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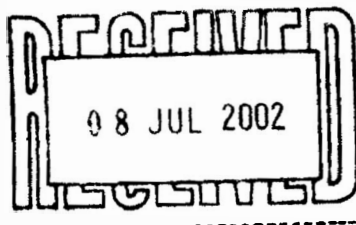
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**BRITISH AMERICAN
TOBACCO
BANGLADESH**

Internship Report

**Automating the Periodic Payments of
British American Tobacco Bangladesh**



Internship Report

***Automating the Periodic Payments of
British American Tobacco Bangladesh***

Prepared For:

The Chairman
Department of Business
Administration
East West University

Prepared By:

Shams Arifin
ID # 1997-1-10-011

EAST WEST UNIVERSITY

11th December, 2000

December 8, 2000

To

The Chairman

Department of Business Administration,

East West University,

Mohakhali, Dhaka.

Sub: Submission of Internship Report.

Sir,

It is my greatest pleasure, to inform you that I have successfully completed my 12 weeks long Internship at British American Tobacco Bangladesh and have prepared my Internship Report during the stipulated time. As per the university's rule, I am submitting my report titled "Automating the Periodic Payments of British American Tobacco". The report includes my research project, which is the system analysis and design of a database software that I have prepared during my internship, the software and also a user guide to run the database software.

I have tried my best to evaluate the calculation of the manual periodical payments system of the Corporate Finance department of BATB, and have proposed a simplified process to calculate the periodical payments with my database software. I hope my efforts would come in to help for BATB.

In this regard, I would request you to kindly accept my internship reports and allow me to complete the submission process.

Thank you,

Sincerely yours,



Shams Arifin

ID #1997-1-10-011

East West University

Acknowledgement

First of all I would like to thank Mr. Syed Aktar Hossain, for being my supervisor for the **internship** and helping me through out, in preparing this report. He guided and showed me **the way** to prepare this report and made it possible for me to present it in such a **wonderful** manner. I would like to take this opportunity to thank Mr. Nusrat I. **Chowdhury**, Chairman, Business Dept. East West University, who has tremendously **helped** me and given me every support I ever needed.

I **am** highly indebted to the management of British American Tobacco, specially Mr. **Aziz**, Ms. Shamima and Mr. Akib, from the IT Department. Mr. Masum M. Sabah, Mr. **Tanzim** Shams, Mr. Delwar Hossain, Mr. Faisal, Mr. Shamshuddin and Mr. Muallem A. **Chowdhury** from the Corporate Finance Department. They were such an wonderful team **to work** with and their co-operation and support really made me feel special.

Last but not the least, I would like to thank and mention about Mr. M. Mahmudul Kabir -- **without** whose name, this report would not be complete one. He is such an wonderful **manager**, and I was lucky that he was my supervisor at BATB. From the very first day of **my internship** till the last, I constantly kept him bugging about asking about this and that, **but** he was always seen in a smiling face and answered to all the queries I had about **BATB**. Special thanks goes to him.

Executive Summary

This report basically describes the automation of the Periodic Payments calculation of the Corporate Finance department of BATB, and contains two more sub-reports. This main reports discusses about the organization's history, functions, products, markets, management and company profiles. The second part of the report is the system analysis and design of the periodic payments of the finance department, and the third part is the user manual of the software that was developed for the calculation of the proposed periodic payments system.

As a multinational company, BATB is the largest in this country in terms of asset and turnover and also in term of highest taxpayer to the government. It has about 51% of the total cigarette market in Bangladesh and is the pioneer in its business.

The second part of this report, as it has been said, contains system analysis and design, it shows the time and processes that will be saved if the proposal is accepted and the software is used.

The third part is the User Manual, this will in details discuss how to use the database software. The software has been termed "Utility Register" and will at this stage focus only to the utility part of the periodic payments. Later on the fixed recursive expenses can be added as separate module to the existing software.

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System Development of Periodic Payments

System Analysis and Design.

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User Manual of Utility Register

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1 INTRODUCTION

1.1 Origin of the report

This report titled "**Automating the Periodic Payments of British American Tobacco Bangladesh (BATB)**" originated from the BBA internship conducted by the author in the head office of BATB, organized by the school of Business, East West University. This report is the product of 12 - week internship, which is a basic requirement of the BBA Degree. This main report, which contains two other sub reports, basically outlined about the background of the company. The two sub-reports, one of which is the project part of the internship, termed "System development on Periodic Payments", and the other one is the User Manual to the software developed during the internship, are also included as separate reports with the main report.

1.2 Objective of the research conducted

The objective of this research report was to automate the Periodic Payments of company and reduce the time and processes taken to prepare the periodic payments. In converting the manual system to an automated one, a database system was proposed through proper system analysis and designing and was developed by using MS Access. The unnecessary steps in the Proposed Periodic Payments system were changed, without losing the basic controls in preparation of the original system, which is now more usage focused and can generate reports instantly with specific queries. The existing system was changed and replaced by the new system keeping in to consideration the three basic requirements:

- 1) The system should support decision.
- 2) The system should support changes in business rule.
- 3) The system should ensure consistent information.

1.3 Scope

The research study basically covered the Corporate Finance Department, where this internship was conducted. In the Finance department, the work area was the calculation of the periodic payments, which is mainly done by a non-managerial staff, supervised by a manager. The author also had to work with the IT department, as this automated computerized database was handed over to them for future modifications. More over the author had to submit a copy of the User Guide, and the developers guide to the IT department.

1.4 Methodology

This report is based mainly on the interviews by the author to the concerned key people among non-managers and managers of the Corporate Finance department. The existing guidelines, documents and other supporting papers relevant to this project were also consulted and examined. The author worked as a part of the present system and found out the present Flow chart by participating in each and every step of it. In this process, the problems and complications of the present system of bill processing were identified. First, all possible options to formulate a simplified system of calculation of the periodic payments, to serve the objective of this project were identified. This was done by analyzing the system, taking suggestions from staffs, managers and concerned clerks, and using the author's own judgement. Finally, all the options were evaluated and the best among those were recommend.

1.4.1 Data Collection Method

The data for this study consisted of both primary and secondary sources. A small portion of the needed information was collected from secondary sources, such as, the existing

~~register~~ books, bill payment system etc. The emphasis was given to the primary data.

~~These~~ primary information were collected by interviewing the concerned managers and ~~employees~~ of the IT and Corporate Finance department. Two managers in the Corporate ~~Finance~~ department were interviewed in long and separate sessions. Moreover, many ~~other~~ information were gathered while working as a part of the processing of the Periodic ~~Payments~~ system from the non managerial staff, who is directly responsible for preparing ~~the~~ periodical payments.

1.4.2 Data Sources

Primary sources

~~Most~~ of the data was collected from the primary sources. Interviews with the concerned ~~managers~~ and employees were the main sources of primary data for the author.

Secondary sources

~~The~~ secondary information were collected from the following sources :

- ✦ ~~Guidelines~~ for conducting different activities of the company (e.g. expenses and payments guideline)
- ✦ ~~Register~~ books for current payments
- ✦ ~~Report~~ prepared by the staffs in association of the periodic payments

~~These~~ secondary sources were used mainly for the project part of the report. Other ~~secondary~~ sources were used, that were used for the organization part of this report. They ~~are~~:

- ✦ ~~Reports~~ and other Annual Report.

➔ **Web site** of BAT.

15 **Limitations**

➔ **Although** there were ample sources of information and all the managers at BATB are **extremely** friendly and resourceful, but still there were some limitations, which to some **extent** caused problem to prepare this report. The limitations are as follows:

- ➔ **Lack of secondary information** : This was the main hindrance at the time of the **study**. The annual report and the journals were only secondary sources of information, **which** weren't adequate to provide the reader a vivid idea on the **BATB**
- ➔ **Limitation of time** : Time was a major constraint for completion of the automated **system** and the report paper. Due to lack of time many aspects of the database system **could** not be incorporated though stated in the system analysis and design.
- ➔ **Limitations of scope** : Every organization may have confidential policy measures **Which** are not disclosed to others. For this reason, employees of the company did not **reveal** the confidential information. As a result, many important points could not be **incorporated** in the report.

