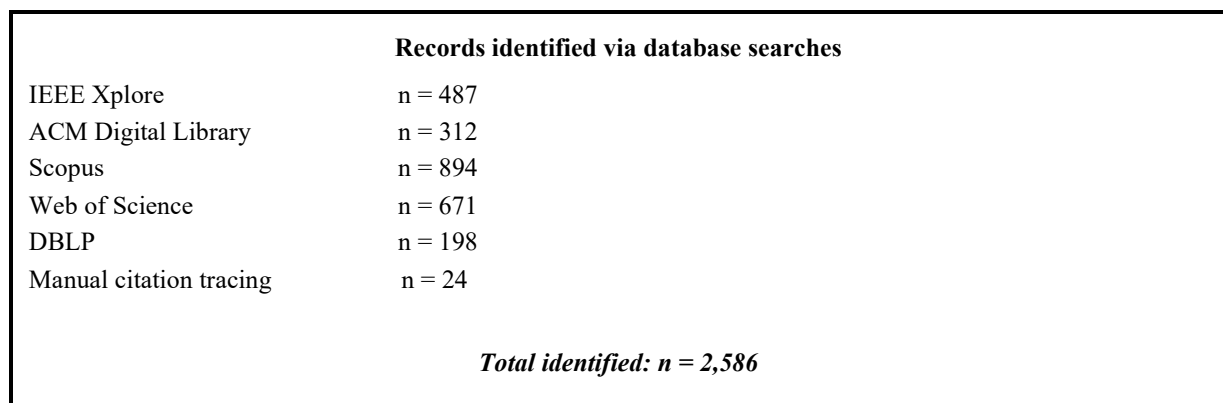
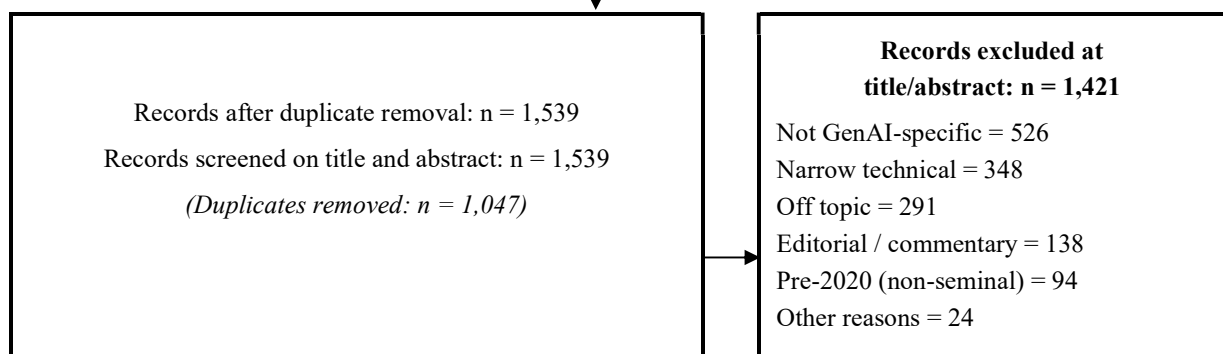


