# Risk Management Plan

# RFID Implementation for Fresh Foods

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*Approval of the Risk Management Plan indicates an understanding of the purpose and content described in this deliverable. By signing this deliverable, each individual agrees work should be initiated on this project and necessary resources should be committed as described herein.*

| Approver Name | Title | Signature | Date |
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# Introduction

This document is the Risk Management Plan for the RFID Implementation of Fresh Foods project. It contains the risks, how they will be identified, the impact, probability, and cost of those risks. It will also show how those costs will be mitigated and how they will be monitored and controlled. Certain personnel will be in charge of each of these risks and identified in this document. The purpose of this plan is to increase the positive risks and decrease the chance of negative risk. We understand that not all risks can be identified and processes have also been put into place to deal with those unknown risks.

# Risk Management Planning

Throughout the RFID implementation project risks must be identified, assessed and eliminated when possible. To ensure the success of the project the following process has been laid out for proper risk management planning.

## Risk Management Tactic

Hopefully a majority of risk identification will occur during the planning phase. Methods will include information gathering, brainstorming, detailed stakeholder analysis and the creation of a risk register. If unforeseen risks are identified and other methods of analysis are required this plan can be adapted as necessary.

## Roles and Responsibilities

i. Project Manager- Is responsible for managing the risks of the project. The PM will assign various team leads as necessary to complete this task.

ii. Project Sponsor- Is responsible for ensure funding and staff resources are made available as required for the project.

iii. Stakeholders- Are responsible for mitigated the risks within their area of the project. If unforeseen project are identified the project manager should be notified immediately.

Budget

Labor and other costs associated with risk management have been included in the appropriate line items in the project budget. Therefore no costs an associated strictly with risk management.

Timing

Risks will be assessed during the planning phase of the project and a schedule will be established for each identified risk. This schedule will allow the project manager to ensure the proper actions are taken to mitigate the risk. Risks will be reevaluated during launch of each project phase and major project milestone and schedule updated as appropriate.

## Risk Breakdown Structure

The Risk Breakdown Structure in Figure 1 categorizes the different risks of the project.

*Figure 1: Risk Breakdown Structure*
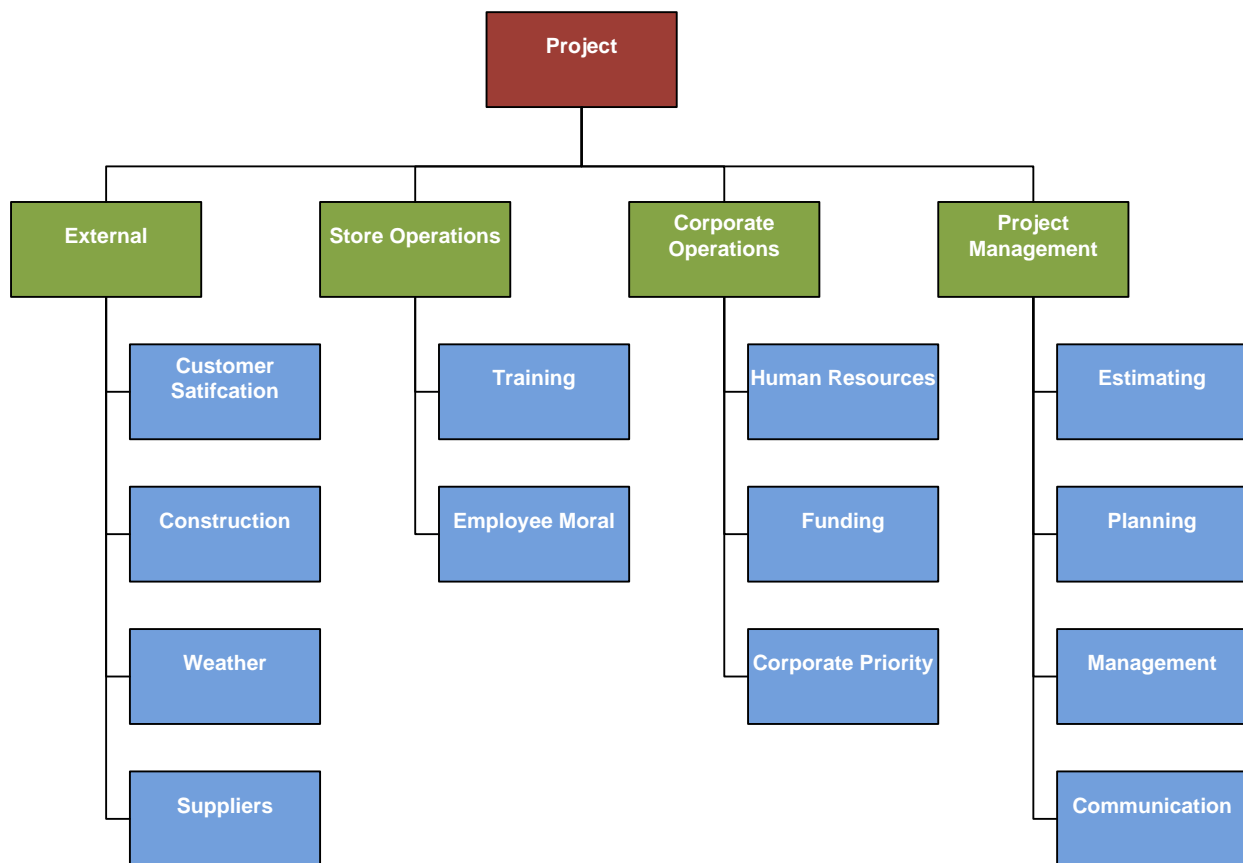
# Risk Identification