2 A SHORT BRIEFING OF BATB

2.1 An overview of the company

British American Tobacco Bangladesh (BATB) is a pioneer and leading multinational cigarette manufacturer. The company sells its leading brand in over 50 countries covering 180 markets, has more than 250 brands worldwide, employees more than 100,000 and produces some 3 billion sticks of cigarettes a day. Its parent company is British American Tobacco, London, which is the world's most reputed international tobacco company. BATB has incorporated in 1972 under the Company Act 1913:7. BATB is one of the largest companies in the country with a long established reputation for consistently providing its consumers with high quality brands. BATB is listed in Dhaka and Chittagong stock exchanges. The company markets major international cigarette brands like Benson & Hedges, State Express and John Player Gold Leaf, which are complemented, by local brands such as Star and Scissors.

The company has its Head Office and the cigarette factory in Dhaka, a Green Leaf Threshing Plant in Kushtia and a number of Leafs and sales Offices throughout the country.

British American Tobacco Bangladesh was previously known as Bangladesh Tobacco Company (BTC). On March 22, 1998 the company changes its identify and establishes commitment to the highest international standards. BATB is operating its business through 5 regions worldwide :

North and Central America, South America, Europe and Asia Pacific and AMESCA.

AMESCA stands for Africa, Middle East, Sub-continent and Central Asia.

British American Tobacco Bangladesh is in AMESCA region. It was established in 1972 as BTC) and has always been a part of British American Tobacco. Currently it achieved almost 54 of cigarette market nationally. Today British American Tobacco highly reputed not because it makes and sells some of the best known cigarette brands, but because it looks beyond its own business interest.

The company's main business is tobacco, which involves growing, procession, manufacturing and marketing of tobacco leaf, cigarettes and pipe tobacco. The company exports processed tobacco leaf in the international market, mainly in the European countries with its effort to create an international market of its products.

2.2 Historical Background of BATB

During the twenties a company called *Imperial Tobacco* began its operations in the sub-continent. The company ruled "Imperially" in the Tobacco industry for 25 years or so.

After the sub-continent broke off into India and Pakistan the company too broke off into two different identities; *Indian Tobacco Company* and *Pakistan Tobacco Company*.

In the beginning Imperial Tobacco Company (ITC) launched a branch office at Moulivibazar, Dhaka in 1926. After the partition in 1947, cigarette were coming freely from Calcutta, but introduction of customs barriers in 1948 between India and Pakistan interrupted the smooth flow of cigarettes from Calcutta to East Pakistan. In March 1949, Pakistan Tobacco Company (PTC) came into existence with the assets and liabilities of ITC limited held in Pakistan. From this time onwards, requirements for cigarettes for East Pakistan markets were met from products manufactured in Karachi. In 1954, PTC established it's first cigarette factory although high-grade cigarettes still came from East Pakistan. The Dhaka factory of PTC went into production in 1965. After the war between

India and Pakistan in 1965, the import of tender leaf from India for the production of Biri was stopped. This gave a big boost to cigarette business. It was at this time the East Pakistani entrepreneurs set up 16 cigarette factories in this region.

A part of the *Pakistan Tobacco Company* broke off with the Independence of Bangladesh during the 70's; this new company that came into being was called the *Bangladesh Tobacco Company*. The Bangladesh Tobacco Company began its operations on the 2nd of February 1972. Since then its products have dominated the cigarette industry. BTC was incorporated under the company Act of 1913 with the assets and liabilities of PTC. Then the government allowed BTC to retain 66% of the shares of the company and 32% of the shares that belonged to PTC was taken by the Government of Bangladesh. The remaining 2% shares remained with the Bangladeshi shareholder, which was previously acquired by them.

British American Tobacco " On The Move "

- March 1949 ----- Formation of the Pakistan Tobacco Company (PTC)
- 1954 ----- PTC opened its first factory in Fouzdarhat Chittagong.
- 1962----- Opened a branch in Moulavibazar, Dhaka.
- 1965----- Building of a factory in Mohakhali Dhaka
- February 1972----- Incorporation of Bangladesh Tobacco Company with a paid up capital of TK 400 million.
- March 22, 1998----- Changed its identify from Bangladesh Tobacco Company (BTC) to British American Tobacco Bangladesh Company Ltd. (BATB).

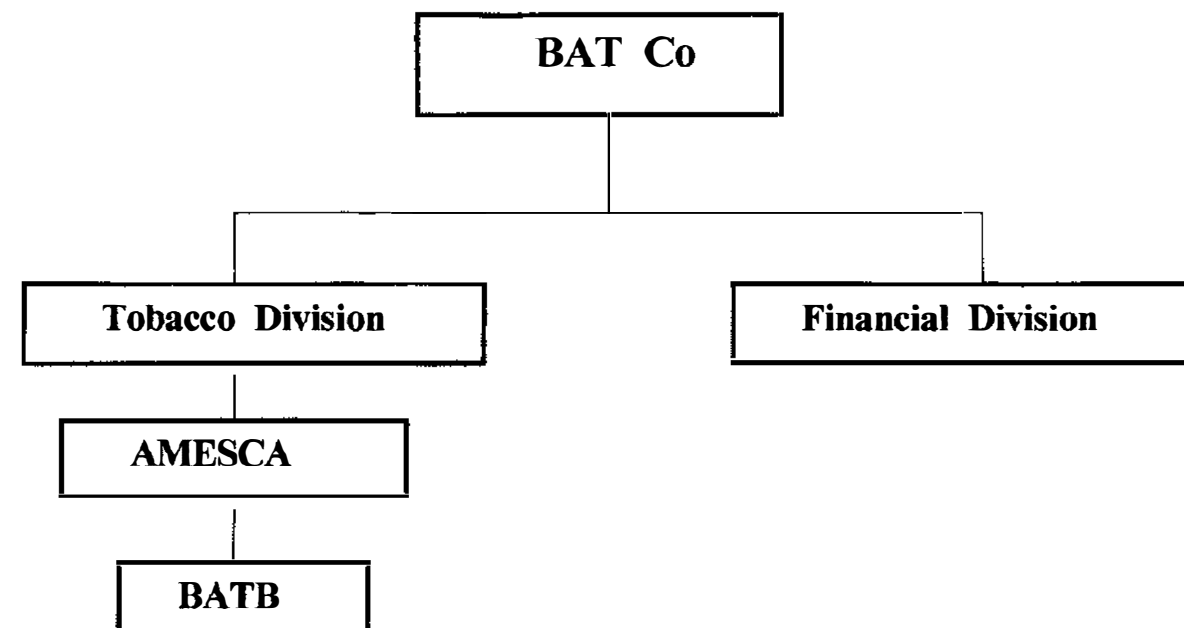
2.3 Relation between BAT & BATB :

The parent company of BATB is called BAT CO or British American Tobacco. They are the major shareholders of BATB. The operations of BATB are regulated according to BAT Co regulations and BAT Co looks after the management aspects of BATB. BATB management is trained by BAT Co and many occasions BAT Co sends over their own management to work in BATB. BAT industries is widely known as BAT Co has two major divisions :

1. Tobacco Division
2. Financial Division.

With the help of the following organogram we can easily see the relationship between BATCo and BATB very clearly.

Figure : 1



The Tobacco Division is actually known as BAT Holding, which operates in more than 78 countries. BATB actually maintains a relationship with BAT Co through AMESCA. It is actually a region of BAT Co to which BATB reports. AMESCA is made up of: A= Africa, ME = Middle East , S = Subcontinent, CA = Central Asia.