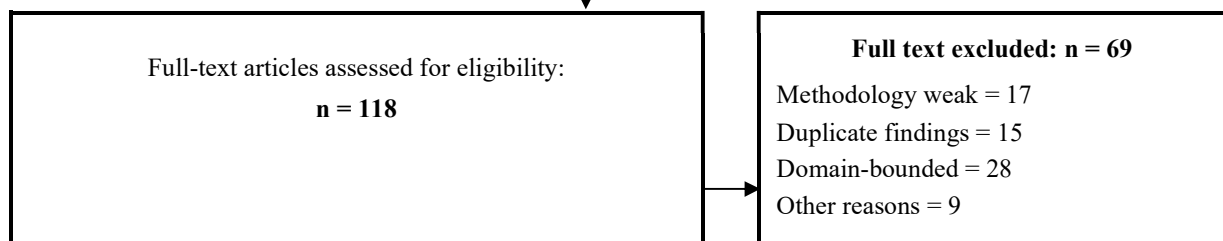
Identification



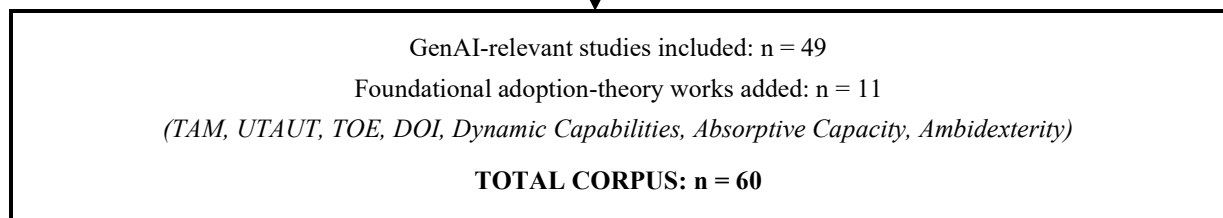
Screening



Eligibility



Included



***S1.** PRISMA 2020 flow diagram for the systematic literature review*

S.2. Data Extraction Matrix

ID	Author(s) (Year)	Title	Source / Journal	Year	Methodology	Theoretical Lens	Sector Focus	Dimension(s) Addressed	Key Contribution	Gap Relative to Techno-Functional Framework
1	Davis (1989)	Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology	MIS Quarterly	1989	Empirical- Quantitative	TAM	Cross-sector	Cross-cutting (foundational)	Establishes perceived usefulness and ease of use as determinants of technology acceptance	Predates GenAI; lacks specificity for probabilistic, generative systems
2	Davis, Bagozzi & Warshaw (1989)	User Acceptance of Computer Technology: A Comparison of Two Theoretical Models	Management Science	1989	Empirical- Quantitative (longitudinal)	TAM, TRA, TPB	Cross-sector	Cross-cutting (foundational)	Validates TAM against TRA; usefulness explains >50% of intention variance	Individual-level adoption only; no organizational or post- implementation lens
3	Venkatesh, Morris, Davis & Davis (2003)	User Acceptance of Information Technology: Toward a Unified View	MIS Quarterly	2003	Empirical- Quantitative (longitudinal multi-org)	UTAUT (synthesis of 8 models)	Cross-sector	Cross-cutting (foundational)	Unified framework with 4 determinants (PE, EE, SI, FC) explaining ~70% of intention variance	Pre-GenAI; treats technology as deterministic; no agility or post- adoption learning constructs
4	Venkatesh, Thong & Xu (2012)	Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology	MIS Quarterly	2012	Empirical- Quantitative	UTAUT2	Cross-sector (consumer)	Cross-cutting (foundational)	Extends UTAUT with hedonic motivation, price value, habit	Consumer-focused; not designed for enterprise GenAI adoption with governance and architecture demands
5	Cohen & Levinthal (1990)	Absorptive Capacity: A New Perspective on Learning and Innovation	Administrative Science Quarterly	1990	Conceptual + Empirical	Absorptive capacity	Cross-sector (manufacturing)	Retrospective (theoretical anchor)	Defines firm's ability to recognize, assimilate, and apply external knowledge	Pre-GenAI; not operationalized for adoption framework with structured retrospection cycles
6	Teece (2012)	Dynamic Capabilities: Routines versus Entrepreneurial Action	Journal of Management Studies	2012	Conceptual	Dynamic capabilities (sense / seize / transform)	Cross-sector	Operating Model, Agility (theoretical anchor)	Articulates the role of entrepreneurial action in dynamic capabilities	Generic; no specification for AI- era technological volatility or POC-to- production gap
7	Teece (2007)	Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance	Strategic Management Journal	2007	Conceptual	Dynamic capabilities (microfoundati ons)	Cross-sector	Operating Model (theoretical anchor)	Microfoundations of sensing, seizing, and reconfiguring capabilities	Pre-GenAI; technology choice and architecture not central
8	Venkatesh (2021)	Adoption and use of AI tools: a research agenda grounded in UTAUT	Annals of Operations Research	2021	Conceptual / Research agenda	UTAUT extended to AI	Cross-sector	Cross-cutting	Bridges UTAUT to AI adoption; identifies AI- specific antecedents and interventions	Predates GenAI specifically; lacks the techno-functional bridging at operating- model level
9	Tornatzky & Fleischer (1990)	The Processes of Technological Innovation	Lexington Books (book)	1990	Conceptual (book)	TOE framework	Cross-sector	Cross-cutting (foundational)	Establishes Technology- Organization-	Pre-AI; treats technology as static

