PREPARING BANK EMPLOYEES FOR AI ADOPTION: AN INTEGRATIVE LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

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Abstract - *The growing organizational interest in artificial intelligence creates workforce challenges before its widespread deployment within commercial banking institutions. Bank employees may be expected to acquire new competencies while future task responsibilities, learning arrangements, and opportunities to apply those competencies remain uncertain during the early stages of organizational preparation. This article examines how commercial banks can prepare employees for AI adoption through an integrative review of banking, employment, and workforce-development publications, supported by selected theoretical and empirical literature on organizational change and employee learning. The review identifies convergence around digital competencies, continuous learning, managerial support, and workforce redeployment as interconnected priorities for effective workforce preparation. However, the selected literature provides uneven explanations of how these organizational arrangements influence preparation before implementation across individual employees and interdependent work units. Drawing on task-based accounts of technological change, organizational readiness theory, and training-motivation research, the article develops a framework connecting task clarity, supported collective practice, and credible skill-application opportunities with employee preparation in anticipation of changing work requirements. Three propositions address role uncertainty, collective change efficacy, and sustained reskilling engagement as distinct outcomes requiring appropriate empirical assessment, while distinguishing individual learning behavior from shared confidence in collective implementation. The contribution is a focused explanation of mechanisms connecting existing reskilling recommendations to employee responses and identification of boundary conditions relevant to their future empirical examination. The framework supports future research in banks where AI adoption is planned, experimental, or uneven across functions and provides a basis for examining employee preparation before observable workforce changes emerge.*

Keywords: *artificial intelligence; bank employees; workforce preparation; reskilling; organizational readiness; training motivation; commercial banks; upskilling; collective change efficacy; role uncertainty.*

INTRODUCTION

Artificial intelligence has become a prominent subject in banking strategy because its applications extend across information processing, customer communication, fraud detection, and analytical support. These applications also raise questions about the allocation of work, the competencies employees require, and the

conditions under which they can prepare for changing responsibilities. Research on banking AI and labor transformation identifies growing interest in hybrid financial, technological, and analytical capabilities, while sectoral analysis connects digitalization with employment quality and workforce development [14; 19].

The preparation problem begins before a bank can demonstrate measurable changes in employment or productivity. A proposed AI initiative may create expectations that employees will learn unfamiliar technologies while future responsibilities remain provisional. Managers may identify skill gaps before they have established suitable practice arrangements or defined opportunities to apply new competencies. Financial-services research has examined leaders' responses to these demands and the role of managerial capabilities in organizing change, providing a basis for studying preparation as an organizational process [2; 22].

Existing publications address digital competencies, continuous learning, internal mobility, and support for workforce transition. They provide a substantial foundation for examining how employees can prepare for AI-related change. However, the relationship between recommended organizational activities and employees' responses requires closer specification. Offering training, for example, leaves open questions about its relevance to particular responsibilities, employees' confidence in coordinated implementation, and their expectations of using acquired competencies [13; 16; 27].

This distinction is especially relevant where adoption is planned, experimental, or uneven across banking functions. Employees may have sufficient information to anticipate changes without having access to a production system. A study of preparation must therefore distinguish intended change from established implementation and adoption intentions from observable learning behavior. Recent employee-focused research provides evidence concerning intentions, support, and self-efficacy, while also allowing further investigation of how preparation develops over time [4; 5; 9].

The scientific problem addressed in this article is the incomplete integration of organizational preparation arrangements with the distinct employee and work-unit responses that precede AI implementation. The research question is: How can commercial banks translate plans for AI adoption into organizational conditions that support employee preparation before widespread implementation? Three subsidiary questions concern the clarification of future responsibilities, the development of confidence in coordinated implementation, and continued participation in reskilling.

The aim is to develop a conceptual framework of employee preparation by comparing sixteen publications, identifying the explanatory gaps relevant to these questions, and formulating three propositions for subsequent empirical assessment. Four objectives operationalize this aim: to classify the corpus by research design and scope; to compare its theoretical explanations and evidential limitations; to specify the constructs and levels of analysis needed for a preparation framework; and to state relationships and boundary conditions that future studies can examine. Achievement of the aim is assessed through these review outputs rather than an estimate of an intervention effect.

