# Production and Operating Strategies with Focus on the Efficiency of the Public Service

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**Abstract**— This study focuses on the strategy for efficiency in production and operation in the services of a people management sector in a public judicial organization. Identified the need to innovate practices to achieve excellence, the U and Contingency Theories were used to reach proposed objectives. The general objective was to study the strategy for efficiency in production and operation in the Department of Personnel Management, and as specific objectives characterize the strategy of efficiency in production and operation, perform the SWOT analysis on the practices of the process operation and suggest innovation for efficiency of the productive process. *The question asked was: What is the strategy for efficiency* in the results of the production and operation of the services provided? To achieve the objectives and answer the question asked was qualitative research. Data collection was obtained through exploratory research in loco, followed by a descriptive phase through field research, using open interviews and application of quer forms. Consequently, SWOT analysis and the DMAIC model were applied to finally suggest innovation. The proposed objectives were reached, where the contingency approach with a behavioral focus and guided leadership was envisaged. The question was answered and the motivation for suggestion of innovations was firmly established in the process of presencing and knowledge management of Theory U. It was concluded that the strategy for efficiency in results should focus on the

dynamic organizational complexity, acting in an integrated way, developing abilities of employees until then unincorporated, allowing the evolution of the flow of knowledge management, empowering skills.

Keywords— Efficiency. Strategy. Theory U. Production. Innovation.

#### I. INTRODUCTION

This study focuses on the strategy for efficiency in production and operation in the services of a people management sector in a public judicial body. Notwithstanding the existence of a strategic map in this body, it is evident that there is a need to innovate the practices in order to improve results. The goal will be the improvement focused on speed with efficiency in the production processes and operations of the sector under study.

#### II. OBJECTIVES

The general objective of the task is to study the strategy for efficiency in the production and operation of service in the Department of Personnel Management of a public judicial body; and as a specific objective to characterize the strategy of efficiency in production and operation in the sector under study (1), to perform the SWOT analysis on the practices in view of the process operation in the sector under study (2), and to suggest innovation for process efficiency in the sector surveyed (3). The question to be

answered is: Which is the best strategy for efficiency in production and operation of the services provided in the researched sector?

## III. THEORETICAL-CONCEPTUAL REVISION

This research is based on the Contingency Theory which, according to Junqueira et al. (2016, p 335), indicates that an organization must tailor the contingency in order to prevent inefficiency. In addition, it will also be used, as inspiration, the Theory U, created by Scharmer (2010, p

27), which helps to break paradigms of the older models and allows an analysis of the deeper levels, as well as to provide techniques to co-create solutions. This helps to refine the study of the strategy of efficiency in the production and operation of service in the People Management Department of the Public Judicial Forum studied here. The basic theories must go beyond a Bureaucratic Theory of Max Weber, which according to Maximiano (2015, p 95) is a basis for organizing the collectivities. Picture 1 below demonstrates the teaching resource in this task.

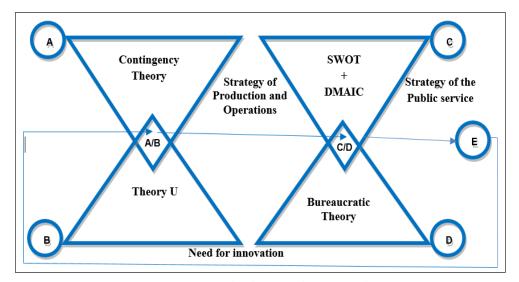


Fig.1: Diagram of the theoretical-conceptual revision

Source: Authors' elaboration.

### 3.1 Concepts of strategy, efficiency and production / operation

The concept of strategy for Mintzberg et al. (2010, p 24) is something complex that requires several definitions, however, the author defines it as a plan, pattern or coherence in behaviour over time.

For Maximian (2015, p 10), efficiency indicates if an organization uses its resources productively. The author uses as an example a Formula 1 stop box to demonstrate that a team can be efficient and inefficient at the same time, depending on the reference. The tire exchange has maximum efficiency time usage, however, it is inefficient when it comes to the use of human resources. In order to evaluate the efficiency of an organization, it is necessary to know its strategies to know if the trade-offs are coherent, as Corrêa explains (2013, p 28).

When dealing with Production Administration, Reis et al. (2017, p 120) explains that production tends to be more geared towards industrial activity, while operations are focused on service delivery. Consequently, it clarifies when quoting Slack that production is the area responsible for developing products or services from inputs, through a logical system to transform inputs into outputs.

According to Corrêa (2013, p 5), operation management is responsible for managing inputs, their interactions and their transformation processes and outputs, controlling the quality to meet the needs of stakeholders, making them compatible with the organization's strategic objectives.

The organization functions as a living organism in a constant cycle of change and adaptation. The figure of the manager is fundamental to the success or failure of the adaptations so that there is no deviation from the objectives. Scharmer's Theory U (2014) raises the importance of the projection of the leader's essence in decision making since it will influence the actions of the collective, aligning or not the reality to the strategy. Mintzberg et al. (2010, p 44) emphasizes the importance of the leader's role as a strategist, stating that, to be successful, an organization must have a strong leader who is willing to make choices and define what is worth, keeping the coherence of the tasks to the strategy and maintaining a clear and sustained direction over time, ensuring that everyone understands the strategy.

