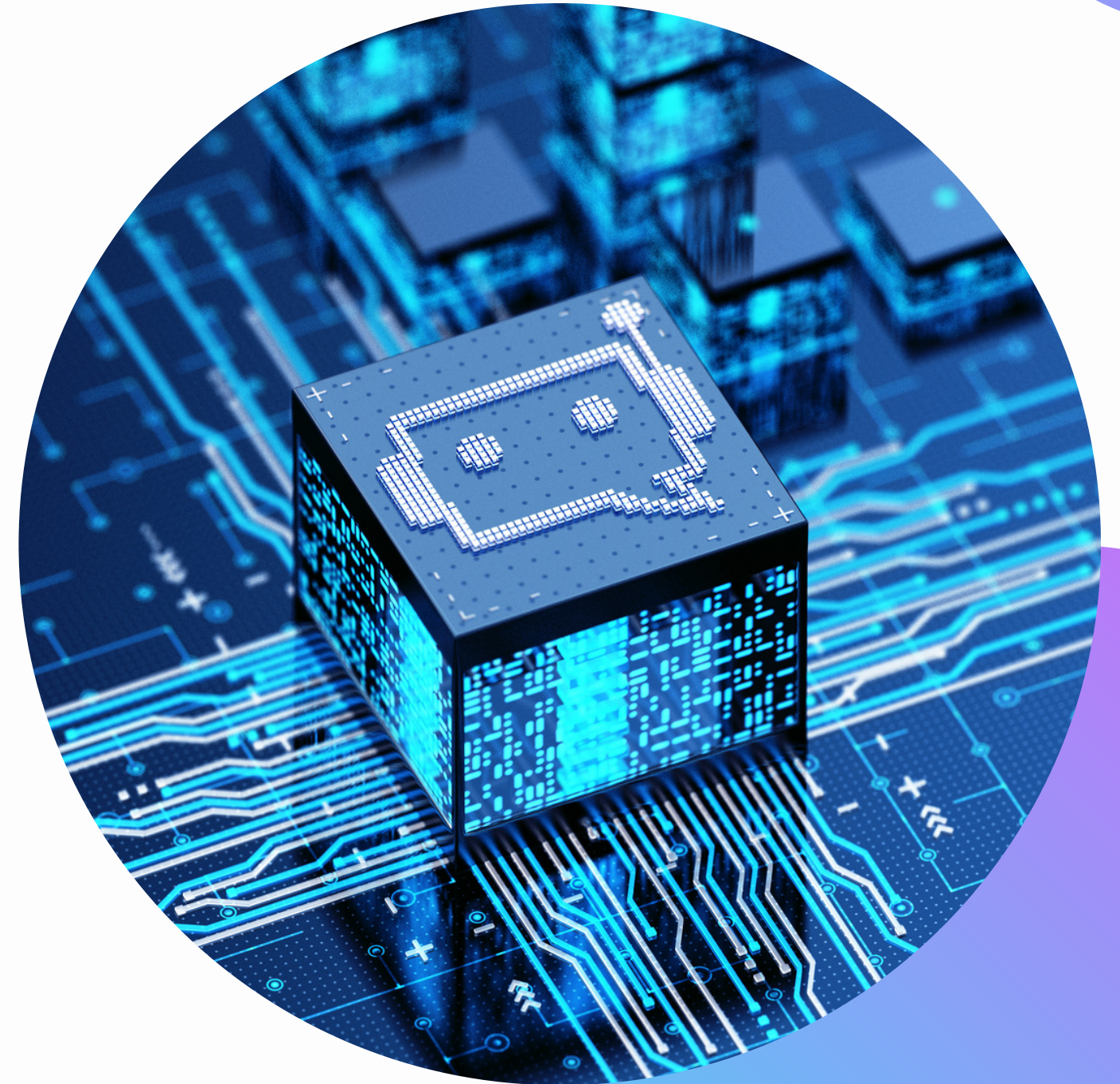




Custom AI Chatbot Solutions for Business Technical Documentation



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Executive Summary

Verge AI provides specialized AI chatbot solutions to businesses facing challenges in automating operations, enhancing customer service, and optimizing information access. In today's digital age, providing immediate and accurate responses to customer inquiries and streamlining internal processes is critical to business success.

