

The GenAI Strategic Assessment (GSA) Framework: A Guide for Enterprise AI Investment

Bhoomika Ghosh
Independent Researcher
Seattle WA

Shereen Moussa
Independent Researcher
New York, USA

Siddharth Shroff
Independent Researcher
San Francisco CA

Vishwasaran S. Srivastava
Independent Researcher
Morris Plains NJ

ABSTRACT

Enterprises are rapidly investing in Generative Artificial Intelligence (GenAI), yet most initiatives struggle to move beyond pilot stages or deliver measurable returns. Recent studies, including MIT's findings that 95% of GenAI pilots fail and OpenAI's methodology for identifying and scaling AI use cases, highlight the urgent need for structured evaluation frameworks. This paper introduces the GenAI Strategic Assessment (GSA) Framework, a four-pillar decision-making model designed to guide organizations in prioritizing, evaluating, and scaling GenAI initiatives. The framework integrates lessons from existing modular and public governance models such as MLOps practices and the NIST AI Risk Management Framework—while addressing the critical strategic gap at the ideation and investment stage. Through weighted scoring across Value Chain Optimization & Innovation, Market and Competitive Reconfiguration, Organizational Readiness & Adaptability, and Ecosystem & Regulatory Landscape, the GSA provides executives with a quantifiable basis for go/no-go decisions. Empirical validation against enterprise AI failure modes demonstrates its ability to mitigate risks such as strategic ambiguity, poor integration, and misalignment between technology and competitive advantage. Case studies of Duolingo and Chegg illustrate the framework's practical application, revealing how disciplined evaluation determines whether GenAI serves as a driver of growth or a source of disruption. This research contributes a scalable, governance-oriented approach for converting AI hype into sustainable enterprise value.

General Terms

Artificial Intelligence, Decision-Making, Strategic Management, Evaluation Frameworks, Risk Management

Keywords

Generative Artificial Intelligence, AI Evaluation Frameworks, Strategic Assessment, Enterprise AI Investment, AI Governance, Organizational Readiness, Value Chain Optimization, Market Reconfiguration, Risk Management, AI Adoption, OpenAI, MIT, Chegg, Duolingo

1. INTRODUCTION

The rapid advancements in Generative Artificial Intelligence (GenAI) and autonomous agent technologies are fundamentally reshaping business strategies across diverse industries. These innovations present unprecedented opportunities for enhanced efficiency, novel product development, and transformative customer experiences. As executive leadership contemplates significant investments in these burgeoning technologies, the establishment of a robust evaluation framework becomes

indispensable. Such a framework is critical not only for balancing the immense potential for innovation against inherent risks but also for ensuring stringent alignment with overarching business objectives. Crucially, its primary function is to provide leadership with a data-driven basis for the fundamental 'go/no-go' decision on any proposed GenAI project.

This paper underscores the dual necessity of applying comprehensive evaluation frameworks: first, in the crucial phase of identifying business use cases where GenAI can deliver substantial value, and second, throughout the entire lifecycle of GenAI use case implementation. Effective evaluation at the ideation stage allows organizations to pinpoint high-value applications that resonate with strategic goals, possess technical feasibility, and promise tangible returns on investment. Subsequently, during implementation, a structured evaluation framework ensures meticulous oversight of development, deployment, and ongoing operation, addressing critical aspects such as data governance, model performance, ethical considerations, and responsible AI practices.

2. GenAI EVALUATION: A FRAMEWORK FOR STRATEGIC CHOICE

The effective assessment, deployment, and ongoing management of Generative AI (GenAI) and agent technologies necessitate well-defined evaluation frameworks. These are not merely technical tools; they are strategic instruments that profoundly influence an organization's ability to harness AI innovation responsibly and effectively. The landscape of available tools can be broadly categorized into three types: overarching strategic frameworks, modular lifecycle frameworks, and public governance frameworks.

2.1 Overarching Strategic Frameworks

These frameworks offer a holistic, top-down model designed to answer the most fundamental question: "Should one invest in this initiative?" By creating a direct and transparent link between a proposed GenAI project and core enterprise objective, they provide the crucial "big picture" perspective needed for high-stakes decision-making. For executive leadership, this is invaluable as it prevents the funding of siloed, ad-hoc projects and ensures that capital is allocated only to initiatives with the highest potential for strategic impact. The primary output is a clear recommendation or scorecard, enabling leaders to confidently make the critical 'go/no-go' decision and build a portfolio of value-driven AI investments, rather than a collection of disconnected experiments.