									Environment determinants of technology adoption	asset rather than evolving capability
10	Rogers (2003)	Diffusion of Innovations (5th ed.)	Free Press (book)	2003	Conceptual (book)	DOI	Cross-sector	Cross-cutting (foundational)	Establishes innovation attributes (relative advantage, compatibility, complexity, trialability, observability)	Generic to all innovations; not tuned for GenAI's probabilistic and risk-laden character
11	March (1991)	Exploration and Exploitation in Organizational Learning	Organization Science	1991	Conceptual	Organizational ambidexterity	Cross-sector	Agility (theoretical anchor)	Foundational tension between exploration and exploitation in organizational learning	Not GenAI-specific; needs translation to iterative AI experimentation cycles
12	Agrawal (2023)	Towards Adoption of Generative AI in Organizational Settings	Journal of Computer Information Systems	2023	Empirical-Quantitative (108 orgs)	TOE + Institutional theory + DOI	Cross-sector (India)	Relevance, Operating Model	Identifies organizational-level determinants of GenAI adoption using a TOE-based model	Antecedent-focused; no post-adoption learning or iterative agility component
13	Rana et al. (2024)	Assessing the nexus of Generative AI adoption, ethical considerations and organizational performance	Technovation	2024	Empirical-Quantitative (PLS-SEM, n=384)	Institutional theory + AI ethics	IT/ITeS (cross-sector services)	Operating Model, Retrospective	Validates institutional pressures and ethical principles as drivers of GenAI use and performance	No explicit adoption-stage progression; treats agility implicitly
14	Russo (2023)	Navigating the Complexity of Generative AI Adoption in Software Engineering	ACM Transactions on Software Engineering and Methodology	2023	Mixed-methods (Gioia + PLS-SEM, n=283)	TAM + DOI + SCT (HACAF)	Software engineering	Relevance, Operating Model	Compatibility with workflow drives GenAI adoption more than perceived usefulness	Domain-specific (SE); HACAF lacks scaled organizational and post-adoption mechanisms
15	Reddy (2024)	Generative AI in healthcare: an implementation science informed translational path on application, integration and governance	Implementation Science	2024	Conceptual / narrative review	TAM + NASSS	Healthcare	Operating Model, Agility, Retrospective	Translational pathway with implementation-science grounding for healthcare GenAI	Healthcare-bounded; not a generalizable cross-sector enterprise framework
16	Sánchez et al. (2025)	Artificial Intelligence Adoption in SMEs: Survey Based on TOE-DOI Framework, Primary Methodology and Challenges	Applied Sciences	2025	Conceptual + case-study insights	TOE + DOI + responsible AI extension	SMEs (cross-sector)	Operating Model, Agility	Six-phase roadmap for SME AI adoption; expands TOE with responsible AI	SME-bounded; treats post-adoption learning implicitly; no structured retrospective stage
17	Holmström et al. (2024)	How organizations can innovate with generative AI	Business Horizons	2024	Conceptual	Innovation strategy typology	Cross-sector	Relevance	Four-quadrant typology (automation x augmentation) for GenAI innovation strategy	Strategy-only; no operating-model, agility, or retrospective treatment
18	Rajaram and Tingley (2024)	Generative artificial intelligence in small and medium enterprises: Navigating its promises and challenges	Business Horizons	2024	Conceptual (sailing metaphor)	Practitioner framework	SMEs	Operating Model	Identifies five strategic dimensions (competency, leadership, culture, collaboration, partnerships)	SME-bounded; no temporal progression; no structured iteration or retrospection
19	Chowdhury et al. (2024)	Generative Artificial Intelligence in Business: Towards a Strategic	British Journal of Management	2024	Conceptual	Institutional entrepreneurship for sustainability	Cross-sector (HRM)	Operating Model	HRM framework for GAI emphasizing alignment, re-institutionalization, continuous learning	HRM-bounded; not a comprehensive techno-functional adoption framework

