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A NEW PROCESSES MANAGEMENT METHOD ORIENTED TO SATISFY ORGANIZATIONAL NEEDS.

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Abstract. *This paper presents a new process management method, which considers the organizational needs analysis, possible satisfaction object, objective, the process that can provide this objective, and the set of key variables, indicators, and goals, oriented to determine and prioritize actions to manage the processes with the focus on meeting organizational needs. The researchers applied this method at the Department of Aerospace Science and Technology - DCTA, in two case studies: one carried out at the Division of Nuclear Energy of the Institute of Advanced Studies - IEAv, and the other at the Radiological Protection of the Industrial Fostering and Coordination Institute - IFI. The semantic categorization at qualitative research analysis of employees' perception demonstrates it was possible to clearly and concisely determine strategic objectives, necessary processes to build these objectives, and determination of indicators to measure the processes progress toward the goals, determined through evidence supported by monitoring key variables. Organizational management needs to allow active posture by adopting a new conception of monitoring and indicators construction. In the studied organizations, the proposed method has performed an effective change in process management by focusing on managing organizational needs and disrupting historical customer-focused management practices.*

Keywords: *process management, quality management, prospective scenarios, organizational needs management.*

1. INTRODUCTION

In cutting-edge or specific technologies, such as those in the space sector, interested parties' polarization, and aversion to high financial risk, make it difficult to achieve a satisfactory result by a strategy guided only by requirements established for the most diverse desires and needs satisfaction. customers, some of them unknown to end user of space technology. Despite understanding the need to define processes guided by objectives and goals, benefits are still not fully understood or linked to performance of organizations (Bartkus, Glassman, McAfee, 2006). This practice, in addition to being harmful and without added value to guide the strategy for determining organizational objectives, produces an effect that discredits management methods.

Critical prospective scenarios analysis related to organization's activity sector, and the state determination that management needs to achieve in future, constitutes a tool that considers relevant questions in organization's processes formulation, which make it possible to reach the necessary future state (Marcial, Grumbach, 2008). Use of prospective scenarios for identifying organizational needs provides a strong change in organizations' management paradigm, currently focused on meeting external customer requirements, which are often dispersed and do not have a defined strategic orientation (Petroni *et al.*, 2009), to focus on organizational needs, determined by its employees' perception about context in which organization operates. Through prospective scenarios analysis, and determination of the necessary future state and differences in relation to current state, one can identify organization's needs to build new capabilities, and manage possible contingencies, uncertainties, trends, risks and opportunities (Miller, Waller, 2003). According to Maslow (1981, p. 49), the way to satisfy the dominant need is motivation. Consequently, a strategic determination to build the necessary future state can inspire collaborators to take actions that align with satisfying the organization's dominant needs, resulting in tangible and contextually relevant outcomes. Managerial actions should be directly linked to the process management results, quantitative and qualitative indicators monitoring and implementation, and goals establishment; not only challenging but necessary to signal key objectives construction that support the organization's success (Van Looy, Shafagatova, 2016). Customer service undergoes a critical analysis if the organization is able to serve that customer, and

if this service is in accordance with organization's internal practices. In some situations, serving a particular customer may not be interesting for the organization, either because there is no available capacity, or short deadlines that require additional hours, or in situations that require new investments with little expectation of creating new opportunities. The organization must verify whether this service or product is in line with its objectives, oriented towards building the necessary future state to be achieved. In this new approach, customer requests are critically analyzed against organization's needs.

This study objectives on process management sought to answer the question of how the organization's processes can be managed to guide the organization's needs satisfaction, and investigate employees' perception about benefits of this change for results. Search for new methods to implement innovative approaches in quality systems is an important factor to drive the organizations' transformation in management area (Pacana, Ulewicz, 2020). This article presents a study that is being conducted in Nuclear Energy Division of the Institute of Advanced Studies - IEAv, which due to the program Effects of Ionizing Radiation on Crews, Aerospace Systems and Defense - ERISA-D, has as one of its goals a quality management system implementation in compliance with requirements established by ISO 9001:2015 standard, and in the Radiation Protection Coordination of the Industrial Fostering and Coordination Institute - CPR-IFI, which must have a management system to comply with the requirements certification from the Brazilian National Nuclear Energy Commission - CNEN. These institutes are government organizations of the Brazilian Air Force Command based in the city of São José dos Campos - SP, whose objectives are technologies development to facilitate access to space (IEAv) and promotion and industrial coordination for development and certification of aerospace sector activities (IFI), among others, correlated to technologies of National Defense interest. This showed the opportunity of these case studies to change processes, guided by organizational needs management. Our process management proposal is comprehensive and can be particularly relevant to professionals and researchers who are less familiar with important aspects for a management system implementation in a research organization composed of various laboratories. To guide managers, we provide a step-by-step guide on how to start or implement process management method. Finally, we propose some opportunities for future studies in this area of innovative management methods and decision-making process.

