

**The role of the accountant in the financial market and senior management:
mathematical-financial models, analytical technologies, and decision-making**

**A atuação do contador no mercado financeiro e na alta gestão: modelos matemático-
financeiros, tecnologias analíticas e tomada de decisão**

**La actuación del contador en el mercado financiero y en la alta gestión: modelos
matemático-financieros, tecnologías analíticas y toma de decisiones**

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ABSTRACT: The role of the accountant in the financial market and in senior management has been redefined by the intensified use of accounting information in mathematical-financial models, predictive analytics, artificial intelligence, risk management, valuation, and data-driven decision-making processes. This study asks how scientific production from 2023 to 2026 has analyzed the accountant's role in the financial market and senior management, especially regarding the use of mathematical-financial models and analytical technologies to support decision-making. The objective is to analyze, through a systematic literature review, how recent studies address the strategic repositioning of accountants in highly complex financial environments. The study is justified by the growing demand for professionals capable of integrating accounting information, financial modeling, risk analysis, artificial intelligence, and technical judgment. The identified gap stems from the dispersion of studies across financial accounting, controllership, corporate finance, digital competencies, artificial intelligence, and risk. The article contributes by proposing an analytical matrix composed of informational, quantitative, technological, and strategic dimensions.

Keywords: Accounting; Financial Market; Senior Management; Mathematical-Financial Models; Artificial Intelligence.

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1 INTRODUCTION

The role of the accountant in the financial market and in senior management has undergone a substantive inflection, as professional responsibilities have expanded from recording, compliance, and retrospective preparation of financial statements to analytical, prospective, and decision-oriented functions. This shift expands classical accounting technique into environments in which financial statements, performance indicators, capital structures, risk assessment, economic-financial projections, and value metrics become indispensable inputs for strategic decision-making. Zhang, Sun and Leung (2025) demonstrate that the accounting-finance profession has increasingly required digital competencies associated with data analysis, automation, business intelligence, and technological interpretation, while Frezatti (2026) positions management accounting and controllership as fields directly linked to the informational support of management, planning, control, and organizational performance evaluation.

This reconfiguration becomes especially relevant in the financial market, including banks, fintechs, controllership areas, analytical auditing, risk management, financial planning, and functions close to senior administration. In these spaces, the accountant interprets complex economic-financial information and translates it into criteria useful for credit, investment, valuation, governance, compliance, and capital allocation. Kureljusic and Karger (2024) show that artificial intelligence has been incorporated into forecasting problems in financial accounting, particularly in contexts in which accounting information is used to anticipate results, risks, and economic behavior. Magni (2026) reinforces the structural connection between financial mathematics, accounting, and corporate finance by showing that cash flows, rates, capital amounts, and investment decisions require integrated treatment between accounting measurement and financial modeling.

At the applied level, the expansion of mathematical-financial, statistical, and computational models strengthens the centrality of accounting information in risk identification, insolvency prediction, performance measurement, and the reading of signals relevant to investors, managers, and regulators. Dong (2025) shows that machine learning-based methods can be used in financial risk identification and accounting analysis of listed companies, highlighting the convergence between accounting, predictive modeling, and corporate risk monitoring. Cordeiro (2026), in discussing the financial market and company-stakeholder integration, reinforces that contemporary financial decisions depend on the

articulation of information, governance, incentive structures, and value assessment, a dimension in which accounting practice assumes a strategic role.

Digital transformation requires professional judgment capable of combining regulatory expertise, financial reasoning, statistical literacy, understanding of information systems, and critical capacity to evaluate results produced by models. Dong, Stratopoulos and Wang (2024) show that tools based on language models have already been examined in accounting and finance both as instruments applicable to professional practice and as objects of academic investigation, although questions remain regarding their effects on judgment, control, responsibility, and the organization of work. Zhang, Sun and Leung (2025) confirm this change from the perspective of occupational demand by identifying that job advertisements in accounting and finance have increasingly valued digital competencies, data analysis, and the capacity to operate technologies aimed at decision-making.

In Brazil, this discussion assumes specific contours, since the role of the accountant in financial and senior management environments takes place in a context marked by regulatory complexity, banking concentration, informational asymmetries, governance requirements, adoption of international standards, and growing pressure for transparency, performance, and control. Martinez (2026) shows that Brazilian research on earnings management accumulated, between 2000 and 2025, relevant discussions on the quality of accounting information, managerial discretion, measurement models, and regulatory implications. Azevedo et al. (2025), in examining contributions from Brazilian accounting research, situate controllership, management accounting, financial accounting, costs, performance, and governance as central areas for understanding the evolution of accounting as a field applied to management and decision-making.

