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# Design Science Research as a Research Methodology in Accounting in Brazil: A Systematic Literature Review

Design Science Research como Metodologia de Pesquisa em Contabilidade no Brasil: Uma Revisão Sistemática da Literatura

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#### **ABSTRACT**

The aim of this article was to identify how Design Science Research (DSR) has been used as a research methodology to propose artifacts that address problems in the accounting field in Brazil. To this end, a Systematic Literature Review (SLR) was conducted in national databases. This study fills a gap in the literature, since no SLRs were found on the use of DSR applied to accounting. It was found that DSR has grown over the years as a research methodology in Brazilian accounting, mainly in dissertations. Most researchers present as the general objective of their studies to "propose" and "develop" artifacts, which are, in most cases, of the "framework" and "method" types and are directed to different contexts, such as the public sector, accounting firms, educational institutions, rural producers, and companies in general. To develop such artifacts, researchers mainly use the protocol presented by Dresch et al. (2015) and adopt as research strategies, primarily, interviews, observation, and questionnaires. Thus, this study contributes by presenting a state of knowledge on DSR in the national context, which may encourage new researchers to choose this methodology to address problems they encounter in their realities and to fill gaps both in scientific literature and in organizational practices.

Keywords: Accounting Science. Artifacts. Research Methodology.

## **RESUMO**

O objetivo deste artigo foi identificar como a *Design Science Research* (DSR) tem sido utilizada como metodologia de pesquisa para propor artefatos que solucionem problemas da área contábil no Brasil. Para tal, realizou-se uma Revisão Sistemática da Literatura (RSL) em bases de dados nacionais. Este trabalho preenche uma lacuna na literatura, uma vez que não foram encontradas RSL sobre a DSR aplicada na contabilidade. Constatou-se que a DSR tem crescido ao longo dos anos como metodologia de pesquisa na área contábil brasileira, principalmente em dissertações. Os pesquisadores, em sua maioria, apresentam como objetivo geral de seus trabalhos "propor" e "desenvolver" artefatos, que são, na maior parte dos casos, do tipo "framework" e "métodos" e são direcionados para diferentes contextos, como setor público, escritórios contábeis, instituições de ensino, produtores rurais e empresas em geral. Para desenvolver tais artefatos, os pesquisadores usam, majoritariamente, o protocolo apresentado por Dresch *et al.* (2015) e adotam como estratégias de investigação, principalmente, as entrevistas, observação e questionários. Desse modo, o presente trabalho contribui por apresentar um estado do conhecimento sobre a DSR no contexto nacional, o que pode incentivar novos pesquisadores a escolherem essa metodologia para solucionar problemas que encontram em suas realidades e preencher lacunas tanto na literatura científica quanto nas práticas organizacionais.

Palavras-chave: Artefatos. Ciência Contábil. Metodologia de pesquisa.

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#### 1 INTRODUCTION

Scientific research has, in many cases, focused on describing and explaining phenomena. However, on some occasions, problems arise that require solutions, which may also be found through scientific investigations. Thus, there emerges the need to conduct studies that are, in terms of their objectives, propositional. Nevertheless, to carry out this type of research, it is necessary to have a methodology that supports it, bringing to light the Design Science paradigm, which underpins different scientific methodologies, among them Design Science Research (DSR).

Design Science Research (DSR) is a research methodology whose aim is to propose artifacts that enable the solution of real problems (Dresch *et al.*, 2015). These artifacts are conceptualized as material or immaterial resources that can improve human practices and actions (Simon, 1981). Thus, DSR is considered a propositional research methodology, since it complements descriptive and explanatory approaches. However, it does not limit itself to merely describing or explaining a problem; instead, it advances in the search for feasible solutions (Ahmad *et al.*, 2022). Compared with other methodological approaches, DSR stands out not only for proposing solutions, but also for enabling the construction of an artifact that is testable, applicable, and reproducible.

Despite its consolidation in areas such as computer science and information systems (Deng *et al.*, 2017; Barata & Cunha, 2023; Jesus *et al.*, 2023; Santana *et al.*, 2024), and its growth in the fields of business and economics, the literature shows that the adoption of DSR is still incipient in the applied social sciences (Fernandes *et al.*, 2022). Recent systematic literature reviews have discussed the use of this methodology in different fields (Dresch *et al.*, 2019; Angeluci *et al.*, 2020; Goecks *et al.*, 2021; Ferreira *et al.*, 2022; Fernandes *et al.*, 2022; Galvão et al., 2024), but no studies have specifically analyzed its application in Accounting Science.

