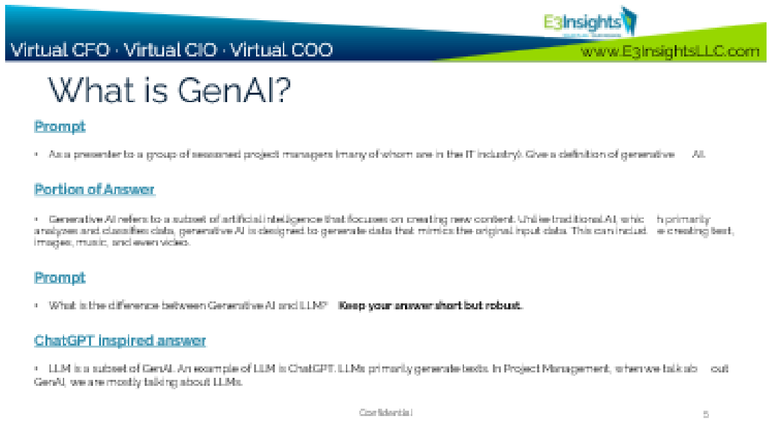


What is Generative AI

Prompt

Act as a presenter, presenting to a group of seasoned project managers, many of whom are in the IT industry. Give a definition of generative AI.

Portion of Answer

Generative AI refers to a subset of artificial intelligence that focuses on creating new content. Unlike traditional AI, which primarily analyzes and classifies data, generative AI is designed to generate data that mimics the original input data. This can include creating text, images, music, and even video.

Prompt

What is the difference between Generative AI and LLM? Keep your answer short but robust.

ChatGPT inspired answer

LLM is a subset of GenAI. An example of LLM is ChatGPT. LLM's primarily generates texts. In Project Management, when we talk about GenAI, we are mostly talking about LLMs.

Slide 5



Select Project Methodology

Prompt

Act as a seasoned IT Project Manager. I need a project plan but first we need to decide which project methodology to use. We are delivering an application that will provide commentary of a tennis match being played using Oculus. We have no more than 12 months and a budget of one million dollars. Which project methodology should we use, traditional, agile, hybrid or something else? Don't present the pros and cons of each methodology. I just need to know which methodology is best and why.

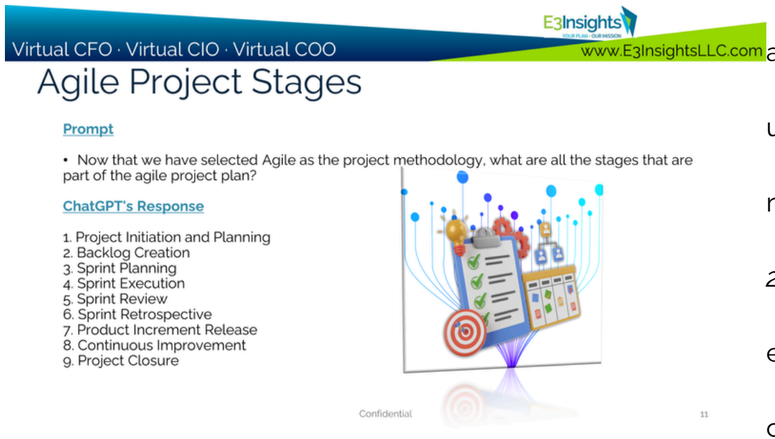
ChatGPTs Response

For this project, I recommend using the Agile methodology.

Why Agile?

1. Flexibility and Iterative Development: Given the innovative nature of creating a commentary application for a tennis match using Oculus, requirements may evolve. Agile allows for iterative development, making it easier to incorporate feedback and changes.
2. Time Constraints: With a 12-month deadline, Agile's sprints ensure continuous progress and regular delivery of working components, helping to manage the timeline effectively.
3. Budget Management: Agile promotes incremental releases and constant testing, reducing the risk of costly errors and ensuring that the project stays within the $1 million budget.

This approach will ensure that the project remains adaptable, focused, and within the constraints provided



Slide 11

Using LLM In Project Management
August, 2024

Appendix A

Identify Agile Stages

Prompt

Now that we have selected Agile as the project methodology, what are all of the stages that are part of the agile project plan?

ChatGPTs Answer

In an Agile project plan, the stages are typically iterative and continuous, focusing on delivering incremental value through short development cycles called sprints. Here are the key stages:

*1. **Project Initiation and Planning***
- **Vision and Scope**: Define the project's vision, objectives, and scope.
- **Stakeholder Identification**: Identify all stakeholders and understand their needs.
- **Team Formation**: Assemble the Agile team with defined roles (e.g., Product Owner, Scrum Master, Development Team).

*2. **Backlog Creation***
- **Product Backlog**: Create a prioritized list of features, enhancements, and bug fixes.
- **User Stories**: Write detailed user stories with acceptance criteria.

*3. **Sprint Planning***
- **Sprint Goal**: Define the goal for the upcoming sprint.
- **Sprint Backlog**: Select user stories from the product backlog for the sprint.

*4. **Sprint Execution***
- **Daily Stand-ups**: Hold daily meetings to synchronize activities and identify blockers.
- **Development and Testing**: Develop, test, and integrate new features continuously.

*5. **Sprint Review***
- **Demonstration**: Present the completed work to stakeholders.
- **Feedback**: Gather feedback and incorporate it into the product backlog.

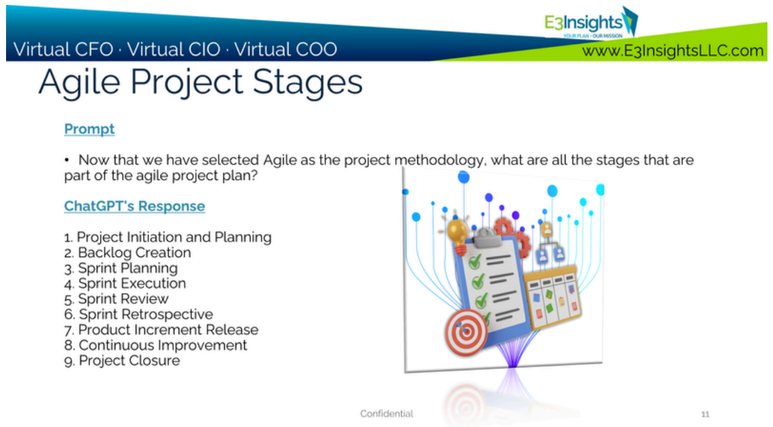
*6. **Sprint Retrospective***
- **Reflection**: Review the sprint process, what went well, and what can be improved.
- **Action Items**: Define action items to improve future sprints.

*7. **Product Increment Release***
- **Integration**: Integrate the completed features into the product.
- **Deployment**: Deploy the product increment to production or a staging environment.
- **Documentation**: Update any necessary documentation.

*8. **Continuous Improvement***
- **Backlog Refinement**: Regularly update and prioritize the product backlog based on feedback and changing requirements.
- **Performance Metrics**: Track and analyze performance metrics to ensure the project is on track.

9. **Project Closure**
- **Final Release**: Deploy the final product release.
- **Post-Mortem**: Conduct a post-mortem analysis to document lessons learned.
- **Celebration and Recognition**: Celebrate the team's achievements and recognize contributions.

These stages repeat in cycles until the project is completed, ensuring continuous delivery of value and adaptability to change.



Slide 11-1

Using LLM In Project Management
August, 2024
Appendix A

Identify Labor Categories (Project Initiation and Planning)
Prompt
What are the different roles required for the Project Initiation and Planning stage of the agile project plan?

ChatGPTs Answer
During the Project Initiation and Planning stage of an Agile project plan, several key roles are required to ensure a successful start. Here are the primary roles and their responsibilities:

*1. **Product Owner***
- **Responsibilities**: Defines the project vision and goals, prioritizes the product backlog, and ensures that the team is working on the most valuable features.
- **Key Activities**: Stakeholder communication, backlog creation, and prioritization.

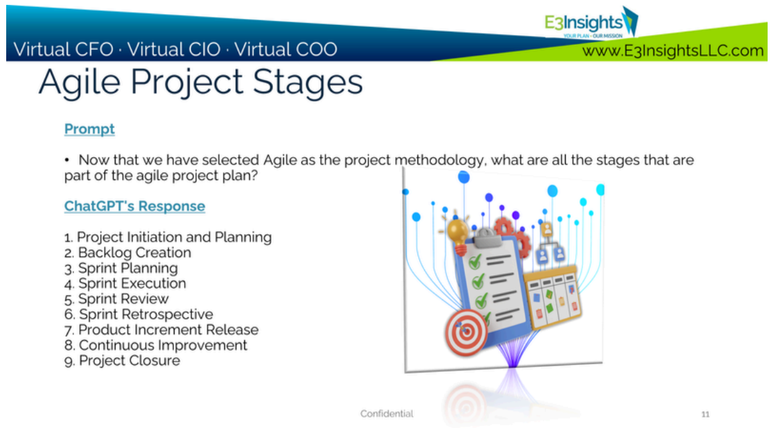
*2. **Scrum Master***
- **Responsibilities**: Facilitates the Agile process, removes impediments, and ensures that the team adheres to Agile principles and practices.
- **Key Activities**: Organizing meetings, coaching the team, and process improvement.

*3. **Development Team***
- **Responsibilities**: Cross-functional team members (developers, testers, designers, etc.) who are responsible for delivering potentially shippable product increments.
- **Key Activities**: Collaborative planning, technical design, and initial development.

*4. **Stakeholders***
- **Responsibilities**: Provide input, feedback, and requirements from the perspective of end-users or business needs.
- **Key Activities**: Initial requirements gathering, vision setting, and review sessions.

*5. **Project Sponsor***
- **Responsibilities**: Provides the necessary resources and support for the project, and champions the project within the organization.
- **Key Activities**: Defining project goals, securing funding, and overall project oversight.

*6. **Agile Coach (optional)***
- **Responsibilities**: Provides guidance and expertise on Agile practices, helping the team and organization adopt Agile methodologies.
- **Key Activities**: Training, coaching, and mentoring the team and stakeholders.



Activities During Project Initiation and Planning:

1. **Vision and Scope Definition**
   - **Product Owner, Stakeholders, Project Sponsor**: Collaborate to define the project vision, objectives, and scope.

2. **Stakeholder Identification and Analysis**
   - **Product Owner, Scrum Master**: Identify all relevant stakeholders and understand their needs and expectations.

3. **Team Formation**
   - **Scrum Master, Project Sponsor**: Assemble a cross-functional development team and assign roles.

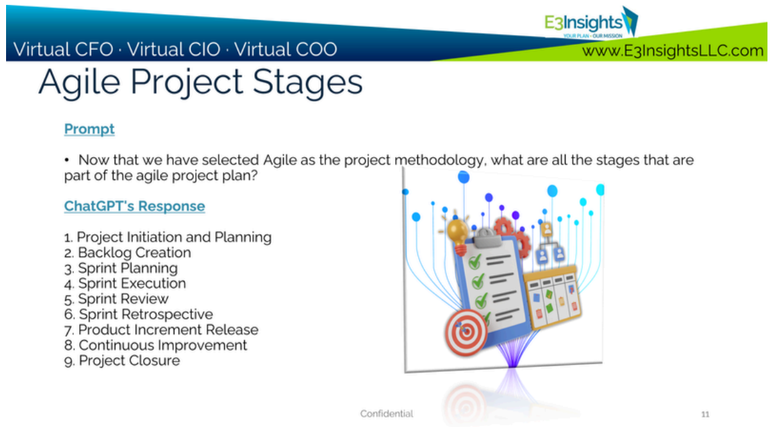
4. **Initial Backlog Creation**
   - **Product Owner, Development Team**: Create the initial product backlog with user stories and acceptance criteria.

5. **Roadmap and Release Planning**
   - **Product Owner, Scrum Master, Development Team**: Develop a high-level roadmap and plan for initial releases.

6. **Communication Plan**
   - **Scrum Master, Product Owner**: Establish a communication plan to ensure effective information flow among all team members and stakeholders.

7. **Environment Setup**
   - **Development Team**: Set up development environments, tools, and initial project infrastructure.

By ensuring these roles are filled and their responsibilities are clearly defined, the Project Initiation and Planning stage will lay a strong foundation for the Agile project's success.