Techniques

      iv.   Brainstorming – team and subject matter experts generate the list of risks

| Category | Risks |
|---|---|
| Customers | 1. Quality of customer service may decrease due to the decrease in staff<br>2. Customers will revolt if they are dissatisfied with the implementation of RFID<br>3. Training customers<br>4. Customers have increased confusion on tagging produce items with RFID label |
| Fraud | 5. Managing fraud based on scale and RFID readers consistency in accuracy<br>6. Hackers can take advantage of this new technology by hacking into the system or making RFID tags of their own<br>7. Customers can forget to tag produce items |
| Employees | 8. Employee strike<br>9. Employee adaptability<br>10. Employees loss in trust<br>11. Human Resource productivity to meet expectations |
| Pricing | 12. Complication with pricing the produce products with lack of supervision of RFID tag makers<br>13. Revenue can be at risk if there is inconsistency with product pricing<br>14. RFID may has complications with scanners and may not scan all items consistently which will affect inventory and revenue |
| Inventory Management | 15. Stock and inventory control<br>16.  Supplies for implementing RFID not delivered on time<br>17. Lack of knowledge for RFID inventory process |
| Technical issues | 18. RFID technical issues<br>19. RFID limitations<br>20. Lack of technical knowledge for RFID; when RFID system goes down and orders cannot be fulfilled<br>21. Design standards and processes |

      v.   SWOT – Strengths, Weaknesses, Opportunities & Threats are generated by the project team.

# Qualitative Risk Analysis
## a.Probability & Impact Matrix

Each of the identified risks are distributed based on risk probability and how they would impact the business; either negative or positive.

| Risk Probability | Threats | | | | | Opportunities | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 90% | - | - | - | - | - | - | - | - | - | - |
| 70% | - | - | - | - | - | - | - | 16 | - | - |
| 50% | 20 | 19 | - | 1 | | - | 18 | 14 | 9 | - |
| 30% | 11 | 2 | 7 | - | 17 | - | 21 | 3 | 15 | - |
| 10% | 6 | 8 | 12 | 10 | 13 | - | 5 | - | - | - |
| | 1-2 | 3-4 | 5-6 | 7-8 | 9-10 | 1-2 | 3-4 | 5-6 | 7-8 | 9-10 |
| | Negative Impact | | | | | Positive Impact | | | | |

## b. Risk relative ranking per category by team

The significance and the likelihood of the risk categories are scored. When these two are added together, the result will be the Risk score of each of these risk categories. By looking at the scores, one could find out the impact and the probability of the risks that are identified as shown in Figure

| Category | Significance | Likelihood | Risk Score | Key Risk? |
|---|---|---|---|---|
| Customers | 4 | 3 | 7 | Yes |
| Fraud | 3 | 2 | 5 | Yes |

| SWOT | |
|---|---|
| Strengths | Leader in technology |
| | Improve process flow |
| | Customer satisfaction by adding value to service |
| Weaknesses | RFID Technical Support Knowledge |
| | RFID tagging for produce |
| | Major inventory fluctuations |
| | Internal fraud |
| | Damage reputation if RFID is not effective |
| Opportunity | First to implement RFID in grocery stores |
| | Eliminate barcodes |
| | Open new market segments |
| Threats | External fraud |
| | Competitors entering the RFID market |

| | | | | |
|---|---|---|---|---|
| Employees | 3 | 2 | 5 | Yes |
| Pricing | 4 | 2 | 6 | Yes |
| Inventory Management | 3 | 3 | 6 | Yes |
| Technical issues | 3 | 1 | 4 | Yes |

