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Cognitivism and Managerial Decision Quality in Financial and Strategic Management: A Critical Review

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Abstract

Managerial decision quality has become increasingly important in financial and strategic contexts marked by uncertainty, digital transformation, and continuous capability renewal. Yet adjacent literatures on behavioral finance, managerial cognition, strategic flexibility, and management learning have largely developed in parallel, leaving limited cross-domain explanation of how shared cognitivist mechanisms shape managerial judgment. This article addresses that gap through a structured critical literature review of metacognition, schema flexibility, and self-efficacy across financial management, strategic management, management education, and executive development. Rather than providing statistical aggregation, the review offers an interpretive synthesis of heterogeneous studies supported by illustrative corporate and institutional cases. Three recurring patterns emerged. Metacognition was repeatedly linked to reflective monitoring, bias checking, and corrective judgment. Schema flexibility was associated with interpretive updating and adaptation when dominant frames became inadequate. Self-efficacy appeared to support the translation of cognitive preparation into action readiness under complexity. Across the reviewed literature, managerial failures were often linked to weak reflective control or rigid interpretive frames, whereas feedback-rich learning designs and structured developmental environments tended to support stronger judgment and adaptive action. The article contributes by integrating finance, strategy, and management learning within a single cognitivist interpretation of managerial decision quality and by deriving delimited implications for management education and executive development.

KEYWORDS

metacognition; schema flexibility; self-efficacy; managerial decision quality.

Introduction

Managerial decision quality has become a central concern in business environments shaped by digital transformation, strategic discontinuity, and rising demands for workforce reskilling. The Future of Jobs Report 2025 places analytical thinking, resilience, flexibility, and leadership among the capabilities most needed for organizational adaptation, suggesting that managers must do more than apply technical routines. They must interpret complex information, revise judgments under uncertainty, and continue learning as business conditions change (World Economic Forum, 2025). This challenge is especially salient in financial management and strategic management, where decisions combine data intensity, risk exposure, time pressure, and long-term organizational consequences. As a result, understanding how managers learn to think, monitor, and revise their judgments is no longer a peripheral educational concern. It is a substantive issue in management and leadership development (Lacerenza et al., 2017).

The importance of cognition to managerial decisions is well recognized, yet the relevant evidence remains dispersed across several adjacent literatures and review traditions. In finance, Frydman and Camerer (2016) synthesize psychological and neuroscientific explanations of financial decision making, showing that judgment under risk is shaped by cognitive constraints rather than technical competence alone. In strategy, Helfat and Martin (2015), Helfat and Peteraf (2015), and

Herhausen et al. (2021) review managerial cognition, dynamic managerial capabilities, and strategic flexibility, demonstrating that executives' cognitive resources matter for sensing, interpretation, and strategic adaptation. In management learning, de Haan & Nilsson, (2023) and Bayona and Durán (2024) synthesize the effects of coaching and case-based pedagogy on developmental outcomes. These contributions are highly relevant, but they largely remain stream-specific.

Taken together, prior reviews and adjacent syntheses leave three omissions that are directly relevant to the present study. First, they do not provide a shared cross-domain explanation of how core cognitivist mechanisms connect judgment quality in financial management and strategic management. Second, the developmental literature tends to focus on intervention effectiveness without explicitly linking reflective learning processes to managerial decision quality across domains. Third, adjacent syntheses rarely translate their insights into an integrated discussion of management education and executive development. As a result, cognition is widely acknowledged as important, but the relationship between learning mechanisms and managerial judgment remains only partially connected across finance, strategy, and management learning.

A cognitivist lens offers a productive way to reconnect these streams. Cognitivism treats learning as an active process of selecting, organizing, integrating, and regulating information rather than as passive knowledge reception or a simple response to external stimuli (Fiorella, 2023; Fiorella & Mayer, 2016; Sweller, 2020; Sweller et al., 2019). Within this perspective, three mechanisms are especially relevant to managerial judgment. Metacognition supports the monitoring and regulation of one's own thinking. Schema flexibility enables decision makers to revise mental structures when new evidence challenges prior assumptions. Self-efficacy influences whether individuals persist, adapt, and act confidently in complex situations (Bandura, 2001; Joie-La Marle et al., 2023). The present article focuses on these three mechanisms because they recur across finance, strategy, and developmental learning studies while remaining sufficiently specific for cross-domain synthesis.

This perspective also matters for management education and executive development. Recent research shows that pedagogical and developmental interventions aimed at reflection, guided practice, and feedback can strengthen self-efficacy, adaptive performance, and decision-related competence (Goosen & Steenkamp, 2023; Joie-La Marle et al., 2023; Wass et al., 2023; de Haan & Nilsson, 2023). The practical significance becomes clearer when recurring managerial failures and successes are viewed through a cognitive lens. Studies of financial decision making have linked weak reflection and biased processing to persistent errors under uncertainty (Frydman & Camerer, 2016). In strategy, the decline of formerly dominant firms has often been associated with rigid cognitive frames that prevented leaders from accommodating disruptive change, as illustrated in the Nokia case (Vuori & Huy, 2016). Conversely, scholarship on strategic adaptation emphasizes learning architectures and cognitive capabilities that enable experimentation, reinterpretation, and renewal (Helfat & Martin, 2015; Teece, (2018).

