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Automating MLR Review with Veeva PromoMats AI Agents

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Executive Summary

The medical–legal–regulatory (MLR) review process is a cornerstone of life sciences marketing, ensuring that all promotional content for pharmaceuticals and medical devices is accurate, balanced, and compliant with stringent regulations. Traditionally, MLR review has been laborious, time-consuming, and prone to delays, with review cycles often taking weeks or longer ([viseven.com](https://www.viseven.com)) (filestage.io). As content volumes surge (with global promotional material production rising sharply in recent years (www.veeva.com) (filestage.io)) and regulatory scrutiny intensifies, life sciences companies face mounting pressure to streamline content approval without sacrificing compliance. Automating portions of the MLR process using artificial intelligence (AI) has emerged as a promising solution to alleviate bottlenecks and improve consistency.

Veeva Systems, a leading provider of cloud applications for the life sciences industry, has incorporated industry-specific AI agents into its PromoMats content management platform. In late 2025, Veeva launched two AI-driven features for PromoMats: the **Quick Check Agent** and the **Content Agent**. The Quick Check Agent is an automated pre-review tool that scans draft content for editorial, branding, regulatory, and compliance issues, flagging errors in spelling, prohibited phrases, missing warnings, and other guideline violations (commercial.veevavault.help) (www.veeva.com). The Content Agent is a conversational “AI assistant” that allows reviewers to interact with documents: it can answer context-specific questions, summarize long materials, analyze images, and integrate Quick Check findings into a structured summary (www.veeva.com) (www.tickertech.com). Both agents operate within Veeva Vault (the underlying secure platform) and leverage large language models (LLMs) hosted on Amazon Bedrock, as described in Veeva’s October 14, 2025 announcement (commercial.veevavault.help) (ir.veeva.com).

In practice, these AI agents are designed to **accelerate approvals, reduce manual effort, and improve compliance consistency**. Quick Check identifies routine issues before MLR review to help reduce rework and review cycles (commercial.veevavault.help) (www.veeva.com). For example, the agent identifies spelling/grammar mistakes and “risky phrases,” checks that required safety statements (e.g. boxed warnings) are present and correctly formatted, verifies that privacy and unsubscribe links conform to company policy, and detects accessibility problems like missing alt text (www.veeva.com) (www.veeva.com). Quantitative benefits

should be measured for the deployed agents rather than inferred from older digital-workflow cases. CEO Peter Gassner and product experts cite increased productivity and shorter content cycle times as central goals of Veeva AI (www.veeva.com) (ir.veeva.com).

The integration of these AI tools into real-world workflows is yielding positive sentiment from industry leaders. For instance, in Veeva's [December 3, 2025 announcement](#), Moderna's marketing operations director described Quick Check as moving the company closer to a process where parts of MLR could become nearly touch-free. Life sciences executives stress that AI should complement human expertise: as Astellas' compliance leader puts it, "ensuring compliance...remains a key responsibility of our MLR teams, which AI alone cannot handle" (www.veeva.com), (www.veeva.com). The technology is expected to lead to **faster, more consistent approvals** (Veeva notes that results of AI use in MLR review are still taking shape ([Veeva's MLR discussion](#))) and **higher-quality outcomes** by directing human attention to high-risk issues (www.veeva.com) (www.veeva.com).

This report provides a comprehensive analysis of automating MLR review with Veeva PromoMats' AI agents. We review the background and challenges of MLR processes, examine the design and capabilities of Veeva's Quick Check and Content Agent, and assess their impact through case examples and industry data. We compare Veeva's approach to other AI-driven MLR solutions and discuss broader implications for compliance, workflow transformation, and the future of pharma content operations.

Introduction and Background

The **MLR review** process brings together medical, legal, and regulatory experts to help create relevant and compliant promotional content ([Veeva's MLR overview](#)); our [guide to MLR review software](#) compares platforms that support this work (filestage.io). Its purpose is twofold: to **protect patient safety** by ensuring all claims are medically accurate and adequately balanced with risk information, and to **shield companies from legal and regulatory enforcement** by preventing false or misleading promotion (filestage.io). Company procedures should define which external-facing assets – from sales slide decks and websites to advertising copy and product packaging – require MLR review. Reviewers verify that claims are supported by evidence, that side-effects and limitations are clearly stated, and that all content adheres to applicable laws (e.g. FDA guidelines, industry codes like PhRMA or EFPIA).

MLR review brings together **medical, legal, and regulatory expertise** ([Veeva's MLR overview](#)).

Consequently, marketing materials often undergo two or more rounds of review: content developers first draft an asset, then medical affairs, legal, and regulatory experts each review it in turn, often suggesting revisions. These rounds continue until the **Promotional Review Committee (PRC)** agrees the content is compliant and can be approved. According to industry accounts, this collaborative loop can be painfully slow: surveys report MLR approvals taking **weeks to over a month**, with some campaigns languishing "for up to 40 days" in review (filestage.io) (viseven.com). Such delays can postpone drug launches and impede marketing agility, even as the volume and complexity of content continue to rise.