## Figure 2: Risk, Impact, and Probability Chart
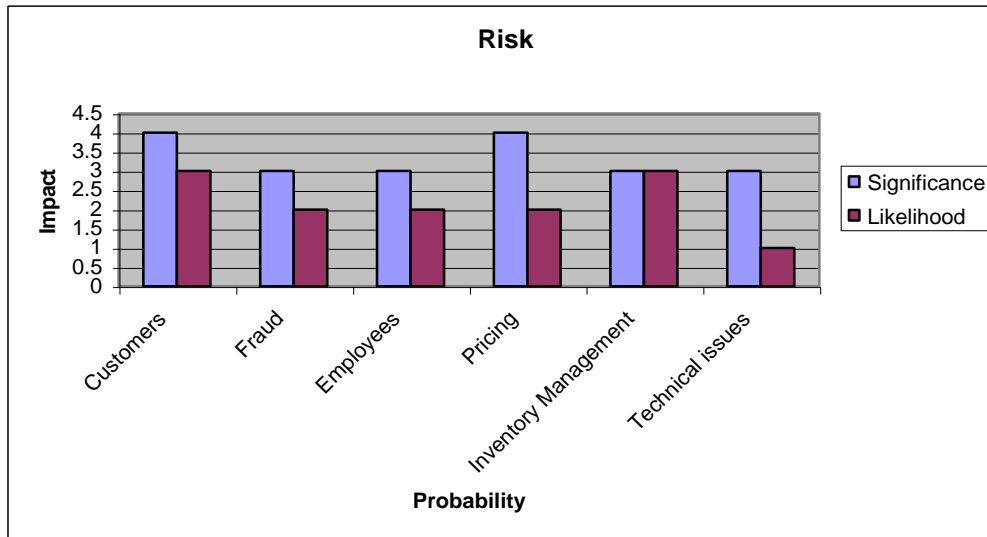


The inputs into this process include the risk register, risk management plan, cost management plan, schedule management plan and the organizational process assets.

      i.   Interviews will be conducted of the project team, Fresh Foods employees, suppliers, and other project managers that have been involved in similar projects to quantify the risks identified.

b.  Cost

The highest cost for the risk can be expected from the customers that do not want to use the system and the problems that may arise from incorrect use of the RFID technology by the Fresh Foods employees.

## Contingency Planning

Cost

      i.   System will be assessed for accounting changes and new accounting processes prior to implementation.

     ii.   Costs will be fixed in the system and validated during pilot program to ensure cost consistency.

Schedule

    iii.   Employees will be scheduled to capacity to ensure the new system is complementary to their employment.

    iv.    Suppliers will be contacted prior to purchasing equipment so there will be sufficient lead-time for orders.

b.  Scope

    i.    Employees will be involved at beginning of project.

    ii.    Customers will be introduced to the new technology before system is implemented so they will both look forward to using the system and be familiar with its operation.

## *Risk Monitoring and Control*

Risk Register Updates

    i.    Project risk reassessments will be made on a regular basis.

    ii.    Amount and detail of risk reassessment will be dependent on project advancement.

Risk Audits

    iii.    The project manager will schedule risk audits regularly.

    iv.    Audits will examine risk response effectiveness associated with risks and their root causes.

Status Meetings

    v.    Risk management will become an integral part of project status meetings in expectation that more people will identify risks and opportunities.

