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The operational steps of the evaluation processes: a balance of the literature

As etapas de operacionalização dos processos de avaliação: um balanço da literatura

Los pasos operativos de los procesos de evaluación: un balance de la literatura

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Abstract
Evaluation is a subcomponent of the control process, which, in turn, is the fourth step of the management process. Its essentiality lies in that it is through it that decisions are made about the effectiveness and efficiency of management processes. As science constantly advances in this field, it is necessary to periodically survey each management process step's state of the art of each subcomponent. In this sense, this study aimed to take stock of what evaluation is and what are its operationalization steps. The method used was the scientific-technological one, characterized by elaborating guiding research questions, data collection on scientific bases, data organization, and generating the sought answers. The results showed that a) evaluation is the decision process that allows comparing what was planned with what was executed, b) the evaluation process is composed of five basic steps: planning, execution, monitoring, analysis of results, and reporting analytical, and c) each step has its criteria to be executed. The conclusion shows that changing the order of these steps can decisively compromise the intended objectives of the entire evaluation process, which is knowledge about the difference between what was planned and what was executed.
Keywords: Evaluation process; Management process; Control process; Evaluation steps; Evaluation definition.

Resumo
A avalição é um subcomponente do processo de controle que, por sua vez, é a quarta etapa do processo gerencial. Sua essencialidade reside no fato de que é através dela que são tomadas as decisões acerca da eficácia e eficiência dos processos gerenciais. Como a ciência avança constantemente nesse campo, é necessário que se faça periodicamente um levantamento sobre o estado da arte de cada subcomponente de cada etapa do processo gerencial. Neste sentido, este estudo teve como objetivo fazer um balanço sobre o que é avaliação e quais são as suas etapas de operacionalização. O método utilizado foi o científico-tecnológico, que se caracteriza pela elaboração de questões norteadoras de pesquisa, coleta de dados em bases científicas, organização dos dados e a geração das respostas procuradas. Os resultados mostraram que a) avaliação é o processo de decisão que permite comparar o que foi planejado com o que foi executado, b) o processo de avaliação é composto de cinco etapas básicas: planejamento, execução, monitoramento, análise dos resultados e elaboração de relatório analítico e c) que as cada etapa tem seus critérios para ser executada. A conclusão mostra que a alteração da ordem dessas etapas pode comprometer decisivamente os objetivos pretendidos por todo processo avaliativo, que é o conhecimento sobre a diferença entre o que foi planejado e o que foi executado.
Palavras-chave: Processo de avaliação; Processo gerencial; Processo de controle; Etapas da avaliação; Definição de avaliação.

Resumen
La evaluación es un subcomponente del proceso de control que, a su vez, es el cuarto paso del proceso de gestión. Su esencialidad radica en que es a través de ella que se toman decisiones sobre la eficacia y eficiencia de los procesos de gestión. Dado que la ciencia avanza constantemente en este campo, es necesario relevar periódicamente el estado del

arte de cada subcomponente de cada etapa del proceso de gestión. En este sentido, este estudio tuvo como objetivo hacer un balance de lo que es la evaluación y cuáles son sus etapas de operacionalización. El método utilizado fue el científico-tecnológico, el cual se caracteriza por la elaboración de preguntas orientadoras de investigación, recolección de datos en bases científicas, organización de datos y generación de las respuestas buscadas. Los resultados mostraron que a) la evaluación es el proceso de decisión que permite comparar lo planificado con lo ejecutado, b) el proceso de evaluación está compuesto por cinco pasos básicos: planificación, ejecución, seguimiento, análisis de resultados y reporte analítico y c) que cada paso tiene sus criterios para ser ejecutado. La conclusión muestra que cambiar el orden de estos pasos puede comprometer decisivamente los objetivos pretendidos por todo el proceso de evaluación, que es el conocimiento de la diferencia entre lo planificado y lo ejecutado.
Palabras clave: Proceso de evaluación; Proceso de gestión; Proceso de control; Etapas de evaluación; Definición de evaluación.

1. Introduction

Evaluation is of crucial importance for any organization. This prominence is apparent in how evaluation appears at different levels, sectors, and activities of organizations. For example, no large corporation dispenses with performance appraisals of its personnel, that is, measuring the performance of tasks and assessing the behavior in the institution of the staff against what is expected of each one. Another example of its importance is evaluating the fulfillment of organizational goals beyond just measuring the percentage of each goal achieved. It aims to understand how and why the goals were achieved or how and why they were not achieved. This makes it possible to improve the procedures adopted.

Reinforcing the importance of evaluation, one can ask about the problems that arise in its absence, and for this, the same examples mentioned can be used. An organization that does not evaluate the performance of its personnel cannot say which sectors need more or fewer employees, which areas need training, and which personnel deserves to be relocated within the institution. The organization that does not assess the achievement of the defined goals may even achieve the plans but would have difficulties understanding and repeating the results. In the same way, if you do not reach the goals, you will have problems understanding what to do differently to change the situation.

Having exposed the importance of evaluation, what scientific thinking knows about evaluation is questioned. With its methodological and technical rigor, scientific literature can produce knowledge that is the foundation for understanding and improving ideas, practices, and results. The managerial approach uses this rigorous knowledge to answer specific questions, guiding the study. Understanding what science has to say about evaluation can lead to best practices in organizations through the assessment execution according to available knowledge, increasing the chances of achieving their goals.

Equivalence terms are words used in the literature as an evaluation correspondent, and attributes are qualifications and specifications related to the term that make it particular. In this sense, this study aims to present a balance of the scientific literature on evaluation, focusing on the equivalence terms and attributes related to these terms. It is intended to expose and analyze the terms of equivalence and evaluation attributes and find the understanding of the literature on the concept.

2. Evaluation and the Management Process

The disregard for evaluation as a step of the managerial process is perceived in almost all scientific studies, including those whose theoretical structure comes from organizational and management sciences. In analogical terms, it is as if it were possible to analyze any aspect of the human body without taking into account that this aspect (nose, ear, legs, or any other part) is not linked to the human body. This decoupling even seems to give the mistaken impression that the evaluation is independent of the management process or has nothing to do with organizations and management. For this reason, to understand the dynamics and influential role of the assessment and the need for a balance of scientific knowledge, it is

essential to understand the idea of organizations, management, and the management process itself, which constitute the frameworks around which this study is established.