We develop custom AI chatbots that not only automate operations and customer service but also provide instant access to necessary information. Unlike generic AI solutions, our chatbots are tailored to your company's specific needs and processes, ensuring a solution that fits seamlessly into your existing operations.

Built on Microsoft technology and Azure Open AI, our chatbot solution is robust, reliable, and secure. Our commitment to data protection and compliance is demonstrated by our adherence to POPIA and GDPR standards. Microsoft's technology also ensures a guaranteed uptime of 99.95%, providing consistent and reliable service.

Choosing Verge AI as your provider means partnering with a company that prioritizes your needs, values, and goals. The expected outcome of implementing our solution is a highly efficient, automated, and user-friendly system that enhances customer service, streamlines internal processes, and provides quick access to information. This results in significant time and cost savings, improved customer satisfaction, and a competitive advantage in the market.

Our Solution

Our AI Chatbot solution is a comprehensive offering designed to streamline operations, enhance customer service, and optimize information access. The primary features and benefits of our solution include:

CUSTOMIZABLE

Our chatbots can be tailored to your company's specific needs, ensuring the solution aligns with your processes and objectives.

INTELLIGENT

Using Azure OpenAI, the chatbots can interpret complex user queries and generate accurate, human-like responses. They are designed to answer any question about a company and its specific processes or data.

COST-EFFECTIVE

By automating operations and facilitating the quick access of information, our chatbots can significantly save time and money for your company.

RELIABLE

Built on Microsoft technology, our chatbots guarantee a high level of reliability with an operational uptime of 99.95%.

Customization Options

Visual Identity

The chatbot widget can be customized to align with your company's specific colours, logo, and preferred size.

Persona and Voice

The persona and voice of the chatbot can be tailored to reflect the unique values and ethos of your company.