Filling this gap is relevant because accounting is also an artificial science (Simon, 1981) and, therefore, it requires the development of artifacts capable of improving professional practices and addressing concrete problems in organizational contexts. However, there is still a lack of studies that demonstrate how DSR has been incorporated into accounting research, which artifacts have been proposed, and what the profile of this production is in Brazil. In light of this, the following question arises: What is the profile of the production on DSR in the accounting field in Brazil? Thus, the objective of this study is to identify how DSR has been used as a research methodology to propose artifacts that solve problems related to the



accounting field in Brazil. To achieve this objective, a Systematic Literature Review (SLR) was conducted in national databases, since, as pointed out by Fernandes et al. (2022), international databases (such as Scopus and Web of Science) tend to present more results from European countries.

The contribution of this investigation lies in the findings of the SLR which, through its systematization of national production, makes it possible to understand how DSR has been adopted in accounting, which artifacts have been developed, and in which accounting topics it has been most frequently applied. These results strengthen accounting research by providing support for the training of new researchers, since the findings can be discussed in courses and curricula of graduate programs.

Furthermore, this research is justified by the fact that it highlights a gap in the literature, as no systematic literature reviews (SLR) on design science research (DSR) in accounting in Brazil were found. In doing so, it contributes to both the accounting research field and professional practices, since DSR develops artifacts that are applicable to organizations in a robust and innovative way. Thus, it fosters dialogue between universities and accounting institutions, which can collaboratively propose artifacts that integrate theory and practice, methodological rigor, and flexibility in application.

#### 2 THEORETICAL FRAMEWORK

#### 2.1 DESIGN SCIENCE RESEARCH

The Design Science Research (DSR) methodology aims to enhance human and organizational capabilities through the creation of new, innovative, and relevant artifacts, whose application can be beneficial in solving real problems (Mwilu *et al.*, 2016; Ahmad *et al.*, 2022). It is a type of research that complements descriptive and explanatory approaches (Ahmad *et al.*, 2022) and is therefore considered a propositional research method, since it aims to propose artifacts (Dresch *et al.*, 2015).

In general, artifacts were conceptualized by Simon (1981), a seminal author of the approach discussed in this study, as artificial objects (that is, created by humans) designed to produce changes in the environment in which they live and act. In this sense, Mwilu *et al.* (2016) summarized that artifacts can be presented in the form of constructs, models, methods, and instantiations. However, this does not prevent other types of artifacts from emerging and being developed, as this is only a summarized way of presenting this element of DSR.

However, regardless of the type of artifact, it is necessary to develop it systematically,



recording all procedures performed to ensure rigor in the investigation (Jesus *et al.*, 2023). There are, therefore, different protocol models. However, Sonnenberg and Brocke (2012) understood that all available options can be summarized as the identification of a problem, the construction of the artifact, and the demonstration of its use or utility.

In the first phase, it is necessary to define a problem, which can be done by considering the state of the art as well as dialogue and experience with professionals in a given field (Zimmermann *et al.*, 2023). Thus, in this phase, it is essential to establish the needs, objectives, and target audience that may benefit from the artifact to be developed. Next, it is necessary to develop the artifact and then validate it to ensure that it has internal and external consistency, is appropriate, easy to use, and relevant to the context in which it was developed (Sonnenberg & Brocke, 2012). However, it is important to bear in mind that it is not possible to produce a perfect artifact, but it is possible to reach a satisfactory level, that is, a plausible solution to the problem identified in a real-world context (Pradeep *et al.*, 2021).

There should also be a demonstration phase, which provides evidence that both the rigor and relevance cycles were considered. The rigor cycle shows that the artifact was developed based on knowledge, theories, and experiences, while the relevance cycle demonstrates that it meets the needs for which it was designed (Blanka *et al.*, 2022). To illustrate, we briefly present the study by Zen (2024). In the aforementioned research, the objective was to develop an artifact to support accounting professionals in guiding their clients regarding compliance with the General Data Protection Law (LGPD). This study constitutes a practical guide for applying DSR, based on the Mason (2006) protocol.

Zen (2024) started with the **problem awareness** phase, through a review of the literature, reflections on her professional experience, and unstructured interviews with experts on the artifact's topic. Next, in the **suggestion** phase, she organized the initial requirements for designing the artifact. In the **development** phase, she created the method, which was subsequently submitted for **evaluation** and tested by users directly related to the problem. Finally, in the **conclusion** phase, the researcher incorporated the improvements suggested by the evaluators in the previous phase and presented the final version of the artifact.