Against this background, the gap addressed by this article is both theoretical and practical. Theoretically, adjacent literatures have not yet been brought together through a single cognitivist interpretation of managerial decision quality across financial management and strategic management. Practically, this fragmentation makes it difficult for management educators and executive developers to design interventions that move beyond tool training toward deeper cognitive capability formation. The issue is also relevant in the Indonesian context. Budiwati et al. (2020) showed that economic literacy is associated with economic decision making, suggesting that decision quality depends not only on exposure to information but also on how knowledge is understood and used.

This article therefore aims to critically synthesize how metacognition, schema flexibility, and self-efficacy shape managerial decision quality in financial management and strategic management, while deriving implications for management education and executive development. The central question is how these three cognitivist mechanisms appear across the two managerial domains and what follows for curriculum design, executive learning, and leadership development. The contribution of the article is threefold. Conceptually, it offers a cross-domain cognitivist interpretation that links finance, strategy, and management learning without collapsing their domain differences. Methodologically, it applies a structured critical review to integrate heterogeneous evidence from educational psychology, financial decision making, managerial cognition, strategic management, and executive development (Snyder, 2019). Practically, it develops delimited implications for management education and executive development by identifying how reflective monitoring, interpretive updating, and action readiness can be cultivated in learning design. The remainder of the article presents the review method, develops the thematic synthesis supported by illustrative corporate cases, and concludes with implications for research and practice.

Methods

This article employed a structured critical literature review to examine how core cognitivist mechanisms shape managerial decision quality in financial management and strategic management. The review was designed to support a transparent, conceptually bounded, and systematically documented synthesis rather than exhaustive retrieval or statistical aggregation. In line with this design, the procedure combined systematic searching, explicit inclusion and exclusion principles, iterative screening, backward citation tracking, and thematic synthesis across adjacent literatures in educational psychology, financial decision making, managerial cognition, strategic management, management education, and executive development (Grant & Booth, 2009; Snyder, 2019; Torraco, 2016). Because the retained literature was heterogeneous in construct definitions, research designs, units of analysis, and outcome measures, the analysis prioritized conceptual integration and interpretive comparison rather than meta-analytic pooling.

Research Type

This study used a structured critical literature review. Such a design is appropriate when the purpose is to compare neighboring streams of scholarship, clarify conceptual overlap and boundary conditions, and develop an integrative interpretation of a focal phenomenon across fields (Grant & Booth, 2009; Torraco, 2016). In this article, the focal phenomenon was managerial decision quality, and the review lens was cognitivism, operationalized through metacognition, schema flexibility, and self-efficacy. The design therefore aimed to identify recurring patterns, tensions, and implications across domains rather than to estimate a single average effect size or to produce a PRISMA-style systematic review (Snyder, 2019).

Population and Sample/Documents

The document was the primary unit of analysis. The broader review population comprised scholarly publications and selected primary documents relevant to cognitivism, managerial cognition, financial decision making, strategic management, management education, and executive

development. The final bibliography contained 37 references. Of these, 24 sources formed the focal interpretive corpus used directly in the thematic synthesis, while the remaining 13 sources served theoretical, methodological, or background framing functions.

The focal interpretive corpus consisted of four sources on financial decision making and financial capability, five sources on strategic management and managerial cognition, seven sources on management education and executive development, two contextual supporting sources, and six case or institutional sources. The recent core studies were drawn primarily from the period 2015 to 2025 in order to capture contemporary developments in managerial cognition, financial capability, strategic adaptation, and management learning. Older foundational works were retained only when they were conceptually necessary for defining core constructs or review methodology. Limited post 2025 sources were retained as contextual supporting literature when they were directly relevant to the article's interpretive frame and were not used as the main empirical backbone of the synthesis.

English-language studies were prioritized to maintain terminological consistency, but relevant Indonesian journal articles were also retained when they made a direct conceptual or practice-related contribution to the review focus and met the same standards of credibility, accessibility, authorship, and bibliographic completeness. Sources were included when they addressed at least one of the three core cognitivist mechanisms or a closely related construct, connected those constructs to managerial decision processes, financial management, strategic management, management education, or executive development, and provided sufficient conceptual or methodological clarity for analysis. Sources were excluded when they were duplicates, anonymous or weakly documented materials, conceptually peripheral to the review question, non-scholarly sources without clear provenance, or publications with no meaningful connection to business and management.

Research Location

Because this study was a literature review, it was not confined to a single physical research site. The evidence base was international in scope and covered multiple regions, sectors, and organizational contexts. However, the interpretation of implications was developed with explicit attention to management education and executive capability development in Indonesia. This positioning allowed the article to synthesize international evidence while preserving contextual relevance for Indonesian higher education and managerial practice.

Instrumentation or Tools

A structured review matrix served as the main analytical tool. The matrix recorded bibliographic information, study context, theoretical lens, focal mechanism, managerial domain, research design, key findings, limitations, and implications for management education or executive development. Reference management software was used to organize citations and reduce duplication, while spreadsheet-based coding sheets were used to document inclusion decisions, thematic notes, and cross-domain comparisons. These tools supported traceability, consistency of interpretation, and disciplined comparison across heterogeneous sources.

Data Collection Procedures

Data collection was conducted between February and March 2026 and proceeded through four interconnected stages. First, literature identification was carried out through Google Scholar, Crossref, and publisher platforms hosting peer reviewed journals, while official institutional and corporate websites were searched for primary case documents. Google Scholar and Crossref were used as discovery tools, and journal indexing status was checked through journal or publisher metadata and, where relevant, through Scopus or Web of Science listings referenced by the journal or publisher.