To understand what evaluation is and in what context it operates, it is necessary to understand what organizations are and what a management process is. Although the evaluative practice is applied at an individual level, it is in the organizational context that it shows its practical importance; similarly, the evaluation process only makes sense if linked to some management scheme or intention. The disconnection of assessment from the organizational context and the management process causes undesirable consequences that mischaracterize it entirely.

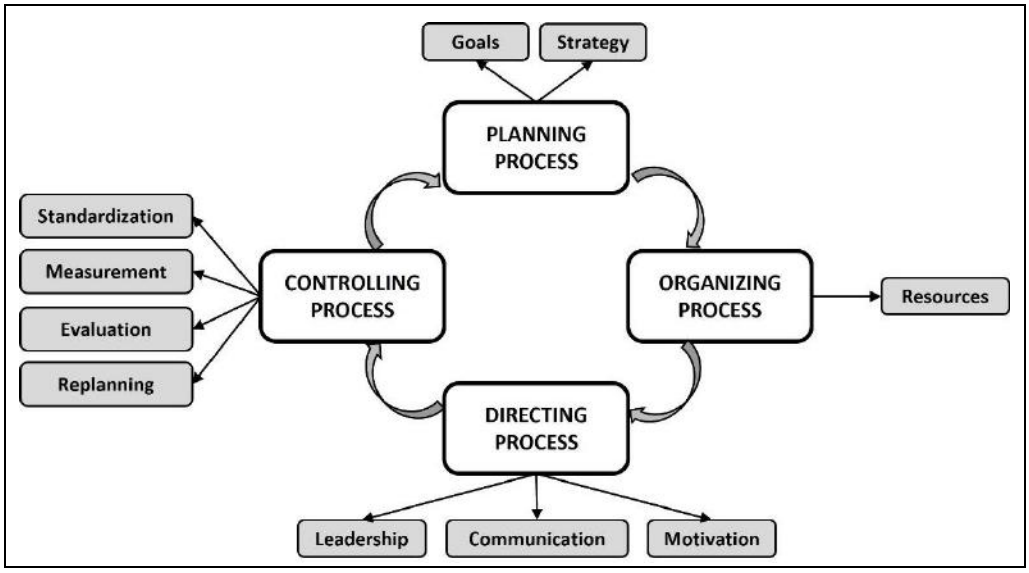
Two requirements are made for there to be an organization. The first is the existence of people, while the second is the need for an objective to be achieved by these people, as shown by studies by Martins et al., (2022), Güloğlu et al. (2021), Matriano (2021), Rukiyah et al., (2021) Choi et al., (2021), among others. People define the goals, how they will accomplish them, and what will be delivered. Viewed in a panoramic way, an organization is a grouping of people focused on meeting the needs of themselves or others (Njeri & Ndeto, 2021; Cooney et al., 2021; Migowski & Migowski, 2021; Aharouay et al.; Navickas & Bačiulienė, 2021). In summary, organizations are need-supplying entities. Often the recipients of what the organization produces are beyond its borders, in what is called the external environment.

The relational effectiveness of organizations with their operating environment is done through management. In this regard, management can be defined as the process of planning, organizing, directing, and controlling resources to achieve organizational objectives (Bakaritantri et al., 2022; Suparti et al., 2021; Nascimento-e-Silva et al., 2020; Iskandar et al., 2021; Sari et al., 2021; Purg & Walravens, 2021). As a process, management is carried out by a logical sequence of steps that generates a product, which is the achievement of objectives when the last one is completed. The raw material worked on, which undergoes the actions of each step of the process, is the organizational resources. That is why every type of management is also seen as a system (Pandaan et al., 2022; Zulkepeli & Talib, 2022; Rani & Ahuja, 2022): inputs are resources transformed through the management process into outputs, which are the achievement of the intended objectives; if the results are not as planned, a new cycle starts again, with replanning (Nascimento-e-Silva et al., 2020).

The planning process focuses on establishing the objectives and the strategy to be implemented for this purpose. The organization process seeks to identify, obtain, allocate, use and evaluate the use of resources necessary to achieve the intended objectives. The management process deals with people, primarily through leadership, motivation, and communication systems. Finally, the control process has the challenge of making what was foreseen in the planning be effectively carried out, using the sub-processes of standardization, measurement, evaluation, and replanning.

Figure 1 shows that the evaluation process is a subcomponent of the control process. For the evaluation to be carried out, it is necessary that, before, there are operational performance indicators, a system of standards capable of guiding the execution of activities that lead to the achievement of the intended objectives, and a mechanism for measuring these standards following the indicators. In this way, the evaluation compares what was effectively carried out, through the measures carried out, with the established performance standards.

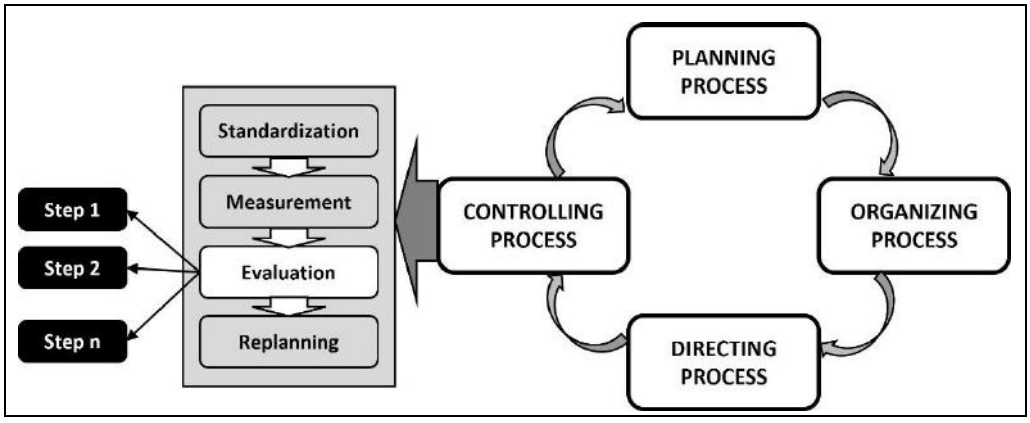
Figure 1. The management process.



Source: Nascimento-e-Silva et al. (2020, p. 1423).

The theoretical architecture of this study can be understood as follows: 1) the management process is composed of specific processes of planning, organization, direction, and control; 2) each specific process is put into practice from sub-processes; 3) the control process is divided into standardization, measurement, evaluation and replanning sub-processes; and 4) the evaluation sub-process, as it is also a process, must necessarily consist of steps (Valle et al., 2020). What steps are these? It is what the theoretical architecture summarized in Figure 2 shows.