2.2 Modular Lifecycle Frameworks

For modular lifecycle frameworks it segments the GenAI project lifecycle into distinct, phase-specific modules, mirroring the disciplined stages of modern software engineering and MLOps (Machine Learning Operations). They offer depth and specificity at each step, allowing technical teams, data scientists, and project managers to "zoom in" on relevant objectives. For example, a modular approach might use a specific Ideation Scorecard for evaluating new ideas, a Data Quality Checklist during data preparation, a Model Bias & Fairness Assessment during testing, and a Deployment Readiness Gate before going live. While these provide essential granular control, they risk strategic fragmentation if not governed by a higher-level vision; individual project phases can be perfectly executed, yet fail to contribute to the most important business outcomes.

2.3 Public Frameworks

Two public frameworks were identified as follows:

2.3.1 Microsoft's AI Value Accelerator (MAVIA):

MAVIA for instance, is a playbook focused on helping organizations build the internal operating model to industrialize AI at scale. It provides guidance on creating intake processes, data architecture, and a supportive organizational culture [1].

2.3.2 The U.S. National Institute of Standards and Technology's AI Risk Management Framework (AI RMF):

AI RMF conversely, focuses on ensuring AI systems are trustworthy and responsible. It provides a structured process, which is built on the core functions of Govern, Map, Measure, and Manage, to help organizations identify and mitigate risks to individuals and society. These public blueprints serve as foundational starting points that enterprises can adopt, adapt, and extend to fit their specific industry and regulatory needs [2].

3. IDENTIFYING THE CRITICAL EVALUATION GAP

Existing AI frameworks fall short in guiding initial strategic evaluations for GenAI initiatives. To address this, the GenAI Strategic Assessment (GSA) Framework is proposed as a comprehensive, top-down tool for organizations to analyze GenAI's disruptive potential and assess internal capabilities before committing resources.

While each category of framework is vital, they are optimized for different stages of the AI journey. Modular frameworks, for instance, excel at managing the implementation phase, addressing challenges analogous to traditional software engineering where many organizations can adapt existing MLOps methodologies. Similarly, public frameworks like the NIST AI RMF are indispensable for risk management and governance, but they are most effectively applied after a strategic decision to proceed has been made.

Despite significant enterprise investment in GenAI, a staggering 95% [3] of organizations report zero return, defining a "GenAI Divide." While generic tools see high adoption for individual productivity, only 5% of custom enterprise AI pilots achieve meaningful value or production deployment. This widespread failure is attributed not to model quality or regulation, but to GenAI systems' inability to retain feedback, adapt, or integrate effectively into workflows. Key patterns observed include limited industry-level disruption, a paradox where large enterprises struggle to scale, and an investment

bias towards front-office functions. Success in crossing this divide hinges on building adaptive, learning-capable systems through strategic external partnerships, focusing on workflow integration and measurable business outcomes.

This exposes a critical gap. This research indicates that organizations need the most help at the very beginning of the process: the initial strategic evaluation of a potential use case. The fundamental questions of "Is this the right initiative for us?", "How does this align with one's core business strategy?", and "Will this create transformative value or just incremental improvement?" must be answered before committing significant resources. Existing modular and public frameworks are not primarily designed to provide this upfront strategic filter

4. PROPOSED APPROACH - THE GENAI STRATEGIC ASSESSMENT (GSA): AN OVERARCHING FRAMEWORK FOR STRATEGIC DECISION-MAKING

To fill this strategic gap, this paper proposes a comprehensive overarching framework called the GenAI Strategic Assessment (GSA) Framework. The GSA provides a structured, top-down lens through which organizations can analyze the disruptive potential of a GenAI initiative and assess their internal capabilities before implementation begins. It is designed to be the primary tool for making the initial, high-stakes investment decision.