Scientific production remains dispersed when seeking to understand, in an integrated manner, the role of the accountant in the financial market and senior management through the use of mathematical-financial models. Kureljusic and Karger (2024) acknowledge that there is still limited systematization of forecasting models effectively evaluated in financial accounting problems, which hinders a consolidated understanding of their applications, limitations, and potential. Dong, Stratopoulos and Wang (2024) also show that the incorporation of generative technologies into accounting and finance still requires greater clarity regarding their professional, organizational, and decision-making implications. This gap concerns the absence of a systematic reading that articulates technology, risk, forecasting, controllership, and finance around the accountant as a strategic agent of analysis, modeling, and decision-making.

In view of this gap, this article is guided by the following research question: how has scientific production from 2023 to 2026 analyzed the role of the accountant in the financial market and senior management, especially regarding the use of mathematical-financial models, artificial intelligence, predictive analytics, risk management, valuation, and decision-making support? The general objective is to analyze, through a systematic literature review, how recent studies have addressed the strategic role of the accountant in highly complex financial and decision-making environments. To this end, the study seeks to identify the main mathematical-financial models associated with accounting information, map the competencies required of accountants in data-driven markets, examine the incorporation of artificial intelligence and machine learning into accounting-financial analyses, and discuss the implications of this transformation for banks, capital markets, controllership, analytical auditing, and senior management. Magni (2026) provides support for the connection between financial mathematics, accounting, and corporate finance, while Zhang, Sun and Leung (2025) contribute to understanding the expansion of competencies required of accounting-finance professionals in digital and data-driven environments.

2 THEORETICAL FRAMEWORK

The role of the accountant in the financial market and senior management is embedded in a research tradition that understands accounting as a system for measuring, interpreting, and communicating economic-financial information aimed at decision-making. Within this tradition, accounting information supports decisions regarding credit, investment, capital structure, risk, performance, solvency, governance, and value creation. Zhang, Sun and Leung (2025) demonstrate that the accounting-finance profession has increasingly required digital competencies related to data analysis, automation, and enterprise systems. Frezatti (2026) situates management accounting and controllership as fields associated with planning, control, performance, and the informational support of management. The articulation of these studies establishes the central theoretical framework of this article: the contemporary role of the accountant is understood as a practice of economic-financial intelligence guided by data, models, technology, and professional judgment.

The concept of accounting information adopted in this study refers to the set of data recognized, measured, disclosed, and interpreted to support internal and external decisions. In the financial market, this information influences risk perception, expected return, cost of capital, credit assessment, financing, and the confidence of economic agents. Cordeiro (2026) brings

together financial markets, companies, and stakeholders by highlighting the role of information and governance in value creation. Albanez (2026), in examining informational asymmetry and capital structure in Brazilian listed companies, demonstrates that the availability and credibility of information influence debt and financing decisions. These studies ground the understanding of the accountant as a professional responsible for qualifying the information that circulates among organizations, markets, investors, creditors, and managers.

The relationship between accounting, financial mathematics, and corporate finance constitutes the second conceptual axis of the study. Magni (2026) articulates cash flows, capital amounts, income, and financial statements within an integrated structure, allowing financial planning, valuation, and investment decisions to be analyzed from the same logical-financial basis.

cash flows, incomes, and capital amounts are interdependent variables governed by these laws and must be modeled jointly (Magni, 2026, n.p.).

This formulation deepens the discussion because it directly links financial statements, projected cash flows, discount rates, invested capital, expected return, and financial risk. Magni's (2026) contribution provides a theoretical basis for understanding why the role of the accountant in banks, fintechs, capital markets, corporate treasury, FP&A, controllership, and senior management requires simultaneous mastery of accounting technique and financial modeling.

Mathematical-financial modeling converts accounting data into scenarios, estimates, classifications, and decision-making inferences. Valuation, sensitivity analysis, insolvency prediction, cost of capital calculation, risk measurement, and capital structure assessment depend on consistency among historical data, economic assumptions, financial variables, and analytical criteria. Kureljusic and Karger (2024), in examining artificial intelligence applied to forecasting in financial accounting, identify a relevant gap:

There is little knowledge about which prediction models have already been evaluated for accounting problems (Kureljusic; Karger, 2024, p. 81).

