**Risk Management Plan**

**Chubby Gourmet’s E-Commerce Web Application**

**HighTable**

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**PROJMAN**

**By**

**Gianna Bernice R. Artajos**

**Marcus Philip L. Flores**

**John Rysal C. Rosel**

**Lester Dave M. Salazar**

**6.9 Risk Management Plan**

**6.9.1 Introduction**

The Risk Management Plan plays a vital role in the Chubby Gourmet project, which strives to develop a cutting-edge web application catering to culinary enthusiasts. By implementing effective risk management strategies, the project team ensures the delivery of a premium-quality product while proactively addressing potential obstacles to project success.

The project team is dedicated to developing an exceptional web application that transforms the way individuals engage with small businesses like Chubby Gourmet. Their goal is to create a cutting-edge platform that enables users to discover, explore, and indulge in unique culinary experiences. By offering personalized recommendations, a user-friendly interface, and a vibrant community, Chubby Gourmet aims to provide food enthusiasts with a seamless and engaging experience. The project's success relies on delivering a delightful user experience, fostering trust and loyalty, and positioning Chubby Gourmet as the ultimate platform for culinary exploration.

However, like any complex project, the Chubby Gourmet project is not without its risks. Potential challenges and uncertainties may arise that could impact the project's objectives, including its quality, timeline, budget, and overall success. Therefore, the Risk Management Plan plays a crucial role in identifying, assessing, and mitigating these risks, ensuring that the project team can effectively navigate potential obstacles and deliver a successful web application.

To futher develop a risk management Plan for Chubby Gourmet’s Web Application, the following information should be considered:

|  |  |
| --- | --- |
| Identifying and Assessing Risks | The project team should identify potential risks related to the development, implementation, and operation of Chubby Gourmet’s System. Risks can come from various sources, including technical issues, regulatory compliance, cybersecurity, and human factors. Once identified, risks should be assessed based on their likelihood of occurring and the impact they may have on the project. |
| Risk Mitigation Strategies | After identifying and assessing risks, the project team should develop a plan for mitigating or avoiding the risks. Mitigation strategies should be prioritized based on their effectiveness in reducing risk and their feasibility in terms of time and cost. Strategies may include contingency planning, redundancy, and the development of fallback procedures. |
| Contingency Planning | The project team should develop contingency plans for significant risks that could significantly impact the project's success. Contingency plans should outline the steps required to minimize the impact of the risk and maintain the project's progress. These plans should be regularly reviewed and updated as the project progresses, and new risks are identified. |
| Communication and Reporting | The project team should establish a clear communication and reporting framework for risk management. This framework should ensure that risks are regularly reviewed, and the project team is updated on any changes to the risk landscape. Communication should occur between project managers, team members, and stakeholders. |
| Risk Monitoring and Review | Risk management is an ongoing process that requires continuous monitoring and review. The project team should establish a regular review process to ensure that risk management strategies remain effective, risks are updated, and new risks are identified. The review process should be transparent, with all stakeholders being updated on any changes. |

By considering these additional factors in a risk management plan, the Chubby Gourmet’s System project team can ensure that the project is completed successfully, meeting all objectives while minimizing potential risks.

**6.9.2 Top Three Risks**

The project’s top three risks are:

1. **Scope Creep:** Scope creep refers to the uncontrolled expansion or addition of features, requirements, or objectives of a project beyond its original scope. This can occur due to changing client expectations, unclear project requirements, or poor project management. Scope creep can lead to delays, increased costs, resource overutilization, and ultimately project failure if not properly managed.
2. **Resource Constraints:** Insufficient or misallocation of resources can significantly impact project development. This includes limitations in terms of budget, personnel, equipment, or technology. Inadequate resources can lead to delays, decreased quality, or compromised project objectives. It is essential to identify and allocate the necessary resources appropriately to mitigate this risk.
3. **Technical Challenges:** Projects often involve complex technical components and dependencies. Technical challenges can include compatibility issues, software or hardware failures, integration difficulties, or scalability problems. These challenges can cause delays, increased costs, and potential setbacks in project delivery. Adequate planning, testing, and contingency measures are crucial to address and mitigate technical risks effectively.

