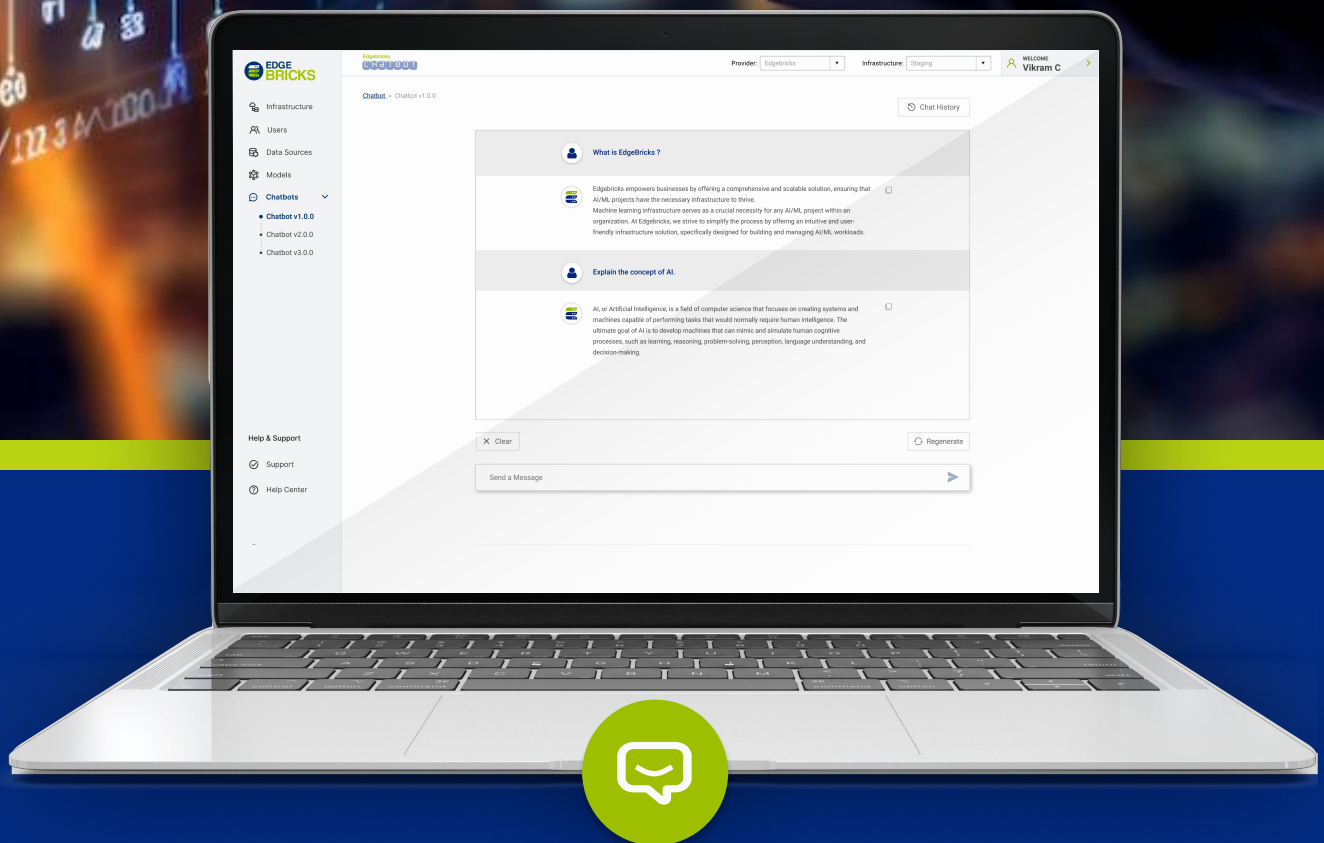


CASE STUDY



How we built a Chatbot for a Leading Financial Firm

Introduction

A prominent financial firm approached EdgeBricks seeking a solution to enhance their service capabilities. The firm wanted to leverage data from the financial firm's website to provide accurate and real-time responses to user inquiries about financial regulations, filings, and other critical financial information.



