

This PROJECT is ABOUT SUPERMARKET MANAGEMENT SYSTEM AND
BASED ON C#

by

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Acknowledgment

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Abstract

The Project “supermarket” deals with the automation of supermarket and based on the sales transaction and billing of items in a supermarket. This software will help salespersons in managing the various types of Records pertaining to his/her customer. The product will help the user to work in a highly effective and efficient environment. The salespersons have been recording the customer information in the past and even in the present through their personal manual efforts. And indeed, it consumes their considerable time and energy that could be utilized in the better productive activities. Apart from that, with increasing customer Strength, the task of managing information of each individual customer is indeed a cumbersome task. There is a lot of reason for the introduction of this project. In the manual System, there are number of inefficiencies that a salesperson faces. The information retrieval is one of the foremost problems. It is very difficult to gather the overall performance reports of the customer. Large records-books have to be maintained where relevant and irrelevant information has to be stored which is very untidy and clumsy process. On the other hand, there are many inherent problems that exist in any manual system. Usually, they lack efficiency. Less efficiency has a great impact on the productivity of any human being keeping the data up-to-date. The automation deals with all such problems and tries to remove them in the best suitable fashion. The new system will cater to the need of the salespersons of any supermarket so that they can manage the system efficiently. The project “supermarket” is developed with the objective of making the system reliable, easier, fast, and more informative.

Declaration

We hereby declare that the project based on the sales transaction and billing of items in a supermarket and targeted for mainly big supermarkets and particularly aims at automation of various management procedures such as managing sales and purchases, stock details, etc of the requirements for the degree of Bachelor of Science in Computer Science and Engineering of Bangladesh University of Business and Technology (BUBT) is our own work and that it contains no material which has been accepted for the award to the candidate(s) of any other degree or diploma, except where due reference is made in the text of the project. To the best of our knowledge, it contains no materials previously published or written by any other person except where due reference is made in the project.

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Dedication

Dedicated to our parents, teachers, friends and who loved us for all their love and inspiration.

Certificate

This is to certify that S M Masfequie Rahman Swapno (18192103087), Al Ahad Sufian (18192103056) and Sazzad Rahman Nahid (18192103051), were belong to the department of Computer Science and Engineering, have completed their project based on the sales transaction and billing of items in a supermarket and targeted for mainly big supermarkets and particularly aims at automation of various management procedures such as managing sales and purchases, stock details, etc in partial fulfillment for the requirement of Bachelor of Science in Computer Science and Engineering of Bangladesh University of Business and Technology in the year 2021.

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Acronyms List

DVD = Digital Versatile Disc
RSA = Rivest–Shamir–Adlema
IT = Data Encryption Standard
USD = United State Dollar
UK = United Kingdom
IPFS = Inter Planetary File System

IoT = Internet of Things
IBM = International Business Machines Corporation
SSL = Secure Sockets Layer
AML = Anti-Money Laundering
KYC = Know Your Customer
TiM = Trust in Motion
MIT = Massachusetts Institute of Technology
ASX = Australian Securities Exchange
JPX = Japan Exchange Group
IPO = Initial Public Offering
QR = Quick Response Code
MD5 = Message-Digest Algorithm
MAC = Message Authentication Codes
TLS = Transport Layer Security
VPNs = Virtual Private Network
ECC = Elliptic Curve Cryptography
URL = Uniform Resource Locator
M2M = Machine to Machine

CPU = Central Processing Unit

GPU = Graphics Processing Unit

SPV = Simplified Payment Verification

HCL = Hindustan Computers Limited

GHZ = Gigahertz

RAD = Rapid Application Development

CAP = Curriculum Accommodation plan

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Chapter 1

Introduction

1.0.1 Introduction

The Supermarket Management System is a project that deals with supermarket automation and it includes both purchasing and selling of items. This project is designed with a goal to making the existing system more informative, reliable, fast and easier. There are many reasons for the starting of the project because in the selling of items through the manual system of salesperson faces a lot of inefficiencies. It requires handling of large record books that consist of both irrelevant and important information's thus making it difficult to find out the required information as per necessity. This is also a clumsy and untidy process that disturbs the smooth flow of work. But this system introduced by us will reduce the huge number of paper works while on the other side there are many more problems that persist in the manual system. They reduce efficiency as well as the productivity level of human. Administrative module, purchase module, employee module, sales module and billing module are some of the various modules that make up our project. The administrators consist of a unique password and names of the employees. It helps the employees to make secure login. The ids and passwords are kept secret from others. The modules of sales and purchase include all the details of selling and purchasing. In the billing module the details of payments are clearly shown. This is one of the best system that can be introduced in the super market for efficient.

management. It will also reduce the cumbersome job of finding the most accurate data from the huge log books. It also helps the management to keep efficient records of all the purchases and sales. The introduction of ID and password will further reduce the manipulation and thus providing the accurate and transparent data. This system will increase the productivity and reduce the need of manual system to a large extent.

1.0.2 The Concept of Super Market Management System

With the increasingly fierce competition, how to reduce the cost has become the supermarket's vital problem. For ordinary supermarkets, involving the management of the sources of raw materials, sales and inventory, and the good or bad management is very important to the durability of the supermarket. Generally speaking, the user's demand for procurement, sales and inventory system is universal. Supermarket management system used in the supermarket's procurement, sales and warehouse department, controlling and tracking the whole business of supermarket procurement, sales and warehouse effectively. Using the supermarket's procurement, sales and inventory management system can effectively reduce the blind procurement, reduce the costs of procurement, reasonable control inventory, increase market sensitivity, and enhance the market competitiveness of the supermarkets. Compared with the domestic and foreign large-scale supermarket, small and medium-sized supermarkets has obvious difference in the operation and management. And in order to design the management software which conforms to the small and medium-sized supermarket, we will understand some characteristic of small and medium sized supermarket management [1]. The function of management system which Small and medium-sized supermarkets need is not as comprehensive as big supermarkets and chain supermarkets, it puts forward higher requirements on concise and practical. Features of small and medium-sized supermarkets: (1) The size is relatively small, and may not have their own warehouse, inventory backlog is less; (2) The employee is less and a person might has multiple positions, and has low quality skills. So this requires a system to have perfect function of help and check, but also requires the