Knowledge Base

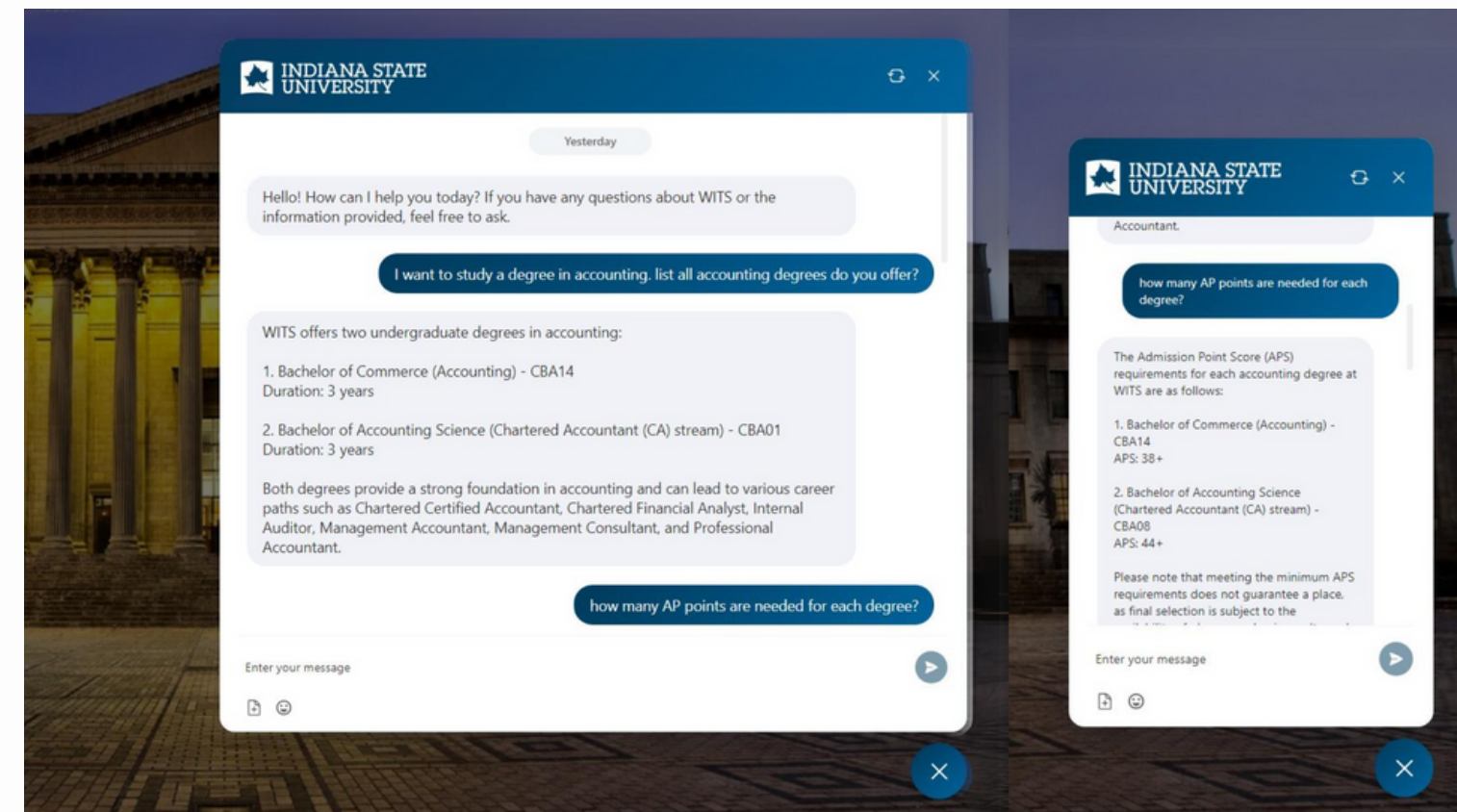
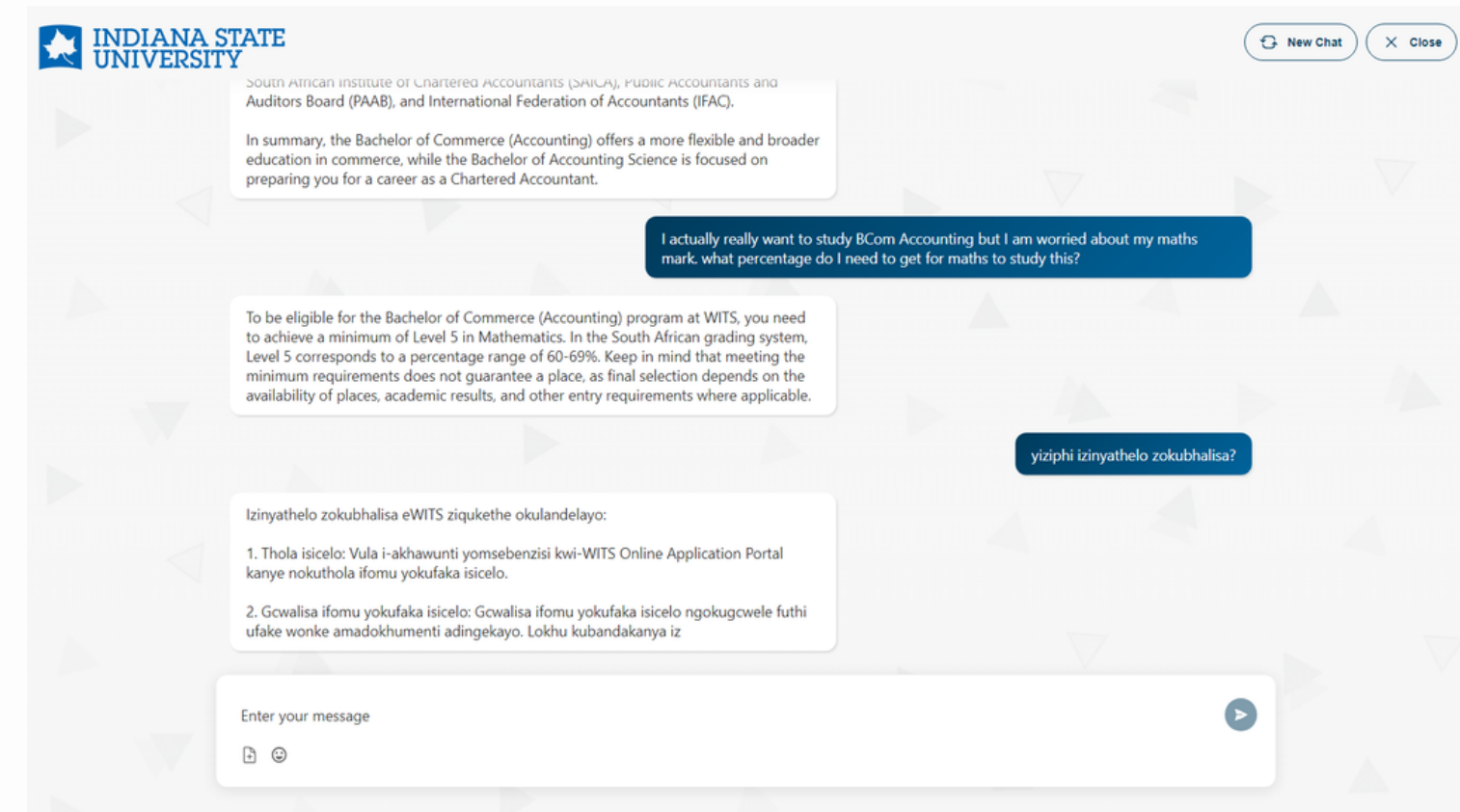
We populate the chatbot's knowledge base with information specific to the client's business. This includes details about products, services, company history, policies, and any other relevant information. This ensures that the chatbot has a solid foundation to draw upon when responding to user queries.