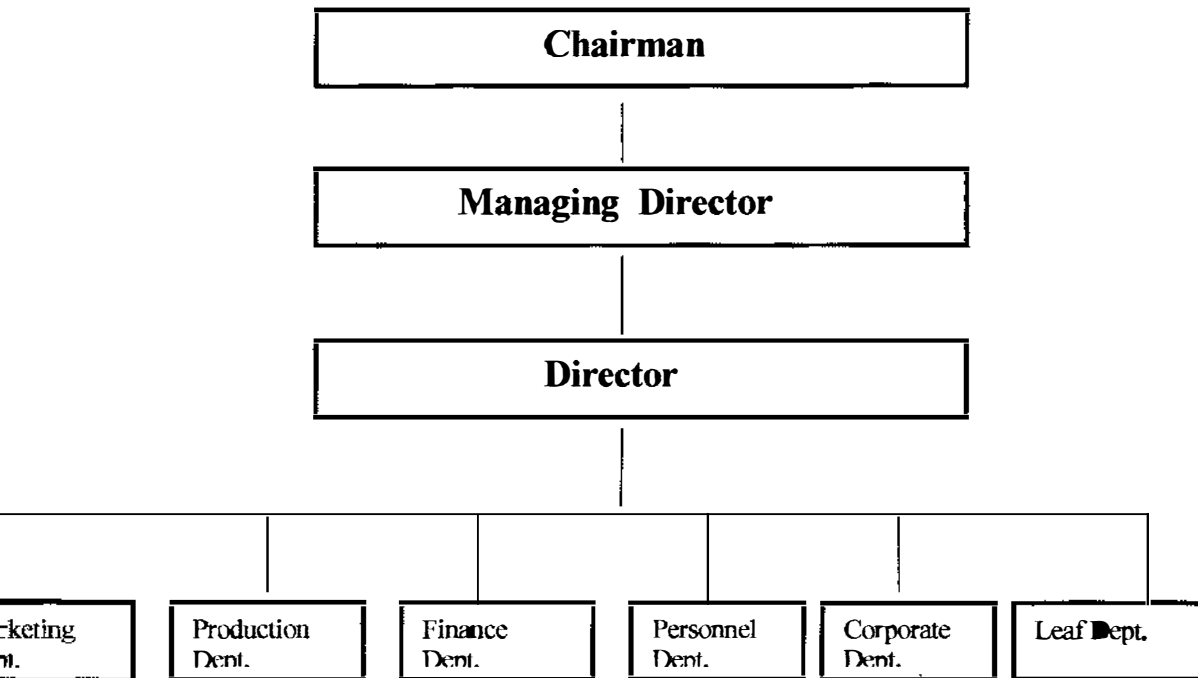
2.4 Tobacco Cultivation in Kushtia

Tobacco cultivation in Kushtia Leaf area was first introduced in 1967 with an area of 10 acres. It was expected to expand to 650 acres by 1971. Flue - cured and air cured tobacco were cultivated in Kushtia and the Leaf department achieved self-sufficiency in cigarette tobacco by 1975. Tobacco cultivation through registered growers and procurement of the product tobacco is done through four leaf depots in Kushtia. Those depots are Meherpur, Jhenaidah, Chechua and Allardarga Leaf Depot. Kushtia Leaf factory stands on 4.31 acres of land and is located at about three Kilometers away from the main town. The Green Leaf Threshing (GLT) plant could complete the entire leaf purchase in 1995. A team of management including the Plant engineer, processing manager , shift manager, quality control manager, leaf accountant and the leaf personal manager is managing the GLT plan. The plant manager is the team leader of GLT management team. Kushtia GLT has own British American Tobacco's environment, health and safety Merit award for the 1994 and 1996 for achieving consecutive two years of operation with zero accident. Besides, the contribution of the department in a forestation program in Bangladesh has earned recognition in the country through winning of the Prime Minister's Trophy in 1993.

2.5 Structure of BATB

There are six functional departments to carry out their management and operational functions. The below chart exhibits the **BATB's** structure :

Figure : 2



BATB is a public limited company. Management Director is the operational head and appointed by the British American Tobacco. Head of every department carries out their functions with the help of line managers. Different departments have different structured According to their function and responsibility.

2.6 Ownership status the company

British American Tobacco Bangladesh is a leading multinational tobacco company, which encompasses 67% of the shares of the British American Tobacco, London. 32%

of its shares were held by the Government. Subsequently the Government has gradually sold its holdings to different organizations of the country the Government has authorized 40,000,000 ordinary shares of TK 10 each which have been issued, subscribed and paid up. The composition of shareholders on December 31, 1994 were :

Releigh Investment co. Ltd. UK 65.91%, invested Corporation of Bangladesh 27.77%, Sadharan Bima Corporation 2.89%, Bangladesh Shilpa Rin Shangshtha 1.10%, Government of Bangladesh 96%, Sena kalyan Sangshtha 0.53%, others 0.84%.

2.7 Employee and Trade Union of BATB

The employees of the BATB are dynamic, self-motivated and energetic to perform any Assigned job, because they are selected on the basis of excellent academic qualification and experience. The company employs 1,244 permanent employees and a varying number of seasonal and temporary workers as required. Each permanent employee receives remuneration in excess of TK 36,000 per annum. Remuneration depends on the nature and conditions of work. The workers are labeled in the following categories.

- Permanent
- Probationer
- Temporary (seasonal)
- Bodily
- Casual

Trade unions are established in the following company working locations :

- ◆ Head office
- ◆ Dhaka factory

- ◆ Chittagong factory
- ◆ Rangpur leaf factory
- ◆ Kushtia leaf factory

There is a positive relationship between the company and the trade union based on Mutual trust and respect. All the employees of the company belong to the trade union. When a worker becomes a member of the union, according to his request a certain amount of his wage is deducted as the union subscription fees on a check off system. Trade union election is held after every two years and governed by their respective constitutions. The terms and conditions of services of the employee are negotiated and determined through a process of collective bargaining between the company and the union.

3 ORGANIZATION FUNCTIONS AT A GLANCE

3.1 Physical infrastructure of the company

The infrastructure of the company has a broader field where the company plays its important role. BATB has five Regional Trade Marketing Offices (RTMOs), ten Regional sales depots, one factory, one Green Leaf Threshing Plant, seven Leaf depots and two Head offices as Corporate Head Office and Production Head Office. The company Head office and cigarette factory are located in Dhaka. A Green Leaf Threshing (GLT) Plant has been set up in Kushtia and it has started operation from April 1995.

The company's product is manufactured in the factory at Mohakhali, Dhaka. Dhaka Factory is headed by the plant manager who reports to the Production Director at the Head Office. The company procures tobacco leaf maintaining the international standard and it imports processed tobacco leaf for its international brands. It procures green tobacco from the registered farmers of the leaf area mainly for its local brands.

The company's authorized leaf area is located in Kushtia, Chittagong and Manikgonj. But bulk of tobacco leaves comes from Kushtia region. The Chittagong area is under development process and it now covers Rangunia and Lama. The company operates seven leaf depots in the leaf area. Four of them are located in Kushtia region, two of them are located in CDA and other one is at Manikgonj. The company provides all sort of support to the registered growers through its depot personnel. This includes technical know how, agricultural inputs and financial assistance.

The company performs its sales and distribution operation all over the country through its five regional sales offices. They are located in Dhaka, Chittagong, Khulna, Rajshahi and Sylhet. Each of the regions is again divided into operational area, which in turn is divided into territories. To perform its sales and distribution smoothly, the company operates 10(ten) sales depots in different locations of the country and it has 82 (eighty two) authorized distributors.

3.2 Functional areas

BATB has been operating its business under the following major functional areas :

- Production
- Marketing
- Finance
- Personnel
- Corporate affair
- Leaf

The following departments are independent and governed by respective directors and managers.

