Risk Management Plan

BREGGHAN POINT OF SALE SYSTEM

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Risk Management Plan

1.1 Introduction

Any store that wishes to monitor transactions and keep track of sales information needs a point of sale (POS) system. However, there are always potential hazards that must be recognized and addressed to guarantee project success with any technical endeavor. A risk management plan can help with that.

In a risk management plan, hazards that might occur during a project are listed along with how they will be avoided or reduced and what steps will be taken if they happen. Risks for a POS project could include difficulties with user uptake, security lapses, unforeseen costs, and delays in implementation.

To further develop a risk management plan for a Point-of-Sale System, the following information should be considered:

- Identifying and Assessing Risks: The Point-of-Sale System's development, implementation, and operation may be subject to hazards, which the project team should identify. Technical problems, vendor dependence, regulatory compliance, cybersecurity, and human factors are just a few of the many potential sources of risk. Risks should be identified and then evaluated for both chance of occurrence and potential effects 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, risk transfer through insurance, 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.

- 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.

The Point-of-Sale System project team can guarantee the project is effectively finished, achieving all objectives while avoiding potential risks by considering these extra elements in a risk management plan.

1.2 Top Three Risks

The project's top three risks are:

1. Failures of hardware or software: The failure of hardware or software components is one of the biggest risks in a POS project. This may lead to a loss of sales, and system downtime. The project team should choose the best hardware and software to carry out thorough testing and quality assurance procedures and create backup plans in case of hardware or software failures to reduce this risk.

2. Unexpected costs: POS projects can be expensive, and unexpected costs can easily send the project off course. The project team should do a thorough cost analysis at the project's start and create a comprehensive budget to reduce this risk. Contingency plans should also be created for unforeseen costs, and the project team should keep a careful eye on costs throughout the project.

3. Human Error: Although human error is a known risk factor, it is also a characteristic of human nature and cannot be completely avoided. Through training, process enhancements, automation, and the implementation of the project team frequently concentrates on reducing human error.

1.3 Risk Management Approach

This document provides a thorough overview of the various risks and vulnerabilities related to POS systems and presents a methodical methodology to effectively reduce and manage these risks.

Here is the step-by-step approach to manage the risks of a POS system.

1. Identify Risks: The project team will identify the project-related risks through reviewing of related software/projects and brainstorming. Steps like gathering information, brainstorming, and analyzing are a great procedure for identifying the risks.

2. Assess Risks: after identifying risks, risk assessment is a process that involves evaluating the potential risk of the Point of Sale (POS) system. This is where ranking comes in each risk is grouped by rank.

3. Vulnerability Analysis: This is where the examination of the identified risks happens. Including the hardware, software, database etc. The analysis helps the group to understand the potential weakness of the project.

4. Risk Monitoring: The Point of Sale (POS) system's risk management method includes risk monitoring as a crucial step. This procedure entails recording, evaluating, and reviewing identified risks systematically to ensure they are effectively managed over their lifespan. To protect the security, stability, and compliance of the POS system, risk monitoring aims to offer continual oversight and allow prompt reaction and mitigation steps.

5. Risk Communication: A critical component of the Point of Sale (POS) system's risk management procedure is risk communication. To promote a shared understanding and support well-informed decision-making, this process entails the timely and efficient exchange of information concerning recognized risks amongst stakeholders. Risk communication is to increase the overall robustness of the POS system, encourage openness, and make proactive risk management possible.

1.4 Risk Identification

It is crucial to consider a variety of factors that can affect the security, functionality, and data integrity of a Point of Sale (POS) system when detecting hazards. Listed below are the list of common risks to consider:

- Unauthorized Access
- Hardware Failures
- Software Failures
- Power Outages
- Network Failure

In the entire risk management framework for any project, including the Point of Sale (POS) system, the process of risk identification is of the highest priority. It entails methodically identifying and cataloging any hazards that can negatively affect the security, effectiveness, and operation of the system.

1.5 Risk Qualification and Prioritization

The probability of risks happening and their impact on the project is described below:

- High: Risks with a high probability of occurring and a significant impact on the project. These risks require immediate attention, and we need to develop mitigation strategies for them.

- Medium: Risks with a medium probability of occurring and a moderate impact on the project. These risks should be closely monitored, and mitigation strategies should be developed in case they occur.

- Low: Risks with a low probability of occurring and a minor impact on the project. These risks can be monitored periodically, and mitigation strategies can be developed in case they occur.

		Probability		
		1	2	3
Impact	1	Low	Low	Medium
	2	Low	Medium	High
	3	Medium	High	High

The practice of rating detected hazards according to their importance and potential impact on the Point of Sale (POS) system is known as risk prioritization. To establish the order in which risks should be handled and mitigated, it entails evaluating and allocating priority levels to each risk. Risk prioritization is to properly allocate resources, prioritize the most important risks, and reduce any potential negative effects.