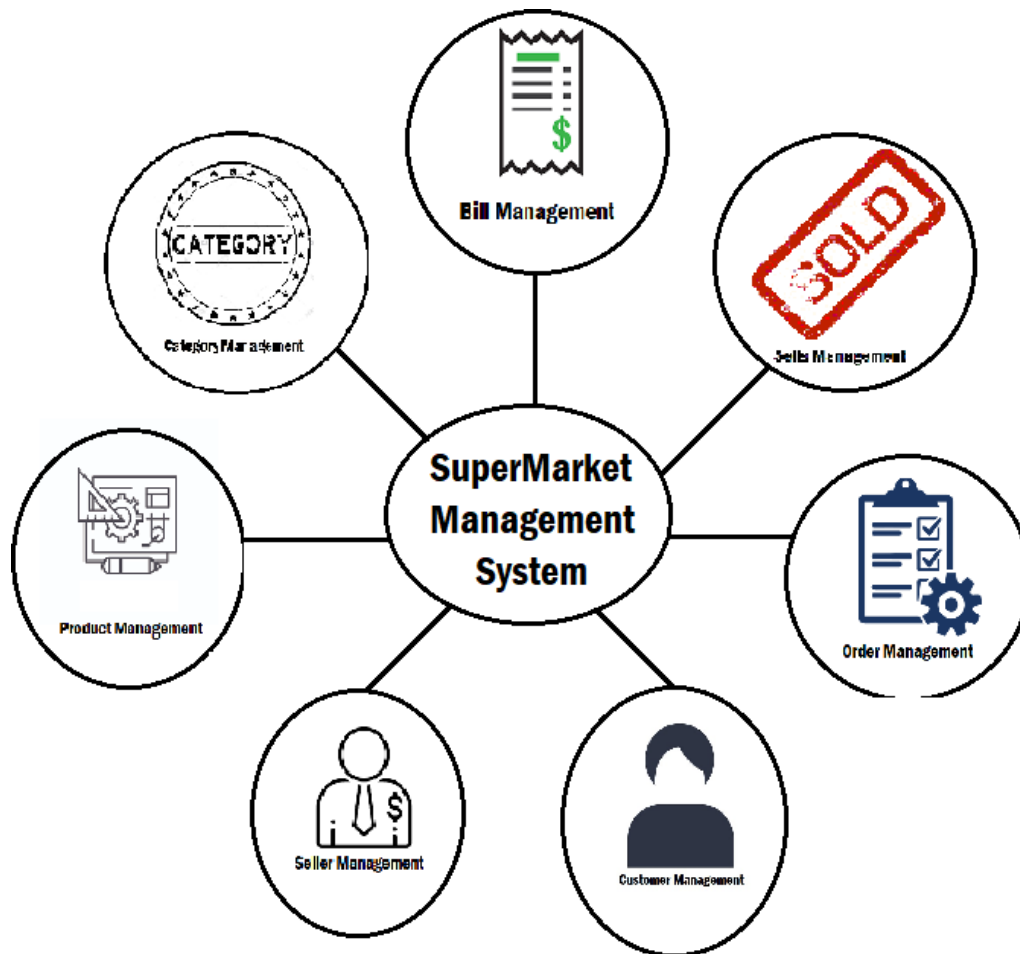


Figure 1.1: Basic Diagram of Supermarket Management System

system easy to operate, concise and clear; (3) The interval of clearing inventory is uncertain, may be a long time hasn't inventory, may be at any time.

1.0.3 Modules

This can be described a search of a set of standardized parts or independent units that can be used to construct a more complex structure, such as an item.

ADMIN: This is the administration of a business, organization.[?]

USERNAME: This is an identification used by a person with access to a computer, network, or online service[2]

PASSWORD: This is a secret word or phrase that must be used to gain admission to a place.

Product Details: Details about the products such as product name, price, category, brand etc. is stored

Credit System: certain customers are provided with credit facility. They can do the payment within a prescribed date. Details about such customers are added .And when the payment is been done, details about that is shown.[3]

Bill Generation: As the customer buys the products and comes to the billing counter, the user can enter the item name and quantity of the item the customer has purchased. The system will display all the items depending on the category whose name starts with the letter selected. He can select out of those displayed. Finally a separate bill will be generated for each customer. The total will be automatically calculated[4]

Stock Report: The products bought from the vendor will be entered here and this will be added to the stock list.[5]

Indent Report: This provides the report of the items sold for a particular month/ year and also gives the turnover of the company

Order generation: This will generate a list of items that are out of stock and has to be bought from the vendors. It will also show what item has to be bought from which dealer.

1.0.4 Introduction of Super Market System

The Supermarket Management System is a project that deals with supermarket automation and it includes both purchasing a selling of items. This project is designed with a goal to making the existing system more informative, reliable, fast and easier. There are many reasons for the starting of the project because in the selling of items through the manual system of salesperson faces a lot of inefficiencies. It requires handling of large record books that consist of both irrelevant and important information's thus making it difficult to find out the required information as per necessity. This is also a clumsy and untidy process that disturbs the smooth flow of work. But this system introduced by us will reduce the huge number of paper works while on the other side there are many more problems that persist in the manual system. They reduce efficiency as well as the productivity level of human. Administrative module, purchase module, employee module, sales module and billing module are some of the various modules that make up our project.[6]

The administrators consist of a unique password and names of the employees. It helps



Figure 1.2: Picture of a Super Market Management

the employees to make secure login. The ids and passwords are kept secret from others. The modules of sales and purchase include all the details of selling and purchasing. In the billing module the details of payments are clearly shown.

This is one of the best system that can be introduced in the supermarket for efficient management. It will also reduce the cumbersome job of finding the most accurate data from the huge log books. It also helps the management to keep efficient records of all the purchases and sales. The introduction of ID and password will further reduce the manipulation and thus providing the accurate and transparent data. This system will increase the productivity and reduce the need of manual system to a large extent. .[7]

1.0.5 Function Of This System

1.

1. This system provides list of various products
2. There are various brands information along with the additional details
3. There is online application form where customer can choose their respective product.
4. There is one important functions provided where the information about the staff can be maintained
5. There is database connectivity provided where each customer detail has been stored.

6. The system Provide functions of editing customer details.
7. Its Provide functions of editing product details.
8. Its Provide functions of editing staff details.

1.0.6 Statement of Problem

Being a Computer Technology student we had to go into the business department to learn some basic sales and supermarket management topics to increase our intellectual understanding on the project at hand it was really tasking. Building a standard Supermarket management system was not an easy task looking at the problems of existing manual system [4]

1.0.7 The factors for these difficulties are:

1. Time Consumption: Manual systems are time consuming, as the business owner must keep track of Supermarket sales on a daily basis, while updating the system manually at the end of the day
2. Poor Communication: A manual Supermarket system requires employees and managers to write down each time an item is removed from the Supermarket. If one employee forgets to mention that the last coffee product has been removed from the Supermarket, a manager expects the item to still be available for a customer during a sale. Compared with a technical Supermarket system, a manual Supermarket system does not help the communication in the workplace.
3. Physical Counts: A manual Supermarket system does not provide any number, as all numbers from the Supermarket are gained through physical Supermarket counts. One of the difficulties of running a manual Supermarket system is that physical Supermarket counts must be performed frequently to control the items in the Supermarket. This is time consuming and can cost the business money, if employees must come in to help out outside of business hours
4. Daily Purchases: Keeping track of daily purchases is another difficult controlling measure with manual Supermarket systems. A manual Supermarket system requires the employees to write down the items sold during a single work day. This can be a difficult task, as one employee may lose the list of items sold or another may forget to write down a sale.
5. Ordering Supplies: A manual Supermarket system does not update at the end of the day with updated Supermarket

1.0.8 Aim of study is

To design a Computerized Supermarket Management System to ascertain stock level of a supermarket, when to order for more goods, keep status and updates of transactions, thereby helping progress level, stock taking and managerial decisions,.

1.0.9 Scope of Study

This research work covers stock control, management and tends to correct anomalies in Supermarket business. It analyses opening of new stocks, stock updates and ability to view existing ones. It provides quick way of operation by capturing the manual process and automating them. This project is helpful to computerize the item transaction, sales activity record keeping which is a very huge task and maintaining the stock

1.1.0 Limitation of Study

Due to time and basic factors like unstable electricity, poor networks, unavailability of concrete business idea and many more this research has been limited to certain areas in supermarket management we only looked more into the supermarket inventory management area using Microsoft access and Visual basic.

1.1.1 Motivation

Most businesses focus on supply and demand chains. But supermarkets and grocery stores will always have customers (everyone has to eat) and their product is worth nothing if they don't sell it before it goes off. The needs of supermarkets are driven by two main factors: time and available income. Between 1850 and 1920 you had a bakery, a butcher, a green grocer, and dry goods. You came in with a list and they would DELIVER it to your house. The depression gave people more time than money so all of the above changed to self-service.

(Read the history of the Piggly wiggly if you are interested in the business ups and downs.) As women entered the workplace and found they didn't have time to stop at 4 places. They combined to form "Supermarkets".(Seven 11 started as a small market open until 11, since even supermarkets closed at 8.) Modern communication has brought back the order and delivery systems. Order online and have it delivered or pick it up. (They don't charge extra or change the prices for this service so either the food is already marked up enough to cover it or the added competitive edge is worth the extra cost.) supermarkets focus on getting people to shop with them and not someone else. They have staples like bread and milk near cost so they don't lose the customers. Coupons to make people feel good about their purchases. Most people do not have time to shop around. Having a supermarket that carries fresh fruit and veg is the number one indicator of the health of a neighborhood. Maybe you have heard of "food deserts". Mostly urban neighborhoods that have only convenience stores. Supermarkets are important indicators of financial and physical health..