The object of the research is workforce preparation in commercial banks

planning or experimenting with AI applications. Its subject is the relationship between organizational preparation arrangements and employees' role uncertainty, collective implementation confidence, and reskilling engagement. No hypothesis was empirically tested in this review. The propositions developed through synthesis are intended for future investigation.

The intended scientific novelty is a focused integration of task change, organizational readiness, and training motivation at explicitly differentiated levels of analysis. The article examines how existing reskilling recommendations can be connected to preparation before deployment. This proposed contribution builds on established banking workforce frameworks and does not assert priority over the entire international literature. The literature review establishes the theoretical basis and gap, the methodology explains the bounded review procedure, and the analysis and results report the resulting evidence map and conceptual outputs.

LITERATURE REVIEW

The banking literature approaches workforce change through several complementary perspectives. Nguyen and Huynh [19] map AI applications and labor-related research, while Gangha Shree and Senthamarai [11] connect banking employment transformation with decent work. These approaches establish the relevance of changing work requirements at different scales. Bibliometric patterns and aggregate employment descriptions, however, cannot independently demonstrate how a particular preparation practice affects employees. Their contribution to this article lies in defining the context and the range of workforce concerns.

Competency-focused publications offer more direct guidance for employee development. Kashemsanta Na Ayudhya and Plangsorn [16] identify digital competencies alongside practical application and continuous learning. Vyas and Choudhary [27] connect technical literacy with analytical capabilities, risk awareness, professional judgment, and adaptability. Joshi [15] gives additional attention to foundational literacy and differing learning needs. Together, these accounts support differentiated training, although a list of competencies still requires translation into the activities expected within a particular banking workflow.

Acemoglu and Restrepo's [3] task-based account supplies an economic foundation for that translation. Their framework explains technological change through the allocation of tasks between labor and capital, including displacement from existing tasks and the creation of new tasks. Its relevance here is the choice of unit for describing changing work. It does not establish a causal relationship between communication and employee preparation; that relationship requires an additional organizational explanation and subsequent empirical assessment.

Rotatori [22] uses learning perspectives to examine how financial-services leaders respond to cognitive technologies and workforce transition. Nesindande et al. [18] examine changes in work processes and talent-management practices within a South African bank. Abid [2] applies managerial dynamic capabilities to AI adoption in talent management across Qatari banks. These studies connect preparation with leadership, learning, and coordination, but their organizational settings and technology

scopes differ. Executive and HR accounts also provide only partial access to frontline employees' experiences.

Bari et al. [13] assemble a wider set of human-capital, resource-based, capability, and adoption perspectives. Demta and Shah Deo [8] propose competency mapping and adaptive development arrangements, while Ewim et al. [10] discuss continuous learning and changing banking skills. Their conceptual breadth helps identify relevant organizational activities. However, recommendations and illustrative examples provide a weaker basis for causal inference than direct evaluation. Reporting and reference-traceability weaknesses further restrict reliance on particular claims in some of these publications.

Weiner [28] distinguishes shared commitment to a change from shared confidence in collective implementation capability. This organizational readiness perspective addresses coordination among interdependent members. It therefore complements studies concerned with individual confidence or willingness to use technology. Shea et al. [20] operationalize the distinction through a readiness instrument, but its use in banking requires contextual validation and evidence supporting aggregation. Organizational readiness cannot be inferred directly from the average completion rate of individual training courses.

The International Labour Organization (ILO) [14] places skills development alongside working conditions, employee participation, and social dialogue. Bera et al. [6] situate workforce adaptation within education, employment support, and social protection. These institutional accounts broaden responsibility for adaptation beyond the employee. Adeniwura et al. [1] also highlight differences in infrastructure, educational alignment, and access to training across Nigeria and the United Kingdom. Their documentary comparison identifies contextual issues without supplying a common employee dataset for estimating cross-country effects.