The search logic combined terms related to the theoretical lens with terms related to the focal managerial domains. Representative search strings included the following combinations: "metacognition" AND "financial decision making"; "metacognition" AND "strategic management"; "schema flexibility" OR "cognitive flexibility" AND "managerial decision making"; "managerial cognition" AND "dynamic capabilities"; "self-efficacy" AND "executive development"; "reflective practice" AND "management education"; and "case-based learning" AND "financial management." Additional searches combined broader strings such as ("metacognition" OR "schema flexibility" OR "self-efficacy" OR "managerial cognition") AND ("financial management" OR "strategic management" OR "management education" OR "executive development"). Search terms were adapted pragmatically across platforms through the use of Boolean operators, phrase searching, and citation chaining.

Second, titles and abstracts were screened to assess conceptual fit with the review objective. At this stage, clearly irrelevant items, duplicate records, and studies outside the business and management domain were removed. Third, potentially relevant texts were read in full to assess source quality, conceptual centrality, analytical usefulness, and bibliographic completeness. Fourth, backward citation tracking and limited purposive enrichment were used to identify conceptually central studies, contextual supporting literature, and official institutional or corporate documents relevant to the illustrative case analysis.

In line with the structured critical review design, the search process was systematic but iterative rather than exhaustively protocolized in a stage-based systematic review format. For that reason, transparency in this article is established through explicit search platforms, representative search strings, inclusion and exclusion principles, source categories, and analytical boundaries. The final interpretive corpus was therefore concept driven, recent in its core, and complemented by foundational, contextual, and case-based materials used for clearly differentiated purposes. Because stage-level search and screening counts were not preserved in a form that would support reliable retrospective reporting, the article does not present reconstructed flow totals that could imply false precision.

Illustrative cases were selected only after the literature themes had become analytically stable. The final case set comprised JPMorgan, Enron, Nokia, Kodak, Amazon, and CFA Institute. These cases were retained because each case had clear relevance to at least one of the three focal mechanisms, adequate documentation in peer reviewed or institutional sources, direct relevance to either financial management or strategic management, and collective value in balancing failure cases with capability building cases. The cases were used to illuminate patterns already identified in the literature rather than to generate independent causal claims, which helped reduce confirmatory overreach and limited the risk of cherry-picking.

Data Analysis

The analysis used thematic synthesis with deductive, comparative, and interpretive coding. Deductive coding began from the three core mechanisms that structured the review, namely metacognition, schema flexibility, and self-efficacy. Financial management and strategic management were treated as parallel analytical domains, while management education and executive development were used as the developmental bridge linking learning processes to managerial

capability. During repeated reading, additional codes were generated to capture recurring issues such as bias awareness, risk judgment, strategic adaptation, interpretive rigidity, learning transfer, reflective practice, and capability development.

After coding, the retained sources were compared across domains to identify recurring patterns, scope conditions, and contextual differences. Theme development followed three criteria, namely recurrence across the focal interpretive corpus, conceptual centrality to managerial decision quality, and explanatory value for linking cognitivist learning mechanisms with management practice. On that basis, the synthesis was organized around three cross-domain themes: metacognition as a regulator of managerial judgment, schema flexibility as a condition of interpretive updating and adaptation, and self-efficacy as a mechanism that helps translate cognitive preparation into managerial action.

The six corporate and institutional cases were then used as illustrative materials to sharpen the interpretation of these themes. They were not treated as stand-alone empirical tests. Their role was to clarify how reflective failure, interpretive rigidity, feedback-rich learning architecture, and renewal-oriented practice become visible in recognizable organizational settings.

The initial identification, screening, full text reading, and first-cycle thematic coding were led by the first author. Cross-domain interpretation, category refinement, and manuscript development were then discussed iteratively with the coauthors. The review did not use independent double screening or formal inter-coder reliability testing. Instead, analytical consistency was supported through review matrix documentation, repeated comparison of supportive and contradictory evidence, iterative refinement of thematic labels, and collective discussion of the final integrative structure. This approach is consistent with the interpretive logic of structured critical review methodology (Braun & Clarke, 2021 ; Snyder, 2019; Torraco, 2016).

Ethical Approval

Ethical approval was not required because the study did not involve human participants, field intervention, or confidential organizational data. The review relied entirely on published scholarship and publicly accessible institutional or corporate documents. Nevertheless, the study followed principles of academic integrity by prioritizing authentic sources, using accurate citation, retaining only verifiable references, and avoiding unsupported claims.

Result and Discussion

The structured critical review produced a broadly convergent, although methodologically heterogeneous, cross-domain picture. Across the focal interpretive corpus, three mechanisms recurred most clearly, namely metacognition, schema flexibility, and self-efficacy. These mechanisms appeared across financial management, strategic management, and development-oriented studies on management learning. Not every source addressed all three mechanisms simultaneously, and the results below should therefore be read as an interpretive synthesis of recurring patterns rather than as uniform empirical proof. The first two themes were supported most directly by finance and strategy studies, whereas the third drew more heavily on management learning and executive development research. Within that development-oriented literature, reflective and progressively scaffolded learning designs appeared repeatedly as the conditions under which these mechanisms became most visible in practice (Goosen & Steenkamp, 2023; Joie-La Marle et al., 2023; de Haan & Nilsson, 2023; Wass et al., 2023; Wufron et al., 2025).