Figure 2. Theoretical research architecture.



Source: Nascimento-e-Silva et al. (2020).

It is known that the management process is operationalized in many different ways, depending on the type of organization and relationships with its operating environments. Commercial organizations apply various forms of management than those practiced by banking and agropastoral organizations. Relationships determine strategies that shape organizational structures and all steps of the subsequent management process, especially the control process. As one of its essential functions, the evaluation sub-process consolidates institutional partnerships with the external environment by ensuring the delivery of products and services following the requirements that need to be met. If there are numerous modalities of management processes, it is also to be expected diversities of the evaluation sub-processes, naturally.

However, in diversity, there is always unity. In other words, in every assortment, some essential elements always constitute and characterize every phenomenon. Similarly, although there are different ways of evaluating the management process, some steps are necessarily part of any evaluation process. What steps are these? As science continually progresses, these basic steps are likely to constantly change, requiring systematic literature reviews to guide future studies. This balance that this investigation intends to make about the evaluation process steps.

3. Research Methodology

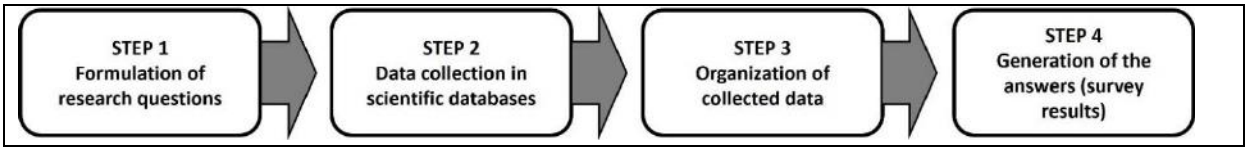
Three guiding questions were created to elaborate the literature review about the evaluation phenomenon. Each of them corresponded to a specific objective of the investigation. The first sought to understand the current definition of the concept; the second focused on identifying the typical steps to carry out the evaluation; the third aimed to map the main activities performed at each step of the evaluation process. From the perspective of the scientific-technological method (Nascimento-e-Silva, 2012; 2020; 2021a; 2021b; 2021c), these questions are cataloged, respectively, as conceptual (what is evaluation?), procedural (what are the most evaluation process?), and functional (what activities make each step of the evaluation process work?).

3.1 Study design

The answers to the guiding questions were generated following the steps of the scientific-technological method: problem formulation, data collection, data organization, and generation of answers. The problem formulation step was performed by identifying the research question and its corresponding pattern of responses. The research questions represented the questions to which answers were sought in the scientific literature; the response patterns were used to search for data in the databases to guarantee that only data would be collected that effectively agreed with the formulated question. This geometry of the answers was necessary to compare the collected data and apply the appropriate analytical and interpretive techniques to generate the sought answers.

Data collection was the second step taken. It was done by typing the way of responses, between quotation marks, in the search space of the Google Scholar database. The pattern of answers was used to find in the databases the scientific studies that presented each answer sought. The documents that contained the answers appeared with the pattern of responses in bold. The researchers would then open the document, collect the data, and paste it into a double-entry table called "mass data." For each answer obtained, the complete bibliographic source was also recorded. Figure 3 summarizes the methodological procedures applied.

Figure 3. Steps were taken to carry out the study.



Source: Authors.

The organization step aimed to generate a design or logical scheme visually showing the desired answer. For example, the conceptual question was organized by analyzing its equivalence terms and attributes. The procedural issue was operationalized through the identification and delimitation of each process step. The available issue focused on mapping the activities developed at each step. Each research question had its organizational scheme. These schemes will be detailed later.

The fourth and final step aimed to generate the answers. Again, the response patterns were used here so that the question "what is evaluation," for example, could be answered according to what was previously established, in the format of "Evaluation can be defined as + equivalence term found + discovered attributes." The guiding question "what are the steps of the evaluation process" was answered as "The steps of the evaluation process are step 1 + step 2 + step n". In contrast, the guiding question "What are the activities performed in each step? of evaluation?" was answered thus, for each step of the evaluation process: "The activities performed in step 1 are activity 1 + activity 2 + activity n".

3.2 Population and sampling

It is considered that the research population on the concept of evaluation is formed by all scientific studies that present the conceptual definition of evaluation. The studies selected according to parameters to compose this research formed its sample. After defining the study's objective, the first study population and its sampling were determined.

A search was carried out in the Google Scholar database for the term "evaluation can be defined as" in Portuguese between 2018 and 2021 and in English in 2021 to determine the first sample surveyed. From the results obtained in the search, 28 literary productions were selected as a sample, including articles, master's dissertations, and doctoral theses. Undergraduate and specialization course conclusion works were not considered for the sampling due to their scientific fragility, and the books were also not considered due to their pedagogical purpose.

In the same way, all studies that presented the evaluation process steps were stipulated as the second population. The studies selected to compose this research formed their sample according to specific parameters. Thus, to determine the second sample of the study, a search was carried out in the Google Scholar database for the term "steps of the evaluation process" in Portuguese and English of scientific records of the year 2021 search, 14 academic productions, including articles, master's dissertations, and doctoral theses. Once again, undergraduate and specialization course completion works and books were excluded from the sample for the reasons already explained.

3.3 Data collecting strategy

The data necessary to start the study were collected on Google Scholar using the response pattern "evaluation can be defined as, "from the research question "what is evaluation?". The results within the desired sampling parameters formed a data mass that contained the conceptual definitions of 28 authors and scientific studies about the question asked. The second part of the research was carried out, collecting data from the evaluation process steps. In this second moment, as in the first, data collection was carried out on Google Scholar using the response pattern "steps of the evaluation process." Fourteen results were found within the desired sampling parameters, organized in the "Evaluation Process Steps" column.

Finally, data collection was intended to know how to build each step of the evaluation process. Some of the contents of the evaluation steps were detailed by the scientists, while others had to be described based on the interpretation of the scientific works collected. This second procedure was done when the description was extremely long, with several paragraphs and pages.