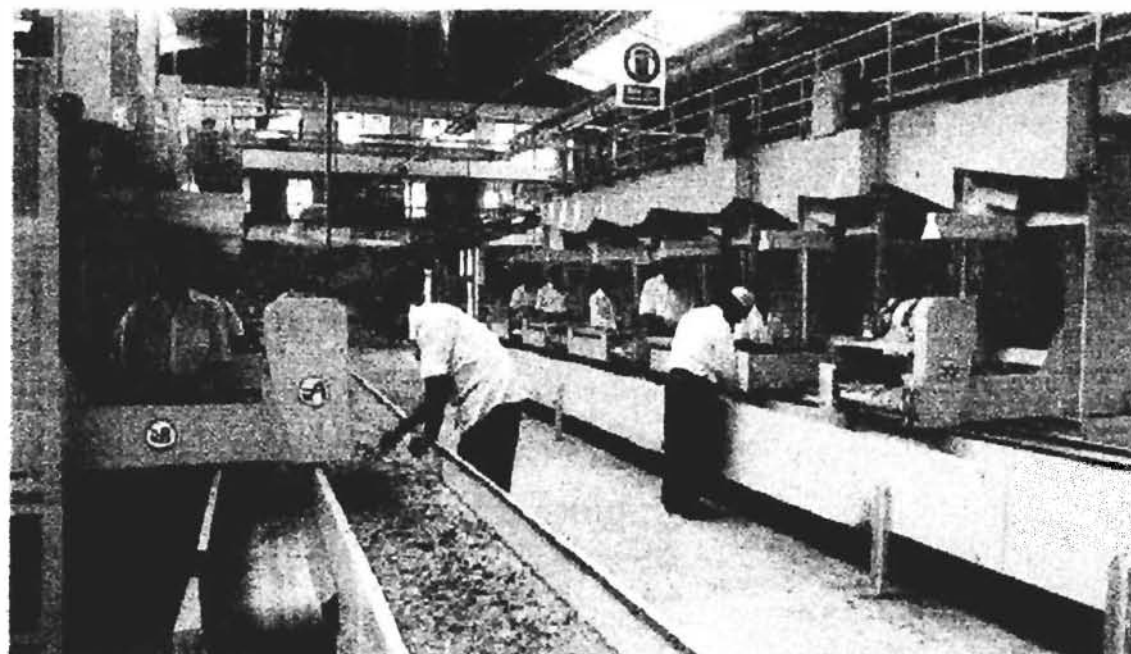
3.3 Production department

The production director looks after the production department and take necessary steps to smooth out the production process. The entire production process is performed at the Dhaka factory . The Motto of Production Department is to ensure the high quality and productivity in sustaining the long-term profitability steadily for the last few years. The

production department has been very successful in meeting the challenges and the company now produces a wide range of filter cigarettes to meet the market demands. All The local brands are now available with filter tips along with its international brands.

3. 3.1 Production process

The Primary Manufacturing Department (PMD) processes the tobacco leaves into rags. Rag for each brand is prepared in different shifts according to the predetermined production schedule. The departments operate on two shifts. Finally the rags are transferred to the Secondary Manufacturing Department (SMD) in cartoons made of wood. SMD transform the rags into cigarettes attaching filter rod, primary packaging, secondary packaging and shipment packaging. Shipment packs are transported to the bonded godown and excise duty is paid as the cigarettes leave the godown.



(Tobacco being processed at Kushtia)

3.3.2 Existing production facilities

Capacity output

The country's biggest cigarette manufacturing plant is powered by BATB with a capacity of 80 million (rounded) sticks of cigarettes per day in three shifts.

Actual output

Presently the factory is producing 60 million sticks per day hence they need 70,000 kg of tobacco leaf.

Reasons for the difference

The market is the main reason for the difference between actual and capacity output.

Wastage is approximately 4% - 5% of the tobacco leaf used that occurs in three forms namely - rejection, yield loss and accountable loss.

Raw material used

The following table summarizes the raw materials used for producing cigarettes. The procurement sources are shown in the same table.

Table :1

Raw materials	Source
Bulk tobacco	Locally produced in leaf areas
Blending tobacco	Imported
Cigarette paper	Imported
Filter material	Imported
Packing material	Local

3.3.3 Production personnel activities

Plant personnel manager

Plant personnel manager deals with the factory personnel department and he is the head of this department. Assistant Plant personnel manager and plant personnel officer help him to deal with the personnel affairs and trade union.

Safety manager

Safety manager has been assigned the responsibility to ensure the overall safety of the factory. He is responsible for monitoring and maintaining the safety standards in the factory. Management at the factory is very much concerned about safety of the workers at the production premises.

Quality assurance manager

Quality assurance manager is responsible for enduring the quality of the products. The quality of the products has been given the prime importance by the management. "Quality First " is the slogan of the company and all products under go rigorous quality testing.

3.4 IT structure of BAT

Three local area network (LANs) have been set up in the Head Office to channel with The Dhaka factory and Kushtia leaf factory. Three LANs are connected via a Wide area Network(WAN) . BAT has a private e-mail network through which management personnel can deal with each other even with the foreign suppliers.

3.4.1 Different brands of BAT

Benson & Hedges, State Express 555 , 555 Subaru World Rally Team, State Express 555 Lights, John Player Gold Leaf Lights, John Player Gold Leaf , Star Filter, Scissors Filter and Capstan Filter etc. are the different brands of BATB.

3.5 Leaf department

At the time of the liberation war in 1971, only 600 acres of land were used for the production of 'Cigarette type' of tobacco. Major portion of the total local requirements of cigarettes were imported from West Pakistan. Immediately after the independence, owing to the shortage of foreign exchange, import had to be reduced. There was an urgent need for increasing local production of tobacco. The sustaining efforts of the company and the Responses of the farmers were so effective that the country became self-sufficient in cigarette tobacco by 1975. In recognition to that outstanding performance, the company was awarded the president's Medal in 1976. In 1996, the company purchased about 5,500 tons of tobacco leaf from its registered farmers.

The leaf department carries out the following important function :

- Provides technical know how, financial assistance and agricultural inputs to the registered farmers.
- Purchases tobacco leaf from the growers.
- Process tobacco leaf ready for insertion in the production department.
- Provides storage and transportation facilities and carrying tobacco to and from the factory.

- Strengthen social relationship through different community development projects in the leaf areas, like encouraging and helping to build a vegetable garden at the premises of the growers.
- Exports tobacco leaf.



(A farmer working in the leaf field)

3.5.1 Structure of the leaf department

Leaf director is the chief executive of this department. Following managers work under this authority of Lead Director in the department.

Project Manager Agriculture

Leaf Administrative Manager

Leaf Area Manager, Kushtia

Leaf Area Manager, Rangpur

Leaf Blender

Export Development Manager

3.6 Personnel department

Personnel Director is the head of the department. The personnel planning & Development manager, Personnel services manager and employee relations Managers works under him.

BAT believes in the strength of human resource and uses the modern concept of human resource utilization. Every job description is carefully designed and modified under dynamic environment. The company believes in the concept of best fit and trains and develops company personnel as the key assets to the company.

The personnel departments thus concentrates all its activities for the development of human resource for the benefit of the company. The department also believes in maintaining harmonious relationship between the management and workers all the times.

The department ensure that managerial development contributes to organizational development. The department various activities cover setting criteria for the selection procedures, interview techniques, training standards etc. According to the BAT policy guideline, the department maintains the personnel through formulation policies on wages, fringe benefits, annual leave, training calendar, provident fund etc. It also negotiates with the trade union for Long Term Agreement(LTA) between management and workers. BAT puts great importance to training and development of managers and employees. The company has technical training center at the Dhaka factory, which organizes different training programs to improve the skill of the workers. The company also conducts in

house training for its management people around the year. As a subsidiary of BAT,
BATB sends its managers for training to BAT group companies.

