

AI for MLR: Developing a Content Generation Agent for Pharma Marketing

Clarkston partnered with a biopharmaceutical company to transform its marketing content development process. The client's content creation approach depended on external agencies and multiple cycles through the Medical Legal Regulatory (MLR) process, with each piece requiring extensive compliance checks. The company often paid for multiple draft iterations, further increasing cost and delay. This workflow hindered the marketing team's agility and drove up costs. The business challenge was to automatically generate fully compliant draft marketing assets, such as sales-rep-triggered emails and digital banner ads.

Clarkston's solution was an AI-driven content generation agent – an internal tool producing compliant first-draft content in minutes. Leveraging the client's vast and varied library of approved content and past assets, including Core Visual Aids, the AI tool generates on-brand assets in a fraction of the time. This initiative streamlined content creation, reduced dependence on agencies, and enabled the team to rapidly iterate on messaging with confidence that every draft met regulatory standards.

Life Sciences Case Study

PROJECT OVERVIEW

INDUSTRY



Biopharmaceuticals

PRODUCTS AND SERVICES



Drug discovery and development

PRIMARY OBJECTIVES

- Automate the generation of draft marketing content that is fully compliant with industry regulations and internal brand guidelines, including medical, legal, and regulatory (MLR) standards
- Reduce content development costs by minimizing reliance on external creative agencies and shifting the drafting process in-house
- Increase flexibility in content tone and format to allow marketing teams to tailor messaging for different audiences without compromising compliance
- Build internal content generation capabilities to decrease dependence on third-party vendors and external timelines

RESOLUTION

- Implemented a generative AI platform and a user-friendly web front-end
- Incorporated custom regulatory prompt logic that embeds MLR guidelines into every content request; the system automatically applied required disclaimers and phrasing rules (*for both branded and unbranded content*) to ensure all generated drafts were compliant by design
- Enabled multi-modal input support so users can upload various reference materials as context
- Empowered rapid content creation by allowing multiple draft variations to be generated instantly and included a creativity tuning feature
- Integrated the tool into client's content workflow with an intuitive interface and output options

KEY BENEFITS

- Reduced content development turnaround time by 50-75% (*first drafts ready in hours instead of weeks*), accelerating time-to-market for campaigns
- Achieved an estimated 60% reduction in content creation costs by decreasing reliance on external agencies, saving several hundred thousand dollars annually
- Increased marketing output capacity, allowing the team to create and iterate on far more content with the same resources
- Improved compliance consistency with AI-generated drafts aligning to approved language on the first pass, significantly reducing the need for rework or heavy review cycles



KPIs

- 50–75% reduction in content production timeline per asset (*draft creation to final approval*)
- ~\$30K savings in external creative costs for each early-stage asset draft replaced by the AI-generated content
- 5+ versions generated instantly for each content request

"The back and forth with [AGENCY] was exhausting. They didn't follow strict instruction guidelines, and minor corrections to our drafts ended up taking weeks. Our AI-driven content creation agent saves us so much hassle and gets our content out for review in a fraction of the time and cost - it's incredible."

- Associate Director, US Marketing

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