3.4 Data organization and analysis strategy

The data organization took place by selecting the equivalence terms and the attributes of these terms from each definition of evaluation of the authors collected. After selecting and tabulating all equivalence terms and attributes, they were, when possible, grouped by semantic proximity and listed in order of highest frequency. The collected data were first organized by the authors, its steps, and how the operationalization took place. The steps were tabulated for each author, numbering the

steps so all the authors' steps could be visualized and analyzed in the same table. When generating the results, a line was added to the end of the table with the essential steps. From the essential steps, the contents for each of these steps were organized in the view of each author

3.5 Results generation strategy

The result of the conceptual definition of the evaluation was generated based on the bibliographic review of the definitions. Through the analysis and discussion of the equivalence terms and attributes found, given the greater relevance for the most frequent ones in the literature. The generation of the result of the conceptual definition of evaluation is exemplified through the bibliographic survey carried out. It was concluded that, among the most found evaluation equivalence terms, the term "process," mentioned by six authors (Ferreira Neto et al., 2021; Trindade, 2018; Damiola, 2020; Muthmainnah et al.,2021; Yörük, 2021; Wildner, 2021), showing that evaluation is a systematic and complete process in itself.

Secondly, the result of the essential steps of the evaluation was generated through the investigation and debate of the steps collected from all the authors, giving relevance to the most present and significant and adding steps when possible. As an example, one can observe the construction of the essential planning step, which added steps such as "identifying the risks" (Oliveira, 2020) and "determining the research" (Ramadhan et al., 2021) with a view to analysis and discussion understandings, understanding that these actions would be contemplated in the act of planning. Still, the result of the content of the evaluation steps was generated. It reached a joint and robust range for each step through examining and discussing the ideas of the various authors in the literature.

3.6 Study limitations

The present study has limitations regarding its sample and the method used. Regarding the restriction of the sample study, it is noteworthy that the database used was only Google Scholar. In addition, searches were carried out in the database with only one search key at each step ("evaluation can be defined as" and "steps of the evaluation process"). In the temporal spectrum, data were not collected from all years of scientific production on the subject; only scientific studies were carried out between 2018 and 2021. Given these limitations of the research sample, it could be considered that the results found are not representative of the population. However, it is understood that the criteria adopted from recent studies give assurance of the results' representativeness. Finally, about the limitations of this study, the present research was concerned with only delving into the analysis of conceptual issues, not focusing on studies of operational issues regarding evaluation.

4. Results and Discussion

The presentation of the results of this investigation follows the following scheme, in line with its guiding questions: a) first, the results will be shown for the conceptual question "what is evaluation," with the findings for each of its two constituent elements, terms of equivalence and attributes, which were the conceptual definition found; b) next, the most common steps of the evaluation process are presented, according to what appears in the literature in the time horizon researched; and c) it ends with the presentation of the functional dimension of the evaluation, with the specification of the most common activities performed at each step of the evaluation process.

4.1 What is evaluation

The literature review showed that process is the most frequent evaluation equivalence term (Ferreira Neto, 2021; Trindade, 2018; Damiola, 2020; Muthmainnah et al., 2021; Yörük, 2021; Wildner, 2021). The process is a sequence of steps,

each with its specific way of being executed. The product of the previous one becomes the raw material of the next step, and when the last step is carried out, a particular product is generated. Similarly, evaluation is a sequence of steps that culminates in a value judgment since the term evaluation has the etymological sense of giving or valuing.

Evaluation can also be understood as a method (Oliveira, 2019; Ambroise, 2020; Gomes, 2019; Francisco, 2018; Eulálio, 2019). It is because the method is the form or technique established to carry out some activity by what was planned; it is used to organize the steps that will be practiced to reach a specific end. It is no different with evaluation: when evaluating something, it is necessary to draw up a plan for the objective to be achieved. Therefore, one must consider the procedures, forms, and techniques to reach the result finally sought in what was evaluated.

Data analysis allowed the creation of three main clusters of equivalence terms, as shown in the table. Semantic groups are composed of terms that represent similar ideas. The first grouping was called method because it encompassed the terms "means" (Ambroise, 2020), "tool" (Gomes, 2019), "form" (Eulálio, 2019), "mechanism" (Francisco, 2018), "procedure" (Gomes, 2019) and "method" (Oliveira, 2019). The semantic analysis showed that means is the resource used to reach an end, with a sense of method. Tool designates an instrument used to carry out a work, a method used to achieve a specific objective, being configured in the context used as a method. The form is a term that designates an organization, a method used to carry out work. The mechanism is how a function is performed to reach the desired end. The procedure is how something is done. Finally, the method is the technique or method used to carry out some action, activity, or objective. For these reasons, the term "method" was established to summarize all the other equivalence terms mentioned in the literature review.

Table 1. Evaluation: groupings of equivalence terms.

Authors	Equivalence terms	Groupings
Ferreira Neto (2021); Trindade (2018); Damiola (2020); Muthmainnah et al. (2021); Yörük (2021); Wildner (2021)	Process	Process
Oliveira (2019)	Method	Method
Ambroise (2020)	Means	
Gomes (2019)	Tool	
Francisco (2018)	Mechanism	
Gomes (2019)	Procedures	
Eulálio (2019)	Way	
Diniz (2020); Almeida (2018); Oliveira et al. (2018); Santos (2018)	Application	Application
Campinhos (2019); Hasibuan et al. (2021); Acampa et al. (2021)	Activity	Activity
Santos (2019)	Act	
Nweke (2021); Boutabssil (2021)	Check	Check
Biodun (2021)	Measure	
Selly (2021)	Analysis	
Yazici; Tasgin (2021)	Determination	
Rodrigues (2019); Honcharenko & Honcharenko (2021); Selly (2021)	Collect	Collect

Source: Authors.

Evaluation can still be understood as an application (Diniz, 2020; Almeida, 2018; Oliveira et al., 2018; Santos & Rocha, 2018). It follows from this understanding that application is the act of executing a plan, putting into practice something that was planned. The evaluation, in this sense, is nothing more than the application of a trial to an objective. It uses its steps and forms in search of a result, that is, to quantify/qualify a value.

The term activity was also found in the literature review as equivalent to evaluation (Campinhos, 2019; Hasibuan et al., 2021; Acampa et al., 2021). An activity is understood, in this context, as a deed, an action, a work, an operation. It is an act

to be performed to achieve some purpose. In a similar conformation, valuation is an action committed to attaining the valuation of an object of interest, an operation to give value to something.