1.7 Corporate affairs department

The corporate affairs department of the company is dedicated for maintaining a good
image of the company to the society by keeping customers, media, government, suppliers,
etc. contented. The company believes that as a corporate citizen, it has a conscious duty
towards the societies well being. The company promotes and sponsors various
community development programs to increase its image in the society.

The department maintains good and continuous liaison with the media, government and
other pressure groups in order to protect its business image from any unwanted situation
in the context of prevalent anti smoking campaign, nationally and internationally.

As a conscientious corporate citizen, BATB has been actively involved in the promotion
of national art, culture and sports. Sponsors of BAT are well known. In the sports field
the company sponsored quite a few national and international events. In addition, the
company also gave financial and material assistance to Diabetic Association of
Bangladesh, Shandhani, Red Crescent and Center for the Rehabilitation of the Paralyzed,
Jahangirnagar Teachers Club and Bangladesh Botanical Society.

Academic institutions, literary associations, cultural groups, charitable institutions and
community development projects continued to receive support from BAT. To ensure that
the country's wood fuel reserves are not depleted as a result of curing tobacco leaf by
firewood, BAT launched its forestation program, which is still continuing in preservation
and development of the environment and natural resource of the country. As part of the

community development programs, BAT distributes seeds and seedlings of vegetables to the interested farmers free of cost every year.

The Corporate Affairs Department is lead by the Corporate Affairs Managers who is assisted by the Communication manager.

3.8 Finance department

The department is headed by the Finance Director who is assisted by the company Secretary, Finance Accountant, Management Accountant, Audit Manager and Management Services Department Manager. The Finance Department comprises of three departments. They are accounting department, management services department and legal departments. The legal department is headed by the company Secretary who looks after the legal sides of the company such as TradeMark Protection, Infringement of Company Rights, Distributor agreement and trust fund etc. It also looks after the share market activities of BAT shares. The accounting department monitors and controls all the accounting and financing activities of the company. Three senior managers, Finance Account, Management Account and Audit Manager supervises overall financial activities. In the Company Management Services Department is responsible for the IT implementation of BAT following BAT Co. directives. Audit Manager manages all the internal and external auditing of the company.

The departments carry out the following functions :

- Finance company assets, personnel and operational facilities of the cigarette factory, Leaf factory and head office.
- Prepare and verify consolidated financial statement of all units of the company.

- Monitor and control all financial activities of the company.
- Process management information.
- Structure capital policy.
- Carry our auditing by internal and external auditors.

3.9 Marketing department

The Marketing Director heads the Marketing Department. Marketing operation of BATB is carried under two heads, Brand Marketing and Trade Marketing and Distribution (TM & D) that is the rename of the former Sales Department. Trade Marketing & Distribution Affairs are managed by the national Sales Manager and the Brand Marketing is managed by the Group Brand Manager. Marketing Research assists Brand Marketing. Both National Sales Manager and Group Brand Manager are assisted by Group Personnel.

3.9.1 Organization structure of marketing department of BATB

Figure :3



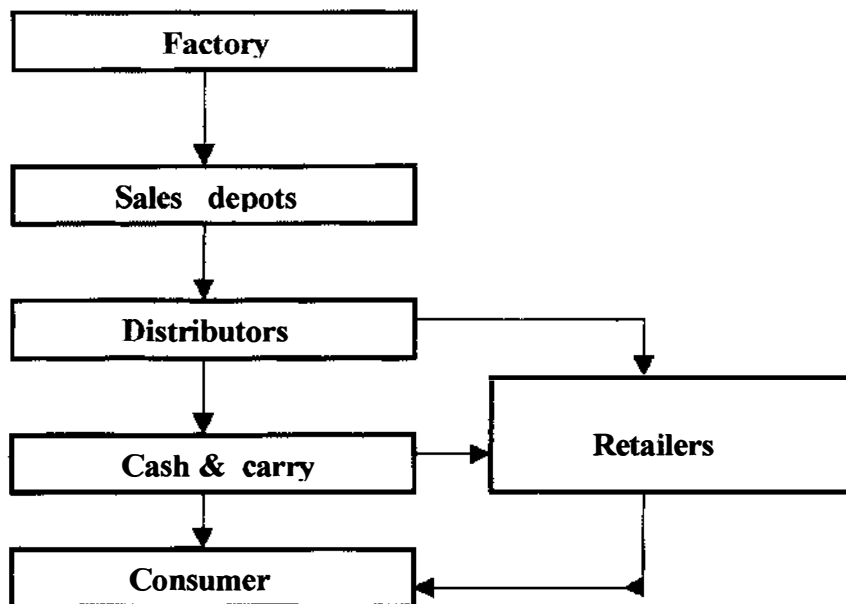
The Brand Managers and Brand Officers are responsible for the allocated brand (s). They are responsible for all type of brand management activities. Group Brand Manager is also supported by a Merchandise & promotion manager whose primary duty is to help brand managers in their performance of the advertisement development functions.

Market intelligence includes the market research teams. The team keeps constant eye on the market situation. Through continuous research, market research team generates useful market information for the brand managers.

The distribution activities are managed by the supply Chain Manager who is assisted by the logistics officer.

5.9.2 Channel of distribution

Figure : 4



Source : British American Tobacco, Bangladesh.

Two distribution channels are named as :

Trade channel :



Figure : 5

Supply channel :

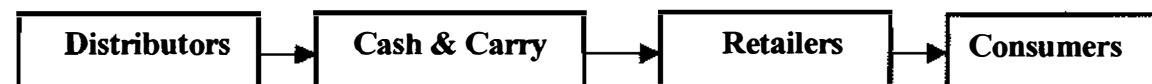


Figure : 6

Trade development & training manager acts as the interface between TM & D and Brand Marketing Group and responsible for trade development activities and all types of Training.

The marketing department and The Production Department activities are highly related.

According to the need of the marketing department , production department carries out

the cigarette manufacturing . The marketing department forecasts the sales volume of the

different brand cigarettes for the coming business year and based on this, prepare a

marketing plan known as the sales operation plan (SOP). According to the plan ,

marketing departments communicate the brand wise sales target for each month to the

production department. Based on the SOP, production department sets its production

schedule. The inventories of cigarettes are also evaluated at this stage to find out the actual output to be produced.

Regional go-down

There are five regional go-downs through out the country to fill up every regional demand just at the time of need, and to overcome various uncertainties related to physical distribution of products , every regional go-down is directly controlled by separate regional manager to face the regional physical distribution challenge.

Carrying contractor

They are the party engaged in the physical movement of cigarettes from head office go-down. Normally they are the truck owners who take all the risk and responsibilities of physical movements of goods between two warehouse.

Distributors warehouse

All distributors have their own warehouse, where cigarette can be kept safely while not degrading its product quality. Distributors buy the cigarette from BATB and from that point ownership and all responsibilities of the products go under the distributors.

Internal carrying agent

They are carrying agent but carry small volume of products. Normally they are local truck owners. They carry products from regional go-downs to distributor warehouse. They also take all the responsibility and risk engaged in physical movement of products.

Opening stock at distributors office

Apart from the warehouse, every distributor also maintains another stock at their office.

This stock is for maintaining any change in market demand instantly. Dealers sometimes

sell cigarette through their countries to face special situation.

Delivery van

All the delivery vans are owned by the dealers to assure the supply of cigarette on the

door of wholesalers, cash & carries and retailers just according to their demand. There are

two types of delivery van.

Cash & Carry

They are businessmen who sell cigarettes directly to consumer and at the same time they

sell cigarette to the retailers.

Retailers

Retailers are at the end of the physical distribution system of cigarette selling products

directly to the consumer.

