws. Valued employees are concentrated around Zeus in the center of the spider's web. Projects realized with Zeus do not come to a conclusion, or become programs, since Zeus suffers from inconsistency in decision-making and team predilection.

The temple culture, paper culture or Apollo culture is represented by a Greek temple with the operational staff at the foundations and senior management at the dome of the marble company. It is a stagnant culture in processes and without mobility. You would mistaken, however, to think that the operational foundation is firm. For if there is a need for change, the foundations of the temple tremble and ruin the dome. In this culture, it is important to note that communication must to be implemented because a noise could disintegrate the temple, and because the communication with other departments or divisions of the company is required to understand the flow of the value chain of this culture regarding what it receives or delivers to the next department of the company.

The task-based culture or Athena culture is represented by a fishing net, with its meshes representing the connections between departments or sections of the organization. It is an entrepreneurial culture because the team is communicative, strategist and competitive, with your product or service always having to stand out from other projects and products developed in the company. It is a culture whose the control is required to be observed according to the autonomy of the parties involved, without the development of negative vanity regarding the competitiveness so individuality does not overshadow the collective.

The existential culture or Dionysius culture is represented by a very bright star in front of a constellation, which characterizes that the individual brings value to the company instead of the company defining the individual's values. It is a culture that puts individualism ahead of collectivism and demonstrates that rewards will be given to those who stand out - without any importance and judgment of the values of individuals. As such, the company will shine as long as the star of the individual shines within it. When the individual leaves, the organization will urgently need to replace this star, either on the market or by internal recruitment for the operation and maintenance of its strategy.

2.2. Project Management

Project management is a science that deals with the planning and control of a project, i.e., planning the implementation before starting a project and monitoring and evaluating the projected with the planned; in addition to controlling the established targets, tasks, and resources, taking corrective actions when necessary [15]. The singularity is an important characteristic of project delivery because, even when there are repetitive elements, the fundamental singularity of a project in meeting a particular requirement will remain [1].

In the second half of the 20th century, the field of project management was strongly influenced by administration theories, incorporating tools and technologies used in this field, but keeping the managerial focus on the project in order to optimize its management and for there really to be a conclusion of the project. This movement towards an approximation of the tools and technologies of administration and project management theories has occurred at a time when there was a perception, both in the scientific and business community, that project management could no longer stay disconnected and that it should really be actively involved in the corporate strategy and the other business processes necessary for the success of a company [2].

Since this study is restricted to the field of project management in Brazil, the analysis will be restricted to those practices that are clearly used by organizations in the Brazilian market: agile methods with the more intense spread of Scrum in the decade of 2010, PMBOK - which spread under the guidance of American companies through their project practices - MPS.BR in order for companies to adapt to government requirements to participate in tenders for technology projects of the Federal Government, in addition to other
agile methods used for projects in production companies - such as PRINCE 2 and FEL, - Front End Loading -
used by Brazilian transnationals in numerous projects, such as by Petrobras, Vale and Samarco [11-18].

It is important to emphasize that the restriction regarding the analysis of project management practices
excludes the ITIL practice, since this practice has a focus on generalizing its activities without alignment of
practices and the systemic executions of activities with the practical use of project management tools.

Data from the PMSURVEY-Brazil of 2013 show that Scrum is the most widely employed agile practice in
Brazil. In global terms Scrum is also the first option regarding agile practices in project management, but the
participation rates are different: in the range of companies with revenues between 500 million and a billion
dollars, the maximum involvement of Scrum reaches 26%. When revenues range from less than one million
dollars to 11 million dollars, the rate of Scrum use is of 44% dropping to 24%, respectively. The reason for the
drop in companies with revenues in the range of 11 million is the fact that they do not use agile methodologies
in their projects: as the company's revenue increases, the need for control over investments, and for maintaining
the return on investment, increases. As a result, other practices are employed that allow financial control over
the investment.