The formation of the second group took place around the term activity. The terms involved and semantically synthesized were "activity" (Campinhos, 2019; Hasibuan et al., 2021; Acampa et al., 2021) and "act" (Santos, 2019). The semantic analysis showed that activity and act are the actions, ability, or tendency to accomplish something. Therefore, for this reason, it was determined that the term activity summarizes both equivalence terms found in the literature.

Gauging was another equivalence term found for the assessment (Santos, 2019; Nweke, 2021; Boutabssil, 2021; Biodun & Masama, 2021; Selly, 2021; Yazici & Tasgin, 2021). Gauging is verification, the result of a comparison, measurement effort, research, and analysis, to understand something better. In this understanding, we have an evaluation as a way to measure, compare, and verify a target, having more excellent knowledge by studying and analyzing it.

For the formation of the third group, that is, measurement, the terms involved and semantically synthesized were "assessment" (Nweke, 2021; Boutabssil, 2021), "measurement" (Biodun, 2021), "analysis" and "determination" (Yazici & Tasgin, 2021). Semantic analysis showed that benchmarking compares two or more elements with a standard as a basis. A measure is a previously established quantity used to evaluate something else. An analysis is studying each component that forms something; it is its in-depth investigation. Determination is evaluating, estimating, and reaching some resolution about something. Thus, it was established that the term gauging synthesizes the equivalence mentioned above in the literature.

The term collection is observed in the literature review less frequently than the other terms but still expressively (Rodrigues, 2019; Honcharenko & Honcharenko, 2021; Selly, 2021). In the view in question, the collection is understood as collecting and gathering data, information, and knowledge for examination and analysis. Therefore, the evaluation takes shape by aggregating mass data and information to study what was selected with a specific method.

It was carried out considering that the terms "identification" (Santos & Rocha, 2018) and "clarification" (Santos & Rocha, 2018), which appear in the same article, was considered semantically equivalent. There is still a fourth grouping, called identification. The semantic analysis explained that identification is the act of recognizing something or someone. Clarification is clarifying a situation, that is, explaining the meaning of something that has been identified. Therefore, given the above, it was established that measurement synthesizes the equivalence terms found in the literature.

The term capacity (Masa et al., 2021) was also found as an evaluation equivalence term). However, on closer examination, it is clear that this concept is satisfied in the activity grouping, functioning as a characteristic that differentiates them (but does not fit in the same equivalence term grouping, having different meanings). For example, capacity is the aptitude to perform something; that is, to perform an activity, an action, it is necessary to be able to do it, consisting of its predicate.

As the term capacity and the grouping of terms called identification had less relevance in the literature review, it was decided not to use them in constructing the evaluation understanding. It was found that the term process equivalence is the one that appears most in the literature review. When analyzing its meaning, it seems to cover most of the purpose sought in other terms found in the literature to refer to evaluation. The process is a method, as an activity, in the form of application and collection, to assess value. Thus, a new conceptual definition of evaluation needs to start with the process as the equivalent term synthesizing all the literature. It remains to see what attributes the literature shows to complete the definition sought.

Attributes are particularities, essential characteristics of something. They are what differentiate one phenomenon from another. As they are very numerous, they were grouped based on semantic proximities. Thus, the primary grouping of evaluation attributes is what brings the idea of decision. This group includes the terms diagnosis (Ferreira Neto, 2021), relevance (Diniz, 2020; Almeida, 2018; Oliveira et al., 2018; Costa, 2020), decision making (Diniz, 2020; Gomes, 2019; Eulálio, 2019; 2019; Almeida, 2018; Oliveira et al., 2018; Trindade, 2018; Rodrigues, 2019; Francisco, 2018; Selly, 2021;

Acampa et al., 2021), background (Gomes, 2019); decision (Francisco, 2018; Biodun, 2021)), plan (Hasibuan et al., 2021), conclusion (Hasibuan et al., 2021), filing (Eulálio, 2019), judgment (Campinhos, 2019; Trindade, 2018; Honcharenko & Honcharenko, 2021; Masa et al., 2021), guidance (Ferreira Neto, 2021), choice (Acampa et al., 2021), rational (Gomes, 2019), establishment (Santos, 2019), criterion (Almeida, 2018), evidence (Honcharenko & Honcharenko, 2021). Among these terms, the most frequent is decision-making. The decision in this perspective is linked to the fact that it is relevant and necessary to diagnose, analyze a situation, reach a conclusion, and make a decision based on a rational choice. Thus, creating a judgment, and making a diagnosis, are based on something that has already been analyzed; making a decision and reaching a conclusion are the predominant examples of the evaluation attributes found in the literature. Evaluation is a fundamental part of decision-making, through a process in which something is valued and arguments for a choice with greater certainty of the best option.

The act of evaluating deals with the idea of action. These actions concern activity (Diniz, 2020; Almeida, 2018; Oliveira et al., 2018), construction (Campinhos, 2019), action (Campinhos, 2019; Gomes, 2019; Muthmainnah et al., 2021), operation (Gomes, 2019), formulation (Honcharenko & Honcharenko, 2021), intervention (Campinhos, 2019; Honcharenko & Honcharenko, 2021; Nweke, 2021; Damiola, 2020), service (Gomes, 2019), capacity (Ambroise, 2020), organization (Acampa et al., 2021), program (Gomes, 2019; Honcharenko & Honcharenko, 2021; Damiola, 2020; Selly, 2021), policy (Honcharenko & Honcharenko, 2021) and compliance (Selly, 2021). It means that to assess is to act in search of the result that one intends to achieve, which, in this case, is to find its value. These actions allow the execution of previously planned ideas and, through them, whether as an operation, intervention, formulation, or construction, evaluating the object of study is possible.

Evaluation attributes were also found that represent the idea of result - achieving or evaluating a result. Among the characteristics of this idea, what most emerged in the literature was value (Santos, 2019; Santos & Rocha, 2018; Trindade, 2018; Damiola, 2020; Yazici & Tasgin, 2021; Biodun, 2021; Boutabssil, 2021; Masa et al. al., 2021; Wildner, 2021). Other taxes found and grouped were result (Ferreira Neto, 2021; Ambroise, 2020; Hasibuan et al., 2021; Yörük, 2021), objective (Diniz, 2020; Almeida, 2018; Oliveira et al., 2018; Nweke, 2021), impact (Diniz, 2020; Almeida, 2018; Oliveira et al., 2018), goal (Selly, 2021). When you have a result with a specific end, this is an objective, a goal, and represents an impact. This result must be qualifiable or quantifiable, that is, present a value. The evaluation process will go through its steps, observing the path to the result, glimpsing the achieved objective, and valuing this achieved impact.