		Human Resource Management Framework								
20	Haki et al. (2025)	Integrating Generative AI Into Enterprise Platforms: Insights From Salesforce	Information Systems Journal	2025	Single-case study (Salesforce)	Platform theory	Enterprise platforms	Operating Model	Three-pillar guidance (capability, architecture, governance) for platform-level GenAI	Platform-owner perspective; not designed for adopting enterprises end-to-end
21	Mikalef et al. (2023)	Examining how AI capabilities can foster organizational performance in public organizations	Government Information Quarterly	2023	Empirical-Quantitative (SEM, 168 EU municipalities)	Resource-based view + AI capabilities	Public sector (EU)	Operating Model	AI capabilities affect performance via process automation and cognitive insight	Public-sector-bounded; pre-GenAI in scope; no iterative or retrospective component
22	Wessel et al. (2025)	Generative AI and its Transformative Value for Digital Platforms	Journal of Management Information Systems	2025	Conceptual (integrative framework)	Platform value-creation theory	Digital platforms	Relevance, Operating Model	Identifies four GenAI mechanisms: automation, democratization, hyper-personalization, collaborative innovation	Platform-focused; lacks adoption-stage and learning treatment for adopting firms
23	Zhang L. et al. (2025)	Unraveling Generative AI Adoption in Enterprise Digital Platforms: The Effect of Institutional Pressures	IEEE Transactions on Engineering Management	2025	Empirical-Quantitative (n=328)	Institutional theory	Enterprise digital platforms	Relevance	Institutional pressures positively drive GenAI adoption; policy uncertainty and innovative culture moderate	Antecedent study only; no post-adoption or operating-model treatment
24	Al-Khatib (2023)	Drivers of generative artificial intelligence to fostering exploitative and exploratory innovation: A TOE framework	Technology in Society	2023	Empirical-Quantitative (CB-SEM, n=260)	TOE	Retail (Jordan)	Relevance, Operating Model	Identifies relative advantage, top management support, organizational readiness, customer pressure as drivers	TOE replication; no cross-stage progression or learning loop
25	Gupta et al. (2024)	Generative Artificial Intelligence (AI) Technology Adoption Model for Entrepreneurs	Internet Reference Services Quarterly	2024	Conceptual + practitioner	TAM extended (Pre-Perception / Assessment / Outcome)	Entrepreneurs / startups	Relevance, Agility	Three-stage adoption model with utilitarian/hedonic value drivers	Entrepreneur-bounded; lacks enterprise operating-model and structured retrospection
26	De Longueville et al. (2025)	The Proof Is in the Eating: Lessons Learnt from One Year of Generative AI Adoption in a Science-for-Policy Organisation	AI	2025	Single-case study (JRC)	JRC GenAI Compass	Public sector science-for-policy	Operating Model, Retrospective	Empirically grounded conceptual framework with AI-IQ construct from one-year deployment	Single-case in public sector; not generalized cross-industry
27	Storey (2025)	Knowledge Management in a World of Generative AI: Impact and Implications	ACM Transactions on Management Information Systems	2025	Conceptual	Knowledge management	Cross-sector	Operating Model, Retrospective	Framework for KM-GenAI interaction including novice-expert progression and tacit knowledge risks	KM-focused; not a full enterprise adoption framework
28	Jackson et al. (2024)	Generative artificial intelligence in supply chain and operations management: a capability-based framework for analysis and implementation	International Journal of Production Research	2024	Conceptual + case-based	Resource-based view + AI capabilities	Supply chain / operations	Relevance, Operating Model	Capability-based framework mapping AI to 13 SCOM decision areas	Domain-bounded (SCOM); no temporal progression or post-adoption review