Data Training

We train the chatbots using your data. We convert your data into vectors using techniques like word embeddings. Upon receiving a user query, the bot transforms the query into a vector and uses an algorithm to find the closest matching information in the database. The bot then formulates a relevant and contextually appropriate response based on the matched data.

Branding the Chatbot

Our chatbot solution offers extensive branding options to align with the visual identity of your business. The chatbot widget can be customized with your company's specific colours, logo, and preferred size, ensuring a seamless integration with your existing digital presence. Beyond these aesthetic customizations, the persona and voice of the chatbot can also be tailored to reflect the unique values and ethos of your business. This means the chatbot doesn't just look like a part of your company, but it also interacts with users in a manner consistent with your company's communication style. All these features work together to ensure that the chatbot serves as a true digital ambassador for your business.



Examples of the different size, color scheme options, and logo placements of our chatbot widgets. Above is our full screen widget. Bottom left is our half page widget. Bottom right is our quarter page widget.

Live Agent Hand-Offs

Our chatbot solution is designed to enable a smooth transition from AI interaction to live agent assistance using Verge Connect, our proprietary customer support platform. This feature ensures a seamless customer experience, bridging the gap between automated and human interaction to provide the most comprehensive support possible.

Utilizing Verge Connect, the chatbot can promptly hand-off the conversation to a live agent upon the user's request for help.

The complete chat history will be preserved and transferred in real-time, providing the agent with full context for a smooth continuation of the interaction.

This allows all conversations to be tracked within Verge Connect, creating a single authoritative solution for all interactions and enabling agents to manage conversations within a single, comprehensive product.

While Verge Connect is our preferred system, we understand that businesses may have established systems in place. This is why our solution is designed to seamlessly integrate with any human handoff/live chat system of your choice, ensuring continuity and ease of use.

Analytics and Reporting

Our solution comes with a suite of AI-powered out-of-the-box Power BI reports, providing immediate insight into key performance metrics. By default, these reports include:

STANDARD METRICS

- Total number of conversations
- Total number of users
- Total number of messages
- Total messages by channel
- Sentiment analysis
- Top intents
- Keyword extraction
- Educational process analytics

Beyond our standard offering, we understand the unique needs and requirements of each business. Therefore, we offer fully customizable analytics and reporting capabilities. This means that any specific metrics or analytics that are important to your business can be included in your chatbot's reports.

Whether you want to track certain user behaviors, measure specific performance indicators, or analyze particular conversation trends, our team can tailor your reports to include these metrics.

Knowledge Management

Our Verge AI solution has been specifically designed to seamlessly integrate with existing Knowledge Bases and SharePoint sites. This is achieved through advanced API capabilities, which enable the chatbot to dynamically pull and update its knowledge base as and when changes are made to these platforms.

A key feature of our solution is its intelligent indexing method. This allows the chatbot to automatically organize, categorize, and retrieve information efficiently from SharePoint and other integrated platforms. Whenever an update is made within SharePoint or the knowledge bases, our chatbot automatically refreshes its knowledge set to reflect the most current information, and indexes it for efficient retrieval and use.