This finding supports the need to systematically review studies that associate accounting, forecasting, mathematical-financial models, and decision-making. The professional role analyzed in this article requires understanding input data, the variables used, the algorithms employed, performance metrics, and the validity conditions of inferences.

Artificial intelligence and machine learning expand the capacity to identify patterns, classify risks, and produce forecasts in accounting-financial databases. Kureljusic and Karger (2024) organize applications of artificial intelligence in accounting forecasting according to purposes, algorithms, samples, periods, and evaluation metrics. Dong (2025) brings together financial statements, market data, and machine learning by proposing a method for financial risk identification and accounting analysis of listed companies. These studies demonstrate that the role of the accountant in financial environments depends on a critical reading of the databases used, the coherence of variables, the interpretation of metrics, and the communication of results for management, credit, investment, and risk control purposes.

Generative language models introduce an additional dimension to the debate on technology and accounting-financial information. Dong, Stratopoulos and Wang (2024) state that their review examines “ChatGPT and related Large Language Models (LLMs) in accounting and finance” (Dong; Stratopoulos; Wang, 2024, n.p.). The authors organize the analyzed literature into applications of language models, their use as research tools, and implications for professionals, organizations, and sectors. This contribution allows LLMs to be understood as technologies that affect document analysis, information classification, report preparation, technical communication, and the production of syntheses. In senior management environments, accounting practice comes to involve response curation, validation of assumptions, traceability of analyses, and assessment of informational reliability.

Controllershship and management accounting form the organizational axis of the theoretical framework. Frezatti (2026) associates the evolution of these fields with planning, budgeting, control, costs, performance, and decision-making support. Barreto et al. (2025), in investigating management accounting and digital technologies, state that their review “applied bibliometric analysis and science mapping” to examine studies on management accounting and digital technologies (Barreto et al., 2025, n.p.). The literature in this tradition shows that big data, business intelligence, analytics, artificial intelligence, blockchain, and digital systems alter the production and use of managerial information. Senior management demands information capable of connecting operational performance, financial indicators, projections, scenarios, and strategic risks.

The quality of accounting information conditions the usefulness of mathematical-financial models. Data with low comparability, managerial discretion, inconsistent measurement, or informational asymmetry reduce the reliability of inferences. Martinez (2026), in synthesizing Brazilian research on earnings management between 2000 and 2025, highlights the centrality of accruals, economic incentives, accounting choices, and the regulatory

environment in assessing informational quality. Albanez (2026) complements this discussion by demonstrating that informational asymmetry interferes with capital structure decisions in Brazil. The articulation of these studies reinforces the accountant's role in assessing the informational basis that feeds valuation, forecasting, risk, and financing models.

Financial risk represents a highly adherent axis between accounting, quantitative models, and strategic decision-making. Banks, fintechs, insurers, asset managers, and listed companies use indicators of liquidity, solvency, leverage, expected losses, asset deterioration, default, and cash generation to assess exposure and anticipate adverse events. Dong (2025) uses machine learning for financial risk identification based on accounting-financial data. Radebe, Nomlala and Matenda (2025) systematize financial distress prediction models and propose criteria for model selection, considering accuracy, context, variables, and predictive purpose. These studies demonstrate that risk analysis depends on consistent data, appropriate indicators, and contextual interpretation.

The transformation of the professional profile appears objectively in studies on digital competencies in accounting and finance. Zhang, Sun and Leung (2025), analyzing job advertisements in Hong Kong and Singapore using natural language processing techniques, report that “the percentage of jobs requiring digital skills typically ranges between 20% and 30%” (Zhang; Sun; Leung, 2025, n.p.). This evidence shows that digitalization has reached the accounting-finance labor market and influences recruitment processes, professional training, and career development. Competencies associated with data, automation, enterprise systems, programming, analysis, and digital tools broaden the scope of accounting practice in finance, controllership, analytical auditing, and management.