29	Leoni et al. (2024)	AI-empowered KM processes for decision-making: empirical evidence from worldwide organisations	Journal of Knowledge Management	2024	Qualitative interviews (n=52 orgs)	Knowledge management + decision-making	Cross-sector (global)	Operating Model	Six-step procedure for AI in KM with 20 adoption factors and dual relationship model	KM-bounded; lacks the agility and retrospective dimensions
30	Zhang Q. et al. (2025)	Research on the impact of generative artificial intelligence on enterprise innovation performance: a knowledge management perspective	Journal of Knowledge Management	2025	Conceptual	Knowledge management processes	Cross-sector	Operating Model, Retrospective	Four-process KM framework (creation, retrieval, transfer, application) for GenAI	Conceptual only; KM-lens-bounded
31	Schwaacke et al. (2024)	The new normal: The status quo of AI adoption in SMEs	Journal of Small Business Management	2024	Systematic literature review (PRISMA, 106 articles)	TOE	SMEs (cross-sector)	Cross-cutting	Eight-cluster TOE-based synthesis of SME AI adoption	SME-bounded; review of antecedents not a prescriptive framework
32	Mohan et al. (2025)	Integrating Generative AI into Digital Transformation: A Unified Pilot-to-Production Framework for Key Economic Sectors	IEEE ICERECT Conference	2025	Mixed-methods (8 longitudinal cases + survey n=212)	Dynamic capabilities	Cross-sector (4 industries)	Operating Model, Agility	Five-level maturity ladder with data platform maturity as strongest accelerator; ROI/payback evidence	Maturity-model framing; integration with theoretical adoption theories implicit; agility cycles not detailed
33	Marshall et al. (2024)	How generative AI will drive enterprise innovation	Strategy & Leadership	2024	Survey (IBM IBV, multiple n)	Innovation strategy	Cross-sector (C-suite)	Relevance, Retrospective	Argues GenAI value comes from innovation (operational, product, business model)	Practitioner-survey-driven; no structured framework with formal propositions
34	Brynjolfsson et al. (2023)	Generative AI at Work	NBER Working Paper / SSRN	2023	Empirical-Quantitative (5,179 agents, RCT-style)	Productivity and learning	Customer service	Cross-cutting (effects)	GenAI assistance increases productivity 15% on average; gains concentrated in lower-skilled workers	Effect study not framework; no adoption-process treatment
35	Feuerriegel et al. (2023)	Generative AI	Business & Information Systems Engineering	2023	Conceptual	BISE foundational	Cross-sector	Cross-cutting (definitional)	Foundational definition and discussion of generative AI's promise, challenges, ethics	Definitional; not an adoption framework
36	Eisfeldt et al. (2023)	Generative AI and Firm Values	SSRN / NBER Working Paper	2023	Empirical-Quantitative (event study)	Asset pricing / firm valuation	Cross-sector (US listed firms)	Cross-cutting (effects)	Higher-exposure firms earned 0.4% daily excess returns post-ChatGPT; high cross-firm variation	Capital-markets perspective; no organizational adoption mechanism
37	Tabassi (2023)	Artificial Intelligence Risk Management Framework (AI RMF 1.0)	NIST	2023	Conceptual / Standard	Risk management	Cross-sector (US standard)	Operating Model	Voluntary, non-sector-specific framework for managing AI risk across lifecycle	Risk-only; not a complete adoption framework with relevance, agility, retrospective dimensions
38	Papagiannidis et al. (2025)	Responsible artificial intelligence governance: A review and research framework	Journal of Strategic Information Systems	2025	Scoping review	Responsible AI governance (structural/relational/procedural)	Cross-sector	Operating Model	Synthesizes responsible AI principles into governance practices and a research agenda	Governance-only; does not address adoption progression or post-adoption learning