1.1.2 Objectives of This Project

To produce software which manage the activities done in a Super-Market. To maintain the records of the sales done for a particular month. ... To reduce time in calculation of Sales activities. To store large amount of data in the database which will reduce clumsiness.

1. To study the functions of Supermarket management system.
2. To explore the challenges being faced by the manual system.
3. To make a software fast in processing, with good userinterface.
- 4.To ensure accurate statistics of product item.
5. For Easy record of goods in store and proper identification

1.1.3 Our Contributions

The main purpose of our thesis is to make a next level of data storage technology and ensuring the data security over the shared storages.The main objectives of our thesis is as following-

- We have used RSA and Caesar cipher algorithm for data encryption. We used SHA-256 hashing to encryption and decryption of data. This ensured the extra layer of security to the data.
- Ensuring data security using Cryptography: Propose of a using a cryptography algorithm to ensure the data security.
- The parallel processing has a vast impact on the processing time and processing power. We observed, if we use the processing power of several machines, it'll make the processing power better and it can reduce the processing time. The data transaction has become more smoother and the data redundancy has been decreased.
- Finally, We have implemented Neural network through our system. Our system was able to collect and pass the requested data by the Neural Network. The data passing was encrypted and we could also secure the final output. That means we were able to make a secure end to end transection of data through Neural Network using oursystem.

In this thesis we motivate to a system that can make a huge change to the data storage technology and the data processing unit.

1.1.4 Organization of This Research Report

The rest of the book is organized in the following way. In Chapter 1, we will show the background and related research studies. After that,

- **In Chapter 2**, describes LITERATURE REVIEW, existing or supporting literature and review of existing system. In existing system, we will discuss about the history of supermarket management system. Moreover, in this part we will also discuss about the many types of existing way of selles and admin. In supporting literature, we will describe about the all types of tools that we have used in our system.
- **In Chapter 3**, consists of our Proposed Model. The algorithm and flow chart and also step by step discussion and figure will be provided there. In this chapter first we discuss

the full procedure with figures. Then next part there is an example of the calculation for better understandings. The calculated result is shown at the end.

- **In Chapter 4**, consists of our SYSTEM IMPLEMENTATION AND DOCUMENTATION. The implementation and Processing will be shown step by step discussion and Documentation will be provided there. In this chapter first we discuss the full Implementation system.
- **In Chapter 5**, explains about the Experimental Results of our thesis and analysis of the result and also discuss about the applications of our project. In result analysis part we will discuss about the report or output of our system and we will know about the accuracy level for different models of our system. In application part we will describe about the real time uses of our system.
- **In Chapter 6**, concludes the Report. In this chapter we will discuss about limitations and future works. In limitation part we will discuss about the limitations of our system. In future works we will discuss about the modules which we will develop in future.

1.1.5 Conclusions

A supermarket is a self-service shop offering a wide variety of food, beverages and household products, organized into sections. It is larger and has a wider selection than earlier grocery stores, but is smaller and more limited in the range of merchandise than a hypermarket or big-box market. The supermarket typically has aisles for meat, fresh produce, dairy, and baked goods. Shelf space is also reserved for canned and packaged goods and for various non-food items such as kitchenware, household cleaners, pharmacy products and pet supplies. Some supermarkets also sell other household products that are consumed regularly, such as alcohol (where permitted), medicine, and clothing, and some sell a much wider range of non-food products: DVDs, sporting equipment, board games, and seasonal items. Supermarkets typically are chain stores, supplied by the distribution centers of their parent companies, thus increasing opportunities for economies of scale. Supermarkets usually offer products at relatively low prices by using their buying power to buy goods from manufacturers at lower prices than

smaller stores can. They also minimise financing costs by paying for goods at least 30 days after receipt and some extract credit terms of 90 days or more from vendors. Certain products (typically staple foods such as bread, milk and sugar) are very occasionally sold as loss leaders so as to attract shoppers to their store. Supermarkets make up for their low margins by a high volume of sales, and with of higher-margin items bought by the attracted shoppers. Self-service with shopping carts (trolleys) or baskets reduces labor costs, and many supermarket chains are attempting further reduction by shifting to self-service check-out.

Chapter 2

LITERATURE REVIEW

2.0.1 Introduction to Supermarket

A supermarket is a large form of the traditional grocery store, it is a self-service shop offering a wide variety of food and household products, organized into aisles. It is larger in size and has a wider selection than a traditional grocery store, but is smaller and more limited in the range of merchandise than a hypermarket or big-box market. The concept of an inexpensive food market relying on large economies of scale was developed by Vincent Astor. He founded the Astor Market in 1915 , investing 750,000 of his fortune into a 165 by 125 corner of in the famous 95 Manhattan avenue, creating in effect, an open air mini-mall that sold meat, fruit, produce and flowers. The expectation was that customers would come from great distances ("miles around"), but in the end even attracting people from ten blocks away was difficult, and the market folded in 1917. The concept of a super market was developed by entrepreneur Clarence Saunders and his Piggly Wiggly stores. His first store opened in 1916. Saunders was awarded a number of patents for the ideas he incorporated into his stores. The stores were a financial success and Saunders began to offer franchises. The Great Atlantic Pacific Tea Company, which was established in 1859, was another successful early grocery store chain in Canada and the United States, and became common in North American cities in the 1920s. The general trend in retail since then has been to stock shelves at night so that customers, the following day, can obtain their own goods and bring them to the front of the store to pay for them. Although there is a higher risk of shoplifting, the costs of appropriate

security measures ideally will be outweighed by reduced labor cost. Historically, there was debate about the origin of the supermarket, with King Kullen and Ralphs of California having strong claims. Other contenders included Weingarten's Big Food Markets and Henke Pillot. To end the debate, the Food Marketing Institute in conjunction with the Smithsonian Institution and with funding from H.J. Heinz, researched the issue. It defined the attributes of a supermarket as "self-service, separate product departments, discount pricing, marketing and volume selling." It has been determined that the first true supermarket in the United States was opened by a former Kroger employee, Michael J. Cullen, on August 4, 1930, inside a 6,000-square-foot (560 m²) former garage in Jamaica, Queens in New York City. The store, King Kullen, (inspired by the fictional character King Kong), operated under the slogan "Pile it high. Sell it low." At the time of Cullen's death in 1936, there were seventeen King Kullen stores in operation. Although Saunders had brought the world self-service, uniform stores and nationwide marketing, Cullen built on this idea by adding separate food departments, selling large volumes of food at discount prices and adding a parking lot. Other established American grocery chains in the 1930s, such as Kroger and Safeway at first resisted Cullen's idea, but eventually were forced to build their own supermarkets as the economy sank into the Great Depression, while consumers were becoming price-sensitive at a level never experienced before. Kroger took the idea one step further and pioneered the first supermarket surrounded on all four sides by a parking lot. Supermarkets proliferated across Canada and the United States with the growth of automobile ownership and suburban development after World War II. Most North American supermarkets are located in suburban strip shopping centers as an anchor store along with other smaller retailers. They are generally regional rather than national in their company branding. Kroger is perhaps the most nationally oriented supermarket chain in the United States but it has preserved most of its regional brands, including Ralphs, City Market, King Soopers, Fry's, Smith's, and QFC. In Canada, the largest such chain is Loblaw, which operates stores under a variety of regional names, including Fortinos, Zehrs, No Frills, the Real Canadian Superstore, and the largest, Loblaws, (named after the company itself). Sobeys is Canada's second largest supermarket with locations across the country, operating under many banners (Sobeys IGA in Quebec). Québec's first supermarket opened in 1934 in Montréal, under the banner Steinberg's. In the United Kingdom, self-service shopping

took longer to become established. Even in 1947, there were just ten self-service shops in the country. In 1951, ex-US Navy sailor Patrick Galvani, son-in-law of Express Dairies chairman, made a pitch to the board to open a chain of supermarkets across the country. The UK's first supermarket under the new Premier Supermarkets brand opened in Streatham, South London, taking ten times as much per week as the average British general store of the time. Other chains caught on, and after Galvani lost out to Tesco's Jack Cohen in 1960 to buy the 212 Irwin's chain, the sector underwent a large amount of consolidation, resulting in 'the big four' dominant UK retailers of today: Tesco, Asda (owned by Wal-Mart), Sainsbury's and Morrisons. In the 1950s, supermarkets frequently issued trading stamps as incentives to customers. Today, most chains issue store-specific "membership cards," "club cards," or "loyalty cards". These typically enable the card holder to receive special members-only discounts on certain items when the credit card-like device is scanned at check-out. Sales of selected data generated by club cards is becoming a significant revenue stream for some supermarkets.