4.1.1 Value Chain Optimization & Innovation:

This dimension assesses how GenAI can optimize existing internal and external value chain activities (e.g., research & development, operations, marketing, customer service, sales) and enable radical innovation in products, services, or processes. It focuses on where and how value can be created, enhanced, or destroyed through the application of GenAI within a firm's operations and offerings. A question to ask would be "Which parts of one's existing value chain can be significantly enhanced by GenAI for efficiency, cost reduction, or effectiveness (e.g., automated report generation, code completion, predictive maintenance)?"

4.1.2 Market & Competitive Reconfiguration:

This dimension examines how GenAI reshapes market structures, creates new product/service categories, enables novel business models, and alters the dynamics of competition within an industry. It focuses on the external impact of GenAI on the industry's economic landscape, akin to aspects of Porter's Five Forces but specifically tailored to GenAI's disruptive power. A question to ask would be "How might GenAI create entirely new markets or significantly disrupt existing ones (e.g., by enabling hyper-personalization, automated content creation, or new forms of interaction)?"

4.1.3 Organizational Readiness & Adaptability:

This dimension evaluates an organization's internal capabilities and preparedness to effectively leverage GenAI. This includes the availability and quality of data, the robustness of the technological stack, the presence of a skilled talent pool (AI engineers, prompt engineers, data scientists, ethicists), strong leadership buy-in, an organizational culture open to experimentation and rapid iteration, and agile operational models. This is an internal, self-assessment component. A question to ask would be "Does one have the necessary data infrastructure, data quality, and data governance policies in place to effectively train, fine-tune, and utilize GenAI models?"

4.1.4 Ecosystem & Regulatory Landscape:

This dimension analyzes the broader external environment influencing GenAI adoption and impact, including evolving regulatory developments, ethical considerations, societal perception, infrastructure availability (e.g., cloud compute, foundation model providers, specialized tooling), and the availability of specialized talent within the overall ecosystem. This draws heavily from the "Political," "Economic," "Social," and "Technological" elements of PESTLE, but with a specific GenAI focus. A question to ask would be *"What ethical concerns (e.g., bias, transparency, explainability, hallucination, job displacement) need to be addressed by the industry and organization?"*

5. INTEGRATING MODULAR AND PUBLIC FRAMEWORKS FOR END-TO-END GOVERNANCE

Adopting the GSA as the initial strategic gate provides the strong grounding needed to deploy other frameworks effectively. It does not replace them; it gives them purpose and direction. Once a GenAI initiative scores highly on the GSA and is approved for investment, the organization can then seamlessly integrate modular and public frameworks to guide its successful execution.

Modular Frameworks can be applied to manage the project lifecycle, ensuring technical rigor and phase-specific objectives are met during development, testing, and deployment. Public Frameworks like the NIST AI RMF become a core part of the implementation plan, ensuring the project adheres to best practices for responsible, ethical, and trustworthy AI. The GSA's "Ecosystem & Regulatory Landscape" pillar provides the initial high-level assessment, which is then operationalized through detailed NIST compliance checks.

In this integrated model, the GSA provides the strategic "why," while modular and public frameworks provide the operational "how." This approach ensures that tactical execution is always in service of a clearly articulated and vetted business strategy (See Fig 1). With this foundational structure in place, the next step is to operationalize the GSA framework with a quantitative methodology to prioritize the most promising use cases.