We also found in the literature words that form a grouping of attributes of the term evaluation, which convey the idea of quality. Among them, the most mentioned were the term quality (Ferreira Neto, 2021; Eulálio, 2019; Gomes, 2019; Santos & Rocha, 2018; Wildner, 2021). It refers to the importance, level, value, and the term effectiveness (Diniz, 2020; Gomes, 2019; Almeida, 2018; Oliveira et al., 2018), which refers to the actual existence of something to its accurate functioning. The other attributes that convey this idea of quality were success (Ambroise, 2020), efficiency (Ambroise, 2020; Santos & Rocha, 2018), effectiveness (Ambroise, 2020; Santos & Rocha, 2018), benchmark (Hasibuan et al., 2021), importance (Santos & Rocha, 2018), reference (Gomes, 2019) and visibility (Gomes, 2019). It can be said, therefore, that evaluation seeks precisely this: when evaluating something, an analysis is carried out, a search for its value, for its importance, for its palpability, that is, for its quality.

Another group of attributes referred to the idea of determination. In this set, attribute determination was the most frequent (Santos, 2019; Almeida, 2018; Oliveira et al., 2018; Damiola, 2020; Hasibuan et al., 2021; Muthmainnah et al., 2021). The attributes verification (Ferreira Neto, 2021; Oliveira, 2019), investigation (Oliveira, 2019), measurement (Santos & Rocha, 2018), measurement tool (Yörük, 2021), interpretation (Yörük, 2021), orientation (Wildner, 2021), information (Campinhos, 2019; Rodrigues, 2019; Francisco, 2018; Acampa et al., 2021). The evaluation in this context gives the idea of determination concerns the search for information that is aimed in this process, investigate and verify, measure and interpret oriented to

determine something. To define is to indicate something through analysis, stipulate a number, a characterization of a variable, or an object of interest.

Finally, other evaluation attributes were found in the literature, having been less cited than those described in this work. They were grouped according to their meanings and the ideas they conveyed. They are: continuous (Ferreira Neto, 2021) and process (Francisco, 2018), which give an idea of continuity; improvement (Ambroise, 2020); change (Ambroise, 2020); improvement (Francisco, 2018), which demonstrate a concept of improvement; object (Eulálio, 2019; Santos & Rocha, 2018); device (Campinhos, 2019); component (Campinhos, 2019); merit (Santos & Rocha, 2018; Trindade, 2018; Honcharenko & Honcharenko, 2021; Boutabssil, 2021); instrument (Hasibuan et al., 2021); element (Masa et al., 2021); actor (Campinhos, 2019; Acampa et al., 2021); technology (Gomes, 2019), which convey an idea of medium, mode; difficulty (Ferreira Neto, 2021); failure (Ferreira Neto, 2021), which connote impediment; systematic (Diniz, 2020; Gomes, 2019; Almeida, 2018; Oliveira et al., 2018; Rodrigues, 2019; Nweke, 2021; Boutabssil, 2021); methodological procedure (Diniz, 2020; Almeida, 2018); technical (Trindade, 2018), which conveys the idea of method; managerial (GOMES, 2019); administrative (Trindade, 2018); political (Trindade, 2018); status (Hasibuan et al., 2021); position (Campinhos, 2019); meaning (Yörük, 2021), which convey the idea of conformation; and valid (Campinhos, 2019); legitimate (Campinhos, 2019); and accountability (Francisco, 2018,) that configures the idea of legitimacy. All these attributes characterize the term evaluation in its essence.

The second guiding question of this study focuses precisely on the steps of this process. To answer the guiding question "what is evaluation," we have that evaluation is the decision process methodically constructed from comparing what was planned with what was executed. It means that the assessment is done in steps, with logical sequencing that has a starting point and an ending point. That point of arrival is the decision. Intermediate points configure the steps of the evaluation process.

4.2 Steps of the evaluation process

The survey in the literature on the steps of the evaluation process carried out in the present study showed that most studies report evaluation processes divided into up to five steps. Some studies presented only four steps, and only one was divided into eight steps. Of course, among the steps found, it was found that many of them are repeated. It shows that evaluation is a systematic process that needs to establish well-defined steps to achieve its purpose, which is the most faithful metric representation possible of reality.

The most repeated initial steps of the evaluation process were planning (Martins, 2020; Silva, 2020; Costa, 2020) and establishing criteria (Muduc et al., 2021; Ankomah, 2021, Keshavarz-Ghorabafe et al., 2021), establishing the scope (Bhagavathy et al., 2021) and setting goals (Lestari et al., 2021). It is understood, however, that the initial steps of the evaluation process synthesize and transmit an idea of an organization's planning before the evaluation's execution. Because the evaluation process, being a systematic process, needs methods and rules to be put into practice, and the planning and establishment of criteria, objectives, and scopes are configured in the introduction of this process. To plan is to organize a plan or a roadmap. It Determines the steps, procedures, or means that must be used for the work to be carried out. Establishing criteria means instituting parameters for the evaluation to be carried out fairly and correctly; establishing scope and objectives portray the purpose of the work and where you want to get with the evaluation process. All these terms make up the planning step, and the evaluation must precede planning so that its later steps are carried out in an organized and correct way so that the most likely result possible is reached.

Another step of the evaluation process that was repeated in several studies was the evaluation execution step (Pereira, 2020; Ramadhan et al., 2021; Gomiero, 2020; Costa, 2020, Zadi, 2021; Bhagavathy et al., 2021). Execution is the act of carrying out a task, of carrying what started to the end. This step in the evaluation process is essential because to achieve the

intended result; it is necessary to carry out the evaluation. As can be seen in table 1, although the term executes was not repeated at different times, four terms expressed the same idea. This idea is to achieve what had been planned according to criteria established in the previous steps and accordance with them: operationalize, interview, apply the instruments and carry out the research. To operationalize is to prepare something to accomplish a task. The terms interview use the tools and carry out the analysis were included in the sense of evaluating because, in their studies, they were the step in which they effectively put into practice the act of assessing, just like the idea of performing the evaluation expresses.