#### 3.2 SWOT Analysis concept

According to Maximiano (2015, p 320), SWOT Analysis is a tool that systematizes the analysis of the threats and opportunities of the external environment, as well as the strengths and weaknesses of the internal

environment. The author refers to the factors that influence the outcome and that will be considered in this study, namely: motivation, individual and group work, and leadership. The SWOT model can be seen in Picture 2 below.

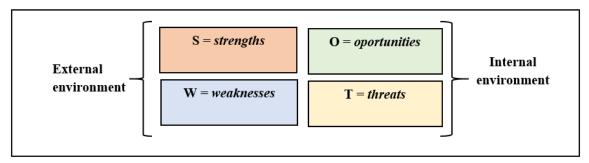


Fig.2: SWOT Model Configuration Diagram

**Source:** Adapted by the authors' from Maximian (2015, p 320)

#### 3.3. DMAIC Innovation and Technical Concepts

Nascimento *et al.* (2015, p 4) when combining concepts, affirms that innovation begins with the implementation of an idea, then stimulates and directs efforts to transform it into products or processes and obtain a positive result, which can be a quality instrument or a significant and profound improvement. The DMAIC model is a process improvement tool that seeks greater efficiency, speed or any other performance indicator, as explained by Maximiano (2015, pp 409 - 415). The author elucidates that this model is one of the Six Sigma developments that fuses quality management and the efficiency school, resulting in an update of the management of scientific procedures. The DMAIC model is deployed in five known steps: *Define* (1), *Measure* (2), *Analyze* (3), *Improve* (4), *and Control* (5).

#### IV. METHODOLOGY

The research is qualitative and according to Nascimento *et al.*, (2015, p 4), seeks to understand human and social phenomena in a naturalistic and interpretative way. As mentioned, the Contingency Theory and U Theory were used as basic theories to carry out the Case Study of the research and suggest the innovation. Case Study, still according to Nascimento *et al.*, (2015, p 4) is a system that

is formed by a delimited set of parts that acts in a certain standardized way and performs a certain function.

The data collection was obtained through the exploratory research characterized as in loco in a public judicial body, in the Strategic Planning and in the Department of Personnel Management, in order to characterize the efficiency strategy in the production and operation of the sector under study. Next, a descriptive step was carried out, conducting a field research, using as tools to obtain the information the open interviews, and application of consultation forms to the people crowded in the Department of Personnel Management, in order to obtain several points of view of strategy in production and operation and their applications in the functional routines, as well as to obtain pieces of information that provided a foundation for the SWOT analysis and contributed to the achievement of the research objectives. Finally, a bibliographical research was carried out in order to base the analysis of the results and help in the development of the innovation suggestion for the efficiency of the production process in the researched sector that was developed with the Theory U in mind, in the form of the DMAIC model. Picture 3 demonstrates the methods, steps and methodological procedures of this research.

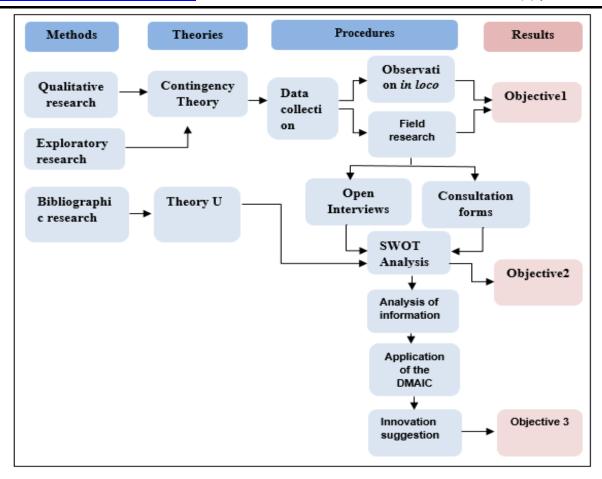


Fig.3: Methodological diagram

Source: Authors' elaboration.

The procedures adopted for the processes of transformation of the research made it possible to obtain data necessary for the elaboration of a conceptual model and the steps defined for the continuation of the research. In order to meet the objectives of the study, it was necessary to establish procedures, as seen in Table 1 below.

Table.1: Specification of methodological procedures.

Methodological points	Meansofaction	Specification
1. Theoretical review	1.1 Basic theories	<ul><li>1.1.1 Research by themes related to the objectives of the research;</li><li>1.1.2 Presentation of concepts published in scientific articles, theses and books.</li></ul>
2. Methodological procedures	<ul><li>2.1 Data collection;</li><li>2.2 Field research.</li></ul>	<ul> <li>2.1.1 Realization of data collection, through field research;</li> <li>2.1.2 Observation in loco;</li> <li>2.1.3 Application of consultation forms to employees of different hierarchical levels;</li> <li>2.1.3 Open interviews with employees, with the Director of the Personnel Management Department</li> </ul>

		and with the Strategic Planning Management Coordination.
3. SWOT Analysis	3.1 Analysis of the data collected.	3.1.1 Survey of internal strengths and weaknesses; opportunities and threats through open interviews and the outcome of the forms.
4. Analysisofresults	<ul><li>4.1 Analysis of information;</li><li>4.2 Application of the DMAIC model.</li></ul>	<ul> <li>4.1.1 gathering and analysing the data collected;</li> <li>4.1.2 Critical representation of results through diagrams, charts and graphs;</li> <li>4.1.3 Realization of objectives 1 and 2;</li> <li>4.2.1 Presentation of the required innovation with inspiration in the U Theory, along the lines of the DMAIC model;</li> <li>4.2.2 Realization of objective 3</li> </ul>

Source: Authors'elaboration.