Figure 2.1: Picture of a Super Market Management

2.0.2 Types of Supermarket

Supermarket is categorized into different type due to their size, scale, products offered, Store Format and Trends While people use the terms "Grocery Store", "Hypermarket" and "Bigbox-market" interchangeably to refer to retail food stores, industry watchers offer more specific guidelines about different types of Supermarket. "Hypermarkets" are on the larger end of this spectrum and carry a diverse mix of food and general merchandise. Nomenclature is not always uniform Financial Institutions Fund places Wal-Mart in the same category as supermarkets, but accounting for only the supercenter's grocery division. The Food Marketing Institute classifies superstores as a large type of supermarket, while designating warehouse stores as grocery stores.

Grocery Store: A grocery store is a retail store that primarily sells food. A grocer is a bulk seller of food. Grocery stores often offer non-perishable food, with some also having fresh produce, butchers, delis, and bakeries. Large grocery stores that stock significant amounts of non-food products, such as clothing and household items, are called supermarkets. Some large supermarkets also include a pharmacy and an electronics section, the latter selling DVDs, headphones, digital alarm clocks, and similar items. Grocery stores operate in many different styles ranging from rural family-owned operations, such as IGAs, boutique chains, such as Whole Foods Market and Trader Joe's to larger supermarket chain stores. In some places, food cooperatives or "co-op" markets, owned by their own shoppers, have been popular. However, there has recently been a trend towards larger stores serving larger geographic areas.

Hypermarket: Is an advanced supermarket which has an additional department store. The result is an expansive retail facility carrying a wide range of products under one roof, including full groceries lines and general merchandise. In theory, hypermarkets allow customers to satisfy all their routine shopping needs in one trip. After the successes of supermarkets and hypermarkets and amid fears that smaller stores would be forced out of business, franchise laws that made it more difficult to build hypermarkets and also restricted the amount of economic leverage that hypermarket chains can impose upon their suppliers. In France, hypermarkets are generally situated in shopping centers (French: centre commercial or centre d'achats) outside of cities, though some are present in the city center. They are surrounded by extensive car parking facilities, and generally by other specialized superstores that sell clothing, sports gear, automotive items, etc.

Bigboxmarket: Is a physically large retail establishment, usually part of a chain. The term sometimes also refers, by extension, to the company that operates the store. The store may sell general dry goods, it is generally inaccessible to pedestrians and often can only be reached by motor vehicles, the big-box store is regarded as unsustainable and a failure of urban planning. Some conservatives worry about the economic impact of big-box retailers on established downtown merchants or the sprawl-inducing impacts on the character of such developments, as these stores are often associated with heavy traffic in the areas around the store locations. Some communities have adopted a higher level of architectural treatment and regulations to ensure that the superstores relate better to their environs and neighbors. Many regulate signage and landscaping. There are also concerns surrounding traffic and roads. The increased traffic leads to more air pollution in an area and higher taxes in order to maintain the roads.

2.0.3 Introduction to Online marketing (E-Commerce)

The internet marketing has been active for a long time now, the cumulative events occurring in online marketing is leading up to where we are now it have impacted the entire globe faster than any marketing revolution in history.[3] Over the past decade or so, supermarkets and other grocery retailers have continued to invest significantly into broadening their Internet presence and expanding the number of channels through which their goods are sold. Key Note estimates that sales of groceries transacted via online channels observed double-digit growth between 2007 and 2011, increasing by 127 overall. One of the major trends to have driven growth within the Internet grocery market is m-commerce that is sales made via mobile channels, i.e. smart phones and tablet computers. The increasing popularity of smart phones and tablets among consumers has resulted in a whole host of retailers investing significant sums of money into mobile sales platforms, as well as downloadable applications (apps'), which offer a more interactive and personalized shopping experience. Despite the growth of online grocers in recent years, online spending still accounts for a relatively small proportion of the overall Internet grocery market, with just 3.9 of total grocery sales estimated to have been transacted via e-commerce and m-commerce channels. However, the share of the total grocery market represented by online grocers has continued to increase year-on-year since at least 2007, when

their market share stood at just 2.1%. Key Note expects the Internet grocery market to continue to go from strength to strength over the forthcoming years and has forecast year-on-year double-digit growth for 2012 to 2016. The rising uptake of Internet-connected mobile devices, such as smart phones and tablets, should boost sales transacted via m-commerce channels, while continued Government investment in the rollout of superfast broadband, alongside the introduction of the UK's first 4G mobile network, will also help to boost Internet activity and the use of e-commerce services throughout the country.

Online marketing can broadly be defined as the processes or areas involved in the running and operation of an organization that are electronic or digital in nature. These include direct business activities such as marketing, sales and human resource management but also indirect activities such as business process re-engineering and change management, which impact on the improvement in efficiency and integration of business processes and activities.[4] In 1994, spending for internet marketing totaled nearly nothing, but increased to over 300 million in 1995. Now, little more than a decade later, marketing spending and internet marketing business has exploded to nearly 200 billion (according to Forrester Research). Today, it's hard to believe in having an organization which doesn't have some kind of online presence. When the internet was first introduced in the early 90s, it wasn't considered to be an advertising medium at all. Instead, the internet was treated as a tool for exchanging emails and digital information, but wasn't yet considered valuable for reaching customers. However, it wasn't long before marketing pioneers began to see the potential for internet marketing business as millions of web surfers logging on each day to find valuable and relevant information. Within just a few years, informative and educational marketing, as well as graphically enticing banner ads began to be show up. It wasn't long before results began to flood in which proved the value of the internet marketplace to even the most skeptical advertisers. Factors that affect online marketing are as follows: Technological Factors, Social Factors and Economic Factors.

2.0.4 Benefits of e-commerce to consumers

It enables customers to shop or conduct other transactions 24 hours a day, all year round from almost any location. For example checking balances, making payments, obtaining travel tickets

and other information. In one case a pop star set up web cameras in every room in his house, so that he could check the status of his home by logging onto the Internet when he was away from home on tour.

More choices: Customers not only have a whole range of products that they can choose from and customize, but also an international selection of suppliers.

Price comparisons: Customers can 'shop' around the world and conduct comparisons either directly by visiting different sites, or by visiting a single site where prices are aggregated from a number of providers and compared (for example www.moneyextra.co.uk for financial products and services).

Improved delivery processes: This can range from the immediate delivery of digitized or electronic goods such as software or audio-visual files by downloading via the Internet, to the on-line tracking of the progress of packages being delivered by mail or courier

2.0.5 Benefits of e-commerce to society

It enables more flexible working practices, which enhances the quality of life for a whole host of people in society, enabling them to work from home. Not only is this more convenient and provides happier and less stressful working environments, it also potentially reduces environmental pollution as fewer people have to travel to work regularly. Enables people in developing countries and rural areas to enjoy and access products, services, information and other people which otherwise would not be so easily available to them. Facilitates delivery of public services.: For example, health services available over the Internet (on-line consultation with doctors or nurses), filing taxes over the Internet through the Inland Revenue website.

