Power Rangers

AI Copilot Application Vision Document

Version <1.0>

Revision History

Date	Version	Description	Author
07/11/24	<1.0>	First version of Vision document	Phùng Tố Uyên

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Vision (Small Project)

1. Introduction

The purpose of this document is to collect, analyze, and define the primary requirements and features of the AI Copilot. It focuses on the key capabilities needed by stakeholders and end users, along with the reasons these requirements are necessary. The specific details of how AI Copilot will address these needs are provided in the use-case and additional specifications.

The introduction section of this Vision document offers a comprehensive overview, including the purpose, scope, and references relevant to the AI Copilot Vision document.

2. Positioning

2.1 Problem Statement

The problem of	Inefficient AI-driven assistance, limited adaptability to user needs, and lack of seamless integration
affects	B2B, B2C businesses and individual users
the impact of which is	Resulting in decreased productivity, frustrated user experiences, and missed opportunities for personalized solutions
a successful solution would be	• AI-powered personalized recommendations • Intelligent data analysis capabilities that provide insights, predictive trends, and actionable recommendations for better decisions. • Smart task prioritization and data analysis features • High-performance algorithms with faster response times • Intuitive and easy-to-use interface • Seamless integration with various third-party tools and platforms to centralize processes and data management. • Automated processes for efficiency and time-saving

2.2 Product Position Statement

For	Businesses (B2B), individual customers (B2C) and individual users
Who	Who want efficient, personalized, and seamless assistance
The (product name)	is AIChat PR
That	Provides tailored insights, recommendations, and automated support for better decision-making
Unlike	Gemini, ChatGPT, BingAI, Claude …
Our product	Offers adaptable, intelligent analysis, integrates easily with other platforms, and saves time through automation

3. Stakeholder and User Descriptions

3.1 Stakeholder Summary

Name	Description	Responsibilities
Instructor	Project mentor guiding the team through the development process	Provides guidance, technical support, and feedback to the development team; ensures alignment with best practices and academic standards
Development Team	Students that involve in building the project	Designing, developing, and testing the application to meet specifications; ensuring the system is scalable, maintainable, and user-friendly
Testers	Students who maintain the system	Make sure that the system works properly and meet the needs of the users (B2B, B2C and individuals)
Project Manager	Team leader	Monitors the project's progress
B2B Business clients	Companies that will use the product in a business context	Provide business requirements for AI Copilot, specify features, and set expectations to ensure the tool meets industry needs.

3.2 User Summary

Name	Description	Responsibilities	Stakeholder
End users	Individuals or companies utilizing AI Copilot	Use the AI Copilot to enhance workflow efficiency, receive intelligent recommendations, and analyze data	Self - represented
B2B Clients	Businesses integrating AI Copilot into their systems	Define business-specific requirements, analyze data insights, and use productivity tools within AI Copilot	Development Team
B2C Clients	Individuals or smaller businesses using AI Copilot	Utilize AI Copilot for personalized assistance, efficient task management, and quick data insights	Development Team
Administrators	Team managing the AI Copilot system	Oversee system standards, manage updates, and ensure user satisfaction by addressing feedback	Self - represented

3.3 User Environment

- **Number of People Involved**: The number of users interacting with AI Copilot can vary significantly depending on its application context. For individual users, the primary use will be solo interactions, while for business contexts, team collaboration may involve multiple users utilizing shared recommendations and insights provided by the system.
- **Task Cycle Duration**: Task durations vary widely depending on the use case:
    - **Individual Users**: Typically shorter, often ranging from a few minutes to an hour, where users leverage AI Copilot for quick insights, task organization, or learning assistance.
    - **B2B and B2C Clients**: Tasks could last from minutes to several hours, as the AI may assist with in-depth analysis, report generation, or long-term project tracking.
    - Given the flexibility of AI Copilot, these cycles can adapt over time, especially as the AI learns and

tailors its responses to user habits and preferences.

- **Environmental Constraints**: AI Copilot will function across devices that support an internet browser, allowing users to access the platform in varied environments, from office desktops to mobile devices in transit.
- **System Platforms**: The primary platform is a web-based application accessible via internet browsers. A future iteration may include a mobile application compatible across major platforms (iOS and Android) for more dynamic, on-the-go accessibility.
- Other applications in use in our project are Slack, Jira, Google Drive and Github. AI Copilot may need to integrate with several commonly used applications and platforms, depending on the specific needs of B2B, B2C, and individual users. These could include:
  - **Collaboration Tools**: Integration with platforms like Slack and Google Drive to support team communication, file sharing, and collaborative work on documents and projects.
  - **Project Management Software**: Connecting with tools such as Jira and Trello to assist in task tracking, project planning, and prioritizing work.
- The AI Copilot business model emphasizes the following task and role-based integrations:
  - **Role-Based User Access**: Provides tailored experiences for individual users, business owners, and teams.
  - **Task-Based Optimization**: Assists in task prioritization, real-time collaboration, and data analysis across various roles and industries.
  - **Data Security and Compliance**: Ensures secure access and data handling, aligning with business standards and regulatory requirements across integrated systems.

