

Final Group Project Assignment	
Project Detail	Phase 3 - Final Paper
Stakeholder / Company	Jennifer Widerberg / Insight Resources Group Inc.
Subject	MASY1-GC1240-100
Adjunct Instructor	Peter Peng
Team Members	Pedro Gamundi Mahnoor Khan Shreya Shreya Christabella Batara Edward Chiang Fengrong Xing

Table of Contents

Executive Summary	3
Company Profile	3
Stakeholder Profile	4
Stakeholder/Company Needs	5
Comparison Analysis	6
Proposal Recommendation	26
Project Plan	30
Conclusion	35
Appendix	36
References	47

Executive Summary

The consulting group was engaged by Insight Resource Group Inc staffing solutions firm to enhance operational efficiency by leveraging technology. The primary objective of the project was to simplify manual tasks and streamline processes within the organization. After a thorough analysis, the consulting group recommends the implementation of a chatbot solution to automate various tasks and improve overall productivity. The staffing solutions firm faces challenges associated with manual processes, including time-consuming candidate screening, repetitive administrative tasks, and communication inefficiencies.

These challenges have led to increased operational costs and decreased responsiveness in the fast-paced staffing industry, in which our stakeholder can be using the spent time on said tasks on other tasks of greater complexity and importance. By embracing the recommended chatbot solution, the staffing solutions firm has the opportunity to revolutionize its operations, enhance productivity, and stay competitive in the dynamic staffing industry. The consulting group is confident that this IT solution will bring about a positive transformation, positioning the firm for sustained success in the rapidly evolving market.

Company Profile

Insight Resource Group Inc. was founded in 2013, and currently has its headquarters in New York, with a team of 10. The firm focuses on national staffing solutions/executive search or the comprehensive recruitment and workforce management services provided on a nationwide scale. These solutions are designed to meet the staffing needs of organizations operating across multiple locations within a country. National staffing firms typically offer a range of services, including talent acquisition, temporary staffing, permanent placement, workforce consulting, and related human resources solutions. Insight Resource Group provides executive search services to

Fortune 500 firms in the following skill areas: Executive Management, Information Technology, Business Operations, Sales, and ITO/BPO.

Clients for the firm generally include but are not limited to major banks, hedge funds, insurance companies, as well as service providers such as software and consulting firms that also serve these industries. Besides the services provided by the company, Insight Resource Group Inc. also strives to maintain long-term relationships with clients through their ability to deliver quality candidates as well as information on industry trends and competitive compensation analysis.

Stakeholder Profile

Jennifer Widerberg is the managing director of Insight Resource Group Inc, with a total tenure of 10 years and 10 months of dedicated service to the company, with previous experience as an account manager/ IT recruiter in the firm M*Logic. Jennifer currently lives and operates in the challenging landscape of the Greater New York City Area, and has been instrumental in driving the success of Insight Resource Group, Inc. Jennifer has a specialty of engaging professionals in Financial Services Technology, and has consistently demonstrated a commitment to fostering meaningful conversations. This personalized approach is complemented by an innate ability to identify by connecting with exceptional individuals. Jennifer creates business opportunities that may have otherwise remained undiscovered through a thorough understanding of the industry she is staffing for, and the candidate's overall profile.

A strategic thinker and proactive leader, Jennifer actively sources and creates research to stay at the forefront of market trends. This commitment ensures that Insight Resource Group, Inc. remains well-informed and adaptive in the ever-evolving landscape of Financial Services and FinTech. Jennifer brings a robust skill set to the table including but not limited to encompassing screening resumes, talent scouting, IT recruitment, technical recruiting, negotiation, account

management, building long-term relationships, interview preparation, recruiting, and business development.

Stakeholder/Company Needs

The consulting group engaged with Insight Resource Group, Inc., under the leadership of Jennifer Weidberg, to enhance operational efficiency by leveraging innovative IT solutions. The primary goal of the project was to simplify manual tasks within the staffing solutions firm and introduce technological advancements to streamline processes so that the shareholder could prioritize more important tasks and simplify manual work. The proposed solution centered around the implementation of a chatbot to reduce manual workload and optimize the overall recruitment and staffing workflow. The chatbot would be designed to automate routine tasks, such as initial candidate screening, interview scheduling, and status updates to clients and candidates. This technology aimed to significantly reduce the manual workload, allowing Jennifer and the rest of her team to focus on strategic, high-value activities. By implementing the recommended chatbot solution, Insight Resource Group, Inc. has the opportunity to revolutionize its operations, reduce manual tasks, and stay at the forefront of technological advancements in the staffing industry.

Comparison Analysis

I. Dante AI

Overview

Dante AI is an advanced AI-powered personal assistant and chatbot platform trusted by over 100,000 businesses. It's designed to enhance productivity, simplify information processing, and provide customizable AI solutions. Dante AI stands out in the AI chatbot service industry due to its superior customization capabilities and high-quality response generation. The platform allows users to create tailored chatbots trained on specific datasets, making it highly adaptable to various business needs and contexts. (Dante)

Key strengths and benefits of Dante AI

1. Personalization: Dante AI allows for the creation of chatbots that are uniquely tailored to the user's specific data, ensuring highly relevant and personalized user interactions.
2. No-Code Solution: The platform is designed for ease of use, enabling users without technical expertise to quickly build GPT-4 powered chatbots.(DataEconomy)
3. Customizable Appearance: Users can extensively customize their chatbot's appearance, aligning it with their brand identity through custom logos, colors, fonts, and styling.
4. Seamless Integration: Dante AI chatbots can be easily integrated into various applications, enhancing their utility across different digital platforms.
5. Language Versatility: The tool supports multiple languages, broadening its applicability and accessibility to a global audience.
6. Voice Control Options: Incorporates voice control features, offering an additional, convenient mode of interaction for users.

7. **Diverse File Upload Capability:** Users can upload a range of file types, or share links, images, and videos, which the AI then analyzes to provide insightful feedback.
8. **Versatility Across Industries:** Dante AI is adaptable for use in various industries, enhancing functions like customer service, marketing, and user engagement.
9. **Advanced AI Technology:** Powered by GPT-4, Dante AI offers sophisticated, context-aware interactions and responses.
10. **Sentiment Analysis Feature:** The platform can perform sentiment analysis, extracting nuanced emotions and meanings from text data, useful for understanding customer feedback and social media content.
11. **Data Security:** Powered by Amazon Web Services (AWS), Dante AI ensures robust data protection with strong encryption standards.
12. **API for Integration:** Comes with an API for embedding the chatbot into products or integrating with other platforms, offering flexibility in its application.
13. **User-Friendly Access:** Provides a user-friendly interface, allowing easy access and management of the chatbot from anywhere.
14. **Free Trial and Demo:** Offers a free live demo and a trial version, making it easy for potential users to test the platform without immediate commitment.

Features of Dante AI and how they fulfill business needs

1. **Chatbot Interaction Quality and User Engagement:** Dante AI stands out in chatbot interaction quality and user engagement by offering personalized responses through data analysis, adapting its communication style to match customer preferences, and supporting multilingual and voice-controlled interactions. This flexibility and customization in

communication ensure users feel valued, fostering stronger customer relationships and enhancing overall engagement. (Dante)

2. **Ease of Integration with Website Platforms:** Integrating Dante AI into a website is straightforward – simply click "Share my chatbot!" in the Dante AI interface, copy the chat embed code, and paste it onto the site. We can also use a direct link for a custom-trained chatbot or embed it as a chat bubble for easy access. Dante AI's API further facilitates seamless integration across various platforms, enhancing its versatility. (DataEconomy)
3. **SEO and Traffic Generation Capabilities:** Dante AI's robust analytics platform offers valuable insights and recommendations to enhance the website's visibility and engagement. By analyzing traffic data, it identifies areas of improvement like keyword optimization, user experience enhancement, and effective marketing strategy implementation. Furthermore, Dante AI aids in content creation and copywriting, assisting in crafting compelling, SEO-friendly content that draws more visitors to the site.
4. **Data Collection and Analytics:** Dante AI excels in real-time data analysis, tracking customer satisfaction, and capturing form data. It can reference documentation and read data from Google Docs, analyze diverse data types like news articles, research papers, and medical records, and interpret information from PDF charts and Excel sheets. Additionally, it can make notes for videos and write essays.
5. **Compliance and Data Security:** Dante AI prioritizes data security and user privacy, complying with stringent data privacy laws like GDPR and implementing robust security measures to protect user data when integrated with company websites. It encrypts data to

prevent unauthorized access and stores content on secure, encrypted AWS servers known for scalability and reliability, particularly in high-traffic scenarios.