## V. STUDY ON THE STRATEGY FOR EFFICIENCY IN PRODUCTION AND OPERATION

Regarding production and operations management, Corrêa (2013, p 5) argues that the organization, even if not seeking profit, generates a value package for its clients. In the case of Public Administration, the client is understood as the whole society; seeking efficiency in production processes for the common good. The author further emphasizes that the purpose of the operations strategy is to ensure that the

function of managing the processes of production and delivery of value to the customer is fully aligned with the strategic intent. Picture 4 and Table 2 demonstrate the production process and operations and their cyclic form, which refers to the connection with the other areas of the organization to become effective and efficient at the completion of each cycle. Table 2 below, in addition to specifying the items in picture 4, demonstrate how all the areas of action are interdependent and, therefore, must be aligned with the strategy.

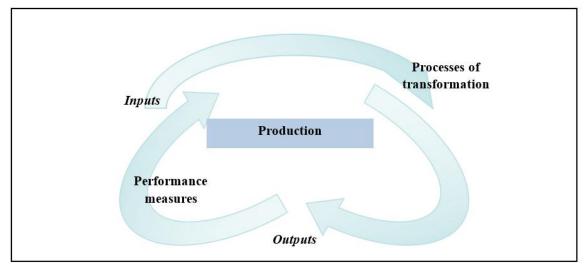


Fig.4: Production diagram

**Source**: Authors' elaboration., based on Corrêa (2013).

Table.2: Designation elements of the Production Diagram

Indicative of diagram items	Action	Specification
1. Production	1.1 Processes of transformation.	1.1.1 Manages resources made available by other sectors.

2. Inputs	2.1 Resources to be processed.	2.1.1 Inputs, machines, direct and indirect labor, energy.
3. Processes of transformation	3.1 Transformation.	3.1.1 Transformation of resources into goods and services for revenue generation.
4. Outputs	4.1 Final product.	4.1.1 Goods and services.
5. Performance Measures	5.1 Control and backup of production.	<ul><li>5.1.1 Controls production processes through quality control, cost control and productivity measurement;</li><li>5.1.2 Provides feedback for closing and restarting the production cycle more and more efficiently.</li></ul>

Source: Authors' elaboration.

The on-site observation made it possible to appreciate the performance of the production and operation routines in the People Management Department of the public body studied here. These practices occur in accordance with the Flow Chart shown in Picture 5 below.

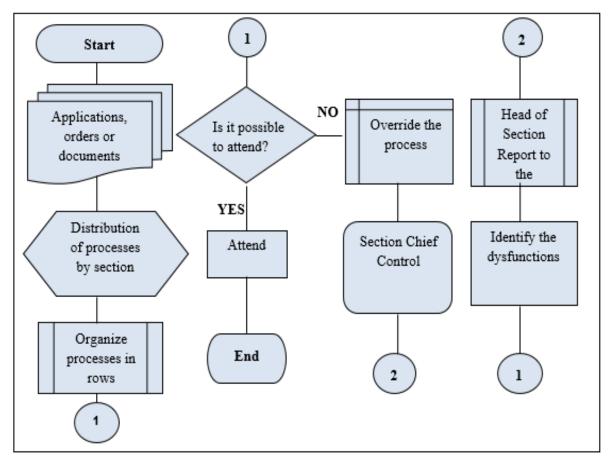


Fig.5: Flowchart of the studied sector production processes.

Source: Authors' elaboration.

Table.3: Specification of the flowchart of production processes in the sector studied

<b>Process Flowchart Item</b>	Specification
1. Applications, orders or documents	1.1 The servers send electronic processes to the Personnel Management Department with applications, dispatches and documents in general according to their specific needs, to the demands pertinent to the sector.
2. Distribution by sections	2.1 The processes are forwarded to the sections according to the specificity of the request.
3. Organize processes in rows	<ul><li>3.1 In the sections, the processes are organized in queues of increasing chronological order, allowing the control of the efficiency with regard to the speed of productivity of each section.</li><li>3.2 Each section has a Section Chief who reports directly to the Director of the Personnel Management Department.</li></ul>
4. Is it possible to fulfill the request?	<ul><li>4.1 It is verified by the collaborators if it is possible to attend the requests.</li><li>4.2 If the answer is positive, the request is answered.</li></ul>
5. Override the process	5.1 If the request can not be fulfilled, employees place the requisition in a special follow-up queue.
6. Management Control	6.1 The special monitoring queue is accompanied by the Section Chief who looks for alternatives to solve the deviations that clutter the process.
7. Section chief reports to management	7.1 In case the Head of Section can not solve the deviations, the competence of the process is passed to the Director of the Department who will decide the course of action.
8. Heal the dysfunctions	8.1 If the malfunction is identified, the Department Director will correct it immediately so that there is no cascade effect, since the sections are interdependent.