The literature review also relevantly presented the monitoring/follow-up step within the evaluation process (Oliveira, 2020; Martins, 2020; Silva, 2020; Pereira, 2020). Monitoring takes place continuously through monitoring and control mechanisms, in which a procedure is observed given data, indicators, and indices, allowing to understand the evolution and need for changes in routes. Monitoring can be a process with an end in itself, of continuous monitoring of an objective/project, which works together with the evaluation process, with evaluation being the process that aims at the final result, with the end of a project, or when it is applied enough to observe its impact. At the same time, monitoring is the continuous monitoring of indicators of interest to the project throughout its course. Monitoring can also occur in a way only inserted in the logic of the evaluation. Monitoring indicators of interest to the evaluation and whether the execution of the evaluation and the project in question is taking place as planned will lead to a successful evaluation.

Analyzing the data or results was the most common step in the literature. It was found in the studies by Muduc et al. (2021), Oliveira (2020), Zadi (2021), Martins (2020), Gomiero (2020), Pereira (2020), Costa (2020), Lestari et al. (2021), and Ramadhan et al. (2021). It is a fundamental step in the process of evaluation. To analyze data and results is the investigation with specific criteria and objectives, particular order, and meaning to a mass of information. It is the step in which the evaluation per se takes place. Here, the evaluator takes the collected data, finds the results, and interprets what was found. He reaches conclusions about the evaluated project, if there was improvement or deterioration, if there was a positive or negative impact, always following the theories and criteria established.

Another step that stood out in the search for literature on the evaluation process was to prepare/present the evaluation report (Zadi, 2021; Gomiero, 2020; Costa, 2020). A report is a document that summarizes various information, data, results of an object of study, and a process that has taken place. The elaboration and presentation of a report on the evaluation process are among the final steps of this activity. It occurs after data analysis and results and may be the product of this step. The preparation of the report requires a lot of care to detail the entire process, clearly summarize the main results, and for its presentation to be succinct so that the primary information of the evaluation is easily accessible.

The literature review also highlighted the results' communication/dissemination/disclosure (Oliveira, 2020; Costa, 2020; Bhagavathy et al., 2021). Dissemination of results is the presentation to the target audience or general public of what has been accomplished, built, studied, and found. In the evaluation process, disclosure of findings is the last step, if not the last. It may not occur in some processes when, for example, it is an internal procedure that cannot be exposed. As a final step, it takes place after the entire process, after the end of the analyzed object of study, the results found and examined, summarized in a report, so these results are compiled and can be presented to anyone of interest.

Finally, some steps obtained in the literature survey had little expressiveness, were not repeated, or have the characteristics of being specific to the particular evaluation carried out by the study that used them. However, it can be seen that they were essential for these studies. Therefore, the evaluation steps may vary according to the object of the research and its determined objectives. Some of them are essential for any evaluation process to be carried out.

After analyzing the literature review about the steps of the evaluation process, it was possible to conclude which actions would be essential in an evaluation process. In this conclusion, the evaluation process has five basic steps, namely: (1)

Plan; (2) Execute; (3) Monitor; (4) Analyze; (5) Prepare and disseminate the report. Each step will be described to understand the process.

The literature review pointed to the predominance of evaluation planning as the first step in the process (Martins, 2020; Silva, 2020; Costa, 2020; Zadi, 2021). In this stage, a) study of the problem and its context (Handojono & Matrutty, 2021; Gomiero, 2020; Zadi, 2021; Pereira, 2020), b) identification of risks (Oliveira, 2020), c) determination of the research (Ramadhan et al., 2021), d) definition of the scope or criteria of the evaluation (Zadi, 2021; Keshavarz-Ghorabafe et al., 2021), e) establishment of scopes, criteria or objectives to put the evaluation into practice (Muduc et al., 2021). al., 2021; Bhagavathy et al., 2021; Lestari et al., 2021; Ankomah, 2021; Keshavarz-Ghorabafe et al., 2021) and f) decision scheme (Pereira, 2020). All these steps can be understood as part of planning the evaluation process.

The second step of the evaluation process determined in the present study was to execute. It is because, as already explained, the evaluation execution consisted of different studies and steps of the evaluation processes studied in the literature survey. It was understood that terms with the same meaning and action intention could be grouped. Therefore, the second step of the evaluation process is performing. It is what operationalize (Zadi, 2021), interview (Gomiero, 2020), apply the instruments (Costa, 2020), and conduct the research (Ramadhan et al., 2021) are terms with the same meaning as performing (Pereira, 2020), in addition to performing the assessment (Bhagavathy et al., 2021). Thus, executing is to start the evaluation itself; it is a critical step and should be the second essential step of an evaluation process. Figure 4 shows a summary of the steps of the evaluation process.

Figure 4. Steps of the evaluation process.

Source: Authors.

The third essential step of the evaluation process was defined as monitoring. The referring steps in the literature encompassed here involve monitoring (Oliveira, 2020; Martins, 2020; Pereira, 2020) and monitoring (Martins, 2020; Silva, 2020). Other steps that can also be included in this essential step are visiting structures (Gomiero, 2020), a process monitoring step, and measuring performance (Muduc et al., 2021) as a follow-up of what is happening during the process.

Analyzing, or analyzing/evaluating the results, is the step that can be called the evaluation itself. It was defined as the fourth essential step of the evaluation process arising from the literature review. As already presented, most of the literature points to this step using terms such as analyze; (Oliveira, 2020; Zadi, 2021; Martins, 2020; Gomiero, 2020; Costa, 2020; Lestari et al., 2021, Ramadhan et al., 2021), discuss (Muduc et al., 2021) and evaluate (Pereira, 2020). Still, other steps of the literature review can be understood as encompassed in this step: analyzing and assessing risks (Oliveira, 2020), closing in the idea of completing the evaluation process by applying the evaluation itself (SILVA, 2020), answering the questions not answered, that is, to find the answers in the results (Handojono et al., 2021).

The fifth step was defined as the elaboration and dissemination of the report. At this step, the development of the report (Zadi, 2020; Gomiero, 2020; Costa, 2020) and the dissemination/communication/exhibition (Oliveira, 2020; Costa, 2020; Bhagavathy et al., 2021) can be unified by the report produced, and in most cases, there will be dissemination of the report built. In this step, other actions can be included, such as carrying out a balance of results (Costa, 2020). Compliance with the activities listed here must be included in the report (Keshavarz-Ghorabafe et al., 2021; Ankomah, 2021).