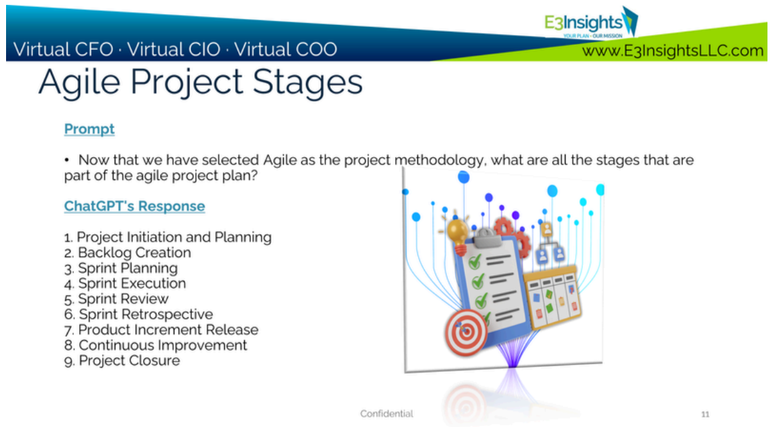
Identify Labor Categories (Backlog Creation)

Prompt

What are the different roles required for the Backlog Creation stage of the agile project plan? No need to provide what each role does. Just list each role.

ChatGPTs Answer

- Product Owner
- *Development Team*
- Stakeholders
- Scrum Master



Prompt

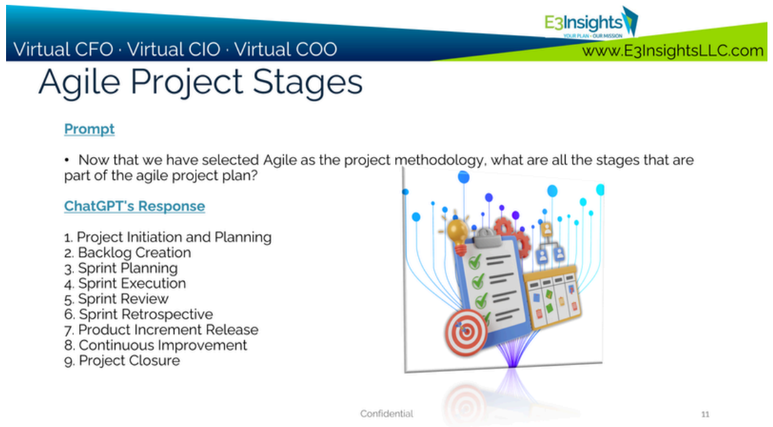
What are the roles that make up the <u>Development team</u>?

ChatGPTs Answer

The roles that make up the Development Team in an Agile project typically include:

- Software Developers
- Testers/Quality Assurance Engineers
- UX/UI Designers
- DevOps Engineers
- Business Analysts
- Database Administrators (DBAs)

These roles work collaboratively to deliver potentially shippable product increments during each sprint.



Identify Labor Categories (Sprint Planning)

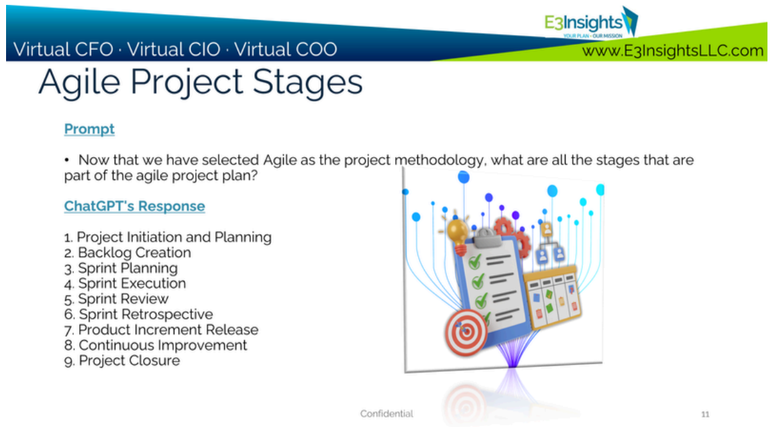
Prompt

What are the different roles required for the Sprint Planning stage of the agile project plan? No need to provide what each role does. Just list each role.

ChatGPTs Answer

The different roles required for the Sprint Planning stage of the Agile project plan are:

1. Product Owner
2. Scrum Master
3. Development Team
    - Software Developers (Backend and Frontend)
    - Testers/Quality Assurance Engineers
    - UX/UI Designers
    - DevOps Engineers
    - Data Scientists
    - Machine Learning Engineers
    - Computer Vision Engineers
    - Natural Language Processing (NLP) Engineers
    - Database Administrators (DBAs)
    - Integration Specialists
    - Business Analysts



Identify Labor Categories (Sprint Execution)

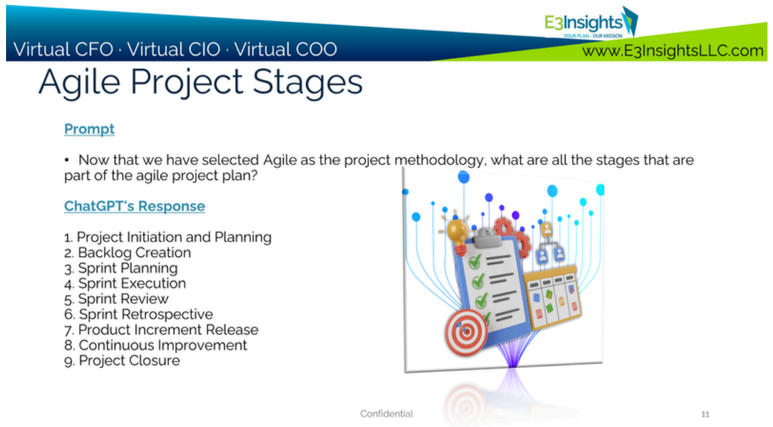
Prompt

What are the different roles required for the Sprint Execution stage of the agile project plan? No need to provide what each role does. Just list each role.

ChatGPTs Answer

The different roles required for the Sprint Planning stage of the Agile project plan are:

1. Product Owner
2. Scrum Master
3. Development Team
   - Software Developers (Backend and Frontend)
   - Testers/Quality Assurance Engineers
   - UX/UI Designers
   - DevOps Engineers
   - Data Scientists
   - Machine Learning Engineers
   - Computer Vision Engineers
   - Natural Language Processing (NLP) Engineers
   - Database Administrators (DBAs)
   - Integration Specialists
   - Business Analysts



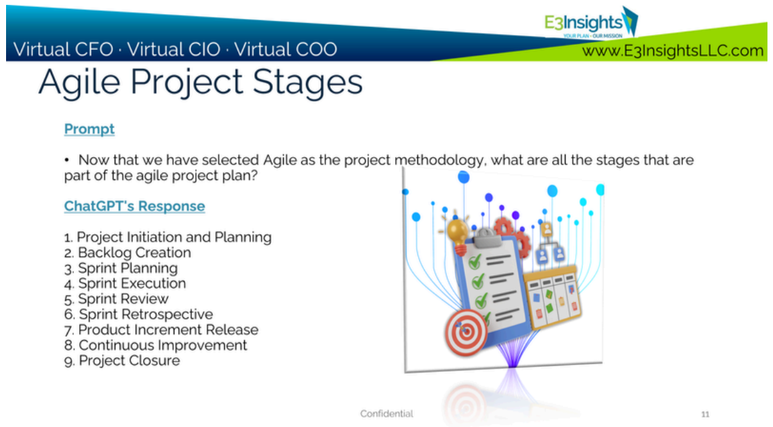
Identify Labor Categories (Sprint Review)

Prompt

What are the different roles required for the Sprint Review stage of the agile project plan? No need to provide what each role does. Just list each role.

ChatGPTs Answer

- Product Owner
- Scrum Master
- Development Team
  - Software Developers (Backend and Frontend)
  - Testers/Quality Assurance Engineers
  - UX/UI Designers
  - DevOps Engineers
  - Data Scientists
  - Machine Learning Engineers
  - Computer Vision Engineers
  - Natural Language Processing (NLP) Engineers
  - Database Administrators (DBAs)
  - Integration Specialists
  - Business Analysts
- Stakeholders



Identify Labor Categories (Sprint Retrospective)

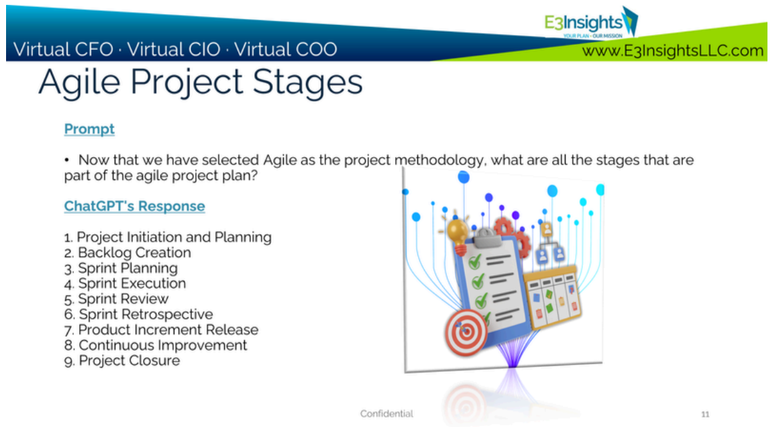
Prompt

What are the different roles required for the Sprint Retrospective stage of the agile project plan? No need to provide what each role does. Just list each role.

ChatGPTs Answer

The different roles required for the Sprint Retrospective stage of the Agile project plan are:

1. Product Owner
2. Scrum Master
3. Development Team
   - Software Developers (Backend and Frontend)
   - Testers/Quality Assurance Engineers
   - UX/UI Designers
   - DevOps Engineers
   - Data Scientists
   - Machine Learning Engineers
   - Computer Vision Engineers
   - Natural Language Processing (NLP) Engineers
   - Database Administrators (DBAs)
   - Integration Specialists
   - Business Analysts



Identify Labor Categories (Product Increment Release)

Prompt

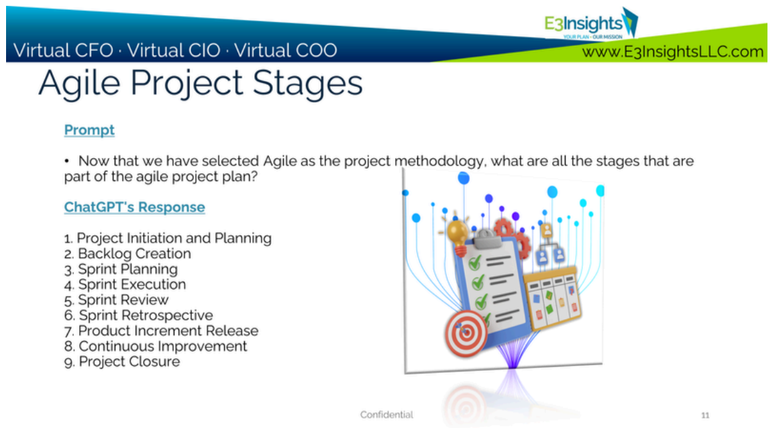
What are the different roles required for the Product Increment Release stage of the agile project plan? No need to provide what each role does. Just list each role.

ChatGPTs Answer

The different roles required for the Product Increment Release stage of the Agile project plan are:

1. Product Owner
2. Scrum Master
3. Development Team
   - Software Developers (Backend and Frontend)
   - Testers/Quality Assurance Engineers
   - UX/UI Designers
   - DevOps Engineers
   - Data Scientists
   - Machine Learning Engineers
   - Computer Vision Engineers
   - Natural Language Processing (NLP) Engineers
   - Database Administrators (DBAs)
   - Integration Specialists
   - Business Analysts
4. Technical Writer
5. Release Manager

Slide 11-7



Identify Labor Categories (Continuous Improvement)

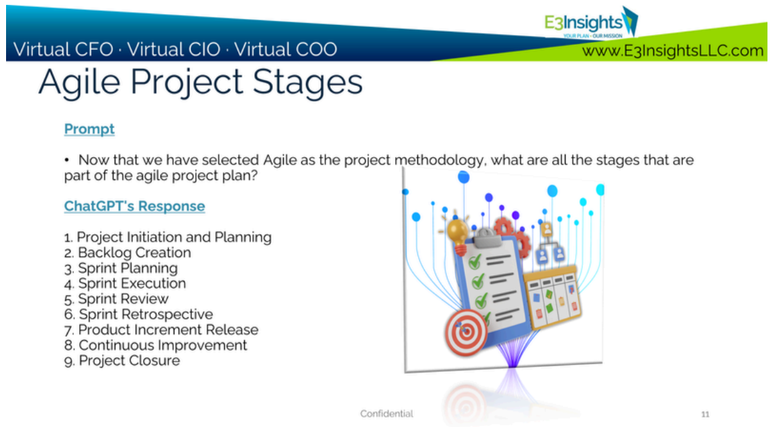
Prompt

What are the different roles required for the Continuous Improvement stage of the agile project plan? No need to provide what each role does. Just list each role.