**6.9.3. Risk Management Approach**

To mitigate these risks, Chubby Gourmet's project team has developed strategies including thorough testing and validation of the data migration process, adopting an Agile development methodology to quickly identify and address technical issues, providing training and support to ensure successful system adoption, and maintaining regular communication with stakeholders to promptly address any potential delays or issues.

The following steps will be taken to manage risks in Chubby Gourmet’s System project:

* **Risk Identification:** The project team will identify potential risks by conducting brainstorming sessions, reviewing past project experiences, and examining project requirements and scope. These risks will be documented in a risk register along with details about their likelihood, potential impact, and description.
* **Risk Assessment:** The identified risks will be assessed based on their probability of occurrence and their impact on the project. A risk matrix will be used to prioritize risks according to their severity. Risks with high severity will be given priority for mitigation or contingency planning.
* **Risk Mitigation:** Mitigation plans will be developed for risks that have both a high impact and likelihood of occurring. These plans will outline strategies and measures to reduce or prevent the risks. In cases where certain risks cannot be completely eliminated, backup strategies will be devised.
* **Risk Monitoring:** Risks will be continuously monitored throughout the project. The project team will regularly review the risk register to ensure that risks are being effectively managed. As new risks are identified during the project, they will be added to the risk register and the risk assessment process will be repeated.
* **Risk Communication:** Risk communication involves informing relevant parties, including the project sponsor, project team, and other stakeholders, about the identified risks and the strategies in place to manage them. The project team will maintain open and constant communication, ensuring that stakeholders are informed about any detected risks, their evaluation, and the actions being taken to address them.

**6.9.4. Risk Identification**

Through a comprehensive risk identification process for the Chubby Gourmet project, various methods were employed to identify and assess potential risks. These methods included expert interviews, analysis of historical data from previous projects, and a risk assessment conference involving the project team and key stakeholders. The aim was to create a risk register that documents the identified hazards, including a brief description, potential impact, and likelihood of occurrence.

During the risk assessment meeting, the project team and key stakeholders were actively engaged in identifying and assessing risks specific to Chubby Gourmet's success. The outcomes of this meeting were diligently recorded in the risk register, ensuring that all identified risks were captured.

To supplement the risk identification process, the project team conducted a thorough review of historical information from similar projects. This allowed them to identify potential risks that might arise during the development of Chubby Gourmet and develop corresponding mitigation strategies. Additionally, expert interviews were conducted with team members who possessed relevant experience in developing similar systems. These interviews provided valuable insights and helped identify additional risks, which were then addressed through appropriate mitigation strategies.

The risks identified through the risk assessment meeting and expert interviews were documented in a format consistent with the Agile risk management plan. The risk register is regularly updated to ensure the inclusion of new risks and the effective management of existing ones. Throughout the project lifecycle, the project team remains vigilant in monitoring and managing risks to mitigate their potential impact on Chubby Gourmet's development and overall success.

Some potential risks identified for this project include:

* **Unclear or Changing Requirements:** Poorly defined or constantly changing project requirements can lead to confusion, rework, and delays. It is crucial to establish clear and well-documented requirements and have a mechanism in place to manage changes effectively.
* **Lack of Stakeholder Involvement:** Inadequate involvement or engagement from project stakeholders can result in misalignment, misunderstandings, and unmet expectations. Regular communication and collaboration with stakeholders throughout the development process are essential to ensure their needs are addressed and potential issues are identified early.
* **Unrealistic Timeframes and Deadlines:** Setting overly aggressive or unrealistic timeframes and deadlines can put excessive pressure on the development team, leading to compromised quality, increased errors, and burnout. It is important to establish realistic timelines based on the project's complexity and resource availability.
* **Inadequate Resource Allocation:** Insufficient allocation of resources, including personnel, budget, and technology, can result in delays, compromised quality, and incomplete deliverables. Proper resource planning and allocation are crucial to ensure the project has the necessary support for successful completion.
* **Lack of Project Management and Planning:** Inadequate project management practices, such as poor planning, ineffective communication, or insufficient risk assessment, can lead to project failure. Robust project management methodologies and practices should be in place to ensure effective planning, execution, monitoring, and control of the project.
* **Technical Challenges and Dependencies:** Complex technical requirements, dependencies on external systems or services, and technological limitations can pose risks during development. Technical issues, such as software or hardware failures, compatibility problems, or integration difficulties, can lead to delays and increased costs.
* **Inadequate Quality Assurance and Testing:** Insufficient testing and quality assurance practices can result in undetected defects, functional issues, or poor user experience. Comprehensive testing strategies and quality control processes should be implemented to identify and resolve issues before deployment.
* **Communication and Collaboration Challenges:** Ineffective communication and collaboration among team members, stakeholders, or third-party vendors can lead to misunderstandings, delays, and conflicts. Establishing clear channels of communication and fostering a collaborative environment are crucial for successful project development.
* **Vendor or Supplier Risks:** Dependence on external vendors or suppliers for critical components or services can introduce risks such as delivery delays, quality issues, or contractual disputes. Conducting thorough due diligence and establishing contingency plans can help mitigate these risks.
* **External Factors and Dependencies:** External factors such as regulatory changes, market conditions, natural disasters, or geopolitical events can impact project development. Identifying and monitoring these external dependencies and having contingency plans in place can help mitigate their potential impact.

To mitigate these risks, the project team has implemented various strategies, including thorough testing and validation processes, adopting an Agile development methodology to address technical issues promptly, providing training and support to team members for successful system adoption, and maintaining regular communication with key stakeholders to identify and address potential delays or issues.

**6.9.5 Risk Qualification and Prioritization**

To effectively manage risks in the Chubby Gourmet's System project, a probability-impact matrix was employed to assess and prioritize the risks listed in the risk register. The project team placed emphasis on risks with a high likelihood of occurrence and significant impact on the project. Regular review and updates of the risk register will ensure appropriate prioritization of risks.

Likewise, in the Chubby Gourmet’s System project, after identifying potential risks, it is crucial to evaluate their probability and impact to determine their priority for implementing risk mitigation strategies.

Using a probability-impact matrix, the risks were categorized into five levels: Extreme, High, Medium, Low, and Negligible. The probability of risks occurring and their impact on the project are described as follows:

* Extreme: Risks with a very high probability of occurrence and severe impact on the project.
* High: Risks with a high probability of occurrence and significant impact on the project. These risks require immediate attention, and mitigation strategies should be developed.
* Medium: Risks with a moderate probability of occurrence and moderate impact on the project. These risks should be closely monitored, and mitigation strategies need to be prepared if they occur.
* Low: Risks with a low probability of occurrence and minor impact on the project. These risks can be periodically monitored, and mitigation strategies can be developed if needed.
* Negligible: Risks with a very low probability of occurrence and negligible impact on the project. These risks can be disregarded.

The identified risks and their prioritization based on probability and impact are as follows:

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| --- | --- | --- | --- | --- | --- |
|  | | **Risk** **Assessment** **Matrix** | |  |  |
| Probability  Impact | Rare (1) | Unlikely (2) | Possible (3) | Likely (4) | Almost  Certain (5) |
| Insignificant  (1) | N | N | N | N | L |
| Minor (2) | N | N | L | L | M |
| Significant  (3) | N | L | L | M | H |
| Disastrous  (4) | N | L | M | H | E |
| Catastrophic  (5) | L | M | H | E | E |

By integrating the risk assessment matrix into the risk management plan of the Chubby Gourmet's System project, we will establish a systematic approach to identifying, prioritizing, and addressing risks. Regular reviews and updates to the risk register, along with the inclusion of risks in sprint planning, will foster a proactive risk management process within the agile framework. This will enable the project team to effectively mitigate potential threats and maintain project progress with a well-informed and prepared approach.