2. PROCESS MANAGEMENT LITERATURE REVIEW

According to James C. Collins and Jerry I. Porras (1996), the management process should be disciplined to differentiate what must be conserved and protected from the processes that should be modified to build organizational progress. The organization's processes management should be oriented to determine what to preserve and which future must be built. Leader must know the organization values and make decisions consistent with the company's desires to effectively motivate employees, with minimal supervision (Nagle, Pasarella, Bennis, 2012, p.50). Processes add value to product or service and represent an activities sequence that organization performs to fulfill its mission (Shepherd, 2023). However, process management is often oriented towards a future state that reflects the values that guide people's idealistic motivations. It describes a future with big and audacious goals, with a vivid and detailed description of how they can be achieved. Thus, objectives are communicated in a vibrant, engaging, and tangible way, and providing an inspiring definition of what organization wants to achieve. Despite fulfilling the function of raising employee awareness, publicizing organization's products, and services, and having a public relations character, the objectives formalization follows a much more ideological aspect (Bordum, 2010). Often, this strategy has a utopian meaning, without a commitment to the context, actions, and/or practices daily activities managing.

Strategic leadership formalization analysis demonstrates a confusing and often mistaken, fundamental aspect understanding that conceptualizes process management. Goals guide strategy without a direct link to processes, while indicators and objectives are often idealized without a link to organizational reality. In many cases, management strategies are widely disseminated and include business rules linked only to organizational culture, such as respect for employees and social responsibility. This stance is associated with organizations that need to be recognized by stakeholders as socially responsible (Bartkus, Glassman, McAfee, 2006). Another practice is processes' goals determination through a projection, or results prediction in function of available resources, process' capacity and possible benefits analysis to be achieved by organization (Dipura, Soediantono, 2022). Although these strategies are widely used in process management, they do not characterize a rational structure directly related to the trends of organizational context change. To make organizational strategy more effective, each process current state should be explained, which represents installed capabilities that organization has to operate in its operation area. The explicitness of the current state acts as a solid foundation to begin the journey to the future state that organization needs to achieve. The necessary future state should guide what needs to be achieved to meet organization's needs, promote opportunities and mitigate threats and risks identified by prospective scenarios analysis that describe future trends.

Implementing a process for identifying the stakeholders' interests in planning, implementing, monitoring, evaluating, and improving processes is an essential success factor in promoting critical analysis of the operation and managing actions to satisfy organizational needs (Al-Azzah, Yahya, 2010). Despite the difficulty of finding current studies on organization's needs, excellent management must know how to balance the employees' interests and organization's needs satisfaction (Harvard Business Review, 2017, p. 175).

3. PROPOSED PROCESS MANAGEMENT METHOD

In the study on the Theory of Human Motivation (Maslow, 1943), several propositions that can be applied to organizations can be evidenced, since these are formed by individuals who have their own motivations and directly influence the decision-making process within management system. But, in an organization with an administration with good results, decision process is influenced by managers' team, with different experiences, opinions and interests, who work with a focus on organizational objectives construction. Due to the motivational factors importance that guide organizational decisions, the authors proposed a Theory of Organizational Motivation that may guide process management by the motivation to satisfy the organization's needs, and promote operation's efficiency, robustness and sustainability. To implement the process management method with a focus on managing the organization's needs, actions must be managed according to the phases described in Table 1.

Table 1. The process management method's implementation phases with a focus on managing the organization's needs.

Phase 1	Context analysis with the current state determination and prospective scenarios survey for the necessary future state determination.
Phase 2	Process needs determination through critical analysis of gaps between the current state and the necessary future state.
Phase 3	Objectives determination through possible needs' satisfaction objects identification to build the necessary future state from the current state.
Phase 4	Processes ⁽¹⁾ identification for objectives construction
Phase 5	Critical performance variables determination, which are directly related to the process objectives construction.
Phase 6	Process indicators determination of through critical performance variables analysis.
Phase 7	Process indicators determination, through the performance variable critical value analysis that indicates the satisfaction object construction the and the objective achievement.

⁽¹⁾ Processes are determined by inputs, outputs, requirements, resources, and the risks and opportunities analysis.