Several factors make traditional MLR review especially inefficient. First, content volumes are exploding. One study notes that the **amount of content submitted for MLR review has tripled in recent years** (filestage.io), driven by omnichannel strategies (digital ads, emails, social media, educational videos) and globalization (multiple markets requiring localized review). At the same time, **field teams often use only a fraction of**

approved materials – industry data indicate nearly 77% of approved content may be rarely or never used (www.veeva.com) – so reviewers spend effort on assets that do not reach audiences. Meanwhile, reviewer headcount has stagnated or shrunk, further straining capacity (www.veeva.com). Second, the MLR workflow is fragmented across disparate tools. Many firms have historically relied on email, spreadsheets, and manual batch approvals, which leads to lost feedback, version control issues, and scattered audit trails. Even with digital document management systems (like Veeva PromoMats) in place, reviewers may not be consulted early in the content lifecycle, so errors are caught late (www.veeva.com) (www.veeva.com).

Third, global and technological complexity adds to the burden. Promotional guidelines vary by country and channel (e.g. some markets require QR codes, others have strict privacy link rules, etc.). Reviewers must manually check that each requirement is met for each asset. For applicable U.S. commercial email, the **FTC's CAN-SPAM guidance** requires an opt-out mechanism; a return email address or another easy Internet-based method can satisfy that requirement. Privacy notices and advertising opt-outs should be assessed for the actual channel, data collection, jurisdiction, and company policy. Quick Check also checks for accessibility barriers against WCAG guidelines, including alt text and readability (www.veeva.com).

Overall, MLR review has become an expensive and time-consuming bottleneck. Conversely, inefficient processes lead to costly delays. Industry experts note that when marketers “eager to set campaigns free,” compliance can feel “glacial,” dragging on due to “outdated methods and software” (viseven.com). It is against this backdrop that life sciences organizations are seeking new approaches – especially those leveraging automation and AI – to accelerate MLR without sacrificing quality or safety.

The MLR Review Workflow and Its Challenges

Roles and Responsibilities

MLR review involves three core disciplines. **Medical reviewers** (often from medical affairs) ensure all scientific content and clinical claims are accurate and evidence-based. **Legal reviewers** enforce laws and company policies: they flag off-label claims, copyright issues, anti-kickback risks, and wording that could be misleading or misrepresentative. **Regulatory reviewers** (regulatory affairs professionals) verify that the content aligns with the official product labeling and regional regulations: for instance, that risk information is fairly balanced and all required regulatory symbols are present. In many companies, a Marketing representative may also be present to clarify the campaign intents and ensure marketing objectives are met within the compliance framework (filestage.io). These stakeholders typically form a **Promotional Review Committee (PRC)** that collectively decides whether content is approved or requires changes (filestage.io).

During the PRC process, each reviewer might identify issues. For example, a medical reviewer might note that a claim of “best-in-class efficacy” lacks comparative clinical evidence. A legal reviewer might highlight missing copyright citations or detect that some phrasing could violate advertising laws. A regulatory reviewer might insist that the numbering of adverse reaction bullet points matches the official label exactly. Feedback is often transmitted via document markups or comment threads. Without automation, this means back-and-forth email or disjointed annotation, which is slow and error-prone. According to industry experts, poor coordination and unclear reviewer roles can cause confusion and rework (filestage.io). When any reviewer is uncertain of expectations, the process drags on.

Complexity of Guidelines

The rules governing promotional content are highly granular. In the U.S., reviewers should assess the balance between benefits and risks in prescription-drug promotion under **FDA's promotional oversight**. There may be legal requirements for disclaimers (e.g. trademark notices, privacy statements), and voluntary industry codes (e.g. the PhRMA Code on Interactions with Healthcare Professionals) impose additional restrictions. Globally, each regulatory authority has its own nuances. The **EFPIA Code** applies to traditional and digital communications and interactions. Its applicable industry-code requirements should be assessed separately from binding law. China, Canada, and others each have their own standards. Compliance teams must maintain “black box” warnings, small-print Indications/Safety statements, promotional burden statements, etc., and ensure all are present at the right prominence. This “rules atlas” means that even experienced reviewers must double-check many items manually.

Compounding the complexity, content often appears in multiple channels. A slide deck might be printed as a PDF, shown on a tablet, and repurposed as HTML for online use. Each channel can have unique formatting or layout rules. Accessibility review should assess applicable standards, including image descriptions, color contrast, and video captions, for the intended channel and audience. Checking all these in each asset adds to the burden (www.veeva.com).

As a result of these factors, many review processes are **inefficient**. Analysts report that from the time a new promotional asset is ready for review to final approval can take **many weeks – often approaching 30–40 days** (filestage.io). Every delay can cost millions in lost sales opportunities, given the tight timelines around drug launches (filestage.io). Senior industry leaders warn that MLR must be viewed as a critical business issue – not just a technicality – if content is to reach customers quickly and accurately (www.veeva.com).

Evolution of MLR Technology and Automation

Given these challenges, life sciences companies have long sought ways to streamline MLR. In the last two decades, most have migrated from purely paper-based or email-based review toward **electronic content management systems**. Veeva Vault PromoMats (now part of Veeva Vault Commercial Cloud) is a dominant example: it provides a centralized repository for all promotional materials, with built-in version control, annotation, and workflow automation. Using generic templates and forms, a company can route a document through the appropriate reviewers and track status. These systems eliminated many pitfalls of lost emails and unclear versioning.