The research traditions mobilized in this theoretical framework present convergences and limits. The tradition of accounting forecasting and artificial intelligence, represented by Kureljusic and Karger (2024) and Dong (2025), deepens the technical dimension of models. The tradition of financial mathematics and corporate finance, represented by Magni (2026) and Albanez (2026), supports the integration of flows, capital, financing, and decision-making. The tradition of controllership and management accounting, represented by Frezatti (2026) and Barreto et al. (2025), positions accounting information in support of management. The tradition of informational quality and governance, represented by Martinez (2026) and Cordeiro (2026), highlights the effects of data reliability on the market and stakeholders. The tradition of digital competencies, represented by Zhang, Sun and Leung (2025), brings academic discussion closer to occupational demands.

The theoretical gap of the study stems from the fragmentation among these traditions. Kureljusic and Karger (2024) systematize applications of AI in accounting forecasting; Dong, Stratopoulos and Wang (2024) examine LLMs in accounting and finance; Barreto et al. (2025) analyze digital technologies in management accounting; Zhang, Sun and Leung (2025) show digital competencies demanded by the market; Magni (2026) integrates financial mathematics, accounting, and corporate finance; and Martinez (2026) discusses earnings management and the quality of accounting information. The contribution of this article lies in articulating these strands around the role of the accountant in financial environments guided by mathematical-financial models, analytical technologies, risk, value, and strategic decision-making.

The resulting theoretical matrix organizes the accountant's role into four dimensions: informational, quantitative, technological, and strategic. The informational dimension involves data quality, recognition, measurement, disclosure, earnings management, and informational asymmetry, supported by Martinez (2026) and Albanez (2026). The quantitative dimension involves financial mathematics, valuation, cash flows, capital structure, risk, forecasting, and insolvency, based on Magni (2026), Dong (2025), and Radebe, Nomlala and Matenda (2025). The technological dimension involves artificial intelligence, machine learning, big data, language models, automation, and business intelligence, supported by Kureljusic and Karger (2024), Dong, Stratopoulos and Wang (2024), and Barreto et al. (2025). The strategic dimension involves financial markets, senior management, controllership, governance, performance, stakeholders, and capital allocation, supported by Cordeiro (2026), Frezatti (2026), and Zhang, Sun and Leung (2025).

This matrix makes it possible to understand the contemporary role of the accountant as a professional practice that integrates accounting technique, financial reasoning, analytical technologies, and executive decision-making. In banks, fintechs, capital markets, analytical auditing, controllership, FP&A, risk areas, and senior management, accountants participate in the production and interpretation of evidence for decisions related to credit, investment, valuation, solvency, performance, compliance, governance, and value creation. Magni (2026) provides the conceptual link between flows, capital, and financial statements; Kureljusic and Karger (2024) demonstrate the expansion of predictive applications in financial accounting; Barreto et al. (2025) evidence the advancement of digital technologies in management accounting; and Zhang, Sun and Leung (2025) demonstrate the demand for digital competencies in the accounting-finance labor market.

3 METHODS

This study was conducted as a systematic literature review with a qualitative, exploratory, and analytical-descriptive approach. The review was designed to identify, select, evaluate, and synthesize scientific production on the role of accountants in the financial market and senior management, with emphasis on mathematical-financial models, artificial intelligence, predictive analytics, risk management, valuation, and decision-making support. The methodological path followed the PRISMA 2020 recommendations, which organize systematic reviews through identification, screening, eligibility, and inclusion procedures (Page et al., 2021).

The research question was structured using the PEO model, which is appropriate for reviews in applied social sciences when the object involves professional subjects, organizational contexts, and outcomes associated with practice. The population corresponded to accountants, accounting-finance professionals, controllers, analytical auditors, CFOs, and related functions connected to the production, interpretation, or use of accounting-financial information. The exposure or phenomenon of interest comprised work in financial markets, banks, fintechs, capital markets, strategic controllership, senior management, risk management, valuation, financial modeling, and decisions supported by analytical technologies. The outcome observed involved competencies, strategic functions, models used, contribution to decision-making, digital transformation, and professional repositioning.

Searches were conducted in national and international databases selected for their adherence to the fields of accounting, finance, administration, economics, information systems, and data science. The databases considered were Scopus, Web of Science, ScienceDirect, Emerald Insight, SpringerLink, Taylor & Francis Online, Wiley Online Library, SciELO, and SPELL. Google Scholar was used only as a complementary tool for citation tracking, open-access version identification, and backward searching from highly adherent studies. The inclusion of international databases made it possible to locate studies on artificial intelligence, machine learning, language models, financial forecasting, and digital competencies in accounting and finance. The inclusion of Brazilian databases made it possible to incorporate studies on controllership, capital markets, capital structure, earnings management, governance, and the quality of accounting information in the national context.