In this new conception, customer satisfaction becomes a means that must be managed to satisfy some organization's needs identified through the current state analysis and the necessary future state, determined by company's operating sector prospective scenarios study. The organization's current state determination carried out by analyzing internal context, supported by installed capabilities identification, that is, active processes with operating conditions, with trained employees, adequate infrastructure, inputs and other necessary resources. Different dimensions of prospective scenarios analysis, which have a greater tendency to affect organization's context, allows the future state identification that organization needs to achieve. The PESTEL method application, to analyze the political, economic, social, technological, environmental and legal aspects, helps to identify prospective scenarios and possible opportunities and threats in different management dimensions (AGUILAR, 1967). Although scenario analysis emerged during the Second World War, it was only in 1960 that the company The Royal Dutch/Shell Group introduced the critical scenario analysis process as a management tool due to emergence of uncertain situations in the oil sector. But it was only in the 1970s that the plausible future states prediction became popular with the aim of identifying opportunities and avoiding possible threats (JEFFERSON, 2012).

The organization's needs identification is carried out by determining the gap between the current state and the future state that needs to be achieved. To satisfy organization's needs, the satisfaction objects are identified, which determine the objectives to be constructed.

The processes are determined according to the objectives. Thus, it is possible to carry out a critical analysis of the objectives, and check whether they are really related to satisfying organization's needs, or whether they are secondary objectives that support the strategic objectives construction. Processes should add value in achieving your goals.

Indicators creation or monitoring process implementation should be carried out according to the objectives to be achieved (Dipura, Soediantono, 2022), with the critical activities identification purpose that need managerial support. Quantitative indicators can be classified into three basic types: operational, effectiveness and efficiency indicators. Operational indicators, for example, measure the ratio between the activities' number carried out by the activities' requested number in a given time interval. There are two specific operational quantitative indicators types: capacity and demand. Operational indicators, for example, measure the ratio of the activities' performed number to the activities' requested number. There are two specific operational quantitative indicators types: capacity and demand. Operational indicators of capacity measure the activities' performed number in relation to the activities' maximum number that could be performed according to maximum installed capacity, informing how much organization can increase the processes operation. And operational demand indicators measure the requests' fulfilled number in a given period of time relative to the requests' received number, measuring how well process can meet a particular service or product. Efficacy indicators quantitatively measure how many requirements are being met, through the requirements' quantity ratio of that have been

met by the total planned requirements. Activities that did not meet the requirements should be reworked or discarded, or renegotiated, being a loss in management process. Efficiency indicators measure how resources are used, being the ratio between the resources spent to carry out the activity by the resources planned for the activity. Other performance indicators, which combine different aspects such as financial, operational and personnel motivation information, can be constructed to meet the managerial needs for information, with a more comprehensive qualitative aspect, on the organization's performance measurement (Shafagatova, Van Looy, 2016), which we can classify as qualitative indicators, since they depend on a criterion of process qualification (of posts, for example). However, this type of combined indicator, where the calculated value is obtained with use of different managerial dimensions information, does not have a link with a measurable physical quantity, being only an intangible reference value. For example, the effectiveness indicator, which can be formulated by efficiency and efficacy indicators combination, or a performance indicator constructed by combining different characteristics. Monitoring process is a follow-up of how the activities are carried out, being individually evaluated the execution deadlines, results obtained, reworks performed, expenditure of resources and requirements met in each activity according to a certain action plan or schedule of activities. Monitoring can consider both quantitative and qualitative aspects considered strategic in critical process effectiveness evaluation. Figure 1 presents a process indicators contextualization oriented to needs satisfaction, processes' objectives and goals.

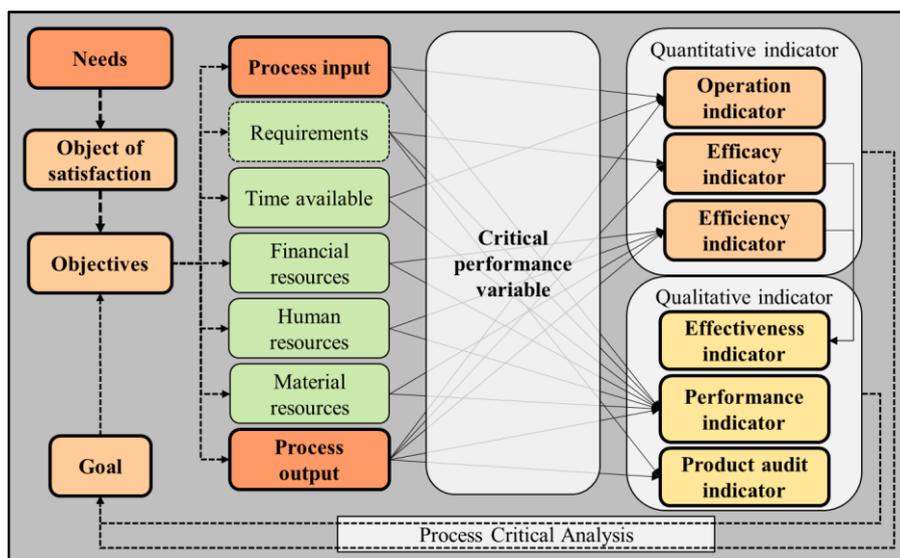


Figure 1. Process indicators.