Other earlier solutions adopted automation in limited ways. For instance, compliance rule-sets could be implemented – e.g. automatically blocking the submission of materials missing mandatory disclaimers. Some companies used custom scripts or simple text-search tools to flag prohibited words (e.g. “cure” for non-curative claims). Basic ATP (automated promotional review) tools existed to compare new content against a library of already-approved messages to avoid unauthorized phrasing (securechek.ai). Still, most of these were heavily rule-based and rigid. They required manual maintenance of checklists and did not understand context; often they only worked on final text (not images or layout).

Content collaboration platforms like Filestage, MarketBeam, and others have further improved workflow efficiency by giving reviewers the ability to comment in context and by automating assignment reminders ([filestage.io](#)). Filestage, for example, claims that a robust online proofing tool can shave “as much as 30%” off review times by automating due-date assignments, status updates, and version comparisons ([filestage.io](#)) ([filestage.io](#)). MarketBeam focuses on social and digital channel compliance by streamlining feedback from agencies on ads and posts. But none of these platforms fully solved the core problem: the tedious checking of content against a broad set of regulatory requirements.

The **rise of AI and machine learning** in recent years offers a new avenue. Advanced language models now demonstrate capabilities in understanding text, checking for consistency, and even reasoning about compliance rules when properly prompted. In principle, such models can ingest a promotional document, compare it to a company’s own rulebook and regulatory guidelines, and highlight potential issues. They can also help with creative aspects: summarizing a complex document for a reviewer, translating it, or answering questions. Importantly, deploying AI in life sciences requires careful control: models should work in context, using validated data, and never leak sensitive information.

Veeva’s cited white paper describes many large pharmaceutical companies as **exploring AI** for content review and generation. Veeva reports that over 80% of major life sciences firms are experimenting with AI in areas like content creation, tagging, and quality checks ([www.veeva.com](#)). Consulting analyses point to a \$5–7 billion total value opportunity from AI in life sciences, with up to a third (~\$2B) coming from commercial functions (including marketing and MLR) ([www.veeva.com](#)). These investments reflect a shared sense that “*the area where GenAI has the most potential is MLR*” (in the words of GSK’s medical-affairs director) ([www.veeva.com](#)).

However, industry experts stress that AI must be used **judiciously and in partnership with human review**. Even with AI checks, the ultimate responsibility for compliance lies with human reviewers. Astellas’ ethics and compliance leader emphasizes that MLR teams remain responsible for compliance and that AI alone cannot handle it ([Veeva white paper](#)). Sanofi echoes this caution: while “automation aids” can streamline tiered reviews, “human oversight is crucial” ([www.veeva.com](#)). Organizations should verify applicable recordkeeping requirements and define how relevant AI evidence is retained.

Against this backdrop of escalating content demands and cautious AI adoption, Veeva launched its **AI agents for PromoMats** in late 2025, aiming to apply LLM technology specifically to MLR challenges. The Quick Check and Content Agent are among the first *industry-specific AI agents* (in Veeva’s terminology) embedded in a regulated life sciences platform ([www.tickertech.com](#)) ([www.veeva.com](#)). Unlike general-purpose AI tools, these agents are built with curated domain knowledge and integrated safeguards. We now examine these agents in detail.

Veeva PromoMats and Its AI Agents

Veeva Vault PromoMats: Overview

Veeva Vault PromoMats is a cloud-based content management application tailored for regulated promotional materials. It handles the full content lifecycle: creation, review, approval, digital asset management, and claims management. Built on the secure Veeva Vault platform, PromoMats provides version control, audit trails,

templating, and global workflow capabilities. Companies use PromoMats to centralize all promotional assets (from slide decks to social media posts) and to enforce standardized processes for different document types and regions.

Historically, PromoMats offered features like claim verification (linking scientific claims in the content to supporting references in a central library), digital proofs, and federated workflows. However, before the AI agents, PromoMats still relied on human reviewers to catch all compliance issues. For example, if a content creator forgot to include a privacy statement in a patient brochure, it was up to a reviewer to notice. Likewise, grammatical errors and brand style violations typically had to be caught manually or by some external checklist.

With the introduction of AI, PromoMats has embedded intelligent layers on top of its existing framework. Veeva describes its agents as operating within established access controls and permissions. Its [security overview](#) states that customer data is never used to train or enhance the third-party LLMs used by Veeva AI. Customers should verify access, retention, contractual data protections, and applicable regulatory controls for their deployment; platform architecture alone does not establish compliance.

Veeva AI Agents and Vault Integration

Veeva's approach to AI is to provide “**deep, industry-specific agents**” trained or configured for particular applications ([ir.veeva.com](#)) ([www.veeva.com](#)). These agents are not generic chatbots that access the open internet; they operate on locked-down LLMs (from Anthropic or Amazon) through Amazon Bedrock, with prompts and data tailored to Veeva's domain ([www.veeva.com](#)) ([ir.veeva.com](#)). Veeva also offers tools to configure or extend agents, letting companies adapt the AI to their own processes.