This dynamic, automated, and integrated approach ensures that our chatbot is always equipped with the most up-to-date and relevant information. This reduces the workload for staff, simplifies processes, and improves the overall user experience, making it a reliable, efficient, and indispensable tool for businesses across various industries.





Fine-Tune Your Knowledge Set

Given the complexity of certain documents, we provide a comprehensive manual documentation process to manage intricate information, such as documents with complex tables or diagrams. This method, though time-consuming, is vital for ensuring our solution can accurately understand and apply the information to answer queries. Our team manually indexes your institution's documents, enabling our solution to provide precise, contextually relevant responses, thus enhancing its efficiency and accuracy.

In addition to the manual documentation, we have developed the our solution platform for fine-tuning your knowledge set. This system allows users to add, remove, or tweak information within a user-friendly interface. Changes made are directly updated in our solution, ensuring its responses are current and accurate. The platform also features a comprehensive audit trail for transparency, and an option to test changes in a User Acceptance Testing (UAT) environment before going live.

Our platform also simplifies version control, allowing users to track their data versions and offering a rollback functionality when needed. The Verge platform is designed to empower users, ensuring that the bot's responses are not only accurate but also cater to the specific needs of your institution and students. This tool is a testament to our dedication to enhancing the overall user experience with our solution.

Integration With Existing Systems

Our Verge AI solution is designed to integrate seamlessly with virtually any system that has an open-facing API, ensuring a smooth and cohesive connection between our chatbot and your existing software systems.

For systems without an open-facing API, we have a dedicated team of skilled developers who can build custom connectors tailored to your specific requirements. Our team has vast experience in creating custom integrations, ensuring that even the most complex systems can be integrated with our solution.

This robust integration capability ensures that our chatbot can access and retrieve relevant data from your existing systems, enhancing its functionality and creating a unified, efficient digital environment. Regardless of the complexity of your systems, we ensure seamless integration, providing a comprehensive, efficient, and effective AI chatbot solution.



Data Protection

NETWORK SECURITY

We utilize Microsoft App Services, which ensures stringent network firewall provisioning, intrusion detection, and regular vulnerability assessments. This guarantees that our chatbot solution maintains a secure network, resistant to unauthorized intrusions and breaches.

APPLICATION SECURITY

Our chatbot solution is built on the Microsoft Bot Framework, which provides robust authentication, authorization, and role-based access control. This ensures that only authorized users can access and interact with the chatbot, providing a secure application environment. Additionally, we apply timely patches, fixes, and updates to the operating system and applications to maintain a secure processing environment.

DATA STORAGE AND ENCRYPTION

We use Microsoft's Cosmos DB for data storage. It provides secure, encrypted storage, ensuring that all data, whether at rest or in transit, is encrypted using industry-standard encryption algorithms. This prevents unauthorized access or interpretation of data, providing a secure environment for data storage and transmission.

DATA PROTECTION AND COMPLIANCE

Microsoft App Services and Cosmos DB are compliant with key industry standards and regulations such as GDPR, HIPAA, and ISO 27001. Compliance with these standards ensures that our chatbot solution adheres to the best practices in data protection and privacy.

HIGH AVAILABILITY AND RELIABILITY

Cosmos DB offers global distribution and replication, ensuring high availability and reliability of our chatbot solution. It also provides automatic backup capabilities, which guarantees data recovery in case of any unforeseen incidents.

SECURITY AUDITS AND MONITORING

We conduct regular security audits and penetration tests to identify and rectify any potential vulnerabilities. Additionally, we use monitoring and alerting systems to quickly detect and mitigate any potential threats or breaches.