This example illustrates how DSR research, when applied in practice, adds theoretical and practical value, as well as providing security to the researcher during its execution and transparency to the reader, who can understand how each step of the investigation was conducted. For this reason, it is interesting to observe how this methodology has been adopted in different fields of knowledge, in order to identify a range of options for its application in

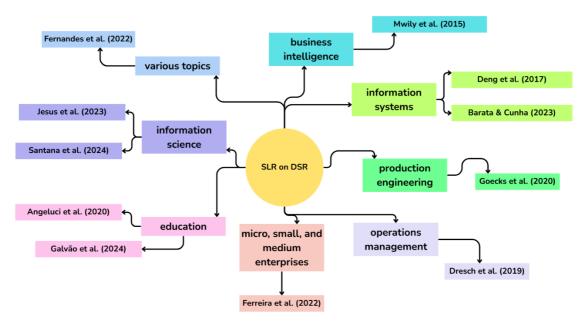


proposing solutions to different classes of problems. In this study, accounting was chosen as the field of analysis. However, to better understand the scope of DSR in this discipline, it is relevant, before focusing specifically on it, to examine other studies that have already discussed this research approach. The next subsection presents a synthesis of some related studies.

#### 2.2 PREVIOUS STUDIES

Through a preliminary search, we found that other SLRs have already been conducted focusing on DSR as a research methodology. These studies address different fields of knowledge that have adopted this approach to carry out their investigative steps. Thus, Figure 1 presents a conceptual map organizing research that has sought to understand how DSR is applied in scientific studies.

Figure 1
Existing Systematic Literature Reviews on DSR



Source: Author's elaboration (2025)

The studies focused particularly on analyzing the **types of artifacts** most developed in their respective fields (Mwilu *et al.*, 2015; Deng *et al.*, 2017; Angeluci *et al.*, 2020; Goecks *et al.*, 2021); the **classes of problems** or **thematic focus** of the studies (Goecks *et al.*, 2021; Fernandes *et al.*, 2022; Jesus *et al.*, 2023); the **verbs** most frequently used to characterize the general objective (Dresch *et al.*, 2019; Galvão *et al.*, 2024); **protocols** adopted for the execution of DSR (Dresch *et al.*, 2019; Galvão *et al.*, 2024); **methods of data production** and/or **artifact evaluation** (Deng *et al.*, 2017; Dresch *et al.*, 2019; Fernandes *et al.*, 2022; Galvão *et al.*, 2024); **contributions and limitations of the research** (Goecks *et al.*, 2021; Barata & Cunha, 2023;



Galvão *et al.*, 2024); and the **most productive countries, authors, and institutions** (Fernandes *et al.*, 2022; Santana *et al.*, 2024; Galvão *et al.*, 2024).

Although this paper also addresses issues previously raised in other studies, adapting them to its context (as will be clarified in the methodology section), it stands out because no prior research, up to the time of this study (first semester of 2025), has conducted a mapping of the literature on the adoption of DSR in the accounting field.

In addition, most studies focused on databases that give greater visibility to international research (Mwilu *et al.*, 2015; Deng *et al.*, 2017; Dresch *et al.*, 2019; Goecks *et al.*, 2021; Fernandes; Oliveira & Borsato, 2022; Jesus *et al.*, 2023; Barata & Cunha, 2023), except for Galvão *et al.* (2024), who focused on education, and Santana *et al.* (2024), who focused on information systems, using the Digital Library of Theses and Dissertations (BDTD). Regarding national production, Fernandes *et al.* (2022) also addressed this concern. However, the authors conducted a comprehensive analysis of the use of DSR as a research methodology, without delimiting a specific field of knowledge.

Thus, to achieve the objective of this research and contribute to the existing literature, filling the gap regarding the adoption of DSR in accounting, it was necessary to establish coherent methodological procedures aligned with the proposal, which ensure the security of the investigative process. This aspect of the research is addressed in the next section.

#### 3. METHODOLOGY

A Systematic Literature Review (SLR) is a type of bibliographic research that consists of a rigorous and systematic review of the literature, following an explicit and reproducible methodology (Okoli, 2019). This type of study provides theoretical support to those interested in the discussed topic (Santos *et al.*, 2021), allowing a deeper understanding of what has been produced on the subject, the main discussions, methodologies, and other relevant issues. For this purpose, qualitative methods are mainly used (Mercês *et al.*, 2017).

In addition, it is relevant to adopt a protocol that guides the researcher's steps, providing security to maintain objectivity during the data production process (Ferreira *et al.*, 2022). Therefore, in this study, PRISMA 2020 was chosen, systematized by Page *et al.* (2021), which is one of the most widely used and respected in the production of SLRs (Marcondes & Silva, 2022).