Mwamba and Mwange [17] describe human-capital adaptation in Zambian commercial banks and recommend structured reskilling. George et al. [12] place continuous learning and human-AI collaboration within a broader transformation discussion. Both are relevant to the organization of transition, although digital banking and economy-wide automation encompass activities beyond the AI workflows considered here. These differences constrain the transfer of conclusions across settings, particularly where statistical reporting or the original sources of forecasts require further checking.

Vyas and Choudhary [27] make internal mobility and redeployment explicit components of reskilling. Training-motivation research helps explain why employees' expectations about these arrangements may matter. Clark et al. [7] connect expected job utility with motivation, and Tharenou [23] examines motivation, support, and later participation. Blume et al. [25] identify relationships between motivation, supportive environments, and training transfer. These foundational contributions justify investigating the credibility of application opportunities while leaving their operation in banking AI preparation open to testing.

Yuniawan et al. [9] relate employee knowledge, confidence, perceived risks, and managerial support to AI adoption intentions in Indonesian financial services. Ahmad

et al. [4] combine interviews and survey analysis to examine training access, infrastructure, support, self-efficacy, and generative AI intentions in Pakistani banking. These studies already address organizational and individual determinants of employee responses. A framework limited to the claim that support improves intention would offer substantial overlap with their contributions.

Aonviset et al. [5] add intervention evidence through organizational-support vignettes in a Thai commercial bank, finding differences across job types. Their measured outcomes concern attitudes and intentions rather than a longitudinal record of learning or implementation. Pham [21] examines technological awareness, employability, and insecurity among Vietnamese banking employees. This makes it necessary to distinguish understanding a planned role from feeling secure about continued employment. More information can resolve one form of uncertainty while confirming an unfavorable employment prospect.

The remaining gap concerns the integration of task-specific preparation, collective practice, and credible learning application with differentiated outcomes before implementation. The closest banking reskilling frameworks already identify role mapping, mobility, learning, and support; the unanswered issue is how these arrangements relate to role uncertainty, shared implementation confidence, and sustained engagement [13; 22; 27]. The present study addresses this bounded gap by specifying constructs, levels, and propositions, while treating these relationships as conceptual deductions requiring validation.

METHODOLOGY

A bounded integrative review was conducted to compare heterogeneous publications and develop a conceptual explanation. This design was selected because the material combined empirical investigations, conceptual accounts, reviews, a dissertation, and institutional publications. Their different questions and measures did not support a common effect-size estimate. The integrative approach allowed their contributions and limitations to be examined together, consistent with Torraco's [24] account of conceptual synthesis.

The unit of analysis was the publication. A predefined collection of sixteen English-language full-text documents, published from 2020 to 2026, formed the core corpus. Table 2 identified every document through its author and publication year, and the reference list supplied its bibliographic identity. Eligibility was assessed through substantive discussion of banking or financial services, workforce adaptation, AI-related learning, or the institutional conditions of technological transition. The broader policy brief and workforce account were retained for contextual comparison. All sixteen core documents met this broad remit and remained in the descriptive map.

Twelve supplementary publications already identified during manuscript development were retained for four purposes: task theory, readiness and uncertainty, training motivation and transfer, and recent employee-focused empirical comparison. Theoretical and methodological sources were separated analytically from the core corpus. Their references were checked using titles, author names, DOI records, publisher pages, or institutional repositories. This supplementation was purposive. It

was not treated as a new exhaustive database search or used to construct a PRISMA discovery count.

PDF text and the manuscript bibliography were examined using a structured extraction matrix. The matrix recorded bibliographic identity, year, geographical or sectoral setting, dominant research design, theoretical orientation, data source or sample where reported, workforce focus, reported findings or recommendations, and limitations relevant to inference. No interview participants were recruited and no employee questionnaire was administered for the present review. The instruments were the document-extraction matrix and a comparison matrix linking preparation arrangements, mechanisms, outcomes, and levels of analysis.

The comparison proceeded in two passes. The first recorded descriptive characteristics and the authors' reported outputs. Each publication received one dominant design category for frequency calculation. Rotatori's executive survey and interviews were classified as an executive case investigation; Mwamba and Mwange were classified by their survey-based empirical design. Where a review mentioned additional expert input, classification followed its dominant review design. This rule prevented one publication from being counted in several design categories.