# Risk Register

| Number | Rank | Risk | Description | Risk Category | Root Cause | Triggers | Probability | Impact | Risk Score | Risk Owner | Potential Responses |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5 | Customers | Quality of customer service may decrease due to the decrease in staff | All | Employee layoffs | Decrease in staff | Medium | Serious | 2.5 | Human Resource Manager | Reallocate employees to handle customer services |
| 2 | 14 | Customers | Customers will not shop at Fresh Foods if they are dissatisfied with the RFID implementation | All | RFID Readers | Change in checkout style | Low | Moderate | 0.9 | Assistant Project Manager | Consider customer suggestions in making system more acceptable |
| 3 | 10 | Customers | Training customers | Scope | New checkout system | Most customers have never used RFID technology | Low | Serious | 1.5 | Assistant Project Manager | Position help attendants at RFID checkout aisles |
| 4 | 2 | Customers | Customers have increased confusion on tagging produce items with RFID label | All | New system | Customers have never used RFID tagging | High | Serious | 3.5 | Assistant Project Manager | Position help attendants in produce department |
| 5 | 19 | Fraud | Managing fraud based on scale and RFID readers' consistency in accuracy | Cost | Unethical customers | Customers falsley weighing items | Very Low | Moderate | 0.3 | Project Manager - RFID | Define scale validation |
| 6 | 21 | Fraud | Hacking into RFID system or creating fake RFID tags | Cost | New technology | Ineffective system security | Very Low | Moderate | 0.2 | Project Manager - RFID | Secure RFID system for authorized personnel |
| 7 | 11 | Fraud | Customers can forget to tag produce items | All | New system | Customers forgetting tags | Low | Serious | 1.2 | Assistant Project Manager | Position help attendants in produce department |
| 8 | 20 | Employees | Employee strike | All | Employee layoffs | Implementation of new system | Very Low | Moderate | 0.3 | Human Resource Manager | Hold open discussions including employee input to solve issues |
| 9 | 1 | Employees | Employee adaptability | Scope | New system | Decrease in staff | Medium | Very Serious | 3.5 | Human Resource Manager | Advise employees regarding new system employee requirements |
| 10 | 17 | Employees | Employees loss in trust | All | Employee layoffs | Implementation of new system | Very Low | Serious | 0.5 | Human Resource Manager | Be transparent with employees regarding new expectations |
| 11 | 16 | Employees | Human Resource productivity to meet expectations | Schedule | New system | Implementation of new system | Low | Moderate | 0.6 | Human Resource Manager | Reward employee effort |
| 12 | 18 | Pricing | Complication with pricing the produce with lack of supervision of RFID tag makers | Cost | Use of new tagging process | Tagging produce | Very Low | Serious | 0.4 | Project Manager - Product Labeling Team | Have trainers work with taggers |
| 13 | 15 | Pricing | Revenue can be at risk if there is inconsistency with product pricing | Cost | Use of new accounting software process | Pricing merchandise | Very Low | Very Serious | 0.7 | Project Manager - RFID Software | Have accountants run checks on pricing before and after RFID software |
| 14 | 4 | Pricing | RFID scanner complications causing inconsistency in accounting | Cost | New system | Scanning merchandise | Medium | Serious | 2.5 | Project Manager - RFID Hardware | Run tests on newly installed hardware |
| 15 | 6 | Inventory Management | Stock and inventory control | All | New system | Internal problems with accounting | Medium | Very Serious | 2.1 | Accounting Manager | Assess new system for reliability |
| 16 | 3 | Inventory Management | Supplies for implementing RFID not delivered | Schedule | Use of new product | Supplier not informed or experiencing delivery problems | High | Serious | 3.5 | Supply Chain Manager | Schedule purchasing according to product availability and with supplier's schedule |
| 17 | 7 | Inventory Management | Lack of knowledge for RFID inventory process | Scope | New system | Complications processing inventory | Medium | Very Serious | 2.1 | Project Manager - RFID | Train employees in new inventory process |
| 18 | 8 | Technical Issues | RFID technical issues | All | New system | Technology new to employees | Medium | Moderate | 1.5 | Engineer - RFID | Make changes/fixes to RFID system as necessary prior to implementation |
| 19 | 9 | Technical Issues | RFID limitations | All | New system | Limited technology | Medium | Moderate | 1.5 | System Analyst 1 | Define limitations of system prior to implementation |
| 20 | 12 | Technical Issues | Lack of technical knowledge of RFID; when RFID system goes down and orders cannot be filled | All | Lack of product support | RFID system failure | Medium | Moderate | 1 | Lead Systems Analyst | Ensure all support mechanisms are in place and backup system is operable |
| 21 | 13 | Technical Issues | Design standards and practices | All | New technology | RFID technology is used as a pilot process for other stores | Medium | Moderate | 0.9 | Program Manager | All team members are working together and quality assurance is in place |