39	Camilleri (2024)	Artificial intelligence governance: Ethical considerations and implications for social responsibility	Expert Systems	2024	Conceptual / review	AI governance + CSR	Cross-sector	Operating Model	Identifies governance dimensions: accountability, explainability, fairness, privacy, safety	Governance-only
40	Madanchian et al. (2025)	Ethical theories, governance models, and strategic frameworks for responsible AI adoption and organizational success	Frontiers in Artificial Intelligence	2025	Conceptual / review	Utilitarian / deontological / virtue ethics	Cross-sector	Operating Model	Integrates ethical theories with governance and strategic frameworks	Theoretical synthesis; no operationalization for stage-by-stage adoption
41	Díaz Rodríguez et al. (2023)	Connecting the Dots in Trustworthy Artificial Intelligence: From AI Principles, Ethics, and Key Requirements to Responsible AI Systems and Regulation	Information Fusion	2023	Conceptual / review	Trustworthy AI (7 requirements x 3 pillars)	Cross-sector	Operating Model	Comprehensive seven-requirement framework for trustworthy AI across lifecycle	Trustworthiness-only; lacks adoption progression
42	Bodnari et al. (2025)	Scaling enterprise AI in healthcare: the role of governance in risk mitigation frameworks	NPJ Digital Medicine	2025	Perspective	Risk and governance	Healthcare	Operating Model	Governance frameworks as scaling enablers for healthcare AI	Sector-bounded; perspective-style
43	Ferrara (2023)	Should ChatGPT be Biased? Challenges and Risks of Bias in Large Language Models	First Monday	2023	Conceptual / review	Bias and ethics in LLMs	Cross-sector	Operating Model (governance)	Maps origins, ethics, and mitigations of LLM bias	Bias-only; not adoption-framework
44	Tambe (2025)	Reskilling the Workforce for AI: Domain Expertise and Algorithmic Literacy	Management Science	2025	Empirical-Quantitative (workforce datasets)	Human capital + complementarity	Cross-sector (US labor market)	Relevance, Operating Model	AI complements domain expertise; firms diffusing algorithmic literacy broadly are rewarded by markets	Workforce-effect study; not an adoption framework but provides empirical foundation for cross-hierarchical literacy
45	Morandini et al. (2023)	The Impact of Artificial Intelligence on Workers' Skills: Upskilling and Reskilling in Organisations	Informing Science: International Journal of an Emerging Transdiscipline	2023	Narrative review	Skills transformation	Cross-sector	Relevance, Operating Model	Identifies transversal-skills mapping and ad hoc training as key adaptation strategies	Skills-only; no adoption-stage treatment
46	Almatrafi et al. (2024)	A Systematic Review of AI Literacy Conceptualization, Constructs, and Implementation and Assessment Efforts (2019-2023)	Computers and Education Open	2024	SLR (n=47)	AI literacy constructs	Cross-sector (education + workforce)	Relevance	Six AI-literacy constructs (Recognize, Know/Understand, Use/Apply, Evaluate, Create, Navigate Ethically)	Literacy-construct review; not an enterprise adoption framework
47	Babashahi et al. (2024)	AI in the Workplace: A Systematic Review of Skill Transformation in the Industry	Administrative Sciences	2024	SLR (n=20)	Skills and adaptation	Cross-sector	Operating Model	Crucial skill sets and continuous adaptation strategies for AI integration	Skills-only review