Source: Authors' elaboration.

In the quest for the expertise of the production and operation performance, the Respondents Consultation Form was applied, namely, the stakeholders located on the departmental service platform. This task involved 21 individuals of different hierarchical levels. It resulted in Table 5, which shows that they are in an age group between 18 and 52 years old, thus identifying a team in which 57.14% is between 26 and 39 years old, and a young

people's picture is recognized. A percentage of 71.43% of these individuals are female, and 52.38% of the team has completed middle school education. The predominant family income range is between four and ten minimum wages, with a percentage of 76.19% at this level. Table 4 below shows the extract of these data obtained in loco on respondent collaborators.

Table.4: Summary of respondent employees

Question	AnswerOptions	Quantity (%)	Quantity
Age group	From 26 to 39 yearsold	57,14%	12
Sex	Female	71,43%	15
Degree of schooling	Complete high school	52,38%	11
Family monthly income range	Four to ten minimum wages	76,19%	16
Time you work at the institution	Oneyear	38,10%	8
	Five yearsor more	23,81%	5

Number of people residing with the	I live with one to three people	57,14%	12
consulted			

**Source:** Authors'elaboration.

When analyzing the table above, it is possible to perceive that the sector is formed by a young team, predominantly by employees with a medium level of technical knowledge. These characteristics will possibly influence the results, due to the lack of experience in the labor market and the scientific knowledge of the majority of the respondents. On the other hand, because it is a young team, adaptability to innovation and change is likely to occur in a natural and uncomplicated way, as Maximiano (2015, p 16) points out when talking about the behavioral approach, where he explains that one of the main ideas of this strand is to put motivation as an internal impulse to the behavior and as a product of the interaction with external stimulation.

The next phase of the Applied Consultation Form allowed characterizing the strategy of efficiency in production and operation. In addition, it optimized the elaboration of the SWOT Analysis, with a foundation whose criticism provided the suggestions of innovation for better efficiency of the production process. The adoption of this procedural technique made possible to infer the relations between the managers and their collaborators in the productive platform of the services. The leader and the subordinates were thus interacting head-on with the researcher at the workplace, offering the coherent dimension in the contextual analysis foreseen in this task. In addition, the respondents' view on innovation made it possible to verify the need for changes to raise efficiency levels in the productive process of the sector. Table 5 below shows the extract of the respondents' statements in the Consultation Form, operated through Excel Software. It was taken into consideration: Totally Agree (TA); Partially agree (PA); Indifferent (I); Partially Disagree (PD) and Totally Disagree (TD).

**Table.5:** Synthesis of the second stage of the search query form

Affirmatives	TA	PA	I	PD	TD
1. The institution perceives the external factors that influence the business dynamics.	23,81%	38,10%	14,29%	23,81%	0,00%
2. The institution perceives my needs and aspirations within the company.	19,05%	42,86%	0,00%	33,33%	4,76%
3. The company seeks to remain competitive by analyzing its competitors and employees.	14,29%	33,33%	23,81%	19,05%	9,52%
4. I feel like an important part of the organization.	47,62%	28,57%	9,52%	9,52%	4,76%
5. I participate in meetings that discuss methods and procedures performed.	14,29%	33,33%	19,05%	4,76%	28,57%
6. I give opinions that are discussed in planning meetings.	9,52%	42,86%	9,52%	4,76%	33,33%
7. I have my superior as an example to be followed in the organization.	42,86%	38,10%	9,52%	4,76%	4,76%
8. I am free to express what I think about methods and procedures.	23,81%	42,86%	14,29%	14,29%	4,76%
9. My superior cares about my opinions and well-being within the organization.	28,57%	42,86%	14,29%	14,29%	0,00%
10. I know what innovation is.	76,19%	14,29%	9,52%	0,00%	0,00%

11. Innovation plays a determining role for the company to adapt to the market.	61,90%	33,33%	4,76%	0,00%	0,00%
12. The institution needs to undergo processes of innovation to become excellent.	66,67%	19,05%	14,29%	0,00%	0,00%

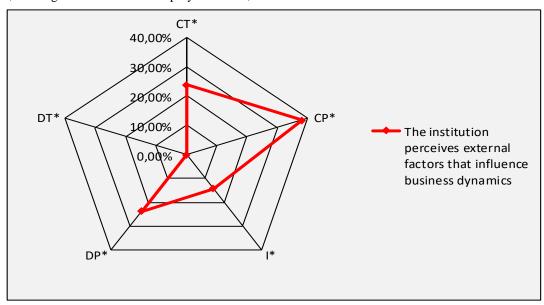
Source: Authors'elaboration.