Problem Statement

The firm needed a robust chatbot that could:

- Accurately interpret and respond to questions using data from the financial website.
- Offer seamless interaction, ensuring users receive relevant and precise answers.
- We built on a scalable & customizable platform to accommodate future expansion and additional use cases.

Solution Approach

EdgeBricks has built a chatbot lifecycle management platform that automates the task of building, testing and deploying a chatbot using data from various sources and LLMs. We used that platform to handle the building of custom chatbot using the firm's private data and a base LLM. The approach included the following key steps:

Requirement Analysis and LLM Options Evaluation

- Conducted a comprehensive requirement analysis to understand the specific needs and goals of the financial firm.

- Evaluated multiple large language models (LLMs) such as OpenAI's GPT-4, Google Bard and other open source models, and other industry-leading models.
- Provided detailed comparisons of the LLM options, highlighting strengths, limitations, and suitability for the firm's specific needs.
- Provided API endpoints that can be integrated to their website.
- The solution was enabled with a Performance measurement system which helped the firm to tailor the model accordingly.
- Batch Mode was enabled to the chatbot which helped them to upload bulk queries which helped them to compare the responses whenever the model was updated with new or modified data so that the firm could compare results across multiple versions.

Data Integration and Model Training

- Ensuring the chatbot meets user expectations and provides a satisfactory user experience requires rigorous testing, which can be resource-intensive.
- Utilized our proprietary platform to fine-tune the chosen LLM on the financial data, ensuring the chatbot could accurately understand and respond to financial queries.
- Implemented robust data preprocessing techniques to enhance model performance and response accuracy.

Bot Development and Customization:

Once built and deployed, a user-friendly chatbot interface was provided to their team and also integrated with the firm's existing systems. Customized the chatbot to understand and respond to a wide range of financial queries, including those related to financial filings, regulations, and compliance requirements.

Ensured the chatbot was capable of handling complex queries by leveraging advanced NLP techniques and contextual understanding.

Testing and Quality Assurance:

- Conducted extensive testing to ensure the chatbot's responses were accurate, relevant, and timely.

- Implemented a feedback loop to continuously improve the bot's performance based on real-world interactions.
- Ensured compliance with data security and privacy standards to protect sensitive user information.

Deployment and Support

Successfully deployed the chatbot, ensuring seamless integration with the firm's service infrastructure. Provided ongoing support and maintenance to address any issues and implement updates as needed

Results and Impact

The implementation of the AI-powered chatbot resulted in significant improvements in service for the financial firm:



Enhanced Customer Experience

Users received accurate and timely responses to their queries, leading to improved satisfaction and engagement.



Operational Efficiency

The chatbot handled a substantial volume of user inquiries, freeing up human resources to focus on more complex tasks.



Scalability and Flexibility:

The customizable nature of the chatbot allowed the firm to expand its capabilities to cover additional use cases and data sources as needed.



Competitive Advantage:

The firm was able to differentiate itself by offering cutting-edge AI-driven user service, strengthening its market position



Ease of Usage:

The solution was designed in such a way that it will be easy to upload, retrain and deploy the model without lengthy process.

Conclusion

Using the Chatbot lifecycle management platform, Edgebricks was able to successfully deliver a powerful AI-powered chatbot tailored to the specific needs of the financial firm, leveraging data from their website and some other sources. By providing expert guidance on LLM selection, comprehensive data integration, and a user-friendly interface, we ensured the firm achieved its goals of enhanced user service and operational efficiency.

Our proprietary platform's capabilities in generative AI use cases were instrumental in delivering a solution that not only met but exceeded the firm's expectations.

For more information on how EdgeBricks can help your organization leverage AI for innovative solutions, please contact us at info@edgebricks.com or visit www.edgebricks.com



Thank You



Empowering AI & LLM Innovation

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