ChatGPTs Answer

The different roles required for the Continuous Improvement stage of the Agile project plan are:

1. Product Owner
2. Scrum Master
3. Development Team
   - Software Developers (Backend and Frontend)
   - Testers/Quality Assurance Engineers
   - UX/UI Designers
   - DevOps Engineers
   - Data Scientists
   - Machine Learning Engineers
   - Computer Vision Engineers
   - Natural Language Processing (NLP) Engineers
   - Database Administrators (DBAs)
   - Integration Specialists
   - Business Analysts
4. Agile Coach (if available)



Slide 11-9

Identify Labor Categories (Project Closure)

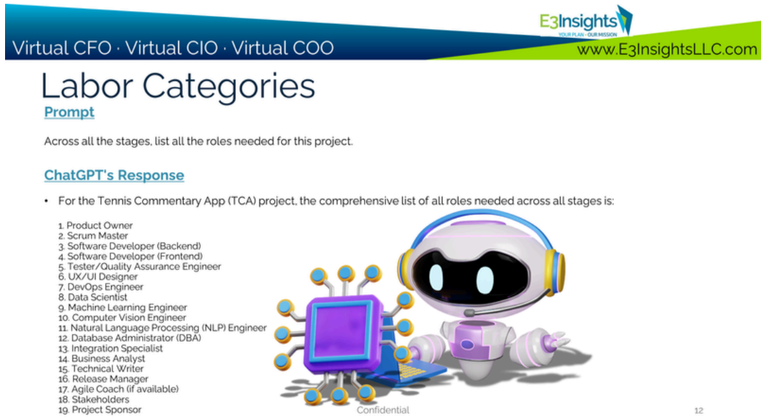
Prompt

What are the different roles required for the Project Closure stage of the agile project plan? No need to provide what each role does. Just list each role.

ChatGPTs Answer

The different roles required for the Continuous Improvement stage of the Agile project plan are:
The different roles required for the Project Closure stage of the Agile project plan are:

1. Product Owner
2. Scrum Master
3. Development Team
   - Software Developers (Backend and Frontend)
   - Testers/Quality Assurance Engineers
   - UX/UI Designers
   - DevOps Engineers
   - Data Scientists
   - Machine Learning Engineers
   - Computer Vision Engineers
   - Natural Language Processing (NLP) Engineers
   - Database Administrators (DBAs)
   - Integration Specialists
   - Business Analysts
4. Stakeholders
5. Project Sponsor
6. Technical Writer
7. Release Manager
8. Agile Coach (if available)



Prompt

Act like a senior solution architect. I need a more exact list of roles for the development team. The Tennis Commentary App (let's call it TCA for short) will interact with the tennis application on the Oculus (lets call this TennisApp). TCA will be an added integration with TennisApp. TennisApp will tell TCA what happens. For example the ball is out. TCA will then produce commentary like "The ball was just out." TCA must be able to analyze video in order to provide additional commentary such as "That ball was way out." TCA must keep track of trends so it can provide commentary such as "This is the third double fault this match." TCA needs to create general commentary about the weather such as "This is a great sunny day to have a match." For now, just list the roles. no need for further explanation of what each role will do.

ChatGPTs Answer

For the development team working on the Tennis Commentary App (TCA) integrated with the TennisApp on Oculus, the roles required are:

1. **Software Developer (Backend)**
2. **Software Developer (Frontend)**
3. **Testers/Quality Assurance Engineers**
4. **UX/UI Designer**
5. **DevOps Engineer**
6. **Data Scientist**
7. **Machine Learning Engineer**
8. **Computer Vision Engineer**
9. **Natural Language Processing (NLP) Engineer**
10. **Database Administrator (DBA)**
11. **Integration Specialist**
12. **Business Analyst**
13. **Technical Writer**

Role Double Check

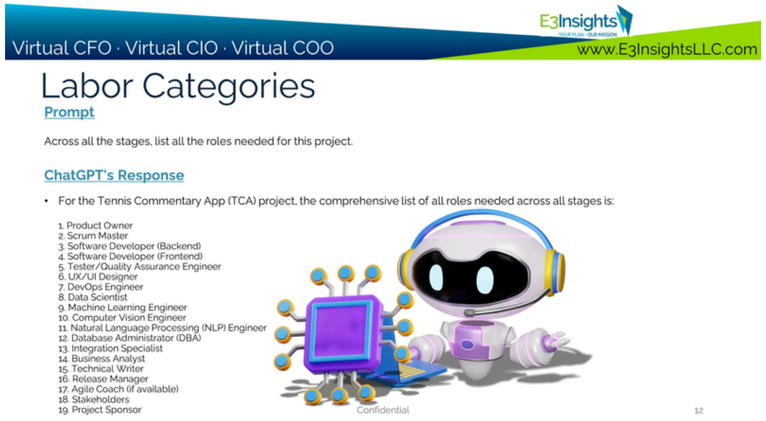
Prompt

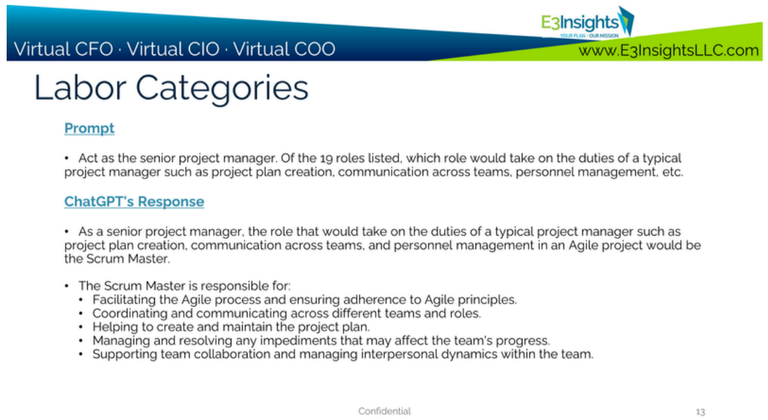
Across all of the stages, list all of the roles needed for this project.

ChatGPTs Answer

For the Tennis Commentary App (TCA) project, the comprehensive list of all roles needed across all stages is:

1. Product Owner
2. Scrum Master
3. Software Developer (Backend)
4. Software Developer (Frontend)
5. Tester/Quality Assurance Engineer
6. UX/UI Designer
7. DevOps Engineer
8. Data Scientist
9. Machine Learning Engineer
10. Computer Vision Engineer
11. Natural Language Processing (NLP) Engineer
12. Database Administrator (DBA)
13. Integration Specialist
14. Business Analyst
15. Technical Writer
16. Release Manager
17. Agile Coach (if available)
18. Stakeholders
19. Project Sponsor

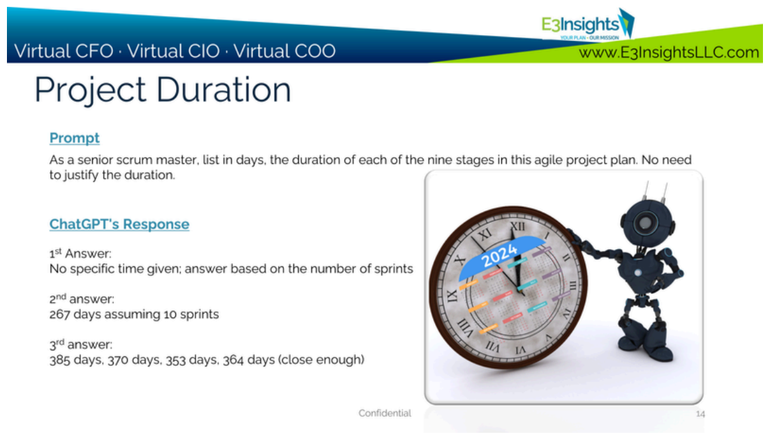




Prompt
Act as of senior project manager. Of the 19 roles listed, which role would take on the duties of a typical project manager such as project plan creation, communication across teams, personnel management, etc.

ChatGPTs Answer
As a senior project manager, the role that would take on the duties of a typical project manager such as project plan creation, communication across teams, and personnel management in an Agile project would be the **Scrum Master**.

The Scrum Master is responsible for:
- Facilitating the Agile process and ensuring adherence to Agile principles.
- Coordinating and communicating across different teams and roles.
- Helping to create and maintain the project plan.
- Managing and resolving any impediments that may affect the team's progress.
- Supporting team collaboration and managing interpersonal dynamics within the team.



Length of each stage

Prompt

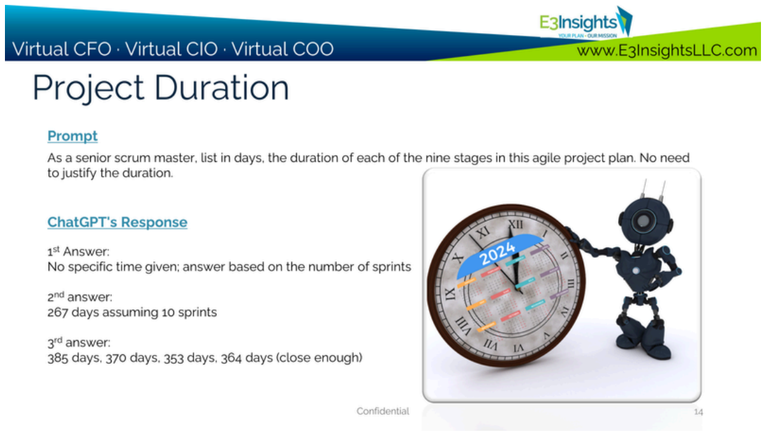
As a senior scrum master, list in days, the duration of each of the nine stages in this agile project plan. No need to justify the duration.

ChatGPTs Answer

As a senior Scrum Master, here is the estimated duration in days for each of the nine stages in the Agile project plan for the Tennis Commentary App (TCA):

1. **Project Initiation and Planning**: 10 days
2. **Backlog Creation**: 7 days
3. **Sprint Planning**: 2 days (per sprint, assuming 10 sprints)
4. **Sprint Execution**: 20 days (per sprint, assuming 10 sprints)
5. **Sprint Review**: 1 day (per sprint, assuming 10 sprints)
6. **Sprint Retrospective**: 1 day (per sprint, assuming 10 sprints)
7. **Product Increment Release**: 5 days
8. **Continuous Improvement**: Ongoing (time not explicitly counted)
9. **Project Closure**: 5 days

(Note: The durations for Sprint Planning, Execution, Review, and Retrospective are repeated for each sprint, typically assuming a two-week sprint cycle.)



Slide 14-2

Using LLM In Project Management
August, 2024

Prompt
Using this schedule, assuming 10 sprints, what is the total duration of the project

ChatGPTs Answer
To calculate the total duration of the project, let's break down each stage and then sum the durations:

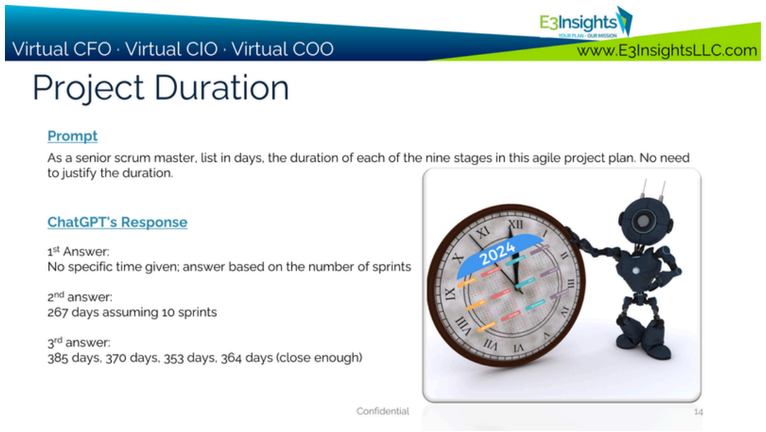
1. **Project Initiation and Planning**: 10 days
2. **Backlog Creation**: 7 days
3. **Sprint Planning**: 2 days per sprint × 10 sprints = 20 days
4. **Sprint Execution**: 20 days per sprint × 10 sprints = 200 days
5. **Sprint Review**: 1 day per sprint × 10 sprints = 10 days
6. **Sprint Retrospective**: 1 day per sprint × 10 sprints = 10 days
7. **Product Increment Release**: 5 days
8. **Continuous Improvement**: Ongoing (time not explicitly counted)
9. **Project Closure**: 5 days

Now, summing the durations:

- Project Initiation and Planning: 10 days
- Backlog Creation: 7 days
- Sprint Planning: 20 days
- Sprint Execution: 200 days
- Sprint Review: 10 days
- Sprint Retrospective: 10 days
- Product Increment Release: 5 days
- Project Closure: 5 days

Total Duration = 10 + 7 + 20 + 200 + 10 + 10 + 5 + 5 = **267 days**

Therefore, the total duration of the project is 267 days.