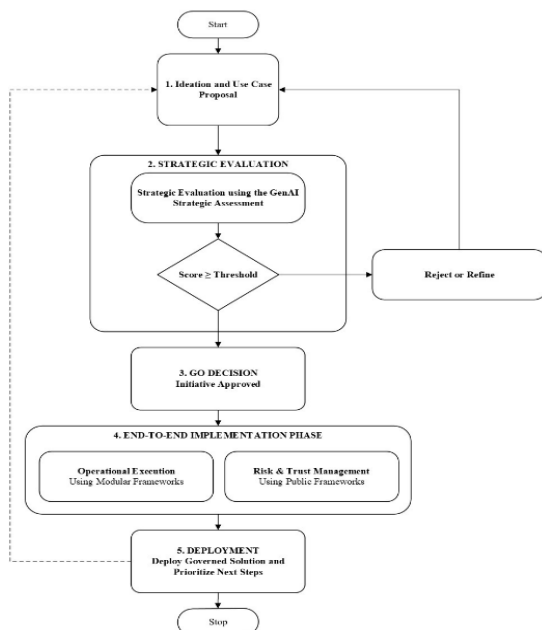


Fig 1: GSA implementation process

6. OPERATIONALIZING THE GSA: A SCORING FRAMEWORK FOR PRIORITIZATION

In an environment where 95% of organizations getting zero return from GenAI, organizations require a structured, data-driven approach to evaluate and prioritize AI use cases [3]. This research, analyzing over 150 successful AI implementations, reveals that organizations following established evaluation frameworks achieve 94% implementation success rates compared to just 31% for ad-hoc approaches. This section presents a comprehensive scoring mechanism built upon four fundamental pillars that determines AI readiness and implementation potential.

6.1 Scoring AI Use Cases across Four Pillars

To validate the GSA's theoretical constructs, this section is informed by recent research by MIT and OpenAI and presents a practical and executable framework to guide enterprises [3,4]. While these approaches are largely procedural, the paper posits that the GSA framework provides the formal, strategic governance structure necessary to execute this lifecycle effectively.

To operationalize the GSA framework discussed previously, organizations can employ a structured scoring mechanism to move from strategic theory to data-driven decision-making. The GSA Framework integrates key success factors identified through analysis of both successful and failed AI initiatives. Each pillar carries a weighted importance based on its correlation with successful outcomes:

6.1.1 Value Chain Optimization & Innovation (30% weight)

This pillar, weighted most heavily due to its direct impact on ROI, evaluates how effectively an AI initiative optimizes existing processes or enables new value creation. OpenAI's methodology for the Identification phase is predicated on a "business-problem-first" principle [4]. It advises organizations to identify use cases that are "high value" and target tasks that are frequent, time-consuming, or of significant strategic importance. For instance, when Toyota implemented AI in their factory operations, they achieved a documented reduction of over 10,000 man-hours annually by focusing on specific, high-impact process optimizations. The scoring considers cost reduction impact (0-25 points) to quantify operational savings of your solution, revenue enhancement (0-25 points) for new or improved revenue streams of your businesses, process efficiency gains (0-25 points) for measurable productivity improvements of the solution, and innovation potential (0-25 points) of novel capabilities or market opportunities through your AI-driven solution.

6.1.2 Market & Competitive Reconfiguration (25% weight)

This dimension assesses the initiative's potential to reshape competitive dynamics. A recent MIT study highlights a broader "misalignment between strategy and expectations," wherein AI projects, even if internally successful, fail to contribute to the firm's overall success [3]. Further, OpenAI's guide states that 92% of companies plan to increase their investment in AI, with an emphasis to building operational lifecycle efficiencies for internal use cases [4]. This represents a critical disconnect between tactical execution and strategic intent. Evaluation criteria include evaluating market share impact (0-25 points)

and potential market share gains, determining competitive advantage (0-25 points) with sustainable differentiation potential, verifying customer value creation (0-25 points) with enhanced customer experiences, and potential of market disruption (0-25 points) through industry transformation capability.

6.1.3 Organizational Readiness & Adaptability (25% weight)

With 72% of CEOs identifying proprietary data as critical for AI success, this pillar evaluates internal capabilities and preparedness [5]. In addition, the MIT research strongly concludes that the most significant failures are organizational, not technological [3]. Key findings include "poor integration," a "lack of adaptability" of generic models to specific enterprise workflows, and the absence of a "feedback loop," causing projects to stall in "pilot purgatory." The study also documents the emergence of a "Shadow AI" economy, where employees bypass corporate systems, as a critical symptom of this organizational dysfunction. This makes the scoring encompass technical capability assessment (0-25 points) for existing technical infrastructure, evaluating data Readiness (0-25 points) for quality and accessibility standards, staff skills evaluation (0-25 points) to assess team's expertise and training needs, alongside change management needs (0-25 points).

6.1.4 Ecosystem & Regulatory Landscape (20% weight)

This pillar addresses external factors and compliance requirements, crucial for sustainable implementation. It is noted that OpenAI's guide acknowledges this by noting the need for "robust infrastructure" and continuous "monitoring" which invariably involve external vendors, platforms, and regulatory constraints [4]. It includes adhering to regulatory compliance (0-25 points), partnering with industry networks (0-25 points), assessing infrastructure readiness and technical maturity (0-25 points), evaluating risk management (0-25 points).