The search strategy was organized into four conceptual blocks: accounting profession; financial and managerial context; models, techniques, and decision-making objects; and analytical technologies. The inclusion criteria covered peer-reviewed articles published

between 2023 and 2026, written in Portuguese, English, or Spanish, and directly or moderately related to the research object. Systematic reviews, scoping reviews, bibliometric studies, quantitative studies, qualitative studies, mixed-method studies, theoretical-analytical studies, and predictive modeling research were eligible. Editorials without methodological basis, opinion essays, duplicate records, publications without full-text access, studies focused exclusively on accounting education, strictly tax-related research, technological studies without connection to accounting-financial information, and financial studies without connection to accounting, controllership, or accounting data were excluded.

Data extraction was conducted through a standardized form recording authors, year, country or region, journal, objective, population or corpus, method, design, instruments or analytical techniques, mathematical-financial or computational model used, accounting and financial variables examined, main findings, stated limitations, contribution to the review, and degree of adherence to the topic. Methodological quality was assessed according to the type of study, considering clarity of the research problem, adequacy of design, consistency of data, analytical robustness, and contribution to the research question. Data synthesis was qualitative, narrative, and thematic, organized around six axes: strategic role of the accountant in the financial market; controllership, management accounting, and senior management; mathematical-financial models applied to accounting information; artificial intelligence, machine learning, and predictive analytics; risk, distress, insolvency, and informational quality; and digital and quantitative competencies of the accounting-finance professional.

4 DISCUSSION AND RESULTS

The analysis of the selected studies revealed that the role of the accountant in the financial market and senior management is addressed in recent literature through the convergence of accounting information quality, mathematical-financial models, analytical technologies, and professional competencies. The central result of the review indicates that accounting information has been converted into a basis for decisions related to credit, risk, investment, valuation, capital structure, performance, and governance. Magni (2026) provides conceptual support for this finding by integrating cash flows, capital amounts, income, and financial statements into a common structure. Kureljusic and Karger (2024) complement this understanding by showing that artificial intelligence has already been applied to forecasting problems in financial accounting, with dispersion regarding the models, variables, and metrics used.

The first result refers to the centrality of accounting information as the infrastructure of financial decisions. Martinez (2026) shows that accounting choices, accruals, managerial incentives, and the regulatory environment affect the reliability of data used in financial analyses. Albanez (2026) demonstrates that informational asymmetry interferes with capital structure decisions in Brazilian listed companies. Cordeiro (2026) expands this result by relating financial markets, stakeholders, governance, and value creation. The discussion of these studies reveals that the role of the accountant in financial environments begins with the qualification of the informational basis that feeds risk, credit, valuation, and performance models. The contribution of this finding lies in placing accounting information at the center of the decision-making chain, since the validity of models depends on the consistency of the data that sustain them.

The second result focuses on the incorporation of mathematical-financial and computational models into accounting analysis. Magni (2026) argues that accounting, financial mathematics, and corporate finance can be analyzed in an integrated manner, allowing cash flows, capital amounts, income, investments, and financial statements to be understood as elements of a common decision-making architecture. Dong (2025) demonstrates that machine learning can be applied to financial risk identification and accounting analysis of listed companies. Radebe, Nomlala and Matenda (2025) contribute by systematizing criteria for selecting financial distress models. The discussion of this result indicates that accountants operating in the financial market must interpret variables, assumptions, metrics, limits, and implications of the models used in credit, risk, solvency, financing, and investment decisions.

The third result refers to the expansion of artificial intelligence, language models, and predictive analytics in the accounting-finance field. Kureljusic and Karger (2024) identify applications of artificial intelligence in accounting forecasting and point to the need for greater systematization regarding tested models, databases, variables, and performance. Dong, Stratopoulos and Wang (2024) examine ChatGPT and language models in accounting and finance, showing that these technologies affect document analysis, research, communication, report preparation, and professional practices. Barreto et al. (2025) evidence the presence of artificial intelligence, big data, business intelligence, blockchain, cloud computing, and analytical systems in management accounting. The discussion of this result shows that technology expands the capacity for processing, classification, and forecasting, while requiring validation of databases, traceability of analyses, control of outputs, and contextual interpretation of results.