2.0.6 LIMITATIONS OF E-COMMERCE

There was much hype surrounding the Internet and e-commerce over the last few years of the twentieth century. Much of it promoted the Internet and e-commerce as the panacea for all ills, which raises the question, are there any limitations of e-commerce and the Internet? Isaac Newton's 3rd Law of Motion, for every action there is an equal and opposite reaction suggests that for all the benefits there are limitations to e-commerce. These again will be dealt

with according to the three major stakeholders' organizations, consumers and society. This includes the following: Rapidly evolving and changing technology, so there is always a feeling of trying to catch up and not be left behind. Under pressure to innovate and develop business models to exploit the new opportunities which sometimes leads to strategies detrimental to the organization. The ease with which business models can be copied and emulated over the Internet increases that pressure and curtails longer-term competitive advantage. Facing increased competition from both national and international competitors often leads to price wars and subsequent unsustainable losses for the organization. There are problems where older business systems cannot communicate with web based and Internet infrastructures, leading to some organizations running almost two independent systems where data cannot be shared. This often leads to having to invest in new systems or an infrastructure, which bridges the different systems. In both cases this is both financially costly as well as disruptive to the efficient running of organizations.[5]

2.0.7 Limitations of e-commerce to consumers

Computing equipment is needed for individuals to participate in the new 'digital' economy, which means an initial capital cost to customers. A basic technical knowledge is required of both computing equipment and navigation of the Internet and the World Wide Web. Cost of access to the Internet, whether dial-up or broadband tariffs.

Cost of computing equipment. Not just the initial cost of buying equipment but making sure that the technology is updated regularly to be compatible with the changing requirement of the Internet, websites and applications. Lack of security and privacy of personal data. There is no real control of data that is collected over the Web or Internet. Data protection laws are not universal and so websites hosted in different countries may or may not have laws which protect privacy of personal data. Physical contact and relationships are replaced by electronic processes. Customers are unable to touch and feel goods being sold on-line or gauge voices and reactions of human beings.

2.0.8 Limitations of e-commerce to society

Breakdown in human interaction: As people become more used to interacting electronically there could be an erosion of personal and social skills which might eventually be detrimental to the world we live in where people are more comfortable interacting with a screen than face to face.

Social division: There is a potential danger that there will be an increase in the social divide between technical haves and have-nots – so people who do not have technical skills become unable to secure better-paid jobs and could form an underclass with potentially dangerous implications for social stability.

2.0.9 Case Study: Shoprite

2.0.9.0 Introduction

This case study forms part of a series of case studies completed for the FinMark Trust by the Centre for Financial Regulation and Inclusion (Cenfri), as part of a larger study titled “Update on innovative microinsurance models and products in South Africa”. The purpose of the case studies is to review the success and development of various microinsurance models that have been launched during the last few years in South Africa. This allows for the identification of success factors and obstacles and challenges to the distribution innovation process, contributing to a better understanding of how to make insurance products work for the low-income market. The main focus of the case studies is on distribution, an area that has seen particular innovation. Nevertheless by reviewing both the distribution model and the products provided through a particular channel, product innovation is also considered. Methodology. The project draws on information gathered during a number of interviews with innovative microinsurance providers, as well as new organisations entering into the insurance distribution space such as retailers or retail payment providers. The information from interviews is supplemented by publicly available information on these providers and their distribution channels, such as newspaper reports, websites and annual reports. Since this report builds on a series of earlier FinMark Trust research reports, the report also draws on earlier information and insights from this research. Availability of data. Given that the case studies will all be placed

in the public domain, data that provide a true reflection of the success and value of different models and products, for example the number of policies sold, claims ratios, policy persistence, total premiums generated, profit, etc, are often not disclosed by the providers on the basis of its being commercially sensitive. Where companies were willing to share this data, it is included in the case studies. Given that we obtained different types and levels of information for the different case studies, the length of case studies also vary. This case study highlights the Shoprite experience in the microinsurance market. It illustrates how a retailer can fulfil a role similar to that of an insurance broker by selling the same category of insurance product, funeral insurance, of more than one insurance company

2.0.9.1 About the products and channel

Shoprite and insurance. Shoprite's insurance offering started as early as 1999 with the introduction of an HTG Life insurance product (Genesis, 2006). Subsequently, due to various reasons, Shoprite has added and withdrawn several insurance products from its range. According to management, the addition of insurance to Shoprite's product offering has been an attempt at differentiating Shoprite from its competitors by increasing the product offering to their clients (Smit, 2009). While Shoprite displays insurance products in-store just before the cashier isles, most premiums (depending on product design) have to be paid at a separate counter, the Money Market counter, in the store. Money Market Counters. The Money Market counter was introduced in 1998. The main objective of the Money Market counter is to enable customers to settle more of their daily transactions in one place (Shoprite Holdings, 2008). This initiative started out by giving clients the option of buying cell phone airtime and pre-paid electricity at a designated counter in the store. The original product offering has now been expanded to include money transfer products, postage stamps, water accounts, municipal rates and taxes, theatre and events bookings, telephone accounts, lottery tickets, bus tickets, flight bookings and insurance. The overall success of the Money Market Counter initiative has been noteworthy. Shoprite estimates that more than 50. The Term management is The organization and coordination of the activities of a business in order to achieve defined objectives. Management is often included as a factor of production along with machines, materials, and money. According to the management guru Peter Drucker

(1909-2005), the basic task of management includes both marketing and innovation. Practice of modern management originates from the 16th century study of low-efficiency and failures of certain enterprises, conducted by the English statesman Sir Thomas More (1478-1535). Management consists of the interlocking functions of creating corporate policy and organizing, planning, controlling, and directing an organization's resources in order to achieve the objectives of that policy. The size of management can range from one person in a small organization to hundreds or thousands of managers in multinational companies. In large organizations, the board of directors defines the policy which is then carried out by the chief executive officer, or CEO. Some people agree that in order to evaluate a company's current and future worth, the most important factors are the quality and experience of the managers. Management involves the manipulation of the human capital of an enterprise to contribute to the success of the enterprise. This implies effective communication: an enterprise environment (as opposed to a physical or mechanical mechanism), implies human motivation and implies some sort of successful progress or system outcome. As such, management is not the manipulation of a mechanism (machine or automated program), not the herding of animals, and can occur in both a legal as well as illegal enterprise and environment. Based on this, management must have humans, communication, and a positive enterprise endeavor. Plans, measurements, motivational psychological tools, goals, and economic measures (profit, etc.) may or may not be necessary components for there to be management. At first, one views management functionally, such as measuring quantity, adjusting plans, meeting goals. This applies even in situations where planning does not take place. From this perspective, Henri Fayol (1841–1925) considers management to consist of six functions: 1. Forecasting 2. Planning 3. Organizing 4. Commanding 5. Coordinating 6. Controlling

2.0.9.2 Introduction to System

The word system in its meaning here, has a long history which can be traced back to Plato (Philebus), Aristotle (Politics) and Euclid (Elements). It had meant "total", "crowd" or "union" in even more ancient times, as it derives from the verb *sunístemi*, uniting, putting together. "System" means "something to look at". You must have a very high visual gradient to have systematization. In philosophy, before Descartes, there was no "system". Plato had no