Starting December 2025, Veeva announced that AI Agents would be gradually released across all application areas ([ir.veeva.com](#)) ([www.tickertech.com](#)). For PromoMats specifically, immediate availability of Vault PromoMats AI plugins was announced. The new features fall under *Veeva AI for PromoMats*, whose mission is “to deliver the fastest path to approved content with AI” ([www.veeva.com](#)). In practical terms, the AI agents aim to **streamline compliance checks early in the content lifecycle** and **provide on-demand insights during review**. As Veeva marketing puts it, these capabilities “*strengthen compliance, accelerate speed to market, and increase productivity*” across the content lifecycle ([www.veeva.com](#)).

In summary, Veeva PromoMats provides the digital infrastructure, and the new AI agents serve as intelligent assistants embedded in that environment. The platform's existing workflows remain, but now with AI-powered quality checks. The remainder of this report focuses on the two new agents: Quick Check and Content Agent.

Quick Check Agent

The **Quick Check Agent** (often abbreviated *QCA*) is an automated compliance-checking tool that runs **before** the formal MLR review begins. It is designed to help content owners and coordinators “*prepare their documents for MLR review by detecting common issues before submission*” ([commercial.veevavault.help](#)). In other words, Quick Check acts like a preliminary filter: it scans a draft document and flags any obvious or medium-level compliance issues so that authors can fix them before sending the content to medical, legal, and regulatory teams.

Core Capabilities

Quick Check performs a range of systemic checks on both the text and some visual elements of a document (www.veeva.com) (www.veeva.com). Its key capabilities include:

- **Editorial (Spelling & Grammar) Checks:** QCA identifies typographical errors, misspellings of medical or product terms, and major grammatical mistakes (www.veeva.com). This ensures content clarity and professionalism, and avoids simple errors that could undermine credibility. Unlike generic spelling checkers, this is tailored to life sciences context (for example, it focuses on *“significant grammatical errors that could hinder clarity...rather than stylistic choices”* (www.veeva.com)).
- **Risk Phrase Assessment:** Veeva’s current user documentation describes neutral observations of wording requiring further scrutiny, rather than advisory rewrites or regulatory categorization. Users should assess the identified language during MLR review ([Using Quick Check Agent](#)).
- **Boxed Warning Check (United States Only):** Quick Check checks whether the product requires a boxed warning and, when one is required, assesses its presence, format, and location. It does not review the warning’s text ([Using Quick Check Agent](#)).
- **Important Safety Information (ISI) Verification (United States Only):** The agent compares the content against the official *Related ISI* document for that product. It detects if required statements are missing, if existing safety text has been improperly edited, or if extraneous safety language appears where it shouldn’t (www.veeva.com). The comparison uses the linked Related ISI document; the check is hidden and does not run for documents outside the United States ([Using Quick Check Agent](#)).
- **Privacy Policy & Unsubscribe Link Checks:** The Privacy Policy Link check flags documents only when they contain data-collection content, such as a form or sign-up call to action ([Using Quick Check Agent](#)). Unsubscribe links are assessed in a separate check. Then it searches the document for such links and verifies them against an approved database of URLs (for validity and correct targeting) (www.veeva.com) (commercial.veevavault.help). These findings require review against applicable law and company policy.
- **Accessibility (WCAG) Compliance:** QCA automatically checks the document for adherence to basic accessibility standards, such as presence of alt-text on images, sufficient color contrast, avoidance of text embedded as image, consistent language tagging, and readability levels (www.veeva.com). These checks use general WCAG guidelines to flag issues that could hinder understanding by persons with disabilities.

These checks produce findings for users to assess before formal MLR review. A passed check should not be treated as authorization to publish or a guarantee that the material complies with all applicable requirements.

Underlying Technology and Integration

Importantly, Quick Check leverages a **large language model (LLM)** as its core engine (commercial.veevavault.help). Unlike earlier static-rule tools, QCA uses AI to understand context. Its Phrase Assessment check identifies wording for further scrutiny without advisory suggestions or regulatory categorization ([Using Quick Check Agent](#)). Veeva’s documentation explicitly notes: *“Leveraging a Large*

Language Model (LLM), Quick Check Agent proactively identifies a wide range of issues” in promotional materials ([commercial.veevavault.help](#)). At the same time, it also relies on structured business data in Vault (lists of products with warnings, a table of approved privacy URLs, etc.) to make certain checks precise (e.g., verifying that a link matches a named Website record in Vault ([commercial.veevavault.help](#))).

Quick Check is **integrated inside PromoMats** and is accessed through its panel on an eligible document’s info page. As checked on October 8, 2026, the [configuration page](#) excludes documents over 100 pages and says images are not evaluated above 20 pages; the [user page](#) instead lists a 300-page ceiling. These published limits conflict. Confirm the documentation and behavior for the deployed release before setting operational eligibility rules. Both pages require the latest document version and a PDF viewable rendition without audio or video.