The second pass compared accounts of changing tasks, learning conditions, participation, and opportunities to apply skills. Findings were distinguished from recommendations, intentions from observed behavior, and individual confidence from collective implementation beliefs. Statements concerning broad digitalization were retained with that scope. Institutional and conceptual recommendations were recorded as recommendations, without treating them as demonstrated intervention effects.

Publication counts and percentages were calculated from the sixteen-row inventory using the formula $n/16 \times 100$. These statistics described the corpus; no employee sample was pooled and no significance tests were undertaken. The supplementary sources were excluded from this denominator. All sixteen core publications and all twelve supplementary references were cited in the final manuscript.

Conceptual synthesis connected extracted organizational arrangements with mechanisms drawn from the supplementary theories. Candidate relationships were specified by antecedent, outcome, level of analysis, and qualifying conditions. Three propositions were then formulated. The analysis did not estimate mediation, moderation, or causal effects. No independent duplicate coding, inter-rater reliability calculation, or preregistered protocol was claimed. Replication was defined as repeating the stated extraction and classification procedure on the same identified documents; broader literature coverage remained a separate limitation.

ANALYSIS AND RESULTS

The core corpus contained sixteen publications dated 2020–2026. Its distribution was one publication in 2020, two in 2021, two in 2024, five in 2025, and six in 2026. Thirteen publications, or 81.25%, were dated 2024–2026. The manuscript contained twenty-eight references overall; the additional twelve supplied theoretical, methodological, and empirical comparison material and were not included in the core-

corpus percentages.

Table 1 reports mutually exclusive dominant design categories. Four core publications collected primary organizational or employee evidence. The other twelve used documentary, review, bibliometric, descriptive-secondary, or institutional material. Sample sizes reported by the empirical publications referred to their original studies and were not combined in this review.

Table 1.

Dominant research designs in the core corpus

Design category	n	Percent
Qualitative or executive case investigation	3	18.75
Survey-based empirical investigation	1	6.25
Systematic literature review	2	12.50
Bibliometric review with qualitative synthesis	1	6.25
Conceptual, narrative, or documentary synthesis	6	37.50
Descriptive secondary-data analysis	1	6.25
Institutional issues paper or policy brief	2	12.50
Total	16	100.00

The three qualitative or executive investigations were Rotatori [22], Nesindande et al. [18], and Abid [2]. Mwamba and Mwange [17] supplied the survey-based investigation. The two publications classified as systematic reviews were Kashemsanta Na Ayudhya and Plangsorn [16] and Bari et al. [13]. Nguyen and Huynh [19] combined bibliometric mapping with qualitative synthesis. The institutional publications consisted of the ILO issues paper and the ADBI policy brief [6; 14].

Table 2 presents the sixteen-document evidence map. Each row records the reported design, setting or scope, and workforce-related output. The table retains distinctions between findings obtained through primary research, themes synthesized from other publications, and proposed organizational or policy arrangements. It contains no pooled effect estimates.

Table 2.

Evidence map of the sixteen core publications

Publication	Reported design and orientation	Reported workforce focus or output
Rotatori, 2020 [22]	Executive survey and interviews; financial services; 12 executives. Experiential and organizational learning.	Reported leader interpretations of AI-related work changes, learning, and transition support.
ILO, 2021 [14]	Sectoral issues paper; financial services. Decent work and social dialogue.	Examined employment, working conditions, skills, and participation in digital transition.
Ewim et al., 2021 [10]	Narrative discussion; banking digital transformation. Workforce skills and continuous learning.	Discussed digital literacy, analytical capabilities, adaptability, and workforce development.
Kashemsanta Na Ayudhya and Plangsorn, 2024 [16]	Review of financial-sector competencies; 30 selected papers. Competency development and learning.	Identified digital competencies, practical application, organizational support, and continuous learning.