FEL applies better to processing, mining, energy, petrochemical and refining industries, for example,
because these are industries with production chains that imply high costs for the amendment of projects. It is
also useful in companies with sunk costs, which must be aligned with business strategy for being a complex
investment [16]. This occurs because it is a practice in project management in which its life cycle stages evolve
when the requirements of the project are known, ensuring the planning of costs and deadlines. This control is
carried at the gates between the stages in which an approval of stakeholders is required - especially of the
company's senior management - to decide whether the projects will continue or will be stopped, or even to
inform the project with mitigation of stage so that decisions can be taken - be these positive or negative [22].

Established in 1969 in the city of Philadelphia, Pennsylvania (USA), the PMI - Project Management
Institute - is an association with the objective of disseminating project management in order to improve the
performance of project management professionals. It is a global leader in project management, mainly because
of its famous PMBOK Guide - A Guide to the Project Management Body of Knowledge - which is reviewed
every four years, according to the ANSI - American National Standard Institute - through the American
National Standard - ANS. PMBOK has become known through the Institute of Electrical and Electronics
Engineers – IEEE, in 1996, which assisted in the spread of PMBOK, including in Europe, where ITIL and other
project management practices had leading positions before PMBOK. This was further strengthened in 1999,
when PMI became the first global organization worldwide to have an ISO-approved Certification Program [12].

PMBOK methodically describes areas of knowledge and practices in project management, with inputs, tools
and outputs for each area of knowledge. PMBOK has several tools that can be adapted to the project and its
requirements, and nothing more than this for the planning and execution of the project. PMBOK has well-
developed project phases, areas and processes. It also integrates the flow between the items of each area and its
sequenced processes in order to better adapt the project management practice. It has a documentary and
communicative character, especially with the strengthening of the stakeholders area in its last update in 2012,
consolidating previously scattered items of its former version into one area that enhances the communication of
the stakeholders in the project.

MPS.BR - Melhoria de Processo do Software Brasileiro (Process Improvement of Brazilian Software) - was
created by Softex - Associação para Promoção da Excelência do Software Brasileiro (Association for the
Promotion of Excellence in Brazilian Software) - in order to adapt, but still remain aligned with CMMI -
Capability Maturity Model Integration - which is a reference model that defines the required practices for the
development and evaluation of software maturity in an organization. The adaptation of the model was required
because the CMMI guidelines predicted a maturity of processes in only five levels. To meet the demand of
Brazilian companies, a model with more gradual jumps would be required. As such, the five levels of CMMI-
DEV were increased to seven in MPS.BR. This has had success from 2004, when MPS.BR started its activities, to 2013, with 110 published evaluations [6-25].

PRINCE2 arose as the method for project management by the British government in 1996. It was adopted as the standard for all projects of the British government and is intensively used by private initiative in Europe, but also in other countries. It is a set of integrated principles, with little application of tools as in other project management practices. It is however able to move human resources forward in distinct projects without loss of production for the time allocated to various projects. It is used in Brazil because of the trans-nationality of European companies, which previously used this method in Europe prior to positioning themselves in Brazil.

To conclude the survey of project management practices used in Brazil, it is important to consider that some may interact with others, or have points that converge or diverge, as is the case of PMBOK and FEL: the FEL methodology is inserted into the initial phase of the project's life cycle, and as such it has a connection with the Initiation and Planning processes of the PMBOK standard. The deployment phase (FEL) has a direct relationship with the intermediate step of the project's life cycle and with the implementation and control processes (PMBOK). And the start-up phase (FEL) is related to the final step and with the group of closure processes (PMBOK). The step FEL 1, which is characterized by exploring the opportunity of the project, has a strong relation with the items proposed in the group of initiation processes of PMBOK. FEL 2 can be matched with the items defined in PMBOK's planning processes group. FEL 3 is also related to this group of processes since it is the moment where the project plan is consolidated, including the consolidation of engineering studies, the material purchase plan, timelines, etc. [21].