Table 1. Implementation Pathway Based on Total Score

Pillar	Weight	Evaluation Criteria	Scoring (0-25 pts)
1. Value Chain Optimization and Innovation	30%	Cost Reduction Impact	Operational savings achieved through AI
		Revenue Enhancement	New or improved revenue streams enabled by the solution
		Process Efficiency Gains	Productivity improvements across workflows
		Innovation Potential	Novel capabilities or new market opportunities unlocked by AI
2. Market and Competitive	25%	Market Share Impact	Potential market share gains or

Reconfiguration			solidification
		Competitive Advantage	Sustainable differentiation vs. competitors
		Customer Value Creation	Enhanced customer experience or perceived value
		Market Disruption Potential	Ability to transform industry dynamics or create new markets
3. Organizational Readiness and Adaptability	25%	Technical Capability Assessment	Suitability of existing technical infrastructure
		Data Readiness	Quality, accessibility, and integration of data
		Staff Skills Evaluation	Team's current AI expertise and required upskilling
		Change Management Needs	Organizational agility and readiness for transformation
4. Ecosystem and Regulatory Landscape	20%	Regulatory Compliance	Adherence to data privacy, industry-specific, or global regulations
		Industry Partnerships	Engagement in strategic alliances or ecosystems
		Infrastructure Readiness & Maturity	External systems, platforms, and supplier ecosystem maturity
		Risk Management	Governance frameworks, operational, and reputational risk mitigation strategies

Further, here is how the collective scoring across these four pillars can influence their decisions to implement AI strategically, such that it adds value for customers.

- i. Organizations achieving a cumulative score of 85-100 across these 4 pillars demonstrate optimal readiness, warranting fast-track deployment with expected ROI realization within 6-12 months. Based on BCG survey of 1,400+ C-suite executives, 71% of them plan to increase their company's tech investments in 2024, up from 60% in 2023, and an even larger percentage (85%) say that they will increase their spending on AI and GenAI in 2024 [7]. Further, a recent IBM study also reported average cost savings of \$1.9 million annually through AI automation initiatives [8].
- ii. Scores of 70-84 indicate strong potential with standard implementation timelines (12-18 months). These organizations often benefit from phased approaches, starting with pilot programs in high-scoring areas while building capabilities in others.
- iii. Moderate scores of 55-69 suggest the need for targeted improvements before full-scale implementation. Organizations in this range should focus on specific deficiencies. For example, if data readiness scores low, implementing data governance programs before proceeding with AI deployment.
- iv. Scores below 55 indicate fundamental gaps including insufficient infrastructure, inadequate staff training, poor strategic alignment, and implementation challenges, rather than issues with the AI technology itself. The lack of AI readiness can be tied majority of failure seen among 95% of AI pilots in the recent MIT study [3].

6.2 Continuous Improvement Strategy

For organizations scoring below optimal levels, this research reveals four critical domains requiring systematic enhancement. Within the Value Chain domain, organizations must implement comprehensive process mining initiatives to identify optimization opportunities. Leading companies establish ROI measurement frameworks that track both direct cost savings and indirect benefits such as improved customer satisfaction. The most successful organizations develop staged innovation pipelines, allowing for controlled experimentation while maintaining focus on core business objectives. Market position enhancement requires a multi-faceted approach integrating competitive intelligence programs with structured voice-of-customer feedback mechanisms. Top-performing organizations consistently develop market disruption scenario plans, enabling them to anticipate and respond to emerging competitive threats while identifying new opportunities for AI-driven innovation.

Organizational capability building emerges as a critical success factor, with companies implementing comprehensive AI literacy programs, where a recent Deloitte report shows that AI-trained teams see a 20-30% rise in efficiency [9]. Successful organizations establish robust data governance frameworks that ensure data quality and accessibility while maintaining regulatory compliance. The creation of AI centers of excellence provides centralized expertise and standardized methodologies for AI implementation across the enterprise. The ecosystem development domain demands particular attention to strategic technology partnerships that can accelerate capability development. Organizations must implement comprehensive regulatory compliance frameworks that adapt to evolving AI governance requirements. Risk management protocols should be dynamic, evolving with the organization's AI maturity and changing threat landscape.