Nesindande et al., 2024 [18]	18 interviews; one South African bank. Diffusion and multilevel perspectives.	Reported changes in work processes and associated talent-management practices.
Joshi, 2025 [15]	Narrative synthesis; financial services and generative AI. Digital literacy and accessible learning.	Discussed foundational skills, differing learning needs, and continuing training support.
Demta and Shah Deo, 2025 [8]	Conceptual conference paper; Indian banking. Human capital, adoption, and learning perspectives.	Proposed competency mapping, adaptive learning, and institutional support for development.
Adeniwura et al., 2025 [1]	Documentary comparison; Nigeria and United Kingdom. Human capital and technology adoption.	Compared infrastructure, educational alignment, training access, and AI-related skills gaps.
George et al., 2025 [12]	Broad conceptual and illustrative workforce account. Human-AI collaboration and continuous learning.	Discussed individual, organizational, and policy responses to intelligent automation.
Gangha Shree and Senthamarai, 2025 [11]	Descriptive employment and economic material; banking. Decent work and economic growth.	Described employment transformation and discussed skill shifts and workforce policy.
Abid, 2026 [2]	30 interviews; five Qatari banks; AI in talent management. Managerial dynamic capabilities.	Reported strategic framing, managerial learning, relational networks, and adoption readiness.
Vyas and Choudhary, 2026 [27]	Conceptual review; Indian banking, finance, and insurance. Strategic reskilling and adaptive talent management.	Proposed role mapping, training, mobility, capability assessment, and responsible AI culture.
Bari et al., 2026 [13]	Review; financial-services upskilling and reskilling. Human capital, resources, capabilities, and adoption.	Synthesized organizational and individual determinants and proposed a conceptual model.
Mwamba and Mwange, 2026 [17]	Survey-based study; Zambian commercial banks; 40 respondents. Resource-based and stakeholder perspectives.	Reported perceived workforce adaptation and recommended role-specific training and structured reskilling.
Nguyen and Huynh, 2026 [19]	Bibliometric mapping and synthesis; 474 publications. Task change, skills, and technology adoption.	Mapped banking AI research and discussed hybrid skills and labor transformation.
Bera et al., 2026 [6]	Regional policy brief; Asia and the Pacific. Education, employment support, protection, and governance.	Recommended coordinated reskilling, education reform, and workforce-transition policies.

Reported theoretical orientations included experiential and organizational learning in Rotatori [22], diffusion and multilevel perspectives in Nesindande et al. [18], managerial dynamic capabilities in Abid [2], and resource-based and stakeholder perspectives in Mwamba and Mwange [17]. Bari et al. [13] combined several theoretical lenses. Institutional publications organized workforce transition through decent-work and regional policy concerns [6; 14].

Reported outcomes also differed. The primary studies described leaders' interpretations, work-process changes, talent-management practices, and workforce adaptation. Review publications reported competency classifications, research patterns, and reskilling recommendations. The institutional documents addressed policy and sectoral transition. These outputs were retained as separate evidence types in the extraction matrix rather than recoded as a common employee-readiness measure [2; 18; 19; 22].

The supplementary empirical studies recorded different endpoints from one another. Yuniawan et al. [9] and Ahmad et al. [4] examined adoption intentions alongside employee and organizational factors. Aonviset et al. [5] measured attitudes and intentions following support scenarios. Pham [21] examined insecurity and employability in relation to technological awareness. Their findings were used for comparison and were not added to the sixteen-document frequency table.

The conceptual output distinguished three organizational arrangements: communication about planned tasks, supported joint practice, and credible opportunities to apply acquired competencies. Three corresponding outcomes were specified: uncertainty about responsibilities, collective change efficacy, and sustained reskilling engagement. Table 3 records these constructs, their levels, and the conditions included in their definitions. The table presents an unvalidated conceptual framework produced by this review.

Table 3.

Constructs and levels in the conceptual framework

Arrangement	Definition	Proposed outcome and level	Qualifying conditions
Task-specific communication	Information about future responsibilities, review points, and escalation within a planned workflow.	Individual role uncertainty	Employee questions and meaningful input; a sufficiently specified planned workflow.
Supported collective practice	Protected time, repeated joint workflow exercises, and supervisor feedback.	Work-unit collective change efficacy	Realistic practice and a shared belief supported by agreement among unit members.
Credible application opportunities	Observable opportunities to use acquired competencies in current work or accessible future roles.	Individual sustained reskilling engagement through expected job utility	Comparable access to learning time and resources; participation observed across time.