3.4 Alternatives and Competition

1. **Alternatives:**

- **Build an In-house Solution:**
  - **Description**: AI Copilot can be developed as a custom in-house solution tailored specifically to the needs of the organization, providing full control over its features, design, and integrations.
  - **Pros**:
    + Complete control over the system and its features.
    + Tailored specifically to business needs and requirements.
    + Enhanced ability to iterate and innovate quickly.
  - **Cons**:
    + Time-consuming development process.
    + Requires significant resources, including AI and software development expertise.
    + Higher initial investment in development, maintenance, and updates.
- **Consider Competitor Products:**
  - **Description**: Organizations can explore existing AI-powered platforms or tools similar to AI Copilot, either by acquiring or partnering with established competitors in the market.
  - **Pros**:
    + Faster implementation and access to an established customer base.
    + Existing products may have tested features and functionality.
    + Lower initial development costs.
  - **Cons**:
    + High acquisition or licensing costs.
    + Integration complexities with existing systems.
    + Less flexibility and control over features, which may not fully align with specific business needs.
- **Maintain the Status Quo:**
  - **Description**: Continue with existing systems or processes without adopting AI Copilot or any other solution, maintaining current workflows and practices.
  - **Pros**:
    + Low-risk option with no immediate cost or disruption.
    + Familiarity with current systems and workflows.

- **Cons**:
  + Potential missed opportunities for optimization, efficiency, and productivity gains.
  + May fall behind competitors in terms of innovation.
  + Long-term inefficiencies and frustrations for users and stakeholders.

2. Competitors:

- **OpenAI GPT (ChatGPT)**
  - **Strengths:**
    + Advanced Natural Language Processing: GPT excels at understanding and responding with context, making conversations smooth and natural.
    + Customizability: OpenAI provides APIs allowing developers to integrate GPT into their products and fine-tune the model for specific needs.
    + Scalability: GPT can handle large-scale usage, supporting multiple users and large data volumes effectively.
    + Continuous Improvement: OpenAI regularly updates and improves GPT, maintaining a leadership position in the AI field.
  - **Weaknesses:**
    + High Costs: Using GPT via API can be expensive for large-scale operations or applications requiring high computational resources.
    + Data Privacy Concerns: Sending data to OpenAI can raise concerns about privacy and data security for users.
    + Limited Context Retention: GPT may struggle to maintain context in longer or complex conversations, potentially leading to inconsistent responses.
- **Bing AI (Microsoft's Copilot)**
  - **Strengths:**
    + Integration with Microsoft Ecosystem: Bing AI is deeply integrated with Microsoft tools like Office 365, Outlook, and Teams, enhancing collaboration and productivity.
    + Powerful Search Capabilities: Leveraging Microsoft's search tools, Bing AI provides quick and accurate information retrieval.
    + Azure Integration: With strong ties to Azure, businesses can easily scale and deploy AI across their operations.
  - **Weaknesses:**
    + Limited Customization for End Users: While powerful, Bing AI may not offer the same level of customization for individual users or complex use cases compared to other AI platforms.
    + Enterprise-Focused: It is more tailored for large businesses, which might not suit smaller businesses or personal use cases.
    + User Experience: Some users may find the interface and usability less intuitive than other AI tools like GPT or newer platforms.
- **Claude AI**
  - **Strengths:**
    + Safety and Ethical Focus: Claude AI is designed with a strong emphasis on safety, minimizing the risk of misinformation, bias, and harmful content.
    + Transparency and Explainability: Anthropic emphasizes transparency in AI operations, which builds trust with users and stakeholders.
    + User-Friendly: Claude AI is designed to be easy to use and understand, making it accessible for a broader audience.
  - **Weaknesses:**
    + Limited Deployment: Claude AI is not as widely available as GPT or Bing AI, limiting its integration and deployment options.
    + Newer Player: As a newer entrant to the AI space, Claude AI lacks the maturity and large user community that established platforms have.
- **Google Bard**
  - **Strengths:**

+ Integration with Google Services: Bard integrates seamlessly with Google's suite of services like Google Search, Gmail, and Google Calendar, enhancing productivity.
+ Search Accuracy: Powered by Google's search engine, Bard provides highly accurate and reliable information retrieval.
+ Multilingual Support: Bard supports multiple languages, making it a global tool.