Goals are management milestones that indicate when an objective is achieved by a process. Thus, a goal indicates the organization's needs' satisfaction object building process end. There may be a difficulty in setting a goal for an intangible target, since the goal qualitative understanding depends on each manager perception. For this case it is possible to perform analysis of the similarity with a known process, which has achieved the intended objective, and define a goal to be achieved. This process management method, described in Figure 2, identifies organization's needs through the gaps between the current state, and the required future state. The organization's current state is evidenced through analysis of the current context and the installed capacities. The necessary future state is evidenced through prospective scenarios analysis, and the organizational posture in relation to the stakeholders' interests.

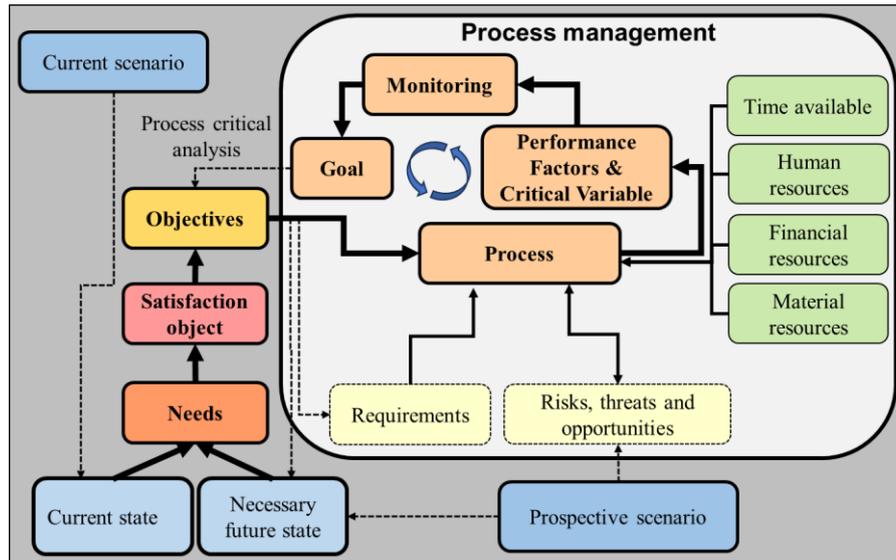


Figure 2. The process management method diagram.

This provides a tool for structuring management in a rational way, based on contextualized evidence. The necessary future state construction occurs through organizational needs satisfaction, with the satisfaction objects construction, explained as the process objectives. There may be several possible objects to satisfy the organization's needs, and it is each manager responsibility to know the best satisfaction object for process. While monitoring indicators inform which performance factor require greater attention from management in controlling critical variables, goals inform when it is possible to consider, in an adequate time cycle, that a satisfaction object has been achieved.

4. CASE STUDY RESULTS ANALYSIS AND DISCUSSION

As already mentioned, the authors conducted this research in institutes of the Department of Aerospace Science and Technology – DCTA of the Brazilian Aeronautics Command, and this case study is linked to nuclear technology, used in ionizing radiation tests on components for aerospace applications, carried out in the Nuclear Energy Division of the Institute of Advanced Studies – IEAv, and the other related to the Coordination of Radiological Protection of the Industrial Fostering and Coordination Institute - IFI. After the employees training in quality requirements (ISO 9001 and ISO 17025), capacity-based planning (PBC), quality management system (QMS) audit, and in the organizational needs identifying process; the process management method change implementation was initiated.