Slide 14-3

Using LLM In Project Management
August, 2024

Prompt
Add more sprints, increase the duration of each stage except project closure so the duration of the total project is 365 days.

ChatGPTs Answer

To extend the total project duration to 365 days, we need to adjust the number of sprints and increase the duration of each stage proportionally.

Let's increase the number of sprints to 12 and adjust the duration of each stage accordingly:

1. **Project Initiation and Planning**: 12 days
2. **Backlog Creation**: 10 days
3. **Sprint Planning**: 3 days per sprint × 12 sprints = 36 days
4. **Sprint Execution**: 22 days per sprint × 12 sprints = 264 days
5. **Sprint Review**: 2 days per sprint × 12 sprints = 24 days
6. **Sprint Retrospective**: 2 days per sprint × 12 sprints = 24 days
7. **Product Increment Release**: 10 days
8. **Continuous Improvement**: Ongoing (time not explicitly counted)
9. **Project Closure**: 5 days (unchanged)

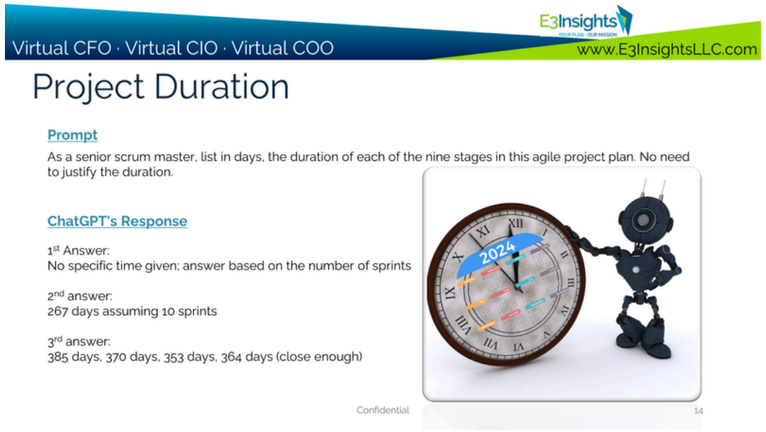
Now, let's sum the durations:

- Project Initiation and Planning: 12 days
- Backlog Creation: 10 days
- Sprint Planning: 36 days
- Sprint Execution: 264 days
- Sprint Review: 24 days
- Sprint Retrospective: 24 days
- Product Increment Release: 10 days
- Project Closure: 5 days

Total Duration = 12 + 10 + 36 + 264 + 24 + 24 + 10 + 5 = **385 days**

This adjustment actually extends the project beyond 365 days. We need to fine-tune the durations to fit exactly into 365 days.

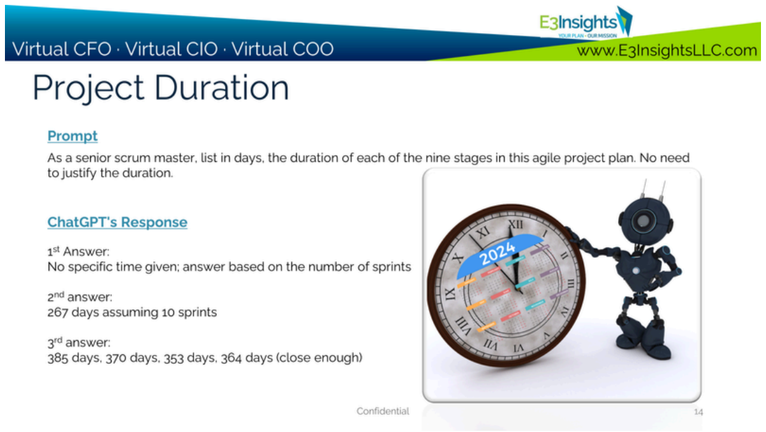
Appendix A



Let's adjust the Sprint Execution to 21 days per sprint:

1. **Project Initiation and Planning**: 12 days
2. **Backlog Creation**: 10 days
3. **Sprint Planning**: 3 days per sprint × 12 sprints = 36 days
4. **Sprint Execution**: 21 days per sprint × 12 sprints = 252 days
5. **Sprint Review**: 2 days per sprint × 12 sprints = 24 days
6. **Sprint Retrospective**: 2 days per sprint × 12 sprints = 24 days
7. **Product Increment Release**: 7 days
8. **Continuous Improvement**: Ongoing (time not explicitly counted)
9. **Project Closure**: 5 days

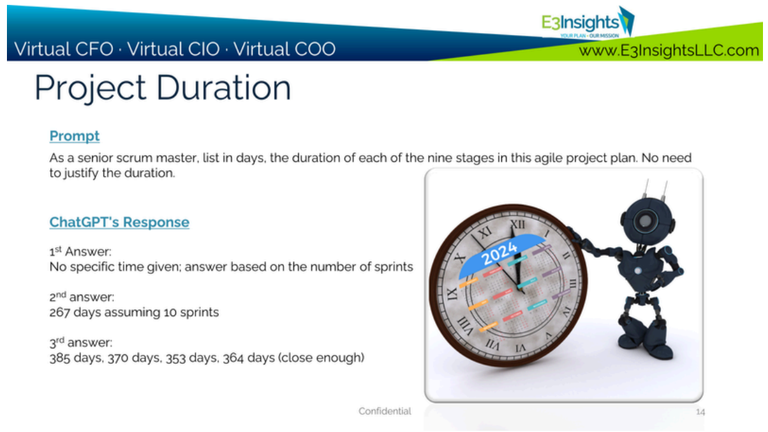
Total Duration = 12 + 10 + 36 + 252 + 24 + 24 + 7 + 5 = **370 days**



Still slightly over. Let's make a final adjustment by slightly reducing Sprint Execution to 20 days and reducing some other stages:

1. **Project Initiation and Planning**: 10 days
2. **Backlog Creation**: 8 days
3. **Sprint Planning**: 3 days per sprint × 12 sprints = 36 days
4. **Sprint Execution**: 20 days per sprint × 12 sprints = 240 days
5. **Sprint Review**: 2 days per sprint × 12 sprints = 24 days
6. **Sprint Retrospective**: 2 days per sprint × 12 sprints = 24 days
7. **Product Increment Release**: 6 days
8. **Continuous Improvement**: Ongoing (time not explicitly counted)
9. **Project Closure**: 5 days

Total Duration = 10 + 8 + 36 + 240 + 24 + 24 + 6 + 5 = **353 days**

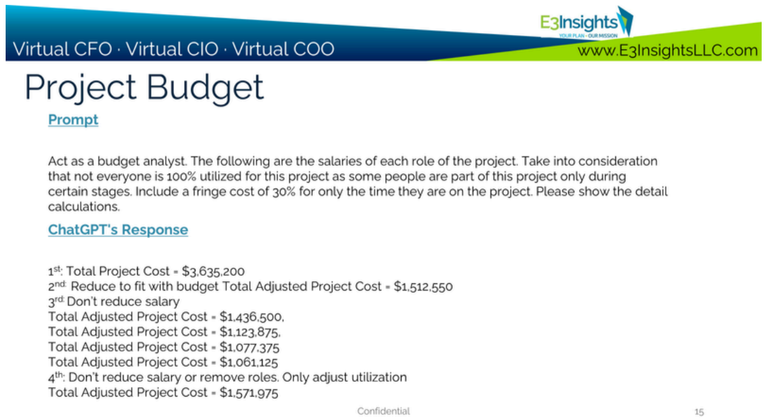


Let's increase Product Increment Release slightly to fit 365 days:

1. **Product Increment Release**: 17 days

Revised Total Duration = 10 + 8 + 36 + 240 + 24 + 24 + 17 + 5 = **364 days**

Thus, the total project duration is adjusted to 364 days, which is close enough to the target of 365 days.



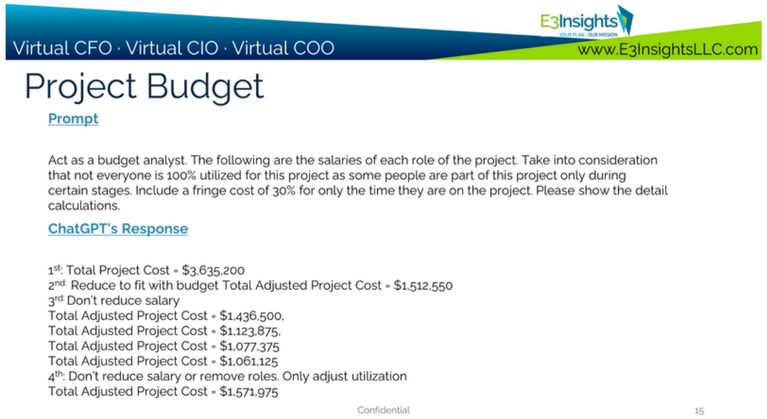
Project costs

Prompt

Act as a budget analyst. The following are the salaries of each role of the project.

1. Product Owner - $200,000
2. Scrum Master - $150,000
3. Software Developer (Backend) - $140,000
4. Software Developer (Frontend) - $140,000
5. Tester/Quality Assurance Engineer - $125,000
6. UX/UI Designer - $130,000
7. DevOps Engineer - $125,000
8. Data Scientist - $160,000
9. Machine Learning Engineer - $165,000
10. Computer Vision Engineer - $170,000
11. Natural Language Processing (NLP) Engineer - $155,000
12. Database Administrator (DBA) - 114,000
13. Integration Specialist - 125,000
14. Business Analyst - 105,000
15. Technical Writer - 100,000
16. Release Manager 100,000

Take into consideration that not everyone is 100% utilized for this project as some people are part of this project only during certain stages. Include a fringe cost of 30% for only the time they are on the project. Please show the detail calculations.



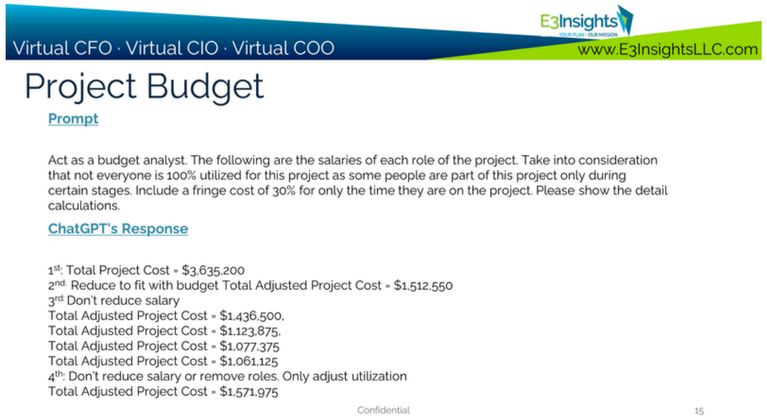
ChatGPTs Answer

To analyze the budget, we'll need to account for the duration each role is utilized during the project and apply a fringe cost of 30%. Here is the breakdown of each role's involvement and the cost calculations:

Project Duration and Role Utilization

The project lasts 364 days. For simplicity, we'll assume a 365-day year for salary calculations.

