



Agentic AI for Content Generation at Scale

CLIENT

A global technology brand



PROBLEM STATEMENT

The company's digital marketing team needed to produce a high volume of diverse, high-quality content (50-100 assets per month) across multiple formats (blogs, articles, white papers, infographics, expert reviews, tweets, etc.) while ensuring brand consistency, data compliance, and personalized messaging. Their existing workflow was manual, time-consuming, and lacked the scalability to meet their growing content demands.



Implementing an Agentic AI framework for content generation and leveraging a suite of specialized AI agents for each stage of the content lifecycle.

Framework Implementation

1. Content Calendar Agent:

- a. **Role:** Analyzes historical data, trending topics, and campaign objectives to generate a dynamic content calendar.
- b. **Capabilities:** Keyword research, competitor analysis, seasonality trends, and content performance prediction.

2. Content Planner Agent:

- a. **Role:** Develops detailed briefs for each content piece based on the calendar and target audience.
- b. **Capabilities:** Topic ideation, outline creation, keyword integration, SEO optimization, and identification of relevant data and sources.

3. Content Writer Agent:

- a. **Role:** Generates initial drafts of various content formats based on the briefs.
- b. **Capabilities:** Text generation, image creation (using text-to-image AI), data visualization, and basic formatting.

4. Quality Inspector Agent:

- a. **Role:** Reviews content for factual accuracy, grammar, style, and brand consistency.
- b. **Capabilities:** Plagiarism detection, grammar and spell check, tone analysis, and brand voice alignment.

5. Translator Agent:

- a. **Role:** Translates content into multiple languages while maintaining original intent and style.
- b. **Capabilities:** Multilingual translation, cultural adaptation, and localization.

6. Content Editor & Tester Agent:

- a. **Role:** Refines content based on feedback from the Quality Inspector and conducts A/B testing for optimization.
- b. **Capabilities:** Content editing, A/B testing setup and analysis, and performance reporting.

7. Personalization Agent:

- a. **Role:** Tailors content for different audience segments based on demographics, interests, and behavior.
- b. **Capabilities:** Audience segmentation, personalized content recommendations, and dynamic content insertion.

8. Data Compliance Agent:

- a. **Role:** Ensures all content adheres to data privacy regulations and legal requirements.
- b. **Capabilities:** PII detection and redaction, legal and regulatory compliance checks, and content auditing.

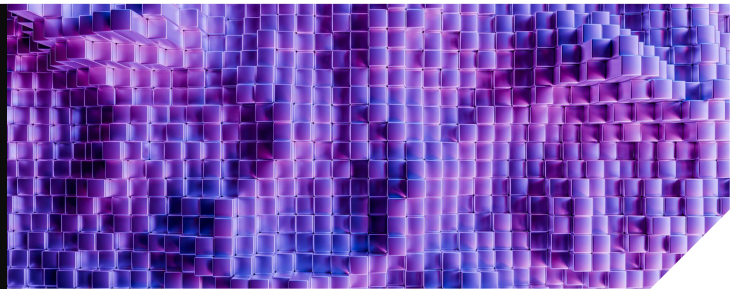
9. Content Publishing Agent:

- a. **Role:** Automates the publishing process across various channels and platforms.
- b. **Capabilities:** Content scheduling, multi-channel distribution, and social media posting.

10. Content Effectiveness Measurement Agent:

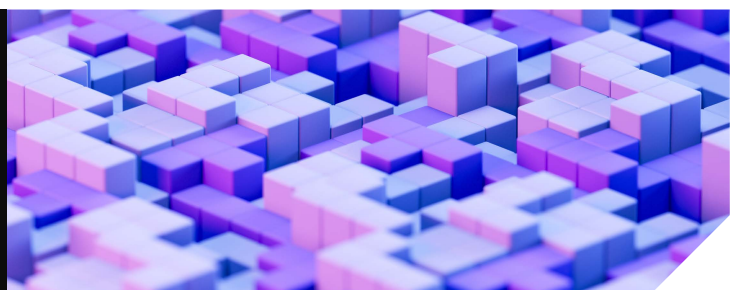
- a. **Role:** Tracks and analyzes content performance to identify areas for improvement.
- b. **Capabilities:** Performance metric tracking (engagement, reach, conversions), data analysis and reporting, and insight generation.