Administrators must opt-in each document type to use Quick Check. In the Vault admin console, an admin assigns certain lifecycle states (e.g. Draft) and document type groups (Quick Check Agent) to enable the panel ([commercial.veevavault.help](#)). They also configure any product-specific fields (for example, adding a custom “QC Boxed Warning” field if a product has a unlisted warning ([commercial.veevavault.help](#))) and set up Website records for validating links ([commercial.veevavault.help](#)). The documented user workflow starts checks when the Quick Check panel is opened; users can clear results and run them again with the Re-run action ([Using Quick Check Agent](#)). Vault lifecycles can even be configured (via entry criteria) to block transitions (e.g. from Draft to Review) until the Quick Check results are obtained ([commercial.veevavault.help](#)). These features allow Quick Check to be woven into existing workflows without major process changes.

Workflow Impact

In day-to-day practice, Quick Check can surface potential issues before formal MLR review. Consider an illustrative example: a marketing author drafts an eligible PDF brochure for a drug and opens the Quick Check panel, which starts the predefined checks. The system might identify a misspelled medical term and wording requiring further scrutiny. Phrase Assessment provides neutral observations, without regulatory categorization or advisory rewrite suggestions. The author corrects the typo and routes the wording to qualified reviewers to assess any off-label concern through the established MLR process ([Using Quick Check Agent](#)). The example illustrates preparation for review; it does not establish a measured reduction in errors or review effort.

Quick Check supports preparation for MLR review by surfacing potential issues. Reviewers should verify critical requirements themselves and assess the agent’s output as part of the established review process. Veeva’s [PromoMats product page](#) describes the application as supporting the full promotional-content lifecycle; that product description is separate from measured AI-agent results.

Content Agent

While Quick Check acts *before* review, the **Content Agent** assists *during* review by serving as an interactive AI assistant embedded in PromoMats. Sometimes referred to as an “AI chat” for PromoMats, this agent enables reviewers and creators to query and summarize content in a conversational fashion. According to Veeva, the Content Agent is “context-aware” and provides insights into an asset by understanding its text and images ([www.veeva.com](#)).

Features and Workflow

The Content Agent is built around large language models as well, but presented through a structured interface in Vault, often as a chat or query panel. Key functionalities include:

- **Ask Questions:** The user can ask questions about the current document or prior chat responses. For example: *“Summarize the key product claims in this brochure”*, *“List all contraindications mentioned in this slide deck”*, or *“Are there any off-label claims?”*. The agent will parse the document text (and images if relevant) and generate an answer. Veeva notes that it can handle vague requests or ask for clarification if an inquiry is outside the document’s scope (www.veeva.com). This effectively allows users to interrogate the content as if it were a searchable knowledge base.
- **Analyze Images:** If the request specifically involves visual elements (e.g. *“What does the graph on slide 3 show?”*, or *“Does this patient image have a caption?”*), the agent will route the query to its vision pipeline. It performs optical character recognition or image analysis as needed. The separation of text vs. image queries ensures efficiency: text-based questions are answered quickly using the parsed text; image-related questions cause the agent to extract and analyze figures only as needed (www.veeva.com).
- **Reviewer Summary:** A particularly powerful feature is “Reviewer Summary”. When invoked, the Content Agent generates a concise briefing for the document. This combines multiple elements: it synthesizes the document’s purpose, target audience, key messaging, and any compliance notes gleaned from Quick Check. The summary is **structured**, often including bullet points for claims, risks, target & intended use (www.veeva.com). With this, a reviewer can start their review with a high-level understanding of the asset’s content and context, along with Quick Check findings all in one place. It essentially orients the reviewer quickly, replacing some of the time it would take to read the entire document linearly.

These actions are supported by Veeva’s AI architecture: the agent has direct access to the document text and images in Vault (just like Quick Check) and can apply the LLM to reason about them. Importantly, the Content Agent also **incorporates Quick Check results**; it can “pull in findings from Quick Check Agent” to ensure consistency (www.veeva.com). For example, if Quick Check flagged missing documentation, the Content Agent can mention that in its summary or answers. The two agents support complementary tasks: Quick Check surfaces potential issues, and the Content Agent can incorporate Quick Check results in a reviewer briefing.

In Practice

In practical use, the Content Agent transforms the review experience. Consider a medical reviewer handed a complex clinical slide deck. Instead of manually flipping through forty slides, she might first click “Get Reviewer Summary.” Within moments, the content agent provides a digest: outlines the drug’s indication, target patient population, number of clinical studies cited, and shows where safety info appears (www.veeva.com). This briefing can orient the reviewer, who should verify the underlying claims and references in the source document.

Alternatively, a reviewer could interact via Q&A: they might type, “**Show me all efficacy endpoints and their values.**” The Content Agent can search the document (or even table data in images) and extract the relevant numbers. Or they might ask “**What changes were made from the last approved version?**” (if version comparison context is available). Essentially, any content task that before required reading and scanning can be done via a simple prompt.

Non-reviewers can also ask questions about the current document or prior chat responses. Veeva describes off-topic inquiries as being redirected to document-scoped help ([Content Agent features](#)). Questions about company-wide brand rules or compliance requirements should be assessed through the established review process.