"system". Aristotle had no "system".[8] In the 19th century the first to develop the concept of a "system" in the natural sciences was the French physicist Nicolas Léonard Sadi Carnot who studied thermodynamics. In 1824 he studied the system which he called the working substance, i.e. typically a body of water vapor, in steam engines, in regards to the system's ability to do work when heat is applied to it. The working substance could be put in contact with either a boiler, a cold reservoir (a stream of cold water), or a piston (to which the working body could do work by pushing on it). In 1850, the German physicist Rudolf Clausius generalized this picture to include the concept of the surroundings and began to use the term "working body" when referring to the system. One of the pioneers of the general systems theory was the biologist Ludwig von Bertalanffy. In 1945 he introduced models, principles, and laws that apply to generalized systems or their subclasses, irrespective of their particular kind, the nature of their component elements, and the relation or 'forces' between them. Significant development to the concept of a system was done by Norbert Wiener and Ross Ashby who pioneered the use of mathematics to study systems. In the 1980s the term complex adaptive system was coined at the interdisciplinary Santa Fe Institute by John H. Holland, Murray Gell-Mann and others. System is therefore an organized, purposeful structure that consists of interrelated and interdependent elements (components, entities, factors, members, parts etc.). These elements continually influence one another (directly or indirectly) to maintain their activity and the existence of the system, in order to achieve the goal of the system. All systems have inputs, outputs and feedback mechanisms, maintain an internal steady-state (called homeostasis) despite a changing external environment, display properties that are different than the whole (called emergent properties) but are not possessed by any of the individual elements, and have boundaries that are usually defined by the system observer. Systems underlie every phenomenon and all are part of a larger system. Systems stop functioning when an element is removed or changed significantly. Together, they allow understanding and interpretation of the universe as a meta-system of interlinked wholes, and organize our thoughts about the world.[9]

Chapter 3

Proposed Model

3.0.1 Super Market Management System:

1. Admin

I. Category Management

CatId(Category Id)

CatName(Category Name)

CatDesc(Category Details or Company Name)

II. Sellers Mangement

SellerId(Seller Id)

SellerName(Seller Name or user name for login)

SellerAge(Seller Age)

SellerPhone(Seller Phone Number)

SellerPass(Seller Password for Login)

III. Product Management

ProdId(Product ID)

ProdName(Product Name)
ProdQty(Product Quantity)
ProdPrice(Product Price)
ProdCat(Product Category)

IV. Sells Management

Category List(Category Table)
Seller List(Seller Table) Customer
List(Customer Table) Product
List(Product Table)

V. Customer Management

CustomerId(Customer Id)
CustomerName(Customer Name)
CustomerPhone(Customer Phone)

VI. Order Management

Seller List
Product List
Customer List
From those table we are Creating a new Bill List(Bill Table)

VII. Bill Management

OrderId(Order Id)
CustomerId(Customer Id, Data Collect from CustomerManagement)
SellerId(Seller Id, Data Collect from Seller Management)

ProductId(Product Id, Data Collect from Product Management)
ProdPrice(Product Price, Data Collect from Product Management)
P.Method(Payment Method)
Quantity(Quantity)

2. Seller

I. Product Management

ProdId(Product ID)
ProdName(Product Name)
ProdQty(Product Quantity)
ProdPrice(Product Price)
ProdCat(Product Category)

II. Customer Management

CustomerId(Customer Id)
CustomerName(Customer Name)
CustomerPhone(Customer Phone)

III. Order Management

Seller List
Product List
Customer List
From those table we are Creating a new Bill List(Bill Table)

IV. Bill Management

OrderId(Order Id)

CustomerID(Customer Id, Data Collect from CustomerManagement)

SellerId(Seller Id, Data Collect from Seller Management) ProductId(Product Id,
Data Collect from Product Management) ProdPrice(Product Price, Data Collect
from Product Management) P.Method(Payment Method)

Quantity(Quantity)

3.0.2 Data Base

Database Name: market

Table 1(CategoryTb)

Field-1: CatId(int)

Field-2: CatName(varchar)

Field-3: CatDesc(varchar)

Table 2(CustomerTb1)

Field-1: CustomerId(int)

Field-2: CustomerName(varchar)

Field-3: CustomerPhone(varchar)

Table 3(OrderTb)

Field-1: OrderID(int)

Field-2: CustomerID(int)

Field-3: SellerID(int)

Field-4: ProductID(int) Field-
5: ProdPrice(int) Field-6:
[P.Method](varchar) Field-7:
Quantity(int)

Table 4(ProductTb)

Field-1: ProdId(int)
Field-2: ProdName(nvarchar)
Field-3: ProdQty(int)
Field-4: ProdPrice(int) Field-
5: ProdCat(nvarchar)

Table 5(SellerTb1)

Field-1: SellerId(int)
Field-2: SellerName(nvarchar)
Field-3: SellerAge(int)
Field-4: SellerPhone(nvarchar)
Field-5: SellerPass(nvarchar)

3.0.3 Super Market Management System Diagram:

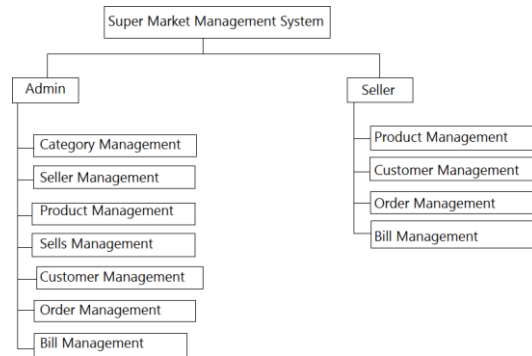


Figure 3.1: Diagram of Supermarket Management System

3.0.4 ER Diagram Of Super Market Management System:

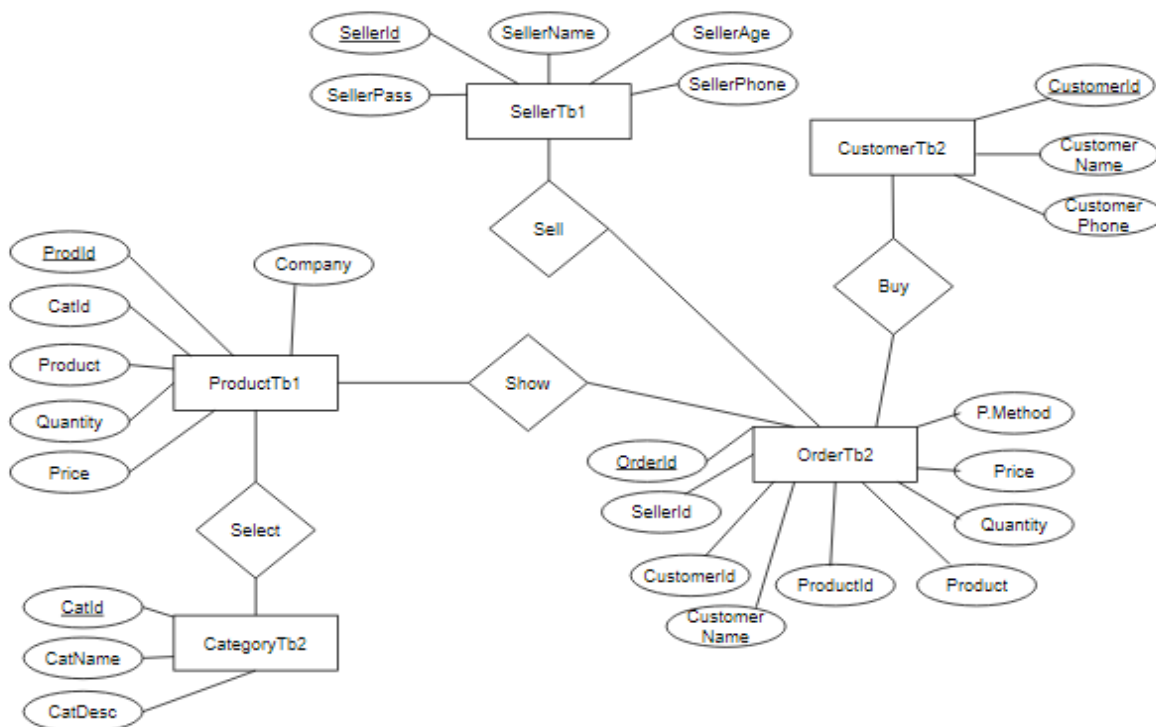


Figure 3.2: ER Diagram of Supermarket Management System

Chapter 4

SYSTEM IMPLEMENTATION AND DOCUMENTATION

4.0.1 System Implementation

This chapter is the part that puts a planned system into action and examine in details the analysis and design of the Skillmid supermarket system. The present chapter discusses the implementation of the system, highlighting the testing exercise and describing some of the main components of the system's Graphical User Interface. It will give an output from programming language and other tools used to develop our system. According to this plan, the activities are to be carried out, discussions made regarding the equipment and resources and the additional equipment has to be acquired to implement the new system.