RESULTS



- **Increased content output:** The team increased content production by 150%, exceeding their initial goal of 50-100 articles per month, publishing an average of 125 articles monthly.
- **Improved content quality:** AI-powered quality checks and editing resulted in a 20% reduction in grammatical errors and a 15% increase in content clarity and readability scores.
- **Enhanced efficiency:** Automation of various tasks saved the team an average of 10 hours per week, allowing them to focus on higher-value activities like strategy and creative development.
- **Better personalization:** Personalized content experiences led to a 7% increase in click-through rates (CTR) and a 3.5% lift in conversion rates.

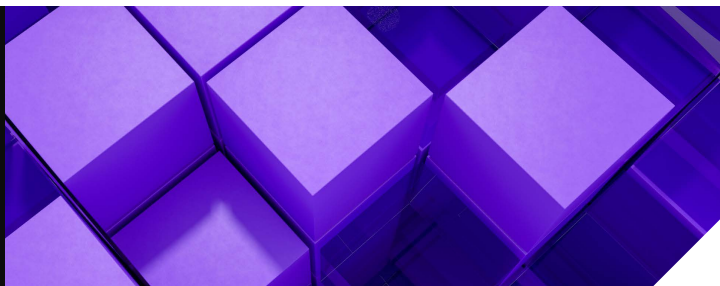
BENEFITS



- **Scalability:** The Agentic AI framework provided a scalable solution for handling growing content demands, allowing the team to easily adapt to a 30% increase in content requests without additional resources.
- **Cost-effectiveness:** Automation led to a 15% reduction in content creation costs per article.

- **Improved brand consistency:** AI ensured adherence to brand guidelines and messaging across all content, achieving a 95% consistency score in brand voice and tone.
- **Enhanced customer experience:** Personalized and relevant content improved customer engagement and satisfaction, as evidenced by a 10% increase in positive social media sentiment related to the brand's content.
- **Increased agility:** The framework enabled the team to quickly adapt to changing market trends and customer needs, reducing content production turnaround time by 20%.

TECHNICAL STACK



- **Azure OpenAI Service:** Access to powerful large language models (LLMs) like GPT-4 for text generation, translation, summarization, and other NLP tasks.
- **Azure Cognitive Services:** Leverage pre-built APIs for tasks like image analysis, sentiment analysis, entity recognition, and language detection to enhance agent capabilities.
- **Custom Models:** Trained and deployed our own machine learning models using Azure Machine Learning for specialized tasks like content quality assessment and personalized content recommendation.
- **Azure Logic Apps:** Automate workflows and connect different agents, triggering actions based on events and data flow.
- **Azure Durable Functions:** For long-running, stateful orchestrations of complex content generation workflows.



CONCLUSION

By implementing an Agentic AI framework, the technology brand successfully transformed its content generation process. This case study demonstrates the power of AI in enabling digital marketing teams to create high-quality, personalized content at scale, leading to improved efficiency, engagement, and business outcomes.

ABOUT US

C5i is a pure-play AI & Analytics provider that combines the power of human perspective with AI technology to deliver trustworthy intelligence. The company drives value through a comprehensive solution set, integrating multifunctional teams that have technical and business domain expertise with a robust suite of products, solutions, and accelerators tailored for various horizontal and industry-specific use cases. At the core, C5i's focus is to deliver business impact at speed and scale by driving adoption of AI-assisted decision-making.

C5i caters to some of the world's largest enterprises, including many Fortune 500 companies. The company's clients span Technology, Media, and Telecom (TMT), Pharma & Lifesciences, CPG, Retail, Banking, and other sectors. C5i has been recognized by leading industry analysts like Gartner and Forrester for its Analytics and AI capabilities and proprietary AI-based platforms.



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