6. **Cost-Effectiveness:** Dante AI presents a cost-effective solution over a three-year period, with an estimated total cost of \$7,700. This includes the overall subscription cost and initial setup, hosting and related services, SSL certificates, maintenance and updates, and training for employees on managing the AI chatbot. Compared to competitors, Dante AI's pricing structure offers good value, considering the comprehensive range of services and features provided within this budget.
7. **Technical Support and Maintenance:** Dante AI offers dedicated customer service to assist users with any inquiries or support needs. Users can easily reach out to the customer service team for assistance by emailing connect@dante-ai.com. This channel ensures direct and efficient communication for any questions or help required with Dante AI's services.
8. **Scalability and Performance Under Load:** Dante AI's platform, featuring a flexible API, demonstrates robust handling of diverse interactions. Its performance under high traffic depends on factors like deployment specifics, server capacity, and load management. The system is adept at managing high user interaction volumes, scaling effectively to meet high traffic demands, contingent on the availability of high-speed internet.(Dante)

3-year overview of the financials of Dante AI (CapEx & OpEx)¹

Total expenses to consider:

1. **Overall Subscription cost - \$600/year**

This includes,

- 6,000 message credits per month

¹ Refer to 'Appendix A' for complete financial breakdown for Dante AI.

- 20 knowledge bases
- 4,000,000 characters per knowledge base
- Embed on unlimited websites
- Upload multiple files/websites/videos/images
- Save conversations
- Voice to text
- API access
- Edit knowledge bases
- Remove 'Powered by Dante'
- Chatbot customization

2. **Initial setup : \$1,000**

3. **Hosting and Related Services : \$600 annually**

Considering that we go for VPS hosting (VPS hosting, or Virtual Private Server hosting, is a type of web hosting that uses virtualization technology to provide you with dedicated (private) resources on a server with multiple users. It's a more secure and stable solution than shared hosting, where you don't have dedicated server space. However, it's smaller-scale and cheaper than renting an entire server.) then typically it will cost \$50/month making it \$600 annually.

4. **Security compliance: SSL certificates - \$100 per year**

5. **Maintenance and Update : on an avg \$900 per year**

6. **Training of existing employees for using / managing AI chatbot :\$100**

2024

CapEx	OpEx
1. Initial setup =\$1,000	1. Overall Subscription cost - \$600/year 2. VPS Hosting - \$600 3. SSL certificates - \$100 per year 4. Maintenance and Update: on an avg \$900 per year 5. Training of existing employees for using / managing AI chatbot :\$100

2025	
CapEx	OpEx
-	1. Overall Subscription cost - \$600/year 2. VPS Hosting - \$600 3. SSL certificates - \$100 per year 4. Maintenance and Update : on an avg \$900 per year

2026	
CapEx	OpEx
-	<ol style="list-style-type: none"> 1. Overall Subscription cost - \$600/year 2. VPS Hosting - \$600 3. SSL certificates - \$100 per year 4. Maintenance and Update: on an avg \$900 per year

Total for 3 years - \$ 7,700

Possible risks, weakness, or other considerations

1. Does not currently support image generation or OCR scanning.
2. Unable to handle multiple queries at a time.
3. Does not have a robust support service apart from customer service support.

II. ChatGPT

Overview

Developed and launched by OpenAI, ChatGPT (Chat Generative Pre-trained Transformer) is a large language model-based chatbot designed to refine and steer conversations with its users. Built upon either GPT-3.5 or GPT-4, its conversation applications use a combination of supervised and reinforcement-learning techniques. ChatGPT has quickly become an industry leader, gaining over 100 million users, contributing to a company valuation of about \$29 billion. (ScienceDirect)

Key strengths and benefits of ChatGPT

1. **Advanced AI Technology:** GPT-3.5 is one of the largest non-sparse language models ever produced. The subscription-based ChatGPT Plus option utilizes GPT-4 which is much more advanced than GPT-3. (AI Multiple)
2. **Multi-Topic Proficiency:** Can simultaneously manage conversations across a diverse range of topics, showcasing its versatile and dynamic interaction capabilities.
3. **Initiating Interaction with ChatGPT:** To begin using ChatGPT, users can either insert or create images, or begin chatting with its voice feature.
4. **Customization:** Users can create custom versions of ChatGPT that combine instruction, various combinations of skill, and extra knowledge to suit their personal needs.
5. **Sentiment Analysis Feature:** ChatGPT offers sentiment analysis and can extract meaning and emotion from the input data. (ScienceDirect)
6. **Language Versatility:** The tool is supported with over 95 languages, catering to a global audience.

Features of ChatGPT and how they fulfill business needs

1. **Chatbot Interaction Quality and User Engagement:** With this chatbot, users can engage in natural, human-like conversations on a wide range of topics (due it being trained on more diverse datasets) as well as being able to generalize original data. It can handle multiple requests at a time, generate quick responses, and can respond in more than 95 languages. Its most admirable feature is its sentiment analysis – it can easily identify sentiment behind a query and respond to it in a suitable tone.
2. **Ease of Integration with Website Platforms:** Launching a ChatGPT-based chatbot requires experienced and expert developers. If an in-house IT/development team is not present, third-party developers will need to be hired.

3. **SEO and Traffic Generation Capabilities:** ChatGPT has the capability to generate high-quality, detailed, and relevant content to improve search engine rankings and website traffic. Although it does not know SEO-specific keywords, the user can guide it by including certain keywords that will bring up the desired content. Moreover, ChatGPT can help create compelling meta titles and descriptions. (Kovair blog)
4. **Data Collection and Analytics:** ChatGPT does not collect or store personal user data; rather, it can generate responses based on the input it receives from the user (Introducing ChatGPT. (n.d.)). With additional tools and further adherence to privacy regulations, it does have the possibility of conducting data collection (Introducing ChatGPT. (n.d.)). It is able to process textual data for insights and summaries, process complex datasets to help generate narratives based on that data, and assist in querying databases in natural language (Introducing ChatGPT. (n.d.)).
5. **Compliance and Data Security:** As a language model, ChatGPT itself does not store personal data from the input it receives (Introducing ChatGPT. (n.d.)). When a company integrates ChatGPT into its website, it must comply with the necessary Data Processing Agreement (DPA) and any relevant data collection regulations such as the way it collects, stores, and processes data; obtaining consent when collecting user data; ensuring data minimization; and providing users with the ability to access, rectify, or delete their data. Furthermore, companies can consider anonymizing or pseudonymizing sensitive data before it is processed by ChatGPT (Introducing ChatGPT. (n.d.)).
6. **Cost-Effectiveness:** Over a three-year period, ChatGPT will present an estimated total cost of \$57,346. This includes hiring a developer for integration, initial setup, support technician, API prompt token cost, API sample token cost, subscription cost, VPS hosting,

SSL certificate, maintenance and update, and training of existing employees to support the chatbot.

7. **Technical Support and Maintenance:** OpenAI offers varying customer support services for ChatGPT. Based on the service plan or agreement in place with the customer, direct customer/developer support is available along with community support of developers and users (forums and discussion boards) where people can seek help and insight (Introducing ChatGPT. (n.d.)). OpenAI offers extensive documentation, guides, and resources for using and integrating the chatbot (Introducing ChatGPT. (n.d.)). ChatGPT users can also expect regular updates and maintenance periods to enhance performance and reliability (Introducing ChatGPT. (n.d.)). Additionally, user feedback and training resources are available for businesses and developers (Introducing ChatGPT. (n.d.)).
8. **Scalability and Performance Under Load:** ChatGPT's reliability in high traffic situations is dependent on the technical infrastructure and management practices surrounding its deployment (Introducing ChatGPT. (n.d.)). With the right setup and ongoing management, ChatGPT can remain reliable in such situations.

3-year overview of the financials of ChatGPT (CapEx & OpEx)²

Total expenses to consider:

1. **API Token = \$ 1642.5**

- **Tokens:** In the context of the GPT-4 model, a token is a piece of text. It can be a word, part of a word, or even punctuation. The model processes and generates text in terms of these tokens.

² Refer to 'Appendix B' for complete financial breakdown for ChatGPT.