During the participatory research, successive interviews were carried out with all employees in the organization's sector under study, with the purpose of determining the employees' perception over time about changes in process management. The results were demonstrated through qualitative content analysis, according to the method of Bardin (2002), through semantic categorization of testimonies collected from the collaborators in relation to contents related to the perception about implementation process difficulties, the proposed method understanding, and the perception of results obtained with this change. Nineteen interviews were analyzed with the focus group formed by the process managers, during the weekly meetings for the process management method implementation. The first phase was to determine the organization's installed capabilities in related processes. With this, it was possible to formalize the current state of the organization. In the research process of the IEAv case study, for example, internal and external issues, strengths and weaknesses, risks and opportunities were identified, being raised as a current state that defense research in the nuclear area is under the coordination of the Brazilian Navy, while the defense space area is coordinated by the Brazilian Air Force, requiring efforts by the Nuclear Energy Division to obtain in the aerospace area the national and international recognition. The second phase was the prospective scenarios construction through the Brainstorm method, collecting opinions on upcoming events that could affect the organization in the political, economic, social, technological, environmental and logistical dimensions, according to the PESTEL method (Aguilar, 1967). The simple prospective scenarios construction generated by the managers group opinion was sufficient to describe a necessary future state that the organization need achieve to minimize risks and maximize opportunities. In the research process, the Brazilian Air Force Command and IFI were identified as interested parties, with an interest in research related to the electronic components certification and systems resistant to cosmic radiation. This has an immediate application in training national industry that supplies electronic systems for national space activities program and in national laboratories for electronic systems qualification tests regarding their tolerance to cosmic radiation. This qualification is crucial to guarantee the operational safety and space mission's durability. It is observed that this irradiation tests training is essential and strategic

to ensure that items purchased abroad really meet design specifications, since it is a sensitive technology (Federico, González, Reinhardt, 2023).

During a future scenarios prospecting process, participants discuss current trends and their perspectives within the organization's context. Managers exercise their judgment by seeking the most plausible states among countless possible future states. Through this prospective scenarios' planning, uncertainties, trends and opportunities, which are often unpredictable during daily activities management, can be identified, evaluated and managed (Miller, Waller, 2003). This method objective is to quantitatively and qualitatively prepare organizational resources to carry out activities to meet the greatest demands' number in proposed prospective scenarios. In the research process, for example, ESA's search and encouragement for component certification laboratories was identified as the most likely prospective scenario due to the reduced the European space program demand and the legislation lack for the mandatory aerospace components and systems irradiation testing. Although there are other generating prospective scenarios methods, such as simulations or through statistical methods, the proposal of the Global Business Network Method – GBN was used, which considers relevant issues through the worldview, uncertainties and concerns of the organization's leaders (Grumbach, Marcial, 2008). These scenarios are elaborated through prospective methodologies in a medium-term temporal environment, in order to identify facts and determine possible situations related to the organization's sector stakeholders, whose evolutions may impact on organizational activities. According to Porter (2011, p. 243), the use of scenarios is an appropriate technique in sectors where the main aspect is uncertainty, being useful in emerging industries such as nuclear and aerospace industry. In the research process, for example, it was identified as a necessary future state that the Nuclear Energy Division should be recognized as a national reference laboratory in component certification service provision, and the Ionizing Radiation Laboratory should be prepared to meet ESA standards. The organization's needs identification is carried out by determining the current state and the future state that needs to be achieved, with the gap between these two states being the organizational need. In this process, the employees' sense of desire was removed, where the needs are the difference between the current state and the desired future situation (Meiers, Visser, Watkins, 2012, p.20), since the organization's strategic orientation is based not on desires, according to the diagram in Figure 3, but on formal establishment of objectives and results that need to be achieved. Note that there may be confusion between a process need and a manager's desire. While the process need is the gap between the current state and the necessary future state, the manager's desire is based only on personal will to achieve or conquer a desire object without building a future state.

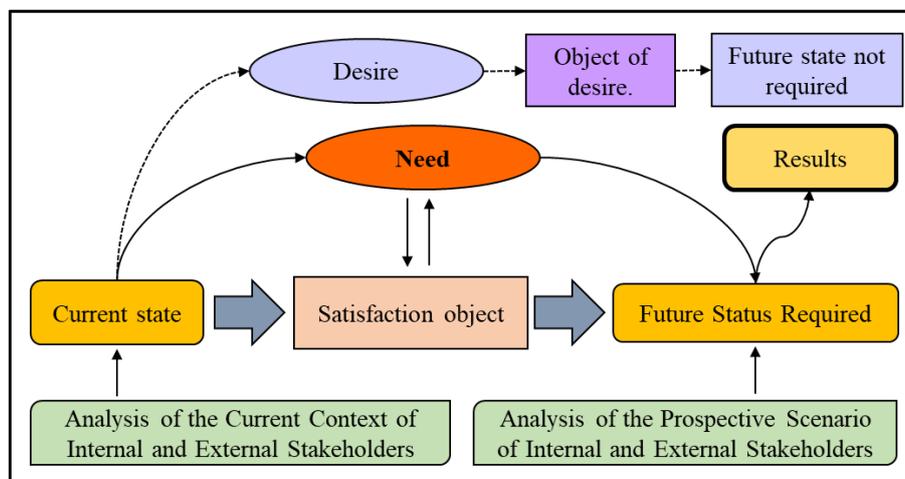


Figure 3. Differences between the organization's concepts of desire and need.