- **Weaknesses:**
  + Still in Development: Bard is still evolving and may not be as refined or feature-complete as GPT or Bing AI.
  + Less Flexibility: It may not offer the level of customization and flexibility that users expect for specialized use cases.

4. Product Features

No.	Feature	Description	Priority
1	Sign up	Allows new users to create an account with a username and password to access AI Copilot.	Medium
2	Log In/Log out	Users can log in to the system with their account credentials and log out when finished.	Medium
3	AI Bot Customization	Allows users to create and configure custom AI bots with unique names and settings.	High
4	AI Interaction	Users can engage directly with AI Copilot for advice, questions, and task support across all tasks and integrations.	High
5	Change Account Information	Allows users to update personal details, including username, password, email, and contact preferences.	Low
6	Chat History and Threads	Displays chat history and allows users to create and revisit different chat threads with AI.	Medium
7	Publish AI Chat to Platforms	Publish the AI chat functionality to Slack, Telegram, Messenger, etc.	Medium
8	Email Drafting	Create a dedicated tab for email drafting and provide AI options to create various email drafts (Thanks, Sorry, Yes, No, Follow Up, Request for Information).	Medium
9	Account Upgrade	Enable users to upgrade to Pro accounts. Display Pro account details and allow token limits to be set as unlimited.	High
10	View/Search Public Prompts	Display and search for public prompts available in the system.	Medium
11	Filter Prompts by Category	Filter prompts based on categories for easier access.	Medium
12	Favorite Prompts	Mark prompts as favorites and view the list.	Low
13	Create Private Prompt	Users can create custom, private prompts.	Medium
14	Search Private Prompts	List and search private prompts created by the user.	Low

15	Update/Delete Private Prompts	Enable updating and deletion of private prompts.	Medium
16	Use Prompt in Library	Utilize prompts from the library for various interactions.	Low
17	Image-based Q&A	Upload an image to chat about the image content or chat based on the captured image or chat based on the screenshot	Medium
18	Integration with Analytics/Crash Reporting	Use Google Analytics, Sentry, or Crashlytics for monitoring and crash reporting.	Low

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5. Non-Functional Requirement

Type	Description	Priority	Benefit	Effort	Risk
Standards and Platform Requirements	**Operating Systems**: Support for major operating systems. **Browsers**: Latest stable versions of popular web browsers. **Mobile Platforms**: Compatibility with iOS and Android.	Low	Increased accessibility	Low	Low (most devices support modern browsers)
Performance Requirements	**Response Time**: Load operations within 2 seconds for most users. **Concurrent Users**: Support at least 200 concurrent users during peak hours. **Data Retrieval**: Execute queries within 500 milliseconds. **Error Handling**: Provide user-friendly error messages.	High	Improved user experience and increased engagement	High (performance tuning may require upgrades)	Potential for slow performance

Robustness and Fault Tolerance	**Fault Tolerance**: Implement automatic failover and backup. **Error Recovery**: Recover gracefully from errors and provide clear instructions. **Data Backup**: Regular user data backups to prevent loss.	High	Enhanced service reliability and data integrity	High (requires backup systems)	Risk of data loss
Usability	**Accessibility**: Offer a night mode to reduce screen brightness, making it more comfortable for users working at night or in low-light environments. Provide a high-contrast interface option for users with low vision or those needing a more visually accessible display. **Mobile Responsiveness**: Adapt to various screen sizes. **Ease of Use**: Ensure each operation is within 5 steps.	Medium	Improved user experience	Medium (design efforts required)	Risk of poor user experience
Environmental Requirements	Minimize resource usage, e.g., limit RAM usage to under 1GB.	Low	Reduced operational costs	Medium	Minimal risk as most devices meet hardware needs

External Design Constraints and Dependencies	**Third-party APIs**: Integration for payments	Medium	Reliable and flexible service	Medium	Integration or dependency failures
Documentation Requirements	**User Manuals**: Provide FAQs and user guides. **Labeling and Packaging**: Ensure legal and branding compliance for labels and packaging.	Medium	Supports user onboarding and legal compliance	Low	Insufficient user support or legal issues
Scalability	Ensure the system can scale as the user base and data load increase.	High	System remains effective as it grows	High	Overload or instability if not well-prepared
Customization and Personalization	Allow users to customize their AI Copilot experience based on preferences.	Medium	Increase user satisfaction and engagement	Medium	Complexity increase, performance impact