- 8K Content Lengths: \$0.03 for 1000 Prompt Tokens or 780 words: This price applies when you send text (prompt) to the GPT-4 model for processing. If your prompt is 1000 tokens or less, it will cost \$0.03. The term "8K" suggests that the maximum length of the prompt can be up to 8000 tokens.
- \$0.06 for 1000 Sampled Tokens: This price is for the text generated (sampled) by the
- GPT-4 model in response to your prompt. For every 1000 tokens generated by the model, it costs \$0.06. Again, the "8K" implies a maximum generation limit of 8000 tokens per response.

If an average interaction uses 200 tokens (100 for the prompt and 100 for the response)

And if chatbot handles 500 interactions per day, the daily token usage would be 200 tokens

* 500 = 100,000 tokens.

yearly token usage = 100,000*365 = 36,500,000

So, for 1000 Prompt Tokens , cost = 0.03\$

1 prompt token = 0.03/1000 = 0.00003

18,250,000 prompt token (half of total) = 18,25,000*0.00003

= \$547.5

Now, for 1000 Sampled token, cost = \$0.06

18,250,000 sampled token = (0.06*18,250,000)/1000 = \$1,095

Total for 36,500,000 = 547.5+ 1,095 = \$ 1642.5

2. **Subscription cost annually** - \$20/month or **\$240 annually**

3. **Development-** **\$7,000**

hiring developer for integration: 100 hrs or 2.5 work weeks on average.

Typical agency cost for development - 70\$/hr

So for overall integration of ChatGPT to website - $70 \times 100 = \$7,000$

4. **Infrastructure Investment : Initial setup = \$1,000**

5. **Hosting and Related Services: \$600 annually:**

Considering that we go for VPS hosting (VPS hosting, or Virtual Private Server hosting, is a type of web hosting that uses virtualization technology to provide you with dedicated (private) resources on a server with multiple users. It's a more secure and stable solution than shared hosting, where you don't have dedicated server space. However, it's smaller-scale and cheaper than renting an entire server.) then typically it will cost \$50/month making it \$600 annually.

6. **Security compliance:** SSL certificates - **\$100 per year**

7. **Maintenance and Update:** on an avg **\$500 per year**

8. **Training of existing employees to support chatgpt** - **\$100** (online learning course)

9. **Technical support staff for just 1 year = \$40,000**

2024	
CapEx	OpEx
1. Hiring Developer for integration =\$7,000 2. Initial setup = \$1,000 3. Technical support - \$40,000	1. API Token cost =\$1642.5 2. Subscription cost = \$240 3. VPS hosting =\$600 4. SSL certificate = \$100 5. Maintenance and update - \$500/year 6. Training of existing employees to support chatbot - \$100

2025	
CapEx	OpEx
-	1. API Token cost =\$1642.5 2. Subscription cost = \$240 3. VPS hosting =\$600 4. SSL certificate = \$100 5. Maintenance and update - \$500/year

2026	
CapEx	OpEx
-	<ol style="list-style-type: none"> 1. API Token cost =\$1642.5 6. Subscription cost = \$240 7. VPS hosting =\$600 8. SSL certificate = \$100 9. Maintenance and update - \$500/year

Total for 3 years : \$57,349

Possible risks, weakness, or other considerations (Kovair blog)

1. Need for professional developers to integrate the chatbot into the website.
2. Does not inherently collect user data or track metrics.
3. Its insights are limited to the data it is given and its training, so it might not provide industry-specific insights without relevant input.
4. Does not have built-in data visualization capabilities.

III. Chatsimple

Overview

Chatsimple is a revolutionary AI-driven chatbot platform designed to seamlessly integrate into any website. Through its highly personalized offerings, it converts business visitors into customers. With its variety of set-up plans to empower organizations with AI-powered customer service solutions, Chatsimple comes recommended by major platforms such as Product Hunt and Yahoo Finance.

Key strengths and benefits of Chatsimple

1. Quick and Easy Setup: Offers easy, no-coding deployment in under five minutes.
2. Customer Engagement: 24/7 live, multi-platform support is available for Chatsimple users.
3. Language Versatility: Can engage with global customers in over 175 languages.
4. Personalization: These chatbots are able to offer personalized and accurate responses to queries, and can clearly convey the suitable business offer, thereby guiding customers towards correct purchasing decisions. The option to choose your own font, color and avatar for your chatbot is also available.

Features of Chatsimple and how they fulfill business needs

1. Chatbot Interaction Quality and User Engagement: Chatsimple offers friendly, automated customer experiences. It is able to provide personalized and relevant responses by using the information and data fed into the chatbot, thereby, making each user engagement more unique (AI Chatbot for Your Business, Chatsimple). Equipped with natural-language processing, Chatsimple chatbots can understand and respond to a wide range of user inquiries accurately (AI Chatbot for Your Business, Chatsimple). It can also communicate in over 175 languages.
2. Ease of Integration with Website Platforms: Enter your website URL, customize your chatbot according to your preferences, and deploy your chatbot on your website with a simple code snippet or plugin.
3. SEO and Traffic Generation Capabilities: Though not directly offering SEO or traffic generation services, Chatsimple chatbots contribute to a website's user experience to boost traffic.

4. **Data Collection and Analytics:** These chatbots have the ability to collect visitor details in order to assist in data collection and analytic strategies. Their service includes capturing user interactions, providing AI summarized insights on customer needs and issues, and supporting the analysis of service usage to improve customer experience (AI Chatbot for Your Business, Chatsimple).
5. **Compliance and Data Security:** Adheres to various data protection regulations such as the California Consumer Privacy Act (CCPA) and the General Data Protection Regulation (GDPR) to protect user data (AI Chatbot for Your Business, Chatsimple).
6. **Cost-Effectiveness:** Using Chatsimple will cost around \$7,880 over a three-year period. This includes the initial setup, overall subscription cost, VPS hosting, SSL certificate, maintenance and updates, and training of existing employees.
7. **Technical Support and Maintenance:** Chatsimple provides 24/7 customer support and maintenance to ensure smooth operation. To address technical problems, users can reach out via email – info@chatsimple.ai – for support.
8. **Scalability and Performance Under Load:** Chatsimple offers a scalable and robust infrastructure and utilizes cloud-based services to efficiently handle high traffic volumes (AI Chatbot for Your Business, Chatsimple). Should an unexpected surge in traffic occur, their systems are equipped to automatically scale to meet desired demand (AI Chatbot for Your Business, Chatsimple).

3-year overview of the financials of Chatsimple (CapEx & OpEx)³

Total expenses to consider:

³ Refer to 'Appendix C' for complete financial breakdown for Chatsimple.

1. Overall Subscription - \$660/year

This includes:

- 5,000 Messages included per month
- 50 Leads per month
- 5 Chatbots
- Advanced Model (GPT-4)
- 500 Files and Webpages
- Unlimited Website Deployment
- Multi-user
- CRM Integrations (exclude Salesforce)
- Premium Support
- \$0.02 Per Additional Message

2. Initial setup =\$1,000

3. Hosting and Related Services(\$600 annually.)

4. SSL certificates - \$100 per year

5. Maintenance and Update : on an avg \$900 per year

6. Training of existing employees for using / managing AI chatbot :\$100

2024	
CapEx	OpEx
1. Initial setup =\$1,000	1. Overall Subscription cost - \$660/year 2. VPS Hosting - \$600 3. SSL certificates - \$100 per year 4. Maintenance and Update : on an avg \$900 per year 5. Training of existing employees for using / managing AI chatbot :\$100

2025	
CapEx	OpEx
-	1. Overall Subscription cost - \$660/year 2. VPS Hosting - \$600 3. SSL certificates - \$100 per year 4. Maintenance and Update : on an avg \$900 per year

2026	
CapEx	OpEx
-	<ol style="list-style-type: none"> 1. Overall Subscription cost - \$660/year 2. VPS Hosting - \$600 3. SSL certificates - \$100 per year 4. Maintenance and Update : on an avg \$900 per year

Total for 3 years - \$ 7,880

Possible risks, weakness, or other considerations

1. Does not directly offer SEO or traffic generation services.
2. Does not guarantee error-free or uninterrupted services.
3. Is not able to handle multiple queries at the same time.