9.3 Regional trade marketing office (RTMO) Dhaka

The British American tobacco Bangladesh has a well defined mission for the marketing

and distribution of products, which is to reach the target consumer in the most efficient

manner by becoming the benchmark supplier to the trade within the strategic channel in

every market where the company operates. A well - organized trade marketing team is

working continuously to make this mission successful, Furthermore the whole country

has been divided into six regions to perform the marketing activities efficiently.

Moreover

The regions are further split into eleven areas. Right now there are six regional managers, twelve area managers and thirty seven territory officers working under the head of trade marketing. At present, there are eighty-two distributors involved with BATB are responsible to make the products of the company available through out the country.

The British American tobacco Bangladesh consider the distributors as their customers. They have identified the distinction between the customers and consumers in a proper way. Consumers are those who buy cigarette for smoking. The company sells their product to the distributors; in turn the distributors sell to the retailers and cash & carry as well. Cash & carry are nothing but wholesalers. Cash & carry are needed because at times the retailers may not have adequate funds to buy the required quantity. However, the company is trying to discourage the use of these wholesalers to control the price of their product in the market. Generally, the trade marketing and distribution team performs three main activities, which are trade coverage, cycle implementation and training & development.

Trade coverage

Accumulating primary data from the market is a function of trade coverage. There is a team working to identify retailers who contribute eighty percent (80%) of their total sales volume. The Territory Offices(TO) are responsible for making a route plan for which they can identify which outlets to visit and in what frequency on the basis of those classes. The territory officers have to visit at least twelve outlets a day and collect raw data from the retailers on the call card in the Laptop computer. A set of questions regarding the various aspects of the outlets make up the call card. There is a database at the RTMO

which is updated regularly by using those calls. This databases as a powerful tool to identify and classify different outlets in terms of volume sales, outlet characteristics and consumer profile.

Cycle implementation

The marketing people of BAT have divided the whole year into thirteen cycle and each cycle focuses on a particular brand. Furthermore, the brand marketing group along with Trade marketing people develop promotional campaign plans for each brand. They also select the brand for the cycle and develop cycle instructions, and send it to the RTMOs. After that the trade marketing team develops some objective and implement those within their territory which helps to follow the proposed cycle instructions. The regional manager and the area manager then brief the TOs about the cycle objectives in turn the TOs brief the distributor and ultimately work with the retailers. In this regard the contract merchandisers generally perform well to accomplish the TOs job, at the end of each cycle, the TOs prepare a cycle evaluation report.

Training and development

To train the working people is one of the most important jobs of any TO. They generally Train the people working for the distributors, for example distribution representative and also the contract merchandisers within his territory. They also train the retailers about how to approach customers, if necessary.

Retail outlet classification

The British American tobacco Bangladesh has classified all the retail outlets into three categories, these are- Convenience, Grocery and HoReCa.

Convenience outlet

All shops where consumers generally go without any purchasing intention fall in this category. The consumers like to buy product in impulse from these sorts of outlets. These outlets generally maintain a limited product range and do not offer flexibility in prices.

Grocery

These are the outlets where consumer visit on a regular basis and with a purchasing intention. They generally make a list of item before they will visit these sorts of outlets. These outlets typically offer variety in terms of product range and also flexibility in price.

HoReCa

Shop like hotels, restaurant and cafes are considered in this category. The prime characteristics of a HoReCa is that the shops must have a seating arrangement. It is assumed that consumers visit those shops with the intention to spend some time. These outlets range from small roadside cafes with seating arrangement to luxurious restaurants and fast food outlets.

1.10 Description of the major brands

1.10.1 Double & Hedges

This brand is the most profitable of the BAT products and launched in early 1997 in order to give consumers the choice to purchase a fresh, duty paid alternative to the widely available smuggled version. The demand of this product is largely high all over the country. It is notable that BAT imports this brands in Bangladesh from the company's other

plants located in foreign countries. Very recently BATB set up plants to produce it in Bangladesh. The author observed the test production of the first B&H cigarette in Bangladesh. The test copies of B&H cigarette, produced in Bangladesh have been sent to BAT head office. BATB will start producing B&H in a large scale after the Head office approves the quality standard of the B&H cigarettes produced in Bangladesh.



(Some of the major brands of BATB)

State express 555

The 555 centenary celebrations took off in the spirit of 100 years of smoothness above all on 05-05-1995. Bangladesh, like many other countries, celebrated the introduction of the new centenary pack with birthday parties special promotional events, and integrated advertising & promotion activities.

State express 555 lights

State express 555 lights is the first light cigarette to be launched in Bangladesh. The SE 555 Lights is a new member of SE 555 family. It is a new variant of the exiting SE 555. It was first introduced in 1995 in Dhaka and Chittagong. The objective was to give the smokers more options within the same brand family and to keep pace with the modern trend of smoking light cigarettes throughout the world.

John player gold leaf lights

To keep pace with the global trend of lights and to support British American Tobacco Bangladesh's corporate objective of establishing leadership in light segment in Bangladesh., The management of BAT launched JPGL lights last year in some selected markets in Sylhet as a part of test marketing. JPGL association with the worldwide F-1 powerboat racing was also successfully exploited in 1997 through a consumer promotional event under the banner of JPGL. Carnival, which took place in five key cities.

John player gold leaf

1995 was an important year for John player gold leaf as the brand was re-launched in the

new international pack. Given the importance of the brand for the company and the risk associated with such change, the management of change process included four phases to properly condition the consumer and the trade to the new pack. Specific materials were used ahead of the re-launch to announce the change to the consumers and to the trade.

Star filter

A new image for a promising future 1995 was an excellent year for Star Filter as the Brand demonstrated an outstanding volume and growth of share. This performance was The result of a major blend improvement, supported through an appropriate communication campaign, as well as the launch of a new advertising campaign with the theme of " The Flavor of Tradition and modernity ".

Scissors filter

Scissors filter has been helping BAT to regain segment leadership in the medium price Segment till 1995, as the brand has experienced dramatic increase in volume and market share. The brand distribution was gradually extended to different parts of the country With the help of focused brand support, emphasizing on POS materials, and consumer promotions.

4 BAT AND ITS MARKET SHARE

4.1 Market share of BATB and competitors

Different brands of BAT and its competitor volume of market share on the basis of price segment are shown in the following table.

Table No.2

Price segment	BAT	Competitors brand(Dhaka, Alpha and Transit & others)	Shares%	
			Competitors And Transit segment share	BA segment Share
Premium TK. 3.00+	Benson & Hedges,555	Marlboro, Rothmans	52%	48%
Medium TK.2.00+	Gold leaf	London, The President	16%	84%
Low TK.1.00+	Star, Capstan, Scissors	Navy, Legend, Senor, duke, Don, London, Top 10, Super Star	46%	54%
Very low TK.0.25+	None	Star, Red & White, Diamond Surma, K-2, Cannon, Prince, Boss, Express, Wilson, Five Five, Nasir Gold, Gold leaf, Gold Star	100%	0%
BIRI	None	Akiz, Abul	100%	0%

BANGLADESH CIGARETTE AND BIRI MARKET

PRICE SEGMENT PKS/STKS	BAT	DHAKA	ALPHA	TRANSIT & OTHERS	SHARE%	
					SEGMENT SHARE 01/2004	BAT SHARE OF SEGMENT
PREMIUM TK. 2.00+					5.46%	97.44%
MEDIUM TK. 1.00+					19.04%	91.48%
LOW TK. 4.00+					38.22%	56.37%
VERY LOW TK. 0.25+					77.12%	
BIRI TK. 0-10						

BIRI = 74.5% OF TOTAL MARKET (CIGARETTE + BIRI COMBINED)

(Pictures of the major cigarette companies and their brands)

Besides BATB, a number of other companies are engaged in manufacturing and marketing cigarettes. The major ones are as follows-

- Dhaka Tobacco Company
- Alpha Tobacco Company
- Nasir Tobacco Company
- Sonali Tobacco Company
- Abul Khair Tobacco Company.