In this study, the scope covered Brazilian research in the accounting field that adopts DSR as a research methodology. For this purpose, national databases were chosen, namely:



BDTD, Oasisbr (maintained by the Brazilian Institute of Information in Science and Technology), CAPES Journals, and SciELO Brazil.

The search string adopted was "design science research" AND ("contabilidade" OR "contábil" OR "contábeis")<sup>1</sup>, with the terms searched in the abstracts of studies available in BDTD, Oasisbr, and SciELO Brazil. In the CAPES Journals portal, this filter was not available; therefore, the search was conducted in the full texts. It should be emphasized that the term "design science research" was kept in English, since there is no official translation into Portuguese, and the national reference literature on DSR — including Dresch *et al.* (2015), as well as more recent systematic reviews — also adopts the term in its original language (Fernandes *et al.*, 2022; Santana *et al.*, 2024; Galvão *et al.*, 2024).

Applying the aforementioned string, we found 64 studies (search conducted in February 2025). It is worth noting that no filters were applied regarding the year of publication or the type of study (article, undergraduate thesis, dissertation, or doctoral thesis), as the goal was to cover as many works as possible to provide a broad understanding of the chosen topic.

We excluded duplicate texts (29 in total) and those that were not openly available (1 in total), selecting 34 studies for preliminary analysis. However, it was necessary to establish inclusion and exclusion criteria, which should be applied to these items through a careful reading of the texts (Slongo et al., 2023). Therefore, the 34 previously selected documents had their titles, abstracts, and keywords critically analyzed to identify those that could remain in the group of studies to compose the SLR. Table 1 presents the selected inclusion and exclusion criteria.

**Table 1** *Inclusion and Exclusion Criteria* 

Inclusion Criteria	Exclusion Criteria
Research conducted in Brazil	Research conducted in other countries
Research using DSR as a methodology	Research using a methodology other than DSR
Empirical research	Theoretical research or literature reviews
Research in the accounting field	Research in other fields of knowledge

Source: Author's elaboration (2025)

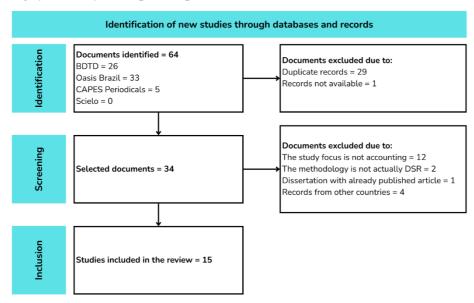
Applying these criteria, 15 studies were selected for full reading. Figure 2 presents the sample selection flow, as organized according to the PRISMA protocol.

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 $<sup>^1</sup>$  The search string included terms in Portuguese ("contabilidade," "contábil," and "contábeis") because this study focuses specifically on the Brazilian literature.



Figure 2
Filtering of articles for sample composition



Source: Adapted from the PRISMA 2020 Protocol.

Moreover, for the analysis of the studies to effectively contribute to scientific discussions, it is relevant to establish research subquestions that guide the reading of the selected studies. These subquestions (Table 2) are essential to address the main research question presented in the introduction of this article.

**Table 2** *Research Subquestions* 

Ordem	Research Subquestions	Adapted from
1	Which verbs are most used in the objectives of	(2024)
	studies adopting DSR as a scientific methodology in	
	accounting in Brazil?	
2	Which protocols are most used by Brazilian studies	Dresch et al. (2019); Galvão et al.
	adopting DSR as a research methodology in	(2024)
	accounting?	
3	Which data production methods are most used by	Deng et al. (2017); Fernandes et al.
	Brazilian studies adopting DSR as a research	(2022)
	methodology in accounting?	
4	Which artifacts are most developed in studies	Mwilu et al. (2015); Deng et al. (2017);
	adopting DSR as a scientific methodology in	Goecks et al. (2021); Angeluci et al.
	accounting in Brazil?	(2020); Fernandes <i>et al.</i> (2022)





Which groups benefit from the artifacts produced in Brazilian studies adopting DSR as a scientific methodology in accounting?

Goecks *et al. (2021)*; Ferreira *et al.* (2022); Fernandes *et al.* (2022)

Source: Author's elaboration (2025).

The studies that composed the sample were read in full, and the relevant excerpts to answer the research subquestions were highlighted and organized in Excel sheets, allowing the information to be systematically categorized according to thematic categories related to the subquestions. The analysis was conducted deductively, using categories previously defined based on the subquestions, but the organization of the data maintained flexibility, as specific details were not predetermined.