Impact on Review Efficiency

By enabling conversational queries and auto-summaries, the Content Agent can significantly cut time for reviewers. Veeva’s materials claim that “only the most relevant feedback is surfaced,” letting agencies, reviewers, and marketers save time as AI takes care of summarizing and analyzing (www.veeva.com). In effect, instead of scanning dozens of pages, reviewers get the gist and can quickly pinpoint novel content. The business benefit is clear: reviewers can focus on high-impact judgments (like assessing new claims or strategy) instead of administrative reading.

Veeva’s [features brief](#) describes Content Agent as providing contextual document understanding during MLR review. Organizations should verify the agent’s access scope, outputs, and evidence-retention process under their own procedures; context awareness and platform security do not establish an unconditional regulatory outcome.

Data Analysis and Impact

The evidence below distinguishes historical digital-workflow results, vendor claims, and estimates. It should not be read as a measured comparison of PromoMats AI-agent performance.

- **Historical Digital-Workflow Case:** In a February 20, 2014 [Veeva case report](#), an unnamed specialty pharmaceutical company replaced a paper system with cloud-based PromoMats and reported a 20% reduction in face-to-face meetings. It projected additional capacity equivalent to two full-time employees from several workflow efficiencies, rather than reporting a measured two-FTE saving attributable to meetings. This predates the 2025 AI-agent launch.
- **Content Processing Volume:** Veeva’s [cited white paper](#) reports promotional-material production growth of 7% globally and 29% in the U.S. in 2023 compared with 2022. The paper also reports that field teams rarely or never use 77% of approved content; that figure should be read in its cited benchmark context, rather than as a current-year usage estimate.
- **Manual Workload:** SecureCHEK’s [blog](#) describes the time agencies and reviewers can spend correcting documents. This is a vendor description of workload, not measured customer savings from an implementation.

- **Vendor Time-Saving Claims:** [Papercurve](#) advertises a 60% reduction in content review and approval time. [Filestage](#) advertises up to 30% off the review process with online proofing. These are vendor claims, not a comparative study or demonstrated PromoMats AI ROI.
- **Quality Metrics:** Beyond time, AI agents can increase consistency. By using the same programmed guidelines across all reviews, companies reduce variability. This potentially leads to fewer compliance incidents (lower legal risk). While no public stat ties AI to a drop in FDA warning letters yet, industry insiders expect that more uniform initial review will reduce errors down the line.

Table 1 summarizes evidence with its measurement type:

Evidence	Metric and context	Source
Historical digital workflow	20% fewer face-to-face meetings; projected two-FTE capacity from multiple efficiencies; 2014 case	Veeva case report
Papercurve vendor claim	60% reduction in review and approval time	Papercurve
Filestage vendor claim	Up to 30% off the review process	Filestage
Veeva qualitative assessment	Results of AI use in MLR review are still taking shape; no quantified AI-agent outcome in this statement	Veeva white paper

For implementation decisions, measure cycle time, review rounds, reviewer effort, and quality against a defined baseline. Keep projected capacity, vendor claims, and measured outcomes separate.

Case Studies and Real-World Examples

Several life sciences companies have begun piloting or implementing Veeva's AI agents and other MLR automation tools. While detailed results are still emerging, initial reports and interviews give insight into their experiences:

- **Moderna (Early Access User):** Jason Benagh, Global Marketing Operations Director at Moderna, participated in early testing of Quick Check. In Veeva's [December 3, 2025 announcement](#), Benagh described Quick Check as moving Moderna closer to a process where parts of MLR could become nearly touch-free. This "touch-free review" vision implies that routine compliance checks require minimal human intervention. The quotation describes an early-access vision rather than a quantified efficiency result.
- **Bristol Myers Squibb:** In Veeva's [December 3, 2025 announcement](#), Greg Meyers is identified as Executive Vice President, Chief Digital and Technology Officer. His statement concerns AI throughout the broader customer journey, including information delivery and field engagement; it is not a measured MLR implementation result.
- **Novo Nordisk:** Frank Armenante, Director of Field Systems, praised the promise of AI in CRM (Vault CRM), indicating it will allow sales reps to focus on "value parts of their jobs" (www.tickertech.com). By analogy, MLR reviewers likewise should focus on value (strategic compliance decisions) rather than drudgery. The CRM comment does not establish adoption in Novo Nordisk's MLR teams.

- **Otsuka (Europe):** Debbie Young, Multichannel Strategy Director at Otsuka Europe, highlighted that Veeva AI embedded in their systems is “important to us as we expand our partnership” (www.veeva.com). This indicates that global companies are investing in these AI capabilities as part of their transformation roadmaps.
- **Other AI Solutions:** SecureCHEK AI describes prechecking new content against a library of approved messaging ([SecureCHEK blog](#)). The blog’s description of manual correction workload should be distinguished from measured customer savings.

Veeva’s [cited white paper](#) attributes the resource-management statement to Jamie Moccia, manager of MRC and medical operations at Argenx: the focus is efficient, compliant support for stakeholders and business initiatives. The statement is qualitative and does not demonstrate measured AI-agent cost savings.

Discussion: Implications and Future Directions

The advent of agentic AI in MLR review heralds a fundamental shift in content operations. Here we discuss the broader implications, potential benefits, and the considerations that must accompany this transformation.