Overall, organizations using this structured improvement approach demonstrate significantly better outcomes, with documented reductions in time-to-value by 67% [10]. The framework provides a clear roadmap for systematic enhancement of AI capabilities while maintaining alignment with strategic objectives and risk tolerance levels. The true test of such a framework lies in its real-world application. The following case studies of Duolingo and Chegg illustrate how these pillars determine the difference between market leadership and disruption.

7. CASE STUDIES: GENAI FRAMEWORKS IN ACTION ACROSS INDUSTRIES

To bring the GSA framework idea to life, it is applied to two case studies, Duolingo and Chegg were evaluating generative AI across the four strategic pillars. Duolingo demonstrates a strong, positive adoption of GenAI usage, while Chegg illustrates the disruptive challenges it can create. Together, these examples showcase how the GSA framework can be used to analyze opportunities and risks in the GenAI space offering valuable lessons for strategic implementation.

7.1 Case 1: Duolingo – Applying GenAI to Enhance Education Services

Duolingo has strategically positioned itself at the forefront of educational technology by embracing Generative AI (GenAI), aligning its initiatives with key pillars of value chain optimization, market reconfiguration, organizational readiness, and the ecosystem and regulatory landscape. This strategic integration aims to redefine language learning through enhanced personalization, accelerated content creation, and increased operational efficiency.

7.1.1 Value Chain Optimization & Innovation

For Duolingo, generative AI has transformed internal operations by enabling unprecedented efficiency and innovation across its value chain. Most notably, GenAI accelerated course creation to 150 new course offerings in under a year doubling a content library that previously required decades to build [11]. This shift represents a step-change in research and development capacity, where automated content generation and curriculum design vastly outpace traditional methods.

Furthermore, GenAI powers advanced personalized learning experiences, such as the "Explain My Answer" feature in Duolingo Max, which provides users with detailed AI-driven feedback on their responses, acting as a virtual tutor. The "Roleplay" feature further enhances this by allowing learners to practice real-world conversations with AI characters and receive real-time feedback, moving beyond static exercises to dynamic, adaptive learning pathways.

Operational scalability is another critical outcome. With fewer than 1,000 employees, Duolingo now supports over 34 million daily active users without proportional increases in headcount. Generative AI underpins this scalability by automating routine instructional tasks, powering adaptive feedback, and enabling conversational practice features that enhance learning outcomes. In this way, Duolingo uses GenAI not only to optimize efficiency across R&D, operations, and customer engagement but also to innovate by extending the platform's capabilities in ways that would have been unattainable through conventional processes.

7.1.2 Market & Competitive Reconfiguration

GenAI integration reshaped the language learning market, enabling Duolingo to pioneer new service categories and business models. By leveraging advanced LLMs like GPT-4, Duolingo introduced hyper-personalized AI tutors for nuanced conversations, including AI-powered realistic video calls with characters like "Lily" [12]. These innovations created new avenues for immersive, conversational practice previously deemed infeasible. GenAI also allowed for the exploration of granular pricing, where users could pay for specific AI features, potentially shifting away from broad subscription tiers. This rapid development of advanced, personalized learning experiences set a new industry standard, diminishing the competitiveness of static content and redefining effective language learning.

7.1.3 Organizational Readiness & Adaptability

The company possessed a vast repository of user interaction data, crucial for training and fine-tuning sophisticated AI models, contingent on this data being managed with robust quality and governance. The company demonstrably invested in talent by integrating AI skills into hiring and performance reviews and made strategic decisions regarding its workforce, phasing out contractor roles that could be automated by AI while focusing human talent on higher-value tasks [13]. This organizational restructuring, coupled with an agile development methodology that Duolingo has historically employed, demonstrated a culture prepared for the rapid experimentation and iteration inherent in GenAI deployment.