Profile of the Retained Evidence

The evidence base was organized around peer-reviewed studies, contextual supporting literature, and illustrative case materials. This structure allowed the review to connect educational psychology with business and management without reducing the synthesis to a single disciplinary stream. Table 1 summarizes the analytical profile of the retained evidence.

Table 1 shows that the evidence did not cluster around one domain only. Instead, the retained literature distributed itself around five mutually reinforcing areas, namely financial judgment, strategic cognition, development-oriented learning, contextual supporting literature, and illustrative case evidence. This distribution was important because the article's central claim required a synthesis that crossed the usual boundary between educational theory and managerial practice.

The Indonesian studies were retained because they added contextual relevance to management education and managerial capability formation in Indonesia while meeting the same inclusion standards applied to the wider corpus. Budiwati et al. (2020) connected economic literacy to economic decisions, while Wufron et al. (2023) linked financial literacy

Table 1. Analytical Profile of the Retained Evidence

Evidence Cluster	Representative Sources	Main Contribution to the Review
Financial decision-making and capability	Frydman and Camerer (2016); Xiao and O'Neill (2018); Budiwati et al. (2020); Wufron et al. (2023)	Showed how planning orientation, financial literacy, and cognitive constraints shape judgment quality in financial contexts
Strategic management and managerial cognition	Helfat and Martin (2015); Helfat & Peteraf, (2015) ; Herhausen et al. (2021); Vuori and Huy (2016); Lucas and Goh (2009)	Identified the role of managerial cognition, strategic flexibility, and interpretive updating in organizational adaptation
Management education and executive development	Goosen and Steenkamp (2023); Joie-La Marle et al. (2023); de Haan and Nilsson (2023); Wass et al. (2023); Hilmiatussadiah and Budiwati (2023); Wufron et al. (2025); Soni et al., (2024)	Demonstrated that reflective, case-based, and guided learning designs support adaptive performance, decision-related competence, and capability development
Contextual supporting literature	Prasetia et al. (2026); Muchamad et al. (2026)	Provided supplementary context on digital transformation and value re-evaluation without serving as the primary backbone of the cross-domain argument
Case and institutional sources	U.S. Senate Permanent Subcommittee on Investigations, (2013) ; Healy & Palepu, (2003); Amazon, (2018) ; CFA Institute, (2024, 2026b, 2026a)	Provided concrete illustrations of failure patterns and capability-building architectures in organizational practice

Source: Synthesized from the focal interpretive corpus and illustrative case materials.

and fintech use to financial inclusion outcomes. In the learning domain, Hilmiatussadiah and Budiwati (2023), Wufron et al. (2025), and Soni et al. (2024) were retained because they illuminated case-based learning, participation, and digital capability development in settings directly relevant to the article's practical implications. The two 2026 studies by Prasetia et al., (2026) and Muchamad et al. (2026) were used more narrowly as contextual supporting literature. They informed the discussion of digital transformation and value re-evaluation, but the main cross-domain argument does not depend on them as primary evidence.

After repeated comparison across the focal interpretive corpus, three recurring interpretive results were retained. Table 2 summarizes the synthesis before each theme is elaborated in narrative form.

Table 2 indicates that the three mechanisms did not operate in isolation. Metacognition mainly explained monitoring and corrective regulation, schema flexibility explained interpretive revision, and self-efficacy explained the move from cognitive preparation to action. The table should be read as a synthesis of indicative patterns rather than as a claim of strict equivalence across measures, designs, or domains.

Metacognition as a Regulator of Managerial Judgment

Across peer-reviewed studies in financial management, a recurring pattern was that decision quality tended to improve when knowledge was accompanied by planning, monitoring, and post-decision evaluation. Frydman and Camerer (2016) showed that financial decisions are shaped by cognitive constraints and judgment processes rather than technical information alone. Xiao and O'Neill (2018) similarly found that propensity to plan was positively associated with financial capability and financial satisfaction, which suggests that reflective regulation matters for financial outcomes. Complementary Indonesian evidence pointed in the same general direction. Budiwati et al. (2020) reported that economic literacy was associated with economic decisions, while Wufron et al. (2023) showed that financial literacy and fintech use were positively linked to financial inclusion. Taken together, these studies suggest that financial decision quality depends not only on what decision makers know, but also on how deliberately they regulate the use of that knowledge.

A related pattern appeared in strategic management. Helfat and Peteraf (2015) identified managerial cognitive capabilities as part of the microfoundations of dynamic capabilities, and Helfat and Martin (2015) showed that managerial capabilities influence strategic change. The illustrative Nokia case sharpened this reading by showing how distorted attention and constrained upward communication limited reflective reassessment of worsening assumptions (Vuori & Huy, 2016). Read together, the strategic literature and the case material suggest that metacognition can be interpreted as an important contributor to managerial judgment under uncertainty.

This first result does not imply that metacognition is the only determinant of decision quality. Rather, within the retained evidence it appeared repeatedly as a cross-domain judgment mechanism that supports error detection, deliberate review, and corrective adjustment in both financial and strategic contexts.