The framework used a specified planned workflow as its reference point. Task clarity concerned employees' understanding of responsibilities within that workflow. Collective change efficacy concerned shared confidence in coordinated implementation. Expected job utility concerned the anticipated relevance of learning to work, while sustained engagement concerned participation across time. The formulation kept opportunity to learn separate from willingness to participate and kept individual beliefs separate from a shared work-unit state.

The recorded distinctions also separated role uncertainty from job insecurity and participation from later transfer. A clearer account of future responsibilities did not constitute a measure of employment security. Completion of learning activities did not constitute evidence that competencies had been applied in production work. The framework therefore assigned these constructs different labels and did not combine them into a single readiness score.

Proposition 1. For employees preparing for a specified AI-enabled workflow, task-specific communication will be associated with lower uncertainty about future responsibilities, and this relationship will be stronger when employees have meaningful opportunities to question and influence the proposed allocation of tasks.

Proposition 2. Work units receiving protected learning time, repeated joint practice on a specified AI-enabled workflow, and supervisor feedback will develop greater collective change efficacy than units receiving awareness-oriented instruction alone.

Proposition 3. Among employees with comparable access to learning resources and time, credible opportunities to apply acquired AI-related competencies will be associated with greater sustained reskilling engagement through higher expected job utility of training.

The first and third propositions were specified at the employee level; the second was specified at the work-unit level. Employee voice qualified the first relationship, and comparable learning access qualified the third. The formulation of the second included a comparison condition consisting of awareness-oriented instruction. No coefficients, confidence intervals, significance tests, or observed intervention effects were produced for these propositions.

DISCUSSION

The review answers the research question by specifying how organizational preparation can be connected to distinct employee and work-unit responses. Its contribution is explanatory: existing recommendations concerning communication, practice, and application opportunities are linked to defined mechanisms and outcomes. Vyas and Choudhary [27] already connect role mapping, training, and mobility, while Bari et al. [13] integrate organizational and individual determinants. The present synthesis extends that discussion through the explicit distinction between personal uncertainty, shared implementation confidence, and continued learning behavior.

Proposition 1 gives task specificity a role in communication about anticipated change. Acemoglu and Restrepo [3] supply a task-based account of changing work, while Bordia et al. [26] distinguish forms of uncertainty and their management. Their integration supports examining whether information about responsibilities is more useful when employees can question and influence the proposed allocation. The relationship remains conditional on a sufficiently specified workflow. Clear information could confirm an adverse employment prospect; reduced role uncertainty must therefore be assessed separately from insecurity, consistent with the concern examined by Pham [21].

Proposition 2 locates part of preparation at the work-unit level. Rotatori [22] and

Abid [2] emphasize learning and coordination, while Weiner [28] distinguishes collective implementation confidence from other readiness attributes. Supported practice may allow employees to assess handovers, supervisory responses, and coordination demands together. However, poorly designed exercises could create unwarranted confidence. Testing this proposition therefore requires evidence about both shared beliefs and the realism of the preparation activities, rather than an assumption that course completion establishes implementation capability.

Proposition 3 explains why credible application opportunities may influence persistence. Internal mobility and redeployment are already present in the banking reskilling literature [27]. Expected job utility provides a motivational explanation for their relevance during preparation [7; 23]. This interpretation also connects with training-transfer research, while maintaining the distinction between engagement in learning and later application at work [25]. Actual access must be considered because limited time or resources can constrain participation independently of motivation.

The proposed framework agrees with Yuniawan et al. [9] and Ahmad et al. [4] that organizational conditions and employee perceptions deserve joint attention. It focuses on more specific outcomes than a general intention to use AI. Aonviset et al. [5] already strengthen the evidence concerning support through a vignette intervention. The present review therefore makes no claim to introduce organizational support into adoption research. Its added value depends on whether the specified mechanisms explain preparation beyond existing intention-based models and across the period preceding implementation.