1. **Product Owner**: Full project duration (100%)
2. **Scrum Master**: Full project duration (100%)
3. **Software Developer (Backend)**: Full project duration (100%)
4. **Software Developer (Frontend)**: Full project duration (100%)
5. **Tester/Quality Assurance Engineer**: Full project duration (100%)
6. **UX/UI Designer**: Full project duration (100%)
7. **DevOps Engineer**: Full project duration (100%)
8. **Data Scientist**: Full project duration (100%)
9. **Machine Learning Engineer**: Full project duration (100%)
10. **Computer Vision Engineer**: Full project duration (100%)
11. **Natural Language Processing (NLP) Engineer**: Full project duration (100%)
12. **Database Administrator (DBA)**: Full project duration (100%)
13. **Integration Specialist**: Full project duration (100%)
14. **Business Analyst**: Full project duration (100%)
15. **Technical Writer**: 50% utilization (approx. 182 days)
16. **Release Manager**: 50% utilization (approx. 182 days)



Slide 15c

Using LLM In Project Management
August, 2024

Appendix A

ChatGPTs Answer (cont'd)
Cost Calculations

For each role, we'll calculate the total cost including the fringe cost of 30%.

1. **Product Owner**
   - Salary: $200,000
   - Fringe: $200,000 * 30% = $60,000
   - Total: $200,000 + $60,000 = $260,000

2. **Scrum Master**
   - Salary: $150,000
   - Fringe: $150,000 * 30% = $45,000
   - Total: $150,000 + $45,000 = $195,000

3. **Software Developer (Backend)**
   - Salary: $140,000
   - Fringe: $140,000 * 30% = $42,000
   - Total: $140,000 + $42,000 = $182,000

4. **Software Developer (Frontend)**
   - Salary: $140,000
   - Fringe: $140,000 * 30% = $42,000
   - Total: $140,000 + $42,000 = $182,000

5. **Tester/Quality Assurance Engineer**
   - Salary: $125,000
   - Fringe: $125,000 * 30% = $37,500
   - Total: $125,000 + $37,500 = $162,500

6. **UX/UI Designer**
   - Salary: $130,000
   - Fringe: $130,000 * 30% = $39,000
   - Total: $130,000 + $39,000 = $169,000

7. **DevOps Engineer**
   - Salary: $125,000
   - Fringe: $125,000 * 30% = $37,500
   - Total: $125,000 + $37,500 = $162,500

8. **Data Scientist**
   - Salary: $160,000
   - Fringe: $160,000 * 30% = $48,000
   - Total: $160,000 + $48,000 = $208,000

9. **Machine Learning Engineer**
   - Salary: $165,000
   - Fringe: $165,000 * 30% = $49,500
   - Total: $165,000 + $49,500 = $214,500

10. **Computer Vision Engineer**
    - Salary: $170,000
    - Fringe: $170,000 * 30% = $51,000
    - Total: $170,000 + $51,000 = $221,000

11. **Natural Language Processing (NLP) Engineer**
    - Salary: $155,000
    - Fringe: $155,000 * 30% = $46,500
    - Total: $155,000 + $46,500 = $201,500

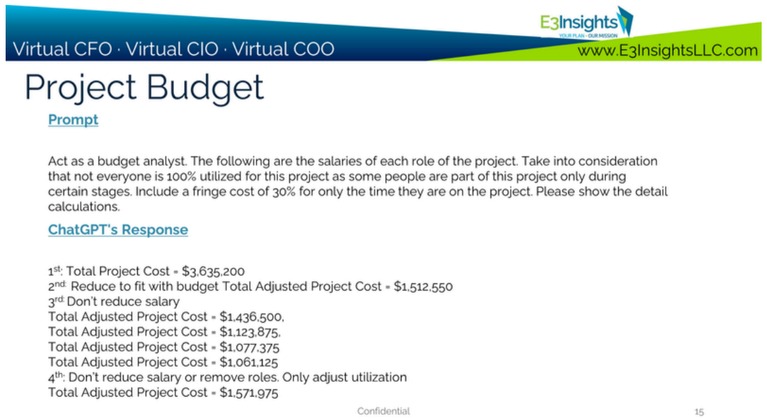
12. **Database Administrator (DBA)**
    - Salary: $114,000
    - Fringe: $114,000 * 30% = $34,200
    - Total: $114,000 + $34,200 = $148,200

13. **Integration Specialist**
    - Salary: $125,000
    - Fringe: $125,000 * 30% = $37,500
    - Total: $125,000 + $37,500 = $162,500

14. **Business Analyst**
    - Salary: $105,000
    - Fringe: $105,000 * 30% = $31,500
    - Total: $105,000 + $31,500 = $136,500

15. **Technical Writer** (50% utilization)
    - Salary: $100,000 / 2 = $50,000
    - Fringe: $50,000 * 30% = $15,000
    - Total: $50,000 + $15,000 = $65,000

16. **Release Manager** (50% utilization)
    - Salary: $100,000 / 2 = $50,000
    - Fringe: $50,000 * 30% = $15,000
    - Total: $50,000 + $15,000 = $65,000

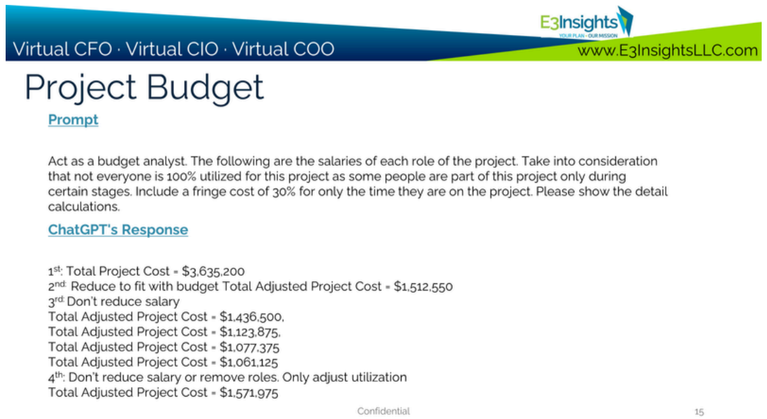


ChatGPTs Answer (cont'd)
Total Cost Calculation

Summing up the total costs for all roles:

- Product Owner: $260,000
- Scrum Master: $195,000
- Software Developer (Backend): $182,000
- Software Developer (Frontend): $182,000
- Tester/Quality Assurance Engineer: $162,500
- UX/UI Designer: $169,000
- DevOps Engineer: $162,500
- Data Scientist: $208,000
- Machine Learning Engineer: $214,500
- Computer Vision Engineer: $221,000
- Natural Language Processing (NLP) Engineer: $201,500
- Database Administrator (DBA): $148,200
- Integration Specialist: $162,500
- Business Analyst: $136,500
- Technical Writer: $65,000
- Release Manager: $65,000

Total Project Cost = $3,635,200



Slide 15e

Using LLM In Project Management
August, 2024

Prompt
How can we complete this project with the one-million-dollar budget?

ChatGPTs Answer
Completing the project with a one-million-dollar budget requires optimizing resource utilization, possibly reducing the scope, and making strategic decisions on the involvement of certain roles. Here are steps to achieve this:

1. Prioritize Critical Roles
Focus on roles that are essential for the core functionality of the Tennis Commentary App (TCA):

- Product Owner
- Scrum Master
- Backend and Frontend Developers
- Tester/Quality Assurance Engineer
- UX/UI Designer
- DevOps Engineer
- Machine Learning Engineer
- Natural Language Processing (NLP) Engineer
- Computer Vision Engineer

2. Adjust Role Utilization
Reduce the involvement of some roles to part-time or only for specific stages where their expertise is crucial. This includes:

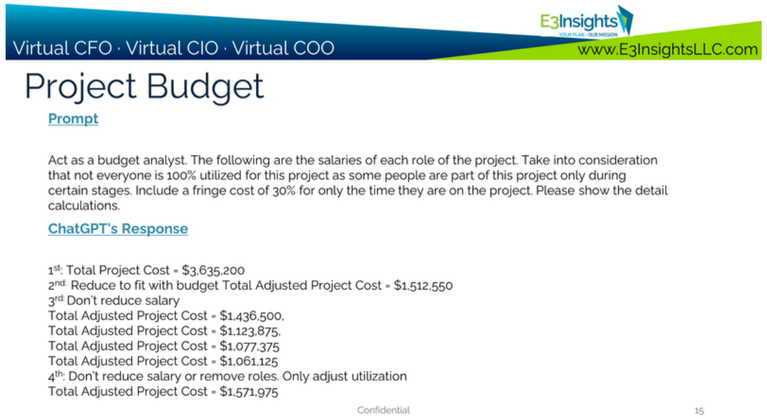
- Data Scientist
- Database Administrator (DBA)
- Integration Specialist
- Business Analyst
- Technical Writer
- Release Manager

3. Optimize Sprint Durations
Shorten sprint durations and focus on delivering the most critical features first. This helps in identifying which roles can be scaled back or even eliminated in later stages.

4. Outsource/Contract Work
Consider outsourcing or contracting roles that are not required full-time throughout the project, such as Technical Writers or Integration Specialists.

5. Automation Tools
Invest in tools that can automate certain tasks to reduce the need for extensive manual work, particularly in testing and deployment processes.

6. Adjust Compensation and Fringe Costs
Negotiate lower compensation rates or benefits for roles that are not full-time or consider reducing the fringe cost percentage.



Slide 15f

Using LLM In Project Management
August, 2024

ChatGPTs Answer (cont'd)
Sample Budget Allocation

Here's a rough allocation of resources with reduced involvement and part-time roles:

1. **Product Owner (50% utilization)**
   - Salary: $100,000
   - Fringe: $100,000 * 30% = $30,000
   - Total: $100,000 + $30,000 = $130,000

2. **Scrum Master (50% utilization)**
   - Salary: $75,000
   - Fringe: $75,000 * 30% = $22,500
   - Total: $75,000 + $22,500 = $97,500

3. **Software Developer (Backend) (100% utilization)**
   - Salary: $140,000
   - Fringe: $140,000 * 30% = $42,000
   - Total: $140,000 + $42,000 = $182,000

4. **Software Developer (Frontend) (100% utilization)**
   - Salary: $140,000
   - Fringe: $140,000 * 30% = $42,000
   - Total: $140,000 + $42,000 = $182,000

5. **Tester/Quality Assurance Engineer (100% utilization)**
   - Salary: $125,000
   - Fringe: $125,000 * 30% = $37,500
   - Total: $125,000 + $37,500 = $162,500

6. **UX/UI Designer (100% utilization)**
   - Salary: $130,000
   - Fringe: $130,000 * 30% = $39,000
   - Total: $130,000 + $39,000 = $169,000

.

7. **DevOps Engineer (50% utilization)**
   - Salary: $62,500
   - Fringe: $62,500 * 30% = $18,750
   - Total: $62,500 + $18,750 = $81,250

8. **Machine Learning Engineer (50% utilization)**
   - Salary: $82,500
   - Fringe: $82,500 * 30% = $24,750
   - Total: $82,500 + $24,750 = $107,250

9. **NLP Engineer (50% utilization)**
   - Salary: $77,500
   - Fringe: $77,500 * 30% = $23,250
   - Total: $77,500 + $23,250 = $100,750

10. **Computer Vision Engineer (50% utilization)**
    - Salary: $85,000
    - Fringe: $85,000 * 30% = $25,500
    - Total: $85,000 + $25,500 = $110,500

11. **Data Scientist (25% utilization)**
    - Salary: $40,000
    - Fringe: $40,000 * 30% = $12,000
    - Total: $40,000 + $12,000 = $52,000

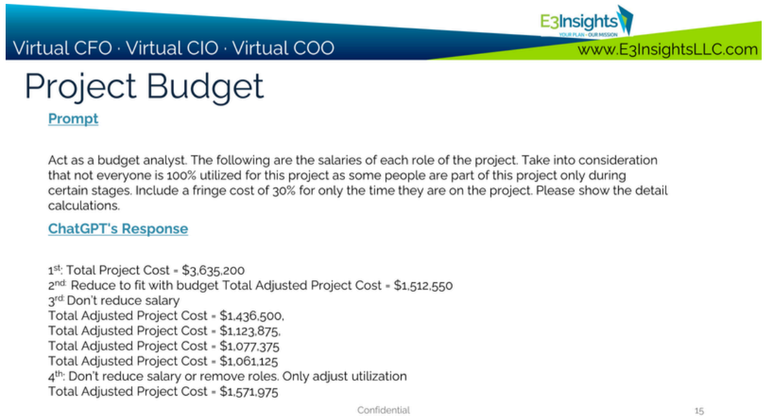
12. **Database Administrator (25% utilization)**
    - Salary: $28,500
    - Fringe: $28,500 * 30% = $8,550
    - Total: $28,500 + $8,550 = $37,050

13. **Integration Specialist (25% utilization)**
    - Salary: $31,250
    - Fringe: $31,250 * 30% = $9,375
    - Total: $31,250 + $9,375 = $40,625