For example, in the subquestion: "Which protocols are most used by Brazilian studies adopting DSR as a research methodology in accounting?", the possible protocols were not previously defined, allowing them to emerge from reading the studies. This approach ensured both rigor and flexibility, allowing the identification of trends and nuances not previously anticipated. In this way, the outlined methodology proved adequate to achieve the objective proposed at the beginning of the investigation, culminating in the results presented in the next section.

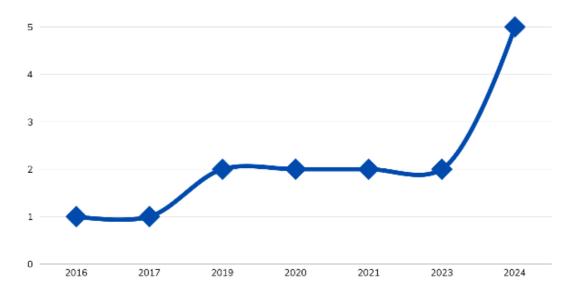
#### **4 RESULTS ANALYSIS**

# **4.1 SAMPLE DESCRIPTION**

The fifteen analyzed research studies cover the period from 2016 to 2024. As shown in Figure 3, there is a noticeable trend of growth in studies conducted using the DSR methodology in the accounting field. A similar trend has also been observed in research from other disciplines (Deng et al., 2017; Jesus et al., 2023). This finding suggests that knowledge fields are gradually moving beyond mere description and explanation of problems, aiming to propose solutions to challenges encountered in real-world contexts.



Figure 3
Timeframe of the studies in the sample



Source: Author's elaboration (2025).

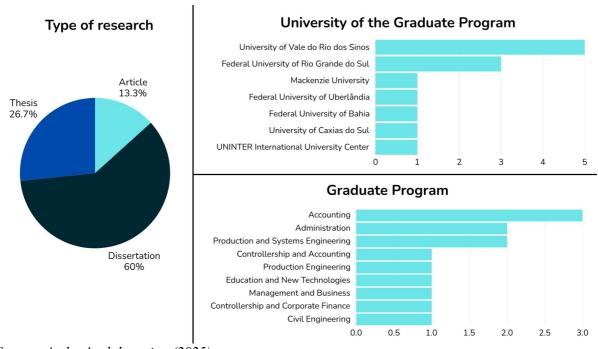
Regarding the type of research, as found by Galvão *et al.* (2024), most of the studies were dissertations. This result suggests that the master's degree is still the preferred setting for applied research, while the doctoral degree tends to focus on more theoretical contributions. Thus, it is recommended that doctoral candidates also consider the possibility of conducting research with a contextualized and practical approach during this stage of postgraduate studies, as they will be more mature researchers and have more time to develop their investigations (considering that doctoral programs usually last four years, while master's programs last only two). Moreover, conducting practical research, such as DSR, does not exempt the researcher from grounding their work in established theories, nor does it prevent their practical contributions from filling theoretical gaps and fostering the development of new conceptual insights.

Regarding the institutions where the graduate research (theses and dissertations) was conducted, most of the studies took place at Rio dos Sinos University. In the study by Fernandes *et al.* (2022), the most productive university in this regard was the Federal University of Rio Grande do Sul, which, in the present study, was the second institution with the highest number of studies in the sample. As for the graduate programs where the theses and dissertations were carried out, most were in accounting programs, followed by management



and production engineering programs. Figure 4 summarizes these results.

**Figure 4**Synthesis of the Types and Origins of the Research <sup>2</sup>



Source: Author's elaboration (2025).

Federal University of Uberlândia (Lisboa et al., 2019).

Before this brief presentation of the sample profile, we follow to expose the answers for subquestions research that guide the SLR. We emphasized that in the second moment, there will be a deepening in the content of the analyzed studies, for the readers to know them and, at the same time, understand their theoretical and practical contributions to the accounting field.

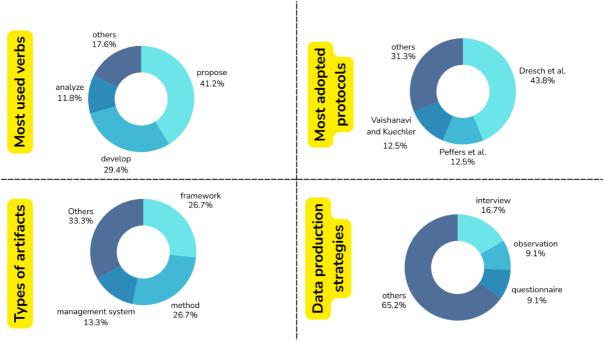
## 4.2 ANSWERS TO THE RESEARCH SUBQUESTIONS

As part of the SLR, five research subquestions were formulated to guide the reading of the studies and enable an understanding of their contributions to the accounting field. Figure 5 summarizes some of the results discussed below, referring to the first four research subquestions.