4.0.2 Changeover Method

This section deals with the strategy used to change from the old system to the new system. There are many methods available to swap from the old system to the new system these are direct changeover, parallel operation, pilot operation and phased operation. I prefer a parallel operation changeover method for this system change over because this kind of method requires that both the old and the new information systems operate fully for a specified period. Data

is input to both systems and output generated by the new system is compared with the equivalent output from the old system. When users, management, and IT group are satisfied that the new system (SKILLMID SUPERMAKET SYSTEM) operates correctly then the old system should be terminated. It is the most costly changeover method but it involves lower risks and it is very good.

4.0.3 Hardware Specification

For a system to be used efficiently and accurately, all computer software needs certain hardware components or other software resources to be present on a computer. These prerequisites are known as (computer hardware specification) and are often used as a guideline as opposed to an absolute rule. Most software defines two sets of system requirements: minimum and recommended. With increasing demand for higher processing power and resources in newer versions of software, system requirements tend to increase over time. Industry analysts suggest that this trend plays a bigger part in driving upgrades to existing computer systems than technological advancements. A second meaning of the term of System requirements is a generalization of this first definition, giving the requirements to be met in the design of a system or sub-system. Typically an organization starts with a set of Business requirements and then derives the System requirements from there. The most common set of requirements defined by any operating system or software application is the physical computer resources, also known as hardware. A hardware requirements list is often accompanied by a hardware compatibility list (HCL), especially in case of operating systems. An HCL lists tested, compatible, and sometimes incompatible hardware devices for a particular operating system or application. The following sub-sections discuss the various aspects of hardware requirements for this application software. The hardware required includes the following:

- Processor 2.4 GHZ processor speed
- Disk space 80 GB (including 20 GB for database Management system)
- SVGA colour monitor or higher quality.
- RAM 512MB.
- Backup storage hard disk of about 80MB.
- Flash drive for file transfer.
- An enhanced keyboard.
- A power stabilizer.

4.0.4 Software Specification

This are requirements specification for a software system, is a description of the behavior of a system to be developed and may include a set of use cases that describe interactions the users will have with the software. In addition it also contains non-functional requirements. Non-functional requirements impose constraints on the design or implementation such as performance engineering requirements, quality standards Software requirements specification establishes the basis for agreement between customers and contractors or suppliers (in market-driven projects, these roles may be played by the marketing and development divisions) on what the software product is to do as well as what it is not expected to do. Software requirements specification permits a rigorous assessment of requirements before design can begin and reduces later redesign. It should also provide a realistic basis for estimating product costs, risks, and schedules. The software requirements specification document enlists enough and necessary requirements that are required for the project development. To derive the requirements we need to have clear and thorough understanding of the products to be developed or being developed. This is achieved and refined with detailed and continuous communications with the project team and customer till the completion of the software. The software components used for this project are listed below:

- Operating system; Windows 98/2000/XP/Vista/7/8.
- Microsoft Visual Basic 6.0 (Front end)
- Microsoft Access(Back end)

4.0.5 Choice of Programming Language

The programming language chosen for this project is VISUAL BASIC 6.0 Visual Basic was derived from BASIC and enables the rapid application development (RAD) of graphical user interface (GUI) applications, access to databases using Data Access Objects, Remote Data Objects, or ActiveX Data Objects, and creation of ActiveX controls and objects. It also provides efficient back-up of data and provides adequate security.

4.0.6 System Documentation

Installation Procedure This program is already packaged having its installer package some computer programs can be executed by simply copying them into a folder stored on a computer and executing the but this is quit advanced in nature because of the advancement in technology. Other programs are supplied in a form unsuitable for immediate execution and therefore need an installation procedure. Once installed, the program can be executed again and again, without the need to reinstall before each execution.

The following are the step involve in installing Skillmid supermarket management system: 1. Install the general programming language platform.net frame work. Go to www.Microsoft.com and install the latest version of .net frame work appropriate for your computer (Windows, Mac, and Linux). 2 Copy the skillmidsupermarket database file to your Windows root folder Locating Root Folder.....Click on Computer....Click on Local disk c...navigate to windows.....paste the file..... 3 Click on Setup 4 Follow the installation step and ignore all Prompted display 5 Go to all Program 6 Click on SkillmidSupermarket

4.0.7 System Maintenance

The program may be maintained on the ground that the system requires an upgrade. When there is a new field to be added or a new form to be added in other to serve users well. Though it is compiled as a standalone software the database can be tempered with but it's advisable that the admin put a password on the file to secure the database from intrusion.

The following precaution should be done

- Ensure that the computer is kept in clean areas.
- System should be kept in cool places.
- Air conditioner is important to reduce room temperature and keep it constant.
- Backup of data is important

4.0.8 SYSTEM EVALUATION

This System is a high standard program that can weather the storm of technology advancement, it is most needed in all supermarket and it is an antidote for poor business speed and transaction

with record keeping and maintenance, it will be very helpful to clients and customers in the marketing business. All it needs is a computer literate operative to make it work, it is stand alone and automated. The product will need another software if the user is willing to make print out and bills due to its restrictions.

Chapter 5

Experimental Results and Evaluation

5.0.1 Interface

Here We add total 11 pages or 11 interface for Super Market ManagementSystem. First Loading page of Super Market Management System.



Figure 5.1: Picture of Loading Page



Figure 5.2: Picture of Login Page

5.0.2 Admin



Figure 5.3: Picture of Admin Logging Page



Figure 5.4: Picture of Admin Menu List Page



Figure 5.5: Picture of Admin Category Page

SellerId	SellerName	SellerAge	SellerPhone	SellerPass
56	Sufian	24	019	1234
51	Sazzad	22	015	4321
81	Mash	55	0181816...	1234
59	Ariful	20	01976	12345

Figure 5.6: Picture of Admin Seller Page

ProdId	ProdName	ProdQty	ProdPrice	ProdCat
110	Laptop	20	45000	Laptop
56	Acer	50	35000	Laptop
115	Chips	128	450	Nachos
511	one plus	5	560	Mobile
41	Chocolate	34	50	Ice Cream

Figure 5.7: Picture of Admin Product Page

Super Market Management System Sells Management

CATEGORY LIST

CatId	CatName	CatDesc
1	Ice Cream	Chocolate
101	Mobile	Samsung
21	Nachos	Spicy

SELLER LIST

SellerId	SellerName	SellerAge	SellerPhone	SellerPass
56	Sufian	24	019	1234
51	Sazzad	22	015	4321
81	Mash	55	01818...	1234
59	Ariful	20	01976	12345

CUSTOMER LIST

CustomerId	CustomerName	CustomerPhone
110	Akkas	019
111	Jakkas	01943
112	Laboni	015

PRODUCT LIST

ProdId	ProdName	ProdQty	ProdPrice	ProdCat
110	Laptop	20	45000	Laptop
56	Acer	50	35000	Laptop
115	Chips	128	450	Nachos
511	one pl...	5	560	Mobile
41	Chocol	34	50	Ice Cre