14. **Business Analyst (25% utilization)**
    - Salary: $26,250
    - Fringe: $26,250 * 30% = $7,875
    - Total: $26,250 + $7,875 = $34,125

15. **Technical Writer (10% utilization)**
    - Salary: $10,000
    - Fringe: $10,000 * 30% = $3,000
    - Total: $10,000 + $3,000 = $13,000

16. **Release Manager (10% utilization)**
    - Salary: $10,000
    - Fringe: $10,000 * 30% = $3,000
    - Total: $10,000 + $3,000 = $13,000



ChatGPTs Answer (cont'd)
Total Adjusted Project Cost

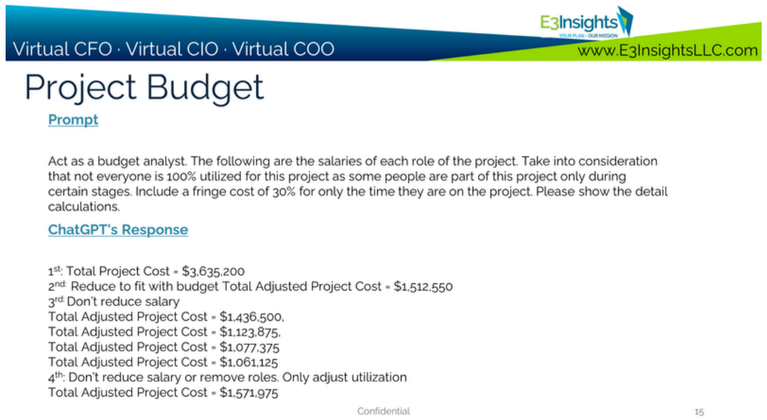
Summing up the adjusted costs:

- Product Owner: $130,000
- Scrum Master: $97,500
- Software Developer (Backend): $182,000
- Software Developer (Frontend): $182,000
- Tester/Quality Assurance Engineer: $162,500
- UX/UI Designer: $169,000
- DevOps Engineer: $81,250
- Machine Learning Engineer: $107,250
- NLP Engineer: $100,750
- Computer Vision Engineer: $110,500
- Data Scientist: $52,000
- Database Administrator (DBA): $37,050
- Integration Specialist: $40,625
- Business Analyst: $34,125
- Technical Writer: $13,000
- Release Manager: $13,000

Total Adjusted Project Cost = $1,512,550

This total still exceeds the budget, so further reductions in role utilization, possible scope reductions, or salary negotiations would be needed to fit within the $1 million budget. Further optimization, including potentially reducing the number of sprints or scope, could help in achieving the budget constraint.

Slide 15g



Slide 15h

Using LLM In Project Management
August, 2024
Appendix A

Prompt
Don't change anyone's salary. Only adjust utilization and remove roles if possible.

ChatGPTs Answer
To fit within the $1 million budget without changing salaries, we'll need to carefully adjust the utilization of roles and remove some roles if possible. Here's an optimized approach:

Critical Roles and Their Utilization
We'll prioritize essential roles and adjust their utilization to ensure the budget is not exceeded.

1. **Product Owner (75% utilization)**
   - Salary: $150,000
   - Fringe: $150,000 * 30% = $45,000
   - Total: $150,000 + $45,000 = $195,000

2. **Scrum Master (75% utilization)**
   - Salary: $112,500
   - Fringe: $112,500 * 30% = $33,750
   - Total: $112,500 + $33,750 = $146,250

3. **Software Developer (Backend) (100% utilization)**
   - Salary: $140,000
   - Fringe: $140,000 * 30% = $42,000
   - Total: $140,000 + $42,000 = $182,000

4. **Software Developer (Frontend) (100% utilization)**
   - Salary: $140,000
   - Fringe: $140,000 * 30% = $42,000
   - Total: $140,000 + $42,000 = $182,000

5. **Tester/Quality Assurance Engineer (100% utilization)**
   - Salary: $125,000
   - Fringe: $125,000 * 30% = $37,500
   - Total: $125,000 + $37,500 = $162,500

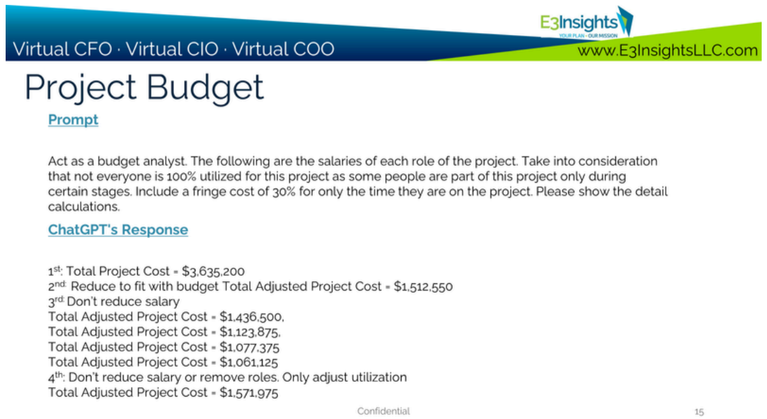
6. **UX/UI Designer (100% utilization)**
   - Salary: $130,000
   - Fringe: $130,000 * 30% = $39,000
   - Total: $130,000 + $39,000 = $169,000

7. **DevOps Engineer (50% utilization)**
   - Salary: $62,500
   - Fringe: $62,500 * 30% = $18,750
   - Total: $62,500 + $18,750 = $81,250

8. **Machine Learning Engineer (50% utilization)**
   - Salary: $82,500
   - Fringe: $82,500 * 30% = $24,750
   - Total: $82,500 + $24,750 = $107,250

9. **NLP Engineer (50% utilization)**
   - Salary: $77,500
   - Fringe: $77,500 * 30% = $23,250
   - Total: $77,500 + $23,250 = $100,750

10. **Computer Vision Engineer (50% utilization)**
    - Salary: $85,000
    - Fringe: $85,000 * 30% = $25,500
    - Total: $85,000 + $25,500 = $110,500



Slide 15i

ChatGPTs Answer (cont'd)

Reducing or Removing Roles

Given the budget constraints, we can reduce or remove the following roles:

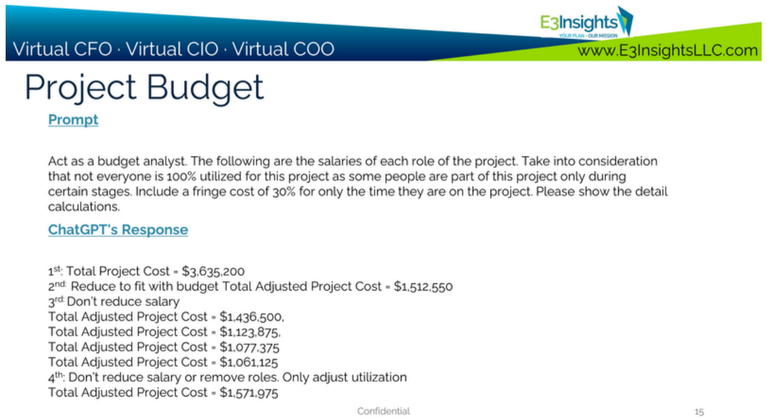
1. **Data Scientist**: Remove
2. **Database Administrator (DBA)**: Remove
3. **Integration Specialist**: Remove
4. **Business Analyst**: Remove
5. **Technical Writer**: Remove
6. **Release Manager**: Remove

Total Adjusted Project Cost

Summing up the adjusted costs:

- Product Owner: $195,000
- Scrum Master: $146,250
- Software Developer (Backend): $182,000
- Software Developer (Frontend): $182,000
- Tester/Quality Assurance Engineer: $162,500
- UX/UI Designer: $169,000
- DevOps Engineer: $81,250
- Machine Learning Engineer: $107,250
- NLP Engineer: $100,750
- Computer Vision Engineer: $110,500

Total Adjusted Project Cost = $1,436,500



Slide 15j

Using LLM In Project Management
August, 2024

ChatGPTs Answer (cont'd)
To fit within the $1 million budget, we need to make further adjustments in utilization. Here's a refined approach:

Further Adjusted Utilization

1. **Product Owner (50% utilization)**
   - Salary: $100,000
   - Fringe: $100,000 * 30% = $30,000
   - Total: $100,000 + $30,000 = $130,000

2. **Scrum Master (50% utilization)**
   - Salary: $75,000
   - Fringe: $75,000 * 30% = $22,500
   - Total: $75,000 + $22,500 = $97,500

3. **Software Developer (Backend) (100% utilization)**
   - Salary: $140,000
   - Fringe: $140,000 * 30% = $42,000
   - Total: $140,000 + $42,000 = $182,000

4. **Software Developer (Frontend) (100% utilization)**
   - Salary: $140,000
   - Fringe: $140,000 * 30% = $42,000
   - Total: $140,000 + $42,000 = $182,000

5. **Tester/Quality Assurance Engineer (100% utilization)**
   - Salary: $125,000
   - Fringe: $125,000 * 30% = $37,500
   - Total: $125,000 + $37,500 = $162,500

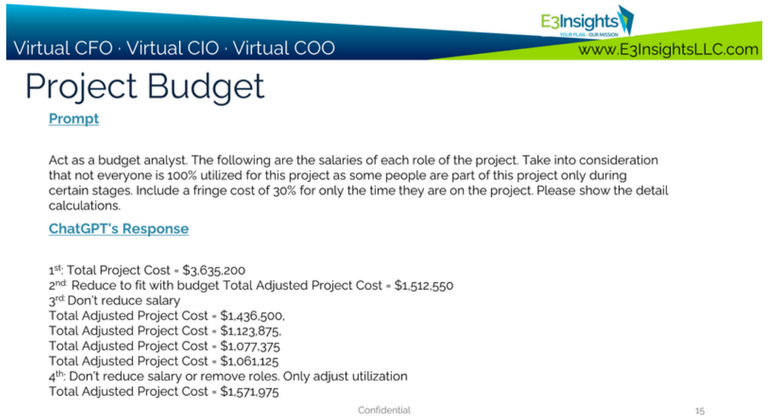
6. **UX/UI Designer (100% utilization)**
   - Salary: $130,000
   - Fringe: $130,000 * 30% = $39,000
   - Total: $130,000 + $39,000 = $169,000

7. **DevOps Engineer (25% utilization)**
   - Salary: $31,250
   - Fringe: $31,250 * 30% = $9,375
   - Total: $31,250 + $9,375 = $40,625

8. **Machine Learning Engineer (25% utilization)**
   - Salary: $41,250
   - Fringe: $41,250 * 30% = $12,375
   - Total: $41,250 + $12,375 = $53,625

9. **NLP Engineer (25% utilization)**
   - Salary: $38,750
   - Fringe: $38,750 * 30% = $11,625
   - Total: $38,750 + $11,625 = $50,375

10. **Computer Vision Engineer (25% utilization)**
    - Salary: $42,500
    - Fringe: $42,500 * 30% = $12,750
    - Total: $42,500 + $12,750 = $55,250



Slide 15k

Using LLM In Project Management
August, 2024

ChatGPTs Answer (cont'd)
Final Total Adjusted Project Cost

- Product Owner: $130,000
- Scrum Master: $97,500
- Software Developer (Backend): $182,000
- Software Developer (Frontend): $182,000
- Tester/Quality Assurance Engineer: $162,500
- UX/UI Designer: $169,000
- DevOps Engineer: $40,625
- Machine Learning Engineer: $53,625
- NLP Engineer: $50,375
- Computer Vision Engineer: $55,250

Total Adjusted Project Cost = $1,123,875

Further adjustments are needed to meet the $1 million budget:

1. **Reduce Product Owner to 40% utilization**
   - Salary: $80,000
   - Fringe: $80,000 * 30% = $24,000
   - Total: $80,000 + $24,000 = $104,000

2. **Reduce Scrum Master to 40% utilization**
   - Salary: $60,000
   - Fringe: $60,000 * 30% = $18,000
   - Total: $60,000 + $18,000 = $78,000

Final Total Adjusted Project Cost:

- Product Owner: $104,000
- Scrum Master: $78,000
- Software Developer (Backend): $182,000
- Software Developer (Frontend): $182,000
- Tester/Quality Assurance Engineer: $162,500
- UX/UI Designer: $169,000
- DevOps Engineer: $40,625
- Machine Learning Engineer: $53,625
- NLP Engineer: $50,375
- Computer Vision Engineer: $55,250