<sup>&</sup>lt;sup>2</sup> The figure shows the institutions of the research classified as "Dissertation" and "Thesis." In the case of articles, the institution of each author was considered individually; that is, if an article had multiple authors affiliated with different institutions, each institution was counted separately. For example, the analyzed articles included authors from the State University of Santa Catarina (Turini & Raupp, 2024), the Brazilian Army, UNISINOS, and the







Source: Author's elaboration (2025).

The first research subquestion was: "Which verbs are most commonly used in the objectives of studies adopting DSR as a scientific methodology in accounting in Brazil?" This aspect is relevant because it is necessary for the verb chosen in the objective to be coherent with the type of investigation. Considering that DSR is a propositive research approach (Dresch et al., 2015), it is essential that the objective reflects this perspective.

In the present study, the most frequently used verbs were "to propose" and "to develop," as was also the case in Galvão *et al.* (2024). This result is relevant because it demonstrates the alignment between the type of investigation (which is propositive) and the verbs, as they denote the proposition and development of solutions. This confirms the methodological adherence to DSR and reinforces that the accounting research field in Brazil has been advancing toward the proposition of practical solutions, not merely descriptive ones.

The second subquestion was, "Which protocols are most used by Brazilian studies adopting DSR as a research methodology in accounting?" As in the study by Galvão *et al.* (2024), the protocol of Dresch *et al.* (2015) was the most frequently adopted. This protocol organizes the research process into 12 steps as follows: i) identification of the problem; ii) problem awareness; iii) systematic literature review; iv) identification of existing artifacts; v) proposal of the artifact to solve the problem; vi) design of the artifact; vii) development of the



artifact; viii) evaluation of the artifact; ix) explication of learning; x) conclusions; xi) generalization to a class of problems; and xii) communication of the results. As can be seen, the use of this protocol in DSR research demonstrates standardization of the methodological process, ensuring the robustness and traceability of the research, as well as its replicability in new investigative contexts.

Next, the third subquestion was addressed: "Which data production methods are most used by Brazilian studies adopting DSR as a research methodology in accounting?" Through reading the studies, 19 different strategies were identified, with interviews being the most frequently used by accounting researchers applying DSR, followed by observation and questionnaires. This result is similar to findings in other fields, as reported by Deng *et al.* (2017), Fernandes *et al.* (2022), and Galvão *et al.* (2024).

Furthermore, these strategies can be valuable both in the problem identification and definition stages, as well as in the artifact validation stage. Additionally, the variety of possible methods demonstrates flexibility in data collection, which is appropriate given the iterative and applied nature of DSR. The predominance of interviews reinforces the importance of engaging with the real context to assess the validity of accounting artifacts.

The fourth subquestion was, "Which artifacts are most developed in studies adopting DSR as a scientific methodology in accounting in Brazil?" This question also yielded an answer. Through the analysis of the studies in the sample, eight types of artifacts were identified, with frameworks and methods being the most frequently used, a result very similar to the findings of Deng *et al.* (2017) and Galvão *et al.* (2024). Methods refer to a set of structured steps to perform specific tasks aimed at solving a problem or achieving an objective (Madureira *et al.*, 2024), while frameworks are graphic or narrative structures that present the key factors to understand a specific topic (Miles & Huberman, 1994).

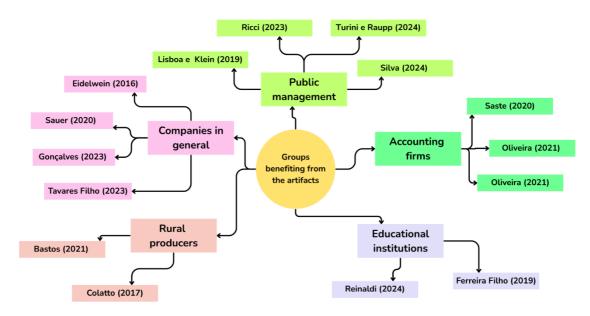
In general, frameworks can be considered more flexible structures than methods, as they present a semi-finished structure that allows customization by the user (Madureira *et al.*, 2025). However, regardless of the researcher's choice (framework or method), this result indicates that accounting studies adopting DSR as a methodology aim to develop guides (with varying levels of flexibility) that enable practical application in accounting activities, tasks, and actions, which can facilitate the daily work of professional accountants and improve organizational management and efficiency.

Finally, the subquestion that concluded the SLR was: "Which groups benefit from the artifacts produced in Brazilian studies adopting DSR as a scientific methodology in



**accounting?**" By reading the studies, it was possible to identify that DSR is used in accounting to design artifacts that can support different groups in various contexts. The studies were then grouped into five categories based on the target audience benefiting from the artifact, as illustrated in Figure 6.