Moreover, there are also some foreign brands, which are either smuggled or imported illegally. These have been termed in board terms as transit brands. The most imported brands in this category are Dunhill, Benson & Hedges, Marlboro, London etc. It is notable that recently Marlboro has started operating seriously in Bangladesh.

The market share of BATB is around 51% in the Dhaka Metro. The share of all other Companies in Dhaka Metro is shown in the following table and pie chart.

Table No.3

Name of the company	Percentage of the share
BATB	51%
Dhaka Tobacco	11%
Alpha Tobacco	3%
Sonali	2%
Transit	13%
Others	20%
Total	100%

Source : BATB : Monthly Audit Report : October 1999

Market share of BATB in Dhaka

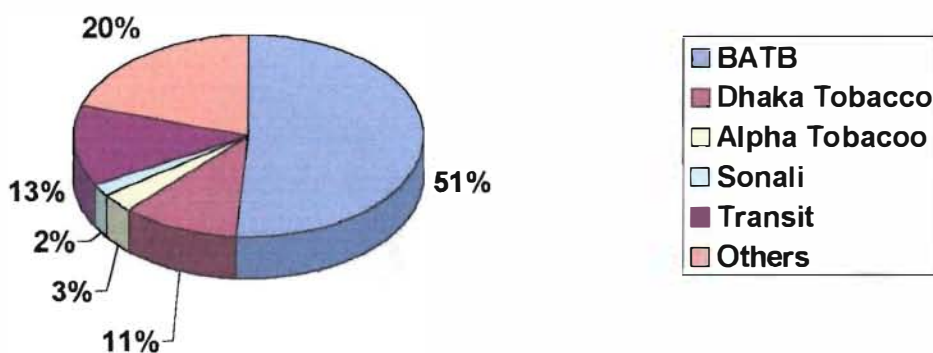


Figure No : 7

In the whole country, the share of BATB is 41% , followed by Dhaka Tobacco, which has a market share of 22%. The market share of BATB on a national basis is shown in the following chart.

Table No 4

Name of the company	Percentage of the share
BATB	41%
Dhaka Tobacco	22%
Alpha Tobacco	8%
Sonali	3%
Transit	6%
Others	20%
Total	100%

Source : BATB : Monthly Audit Report : October 1999.

Market share of BATB in Bangladesh

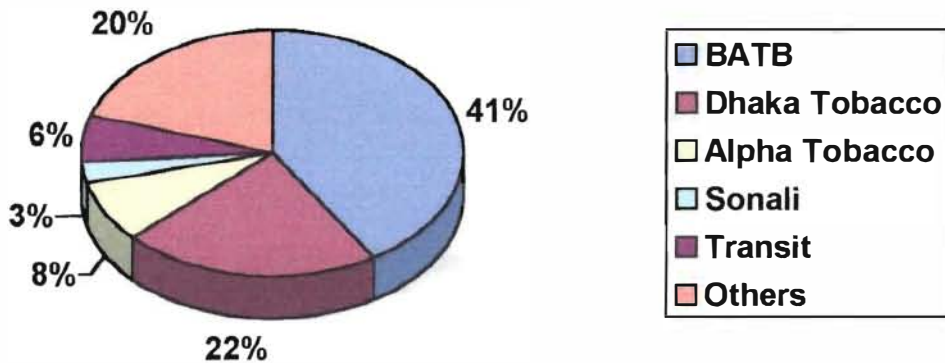


Figure No : 8

The above chart shows that BATB is holding the major portion of the market share in the whole country amounting to 41% and the nearest one is Dhaka Tobacco with the market Share of 22 followed by alpha tobacco with 8% market share.

Though BATB is holding the major cigarette market in the Dhaka city as well as whole country, there are also other companies that are operating in the market.

The main brands of the competitors are as follows.

Table No : 5

Name of the company	Name of the brands
Dhaka tobacco	Five star, Legend, Navy
Alpha tobacco	Senor Gold
Azizuddin Industries	Wilso Classic
Sonali	Five Five
Abul khair Tobacco	Sun-moon
Nasir Tobacco	Nasir Gold, Top-10

Although none of these companies have become a major threat to BATB, except perhaps Dhaka Tobacco, yet the presence of these companies signals that other companies can also join this market.

But the introduction of the operation of an international tobacco company like Marlboro In Bangladesh is really a big threat for BATB. This is an external threat over which BATB has no control. However the company should take steps to increase its market share to combat Marlboro. The market leader is Gold Leaf of BATB (15%) , followed by Star of the same company. Which accounts for 11% of the market share. Then comes

Navy of Dhaka Tobacco, which Accounts for 7% of the market share. The market shares of all main brands are shown in the following table.

Table No: 6

Name of the brand	Percentage of share
Gold leaf	15%
Navy	7%
London	3%
B & H	3%
555	3%
Scissors	10%
Star	11%
Others	58%

Source :BATB : Monthly Audit Report :October 1999.

Market share of BATB Brands

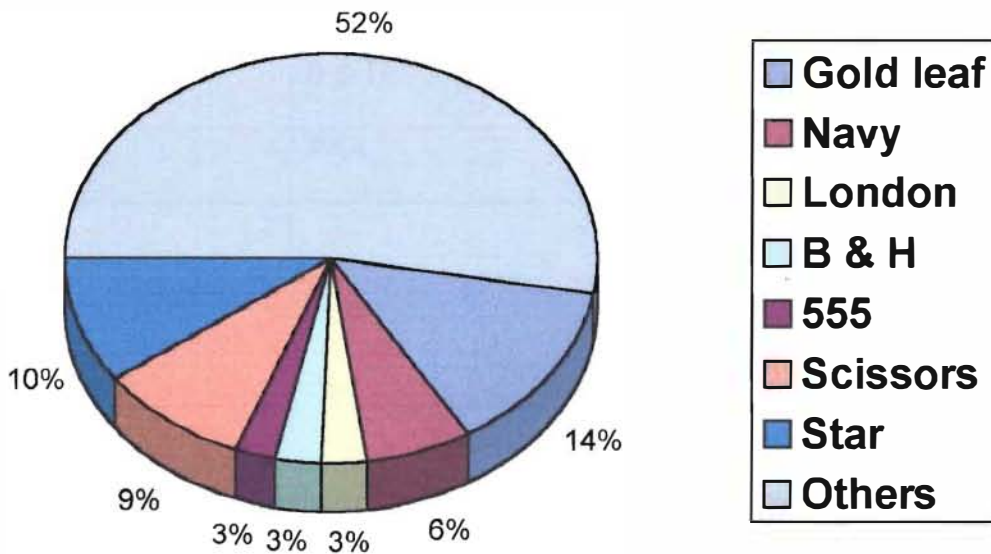


Figure No : 9

4.2 Price segmentation of market

Table No : 7

	Volume share	Value share	BAT segment share
Premium	5.4%	17.0%%	48%
Medium	17.6%	35.0%	84%
Low	43.0%	13.0%	54%
Very Low	34%	13.0%	

Source : BATB 's portfolio 2000.

4.3 Current portfolio of BATB brands

Table No : 8

Segment	International	Local
Premium	B & H, 555	
Medium	JPGL	
Low		Star, Capstan, Scissors

Table No : 9

Price(TK/ Stick)	Current portfolio
4.0	B & H
3.5	555

3.0	
2.5	JPGL Lights
2.0	JPGL
1.5	Capstan
1.0	Star, Scissors

Source : BATB 's portfolio 2000.

5 ANALYSIS OF BATB's POSITION

5.1 Research method of the survey

The review of BATB given in the next section was done by analyzing data from different

Sources. These are :

- **Primary sources :**

- In - depth interview
- Question survey

- **Secondary sources :**

- Annual reports of BATB.
- Leaflets and brochures of BATB
- Articles and journals.

- **Method of data collection**

Two methods were used in collecting the data. They are :

(a) In - depth interview

The personal in - depth interviews were placed with the personnel of BATB.