Comparison Matrix⁴

Below are the features we chose to conduct the comparison matrix as well as their assigned weightages:

1. **Chatbot Interaction Quality and User Engagement (10):** High-quality chatbot interactions ensure user satisfaction and engagement, which are essential for customer

⁴ Refer to 'Appendix D' for complete Comparison Matrix.

retention and positive brand perception. We weigh this at 10 as it aligns with our company's vision "Be people first, building relationships, tackle problems with a technical solution"

2. **Ease of Integration with Website Platforms (9):** Ease of integration with website platforms is essential, especially as our company does not have a full-time developer in-house, and hence, we weigh it at 9.
3. **SEO and Traffic Generation Capabilities (8):** SEO and traffic generation capabilities are important because they enhance the visibility of a website, attracting more visitors and potentially increasing conversions and revenue. We weigh it at 8 as our company places significant emphasis on traffic generation capabilities
4. **Data Collection and Analytics (8):** Data collection and analytics in chatbots are important for understanding user behavior, refining the chatbot's responses, and personalizing user experiences, leading to improved service and actionable insights for business strategy and hence the weight 8.
5. **Compliance and Data Security (10):** Compliance and data security are crucial in choosing a chatbot to ensure user data protection, adhere to legal regulations like GDPR, and maintain customer trust in handling sensitive information. Because of all these reasons, we weigh it at 10.
6. **Cost-Effectiveness (9):** Cost-effectiveness is vital when choosing a chatbot tool as it ensures a balance between functionality and budget, maximizing return on investment while meeting business and customer service objectives. Given that our stakeholder is flexible with the budget for enhanced chatbot support, we aim for a balanced investment that aligns cost with value.

7. **Technical Support and Maintenance (7):** Technical support and maintenance, while not critical, should be considered when choosing a chatbot, as adequate support can ensure smooth operation and quick resolution of issues, contributing to overall system reliability without being a primary deciding factor, hence the weight 7.
8. **Scalability and Performance Under Load (7):** Scalability and performance under load are important, though not primary in our case, in choosing a chatbot because they ensure the chatbot can handle increased user interactions and growth needs over time, maintaining efficiency without necessitating frequent upgrades. Considering our website typically experiences moderate traffic, we've assigned a priority score of 7 to scalability and performance under load.

Proposal Recommendation

Based on the comparison analysis and the result from the weighted comparison matrix, the recommended AI chatbot tools to be integrated into the Insight Resources Group website is Dante AI. Among the three available options for AI chatbot tools, Dante AI placed as the highest-ranking choice, attaining a weighted score of 309 and a standard score of 36. Subsequently, Chat Simple secured the second position with a weighted score of 274 and a standard score of 32, while ChatGPT was positioned last, obtaining a weighted score of 269 and a standard score of 32. As shown in the comparison matrix from the previous section, based on the standard score alone, the differences between the 3 options are very minimal, however when considering the weighted comparison matrix it is apparent that the differences between the 3 options are significant, with Dante AI scoring the highest.

Dante AI attains the highest weighted score as a result from scoring higher in features assigned with higher weights, among the eight features on the weighted matrix, Dante AI outscored three of the eight features by achieving higher scores compared to ChatGPT and Chat Simple. These three features that Dante AI outscored are also the features with the highest weightings. The first feature that Dante AI outscored is ‘Compliance and Data Security’ which has a weighting of 10 (the highest possible weighting assigned), for this feature Dante AI scored 5 resulting with a weighted score of 50, which is the highest score from all 3 options. ‘Compliance and Data Security’ is one of the most important features when choosing an AI Chatbot tool considering the amount of data that both Insight Resource Group and potential candidates will store into the AI Chatbot, hence why it is crucial for Insight Resource Group to choose an AI chatbot that has strict control and policy over their data security as well as compliance. Evidently, Dante AI Adheres to GDPR regulations, the company prioritizes both data security and user privacy. It achieves this by encrypting data and employing secure, scalable AWS servers for storage.

Furthermore, the second feature that Dante AI outscored the other two AI chatbot alternatives is ‘Cost-effectiveness’ which has a weighting of ‘9’, for this feature Dante AI scored 5 resulting with a weighted score of 45. ‘Cost-effectiveness’ is a critical factor when choosing which AI chatbot to subscribe to; this factor determines whether the advantages gained from the subscription outweigh the related expenses. Considering the three-year analysis of the Capital Expenditure (CapEx) and Operational Expenditure (OpEx) for the three AI chatbot alternatives, the projected expense for a three-year subscription to Dante AI is \$7,700. In contrast, the estimated cost for a three-year subscription to Chat Simple is \$7,880, while the anticipated subscription cost for ChatGPT over the same period is \$57,349. Evidently, according to the weighted comparison matrix, Dante AI emerges as the AI Chatbot alternative with the highest overall weighted score

and the lowest cost. This suggests that the advantages offered by Dante AI outweigh the costs associated with integrating Dante AI into the Insight Resource Group website.

The third feature that Dante AI outsourced is “Data Collection and Analytics”, which has a weighting of 8 and for this feature Dante AI scored 5, with a weighted score of 40, again Dante AI scored the highest amongst the 3 AI chatbot alternatives. ‘Data Collection and Analytics’ is an important aspect to consider when choosing an AI chatbot because this particular aspect can improve the overall user experience of the AI chatbot. The chatbot's performance can undergo continuous improvement and optimization through the ongoing collection of data, offering insights into user understanding. This process enables the curation of more personalized responses and suggestions. Additionally, the data can inform whether adjustments or updates to the chatbot are necessary. A high score in this feature suggests that Dante AI is adept at delivering heightened user engagement and satisfaction, thereby contributing significantly to the overall user experience and satisfaction of the Insight Resources Group website.

In summary, despite achieving comparable results with the other two alternatives in certain features, when assessed collectively, Dante AI consistently attains the highest total weighted score in contrast to ChatGPT and Chat Simple. It is evident that Dante AI stands out as the superior AI chatbot tool among the three alternatives. Subsequently, it is highly recommended that Insight Resource Group incorporates the Dante AI chatbot into their website to revolutionize operational processes, optimize manual tasks, and to pioneer technological advancements in the staffing industry.

Examples of companies using Dante AI

Based on the Dante AI website, their chatbots have been integrated by well known companies such as Wordpress, Slack, and Zappier to name a few. Moreover, Dante AI chatbots

have also integrated their chatbots to companies such as Kinetic Business Solutions and Origin Travel Nurses which are similar size companies to Insight Resources Group (Dante AI, 2023). The chatbots integrated into Kinetic Business Solutions and Origin Travel Nurses are capable of providing comprehensive and detailed responses to inquiries, as well as demonstrating its ability to identify and address customized questions⁵. Dante AI integration with Slack and Zappier are more advanced in terms of the features that are offered in the packages, the Slack integration, enables Dante AI to reply to messages in Slack (Sharma, 2023). Additionally, Dante AI integration with Zappier, allows Dante AI to integrate its chatbot services with numerous application platforms that are connected with Zappier (Sharma, 2023). The integration of Dante AI with Slack and Zapier serves as an illustrative example of the advanced features that Insight Resources Group could potentially leverage should they choose to enhance their chatbot integrations further with Dante AI.

Possible risks, weakness, or drawbacks of the options not chosen

For ChatGPT one of the main weaknesses is its “Data Collection and Analytics” feature. ChatGPT does not include built-in data visualization features and necessitates external tools for specialized analytics and monitoring user engagement or website traffic. For chatbots to be further enhanced and optimized it is crucial for the AI chatbot to be equipped with tools to collect data and provide analytics. Additionally, ChatGPT scored the lowest for ‘Compliance and Data Security’, indicating that it is highly more likely to be exposed to data and security risks. Furthermore, ChatGPT does not provide seamless integration as it requires a developer for the integration and a technician for support. Lastly, the estimated ChatGPT subscription cost for three

⁵ Refer to ‘Appendix E’ and ‘Appendix F’ for an example of Dante AI Chatbot responses.

years amounts to \$57,349. However, considering that its features do not justify the integration costs, ChatGPT is not deemed the optimal choice.

For Chat Simple, overall the band has adequate features however it falls short in providing sufficient depth to its offered features. For example with its “Data Collection and Analytics” feature, it only provides data collection on user interaction to provide the analytical strategy, whereas with Dante AI, the “Data Collection and Analytics” feature has a more well rounded approach on the usability of the data, such as utilizing the data for a more customized experience and managing diverse data. Moreover, with their ‘Compliance and Data Security’ feature they do not utilize a secured software such as AWS for its data storage. To conclude, while Chat Simple's costs exceed those of Dante AI, its features still lag behind. Therefore, opting for Dante AI is advisable as the recommended AI Chatbot tool.