By analyzing the answers of the Query Forms, it is possible to concatenate theoretical parameters to achieve the objectives of this work. It is noticed that most employees feel valued by the company when having their needs and inspirations perceived by the organization, which denotes a predominantly motivated team. This is confirmed by observing that 47.62% claim to fully agree that they feel an important part of the organization, while only 4.76% disagree totally with this statement. This motivation can be related to the department leader and their participatory approach, since 42.86% claimed to have their leader as an example to be followed in the organization and no interviewees, even the unmotivated, have totally disagreed on the leader's interest in opinions and wellbeing of their subordinates. It should be noted that 90.48% of respondents say they know what innovation is, and 95.23% recognize the importance of innovation for the organization. This view is reinforced when 85.72% of the respondents say that the organization urges innovation to become excellent. This majority position characterizes the need to implant new techniques in the productive processes of the sector, making the most of the employees' skills;

adjusting the efficiency in the production strategy, as prescribed by Maximiano (2015, p 290); who approaches systemic thinking, where he raises definitions of organizational complexities. In one of his definitions, he elucidates the technical difficulties inherent in the depth and extent of the knowledge needed to solve a divergence.

## 5.1 Characterization of the efficiency strategy in production and operation of the sector under study

Initially, the task of comparing the Contingency Theory approach with routine practice in the researched sector is established here. It was possible to verify that the external factors exert influence on the business dynamics, being a condition sometimes decisive, in the collaborators' point of view. So much that Junqueira (*et al.*, 2016 p 335) prescribes that, in order to avoid inefficiency, the organization must maintain its strategically adequate structure for contingency. Most of the respondents assert that they perceive the influence that external factors exert on the organizational dynamics, as shown in Graph 1 below.



Graph.1: Perceptions of respondents' on external factors

\* CT (totally agree); CP (partially agree); I (indifferent); DP (partially disagree); DT (totally disagree) **Source:** Position of the respondents'.

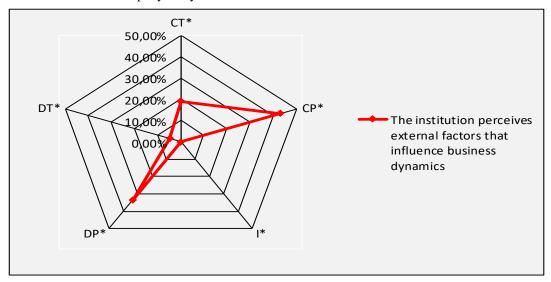
Graph 1 shows that 38.10% of respondents partially agree that the stakeholders in the body perceive the

external factors in the organizational dynamics. In fact, because it is a public agency, the external factors are

evidenced, since the source of resources and the objective end is the society. As Nascimento *et al.* (2015, p 3) when considering the quality of Public Administration, indicating that not only customer-citizen satisfaction but also continuous improvement of processes and cost reduction; this external clientele referred to by the authors, form real expectations that imply greatly in the qualification of the public services produced.

Through the in loco observation of the Department of People Management and open interviews carried in this and the Planning Sector that supports the institutional practices, it was possible to note the characterization of the efficiency strategy in the production and operation in the researched environment. First, on the plan of goals, it is stated that the Planning Sector has set out to raise the Organizational Climate Index to 5% per year by the end of

2020. Maximiliano (2015, p 201) stresses the importance of the organizational climate for the organization in the face of meaning in cooperative systems; in fact, people cooperate to achieve institutional goals. However, cooperation can only be achieved when there is a balance between the benefits or inducements that the organization offers to the employee and the contributions or efforts that the individual offers to the organization; would be a counterpart between effort and rewards. So much that Maximiano (2015, p 202) states that this approach was a pioneer in the performance of organizations, in addition to highlighting the role of human factors in the work of managers. The effect of this strategy is clearly observed from the positioning of the respondents when pronouncing in the Consultation Form, according to Chart 2 that follows.



Graph.2: Respondents' perception of their needs and aspirations

\* CT (totally agree); CP (partially agree); I (indifferent); DP (partially disagree); DT (totally disagree) **Source:** Position of the respondents'.

Graph 2 allows us to analyze that the efficiency strategy in production and operation in the sector under study is focused predominantly on the behavioral approach; being consistent with the human and behavioral dimension of Chester Barnard, as well as George Elton Mayo's vision in analyzing the Hawthorne experiment, as Maximiano explains (2015, pp 203-206). In addition, it raises the importance of the workers' behaviour, since the quality of the treatment dispensed by the hierarchical superior to its subordinates, reinforcing the sense of group, significantly influencing on the performance of the whole workforce; this phenomenon is known as Hawthorne Effect. It is on the basis of this context that Maximiano (2015, p 206) states that in order to achieve efficiency in production on an organization it is necessary to consider the behaviour of people, a fact reaffirmed here, in view of the results of the present investigation.

## 5.2 SWOT analysis on the practices in view of the process operation in the sector under study

The Department of People Management in a public body of the State Judiciary served as the setting for this investigation. According to Teiga (2012, pp 8 - 28), a personnel management body is the sector responsible for keeping the workforce motivated, qualified and adjusted to the goals and objectives of the organization. For the treatment of the strategy of efficiency in the production and operation in the studied locus, a SWOT analysis was performed, in which we focus on the procedural practices of the current routine.