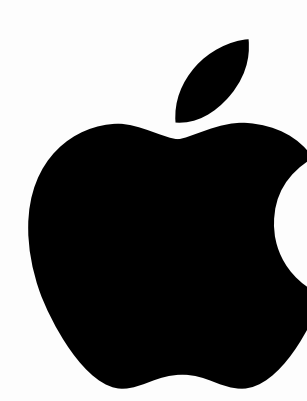
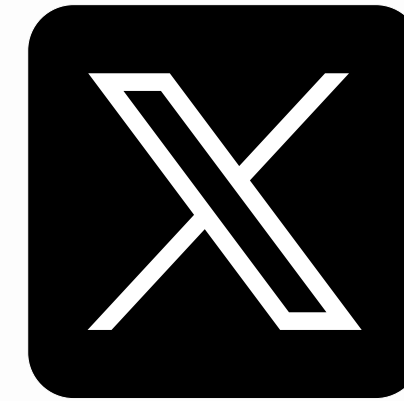
SECURITY BREACH NOTIFICATION PROCESS

In the unlikely event of a security breach, we have a clear notification process in place. We will promptly inform all affected parties and take immediate action to mitigate the impact of the breach.



Deployment Channels

Our solution's compatibility spans across multiple deployment channels, including: Modern web browsers like Google Chrome, Safari, Bing, and Firefox, Telegram, WhatsApp, iMessage, SMS, Facebook Messenger, Instagram, X, Apple Business Chat, Slack, Microsoft Teams, and more.





Service Availability

Our solution is built on Microsoft Technology, a leading provider in cloud services. Microsoft guarantees an operational uptime of 99.99% for their services. This high level of reliability is possible due to Microsoft's global network of data centres, advanced data replication methods, and robust disaster recovery systems.

The 99.99% uptime guarantee means that our solution will be available for use almost all the time, ensuring that customers and staff will have consistent and reliable access to the services and information they need.

In the unlikely event of any downtime, Microsoft's robust disaster recovery systems ensure rapid restoration of services, minimizing any potential disruption. This commitment to high availability and reliability makes our solution a dependable platform for companies.

Our Technology

Our solution employs cutting-edge AI technology, including Natural Language Processing (NLP) technology from OpenAI. This NLP technology empowers our solution to comprehend and interpret user inputs in a highly human-like fashion. This eliminates awkward interactions and ensures all conversations maintain a natural and fluid feel.

In addition to NLP, our solution uses Microsoft Cognitive Services. These services enable the chatbot to perceive its environment, understand context, and make informed decisions accordingly. This sophisticated understanding of context further enhances the user experience, making interactions with our solution intuitive and seamless.

Equipped with these advanced technologies, our solution can communicate with users in a manner that is not only natural but also intuitive. Gone are the days of robotic responses and scripted interactions. Instead, our solution can provide personalized recommendations, immediate support, and crucial information that users require. All these services are delivered in a conversational and engaging manner, greatly enhancing user experience and engagement.



Maintenance and Support

For maintenance and support, we follow a structured approach:

MONITORING

We continuously monitor the chatbot's performance using logging, analytics, and user feedback to identify and address any issues or anomalies.

ISSUE RESOLUTION

Immediate action is taken to resolve identified issues, including debugging, code fixes, or configuration changes.

UPDATES AND UPGRADES

Regular updates and upgrades are performed to keep the chatbot up to date with the latest technologies and features.

USER SUPPORT

Our dedicated support team provides assistance to resolve any issues or questions from users through various communication channels.

PROACTIVE MAINTENANCE

We adopt a proactive approach by conducting regular testing, code reviews, and performance optimization to identify and address potential issues before they arise.

By following this approach, we ensure that our solution is tailored to meet your specific requirements, user needs, and business objectives. Our iterative development process, coupled with close collaboration and regular communication, guarantees a high-quality chatbot solution that drives tangible value for your business.

Development Approach

Our development approach follows a meticulous process to ensure alignment with your specific requirements and objectives.

Throughout the development process, we conduct rigorous testing, address any identified gaps or discrepancies, and ensure high-quality performance.

Preliminary Analysis and Workshops

We conduct workshops and analysis to understand your project requirements and objectives.

Customization and Development

Based on the insights gathered, we customize and develop the chatbot, implementing key features.

Design and Build Reports

Custom reports are designed and built to provide key insights into the chatbot's performance.

Deployment and Go-live

Upon successful testing, the chatbot is deployed and goes live.

Setup and configuration of the Verge Platform

The Verge Platform is set up and configured, preparing it for development.

Software Integration

The chatbot is seamlessly integrated with your existing software systems.

UAT and Connect Training

User Acceptance Testing (UAT) is performed and training provided on Verge Connect.

Project Management

Our project managers oversee the process from start to finish, ensuring all requirements are met.



Thank You

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