4.3 Operationalization of the steps of the evaluation process

Each step of the evaluation process involves a series of possible activities that make up its content and application procedure. This execution is what ensures that the assessment can be successful. The first step is planning. Planning is the roadmap for the evaluation process, how it is produced, and where the objectives and criteria are defined. Zadi (2021), Martins (2020), Silva (2020); Coast (2020); Muduc et al. (2021), Bhagavathy et al. (2021), Lestari et al. (2021), Ankomah (2021), Keshavarz-Ghorabafe et al. (2021) and Pereira (2020) presented in their work the concept of planning as a step in the evaluation process in their work. The general idea presented by the authors is that planning involves a) a specific time (Costa, 2020; Martins, 2020), b) an understanding of what will be studied (Keshavarz-Ghorabafe et al., 2021; Lestari et al., 2021; Bhagavathy et al., 2021; Bhagavathy et al., 2021; al., 2021), c) define the objectives and details of the procedure (Zadi, 2021; Martins, 2020; Silva, 2020), and d) define evaluation criteria (Zadi, 2021; Silva, 2020; Muduc et al., 2021; Bhagavathy et al. al., 2021; Ankomah, 2021). There must be an understanding and study of the topic to support the plan, which must present the objectives and scope, as well as any necessary delimitations for each specificity of the evaluation process, which must also be clear and well delimited. The criteria evaluated are defined in a specific period and when each step will occur.

The second step determined as essential in the evaluation process is the Execute. In this step, which follows the planning, the evaluation itself begins. Pereira (2020), Zadi (2021), Gomiero (2020), Costa (2020), Ramadhan et al. (2021), and Bhagavathy et al. (2021) also understood that performing is an essential step in the evaluation process and explained how this step takes place. Execution involves carrying out the actions that were prioritized in the planning to collect evidence to support the evaluation (Pereira, 2020); that is, with everything previously planned and organized, the evaluation begins (Ramadhan et al., 2021; Bhagavathy et al., 2021), which can be divided into two phases: preparation, to analyze the elements that precede the execution, and execution, which is the beginning of the application, in practice, of the evaluation, and after that, the evaluation model to be used will be defined (Zadi, 2021). It can be seen that execution is the step that occurs after planning, as it is the beginning of the evaluation itself and therefore needs to be preceded by an organization. It can be divided into two phases: the preparation and the actual execution of the evaluation. Execution can also be understood in more specific situations, such as conducting interviews (Gomiero, 2020) and consultations with the academic community (Costa, 2020).

The third essential step of the evaluation process is Monitoring. It is the continuous monitoring of the evaluation process so that it is updated if necessary (Oliveira, 2020). The authors have a similar understanding of monitoring in the evaluation process. Monitoring is carried out throughout the process to identify deviations that may occur. In contrast, previously planned activities are carried out (Martins, 2020) and comprise the validation of the execution of actions (Pereira, 2020). Monitoring is a step toward monitoring and control during the evaluation. It can also occur more specifically, for example, when the team manager monitors subordinates to check the team's engagement and development (Silva, 2020) or when field visits take place for follow-up and interviews with participants (Gomiero, 2020). 2020) or evaluating current performance (Munduc et al., 2020). Therefore, it can be extracted from the literature that monitoring is an essential step in the evaluation process, as it is part of the monitoring and control.

As explained above, the fourth step of the evaluation process was the Analyze. According to the literature survey, analyzing the results was the most common step of the evaluation process. The authors generally understand that the analysis concerns evaluating the results. Thus, it is understood that analyzing is a) generating the results of the research carried out (Zadi, 2021), b) understanding the risk and establishing the consequences of the risks and the probabilities of them happening (Oliveira, 2020), c) evaluating the results, where the results obtained and the planned objectives are interpreted and compared, and may or may not stipulate new objectives (Martins, 2021; Lestari et al. 2021), d) prepare and analyze a report based on the data that were collected with the evaluation (Gomiero, 2020), compiling the results and analyzing them (Costa, 2020), e)

working with the data and investigating the results, according to the planned objectives, carrying out the evaluation process (Ramadhan et al., 2021), f) gathering the results (Munduc et al., 2021), g) evaluation of planning perspectives (Oliveira, 2020), h) progress in the evaluation by answering questions that have not yet been answered (Handojono et al., 2021) and, more specifically, being the record to measure the degree of engagement (Silva, 202 0). Because of all the above, analysis is one of the most critical steps of the evaluation process since it surveys the collected data, interprets and compare to investigate the results; that is, it is the advance of the evaluation.

The fifth and final essential step of the evaluation process determined in the present study is to prepare and disseminate the report. It must be designed based on the data collected in the evaluation (Gomiero, 2020; Costa, 2020), be later released (Costa, 2020), make a balance of the results to help improve performance in the future (Costa, 2020), allow learning (Ankomah, 2021) and to become a source of information for the development of procedures for stakeholders (Oliveira, 2020). In addition, this step contains all steps of the evaluation process (Pereira, 2020), giving transparency to the evaluation process. Therefore, preparing and disseminating the report is extremely important in the evaluation process because, in addition to publicizing what was evaluated, it allows learning and seeking to improve procedures for future evaluations.

5. Conclusion

This work took stock of the literature on the evaluation process steps. It was found that the steps of this process are to plan, execute, monitor, analyze the results and prepare and disseminate the report. Each step of this assessment process is complex, representing a complete process. For that reason, there is evaluation planning, execution, and so on. The definition and understanding of the evaluation process steps are of paramount importance for the scientific knowledge of the management process, not only in the specific literature but as a whole. Evaluation processes are present in many fields, and the clear and detailed separation of this process facilitates and effectively its success. Each scientist interested in the qualifications of this procedure must have direct access to the best and most rigorous science product on the subject to allow the continuous advancement of science.

In the management practice of organizations, the benefits of improved knowledge of the essential steps of the evaluation process and its content are also evident in the management practice of organizations. Managers interested in assessments of any kind, such as personnel in their organizations, and who do not have experience in the procedure, must be clear about where to start and which steps must be taken to meet the intended deliverables. Another benefit generated by this knowledge occurs when the evaluation does not have the desired course and result. It is due to some procedural error. In this case, the best knowledge on the subject must be used. Knowing the content of each step, what was missing, and what should be changed helps to correct the paths used and carry out the assessment in a powerful way.

Finally, as a recommendation for future studies, we suggest another literature review to elaborate an operational definition of the evaluation process. This operational definition seeks to define the main dimensions and analytical categories capable of explaining the evaluation phenomenon and influencing the execution of each stage. We also recommend an empirical study to assess the explanatory power of the evaluation process developed in this study.

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