Project Scope

RFID Implementation for Fresh Foods

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Approval of the Project Scope 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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Executive Summary

RFID implementation is a project that is entails the introduction of a more efficient way of checking out groceries. The project is going to be accomplished by investing in RFID tags and readers and designing the installation of the RFID readers, scales for weighing groceries and new job descriptions for cashiers and baggers. The deliverables of this project will include how the new checkout system increases efficiency to satisfy customers need for faster checkout and increase profit margins by 20% by reducing time cashiers and baggers are busy scanning groceries.

Project Justification

Our purpose in initiating the project to tag items in Fresh Foods Market with RFID transponders is to improve the rate of checkout time by enabling an RFID transceiver to checkout entire contents of the customers' shopping cart in one instance. This will reduce costs by limiting the number of checkout people and baggers. Increase quality of inventory control by reducing the number of database transactions to one, thereby limiting data error. Reduce clerical costs by reducing the number of transactions. Increase productivity by allowing speedier access through checkout so more customers can checkout more quickly. Improve customers' access to open checkout lanes, thereby improving convenience, customer satisfaction, and retention, and attracting more customers. Fresh Foods out-of-stock merchandise will be reduced.

Budget Estimate

	Estimated Cost	Estimated Cost +30%
RFID Tags (passive) @ .29 - .38 * 100,000	$ 38,000	$ 49,400
RFID Readers		28,535
Motorola Symbol XR450 @ $ 2,195 * 10	21,950	
Printers (writes to RFID chips) @ $ 5,000 @ 3	15,000	19,500
Middleware (approx.)	5,000	6,500
Infrastructure Improvements (aisles, etc.)	145,000	188,500
Labor – Internal - Implementation	100,000	130,000
Labor – External - Consulting	100,000	130,000
Labor – External - Training	60,000	78,000
TOTAL ROUGH BUDGET	**$ 484,950**	**$ 630,435**

Project Characteristics and Requirements

1. Raise sales goals 20% by next year
2. Must acquire 6 RFID readers for the 6 check out lines
3. Must acquire 4 RFID label scales for bags in the produce section

4. Must develop a 100 shopping cart with ready bags functionality

5. Shopping cart must hold 8 full shopping ready bags

6. Contract a team to design shopping carts

7. Must develop training documents for customers and employees

8. RFID technology must increase Fresh Foods rewards card growth over the next 5 years by creating a larger customer base by 50%

9. The company we buy RFID from should provide technical service for a year

10. RFID readers and scales must detect check out fraud by 98%

11. Must acquire self payment systems

12. Inventory process must be modify to match the RFID tag implementation

13. Must include risk assessment

Project Management - Related Deliverables

1. Charter

2. Team Agreement

3. Business Case

4. Define Scope Statement

5. Stakeholders Status Report

6. Schedule of meetings

7. Daily task lists and progress reports

8. Work breakdown structure

9. Financial Reports

10. Risk Assessment

11. Final Project Report

12. Lessons Learned Report

Product-related Deliverables

1. Redesigned checkout area
   o Cart scales
   o Self payment

2. Ready-Bags shopping cart

3. New/updates job descriptions
   o Auto checkout customer service agent (new)
   o Cart Attendant (updated)
   o Inventory clerks (update)

         o   Floor customer service attendants

4. Ready bag scale kiosks

5. Redesigned rewards card by adding RFID tag and payment registration

6. Process for affixing tags to products

7. Process flowcharts

8. Process on how to maintain RFID readers and tag makers

9. Check out systems maintenance plan

Project Success and Acceptance Criteria

<u>Short Term</u>

- 75% of customers can complete their shopping trip without needing assistance during checkout.

- 20% reduction in staff levels

<u>Long Term</u>

- Increase customer loyalty by 25%

- Increase new customers by 15%

- Increase over all sales by 20%

- Decrease check out process time by 90%

- Reducing inventory management and accounting costs by 10%

Schedule Objectives & Targets

Starting January 30, 2010:

Tasks	# of Days	+ 30 %
Project Charter Approved	2	2.6
Project Plan Completed	10	13
Project Plan Approved	1	1.3
Project Execution - Research	90	117
Project Execution – Implementation	120	156
Project Closed Out	5	6.5
Total Number of Days	228	296

                    (Best)   (Worst)

Ending   September 15, 2010 – November 22, 2010

Project Scope Description

The business scope will consist of policies, procedures and templates that will allow Fresh Foods to successfully develop a better way to check out customers. The project will need 3 major components 6 RFID, 4 RFID tag makers, 6 scales and 60 shopping carts to be successful. Each component must be designed carefully allowing Fresh Foods to stay within

budget and allow Fresh Foods to please their shareholders. Having each of these components should allow Fresh Foods to sales grow by 20% in the 1st year and 30% in the next 5 years. Expanding their market and having returning customers come back to the store more frequently. The business scope will also consist of reducing labor by 15%. The need for cashiers and baggers shall decrease and customer service shall increase by 5% which will reduce labor by about 10%.