Project Plan

Should Insight undergo the implementation of Dante AI, it can begin training the chatbot immediately. In the knowledge base section, Insight can upload documents such as company introductions, interview tips, and job descriptions. Dante AI can transcribe documents and reply to questions based on the provided information. The more information Dante AI is given, the better the responses. The projected timeline to set up the chatbot database knowledge would be around three weeks. Insight has to think of hundreds of prompts that site visitors would likely have and formulate the corresponding responses. The next step would be testing the constructed AI chatbot. Quality assurance is important as we want to provide site visitors with the most pertinent and comprehensive response. This would take around four weeks as we need to think of as many possible permutations of questions as possible. If there are any inadequate responses, we would

have to adjust the corresponding database knowledge. As soon as the AI chatbot passes the quality assurance stage, Insight can implement the chatbot onto its website. The suggested human resources for setting up Dante AI would be three to five people. The team would begin by contacting Dante AI and discussing a suitable plan. The team would then start formulating the questions and uploading the corresponding responses. Even though one or two people are enough for the setup, a bigger group allows more possibilities for questions.

Return on Investment

The current solution of Dante AI yields a total cost of \$7,700 after three years. This includes the capital expenditure of initial setup in year 1 which is \$1,000. The operating expenditure is \$3,300 for year 1, \$2,200 for year 2, and \$2,200 for year 3. The more detailed breakdown is explained in the cost breakdown section. For the ROI breakdown, we took the approach of calculating the cost saving with the implementation of chatbot. On average, a staffing agency manager earns about \$102,843 per year in New York City according to Glassdoor's 2023 data. The current cost of Dante AI is \$7,700 over three years which is around \$2,566.67 per year. The ROI formula for cost savings is $ROI/Cost\ Savings = (Hourly\ Wage * Hours\ Saved) / Cost\ of\ Solution * 100$. The hourly wage for \$102,843 is \$49.44. The consulting group estimates that the chatbot would save roughly 2 hours per day for our stakeholder. The calculation is $(49.44*2)/2566.67*100 = 3.85$. ROI of 3.85% indicates that for every \$1 spent on Dante AI, Insight is looking at a \$1.0385 return.

Gantt Chart⁶

Phases	Activities	Resources	Begin Date	End Date	Duration (Days)
Planning	Define project timeline: Make a plan for the entire project timeline, including different activities at different stages	Gantt Chart software.	1/1/2024	1/9/2024	7
	Identify Resources: Know the tools and all stakeholders needed for this project	Stakeholder analysis tools, Gantt Chart software.	1/10/2024	1/18/2024	7
	Check feasibility: Evaluate whether it is technically feasible and whether funds are sufficient	Market research reports, technical research reports.	1/19/2024	2/1/2024	10
Analysis	Gather detailed requirements: Obtain all required requirements through surveys and meetings.	Meeting agenda, requirements documents.	2/2/2024	2/21/2024	14
	Analyze capabilities: Understand whether the existing system is compatible with this AI chat, if not, make corresponding updates	System documentation, technical evaluation tools.	2/22/2024	3/12/2024	14
	Define user personas: Create a user personas to identify your main customer groups	User research tool, persona creation tools.	2/28/2024	3/12/2024	10

⁶ Refer to 'Appendix G' for complete Gantt Chart.

Design	Create system architecture: Build a mockup of the webpage to determine how the Aichat bot should integrate with the existing webpage	Architecture design software.	3/13/2024	4/9/2024	20
	Design user interface: Design the UI to better meet the customer experience	UI/UX design software.	4/10/2024	5/14/2024	25
	Plan data models: Define storage of data and how to interact with Aichat bot	Data modeling tools, workflow diagrams.	4/10/2024	4/30/2024	15
Development	Set up environment: Set up the development environment needed for Dante AI, like a cloud(gitlab), coding software.	Cloud services, server setup tools.	5/15/2024	6/11/2024	20
	Code integration APIs: Develop APIs to connect your webpage and the AI chatbot	API development software.	6/12/2024	7/23/2024	30
	Develop and test individual modules: Use two to three iterations to test the functions and components of AI Chatbot	Development environments, unit testing tools.	7/24/2024	9/17/2024	40
Testing	Conduct unit testing: Test each individual component and equation	Unit testing frameworks, bug tracking software.	9/18/2024	10/8/2024	15
	Perform system and integration testing: Test the overall website to see if it can run without bugs	Integration testing tools, performance monitoring tool	10/9/2024	10/29/2024	15
	User acceptance testing: Test the whole system to see whether it's meet the clients' requirement	test server, feedback collection tools.	10/30/2024	11/12/2024	10

Implementation	Implement a phased rollout: Start using the ai chat bot function of the website to the public to collect feedback	Deployment plan, version control systems.	11/27/2024	12/17/2024	15
	Monitor system performance: Monitor system conditions in real time to solve problems as soon as possible	Monitoring software, analytics tools.	11/27/2024	12/24/2024	20
	Provide training and support: Offer training sessions for users and staff members	Training materials	11/13/2024	11/26/2024	10
Maintenance	Regularly update the system: Keep the AI system up-to-date with the latest features and security patches.	maintenance team.	12/25/2024	5/19/26	1 year
	Monitor user feedback: Continuously collect user feedback to make corresponding improvements	Feedback documents, customer service team.	12/25/2024	5/19/26	1 year
	Perform continuous performance evaluation: Regularly assess system performance against key performance indicators (KPIs).	maintenance team.	12/25/2024	5/19/26	1 year

Conclusion

After factoring in the stakeholder's need to simplify manual tasks and streamline processes within the organization, the consulting group concluded that creating a chatbot for Insight Group would be the best solution. The consulting group narrowed down to three chatbot solutions, Dante AI, ChatGPT, and Chatsimple. The consulting group conducted a cost breakdown analysis of the three solutions. For Dante AI, the overall subscription cost is \$600/ year and additional cost includes VPS hosting, SSL certificates, maintenance update, and training. After the initial capital expenditure cost of 1,000, the operating expenditure after the initial year is \$2,200 per year.

Regarding the comparison matrix, the consulting group ranks different categories from 10 being most important to 7 being least important. Dante AI scored the highest in the comparison matrix with a score of 309 compared to Chatsimple's 274 and ChatGPT's 269. After analyzing the solutions with breakdown analysis and comparison matrix, the consulting group concluded that Dante AI is the best solution for Insight Group with its high customization, ease of use, lower costs than competitors, and strong security.

Appendix A								3-year overview of the financials of DanteAI	
2024									
CapEx				OpEx					
Item	Cost	Quantity	Subtotal	Item	Cost	Quantity	Subtotal		
Initial setup	\$1,000	1	\$1,000	Overall Subscription cost	\$600	1	\$600		
				VPS hosting	\$600	1	\$600		
				SSL certificate	\$100	1	\$100		
				Maintenance and update	\$900	1	\$900		
				Training of existing employees to support chatbot	\$100	1	\$100	Total 2024 Cost	\$3,300
		Total	\$1,000			Total	\$2,300		
2025									
CapEx				OpEx					
Item	Cost	Quantity	Subtotal	Item	Cost	Quantity	Subtotal		
				Overall Subscription cost	\$600	1	\$600		
				VPS hosting	\$600	1	\$600		
				SSL certificate	\$100	1	\$100		
				Maintenance and update	\$900	1	\$900		
		Total				Total	\$2,200	Total 2025 Cost	\$2,200
2026									
CapEx				OpEx					
Item	Cost	Quantity	Subtotal	Item	Cost	Quantity	Subtotal		
				Overall Subscription cost	\$600	1	\$600		
				VPS hosting	\$600	1	\$600		
				SSL certificate	\$100	1	\$100		
				Maintenance and update	\$900	1	\$900	Total 2026 Cost	\$2,200
		Total				Total	\$2,200		
								3-year total cost	\$7,700