According to the Principle of Equifinality of Systems Theory, there are several ways to obtain the same result for construction of a possible organization's need satisfaction object (Hanson, 2014, p.64). Some solutions will be limited by economic viability, while others will be established by expected results priority or determined by managers decision (Meiers, Visser, Watkins, 2012, p.72). Therefore, there are numerous solutions to satisfy an organizational need, which must be defined tactically, guiding each process in the objective's construction for the necessary future state achievement for the organization. In the research process, for example, it was identified as a necessity the research processes adequacy to meet the ESA standards, and the components certification adequacy to obtain recognition by the INPE and AEB. Therefore, the need's satisfaction object is to obtain the ESA qualification, electronic components and systems certification recognition by the INPE/AEB and the Aerospace Metrology System (SISMETRA). The strategic objective is to produce nationally and internationally recognized research on advanced topics at the aerospace and defense interest knowledge frontier. After the processes are defined, the indicators are determined by identifying which process' critical characteristic should be managed. An operational process should have an indicator that measures its operation, while a quality control process, which verifies compliance with service and product requirements, may have an efficacy indicator. A process related to cost control, which verifies the resources use and waste, can have an efficiency indicator. The

processes' indicators are defined through the objectives' characteristics analysis, and the possible satisfaction objects, and should provide information on how the processes transform inputs, using available resources, minimizing risks and maximizing opportunities, meeting technical, logistical, industrial and legal requirements established for the product or service, in an adequate output. During this operation, the process should build the organizational need's satisfaction object that will meet the necessary future state. In addition to the indicator type to be used, the measurement cycle should also be considered, so that the indicators produce relevant information for the processes management. For example, to achieve the research processes' objectives in case studies, having international recognition in the research carried out by the organization, the scientific articles citations' number in other internationally renowned organizations was verified. The citations' number obtained (critical variable) was used as an operational indicator based on the scientific articles' number produced by researchers and submitted for publication within a one-year period. Although recognition is an intangible quantity, it was possible to identify a critical quantitative variable related to an intangible organizational need's satisfaction object. Each process has a goal that has indicating purpose when an objective is met, and identifies which processes should have greater attention from management to achieve the objectives, either due to resources lack, failure to determine the requirements or divergences in activities schedule. Goals are defined through the critical variables values that indicate when an objective is built. In the research process, for example, the goal was 10 citations per article in a one-year period, a metric similar a Brazilian institution with international recognition in the area of nuclear research. The Nuclear Energy Division of the IEAv reached the value of 7.3 citations per article accumulated in the year 2022, with the production of 10 articles that were cited 73 times. Through the prospective scenario analysis formal institution, objectives establishment, processes determination, activities monitoring or the use of process indicators, and the goals determination, a significant transformation occurred in the case studies management process. This gave a strategic meaning to management decisions, which previously were merely tasks lost in bureaucracy of management documents. Monitoring process activities, without numerical indicators use, is essential to manage the activities evolution based on an action plan. It is typically common practice to establish individual targets for each monitored activity, with an ideal or desired estimate completion time, progress levels or associated costs. However, in the new proposal, goals are defined through the values of critical variables, which indicate when an objective is constructed in a given time period. During the method implementation process, it was possible to highlight the difficulty in using concepts and meanings, widely accepted in management environment, due to difference with practical concepts and corporate meanings used in daily activities. Goals have often been confused with objectives, needs with their satisfaction objects, projects with the processes that execute them, and indicators with objectives. And goals are only set as a value considered challenging. The not understanding correct meaning of managerial terms risk can lead to a practice of seeking an indicator number, or a goal value, without a real concern for the final result of building a goal that should promote the organization's necessary future state achievement. The contents qualitative analysis, according to Bardin (2002), of testimonies collected during diagnostic interview with the case studies' focal group, were evidenced contents about difficulties in the proposed method implementation. The recordings of 19 interviews with 5 managers and 2 specialized technicians were analyzed during the method implementation in processes of 29 different capabilities, being performed semantic categorization of the contents according to Table 2.