Transforming Content Workflow

Reduced Bottlenecks. With Quick Check and Content Agent, many of the tedious manual checks in the MLR chain can happen without human input. Early removal of errors means marketing teams get faster feedback on drafts. In practice, workflows will evolve so that content-triaging becomes an automated first step. This could reduce manpower needed for initial compliance review, or allow those reviewers to be reassigned to higher-level tasks (like strategic oversight, global coordination, or field support).

Tiered Review Models. Any reduction in review intensity should follow an approved, documented risk-based SOP with qualified human accountability and verification of applicable promotional requirements. A clean Quick Check result alone should not authorize publication or demonstrate compliance. Veeva’s [tiering discussion](#) describes business rules and retains human oversight; automated findings can inform that process.

Enhanced Collaboration. By summarizing and indexing content, AI agents can enable more effective discussions with marketing and agencies. Instead of presenting a draft from scratch, companies might start reviews with Quick Check reports and AI summaries to highlight topics to discuss. Cross-functional PRC meetings could be more data-driven: participants come prepared with the AI-generated analysis in hand.

Scalability Across Geographies. Global companies produce local language versions of content. AI can assist with translation checks (e.g. ensuring the same warnings appear in each language) and maintain consistency across regions. Veeva’s secure, cloud-based approach means multinational teams everywhere can access the same AI tools and datasets.

Compliance and Risk Management

Evidence Retention. Quick Check findings should not be equated with formal approval audit trails. Veeva’s [user documentation](#) says its quality-check outcomes are neither audited nor reportable and are not saved to the document by default; users can select issues to save as annotations. Separately, [agent monitoring](#) records

execution details for usage and troubleshooting. Organizations should distinguish execution monitoring, chat history, saved annotations, and approval records, then configure and validate retention procedures for the evidence they need.

Human-in-the-Loop Safeguards. Veeva emphasizes that reviewers retain final authority. The AI agents aid decision-making but do not override human judgment. This aligns with best practices in pharmaceutical AI: using AI as “augmented intelligence” rather than replacing expert oversight. Reviewers can accept or reject each AI finding. Terminology supplied as context should be distinguished from training the underlying model.

Quality Control. AI output should be evaluated for mistakes and omissions under the organization’s review procedures. Veeva’s [security overview](#) states that customer data is never used to train or enhance its third-party LLMs. Documented context and terminology tailoring should not be described as training those models on MLR outcomes.

Regulatory Acceptance. It remains to be seen how regulators feel about AI involvement. The FDA and other agencies have not explicitly banned or encouraged AI use in promotional review. Because the AI is not replacing human analysis, regulators will likely focus on whether the final materials are compliant, regardless of how many automated checks were used. However, companies should note internal policies: some may require documentation of the AI use just for transparency (not for compliance necessity, but for corporate governance).

Broader Industry Trends

The broader integration of AI agents like these suggests several trends:

- **End-to-End Content Operations:** Beyond pre-review, we can anticipate AI tools at other content lifecycle stages. For example, use of AI in content creation is already being piloted (drafting initial copy, generating images, etc.). Veeva notes that future PromoMats AI applications will empower marketers in ideation and creation, not just in review (www.veeva.com). Similarly, after publication, AI could help analyze field usage of materials (identifying which content resonates with HCPs).
- **Data-Driven Compliance:** With AI agents embedded, companies accumulate new data on review patterns and error types. Any analysis of finding patterns would need deliberately retained evidence; Quick Check outcomes themselves are not reportable. Over time, this can inform training and process improvements.
- **Focus on Critical Content:** If AI allows low-hanging compliance tasks to be automated, human reviewers might shift focus toward strategic, high-stakes content. This could enable teams to take on more sophisticated marketing (e.g. real-world evidence content, personalized medicine messaging) because they are not bogged down by routine checks.
- **Global Harmonization Efforts:** The use of AI in compliance might also push regulators toward more harmonized guidelines. As companies deploy AI across regions, it will highlight differences in rules; industry pressure might mount for simplifying global promotional codes.

- **Custom AI Agents:** Beyond Veeva's built-in agents, the platform allows building *custom* AI agents. Veeva documents that customers can configure or extend agents and create custom agents ([Vault AI](#)). This should not be confused with permission to train third-party LLMs on customer content. This extensibility means Veeva AI can evolve with customer needs. It also suggests a future market of third-party "apps" for Vault, analogous to smartphone apps, focused on niche tasks in life sciences.