The research on the service platform allowed the identification of several points of view of the efficiency strategy in production and operation, as well as the applications in the functional routines. This information provided a foundation for critical mass construction, in line

with the one recommended in Maximian (2015, p 320) when discussing the SWOT Analysis. This provision enables management to manage operational strategy by monitoring internal and external dynamics; and results in decisions that improve or enhance the business model, their specific objectives oriented to competitive advantage. As the organ studied is linked to the Public Power, it is possible to have an adequate understanding of how the competitive advantage and the excellence in the provision of services to the society starts to satisfy the user. As much as Corrêa (2013, p 5) considers that the organization generates a package of value for its clients, and seeking efficiency in the productive processes, the organ will be seeking the common good. This is a premise for the New Public Management that involves the strategy in the

administration of the production and operation of the services offered to society, beyond the Bureaucratic Theory and achieving efficiency and excellence in the services provided.

Based on the open interviews with the collaborators and the results of the consultation forms applied in the organ in study, it makes it possible to systematize the analysis of strengths and weaknesses in the internal structure; and through the critique of the position of the organ searched in relation to its objective purpose that is society, it was considered to criticize the opportunities and threats located in the external environment. These two scenarios analyzed resulted in the content shown in Table 6 below.

Table.6: SWOT analysis of the productive platform under study

<b>Monitoring Items</b>	<b>Observed Points</b>	Specifications
1. Strengths	<ul><li>1.1 Motivated team.</li><li>1.2 Leadership.</li><li>1.3 Team participation in decisions.</li></ul>	<ul><li>1.1.1 Employees state that they feel they are an important part of the organization.</li><li>1.1.2 The team recognizes the leadership of the Director of the Department and supports their decisions.</li><li>1.1.3 Employees claim to have freedom of expression of opinions on methods and procedures.</li></ul>
2. Weaknesses	<ul><li>2.1 Bureaucratic deviations.</li><li>2.2 Centralization of information.</li><li>2.3 Demand overload.</li></ul>	<ul><li>2.1.1 Need for physical documentation in some sections for bureaucratic reasons;</li><li>2.1.2 Obligation to publish all acts.</li><li>2.2.1 Information related to people.</li><li>2.3.1 Labor insufficient to meet the demands.</li></ul>
3. Opportunities	<ul><li>3.1 Technologies and technical support.</li><li>3.2 Power - political factors.</li></ul>	<ul><li>3.1.1 Access to technologies to promote strategy efficiency.</li><li>3.2.1 Political power because it is a public body.</li></ul>
4. Threats	<ul><li>4.1 Dependency.</li><li>4.2 Layout.</li></ul>	<ul> <li>4.1.1 Lack of autonomy in the course of action because it depends on the approval of the State.</li> <li>4.2.1 The sector occupies a small space in relation to the demand of processes;</li> <li>4.2.2 Inexistence of access control of the external public to the Director of the Department.</li> </ul>

Source: Authors' elaboration.

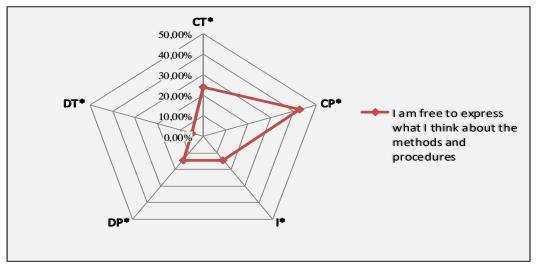
Strengths analysis indicates that team motivation, industry leadership, and the freedom of the employee to express opinions about methods and procedures have been identified. The motivation of the team was identified in the on-site observation and in the application of the Consultation Form, where 76.19% of the interviewees affirm that they feel they are an important part of the

organization. The motivation of the employees of an organization is one of the central themes of the behavioural approach. Maximiliano (2015, pp 239-261) points out that motivation theories explain people's performance in work situations and, when dealing with process theories, explains how the motivation mechanism works. The author further explores the theory of equity where it says the belief

that rewards should be commensurate with efforts and equal for all. This theory applies in this case since 61.91% of respondents stated that their needs and aspirations are perceived by the organization.

Regarding leadership, the team demonstrates the recognition and approval of the leadership of the Director of the Department of Personnel Management when 80.96% say they have it as an example to be followed in the organization and 71.43% agree with the statement that the same is concerned with the opinions and well-being of employees within the organization. Scharmer (2014, p 30)

in exploring leadership and Theory U highlights the end of an era where leadership behaved as an inflexible, centralized control structure. In addition, Scharmer (2014, p 47) reinforces that a structure is a pattern of relationships. This refers to a statement by Maximiano (2015, p 268), where he stresses that the processes of motivation and leadership are intertwined. Another factor that seems to stimulate the motivation of the team and also strengthen the leadership of the Director of the sector studied is the participation of the team in the decisions. As can be seen in Graph 3:



Graph.3: Performance on the freedom to express what the stakeholder thinks

\*CT (concordo totalmente); CP (concordo parcialmente); I (indiferente); DP (discordo parcialmente); DT \*\* CT (totally agree); CP (partially agree); I (indifferent); DP (partially disagree); DT (totally disagree)

Source: Position of the respondents'.