7.1.4 Ecosystem and Regulatory Landscape

Navigating the external ecosystem and regulatory landscape became critical for Duolingo's GenAI adoption especially regarding content integrity, conversational safety, and workforce impact. The company acknowledged that GenAI can "hallucinate," meaning it might generate factually incorrect or nonsensical outputs. To mitigate this, Duolingo implemented a system of human expert review and user feedback loops, which are crucial for continuous quality assurance and refinement of AI-generated content.

To maintain conversational safety and operational efficiency, Duolingo has adopted a multi-layered AI model strategy. This includes employing "red teaming," a process where AI systems are intentionally tested with adversarial prompts to uncover vulnerabilities such as bias, misinformation, or harmful outputs before they can be exploited. Duolingo's Duolingo English Test (DET) also utilizes AI to automate its entire assessment pipeline, from test creation to cheat detection, further safeguarding the integrity of its evaluations [14]. This multifaceted approach demonstrated Duolingo's strategic effort to harness GenAI's potential while actively managing its associated risks within a complex external environment.

7.2 Case 2: Chegg – A cautionary Tale of GenAI Disruption in EdTech

Unlike Duolingo, which saw a jump in paid subscribers and revenue growth from AI adoption, Chegg experienced the opposite. While Duolingo used AI to enhance its mission, scale content, and grow its user base, Chegg found itself disrupted by AI, with free tools stealing its customers and triggering major layoffs. This case underscores the importance of strategic alignment, differentiation, and timing in AI adoption. For companies across industries, Chegg's story serves as a cautionary tale: AI can be a powerful enabler or a disruptive force that reshapes your business overnight.

7.2.1 Value Chain Optimization & Innovation

Chegg's efforts to leverage LLMs for homework assistance and service scaling did not yield the desired competitive advantage, primarily due to a lack of differentiation and precision in its AI offerings compared to Duolingo's more curated approach. This deficiency resulted in content inaccuracies and insufficient innovation, which instead of increasing subscriber retention, accelerated attrition. Significant technical and operational feasibility challenges compounded these issues. A key factor was Chegg's failure to effectively integrate AI into its ecosystem, lagging platforms like Khan Academy, which had already established AI-driven, step-by-step learning guidance for students. Furthermore, Chegg found itself in a highly competitive AI landscape, where students increasingly turned to superior, more accessible, and often free tools such as ChatGPT, Anthropic's AI, and Google's AI features. These external solutions frequently outperformed Chegg's tools in speed, quality, and accessibility [15]. The failure to effectively innovate within its value chain resulted in financial losses, including a reported \$212.6 million loss in late 2023, and precipitated significant workforce reductions [16].

7.2.2 Market & competitive Reconfiguration

Chegg's traditional model was significantly disrupted by the emergence of free, widely accessible AI tools such as ChatGPT and Google's AI-powered search summaries. These AI solutions provided instant, high-quality academic assistance at no cost, directly undermining Chegg's value proposition and appeal to students.

Despite Chegg's attempts to integrate AI through products like Chegg AI, which offered step-by-step explanations and writing feedback, the company struggled to adapt to changing student behaviors. Chegg found AI to be a formidable competitor rather than a collaborator. This strategic misstep led to decreased customer demand and forced Chegg to scale back operations in a shrinking market.

7.2.3 Organizational Readiness & Adaptability

Chegg's readiness for GenAI was hampered by internal challenges. While it had a large user base and extensive interaction data, the quality and governance of that data were likely insufficient for training precise academic AI compared to more pedagogy-focused platforms. Its infrastructure supported core services but lacked the agility to rapidly integrate and scale advanced LLMs, leaving the company struggling to keep pace with AI advancements. Talent gaps in critical roles such as prompt engineers and AI specialists further limited progress. Combined with product innovation struggles, workforce reductions, and financial losses, these issues suggested a culture resistant to the rapid experimentation GenAI demands—perhaps due to leadership buy-in challenges or rigid operations. As a result, Chegg adopted AI reactively rather than proactively, weakening its strategic position. In response to these market pressures, Chegg undertook significant workforce reductions, cutting over 319 jobs – approximately 22% of its staff by mid 2024, with further layoffs announced. Additionally, Chegg engaged in legal action, filing an antitrust lawsuit against Google in early 2024, alleging that AI-powered search summaries diverted web traffic away from Chegg's platform [16]. This sequence of events underscores the critical importance of organizational agility and proactive adaptation in the face of disruptive AI technologies.