Figure 6
Groups benefiting from the developed artifacts



Source: Author's elaboration (2025).

The first group was formed by studies that developed artifacts aimed at **public management**. In this group, four different types of artifacts were developed. In Lisboa *et al*. (2019), a method was designed to conduct an operational audit in the Brazilian Army. Ricci (2024) developed a management accounting system focused on sustainability information for a mixed-economy company in the sanitation sector. Additionally, the study by Turini and Raupp (2024) created a framework to assist Brazilian municipalities in decision-making regarding the concession of the Refis tax benefit. Finally, Silva (2024) organized a course based on David Kolb's Experiential Learning model to train public managers in cost accounting.

These studies provide relevant contributions to the public sector, particularly regarding organizational efficiency, process improvement, and decision-making, both through the materials developed (methods, systems, and frameworks) and through the training of public servants. Additionally, they open the possibility for new research, as the methods and frameworks can be adopted in other public institutions to analyze their adaptability in different contexts. Furthermore, the development of training courses for public managers can inspire the



implementation of other teaching-learning strategies. The fact that Silva (2025) adopted Experiential Learning as the theoretical basis of the course can help professionals involved in people development and management to understand an andragogical teaching approach, suitable for training teams of employees.

The second group that emerged from the analysis was composed of **accounting firms**. In this group, two frameworks and one method were developed. The focus of the studies was on improving the quality of services provided by the firms (Sastre, 2020), allowing them to better serve their clients in specific aspects, such as compliance with the General Data Protection Law (LGPD) (Zen, 2024). Additionally, there was an intention to support the firms in their digital transformation process (Oliveira, 2021).

The three studies present relevant contributions that can benefit not only the accounting firms where they were tested during the research process but also other institutions, due to their high level of flexibility (especially the frameworks) and because they address topics of national scope (as in the case of the LGPD). Moreover, all studies cover current and relevant issues in light of the technological disruptions that are transforming the role and profile of accounting professionals.

The third group to benefit were **educational institutions**, especially regarding teaching-learning processes and teacher training. The first study was by Ferreira Filho (2019), who developed a business game called "Contabuleiro," aimed at providing teachers with a tool that promotes enjoyable and engaging learning for students, so that student motivation is driven not by an external event but by the task itself. The second study was by Reinaldi (2024), which presented a teacher training workshop as the artifact, focused on accounting professors for the use of gamification in accounting education. The author also relied on Experiential Learning Theory to support the proposed teaching-learning process, as Silva (2024) did.

The flexibility of use and the availability of access are the differentiating aspects of these studies. Ferreira Filho (2019) made available in his dissertation the board and game cards, allowing users to create new cards and adapt the ones already available. Reinaldi (2024) uploaded all the workshop video lessons to an open website for interested parties<sup>3</sup>. These initiatives enable the improvement of teaching and learning processes for both teachers and students, considering them as participants in a continuous development process. Moreover, these studies can contribute to the creation of other artifacts for accounting education, such as

<sup>&</sup>lt;sup>3</sup> Available at: <a href="https://desvendando-a-gamificacao-no-ensino-de-contabilidade.webnode.page/">https://desvendando-a-gamificacao-no-ensino-de-contabilidade.webnode.page/</a>



games, apps, and information systems with an educational focus, as well as guidance for teachers who need to rethink their teaching practices in light of contemporary demands.

The **rural producers** were also benefited by artifacts developed in the analyzed studies. In the study by Colatto (2017), a company in the poultry industry benefited from a method to measure the positive and negative environmental impacts of its activities. Meanwhile, Bastos (2021) aimed to contribute to the practical knowledge of rural producers in banana cultivation regarding cost calculation. Both studies can be adapted to other rural contexts and open opportunities for further research that supports this group, which, in many cases, lacks accounting knowledge to make efficient decisions on issues such as pricing, waste reduction, operational efficiency, planning, cash flow, and other aspects.

The last group was formed by **companies from different sectors**. In this group, four types of artifacts were developed: method, model, framework, and system. Two studies focused on cost management and production planning and control in the construction industry (Sauer, 2020) and the graphic industry (Gonçalves, 2023). Environmental issues were also addressed in this group, resulting in the development of a method to prepare the Environmental Economic Result Report (DREA) by Eidelwein (2016). Finally, an information system was developed to evaluate the economic and financial performance of micro and small companies (Tavares Filho, 2023). Despite these contributions, the studies highlight that, given the complexity of the business environment, DSR still has a broad and largely unexplored potential for application. The challenges faced in the Brazilian market represent a fertile field for further propositive research.