Table 2. Semantic coding, context categories and inferred content

Nº	Qty	Codes	Context Categories	Inferred Contents	Qty
1	8	● Affects all levels of the organization.	PROCESS MANAGEMENT METHOD	It should be deployed throughout the organization.	15
2	1	● It is well applied in the field of science and technology.			
3	6	● Should be implemented across the organization.			
4	5	● It should have the analysis of prospective scenarios simplified.		It should be simplified.	8
5	3	● It is difficult to review annually.			
6	2	● It's innovative.		It improves managerial processes.	182
7	15	● It's very good, excellent, fundamental, fantastic.			
8	5	● It is well structured.			
9	1	● This succeeded in synthesizing the concepts.			
10	4	● This determines indicators that measure the construction of objectives.			
11	10	● This is the work of the team of collaborators.			
12	13	● This better outlined the vision.			
13	34	● This improved awareness of the organizational context.			
14	6	● This determines goals that define when objectives are achieved.			
15	8	● This identified the processes.			
16	10	● It helps to formally explain the strategies.			
17	10	● This has a high level of detail and depth.			
18	9	● This promotes a logical sequence.			
19	3	● This promotes consensus.			
20	1	● This reduces the number of indicators.			
21	1	● This reduces the number of objectives.			
22	6	● Assists the identification of stakeholders.			
23	10	● Assists the identification of objectives.			
24	23	● Assists in identifying the needs of the process.			
25	2	● Assists in the prioritization criteria of actions.			
26	2	● Determines the critical performance variables for the construction of objectives.			
27	5	● Guarantees the results.			
28	2	● Promotes the identification and prioritization of risk.			
29	19	● The process management method is in the development phase, and requires corrections and improvements.		Under development	19

N°	Qty	Codes	Context Categories	Inferred Contents	Qty
30	5	● Lack of support from top management to carry out the necessary actions to achieve the objectives.	IDENTIFICATION OF MANAGEMENT FAILURES	Lack of support from top management.	9
31	4	● Lack of support from top management to get the necessary resources to achieve the objectives.			
32	1	● Lack of risk management method.		Lack of a management method.	6
33	2	● Lacks a method for determining strategic objectives.			
34	1	● Lacks a method to plan the required capacities.			
35	2	● Missing internal audit requirements report.			
36	1	● Lack of secure document storage system.		Lack of documented information management.	8
37	3	● Lack of a document management system.			
38	4	● Lack of a knowledge management system.			
39	5	● Know the interested parts.	DIFFICULTIES DURING THE CONSTRUCTION OF THE MANAGEMENT SYSTEM STRUCTURE	Lack knowledge about the stakeholders.	31
40	14	● Achieve the involvement and commitment of top management and other interested parts.			
41	6	● Build prospective stakeholder scenarios.			
42	6	● Understand the application in the organizational context.		Lack of knowledge of the method of strategic structuring.	55
43	16	● Understand the Capabilities-Based Planning phases.			
44	6	● Changing concepts and paradigms in the management area.			
45	6	● Understand how it will be deployed.			
46	3	● Understand concepts of efficacy and efficiency.			
47	13	● Understand concepts.			
48	5	● Understand indicators.			
49	3	● Understand goal.			
50	3	● Understand the classification of strategic content according to the PESTEL tool.			
51	2	● Capacity-based planning avoids problems.	CONCLUSIONS AND PERCEPTIONS	The strategic structuring method improves management.	12
52	1	● The quality management system avoids problems.			
53	2	● Current process management is based on opinions and a logical structure is missing.			
54	2	● Knowing the interested parts reduces the uncertainty of building prospective scenarios.			
55	5	● Organizational needs should be prioritized over the interested parts needs.			

The difficulty in understanding managerial concepts was explained, in the objectives' classification as strategic, tactical and operational, in understanding the effectiveness, efficiency and operational indicators construction. The relationship between deficiencies of current practice in process management with difficulties evidenced in testimonials collected during the process management method implementation is demonstrated in the Sankey diagram of Figure 4.

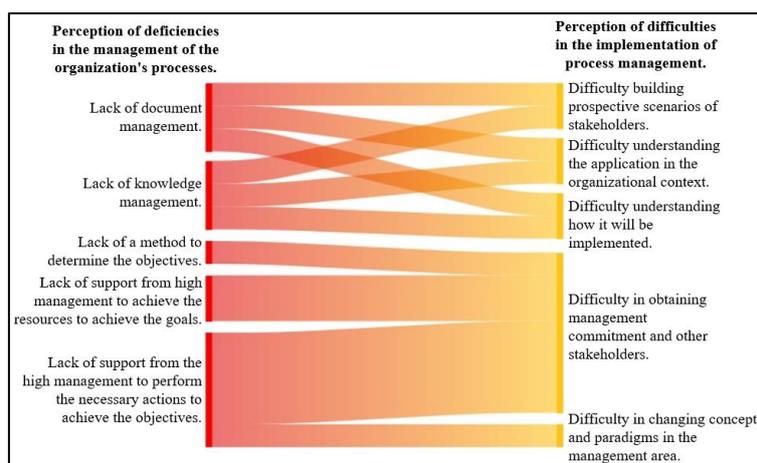


Figure 4. Sankey Relationship Diagram contents analysis between the current disabilities' perceptions in process management and the testimonials of difficulties in the process management implementation.