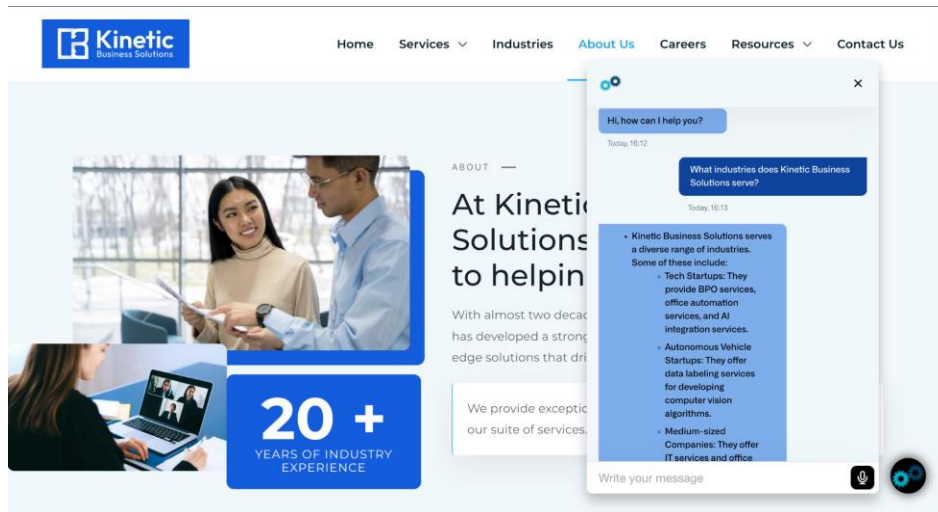
Appendix B								3-year overview of the financials of ChatGPT		
2024										
CapEx				OpEx						
Item	Cost	Quantity	Subtotal	Item	Cost	Quantity	Subtotal			
Hiring Developer for integration	\$7,000	1	\$7,000	API Prompt Token cost	\$548	1	\$548			
Initial setup	\$1,000	1	\$1,000	API Sample token cost	\$1,095	1	\$1,095			
Technician for support	\$40,000	1	\$40,000	Subscription cost	\$240	1	\$240			
				VPS hosting	\$600	1	\$600			
				SSL certificate	\$100	1	\$100			
				Maintenance and update	\$500	1	\$500			
				Training of existing employees to support chatbot	\$100	1	\$100			
		Total	\$48,000			Total	\$3,183	Total 2024 Cost	\$51,183	
2025										
CapEx				OpEx						
Item	Cost	Quantity	Subtotal	Item	Cost	Quantity	Subtotal			
				API Prompt Token cost	\$548	1	\$548			
				API Sample token cost	\$1,095	1	\$1,095			
				Subscription cost	\$240	1	\$240			
				VPS hosting	\$600	1	\$600			
				SSL certificate	\$100	1	\$100			
				Maintenance and update	\$500	1	\$500			
		Total				Total	\$3,083	Total 2025 Cost	\$3,083	
2026										
CapEx				OpEx						
Item	Cost	Quantity	Subtotal	Item	Cost	Quantity	Subtotal			
				API Prompt Token cost	\$548	1	\$548			
				API Sample token cost	\$1,095	1	\$1,095			
				Subscription cost	\$240	1	\$240			
				VPS hosting	\$600	1	\$600			
				SSL certificate	\$100	1	\$100			
				Maintenance and update	\$500	1	\$500			
		Total				Total	\$3,083	Total 2026 Cost	\$3,083	
								3-year total cost	\$57,349	

Appendix C								3-year overview of the financials of ChatSimple	
2024									
CapEx				OpEx					
Item	Cost	Quantity	Subtotal	Item	Cost	Quantity	Subtotal		
Initial setup	\$1,000	1	\$1,000	Overall Subscription cost	\$660	1	\$660		
				VPS hosting	\$600	1	\$600		
				SSL certificate	\$100	1	\$100		
				Maintenance and update	\$900	1	\$900		
				Training of existing employees to support chatbot	\$100	1	\$100	Total 2024 Cost	\$3,360
		Total	\$1,000			Total	\$2,360		
2025									
CapEx				OpEx					
Item	Cost	Quantity	Subtotal	Item	Cost	Quantity	Subtotal		
				Overall Subscription cost	\$660	1	\$660		
				VPS hosting	\$600	1	\$600		
				SSL certificate	\$100	1	\$100		
				Maintenance and update	\$900	1	\$900		
		Total				Total	\$2,260	Total 2025 Cost	\$2,260
2026									
CapEx				OpEx					
Item	Cost	Quantity	Subtotal	Item	Cost	Quantity	Subtotal		
				Overall Subscription cost	\$660	1	\$660		
				VPS hosting	\$600	1	\$600		
				SSL certificate	\$100	1	\$100		
				Maintenance and update	\$900	1	\$900	Total 2026 Cost	\$2,260
		Total				Total	\$2,260		
3-year total cost									\$7,880

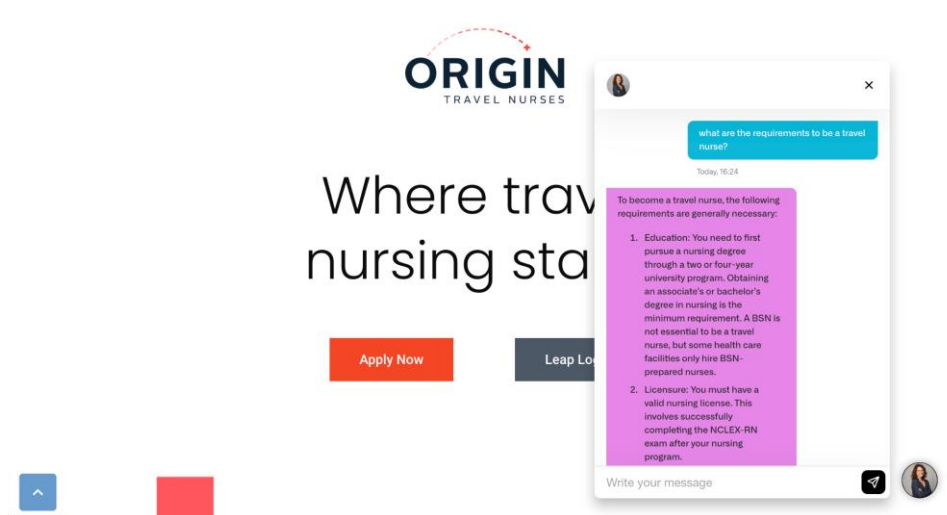
Appendix D

No.	Feature	Weight	Dante AI			ChatGPT			Chatsimple		
			Description	Score	Weighted Score	Description	Score	Weighted Score	Description	Score	Weighted Score
1	Chatbot Interaction Quality and User Engagement	10	Offers personalized interactions through customer data analysis, tone and language adaptation, and tailored recommendations. They support multilingual and voice control features, improving accessibility and engagement. also allows sentimental analysis.	4	40	Provides natural, quick conversations in over 95 languages, excelling in personalized engagement and sentiment analysis. Leveraging advanced machine learning algorithms, the chatbot can easily analyze users' intent based on past interactions and demographics. It is able to handle multiple queries at the same time.	5	50	Offers 24/7 engagement to visitors in over 175 languages with personalized and relevant responses, and tailored guidance and recommendations.	4	40
2	Ease of Integration with Website Platforms	9	Offers a no-code solution for easy chatbot integration into websites, using "Share my chatbot!" for embedding chat code or a chat bubble.	5	45	Need to hire skilled developers from a reputable agency for effective AI chatbot integration, especially if lacking in-house AI expertise.	3	27	No-code, easy integration by entering website URL to launch the chatbot.	5	45
3	SEO and Traffic Generation Capabilities	8	Provides an analytics platform for optimizing websites and creating SEO-friendly content to improve visibility and user experience.	5	40	Boosts SEO by creating engaging content, incorporating keywords, answering FAQs, and crafting meta titles and descriptions, thereby, enhancing user engagement and site dwell time.	5	40	Their chatbots contribute to the website's user experience to boost traffic.	4	32
4	Data Collection and Analytics	8	Focuses on creating personalized chatbots with real-time data analysis capabilities. It is more tailored towards customer engagement, satisfaction tracking, and handling diverse data types like news, research papers, and medical records.	5	40	Does not collect user data or track metrics but can process textual data for insights and summaries. It lacks built-in data visualization and requires external tools for specific analytics and tracking user engagement or website traffic.	4	32	Captures user interactions for data collection and analytical strategies.	4	32
5	Compliance and Data Security	10	Complies with GDPR and prioritizes data security and user privacy, encrypting data and using secure, scalable AWS servers for storage.	5	50	Processes inputs without storing data; companies using it must ensure GDPR compliance and data security, including encryption and privacy measures. The responsibility for data compliance lies with the integrating company.	3	30	Complies with various data protection regulations such as CCPA and GDPR. Service providers are legally obligated to not disclose personal data.	4	40
6	Cost-Effectiveness	9	Total estimated cost for 3 years - \$ 7,700.	5	45	Total estimated cost for 3 years - \$ 57,349.	3	27	Total estimated cost for 3 years - \$ 7,880.	4	36
7	Technical Support and Maintenance	7	Provides customer service options to assist users.	3	21	Offers varying customer service for ChatGPT including community support and extensive documentation. Technical assistance varies by service level. Regularly updates and maintains ChatGPT with robust infrastructure ensuring reliability. User feedback and training resources are also provided.	5	35	Provides technical support and maintenance to ensure smooth operation.	3	21
8	Scalability and Performance Under Load	7	Its robust API and support over 5,000+ applications indicating strong handling of varied interactions. Its high-traffic performance depends on deployment specifics, server capacity, and load management, scaling effectively with high-speed internet availability.	4	28	Its reliability in high-traffic situations depends on its deployment infrastructure and management, performs well with the right setup and maintenance.	4	28	Scalable and robust infrastructure, utilizes cloud-based services to handle high traffic situations.	4	28
Sum				36	309		32	269		32	274