Admin Menu List Logout

Figure 5.8: Picture of Admin Seller Page

Super Market Management System Customer Management

C. ID:

C. Name:

C. Phone:

ADD EDIT DELETE

Admin Menu List Logout

CustomerId	CustomerName	CustomerPhone
110	Akkas	019
111	Jakkas	01943
112	Laboni	015

Figure 5.9: Picture of Admin Customer Page

Super Market Management System
Order Management

SELLER LIST

SellerId	SellerNar	SellerAge	SellerPhc	SellerPas
56	Sufian	24	019	1234
51	Sazzad	22	015	4321
81	Mash	55	01818...	1234
59	Ariful	20	01976	12345

PRODUCT LIST

ProdId	ProdNan	ProdQty	ProdPrice	ProdCat
110	Laptop	20	45000	Laptop
56	Acer	50	35000	Laptop
115	Chips	128	450	Nachos
511	one pl...	5	560	Mobile
41	Chocol	34	50	Ice Cre

Order ID

Customer ID

Price

Quantity

Seller ID

Product ID

Payment Method ▼

Add To Order

CUSTOMER LIST

CustomerId	CustomerName	CustomerPhone
110	Akkas	019
111	Jakkas	01943
112	Laboni	015

BILL LIST

OrderID	CustomerID	SellerID	ProductID	ProdPrice	P.Method	Quantity
1	110	56	111	7000	Cash	4
2	111	51	56	35000	Rocket	2
3	112	51	115	450	Bkash	3
4	112	51	511	560	ATM	1
5	111	51	511	560	Cash	1

View Order

Admin Menu List

Logout

Figure 5.10: Picture of Admin Order Page

Super Market Management System
Bill Management

Payment Method ▼ **Search** **Refresh**

OrderID	CustomerID	SellerID	ProductID	ProdPrice	P. Method	Quantity
1	110	56	111	7000	Cash	4
2	111	51	56	35000	Rocket	2
3	112	51	115	450	Bkash	3
4	112	51	511	560	ATM	1
5	111	51	511	560	Cash	1
6	112	56	41	50	Rocket	1
7	110	81	41	50	Nogod	1
8	111	59	511	560	ATM Card	1
9	110	59	56	35000	Bkash	1
10	112	51	115	450	Cash	1

Print **Copies** 1

Printer Epson

Settings

Print All Pages Print the entire document

Pages 1,2,3 1,2,3 1,2,3

Print One Sided Only print on one side of the...

Collated 1,2,3 1,2,3 1,2,3

Portrait Orientation

Letter 8.5" x 11"

Normal Margins Left: 1" Right: 1"

1 Page Per Sheet

Page Setup

Admin Menu List

Logout

Super Market Management System

Bill Copy

Order ID

Customer ID

Seller ID

Product ID

Quantity

Payment Method

Product Price

Cart Of Happiness

01988XXXX5
Thank You, Sir

Figure 5.11: Picture of Admin Bill Page

5.0.3 Seller



Figure 5.12: Picture of Seller Logging Page



Figure 5.13: Picture of Seller Menu List Page

Super Market Management System
Product Management

Ice Cream ▼ Search Refresh

ProdId	ProdName	ProdQty	ProdPrice	ProdCat
110	Laptop	20	45000	Laptop
56	Acer	50	35000	Laptop
115	Chips	128	450	Nachos
511	one plus	5	560	Mobile
41	Chocolate	34	50	Ice Cream

ID _____
 Name _____
 Quantity _____
 Price _____
 CATEGORY Ice Cream ▼
 ADD EDIT DELETE

Seller Menu List

Logout

Figure 5.14: Picture of Seller Product Page

Super Market Management System
Customer Management

C. ID _____
C. Name _____
C. Phone _____

ADD EDIT DELETE

Seller Menu List

CustomerId	CustomerName	CustomerPhone
110	Akkas	019
111	Jakkas	01943
112	Labori	015

Logout

Figure 5.15: Picture of Seller Customer Page

Super Market Management System

Order Management

SELLER LIST

SellerId	SellerName	SellerAge	SellerPhone	SellerPassword
56	Sufian	24	019	1234
51	Sazzad	22	015	4321
81	Mash	55	01818...	1234
59	Ariful	20	01976	12345

PRODUCT LIST

ProdId	ProdName	ProdQty	ProdPrice	ProdCategory
110	Laptop	20	45000	Laptop
56	Acer	50	35000	Laptop
115	Chips	128	450	Nachos
511	one pl...	5	560	Mobile
41	Chocol	34	50	Ice Cre

CUSTOMER LIST

CustomerId	CustomerName	CustomerPhone
110	Akkas	019
111	Jakkas	01943
112	Labori	015

Order ID

Customer ID

Price

Quantity

Seller ID

Product ID

Payment Method

Add To Order

BILL LIST

OrderID	CustomerID	SellerID	ProductID	ProdPrice	P.Method	Quantity
1	110	56	111	7000	Cash	4
2	111	51	56	35000	Rocket	2
3	112	51	115	450	Bkash	3
4	112	51	511	560	ATM	1
5	111	51	511	560	Cash	1

View Order

Seller Menu List

Logout

Figure 5.16: Picture of Seller Order Page

Super Market Management System Bill Management

Payment Method Search Refresh

OrderID	CustomerID	SellerID	ProductID	ProdPrice	P. Method	Quantity
1	110	56	111	7000	Cash	4
2	111	51	56	35000	Rocket	2
3	112	51	115	450	Bkash	3
4	112	51	511	560	ATM	1
5	111	51	511	560	Cash	1
6	112	56	41	50	Rocket	1
7	110	81	41	50	Nogod	1
8	111	59	511	560	ATM Card	1
9	110	59	56	35000	Bkash	1
10	112	51	115	450	Cash	1

Seller Menu List
Logout

Print
 Copies: 1

Printer
 Epson

Settings
 Print All Pages
 Print One Sided
 Collated
 Portrait Orientation
 Letter
 Normal Margins
 1 Page Per Sheet

Super Market Management System

Bill Copy

Order ID
 Customer ID
 Seller ID
 Product ID
 Quantity
 Payment Method
 Product Price

Cart Of Happiness

01988XXXXX5
 Thank You, Sir

Figure 5.17: Picture of Seller Bill Page

Chapter 6

Conclusion and Future Work

6.0.1 Conclusions

By this whole research we have found that our system can be better. In conclusion, Supermarket Management System has to do with making appropriate effort to stop the rising problem to all manual supermarket operation in order to enhance the operation of such supermarket. In this project, the software or system that can be used to aid all supermarkets that is still operating manually have been successfully developed. The software can be implemented in all types of supermarket as mentioned in the second chapter. The software has a large memory of storing all the goods in the supermarket and also keeping record it is highly effective and accurate..

6.0.2 Recommendation

In the development of this supermarket management system, I will recommend that if there is going to be any modification the new writer should endeavor to improve on the limitations such as inclusion of the billing and printing to further increase the system architecture and to satisfy users' need more for writing of the source code, Visual Studio 2012 should be used and Microsoft Access for the database. There are some limitations during the development of this supermarket management system that will require improvement as stated in the previous chapter. The writer should put them in mind and face it as a challenge and not a problem.

6.0.3 Problem Encountered

A lot of challenges surfaced during the development of this incredible application though it tried stopping this project but the doggedness and consistency of the writer was in match with the challenge. The following are some of the problems or challenges encountered.

1. Expensive internet facility.
2. Understanding the M.S ADODC (Active X Data Object Data Control).
3. Time factor on research to get a way of packaging the application successively.

6.0.4 Further research

In the future, the following components can be added to the system in order to improve the effectiveness and efficiency of the system, which includes:

1. An advanced password system that will be embedded into all login pages to increase the security of the system
2. A good Printing module should be included.
3. A good internet backup should be automated after everyday sales.
4. Internet Transactions should be allowed.

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