Schema Flexibility as a Condition for Interpretive Updating

The second result of the synthesis concerned schema flexibility, which repeatedly appeared as a condition that helps managers reinterpret new evidence and adjust decision frames. In strategic management, this pattern was direct and well developed. Herhausen et al., (2021) demonstrated through meta-analysis that strategic flexibility has meaningful antecedents and consequences across changing environments. Helfat and Peteraf (2015) and Helfat and Martin (2015) likewise positioned managerial cognition as central to sensing, interpreting, and reconfiguring strategy. The illustrative Nokia and Kodak cases clarified the same logic by showing how access to important signals did not automatically translate into timely strategic reorientation when dominant frames remained rigid (Lucas & Goh, 2009; Vuori & Huy, 2016).

Financial management studies revealed a comparable pattern, although the terminology was more varied and the inferential step was somewhat stronger. The finance literature pointed repeatedly to the need to revise analytical and ethical frames when new information no longer fits prior assumptions (Frydman & Camerer, 2016). The two 2026 contextual sources were retained only as supplementary illustrations of this broader concern. Muchamad et al. (2026) showed that capital structure thinking is being reconsidered through multidimensional value considerations, while Prasetia et al. (2026) documented that digital transformation discussions increasingly involve the re-evaluation of governance and value commitments. These contextual sources do not function as the primary backbone of the theme, but they show that similar questions of frame revision are also visible in adjacent contemporary discussions.

This second result therefore highlights that the central issue is not information scarcity alone. Across the retained evidence, a recurring interpretive problem was the failure to revise the internal structures through which information was understood. Where such revision occurred, adaptation became more plausible. Where it did not occur, organizations remained vulnerable to delayed or distorted responses.

Table 2. Cross-Domain Thematic Synthesis on Managerial Decision Quality

Core Mechanism	Indicative Financial Management Pattern	Indicative Strategic Management Pattern	Indicative Development-Oriented Pattern
Metacognition	Planning orientation and reflective monitoring were recurrently associated with stronger financial capability and more deliberate judgment	Reflective monitoring and assumption checking were linked to strategic change capacity	Reflective self-assessment, coaching, and metacognition training supported decision-related competence
Schema flexibility	Updating analytical and ethical frames supported the reading of new financial conditions	Reframing and strategic flexibility supported adaptation under disruption	Case-based and cross-context learning created conditions for cognitive transfer and frame revision
Self-efficacy	Confidence supported persistence in complex analysis and decision preparation	Confidence supported action readiness under ambiguity and change	Guided learning and developmental interventions were associated with adaptive performance and participation

Source: Synthesized primarily from peer-reviewed studies in the focal interpretive corpus.

Self-Efficacy as a Bridge from Learning to Managerial Action

The third recurring result concerned self-efficacy. Across the retained evidence, self-efficacy appeared most clearly as an action-related condition that helps explain whether cognitive preparation is translated into participation, persistence, and readiness to act in demanding situations. Joie-La Marle et al. (2023) reported that metacognition training increased self-efficacy and adaptive performance among employees. De Haan and Nilsson (2023) showed, in a meta-analysis restricted to randomized controlled trials, that guided developmental interventions produced positive coaching outcomes, indicating that structured reflection can translate into measurable behavioral change. In accounting education, Goosen and Steenkamp (2023) found that reflective self-assessment activated decision-making skills. Wass et al. (2023) further showed that pedagogical training can strengthen educators' capacity to develop students' metacognition.

This action-oriented pattern was also visible in the Indonesian studies retained for contextual relevance. Hilmiatussadiah and Budiwati (2023) reported no significant differences in learning outcomes across student groups exposed to case-based learning, which suggests that the method can operate across institutional settings. Wufron et al. (2025) found that case-based learning in financial management increased students' critical thinking skills and learning enthusiasm across repeated instructional cycles. Soni et al. (2024) showed that digitalization creates wider opportunities for entrepreneurial learning and action among Generation Z. Taken together, these studies suggest that self-efficacy is most visible when guided learning, repeated feedback, and cognitively demanding participation are already present.

This third result therefore completes the cross-domain pattern cautiously rather than definitively. If metacognition explains reflective monitoring and schema flexibility explains interpretive updating, self-efficacy can be read as part of the mechanism through which learning becomes action readiness under complexity.

Cross-Case Pattern Across Financial and Strategic Contexts

The case material was used illustratively rather than as stand-alone empirical testing. Even with that limitation, it clarified a recurring contrast across the two managerial domains. Failure cases were marked by suppressed cognitive updating, weak reflective control, or rigid interpretive frames. Capability-building cases were marked by structured experimentation, feedback-rich learning environments, or protected spaces for exploration. Table 3 summarizes this contrast.

Table 3 shows that the failure cases did not merely involve poor decisions. They highlighted recurring breakdowns in reflective monitoring or in the updating of dominant interpretive frames. By contrast, the capability-building cases relied on organizational arrangements that protected reflection, experimentation, or feedback. Because the cases are illustrative, the table should not be read as causal proof. Its value lies in making the literature-based themes more concrete in recognizable organizational settings.

Overall, the Results section does not claim uniform consistency across all retained sources. Rather, it identifies a broadly convergent interpretive pattern in which reflective monitoring, flexible updating of interpretive frames, and action confidence recur across adjacent literatures and are clarified by illustrative cases. These results provide the basis for the more interpretive discussion that follows.