Appendix E: Dante AI Chatbot Response on Kinetic Business Solutions website



Appendix F: Dante AI Chatbot Response on Origin Travel Nurses Website



Appendix G - Gantt Chart

Insight group's project
timeline

Dec 10, 2023

New York University

<http://insightgroupprojecttimeline>

Project manager

Project Manager

Project dates

Jan 1, 2024 - May 20, 2026

Completion

0%

Tasks

28

Resources

39

Tasks

Name	Begin date	End date	Duration	Resources
Planning	1/1/24	2/1/24	24	
Define project scope <i>Make a plan for the entire project timeline, including different activities at different stages</i>	1/1/24	1/9/24	7	Project Manager, Gantt Chart software
Identify Resource <i>Know the tools and all stakeholders needed for this project</i>	1/10/24	1/18/24	7	Project Manager, Gantt Chart software, Stakeholder analysis tools
Conduct a feasibility study <i>Evaluate whether it is technically feasible and whether funds are sufficient</i>	1/19/24	2/1/24	10	Project Manager, Doc writer, technical research reports, Market research reports
Analysis	2/2/24	3/12/24	28	
Gather detailed requirements <i>Obtain all required requirements through surveys and meetings.</i>	2/2/24	2/21/24	14	Project Manager, Analysis, Meeting agenda, requirements documents, Doc writer
Analyze current system capabilities <i>Understand whether the existing system is compatible with this aichat bot, if not, make corresponding updates</i>	2/22/24	3/12/24	14	Project Manager, Analysis, System documentation, technical evaluation tools, Doc writer
Define user personas <i>Create a user personas to identify your main customer groups</i>	2/28/24	3/12/24	10	Project Manager, Analysis, User research tool, persona creation tools, Doc writer
Design	3/13/24	5/14/24	45	
Create system architecture <i>Build a mockup of the webpage to determine how the Aichat bot should integrate with the existing webpage</i>	3/13/24	4/9/24	20	Project Manager, Designer, Architecture design software
Design user interface <i>Design the UI to better meet the customer experience</i>	4/10/24	5/14/24	25	Project Manager, Designer, UI/UX design software
Plan data models and workflows <i>Define storage of data and how to interact with Aichat bot</i>	4/10/24	4/30/24	15	Project Manager, Designer, Data modeling tools, workflow diagrams
Development	5/15/24	9/17/24	90	
Set up environment <i>Set up the development environment needed for Dante AI, like a cloud(gitlab), coding software.</i>	5/15/24	6/11/24	20	Project Manager, Developer, Cloud services, server setup tools
Code integration APIs <i>Develop APIs to connect your webpage and the AI chatbot</i>	6/12/24	7/23/24	30	Project Manager, Developer, API development software
Develop and test individual modules <i>Use two to three iterations to test the functions and components of aichat bot</i>	7/24/24	9/17/24	40	Project Manager, Developer, Development environments, unit testing tools
Testing	9/18/24	11/12/24	40	
Conduct unit testing <i>Test each individual component and equation</i>	9/18/24	10/8/24	15	Project Manager, Tester, Unit testing frameworks, bug tracking software

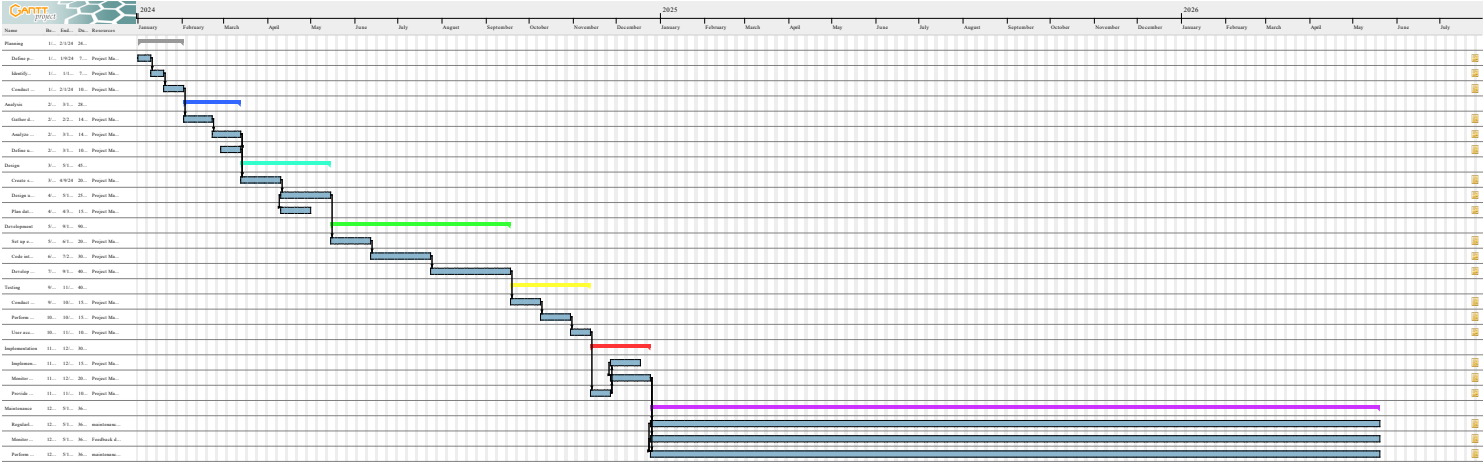
Tasks

Name	Begin date	End date	Duration	Resources
Perform system and integration testing <i>Test the overall website to see if it can run without bugs</i>	10/9/24	10/29/24	15	Project Manager, Tester, Integration testing tools, performance monitoring tool
User acceptance testing <i>Test the whole system to see whether it's meet the clients' requirement</i>	10/30/24	11/12/24	10	Project Manager, Tester, test server, feedback collection tools
Implementation	11/13/24	12/24/24	30	
Implement a phased rollout <i>Start using the ai chat bot function of the website to the public to collect feedback</i>	11/27/24	12/17/24	15	Project Manager, Deployment plan, version control systems
Monitor system performance <i>Monitor system conditions in real time to solve problems as soon as possible</i>	11/27/24	12/24/24	20	Project Manager, Monitoring software, analytics tools
Provide training and support <i>Offer training sessions for users and staff members</i>	11/13/24	11/26/24	10	Project Manager, Training materials
Maintenance	12/25/24	5/19/26	365	
Regularly update the system <i>Keep the AI system up-to-date with the latest features and security patches</i>	12/25/24	5/19/26	365	maintenance team.
Monitor user feedback <i>Continuously collect user feedback to make corresponding improvements</i>	12/25/24	5/19/26	365	Feedback documents, customer service team, Doc writer
Perform continuous performance evaluation <i>Regularly assess system performance against key performance indicators (KPIs)</i>	12/25/24	5/19/26	365	maintenance team.