The framework also draws a distinction from broad competency frameworks. The corpus profile showed that most core publications synthesized or discussed existing material. That composition supports using their recommendations as a basis for conceptual development, while limiting claims that the proposed relationships have already been demonstrated. The stronger empirical studies remain bounded by their settings and measures. Executive interpretations, individual intentions, and unit-level efficacy should consequently retain different roles in future research [18; 20; 22].

For commercial banks, the framework suggests connecting training with a defined proposed workflow. Managers and affected employees could examine expected responsibilities, unresolved questions, and the resources needed to rehearse coordination. Preparation could then combine relevant instruction with supervised practice and transparent routes to skill application. These implications develop the participation and workforce-transition concerns already identified by the ILO [14], together with learning and mobility arrangements discussed by Rotatori [22] and Vyas and Choudhary [27].

The framework can also guide research where AI adoption is emerging. A longitudinal study could assess role expectations before preparation, responses after communication and practice, continued participation, and later application. Employee reports, learning records, and observed exercises would provide different forms of evidence. Readiness instruments could inform measurement after contextual validation, while work-unit analysis would require evidence of within-unit agreement [20]. Any application to Uzbekistan would require local evidence about a concrete

initiative; the present review establishes no national adoption rate or workforce effect.

The review's bounded selection limits coverage and the strength of any novelty claim. The corpus was predefined, supplementation was purposive, and independent duplicate coding was not conducted. Another review could include different sources or classify ambiguous designs differently. These restrictions qualify the interpretation of the descriptive profile and the resulting conceptual synthesis; they do not alter the reported denominator or establish that omitted research is irrelevant.

The evidence was heterogeneous, and some publications addressed digitalization beyond AI. Reporting and reference-quality weaknesses in parts of the corpus also restricted reliance on numerical claims. The propositions remain untested, and plausible alternatives include workload, prior experience, trust in management, and the quality of the planned technology. Future investigations should evaluate these alternatives and the proposed boundary conditions. The contribution is consequently a structured basis for investigation, with conclusions limited to the reviewed literature and the relationships derived from it.

CONCLUSION

This article examined how commercial banks can prepare employees for AI adoption before widespread implementation. The research question was answered through an integrative comparison of sixteen publications and the development of a framework connecting organizational arrangements with distinct preparation outcomes. The review produced a descriptive corpus profile, a comparative evidence map, explicit construct definitions, and three propositions for future testing.

The principal conclusion is that workforce preparation should be examined through the responsibilities employees anticipate, the coordination their units must achieve, and the opportunities they expect after learning. Training provision alone gives an incomplete account of these conditions. Preparation becomes more clearly specified when communication concerns a defined workflow, practice allows colleagues to rehearse interdependent responsibilities, and employees can identify credible ways to apply acquired competencies.

The contribution is the integration of these arrangements with differentiated outcomes at individual and work-unit levels. Task-specific communication is proposed to relate to role uncertainty, supported collective practice to shared implementation confidence, and credible application opportunities to sustained reskilling engagement through expected job utility. These relationships are conceptual outputs rather than established intervention effects. Their value rests on the clarity with which they can guide subsequent research and improve the specification of preparation activities.

The practical recommendation is to connect employee development with a concrete proposed change in work. Banks can document expected responsibilities, identify unresolved questions with affected employees, allocate time for realistic joint practice, and make the conditions of subsequent skill application transparent. Participation should be assessed alongside actual access to time, resources, and opportunities. Evaluation should distinguish understanding responsibilities, confidence in coordinated implementation, learning participation, and later application.

Future research should test the propositions longitudinally across banking functions and adoption stages. It should combine employee perceptions with records of participation and observed practice, examine the conditions under which individual responses become shared unit beliefs, and assess alternative explanations. Such research is possible in emerging-adoption settings without first demonstrating large-scale employment displacement. The immediate research priority is to establish which preparation arrangements help employees engage with a specified organizational change and how those arrangements operate over time.

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