The Results section identified a recurring triad across the retained evidence, namely metacognition, schema flexibility, and self-efficacy. Interpreted together, these patterns suggest that managerial decision quality in financial management and strategic management is shaped less by information access alone and more by the quality of cognitive regulation through which information is monitored, updated, and translated into action. Because this article is based on a structured critical review rather than on statistical aggregation, the discussion below should be read as an interpretive integration of adjacent literatures, not as definitive causal proof. This reading is most directly supported by peer-reviewed studies on financial decision processes, managerial cognitive capabilities, strategic flexibility, and adaptive performance, and is then clarified by illustrative cases (Frydman & Camerer, 2016; Helfat & Peteraf, 2015; Herhausen et al., 2021; Joie-La Marle et al., 2023).

Interpreting Metacognition as a Cross-Domain Regulator

The first major implication is that metacognition can be interpreted as a cross-domain regulator of managerial judgment rather than as a purely pedagogical construct. In financial management, the peer-reviewed literature indicates that stronger planning orientation and reflective monitoring improve financial capability and the quality of judgment under risk, while weak monitoring leaves decision makers more exposed to cognitive shortcuts and poorly calibrated confidence (Frydman & Camerer, 2016; Xiao & O'Neill, 2018). In strategic management, the same logic appears in a different form.

Table 3. Illustrative Corporate Cases and Dominant Cognitivist Patterns

Case	Domain	Dominant Mechanism or Problem	Pattern Observed	Resulting Condition
JPMorgan "London Whale"	Financial management	Metacognitive failure	Weak scrutiny of models and escalating complexity	Risk judgment breakdown
Enron	Financial management	Distorted ethical schema	Persistent rationalization and weak corrective reflection	Reporting and governance collapse
Nokia	Strategic management	Schema rigidity	Threat signals failed to become timely strategic updating	Delayed adaptation
Kodak	Strategic management	Failure of interpretive updating	Knowledge of disruption did not translate into strategic reorientation	Digital transition failure
CFA Program Learning Ecosystem	Financial and managerial learning	Structured scaffolding and feedback	Curriculum, practice questions, mock exams, study planner, flashcards, and practical skills modules	Reinforced analytical learning architecture
Amazon "Day 1"	Strategic management	Institutionalized reflective renewal	Experimentation, acceptance of failure, and customer-focused learning	Ongoing renewal orientation

Source: Synthesized from U.S. Senate Permanent Subcommittee on Investigations (2013), Healy and Palepu (2003), Vuori and Huy (2016), Lucas and Goh (2009), CFA Institute (2024, 2026a), and Amazon (2018).

Metacognitive awareness enables leaders to question assumptions, re-examine interpretations, and prevent strategic commitments from becoming cognitively self-sealing. The Nokia case does not independently prove this mechanism, but it clarifies how failure can persist when dominant assumptions are not interrogated at the top of the organization (Helfat & Martin, 2015; Vuori & Huy, 2016).

This interpretation also helps refine the role of literacy in decision quality. The review does not imply that knowledge is secondary. Rather, it suggests that knowledge becomes managerially consequential when it is used reflectively. Budiwati et al. (2020) demonstrated that economic literacy is associated with economic decisions, while Wufron et al. (2023) linked financial literacy and fintech use with financial inclusion. Read through a cognitivist lens, these findings imply that literacy matters most when decision makers can organize, monitor, and appropriately deploy what they know. Content knowledge and metacognitive regulation should therefore be treated as complementary rather than competing explanations of decision quality.

Schema Flexibility as the Logic of Adaptive Updating

The second major implication is that schema flexibility appears to be the shared logic of adaptation across both managerial domains, although the evidentiary strength is not identical in each domain. In strategic management, the theme is direct and strongly supported. Studies on dynamic managerial capabilities and strategic flexibility suggest that leaders perform better when they can revise interpretive frames in response to environmental shifts rather than intensify established routines (Helfat & Peteraf, 2015; Herhausen et al., 2021). The Nokia and Kodak cases clarify this interpretation because both organizations had access to important signals, yet failed to convert them into timely frame revision and strategic reorientation (Lucas & Goh, 2009; Vuori & Huy, 2016). One implication of this pattern is that adaptive failure often begins as interpretive failure before it becomes an operational or market failure.

A related interpretive logic is visible in finance, although it is inferred more cautiously. Financial management also depends on the capacity to revise analytical and normative frames when familiar valuation assumptions, governance expectations, or risk interpretations become inadequate. The two 2026 studies retained in this article should be read within that limited scope. Muchamad et al. (2026) and Prasetia et al. (2026) are used here as contextual supporting literature rather than as primary proof of the core argument. Their value lies in showing that concerns about value re-evaluation, governance reconsideration, and frame revision are also visible in adjacent contemporary discussions. The stronger backbone of the theme remains the broader finance and strategy literature.

Self-Efficacy and the Translation of Learning into Action

The third interpretive insight concerns self-efficacy. Here the review warrants especially careful wording. The retained evidence does not establish self-efficacy as a uniformly measured causal bridge across all studies. Rather, the convergent literature suggests that self-efficacy often accompanies the translation of reflection, guided practice, and cognitive preparation into action readiness. A manager may possess knowledge and even recognize the need for adjustment, yet still hesitate to act if confidence in the ability to perform under complexity remains weak. This interpretation is aligned with Bandura's agentic view of self-efficacy and with more recent evidence showing that developmental interventions can raise both self-efficacy and adaptive performance (Bandura, 2001; Joie-La Marle et al., 2023). Evidence from executive coaching and reflective self-assessment points in the same direction, indicating that guided reflection can translate into stronger action readiness, not merely deeper self-understanding (de Haan & Nilsson, 2023; Goosen & Steenkamp, 2023).