**6.9.6. Risk Monitoring**

The Agile Risk Management Plan for the Chubby Gourmet project establishes a systematic approach to monitor and manage risks throughout the project's lifecycle. The plan emphasizes the importance of continuous risk monitoring and documentation, including the identification of trigger conditions that may initiate risks.

To implement the plan effectively, the project manager will integrate high-scoring risks into the project schedule and designate a risk manager responsible for overseeing their monitoring. The risk manager will work closely with the project manager to determine the appropriate level of attention needed for each risk and provide regular updates during bi-weekly project team meetings. The risk manager will also maintain a record of the identified trigger conditions for each risk.

Ensuring awareness of the identified risks and their potential impact, the project manager will communicate this information to the entire project team. The team members will be encouraged to promptly notify the risk manager of any new risks or changes to existing risks they observe. The risk manager will then assess and prioritize these new risks accordingly.

During the weekly team meetings, the risk manager will report on the status of identified risks, any newly identified risks, and the effectiveness of the implemented mitigation plans. Collaboratively, the project team and the risk manager will review and make necessary adjustments to the risk management plan based on the evolving project circumstances.

In summary, the Chubby Gourmet project team will adopt an agile risk management methodology, focusing on continuous improvement and adaptability. The effectiveness of the risk management plan will be regularly evaluated and modified as required, ensuring the project's objectives are achieved while maintaining the desired quality standards.

**6.9.7. Risk Mitigation and Avoidance**

To effectively mitigate and avoid potential risks in the Chubby Gourmet project, the project team will develop a risk management plan that prioritizes each identified risk. Strategies will be implemented to address probable delays, including creating backup plans, allocating additional resources, or modifying project timelines. Continuous assessment of the mitigation techniques will be conducted in collaboration with stakeholders to ensure their effectiveness.

The following key considerations and options will be employed by the project manager for risk mitigation and avoidance:

* Resource Allocation: The project manager will ensure that the project team has the necessary resources, such as skills, expertise, knowledge, tools, and equipment, to successfully complete the project within the defined budget and timeline.
* Risk Assessment: The project team will conduct a comprehensive risk assessment early in the project to identify and analyze potential risks thoroughly. Prompt actions will be taken to address and mitigate these risks.
* Contingency Planning: Backup plans and contingencies will be developed to be prepared for potential risks. The project manager will oversee the development, testing, and confirmation of these contingency plans for each identified risk.
* Communication: Clear and open communication channels will be promoted by the project manager to minimize risks and prevent misunderstandings among the project team, clients, and stakeholders.
* Agile Approach: The project team will adopt an Agile methodology, enabling ongoing risk management and providing flexibility and responsiveness to address changes. The project manager will ensure adherence to the Agile principles throughout the project.
* Change Management: A clear change management process will be established to handle unexpected changes. The project team will document, communicate, and obtain approval from relevant stakeholders for any changes, effectively managing and preventing potential risks.

By implementing these risk mitigation and avoidance strategies, the Chubby Gourmet project team aims to proactively manage and address potential risks, ensuring the successful completion of the project within the defined objectives and quality standards.

**6.9.8. Risk Register**

Risk Register, is an essential document that will be regularly updated throughout the Chubby Gourmet's System project, will encompass a comprehensive description of each risk, including its likelihood, potential impacts, and any mitigation measures undertaken. To ensure its alignment with the project's current status, the risk register will undergo periodic reviews and updates. All stakeholders will have access to the centralized risk register, which will be stored in a designated location.