Total Adjusted Project Cost = $1,077,375

Finally, we need to reduce the total to $1 million:

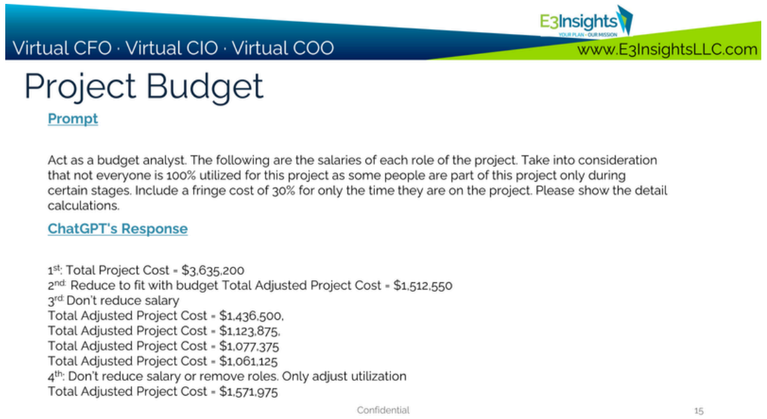
1. **Reduce Tester/Quality Assurance Engineer to 90% utilization**
   - Salary: $112,500
   - Fringe: $112,500 * 30% = $33,750
   - Total: $112,500 + $33,750 = $146,250

Final Adjusted Project Cost:

- Product Owner: $104,000
- Scrum Master: $78,000
- Software Developer (Backend): $182,000
- Software Developer (Frontend): $182,000
- Tester/Quality Assurance Engineer: $146,250
- UX/UI Designer: $169,000
- DevOps Engineer: $40,625
- Machine Learning Engineer: $53,625
- NLP Engineer: $50,375
- Computer Vision Engineer: $55,250

Total Adjusted Project Cost = $1,061,125

To fit within the $1 million



Slide 15l

Using LLM In Project Management
August, 2024

Prompt
Don't remove any roles. Just reduce utilization. Increase the budget to 2 million

ChatGPTs Answer
Given a $2 million budget and the requirement to keep all roles with adjusted utilization, here is an optimized approach:

Adjusted Utilization with All Roles

1. **Product Owner (50% utilization)**
 - Salary: $100,000
 - Fringe: $100,000 * 30% = $30,000
 - Total: $100,000 + $30,000 = $130,000

2. **Scrum Master (50% utilization)**
 - Salary: $75,000
 - Fringe: $75,000 * 30% = $22,500
 - Total: $75,000 + $22,500 = $97,500

3. **Software Developer (Backend) (75% utilization)**
 - Salary: $105,000
 - Fringe: $105,000 * 30% = $31,500
 - Total: $105,000 + $31,500 = $136,500

4. **Software Developer (Frontend) (75% utilization)**
 - Salary: $105,000
 - Fringe: $105,000 * 30% = $31,500
 - Total: $105,000 + $31,500 = $136,500

5. **Tester/Quality Assurance Engineer (75% utilization)**
 - Salary: $93,750
 - Fringe: $93,750 * 30% = $28,125
 - Total: $93,750 + $28,125 = $121,875

6. **UX/UI Designer (75% utilization)**
 - Salary: $97,500
 - Fringe: $97,500 * 30% = $29,250
 - Total: $97,500 + $29,250 = $126,750

7. **DevOps Engineer (50% utilization)**
 - Salary: $62,500
 - Fringe: $62,500 * 30% = $18,750
 - Total: $62,500 + $18,750 = $81,250

8. **Data Scientist (50% utilization)**
 - Salary: $80,000
 - Fringe: $80,000 * 30% = $24,000
 - Total: $80,000 + $24,000 = $104,000

9. **Machine Learning Engineer (50% utilization)**
 - Salary: $82,500
 - Fringe: $82,500 * 30% = $24,750
 - Total: $82,500 + $24,750 = $107,250

10. **Computer Vision Engineer (50% utilization)**
 - Salary: $85,000
 - Fringe: $85,000 * 30% = $25,500
 - Total: $85,000 + $25,500 = $110,500

11. **Natural Language Processing (NLP) Engineer (50% utilization)**
 - Salary: $77,500
 - Fringe: $77,500 * 30% = $23,250
 - Total: $77,500 + $23,250 = $100,750

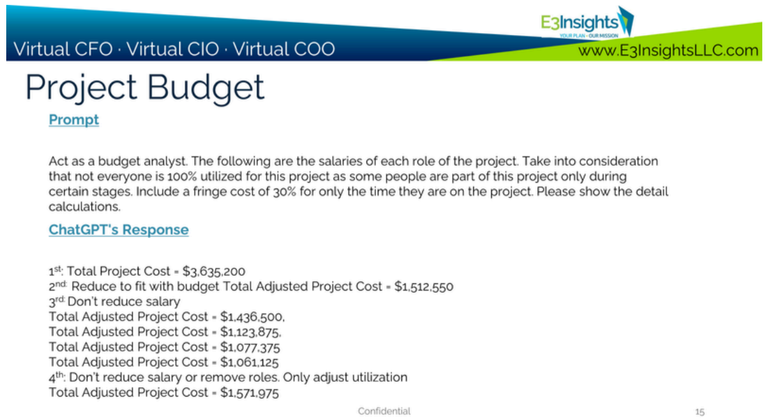
12. **Database Administrator (50% utilization)**
 - Salary: $57,000
 - Fringe: $57,000 * 30% = $17,100
 - Total: $57,000 + $17,100 = $74,100

13. **Integration Specialist (50% utilization)**
 - Salary: $62,500
 - Fringe: $62,500 * 30% = $18,750
 - Total: $62,500 + $18,750 = $81,250

14. **Business Analyst (50% utilization)**
 - Salary: $52,500
 - Fringe: $52,500 * 30% = $15,750
 - Total: $52,500 + $15,750 = $68,250

15. **Technical Writer (25% utilization)**
 - Salary: $25,000
 - Fringe: $25,000 * 30% = $7,500
 - Total: $25,000 + $7,500 = $32,500

16. **Release Manager (25% utilization)**
 - Salary: $25,000
 - Fringe: $25,000 * 30% = $7,500
 - Total: $25,000 + $7,500 = $32,500



ChatGPTs Answer (cont'd)
Total Adjusted Project Cost

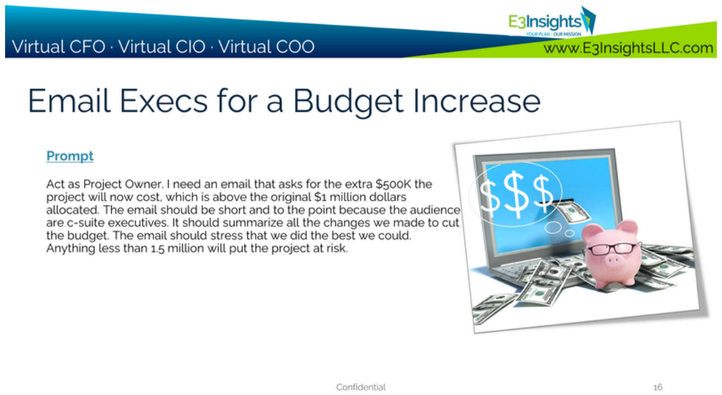
Summing up the adjusted costs:

- Product Owner: $130,000
- Scrum Master: $97,500
- Software Developer (Backend): $136,500
- Software Developer (Frontend): $136,500
- Tester/Quality Assurance Engineer: $121,875
- UX/UI Designer: $126,750
- DevOps Engineer: $81,250
- Data Scientist: $104,000
- Machine Learning Engineer: $107,250
- Computer Vision Engineer: $110,500
- Natural Language Processing (NLP) Engineer: $100,750
- Database Administrator: $74,100
- Integration Specialist: $81,250
- Business Analyst: $68,250
- Technical Writer: $32,500
- Release Manager: $32,500

Total Adjusted Project Cost = $1,571,975

This total fits well within the $2 million budget.

Slide 15m





Slides 16-17

Using LLM In Project Management
August, 2024

Email to Execs
Prompt
Act as Project Owner. I need an email that asks for the extra $500K the project will now cost, which is above the original $1 million dollars allocated. The email should be short and to the point because the audience are c-suite executives. It should summarize all of the changes we made to cut the budget. The email should stress that we did the best we could. Anything less than 1.5 million will put the project at risk.

ChatGPTs Answer
Subject: Request for Additional Funding for TCA Project

Dear [C-Suite Executives],

I hope this message finds you well. I am writing to request an additional $500K for the Tennis Commentary App (TCA) project, bringing the total budget to $1.5 million. Despite our rigorous efforts to optimize costs and reduce utilization across all roles, the complexity and scope of the project require this increased investment to ensure its successful delivery.

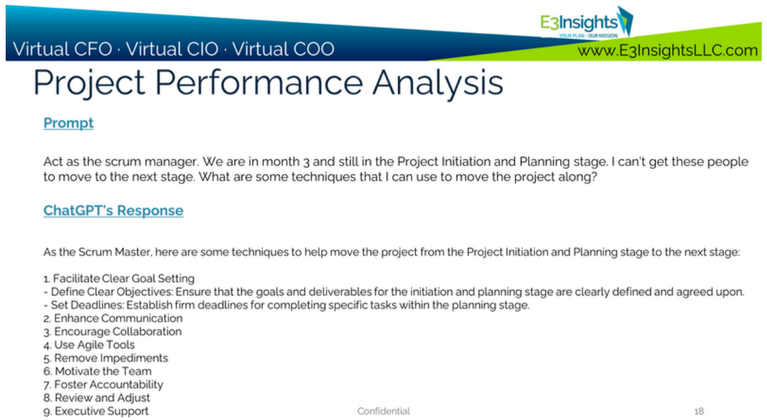
Summary of Budget Optimization:
- **Role Utilization Reduced**: Key roles such as Product Owner, Scrum Master, Developers, and Engineers have been reduced to 50-75% utilization where possible.
- **Maintained Critical Roles**: Essential roles have been preserved to maintain project integrity and functionality.
- **Eliminated Redundancies**: Streamlined the team to remove any redundancies and non-essential roles.

Despite these measures, the project's innovative nature and integration complexities necessitate the additional funds. Anything less than $1.5 million will put the project at significant risk.

Thank you for your understanding and support.

Best regards,

[Your Name]
Project Owner, TCA Project



Slide 18

Using LLM In Project Management
August, 2024

Analysis of Project Performance
Prompt
Act as the scrum manager. We are in month 3 and still in the Project Initiation and Planning stage. I can't get these people to move to the next stage. What are some techniques that I can use to move the project along?

ChatGPTs Answer
As the Scrum Master, here are some techniques to help move the project from the Project Initiation and Planning stage to the next stage:

1. Facilitate Clear Goal Setting
- **Define Clear Objectives**: Ensure that the goals and deliverables for the initiation and planning stage are clearly defined and agreed upon.
- **Set Deadlines**: Establish firm deadlines for completing specific tasks within the planning stage.

2. Enhance Communication
- **Daily Stand-ups**: Hold daily stand-up meetings to discuss progress, identify roadblocks, and keep everyone accountable.
- **Effective Use of Meetings**: Make meetings short and focused. Use techniques like time-boxing to limit the duration of discussions.

3. Encourage Collaboration
- **Team Workshops**: Organize workshops or working sessions to collaboratively address specific issues or tasks.
- **Pairing and Swarming**: Encourage team members to work in pairs or small groups to tackle high-priority items.

4. Use Agile Tools
- **Task Boards**: Use Kanban boards or similar tools to visualize work progress and highlight bottlenecks.
- **Progress Tracking**: Regularly update and review progress tracking tools to keep the team aware of where they stand.

5. Remove Impediments
- **Identify Blockers**: Actively identify and address any blockers that are preventing progress.
- **Resource Allocation**: Ensure that the team has the necessary resources and support to move forward.

6. Motivate the Team
- **Recognize Efforts**: Recognize and celebrate small wins to keep the team motivated.
- **Incentives**: Consider implementing incentives for meeting deadlines or achieving milestones.

7. Foster Accountability
- **Role Clarification**: Ensure that each team member understands their role and responsibilities.
- **Regular Check-ins**: Schedule regular check-ins with individual team members to discuss progress and any challenges they face.

8. Review and Adjust
- **Retrospectives**: Conduct retrospectives to review what's working and what's not, and make necessary adjustments.
- **Adapt Plans**: Be flexible and adapt plans based on feedback and changing circumstances.