1.6 Risk Monitoring

The Risk Management Plan of the Bregghan Point of Sale System provides framework for monitoring risks throughout the project. It is a requirement to continuously monitor risks during the project's lifespan.

For a project to be executed successfully and to reduce any risks that could surface during its lifespan, the project manager's involvement in managing risk monitoring is essential. Working closely with the project team and stakeholders to retain visibility and control over hazards, the project manager adopts a proactive strategy to discover, analyze, and monitor risks.

1.7 Risk Mitigation and Avoidance

The method of managing risks for the Point of Sale (POS) system focuses on risk reduction and avoidance. These tactics are designed to lessen the possibility and effects of recognized risks on the system's operations, compliance, and security. Organizations may proactively safeguard the integrity and dependability of the POS system by putting into place efficient risk reduction and avoidance strategies.

The project team should identify the risks with the highest possibility and develop plans to avoid them. The following are the key points or options available to the project manager:

- Risk Mitigation: carry out a thorough analysis to comprehend the nature, consequences, and likelihood of detected hazards. This assessment serves as a basis for creating specialized mitigating measures.

- Risk Assessment: after identifying risks, risk assessment is a process that involves evaluating the potential risk of the Point of Sale (POS) system. This is where ranking comes in each risk is grouped by rank.

- Contingency Planning: A crucial step in the risk management procedure for the Point of Sale (POS) system is contingency planning. To manage and lessen the effects of prospective risks and disruptive occurrences, it entails developing and documenting a set of specified actions, processes, and strategies. By limiting downtime and any negative effects in the case of unforeseen occurrences, contingency planning aims to maintain the POS system's resilience and continuity.

- Communication: A key component in the Point of Sale (POS) system's risk reduction process is effective communication. It is essential for ensuring that pertinent stakeholders are aware of, involved with, and supportive of the plans and actions taken to reduce risk. To improve information sharing, encourage cooperation, and advance a common knowledge of the risks and mitigation actions inside the company, communication related to risk mitigation serves these purposes.

- Agile Approach: Risk management may be done in a flexible and quick manner by using the Agile methodology. The team's use of the Agile approach, which permits

continual risk management and the capacity for change, must be ensured by the project manager.

- Change Management: Risk management may be done in a flexible and quick manner by using the Agile methodology. The team's use of the Agile approach, which permits continual risk management and the capacity for change, must be ensured by the project manager.

1.8 Risk Register

A risk register is a thorough record that systematically captures and documents all identified risks in a project or organization. It acts as a central storage of vital details for each risk, such as its description, potential consequences, likelihood, status, and assigned responsibilities. The risk register aids in streamlining risk management by offering a consolidated overview of the risks, facilitating prioritization, monitoring, and the implementation of suitable measures to address and mitigate potential hazards.

The following criteria will be used for the risk register:

- Risk ID: Every risk will receive an individual identification number.
- Risk Description: Thorough clarification of the possible adverse outcomes or effects linked to the risk.
- Risk Category: Identification of broad themes or key areas of concern associated with the risks.
- Risk Owner: The task of monitoring and managing each risk will be assigned to a responsible individual or team.
- Probability: Evaluation of the likelihood or frequency at which the risk is expected to occur.
- Impact: Assessment of the potential outcomes or ramifications that could arise from a risky event.
- Status: Current state or condition of the risk

Risk ID	Risk Rank	Risk	Description	Category	Destination/Owner	Probability	Impact	Status
1	1	Hardware Failure	Hardwares like barcode scanner, printer may not work	Technology	System Developer	Medium	High	In Progress
2	1	Software Failure	There is a risk of software failure refers to potential malfunction in the system that could lead to lose track of sales/inventory	Operational Risk	System Developer	Low	High	In Progress
3	1	Potential Departure of Team Member	There is a risk that a team member may leave the project.	Human Resource	Project Manager	Low	High	In Progress
4	1	Limited Resources	There is risk of insufficient resources that could affect the completion of the project	Resource Allocation	Project Team	Medium	High	In Progress
5	2	Human Error	There might be a risk of mistakes made by the project developers which can affect the project's completion.	Workplace	User	Medium	High	In Progress
6	2	Technological Changes:	There is a risk that there might be some changes in technology or the industry	Operational Risk	System Developer	Low	Medium	In Progress

			standards that may result in additional work or resources for the project.					
7	3	Dependencies on other parties	The project may depend on the performance and capabilities of external parties that can lead to other issues like backlogs.	Partnership Risk	Project Manager	Low	High	In Progress