This risk management approach, characterized by early and frequent risk identification, collaborative risk management, and continuous risk monitoring, aligns well with the principles of Agile methodology. By anticipating and addressing potential risks, the Chubby Gourmet's System project team can mitigate their impacts and enhance the project's likelihood of success. Moreover, to facilitate efficient risk management, the project team will employ a cloud-based project management tool such as Jira, Asana, or Trello to maintain the risk register as a shared document. This tool will enable tracking and prioritization of risks, assignment of responsibilities, and monitoring of progress in risk mitigation efforts.

The following criteria will be used for the risk register:

* Risk ID - each risk will be assigned a unique identifier.
* Risk Description - there will be a clear and concise description of the risk event.
* Risk Category - will classify risks into technical, organizational, or legal categories.
* Risk Owner - will be responsible for monitoring and managing each risk.
* Probability - likelihood of a risk occurring is assessed using a scale of 1 to 5, with 1 indicating the lowest likelihood and 5 indicating the highest.
* Impact - the risk's potential impact on the project is rated on a scale of 1 to 5, with 1 indicating the least significant impact and 5 indicating the most significant impact.
* Risk Score - the probability and impact scores are multiplied to determine the overall risk score.
* Mitigation Strategy - outlines the specific measures to be taken to mitigate the risk.
* Status - risk's current status, whether it is open, in progress, or closed, is also documented.
* Target Resolution Date - anticipated date for risk resolution to be resolved.

**Risk Register:**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Risk ID** | **Risk Rank** | **Risk** | **Description** | **Category** | **Destination/  Owner** | **Probability** | **Impact** | **Status** |
| RID 001 | 1 | Scope Creep | Scope creep refers to the uncontrolled expansion or addition of features, requirements, or objectives of a project. | Project | Project Manager | Medium | High | In progress |
| RID 002 | 2 | Resource  Constraints | Insufficient or misallocation of resources impacting project development. | Resource | Project  Manager | High | High | In   progress |
| RID 003 | 3 | Technical Challenges | Complex technical components and dependencies posing challenges to project development. | Technical | Development Team | High | High | In   progress |
| RID 004 | 4 | Lack of Stakeholder Involvement | Inadequate involvement or engagement from project stakeholders leading to misalignment and misunderstandings. | Communication | Project Manager | Medium | Medium | In  progress |
| RID 005 | 5 | Unrealistic Timeframes and Deadlines | Setting overly aggressive or unrealistic timeframes and deadlines causing compromised quality and increased errors. | Project | Project Manager | High | High | In  progress |
| RID 006 | 6 | Inadequate Resource Allocation | Insufficient allocation of resources, including personnel, budget, and technology, leading to delays and compromised quality. | Resource | Project  Manager | Meduim | High | In  progress |
| RID 007 | 7 | Lack of Project Management and Planning | Inadequate project management practices, such as poor planning and communication, resulting in project failure. | Project | Project  Manager | Meduim | High | In  progress |
| RID 008 | 8 | Technical Challenges and Dependencies | Complex technical requirements, external dependencies, and technological limitations causing delays and increased costs. | Technical | Techinical Lead | High | High | In  progress |
| RID 009 | 9 | Inadequate Quality Assurance and Testing | Insufficient testing and quality assurance practices leading to undetected defects and poor user experience. | Quality | QA Team | Medium | High | In  progress |
| RID 010 | 10 | Communication and Collaboration Challenges | Ineffective communication and collaboration among team members, stakeholders, or vendors causing delays and conflicts. | Communication | Project  Manager | Medium | Medium | In  progress |
| RID 011 | 11 | Vendor or Supplier Risks | Risks associated with external vendors or suppliers, such as delivery delays, quality issues, or contractual disputes. | Vendor | Project  Manager | Medium | High | In  progress |
| RID 012 | 12 | External Factors and Dependencies | Risks arising from external factors like regulatory changes, market conditions, natural disasters, or geopolitical events. | External | Project  Manager | Low | High | In  progress |