The fourth result involves the transformation of the accountant's professional competencies. Zhang, Sun and Leung (2025) identify demand for digital skills in accounting and finance job advertisements, including data analysis, automation, programming, enterprise systems, and analytical tools. Frezatti (2026) reinforces the relevance of accounting information for planning, control, performance, and decision-making. Barreto et al. (2025) show that management accounting has been affected by digital technologies that expand the capacity for data analysis and integration. The discussion of this result indicates that accountants working in banks, fintechs, capital markets, analytical auditing, FP&A, controllership, and risk areas need to articulate accounting knowledge, financial reasoning, modeling, data, information systems, and executive communication.

The fifth result concerns the strategic position of controllership and management accounting in the articulation between data, models, and decision-making. Barreto et al. (2025) show that digital technologies alter the way management accounting produces, organizes, and communicates information for management. Frezatti (2026) situates controllership as a field that supports planning, control, and performance. Cordeiro (2026) broadens this discussion by highlighting the importance of information in building trust, governance, and value. The discussion of this finding shows that the accountant's role in senior management is associated with the construction of indicators, interpretation of variations, scenario assessment, risk communication, and support for resource allocation decisions.

Table 1. Analytical matrix of the results of the systematic review

Identified result	Convergent studies	Evidence extracted from the review	Implication for the role of the accountant	Remaining gap
Accounting information supports complex financial decisions	Martinez (2026); Albanez (2026); Cordeiro (2026)	Informational quality, informational asymmetry, governance, and earnings management affect financing, risk, and value decisions	Validation, interpretation, and qualification of data used in credit, valuation, risk, and governance	Limited empirical articulation between accounting information quality and professional responsibility in financial models
Mathematical-financial models integrate accounting, finance, and strategic decision-making	Magni (2026); Dong (2025); Radebe, Nomlala and Matenda (2025)	Cash flows, capital amounts, capital structure, distress, and risk depend on modeling and accounting-financial variables	Interpretation of assumptions, variables, metrics, and results of models used in financial decisions	Scarcity of empirical studies on accountants applying models in banks, fintechs, and senior management
AI and machine learning expand forecasting and risk identification	Kureljusic and Karger (2024); Dong (2025); Barreto et al. (2025)	AI, machine learning, analytics, and big data are applied to	Validation of data, interpretation of results, and communication of	Limitations regarding explainability, external validation,

Identified result	Convergent studies	Evidence extracted from the review	Implication for the role of the accountant	Remaining gap
		accounting forecasting, risk analysis, and management accounting	inferences to management	and model governance
LLMs affect accounting and financial practices	Dong, Stratopoulos and Wang (2024); Zhang, Sun and Leung (2025)	Language models affect document analysis, communication, research, and professional practices	Assessment of reliability, traceability, consistency, and responsible use of AI-generated responses	Gaps regarding technical responsibility, institutional control, and limits of LLM use
Digital and quantitative competencies become occupational requirements	Zhang, Sun and Leung (2025); Frezatti (2026); Barreto et al. (2025)	Job advertisements require data analysis, automation, enterprise systems, programming, and digital tools	Integration among accounting, finance, data, technology, and executive communication	Insufficient studies on curricula, training, and actual performance in analytical functions
Controllershship brings the accountant closer to senior management	Frezatti (2026); Barreto et al. (2025); Cordeiro (2026)	Planning, control, performance, governance, and digital technologies expand the decision-making role of accounting information	Construction of indicators, scenario analysis, performance assessment, and executive decision support	Scarcity of studies on the accountant's role in strategic committees and high-impact decisions

Source: Prepared by the authors, 2026.

Table 1 synthesizes the substantive findings of the review rather than merely characterizing the studies. It demonstrates that the role of the accountant in the financial market and senior management is organized around a chain of informational value production: qualified accounting information feeds mathematical-financial models; these models produce inferences regarding risk, value, and performance; analytical technologies expand processing capacity; and professional judgment connects the results to executive decision-making.