Analysis of Graph 3 shows that most employees perceive advisory or participative leadership, which Maximiano (2015, p 274) classifies as people-oriented leadership. This leadership model comprises behaviours classified in the democratic model without the use of authority; the leader is flexible, malleable and focuses on the employee or group itself, emphasizing human relationships and developing the ability to work as a team.

Regarding the Weaknesses, open interviews show that employees identify bureaucratic deviations or dysfunctions, the need for physical documentation in some sections, and the constitutional requirement of publicity, which makes it mandatory to publish administrative acts of the public body. Maximian (2015, p 103) scores by exposing the criticisms of Charles Perrow, William Roth, and Robert K. Merton to Max Weber's model; the cited author defines as bureaucratic dysfunction the excess of rules, which turns bureaucracy into a synonym of complications and additional cost to the taxpayer. In spite of this, it is significant to emphasize that the bureaucratic

system is inherent in the public service since it guarantees procedural routines the constitutional premises of formality, impersonality and professionalism. Max Weber's bureaucratic theory says that bureaucracies, as Maximiano (2015, p 96) point out, are essentially normative systems, which refers to productive patterns. On the other hand, currently, the Public Administration has been approaching a managerial model, migrating the focus from processes to the efficiency of production and services for the clients, in this case, society. Although the managerial approach is the majority among the other public departments, it is possible to notice the little application of this in the researched sector.

Observation in loco indicates the concentration of information in the people when each sections' collaborator concentrates the information inherent to its attributions. The dysfunction is evidenced when the employee goes away for a long period of time or unexpectedly; the section where this collaborator is located suffers from congestion, consequently obstructing other sections of the service,

whose routines are interdependent. The demand overload in the face of the number of employees in the sector is another characteristic dysfunction. So much that in Silva, Munhoz and Munhoz (2015, p 4) it is pointed out that this type of deviation tends to generate conflicts, which directly damages the efficiency of the production and operations strategy.

With regard to the Opportunities, the analysis allows affirming that, like any public organ, the organization studied here has State support for access to technologies and Power, regarding the political factors and competitive advantage for not facing competition in the market. And with reference to the Threats, the analysis also points out those inherent to the public service, such as the lack of autonomy in the course of action because it depends on the approval of the State. The second threat relates to the layout of the industry, which occupies a small space in relation to the demand for processes. In addition, a threat to efficiency raised in on-site observation was the lack of external access control to the Director of the Department. There is no secretary in this sector to filter and distribute according to the subject the access to the public. This deviation compromises the efficiency of the entire industry, as people enter and leave the industry, seeking to solve their personal problems and end up interrupting or disrupting the Director of the Department with issues that could have been solved in sections or even in intranet internal systems. Maximiano (2015, p 104) raises the satisfaction of personal interests by listing the dysfunctions of Max Weber's bureaucracy model in Perrow's view. The author explains that Patrimonialism is the term used to designate the practice in which the employee uses the

organization to accomplish personal goals. That would hurt production as a whole.

## 5.3 Suggestion of innovation for the efficiency of the production process in the researched sector

Nascimento et. al. (2015, p 4), when concentrating definitions of several authors consider that the elaboration and study of innovation in public bodies focus on the principles of efficiency and, later, on the model of managerial administration when presenting as an instrumental method to obtain results. To suggest innovation capable of increasing the efficiency of the production process in the researched sector, it is necessary to identify what prevents or decreases efficiency in the production process and operations. According to Scharmer's Theory U (2014, p 47), in a modern society, sectors develop their own style of coordination and self-organization.

One approach to suggest a process or organizational innovation is to use the DMAIC model, which Maximiano (2015, p 414) defines as one of Six Sigma - Six Sigma, which consists on the convergence of quality management and efficient movements. According to Maximiano (2015, pp 412-415), this methodology works through projects and starts when choosing the process to be modified; and ends when the new process replaces the obsolete, through the five steps of the DMAIC method. Picture 6 below demonstrates the five steps of the DMAIC Model; and Table 7 below contains the related descriptive elements, in which the nature of the DMAIC Model is explained, from the definition of the project scope to identifying the focus of the problem, identifying the causes, implementing solutions and finally guaranteeing long-term results.



Picture.6: Diagram of the DMAIC model

**Source:** Adapted from Maximiano (2015, p 414)

Table.7: Design elements of the DMAIC Diagram

Indicativeofdia gramitems	Meaning in Portuguese	Description
1. Define	1.1 Definir	1.1.1 To define the process that will be modified, with expected results and stakeholders in the project.
2. Measure	2.1 Medir	2.1.1 Measuring process performance through data collection and analysis;
3. Analyse	3.1 Analisar	2.1.2 Identify the focus of the problem.
4. Improve	4.1 Melhorar	4.1.1 Propose solutions to address the causes of the problem.

5. Control

5.1 Controlar

5.1.1 Ensure the effectiveness of the results.

Source: Adapted from Maximiano (2015, p 414).