Project Boundaries

In scope

- Process flows for customer and employees
- Redesign of front of store
- Redesign of weighted product sales
- Stocking procedures
- Surveillance/anti-theft procedures

Out of scope

- General store operations
- Shopping cart production
- Self payment system production
- Any process not involved with check out and inventory

Project Constraints

- Time
- Budget
- Customer willingness for new system
- Employee unions?
- RFID technology
- Downsizing employees

Project Assumptions

- Project team members have a basic understanding of grocery store operations
- General store operations procedures already exist
- Customers will use new technology
  - If they don't offer some type of reward for auto checkout
- RFID technology is mature enough to make this technically feasible
- RFID project requires a well-managed database since all the products offered in the supermarket are going to be in the system
- Project assumes that pricing and product information for each product should be legitimate because a single

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mistake in price or product information can lead to a loss in the supermarket's revenue

Initial Project Organization

Team members, sponsor and stakeholders are listed in the project charter.

Initial Risks

1. Complication with pricing the produce products

2. Quality of customer service, since there is less human

3. Stock and inventory control can be at risk if there is inconsistency in tagging the products

4. Managing fraud based on scale and RFID readers consistency in accuracy

5. Revenue can be at risk if there is inconsistency with product pricing

6. Hackers can take advantage of this new technology by hacking into the system or making   RFID tags of their own

7. Customer revolt

8. Employee strike

9. Training customers

10. Who to contact when RFID issues arise

Project Configuration Management Requirements & Scope Control

These details will be covered in the Scope Management Plan.

Work Breakdown Structure

1. **RFID Project**

   1.1. Initiation

      1.1.1. Identify value added to company

         1.1.1.1.   Accounting

         1.1.1.2.   Purchasing

         1.1.1.3.   Shipping/Receiving

         1.1.1.4.   Cashier/Bagger Labor

      1.1.2. Survey Customers

         1.1.2.1.   Formal questionnaire

         1.1.2.2.   Informal discussion

      1.1.3. Evaluate Feedback

         1.1.3.1.   Current value vs. expected value

         1.1.3.2.   Customer responses

        1.1.3.2.1.   Questionnaire

        1.1.3.2.2.   Discussion feedback

1.2. Project Execution - Research

1.2.1. Measure as-is system

    1.2.1.1.   Trial shopping trip

        1.2.1.1.1.   Measure accounting process

        1.2.1.1.2.   Measure speed of trip/checkout

1.2.2. Measure RFID system

    1.2.2.1.   Trial shopping trip

        1.2.2.1.1.   Measure accounting process

        1.2.2.1.2.   Measure speed of trip/checkout

1.2.3. Weigh results

1.2.4. Compare requirements

1.2.5. Define RFID machinery

1.2.6. Define architectural redesign

    1.2.6.1.   Checkout area

    1.2.6.2.   Design shopping cart

1.2.7. Define information processes

    1.2.7.1.   Accounting

    1.2.7.2.   Purchasing

    1.2.7.3.   Shipping/receiving

1.2.8. Develop self-payment process

1.2.9. Develop pilot process

1.3. Project Execution – Implementation

1.3.1. Acquire RFID Machinery

1.3.2. Construction of aisles

    1.3.2.1.   Remove existing aisles

    1.3.2.2.   Implement RFID wiring

    1.3.2.3.   Construct RFID aisles

        1.3.2.3.1.   Install scales

        1.3.2.3.2.   Install RFID readers

1.3.3. Implement RFID software

    1.3.3.1.   General RFID scanning software

    1.3.3.2.   Accounting software

1.3.4. Enable self-payment cards

      1.3.5.Tag stock

      1.3.6.Align pilot program production crew

          1.3.6.1.   RFID training

          1.3.6.2.   RFID checkout attendants

          1.3.6.3.   Staff plan

1.4. Close out project

      1.4.1.Final project report

      1.4.2.Lessons learned report

      1.4.3.RFID general support

          1.4.3.1.   Technician

          1.4.3.2.   Manufacturer support programs

          1.4.3.3.

Work Breakdown Structure – Dictionary

Project Title: RFID Implementation for Fresh Foods

WBS Item Number: 1.1.1

WBS Item Name: Identify value added to company

Description: During the initiation phase of the project a cost/benefit analysis will be done resulting in financial data that can be used in determining whether the Fresh Foods RFID project will return a significant amount of value to the company. The Customers will be surveyed to determine the intangible benefits the company will receive from customer satisfaction. Both the tangible and intangible values will be assessed.

WBS Item Number: 1.2.6

WBS Item Name: Define architectural redesign

Description: During the research the general design of the checkout process will be determined, including the redesign of the shopping carts. This will be a collaborative effort between the outside technical consultant and architects / cart manufacturer.

WBS Item Number: 1.2.7

WBS Item Name: Define information processes

Description: Software and processes for general accounting and ordering will be determined and appropriate measures will be defined for the change to the bookkeeping system.

WBS Item Number: 1.3.2

WBS Item Name: Construction of aisles

Description: During the implementation phase, many of the existing aisles in the store will be removed and replaced

with RFID aisles, the wiring will be installed underneath.

WBS Item Number: 1.3.3

WBS Item Name: Enable self-payment cards

Description: Fresh Foods RFID self-payment card processing will be activated through bank.

WBS Item Number: 1.3.5

WBS Item Name: Align pilot program production crew

Description: Fresh Foods staff for the RFID pilot program will be trained and checkout attendants will be selected to aid customers with the new checkout process. A staff plan utilizing employees in other areas of the store will be created.

WBS Item Number: 1.4.3

WBS Item Name: RFID general support

Description: At the close of the project a file will be produced detailing all support connected with the RFID system, including the contact information for the technician that helped design the process, and all manufacturer related support options (i.e. representatives, phone numbers, etc.).