Potential Risks and Mitigations

While promising, automating MLR review with AI also has potential downsides:

- **Overreliance on AI:** There is a risk that users might over-trust the agents, assuming "if Quick Check didn't catch it, it must be fine." To mitigate this, companies should train reviewers to view AI cues as advisory. Standard operating procedures may emphasize double-checking critical sections manually, especially early in adoption.
- **False Positives/Negatives:** AI models can sometimes produce irrelevant alerts (false positives) or miss subtle violations (false negatives). Veeva's Quick Check and Content Agent, being LLM-based, have these limitations. Continuous monitoring is needed. Initially, teams might find that the agent flags minor style issues that distract from bigger problems. Veeva's [user documentation](#) says predefined checks cannot be edited or augmented with custom checks. Supported tailoring uses organization-specific terminology and phrases as context, including Allowed Terms and Prohibited Terms; this is distinct from a general sensitivity control.
- **Security and IP Concerns:** PromoMats is a cloud application. Veeva's [AI architecture description](#) identifies Anthropic and Amazon LLMs hosted on Amazon Bedrock for standard agents. This is not an on-premises deployment or a promise of no third-party processing. Customers should assess permissions, data entitlements, retention, and applicable contractual data protections for their deployment.
- **Regulatory Scrutiny:** If an AI system were to recommend a promotional claim that turned out to be non-compliant, liability (in terms of internal review) is unclear. Companies will have to maintain a clear record that the ultimate sign-off was done by qualified personnel.

Overall, experts emphasize that process changes (clear roles, training, update of SOPs) must accompany technology introduction (www.veeva.com) (www.veeva.com). AI is an enabler, but operational governance remains critical.

Future Directions

As checked on October 8, 2026, Veeva's [Quick Check user documentation](#) identifies Quick Check as in maintenance mode and supported through 2028. The possibilities below are hypotheses for future content tools, not a Quick Check roadmap or a commitment to additional Quick Check functionality:

- **Enhanced Multimodal Analysis:** Content Agent already handles text and static images. It could evolve to handle rich media: analyzing video scripts, embedded interactive elements, or even voiceover content. Future agents may incorporate real-time speech-to-text checks for webinar content or chat

analysis from tele-sales calls.

- **Global Support:** Hypothetical future tools could help assess localized materials. Organizations should verify supported markets, checks, and configuration for each deployed release rather than assume automatic application of country-specific law.
- **Future Learning Approaches:** Any hypothetical future feedback mechanism would need to respect Veeva's stated data protections. Customer corrections should not be presented as training or enhancing its third-party LLMs for all customers ([Veeva security overview](#)).
- **Integration with Other Systems:** Veeva PromoMats does not work in isolation. Future AI extensions could span CRM (integrating with customer interactions) or regulatory submissions (flagging content for filing in specific formats). There are hints Veeva wants Agents across all applications (ir.veeva.com). A future scenario: an agent helps generate an FDA-compliant submission document by pulling content and warning of missing sections.
- **Standardization of AI in Pharma:** As AI tools become commonplace, industry groups or regulators may issue guidance. For instance, there could be a formal principle of "AI-assisted review" requiring firms to document AI usage and validation. Proactive adopters like Veeva will have an advantage, having already integrated into their quality systems.

In the long run, "Agentic AI" like Veeva's could blur the lines between content ideation, production, and compliance. Teams might ideate a campaign using generative models, have those models output draft content, and route it through automated checks before qualified human review. Automated checks alone would not establish compliance. This vision of a semi-automated content pipeline is compelling but will need careful change management.

Conclusion

Automating the MLR review process with AI holds transformative promise for life sciences marketing. Veeva PromoMats' new Quick Check and Content Agents directly address the historic pain points of MLR review: the tedium of checking against a vast body of rules and the slow, batch-mode nature of committee review. By using AI to perform editorial and regulatory pre-checks (Quick Check) and to assist human reviewers with summarization and Q&A (Content Agent), PromoMats aims to **accelerate the fastest path to approved content** (www.veeva.com).

The evidence should be read according to its type: historical digital-workflow cases, vendor claims, estimates, and qualitative early-access comments do not establish a measured PromoMats AI-agent return on investment. Veeva's [features brief](#) describes AI-powered checks as a way to identify issues before MLR review and reduce rework. Organizations should establish their own baseline and measure outcomes for the deployed release.

However, success will depend on rigorous implementation and ongoing oversight. Organizations must treat AI as a tool that augments expertise, not as an infallible oracle. Guardrails, clear governance, and performance tracking will be essential to ensure that compliance outcomes are as good as (or better than) the old system. When done correctly, though, the shift is likely to yield a **step-change** in how content flows from idea to

market. Reviewers will spend their time on the most critical strategic issues, rather than routine checks. Creative teams will get faster feedback, enabling truly agile marketing. Ultimately, this means **faster patient access** to information about new therapies – a core goal of both industry and regulators.

In closing, Veeva's integration of AI into MLR workflows exemplifies a broader digital transformation in healthcare marketing. It stands at the intersection of advanced LLM technology and the heavily regulated world of drug promotion. The Quick Check and Content Agents are pioneering tools, and Veeva presents them as tools intended to support productivity and content review (www.veeva.com) (www.tickertech.com). As these tools mature and more companies adopt them, we can expect to see MLR review evolve from a lengthy gatekeeper to a mostly seamless, high-value layer of the content lifecycle. Regulators and industry alike will need to adapt as well, but those that harness this technology wisely will gain a competitive edge – bringing quality information to patients and healthcare providers more quickly and safely than ever before.

Source links

Links cited in this article, in order of first appearance. Full addresses are provided for readers using extracted text.

1. <https://viseven.com/mlr-review-process-in-pharma-challenges-and-solutions/>
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