Similarly, if a superficial comparison was to be made between Scrum, FEL and PMBOK, we would see that in the transition step from each phase of the project, there is a "frontier", so to speak, and that "frontier" leads to the perception that advances in the project are only made in FEL when decision-making allows such progress. Otherwise the project will be canceled or backtracked until the moment in which there was a need for rectification of the project at its "gates". If the superficial comparison is made with Scrum, one perceives that there is a parallelism of stages regarding the need for rapid implementation of the project without harming its implementation. This parallelism, or the simultaneous implementation of the activities by human resources, however, can bring the progress of the project off course if there is no documentary control of what is being done or no well-defined sprint meetings. PMBOK also allows for parallelism, has a firm documentation protocol and a sequence that allows for a return to a point to be rectified through the monitoring and control phase, which is cyclical in its sequence. But the care for the communication and interaction between the human resources needs to come to the attention of the project manager.

3. Methodology

The present work can be classified as applied in nature because of the practical interest in the application of its results in the resolution of real problems. Regarding its objectives, this study is descriptive since it seeks to describe the characteristics of the object of study and establish relations between the variables/items. Its approach is, for the most part, qualitative, because most of the study results cannot be measured numerically, and there is a dynamic relationship between the object of study and the author [3]. The exploratory and planning phase of the study lasted from September 2014 to February 2015. The first iteration was from January to February 2015.

For the development of this study, a review of the literature was conducted with restriction to the pragmatism about the subjects in the Capes, SciELO, Scopus and ISI Web of Science databases to give theoretical support to the study, in the texts chosen according to the needs of the proposed work, in addition to the search for studies unrelated to the surveyed subjects. The criteria that best fitted the research objectives were chosen to develop the questionnaire. The gathered data was analyzed with descriptive statistics. The
variations related to the observed criteria by users during the implementation of the questionnaires, which were sent by e-mail [4], were treated with a qualitative approach. Subsequently, the steps taken in the study were fleshed out.

The conducted study is qualitative and the main strategy is an applied investigation of the case study. The data collection instrument was organized as a questionnaire to align organizational culture - according to the typology of Charles Handy - with practices in project management. A questionnaire with open and closed questions was chosen in order to quantify and statistically analyze the collected data, and to allow the respondent to accurately answer questions specifically related to the management of the investigated company's projects.

A case study can be defined as a study design focused on a person or sample, which provides limited information about a single issue, person or organization, with its results potentially indicating trends [8]. In this sense, the main problem in a case study is to identify a case that is relevant to the issue under study and to clarify what else is connected to this case and which methodological approaches are required for its reconstruction [5].

By crossing the data obtained for the subject of organizational culture in the typology of Charles Handy (2003), with the subject of project management, which was verified through this work as belonging to the culture of Athena, aligns with the FEL project management practice, which was confirmed by the respondent of the category "energy", by the strong fact that this company develops more than 2,800 projects annually - which require full involvement of the sponsor in the control of expenditures in each step of the project, with approval for the next stage - and by the fact that the culture defines the tasks and responsibilities of each member of the team, remembering, however, that they have to observe the intra-team communication and interaction involved in complex projects.

In the consulting firm in which there are 7 applications of project management practices, the observation that the culture of Zeus is dominant, with a strong concentration on the use of the Scrum tool, it is not a point of attention in this study because the profile of consulting firms, even if currently they resemble the culture of Dionysus where stars appear, is weighted towards the head of the team, the director and managing partner, who are in place during the project as a result of the decision-making and experience in the conduct of projects without losing customers to the market. The involvement of everyone in the team for the implementation of parallel activities in alignment with varying degrees of complexity that require multi-disciplinarity of those involved, is therefore the factor of weight in the identification of the respondent with the culture of Zeus with the Scrum practice.

The respondent in the category "government - public body" identified as culture of Apollo and showed that the efficiency of projects only occurs when the choice for PMBOK is made, despite him having cited four project management practices.

In one of the respondents of the category of "energy", the identification was exactly with the culture of Apollo and the use of PMBOK, mainly because the company was structured as a mixed capital company.