48	Annapureddy et al. (2024)	Generative AI Literacy: Twelve Defining Competencies	Digital Government: Research and Practice	2024	Conceptual	Competency-based literacy	Cross-sector	Relevance	12 competencies for GenAI literacy from foundational to ethical and prompt-engineering	Literacy-construct only; not adoption framework
49	Li et al. (2024)	Developing AI literacy in HRD: competencies, approaches, and implications	Human Resource Development International	2024	Conceptual / TAM-grounded	TAM applied to AI literacy	Cross-sector (HRD)	Relevance	Four-aspect AI literacy: skills, relevance, values, knowledge	HRD-bounded
50	Vania et al. (2024)	The Impact of Generative AI on Managerial Productivity, Decision-Making, and Organizational Performance	Journal of Information Systems Engineering and Management	2024	Survey synthesis	Productivity and value	Cross-sector	Retrospective	Reports productivity improvements and ROI estimates from GenAI adoption	Effects-survey, not framework; useful for ROI claims
51	Stevenson et al. (2024)	The Minimum Viable Product (MVP): Theory and Practice	Journal of Management	2024	Conceptual / theoretical	Lean startup + scientific entrepreneurship	Cross-sector (entrepreneurship)	Agility (theoretical anchor)	Defines MVP dimensionality, forms, risks, and trade-offs	Generic to entrepreneurship; not GenAI-specific
52	Bahi et al. (2024)	Integrating Generative AI for Advancing Agile Software Development and Mitigating Project Management Challenges	International Journal of Advanced Computer Science and Applications	2024	Conceptual / review	Agile + GenAI	Software engineering	Agility, Operating Model	Integrates GenAI into Agile workflows for code generation, testing, predictive analytics	SE-bounded; tool-level rather than enterprise framework
53	Saklamaeva et al. (2023)	The Potential of AI-Driven Assistants in Scaled Agile Software Development	Applied Sciences	2023	SLR + practitioner mapping	Scaled Agile Framework (SAFe)	Software engineering (large-scale)	Agility, Operating Model	Maps 18 SADM challenges and 7 benefits of AI assistants in scaled agile	SAFe-bounded; SE-domain
54	Alonso et al. (2022)	A systematic mapping study and practitioner insights on the use of software engineering practices to develop MVPs	Information and Software Technology	2022	Systematic mapping (n=33)	Software engineering	Software engineering	Agility (foundational)	Identifies MVP ideation and evaluation practices including A/B testing and usability tests	Not GenAI-specific; SE-bounded
55	Huang et al. (2025)	A Survey on Hallucination in Large Language Models: Principles, Taxonomy, Challenges, and Open Questions	ACM Transactions on Information Systems	2023	Survey	Hallucination taxonomy	Cross-sector (NLP/IR)	Operating Model (governance)	Foundational taxonomy of LLM hallucinations with detection and mitigation methods	Technical-only; not organizational adoption
56	Farquhar et al. (2024)	Detecting hallucinations in large language models using semantic entropy	Nature	2024	Empirical / methodological	Uncertainty quantification	Cross-sector	Operating Model (technical guardrail)	Semantic-entropy method for detecting confabulations across tasks without prior knowledge	Technical method; not adoption framework
57	Lin et al. (2024)	Towards trustworthy LLMs: a review on debiasing and dehallucinating in large language models	Artificial Intelligence Review	2024	Review	Trustworthy LLMs	Cross-sector	Operating Model (governance)	Synthesizes mitigation strategies for bias and hallucination in LLMs	Technical review
58	Weinberg (2025)	A Framework for the Adoption and Integration	ArXiv (preprint)	2025	Conceptual	Synthesis of TAM, change	Midsize and enterprise	Multiple	Four interconnected phases: Strategic	Phase-based framework only; no

		of Generative AI in Midsize Organizations and Enterprises (FAIGMOE)				management, DOI			Assessment, Planning and Use Case Development, Implementation and Integration, Operationalization and Optimization	continuous Retrospective dimension; treats agility implicitly; preprint
59	Khanna et al. (2025)	Navigating AI Adoption: An AI-Verse Framework for Enterprises	IEEE Conference on Artificial Intelligence (CAI)	2025	Conceptual + survey	Enterprise architecture	Cross-sector (enterprises)	Operating Model	Cross-functional AI integration architecture for unified enterprise AI ecosystem	Architecture-focused; no relevance-gating, agility, or retrospection construct
60	Sauvola et al. (2024)	Future of software development with generative AI	Automated Software Engineering	2024	Conceptual / scenarios	Scenario planning	Software development	Operating Model, Agility	Four primary GenAI software development scenarios with model trajectories	SE-domain; scenarios not full framework