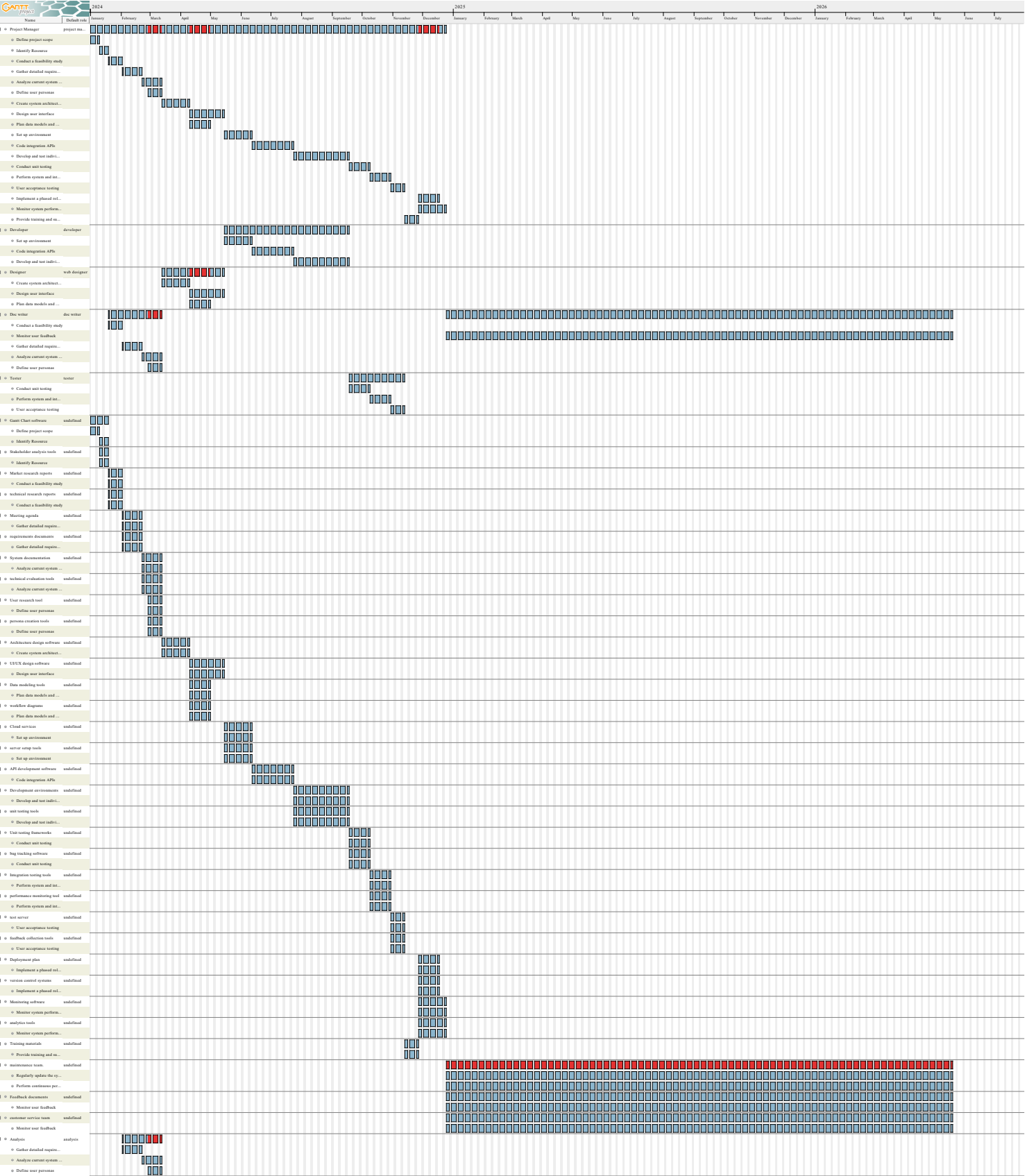
Resources

Name	Default role
Project Manager	project manager
Developer	developer
Designer	web designer
Doc writer	doc writer
Tester	tester
Gantt Chart software	undefined
Stakeholder analysis tools	undefined
Market research reports	undefined
technical research reports	undefined
Meeting agenda	undefined
requirements documents	undefined
System documentation	undefined
technical evaluation tools	undefined
User research tool	undefined
persona creation tools	undefined
Architecture design software	undefined
UI/UX design software	undefined
Data modeling tools	undefined
workflow diagrams	undefined
Cloud services	undefined
server setup tools	undefined
API development software	undefined
Development environments	undefined
unit testing tools	undefined
Unit testing frameworks	undefined
bug tracking software	undefined
Integration testing tools	undefined
performance monitoring tool	undefined
test server	undefined
feedback collection tools	undefined
Deployment plan	undefined
version control systems	undefined
Monitoring software	undefined
analytics tools	undefined
Training materials	undefined
maintenance team.	undefined
Feedback documents	undefined
customer service team	undefined
Analysis	analysis

Gantt Chart



Resources Chart



References

Ai, D. (2023, July 20). The synergy of AI chatbots and effective sales strategies. Dante AI. <https://www.dante-ai.com/article/the-synergy-of-ai-chatbots-and-effective-sales-strategies/>

AI Chatbot Creator - Dante AI. (n.d.). <https://dang.ai/tool/ai-chatbot-creator-dante-ai>

Create custom chatbots zero code: Dante AI. Create custom chatbots zero code | Dante AI. (n.d.). <https://www.dante-ai.com/>

www.chatsimple.ai. (n.d.). *AI Chatbot for Your Business* / Chatsimple. <https://www.chatsimple.ai/>

Dilmegani, C. (2023, October 14). Chatbot vs ChatGPT: Understanding the Differences & Features. AIMultiple. <https://research.aimultiple.com/chatbot-vs-chatgpt/#:~:text=ChatGPT%3A%20Trained%20on%20more%20diverse,biggest%20current%20appeal%20to%20users.>

Gülen, K. (2023, September 27). Dante AI: How to build a chatbot with no coding-Dataconomy. Dataconomy. <https://dataconomy.com/2023/09/27/dante-ai-build-a-chatbot-with-no-coding/>

Introducing ChatGPT. Introducing ChatGPT. (n.d.). <https://openai.com/blog/chatgpt>

M, R. (2023, October 6). *Revolutionizing Customer Services with ChatGPT-based Chatbots*. Kovair Blog. <https://www.kovair.com/blog/revolutionizing-customer-services-with-chatgpt-based-chatbots/>

Niu, B., & Mvondo, G. F. N. (2024). I Am ChatGPT, the ultimate AI Chatbot! Investigating the determinants of users' loyalty and ethical usage concerns of ChatGPT. *Journal of Retailing and Consumer Services*, 76, 103562. <https://doi.org/10.1016/j.jretconser.2023.103562>

Sharma, N. (2023, September 26). Create your own automated HR assistant chatbot with Dante AI, Slack, and Zapier within 5 minutes. Medium. <https://levelup.gitconnected.com/create-your-own-automated-hr-assistant-chatbot-with-dante-ai-slack-and-zapier-within-5-minutes-10ce7cc5432f>

Niu, B., & Mvondo, G. F. N. (2024c). I Am ChatGPT, the ultimate AI Chatbot! Investigating the determinants of users' loyalty and ethical usage concerns of ChatGPT. *Journal of Retailing and Consumer Services*, 76, 103562.
<https://doi.org/10.1016/j.jretconser.2023.103562>

Dilmegani, C. (2023b, October 14). *Chatbot vs ChatGPT: Understanding the Differences & Features*. AIMultiple. <https://research.aimultiple.com/chatbot-vs-chatgpt/#:~:text=ChatGPT%3A%20Trained%20on%20more%20diverse,biggest%20current%20appeal%20to%20users.>

M, R. (2023b, October 6). Revolutionizing Customer Services with ChatGPT-based Chatbots. Kovair Blog.
<https://www.kovair.com/blog/revolutionizing-customer-services-with-chatgpt-based-chatbots/>

Gülen, K. (2023b, September 27). Dante AI: How to build a chatbot with no coding - Dataconomy. *Dataconomy*. <https://dataconomy.com/2023/09/27/dante-ai-build-a-chatbot-with-no-coding/>

Ai, D. (2023b, July 20). *The synergy of AI chatbots and effective sales strategies*. Dante AI.
<https://www.dante-ai.com/article/the-synergy-of-ai-chatbots-and-effective-sales-strategies/>

Salary: Manager in New York City, NY 2023 | glassdoor. (n.d.-b).
https://www.glassdoor.com/Salaries/new-york-city-manager-salary-SRCH_IL0,13_IM615_KO14,21.htm