Another observation that should be commented is the intersection of the answer of the respondent in the company categorized as "cosmetics", for despite the predominance of the culture of Zeus, projects only go ahead if the PMBOK project management practice is adopted, backed up by the fact that the subculture is the one of Apollo. For a culture that is already aligned with the sequencing of processes and continuity of phases, the leader can therefore only have control if he understands the behavior of employees and aligns himself with the requested.

There was a distortion regarding what was proposed by the author regarding the three answers in the culture of Athena, in which the chosen project management practice was PMBOK, for the companies categorized as "consulting firm", "independent professionals" and "government - university", but this behavior can be defended when one observes the small size of the consulting firm in terms of employees, and the strength of customers on the market who require a certification that standardizes the minimum project management
requirements for a consulting firm to be certified. The same applies for the independent professional. It should also not be surprising that the company in the category "government - university" is aligned with PMBOK, because the profile is one of rules and regulations to be complied with for the continuity of the performed procedures. PMBOK, which has this profile of procedures in its sequenced processes, offers the opportunity to align this way, so much so that when talking with the respondent outside the context of the study, one perceives that the dominant culture is the culture of Athena, but the very intrinsic subculture in the public distribution in which he works is the culture of Apollo.

The others followed with the alignment of the observations of the author about the intersection of organizational culture with the project management practice.

4. Conclusions

Through a review of the literature, both national and international, this study enabled the identification of the main criteria in question for the alignment of the organizational cultures observed in the typologies of Charles Handy (2003) with the currently most widely employed project management practices in Brazil, through a pragmatic search for studies under the subjects: organizational culture and project management.

The questionnaire allowed for the feasibility of this study by the author, through the frank responses of users. Even when they chose not to respond, however, they made comments outside the scope of the study that underpin the observation of the proposed theme. The sample analyzed of only 12 replies to the various studies sent, although small, showed that the behavior and the profile of the companies was transparent.

The cross-checking of the cultures of Handy (2003) with the project management cultures was demonstrated by the respondents with comments on the culture and subcultures, with the consequent application of some project management practices, but using only one project management practice to make the implementation of the project efficient.

In this sense, this study may contribute to the incorporation of new concepts to the humanistic area of organizational culture, aligning the corporate strategy of optimizing practices in project management in Brazil, to the extent that the evaluation system is practiced in the empirical field of the Brazilian market by other professionals and academic studies.

References

Appendix

1- What is the size of your company? (Number of employees)
a. 0-100
b. 101-500
c. 501-1000
d. Above 1000

2- Does the company have project office?
a. Yes, the company has project office.
b. No, the company doesn't have project office.
c. No, projects are conducted by the IT Team.
d. No, projects are conducted by other teams.

3- How many projects are undertaken and completed successfully per year?
a. 1-5
b. 6-10
c. 11-20
d. More than 20 projects
e. I don't know about it.

4- How many projects are started and not completed successfully a year?
a. 1-5
b. 6-10
5- How are divided the tasks and activities?
   a. Um single manager manages the activity of all, and all the team report to him.
   b. The tasks and activities are divided for each team member to run it at a certain time and deliver to another member as a result of the project.
   c. Tasks and activities are divided into products with deadlines, and, although there are people responsible for the implementation, there may be exchange activities between people.
   d. All the team works on the project without division of tasks and report to the responsible person (not a senior person is a person that stands out about the group because the name on the market that already has) on the activities that have to do.

6- What are the best practices in project used by your company? (Can mark more than one answer)
   a. PMBOK
   b. FEL
   c. Ágil
   d. Scrum
   e. ITIL
   f. COBIT
   g. MPS.BR
   h. CMMI
   i. Other best practice:
   j. We use several practices at the same time (which - in this case check the existing and write next to the adopted that aren't on the list?):

7- When you adopt best practice in projects of your company, which one is more efficient?
   a. PMBOK
   b. FEL
   c. Ágil
   d. Scrum
   e. ITIL
   f. COBIT
   g. MPS.BR
   h. CMMI
   i. Other best practice:

8- What is the average size, in number of employees, a project team in your company?

9- How many projects simultaneously occur per year in your company?

10- Which the average duration of a project in your company?