7.2.4 Ecosystem and Regulatory Landscape

The AI disruption exposed Chegg to multiple ecosystem and regulatory risks. Market risk was prominent as AI tools

emerged not as complementary assets but as direct competitors undermining Chegg's core offerings. Additionally, reputational risks grew as Chegg's AI tools were perceived as less innovative and less reliable compared to dominant AI platforms, weakening brand loyalty.

The company's legal confrontation with Google over alleged antitrust violations—specifically regarding AI-driven search summaries that diverted traffic away from Chegg's site—highlighted the growing regulatory ambiguity around AI's impact on content ownership and market fairness [16]. This lawsuit underscores the challenges traditional ed-tech firms face in navigating AI-driven changes in digital traffic and revenue models, amid an evolving but uncertain legal environment. Chegg's AI adoption was not just a missed opportunity, but it was a strategic risk that reshaped the company.

8. IMPLEMENTATION RECOMMENDATIONS

A framework is only as valuable as its implementation. To embed this evaluation methodology into the organization's operational DNA, organizations should execute the following recommended steps:

- i. Establish a Cross-Functional AI Council: Form a dedicated committee composed of leaders from product, engineering, data science, legal, finance, and ethics. This council will own the evaluation process, champion initiatives, and ensure alignment with enterprise strategy.
- ii. Integrate into the Innovation Pipeline: The Four-Pillar scoring model should become the official gateway for all proposed GenAI initiatives. Integrate it into your existing project intake and portfolio management systems. No GenAI project should receive significant funding without being scored and vetted against this framework.
- iii. Set a Cadence for Review: The AI landscape changes rapidly. The AI Council should meet on a regular cadence (e.g., quarterly) to review the portfolio of GenAI projects, assess the performance of deployed solutions, and re-evaluate the strategic pillars against new market developments. For initiatives that aren't delivering value, the council should be decisive in pulling the plug to unlock resources for others in the pipeline.
- iv. Embrace Iteration: Your evaluation framework is not static. After the first cycle of evaluations, gather feedback from stakeholders. (e.g. "Was the weighting of the pillars correct for your industry? Were the scoring criteria clear?"). Continuously refine the framework to better suit your organization's unique context and maturity level.
- v. Democratize and Educate: While the AI Council governs the process, the ideation should be democratized. Educate employees across the organization on the four pillars of evaluation. This empowers them to submit higher-quality, more strategically aligned ideas, fostering a bottom-up.

9. CONCLUSION

The era of Generative AI is not about whether to adopt the technology, but how. As this guide has demonstrated,

navigating this transformation successfully requires moving beyond ad-hoc experimentation and establishing a disciplined, strategic evaluation framework. The choice is not simply between an overarching or modular approach, but about building a hybrid system that provides both high-level strategic governance and granular, phase-specific control. By grounding this system in the Four-Pillar methodology—assessing Value Chain impact, Market dynamics, Organizational Readiness, and the Ecosystem—leaders can make holistic, data-driven decisions. Public frameworks like Microsoft's AI Value Accelerator (MAIVA) and the NIST AI Risk Management Framework are not just compliance tools; they are foundational blueprints for industrializing AI responsibly and at scale. The divergent paths of Duolingo and Chegg offer a stark, concluding lesson. Duolingo thrived by using GenAI to amplify its core mission, deepen its value proposition, and enhance user experience, showcasing remarkable organizational adaptability. Chegg, in contrast, was disrupted by the very technology it sought to adopt, failing to create a differentiated offering and losing its customer base to more agile, accessible AI alternatives. Their stories confirm that the ultimate differentiator is not access to technology, but the strategic wisdom to align it with business goals and the organizational agility to adapt to the new realities it creates. For today's executive, the mandate is clear: implement a robust evaluation framework not as a bureaucratic gate, but as a strategic compass. Before any resources are spent on implementation, the first and most critical choice is which projects to pursue. An overarching strategic framework like the GSA is designed to make that choice with confidence. Doing so will enable your organization to filter the hype from the high potential, manage risks proactively, and convert the revolutionary power of Generative AI into tangible, sustainable, and decisive competitive advantage.

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