9. Executive Support
- **Stakeholder Engagement**: Involve key stakeholders and executives to provide the necessary support and urgency.
- **Escalation**: Escalate issues to higher management if critical decisions are being delayed.

By implementing these techniques, you can help ensure that the team transitions from the Project Initiation and Planning stage to the next stage efficiently and effectively.

Appendix A



Slide 19

Using LLM In Project Management
August, 2024

Project Analysis
Prompt
Act as the Scrum Master. We are in month 6. We are in the 6th sprint. We have spent $750,000. Are we on track to finish in six months?

ChatGPTs Answer
As the Scrum Master, I would assess our progress and current spending to determine if we are on track to finish the project in the remaining six months.

Current Status:
- **Month**: 6
- **Sprint**: 6
- **Budget Spent**: $750,000
- **Total Budget**: $2,000,000

Analysis:
1. **Budget Analysis**:
  - **Total Budget**: $2,000,000
  - **Spent**: $750,000
  - **Remaining Budget**: $2,000,000 - $750,000 = $1,250,000

2. **Time Analysis**:
  - **Total Project Duration**: 12 months
  - **Elapsed Time**: 6 months
  - **Remaining Time**: 6 months

3. **Sprint Analysis**:
  - **Total Sprints**: Assume 12 sprints (2 per month)
  - **Completed Sprints**: 6
  - **Remaining Sprints**: 6

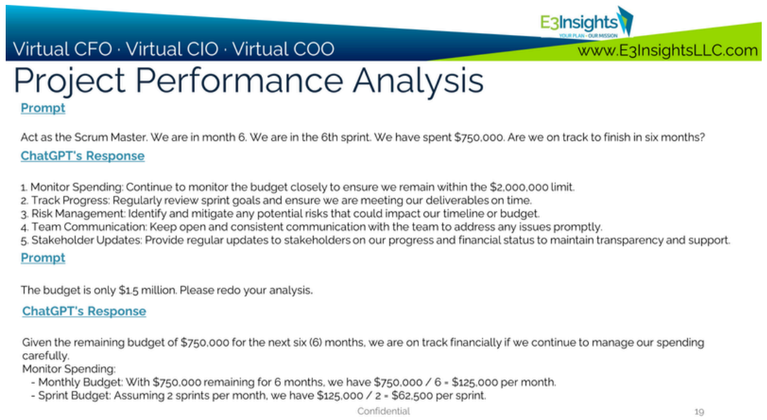
Evaluation:
- **Spending**: We have spent $750,000 in the first 6 months, which is 37.5% of the total budget. With $1,250,000 remaining, we are on track budget-wise, assuming consistent spending and no major unforeseen expenses.
- **Progress**: Being in the 6th sprint out of an assumed 12 means we are halfway through the planned sprints, which aligns with the halfway point of the project timeline.

Conclusion:
Based on the budget and sprint progress, we are on track to finish in six months, provided we maintain our current pace and spending.

Recommendations:
1. **Monitor Spending**: Continue to monitor the budget closely to ensure we remain within the $2,000,000 limit.
2. **Track Progress**: Regularly review sprint goals and ensure we are meeting our deliverables on time.
3. **Risk Management**: Identify and mitigate any potential risks that could impact our timeline or budget.
4. **Team Communication**: Keep open and consistent communication with the team to address any issues promptly.
5. **Stakeholder Updates**: Provide regular updates to stakeholders on our progress and financial status to maintain transparency and support.

By continuing to manage our resources effectively and addressing any issues as they arise, we can stay on track to complete the project within the next six months.

Appendix A



Slide 19-1

Using LLM In Project Management
August, 2024

Prompt
The budget is only 1.5 million. Please redo your analysis.

ChatGPTs Answer
As the Scrum Master, let's reassess the project status considering the correct total budget of $1.5 million.

Current Status:
- **Month**: 6
- **Sprint**: 6
- **Budget Spent**: $750,000
- **Total Budget**: $1,500,000

Analysis:
1. **Budget Analysis**:
  - **Total Budget**: $1,500,000
  - **Spent**: $750,000
  - **Remaining Budget**: $1,500,000 - $750,000 = $750,000

2. **Time Analysis**:
  - **Total Project Duration**: 12 months
  - **Elapsed Time**: 6 months
  - **Remaining Time**: 6 months

3. **Sprint Analysis**:
  - **Total Sprints**: Assume 12 sprints (2 per month)
  - **Completed Sprints**: 6
  - **Remaining Sprints**: 6

Evaluation:
- **Spending**: We have spent $750,000 in the first 6 months, which is 50% of the total budget. With $750,000 remaining, we need to ensure that our spending aligns with the remaining budget.
- **Progress**: Being in the 6th sprint out of an assumed 12 means we are halfway through the planned sprints, which aligns with the halfway point of the project timeline.

Conclusion:
Given the remaining budget of $750,000 for the next 6 months, we are on track financially if we continue to manage our spending carefully.

Recommendations:
1. **Monitor Spending**:
  - **Monthly Budget**: With $750,000 remaining for 6 months, we have $750,000 / 6 = $125,000 per month.
  - **Sprint Budget**: Assuming 2 sprints per month, we have $125,000 / 2 = $62,500 per sprint.

2. **Track Progress**: Ensure that each sprint delivers on its goals without exceeding the sprint budget of $62,500.

3. **Cost Management**:
  - Review and optimize resource allocation and utilization.
  - Identify and cut any non-essential costs or activities.

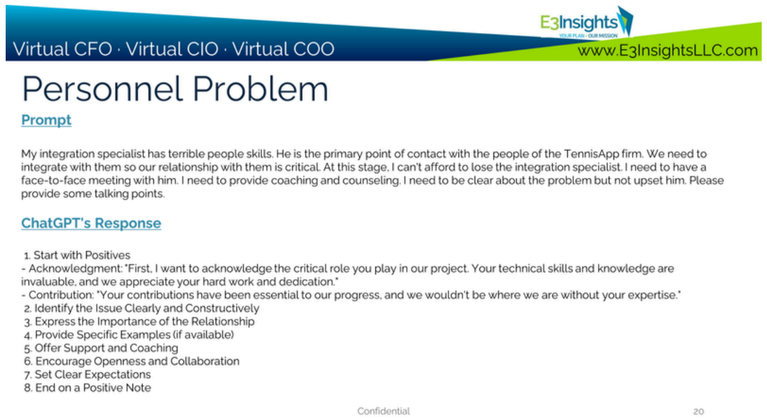
4. **Risk Management**:
  - Identify potential risks that could lead to budget overruns and develop mitigation strategies.
  - Regularly update risk assessments and adjust plans accordingly.

5. **Team Communication**:
  - Keep the team informed about budget constraints and encourage cost-saving measures.
  - Foster collaboration to find innovative ways to reduce costs while maintaining quality.

6. **Stakeholder Updates**:
  - Provide regular updates to stakeholders on both progress and financial status.
  - Ensure transparency to build trust and secure additional support if necessary.

By maintaining strict budget control and ensuring that each sprint is executed efficiently, we can stay within the $1.5 million budget and complete the project within the next six months.

Appendix A



Slide 20

Using LLM In Project Management
August, 2024

Personnel Issue
Prompt
My integration specialist has terrible people skills. He is primary point of contact with the people of the TennisApp firm. We need to integrate with them so our relationship with them is critical. At this stage, I can't afford to lose the integration specialist. I need to have a face to face meeting with him. I need to provide coaching and counseling. I need to be clear about the problem but not upset him. Please provide some talking points.

ChatGPTs Answer
Talking Points for Meeting with Integration Specialist

1. **Start with Positives**
- **Acknowledgment**: "First, I want to acknowledge the critical role you play in our project. Your technical skills and knowledge are invaluable, and we appreciate your hard work and dedication."
- **Contribution**: "Your contributions have been essential to our progress, and we wouldn't be where we are without your expertise."

2. **Identify the Issue Clearly and Constructively**
- **Observation**: "I've noticed that there have been some challenges in our interactions with the TennisApp firm."
- **Impact**: "These challenges seem to stem from communication and interpersonal interactions, which are affecting our collaboration with them."

3. **Express the Importance of the Relationship**
- **Emphasize Collaboration**: "Our relationship with the TennisApp firm is crucial for the success of the integration. Effective communication and strong interpersonal relationships are key to this collaboration."
- **Highlight Goals**: "We all share the same goal of successfully integrating TCA with TennisApp, and building a strong working relationship with their team is essential."

4. **Provide Specific Examples (if available) **
- **Examples**: "For instance, there were a few meetings where the feedback from their team indicated they felt misunderstood or dismissed."
- **Clarification**: "Can you share your perspective on what happened during these interactions? Understanding your view will help us address any miscommunications."

5. **Offer Support and Coaching**
- **Support**: "I want to support you in developing these interpersonal skills. It's not just about our current project but also about your professional growth."
- **Resources**: "Would you be open to some coaching or training sessions on communication and relationship management? We can provide resources or even schedule some one-on-one coaching."

6. **Encourage Openness and Collaboration**
- **Feedback Loop**: "Please feel free to come to me with any concerns or if you need help navigating any challenging interactions. We can work through these together."
- **Team Collaboration**: "Let's also work on ways we can improve team collaboration and support each other better."

7. **Set Clear Expectations**
- **Expectations**: "Going forward, I'd like us to focus on improving our interactions with the TennisApp team. Building a positive and cooperative relationship is a priority."
- **Follow-up**: "We'll have regular check-ins to see how things are progressing and to address any issues that come up. I'm here to help you succeed in this role."

8. **End on a Positive Note**
- **Reaffirm Value**: "I value your contributions greatly and believe that with a few adjustments, we can enhance our collaboration with TennisApp significantly."
- **Encouragement**: "I'm confident that you have the capability to make these improvements and continue to be a key asset to our team."

By using these talking points, you can have a constructive and supportive conversation with your integration specialist, focusing on improvement without causing upset.

Appendix A



Slide 21

Using LLM In Project Management
August, 2024

Plan the party
Prompt
We successfully delivered the project. Now its time for celebration. I'm thinking about a local celebration, during work hours. Many of our resources are remote but we must find a way to include them in the celebration. Any ideas?

ChatGPTs Answer
Celebration Ideas for Onsite and Remote Team Members

1. **Hybrid Celebration Event**
- **Onsite Celebration**: Host a catered lunch or afternoon gathering at the office with decorations, music, and a celebratory atmosphere.
- **Remote Participation**: Set up a high-quality video conferencing system so remote team members can join in real-time. Use multiple cameras to capture different parts of the event.

2. **Virtual Celebration for Remote Team Members**
- **Live Stream**: Live stream the onsite celebration through platforms like Zoom or Microsoft Teams. Include interactive elements like Q&A sessions, shout-outs, and live toasts.
- **Virtual Games**: Organize virtual games or trivia related to the project and team achievements. This can be done through platforms like Kahoot or online escape rooms.

3. **Celebration Kits**
- **Gift Boxes**: Send celebration kits to remote team members ahead of time. These can include snacks, drinks, party hats, and a thank-you note.
- **Branded Merchandise**: Include branded items like T-shirts, mugs, or pens as a token of appreciation.

4. **Interactive Activities**
- **Virtual Toasts**: Schedule a specific time during the celebration for everyone to raise a toast together, both onsite and remote.
- **Recognition Awards**: Hand out virtual awards or certificates recognizing individual contributions. Share these live during the event and mail physical copies to remote team members.

5. **Digital Photo Booth**
- **Photo Booth**: Set up a digital photo booth that allows both onsite and remote team members to take fun pictures. Use an app or platform that can compile these into a digital album.
- **Shared Photo Album**: Create a shared photo album where everyone can upload and view pictures from the celebration.

6. **Shared Activities**
- **Music and Dance**: Play a curated playlist and encourage remote team members to join in dancing or just enjoying the music.
- **Games and Competitions**: Include simple games or competitions that everyone can participate in, like a trivia quiz about the project or a virtual scavenger hunt.

7. **Thank-You Video**
- **Compilation Video**: Create a thank-you video featuring messages from leadership and team members, highlighting key achievements and moments from the project. Play this during the celebration and share it with everyone afterward.

8. **Inclusive Scheduling**
- **Flexible Timing**: Schedule the celebration during a time that accommodates various time zones, even if it means having two shorter sessions to include everyone.

By combining these ideas, you can create a fun and inclusive celebration that recognizes the hard work of both onsite and remote team members, ensuring everyone feels appreciated and part of the achievement.