At the same time, self-efficacy should be distinguished carefully from overconfidence. In financial settings especially, confidence becomes beneficial only when it is calibrated by evidence, feedback, and reflective correction. The Indonesian contextual studies retained in this review are compatible with that interpretation. Hilmiatussadiah and Budiwati (2023), Wufron et al. (2025), and Soni et al. (2024) suggest that participation, confidence, and capability development are strengthened when learning environments combine guided practice, repeated feedback, and cognitively demanding participation. Within the present synthesis, self-efficacy is therefore best understood as an interpretive bridging mechanism inferred from convergent literature rather than as a directly proven universal pathway.

Contribution to the Literature

From a theoretical standpoint, the contribution of this review is deliberately bounded. The article does not replace prior reviews in behavioral finance, managerial cognition, strategic flexibility, coaching, or case-based pedagogy. Instead, it brings them into conversation through a common cognitivist vocabulary. In this respect, the article extends the finance-focused synthesis of Frydman and Camerer (2016), the strategy-focused reviews of Helfat & Martin, (2015) , Helfat and Peteraf (2015), and Herhausen et al. (2021), and the development-focused syntheses of de Haan and Nilsson (2023) and Bayona and Durán (2024). What is newly integrated here is a cross-domain interpretation of managerial decision quality that links finance, strategy, and management learning through metacognition, schema flexibility, and self-efficacy while still keeping their domain-specific differences visible.

The contribution is also methodological and practical, but again within clear limits. Methodologically, the article shows how a structured critical review can connect heterogeneous evidence from educational psychology, financial decision making, strategic management, management education, and executive development. Practically, it clarifies which implications are directly supported by the reviewed literature and which remain reasoned extensions for curriculum design and executive development.

Implications for Management Education and Executive Development

Several implications are directly supported by the reviewed evidence. For management education, the synthesis suggests that curricula should do more than transmit analytical content. Across the peer-reviewed development-oriented studies, reflective self-assessment, metacognition training, and case-based learning repeatedly appeared as productive designs for strengthening decision-related competence and adaptive performance (Bayona & Durán, 2024; Goosen & Steenkamp, 2023; Hilmiatussadiah & Budiwati, 2023; Wass et al., 2023; Wufron et al., 2025). These implications are strongest where the evidence directly concerns pedagogy, reflective practice, and guided learning.

A second set of implications should be read as reasoned extensions of the synthesis rather than as directly tested prescriptions. For executive development, the discussion suggests that programs for finance and strategy leaders are likely to benefit from architectures that cultivate reflective review, frame revision, and calibrated action confidence. In finance, this points toward greater use of decision debriefing, bias awareness, structured scenario work, and feedback-rich practice. In strategy, it points toward assumption-challenging exercises, scenario exploration, cross-functional reflection, and

development processes that make interpretive blind spots discussable. These propositions are consistent with the adjacent literature and with the illustrative cases, but they remain inferential extensions that would benefit from further direct empirical testing, especially in Indonesian organizational settings.

Limitations and Cautions

The present review should be read with several limitations and cautions in mind. First, this article employed a structured critical review rather than a meta-analysis. This design was appropriate for integrating conceptually adjacent but methodologically heterogeneous studies, yet it does not allow statistical aggregation of effect sizes or precise causal estimation across the retained literature (Grant & Booth, 2009; Snyder, 2019; Torraco, 2016). The conclusions of this article therefore rest on analytical synthesis and the recurrence of patterns rather than on pooled quantitative effects.

Second, the retained literature operationalized key constructs in diverse ways. Metacognition, schema flexibility, self-efficacy, managerial cognition, strategic flexibility, and financial capability were not always defined or measured through equivalent instruments. This heterogeneity broadens the scope of interpretation, but it also requires caution against treating all indicators as fully interchangeable across studies and domains (Helfat & Peteraf, 2015; Herhausen et al., 2021; Xiao & O'Neill, 2018).

Third, the corporate cases strengthened interpretive clarity, but they should not be treated as independent causal tests. Cases such as JPMorgan, Enron, Nokia, and Kodak were used as illustrative evidence to illuminate recurring patterns of reflective failure, interpretive rigidity, and delayed updating. Financial and strategic outcomes, however, are usually shaped by interacting factors that extend beyond cognition, including organizational climate, communication structures, incentives, and emotional dynamics (Frydman & Camerer, 2016; Vuori & Huy, 2016).

Fourth, the cognitivist lens adopted in this article was intentionally selective. That selectivity was analytically useful because it enabled a tighter cross-domain synthesis around metacognition, schema flexibility, and self-efficacy. At the same time, it means that the article does not fully explain affective, political, or institutional influences on managerial decision quality. The present synthesis should therefore be interpreted as a theoretically focused account of core cognitive mechanisms rather than as a complete theory of managerial behavior.

Fifth, although the review incorporated Indonesian studies to improve contextual relevance, the evidence base remained more global than locally grounded. The implications for management education and executive development in Indonesia are therefore theoretically informed and contextually plausible, but they still require stronger empirical validation in Indonesian organizations, universities, and professional learning environments (Budiwati et al., 2020; Wufron et al., 2023).

Taken together, these limitations do not diminish the contribution of the article. Instead, they clarify its appropriate boundary conditions. The article offers a conceptually integrated explanation of managerial decision quality through a cognitivist lens, but its conclusions should be read as analytically robust, context-sensitive, and open to further empirical refinement.