After observing the routine in the studied sector, based on the results of the consultation forms and open interviews with the various hierarchical levels of employees of this department, based on the SWOT analysis performed here, as well as based on Contingency Theory and U Theory, it is evident that the origin of the inefficiency of the production process in the Department of People Management occurs in the dysfunctions of Weber's bureaucratic model pointed out by Maximiano (2015, pp 109-109). This inefficiency can significantly influence production and operations strategies. So much that Maximiano (2015 p 313) emphasizes that a strategy is planned and executed through leadership, communication, operational planning, and work in the functional areas. It is clear then that these are interdependent and linked to the processes of production and operations.

The proposed innovation model is based on Scharmer's Theory U (2014, p 19), which posits how perception and mentalization are primordial to the results when saying that the quality of the results depends on the

quality of the awareness of the participants that operate the system. In addition to the inspiration in Theory U, the suggestion of innovation was idealized along the lines of the DMAIC model. Defining the scope of the innovation project, the focus of the problem was identified, consisting of the organization of production processes. Consequently, the causes identified in the SWOT analysis were identified. The phases of implementing solutions and ensuring longterm results will be the responsibility of the industry under consideration to ponder the applicability of the suggestions, choosing to adopt them in the productive processes of the sector. This choice may impact the quality of production processes and operations since the model presented here is about the evolutionary convergence of two movements: quality management and the efficiency school or an updated version of the procedures of scientific management, as explained Maximiano (2015, p 411). Table 8 below shows the demonstration of a new model of production and processes that can integrate the objectives in the researched sector.

Table.8: Proposal of innovation in productive processes

<b>Process for innovation</b>	Innovation Suggestion in the Personnel Management Department
1. Organization of productive processes	1.1 Automation of processes, in a way that the server itself launches in the system its holidays, trips, vacations, with the approval of the immediate resposible, being the responsibility of the Department of Management of People to validate the acts;
	1.2 Unification of the programs in a single software to facilitate the crossing of data for the aforementioned validations;
	1.3 Creation of an agenda for the sector's board of directors in order to avoid subordinate competencies and avoid diverting focus in moments where the director lacks concentration, such as when writing Normative Instructions;
	1.4 Optimization of the physical space of the sector through the elimination of physical files;
	1.5 Deploy a server rotation scheme between the sections that make up the department to prevent information from being linked to one person.

**Source:** Authors' elaboration.

Automating processes and unifying programs into a single software would increase the efficiency of the industry by optimizing the speed of production, contributing to cost reduction, making the execution of processes more assertive, avoiding material errors, producing a lower environmental impact with reduced

paperwork, and improved information security. By reducing paperwork, optimizing physical space by eliminating file cabinets would also increase information security.

Creating an agenda for the board would make leadership more efficient in order to make it possible for

the Director of the Department to organize priorities through trade-offs, aligning with the strategy. This would allow the manager to effectively organize their duties, actively contributing to the efficiency of production and operations.

As for the rotation scheme of the servers between the sections that make up the department, this innovation would make possible not only to avoid surprises through the unexpected absence of a collaborator and consequent encroachment of the other sections, but would also allow the sharing of knowledge, according to Scharmer (2014, p 53), with increase in the team performance and consequent optimization of the processes production efficiency and operations. It would have a significant impact on public service and efficiency in the sector, since all the employees in this sector would have the knowledge to meet the emergency demands that may emerge randomly, increasing the focus on the sections demanded seasonally.

Based on the study, the motivation for suggestion of innovations is firmly established in the process of presenting and knowledge management elucidated by Scharmer (2014, pp 21-62); this author reinforces the leader's position in decision making, where he must make an introspection to reflect on the possible scenarios, getting rid of the paradigms that tend to sabotage decision making. After this deep introversion, perspectives emerge and innovation occurs naturally for the whole group, as it has in its leader an example to be followed, as stated in the consultation forms. These impact directly on production and operations, since according to Maximiano (2015, p 391) one of the main functions of the organization's culture is to regulate relations among members, such as how to resolve conflicts to define criteria for the evaluation of results, as well as corrective actions to be implemented in cases of errors and problems.

#### VI. CONCLUSION

This work focused on the strategies for efficiency in production and operation in the services of a people management sector in a public judicial body. It was evident the necessity to innovate the practices to achieve improvement in results. The overall objective of the task was to study the strategies for efficiency in the production and operation of service in the Personnel Management Department of a public judicial body. The proposed objectives were achieved, since it was possible to characterize the strategies through on-site observation, application of consultation forms and open interviews with employees, where the contingency approach was behavioral focus and guided leadership; the SWOT Analysis was elaborated on the practices in face of the procedural operation, in the sector under study, based on the view of employees, in the different hierarchical levels;

in addition to the suggestions of innovations, based on the weaknesses and threats, raised in the results of the SWOT analysis and based on the U Theory, along the lines of the DMAIC model. As for the answers of the research questions, the study points out that the motivation for suggestion of innovations is based on the process of presencing and knowledge management elucidated by Scharmer (2014, pp 21-62). From the foregoing, it is concluded that the strategy for efficiency in the results of the production and operation of the services provided in the researched sector should focus on the complexity of dynamic organization, acting in an integrated way, developing skills of the unincorporated collaborators, allowing evolution of the knowledge management flow, empowering skills and allowing the interaction of employees' functional pieces of information in a practical way in the application of services provided, promoting excellence in the application of the production processes and operations of the sector studied.

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