It is important to highlight that, with the Tax Reform, companies and accounting professionals will need artifacts to help them navigate the new scenario. Resources such as guides, methods, and frameworks can be developed to support professionals in performing their tasks, updating their knowledge, and configuring systems to comply with the new legislation. In addition, courses and training programs will be important for building the skills of accountants and also for supporting teachers who will be responsible for tax accounting courses. These training initiatives can be designed using DSR, ensuring that the plan meets both scientific rigor and practical flexibility.

Considering these aspects, it can be noted that DSR can advance to investigate new accounting objects that are still underexplored, such as real-time digital auditing systems, metrics of public value applied in government management, solutions for integrated sustainability reports, artifacts to support tax accounting in the post-Reform context, and



methods for predictive accounting using artificial intelligence. These future directions not only expand the scope of DSR applications in the accounting field but also strengthen its role as a bridge between theory and practice.

In this way, it is possible to perceive the variety of possibilities and contexts for applying DSR research, which can bring theoretical and practical benefits, improving academic discussions and, above all, the reality of organizations. Through well-founded and carefully developed artifacts, respecting scientific and technical aspects, public and private institutions can benefit from the results of the research, breaking the stigma that separates academia from the market.

# **5 FINAL CONSIDERATIONS**

The objective of this research was to identify how DSR has been used as a research methodology to propose artifacts that address problems related to the accounting field in Brazil. Through an SLR, it was possible to analyze 15 studies that applied DSR as a methodology to develop artifacts aimed at solving problems aligned with the accounting field.

With this, the guiding question, "What is the profile of the production on DSR in the accounting field in Brazil?" received the following answer:

DSR has been growing over the years as a research methodology in the Brazilian accounting field, mainly in the development of dissertations. In most cases, researchers present the general objective of their studies as "to propose" and "to develop" artifacts, which are mostly of the "framework" and "method" types and are directed toward different contexts, such as the public sector, accounting firms, educational institutions, rural producers, and companies in general. To develop these artifacts, they mainly use the protocol presented by Dresch et al. (2015) and adopt investigation strategies, primarily interviews, observation, and questionnaires (Research data).

Thus, we conclude that the research achieved its objective and answered the research question. The main limitation of this paper is that SLR studies are constrained by the researchers' choices, such as the databases selected, the search strings adopted, and the inclusion and exclusion criteria. These aspects may cause relevant studies to be left out of the analyzed sample. However, making such choices, which lead to the inclusion of some studies and the exclusion of others, is inherent to this type of investigation.

Despite this limiting factor, the contribution of this study remains, as it presents a state of knowledge on DSR in the national context. This can encourage new researchers to adopt



this methodology to address problems encountered in their realities and to fill gaps both in the scientific literature and in organizational practices.

The results indicate that the greater concentration of research in the South region highlights the need to broaden the discussion on DSR in graduate programs from other regions, encouraging its inclusion in methodology courses and applied research projects. Moreover, the fact that most studies are dissertations suggests that the master's level remains the main space for applied research, while doctoral programs tend to focus more on theoretical contributions. Additionally, to increase the impact of the artifacts produced by these studies, it is recommended that the developed materials also be communicated through scientific articles and made available on broader-access platforms, enabling accounting professionals from different contexts to benefit from adaptable solutions.

Regarding the practical implications and research suggestions, the findings point to concrete opportunities for the advancement of DSR in accounting. Future studies may explore new accounting objects related to management control, sustainability metrics, corporate governance, risk management, tax reform, predictive accounting, artificial intelligence, and accounting compliance. Furthermore, there is room for geographic expansion, as this research may encourage the development of projects and courses on DSR in other regions of Brazil, promoting a greater diversity of contexts and research problems.

Thus, this paper can promote greater integration between university levels and the accounting professional market. It may encourage the use of DSR in both graduate and undergraduate research, diversifying contributions and strengthening both practical and theoretical training. In addition, it addresses the needs of organizations and accounting departments. However, to achieve this, it is recommended that authors who adopt DSR make the artifacts they create available in accessible formats, such as websites designed for research communication, since these artifacts can be adapted and replicated in different contexts.

For further research, we recommend i) expanding the SRL for international and Latin American bases, exploring the emergent contexts and regional challenges; ii) investigating new accounting objects in different contexts, like the public and private sectors and accounting education; and iii) analyzing the ways of communication of the artifacts adopted by researchers. Thus, this paper gives ways for researchers, institutions, and professionals to work collaboratively in the search for solutions for the accounting challenges in a way that bonds theory and practice by DSR.



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