Recommendations for Future Research

Several directions follow directly from the present synthesis. First, future research should move beyond conceptual integration toward longitudinal and intervention-based designs. There is a clear need for studies that test whether metacognition training, reflective self-assessment, case-based learning, coaching, or scaffolded executive learning produce durable improvements in managerial decision quality across time and across domains (de Haan & Nilsson, 2023; Goosen & Steenkamp, 2023; Joie-La Marle et al., 2023; Wass et al., 2023).

Second, future studies should examine managerial decision quality at multiple levels of analysis. The current review focused primarily on individual and cross-domain mechanisms, yet many strategic failures and adaptations emerge from team interaction, shared mental models, and collective patterns of attention. Research on top management teams, finance committees, and cross-functional strategic groups would help explain how metacognition and schema flexibility operate collectively rather than only individually (Helfat & Peteraf, 2015; Vuori & Huy, 2016).

Third, greater methodological diversity is needed. Future work should complement self-report measures with behavioral tasks, scenario-based assessments, process tracing, and decision simulations. This is especially important in financial management, where bias detection, planning discipline, and confidence calibration may be captured more accurately through observed decision processes than through perceptual indicators alone (Frydman & Camerer, 2016; Xiao & O'Neill, 2018).

Fourth, more research is needed in emerging-market and Indonesian contexts. Comparative studies across sectors, organizational forms, and educational settings would clarify whether the relationships synthesized in this article remain stable under different institutional and cultural conditions. This agenda is especially relevant for economic and financial literacy, case-based management education, and executive capability formation in Indonesia (Budiwati et al., 2020; Hilmiatussadiah & Budiwati, 2023; Wufron et al., 2023).

Fifth, future research should develop more integrative models that place cognitivist mechanisms in dialogue with affective and social processes. A particularly promising direction is to examine how metacognition, schema flexibility, and self-efficacy interact with emotional regulation, psychological safety, ethical climate, and organizational power structures in shaping managerial decisions. Such work would preserve the explanatory strength of cognitivism while addressing the broader realities of organizational life (Vuori & Huy, 2016).

Overall, future research should not move away from the cognitivist lens. Instead, it should deepen it empirically, extend it contextually, and connect it more carefully with adjacent explanations. That pathway is likely to produce a stronger evidence base for both managerial theory and the design of management education and executive development.

Conclusion

This article has presented a structured critical literature review of how metacognition, schema flexibility, and self-efficacy may help explain managerial decision quality in financial management and strategic management. Rather than proposing a definitive causal model, the review develops an integrative cognitivist interpretation of how managers monitor their reasoning, revise interpretive frames, and translate cognitive preparation into action under conditions of uncertainty. The illustrative cases sharpen this interpretation, but they do not substitute for direct empirical testing.

Across the retained evidence, the most directly supported pattern is that metacognition repeatedly appears as a contributor to reflective monitoring, bias checking, and corrective judgment, while schema flexibility appears as a condition for interpretive updating and adaptation when dominant frames become inadequate. The evidence for self-efficacy is also broadly convergent, especially in development-

oriented studies, but it should be read more cautiously as an interpretive bridging mechanism that helps explain how guided learning and reflective preparation may be translated into action readiness. Taken together, these patterns suggest that managerial decision quality is linked not only to technical knowledge, but also to the cognitive regulation through which knowledge is interpreted and used.

The review also clarifies why cognitivism matters for management education and executive development. The retained literature supports the value of reflective practice, case-based learning, guided challenge, and feedback-rich developmental designs for strengthening decision-related competence. At the same time, the article's more specific implications for executive development remain partly inferential because the evidence base is more direct in pedagogical settings than in organization-level intervention studies. The article should therefore be read as offering a conceptually integrated foundation for curriculum design and executive learning rather than a universally validated prescription.

The contribution of the article is deliberately bounded. It brings finance, strategy, and management learning into conversation through a shared cognitivist vocabulary centered on metacognition, schema flexibility, and self-efficacy. What the review clarifies is that adjacent literatures reveal a broadly convergent pattern in which reflective monitoring, interpretive updating, and action confidence matter for managerial judgment across domains. What remains uncertain is how stable these relationships are across sectors, cultures, organizational levels, and intervention designs, especially in Indonesian settings. That uncertainty does not weaken the relevance of the review. Instead, it defines a clearer agenda for future empirical work and reinforces the practical importance of designing management education and executive development around deeper cognitive capability formation rather than technical training alone.

Author contributions

Arus Reka Prasetia contributed to the conceptualization of the study, review design, literature screening, thematic synthesis, original draft preparation, and overall manuscript integration. Neti Budiwati contributed to academic supervision, conceptual refinement, methodological direction, validation of the manuscript's scholarly framing, and critical review for important intellectual content. Mohammad Soni contributed to the identification and synthesis of literature related to strategic management, executive development, and digital capability development, and participated in manuscript revision. Widy Muchamad contributed to the synthesis and interpretation of literature related to financial management, cross-domain comparison, and analytical consistency, and participated in manuscript revision. Wufron contributed to the synthesis of literature on financial literacy, management education, and case-based learning, refined the practical implications of the article, and participated in manuscript revision. All authors discussed the findings, contributed to the refinement of the manuscript, approved the final version, and agreed to the publication of this article.

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