Qualitative analysis regarding evidence collection on results perception obtained with the method, with testimonies made after the processes' determination phase, show that statements emerged considering that this approach is well structured and rational, which helps discussions through argumentation supported by logic and evidence. It was possible to review and make more concise necessary future state descriptions, and, through prospective scenarios analysis, reduce the objectives' number and their processes, and build feasible indicators, which actually measure progress towards the objectives. It was evidenced that the historical indicators construction practice disoriented the actions between the various competing organizational objectives, established without contextualization, being an erroneous and harmful system for the organization. With the method, feasible indicators were built, which really measure the process progress towards the objectives. In Figure 5, the word frequencies analysis map in the evidenced statements, demonstrates a team's awareness in the case studies with aspects related to the organization's vision and mission, which explain the current state and the organization's purpose in search of a future state. And terms related to processes planning and the organization's direction, which is the closest stakeholder.



Figure 5. Map with the most frequently used words in the statements.

The method used to evaluate the proposal acceptance with the case studies managers' group was the feelings codification expressed in the statements, where most of the statements express a positive perception about the method and its results, as shown in Table 3.

Table 3. Coding result regarding the managers' feeling in relation to the process management method.

Feeling about the construction method of the strategic structure.	Total
● NEGATIVE PERCEPTION.	9 15%
● NEUTRAL PERCEPTION.	19 32%
● POSITIVE PERCEPTION.	32 53%
	Total 60 100%

The qualitative research semantic categorization analysis demonstrates that the employees' training phase in process concepts and requirements should be emphasized, and the organizational objectives' communication should be improved. Despite the initial difficulties in understanding management concepts, the employees' perception qualitative analysis revealed ability to clearly and precisely identify the processes' needs, as well as to rationally define the objectives. Furthermore, the performance factors and critical variables identification and indicators or monitoring systems establishment to measure progress towards goals were carried out based on solid evidence. These actions made it possible to signal the objectives construction within the available time frame and reach the future state necessary for the process.

5. CONCLUSION

The research results demonstrate the hypothesis that, although the establishing objectives and goals -oriented processes importance is widely recognized, this approach benefits are not yet completely understood or directly associated with the organizations' performance (Bartkus, Glassman, McAfee, 2006). This emphasizes the need to invest in employee training, including managers, for a deeper understanding of this new process management method, aimed at meeting the organization's needs. The most evident result is that employees and managers consider that the proposed method improves process management. Scenario analysis assists in determining actions needed for the organization, to implement strategic changes and identify the processes necessary to achieve its objectives. Prospective scenarios adoption for the necessary future state determination based on the organizational context reality provided good results, avoiding purely economic bases without due analysis, adopted blindly with improving organizations' performance purpose. The organization's needs identification and management allow an active managerial posture in the possible future state transformation outlined by the prospective scenarios. Management is involved and adapted incrementally during the future state needed by the organization building process. These structuring processes guided by the capacities' determination in the current state, the new scenarios prospecting and the necessary future state construction with the objectives and critical performance variables, indicators or monitoring and goals determination, should be periodically analyzed critically. The indicators creation's new conception proposal, through structuring, investigated the prospective scenarios use with producing relevant information purpose to processes adjustment for objectives construction, this being a relevant research area because it is directly linked to the decision-making process (Van Looy, Shafagatova, 2016). As a future study is proposed to apply this method in other areas, such as industry, commerce and services, in order to verify the feasibility of the conclusions made in these case studies in other business environments and in medium and large organizations. In particular the techniques development for identifying critical performance variables to reduce the indicators' number needed to manage process effectiveness.

The study mentions the difficulty of understanding standards and their application in real context, the proper documentation importance, and the need to define effective indicators to measure objectives. We can also highlight the lack of human, financial and infrastructure resources as obstacles to process planning. However, planning has been useful

in promoting the context perception, clarifying paths and formalizing ideas. Division of labor and assignments within the organization is discussed, as is the senior management commitment importance and all members of the organization engagement. This study also highlights the importance of simplifying analysis process and updating the management method, so that it is executed effectively and routinely. The proposed method made a disruptive change in strategic determination and decision-making process of process management through the managerial focus adoption on managing the organization's needs, producing a rupture with historical managerial practice.

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8. RESPONSIBILITY NOTICE

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