The discussion of the findings reveals a specific theoretical contribution. The analyzed literature addresses accounting forecasting, artificial intelligence, language models, digital management accounting, capital structure, informational quality, and digital competencies in separate strands. This review articulates these strands into an integrated matrix of strategic accounting practice. Martinez (2026) supports the informational basis; Magni (2026) supports the quantitative basis; Kureljusic and Karger (2024), Dong (2025), and Dong, Stratopoulos and Wang (2024) support the technological basis; Frezatti (2026), Cordeiro (2026), and Zhang, Sun and Leung (2025) support the professional and strategic basis. This integration constitutes the

study's original contribution to understanding the accountant as an agent of economic-financial intelligence in environments guided by data, risk, and value.

The main gap identified is empirical. The analyzed studies provide a consistent basis regarding models, technology, informational quality, and competencies, but research that directly observes accountants working in banks, fintechs, asset managers, risk areas, valuation, FP&A, analytical auditing, and senior management committees remains scarce. This gap appears across the corpus: Kureljusic and Karger (2024) focus on accounting forecasting; Dong (2025) focuses on risk modeling; Zhang, Sun and Leung (2025) analyze job advertisements; Frezatti (2026) and Barreto et al. (2025) address management accounting and controllership. The future research agenda should move toward empirical studies on practices, decisions, responsibilities, and competencies effectively mobilized by accountants in highly complex financial environments.

5 FINAL CONSIDERATIONS

This study analyzed how scientific production from 2023 to 2026 has addressed the role of the accountant in the financial market and senior management, especially regarding the use of mathematical-financial models, artificial intelligence, predictive analytics, risk management, valuation, and decision-making support. The systematic review identified that accounting practice has been repositioned in highly complex decision-making environments, in which qualified accounting information supports analyses of credit, investment, risk, capital structure, performance, governance, and value creation.

The main contribution of the study lies in the proposal of an integrated matrix for understanding the role of the accountant as an agent of economic-financial intelligence. This matrix articulates four dimensions: informational, quantitative, technological, and strategic. The informational dimension expresses the importance of the quality of accounting data that feed models and decisions. The quantitative dimension comprises the use of mathematical-financial, statistical, and computational models in analyses of risk, valuation, capital structure, financial forecasting, and insolvency. The technological dimension involves artificial intelligence, machine learning, big data, business intelligence, language models, and automation. The strategic dimension situates the accountant within senior management, governance, performance, resource allocation, and value creation processes.

The review demonstrated that the validity of financial models depends on the consistency of the accounting information that feeds them. This finding reinforces the relevance

of the accountant in assessing data quality, interpreting the variables used, analyzing assumptions, communicating model limitations, and technically supporting decisions. Professional practice in banks, fintechs, listed companies, analytical auditing, controllership, FP&A, corporate treasury, risk areas, and executive committees requires articulation among accounting knowledge, financial reasoning, command of indicators, familiarity with databases, understanding of quantitative models, and executive communication skills.

As a theoretical contribution, the article integrates research traditions that appear dispersed in the literature: accounting forecasting with artificial intelligence, language models in accounting and finance, financial mathematics applied to decision-making, digital management accounting, quality of accounting information, capital structure, financial distress, and digital competencies. As a practical contribution, it identifies competencies and functions associated with accountants in complex decision-making environments. As a methodological contribution, it organizes a recent and heterogeneous corpus through qualitative thematic synthesis, preserving the relationship among evidence, argument, and scientific gap.

The limitations of the study derive from the temporal scope between 2023 and 2026, the heterogeneity of the methodological designs included, and the absence of meta-analysis. The temporal scope privileges the most recent production on technology, financial modeling, and professional transformation, restricting the incorporation of classical studies on management accounting, corporate finance, forecasting models, and decision theory. The heterogeneity of the corpus required a thematic narrative synthesis, appropriate to the objective of the research, but limited in terms of statistical comparison among results.

Future research may advance in three directions. The first involves empirical studies on accountants working in banks, fintechs, asset managers, listed companies, risk areas, valuation, analytical auditing, FP&A, and senior management committees. The second involves investigations into governance, validation, traceability, and technical responsibility in the use of artificial intelligence, machine learning, and language models in accounting and finance. The third involves studies on professional education and curricula that integrate accounting, quantitative finance, data science, and information governance.

The study concludes that the role of the accountant in the financial market and senior management is being redefined by the capacity to convert reliable accounting information into decision-making intelligence. In environments guided by data, risk, and value, the accountant assumes a strategic role in qualifying information, interpreting mathematical-financial models, assessing risks, and supporting high-impact organizational decisions.

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