(b) Observation

The major and minor issues in different issues of BATB were noted through observation for three month.

5.2 SWOT Analysis

5.2.1 Strengths

- 1) **Getting highest competitive advantage in Bangladesh :** BATB process highest competitive advantage in manufacturing and marketing their products in Bangladesh. BATB is the only one pioneering multinational company in the country and local companies are not capable to produce international standards products. Customers always expect high product and service quality from producers. BATB has been successful in this context. BATB enjoy almost monopoly business in the premium Brand cigarette market as other local companies have no premium brand to complete with BATB's Benson & Hedges and 555 State Express.

Bangladesh cigarette market shares

Table No: 10

Price Segment	Segment Share	
	BAT	Other companies
Premium (Tk. 3.00+)	48%	52%
Medium (Tk. 2.00+)	84%	16%
Low (Tk. 1.00+)	54%	46%
Very Low	0%	100%

(Source BATB's Portfolio 2000)

2) **Using latest Technology** : Technology revolutionizes the product and production Process. BAT always uses latest technology smoothing out the production process.

- **Process Technology** : Process technology is used for tobacco processing and its conversion to cigarette. It encompasses extrusion technology, aspects of packing and painting, cutting and dying technology, application of instrumentation, control system and process automation and separation of tobacco and non- materials etc.
- **Material Technology** : The company has been using latest material technology to the design and develops the cigarette and packing. These area are covers papers technology, combustible smoking materials etc.
- **Information Technology** : BAT's computer section is very updated and well oriented All the external and internal information is being controlled through a network.
- **MRP II** : BATB is the only company in Bangladesh who uses MRP II (Manufacturing Resource Planning) in their production and operation . This is the latest technology and only a few companies in the world have the capability to implement MRP II . This is a very distinctive competitive advantage of BATB over other companies.

3) **High quality management** : Ideal management comprises of five essential aspects- Planning, organizing, controlling, staffing and leading. All these five elements are effectively present in BATB management.

Some important feature are listed bellow :

◆ **Planning :**

- Long term orientation
- Many people involved in preparing and making decision.
- Decision making takes long time but implementation is fast.
- Employees share power and responsibility.

Organizing :

- Common organization culture.
- Organizational changing by changing goals.

Staffing :

- Rapid advancement highly desired and demanded.
- Reward for individual achievements.
- Training and development undertaken.

◆ **Leading:**

- Directive style, strong, firm and determined.
- Leaders are decision makers heading the group.

◆ **Controlling :**

- Control by superior
- Control focus on individual performance.

4) **High financial strength** : BATB is a very big multinational company, which has a huge financial back up. So, the company can devote a large fund to research and development, advertisement, quality control and training and in other areas, which its competitors cannot match.

5) **Absorbing economies of scale in producing BATB products** : BAT product has a higher demand in Bangladesh. As the produces in a large scale, it possesses economies of scale and hence per unit cost is comparatively lower in Bangladesh. On the other hand , production sources-land, labor and materials are also low in Bangladesh.

6) **BATB is the largest taxpayer in Bangladesh** : BAT is the largest taxpayer in Bangladesh. It paid more than Tk. 267. Million in tax in the year 1998 (source : Annual Report 1998) . As a result of this BATB enjoys a very cordial relationship with the Government of Bangladesh.

7) **Highly respected in Bangladesh** : BATB has a very good reputation through out the country. All respects the company. He consumer believe that BATB's product is of high quality. To most of the consumer it is a status symbol to smoke BATB's premium brand cigarette (e.g. B&H , 555) . Most of the suppliers and other people

- also treat BATB with respect, as they perceive that the management system, employees and products of BATB represent top quality.
- 8) **Low manufacturing cost :** There are many reasons for low manufacturing costs of BATB in Bangladesh. First, it can hire labor at a cheaper cost, which is not possible in the developed countries. Secondly, the company has been using latest technology in production by which it is able to minimize its production cost by producing bulk of cigarettes. Thirdly, transportation cost is also comparatively lower in Bangladesh.
- 9) **High manpower quality:** BATB hire highly qualified managers and employees. Most of the hired persons are best in their field. So, higher productivity of the staff is a distinct advantage to BAT in the field of management and production.

5.2.2 Weaknesses

- 1) **Missing a large number of consumers due to high price :** BAT is loosing A large number of consumers in Bangladesh due to high price of its products. BAT does Not have a product for very low income consumers and " Biri" consumers. Evidence Shows that 74.5% of total volume of market share of smokers(cigarettes and Biri combined) belongs to local company where BAT has no access. Hence, we may suggest That BATB may capture a large portion of the local smokers market, if it produces a low price product for the low - income consumers.

- 2) **Wholesalers and retailers are not getting enough attention :** Distributors of the company do not give enough attention to the wholesalers. The retailers also complained that BATB does not provide sufficient merchandising materials to them. The concern territory officers do not hold much responsibility in this sector.

- 3) **High tax :** It is both an advantage and a constraint for BATB. BATB has to pay a huge tax to the Government. Because , although it has a reputation as a large taxpayer, it has to spend a huge amount of it's earning for income tax and VAT.

- 4) **Problems facing for operating in the Tobacco industry :** Because of the health Hazard of the products it produces, BATB faces the barriers as faced by any other tobacco companies. Its products are becoming less and less desirable in the society day by day as the anti smoking campaign goes on. The rate of supplementary duty on cigarette is very high. BATB is barred advertising its products in Bangladesh Television.

5.2.3 Opportunities

- 1) **1) The number of augmenting smokers in Bangladesh is also an opportunity for BATB:** The number of professional smokers is gradually decreasing in the Western countries whereas the same is increasing in Bangladesh. The BATB can have this opportunity and can make a consumer forecast for the future. At present, the cigarette market in Bangladesh is growing at a rate of 10 percent. It is a very good opportunity for BATB to grow.

- 2) **Augmenting GDP** : GDP of Bangladesh is increasing due to economic expansion, open market policy, industrialization and educational development. It is a great opportunity for BATB to expand its market and product line.

Table No. 11

Year	1994-95	1995-96	1996-97	1997-98
GDP	4.4	5.3	5.9	5.7

(Source : Statistical year book of 1998).

- 3) **Increasing number of population**: The number of population is increasing at a high rate in Bangladesh. And at the same time the number of smoker are increasing (increasing demand disclose it) . So it is an opportunity for the company.
- 4) **80% people smoke Biri** : In our country a large section of urban and rural people smoke ' Biri' . This means that the market potential of BATB is very high. If the Biri consumers can be persuaded to make cigarette instead., the company will have a very big market for its products in this country.

5.2.4 Threats

- 1) **Political instability and violation** : Political instability, hartal, public demonstration, anti- social activities are the most common phenomenon in Bangladesh. These external anti national welfare activities hamper sound business environment. So these factors are big threats for the company.

- 2) **Natural disasters** : Natural disasters like floods, cyclones, and tornadoes are very common in Bangladesh. These natural disasters cause a huge loss of crops, production and property, which directly reduces the purchasing power of the consumers. This in turn reduces demand for cigarette including BATB products. As BAT cultivates a considerable amount of tobacco in the country to use them as raw materials in cigarette production, sometimes natural disaster greatly hampers leaf cultivation.
- 3) **Anti smoking lobbies activities** : At present all over the world anti smoking campaign is gaining strength day by day. These kind of campaign threaten the company 's activities.
- 4) **Smuggling cigarettes** :Smuggled cigarettes are available in Bangladesh. These are company's same brand or other international brands. Smuggled cigarettes decrease the internal demand. This is one of the greatest threats for BATB. BATB cannot lower the price of its products, as the company has to pay a huge tax for them. But the same brands of smuggled cigarettes are sold inside Bangladesh at a lower price. As a result consumers are purchasing the smuggled cigarettes.
- 5) **Violation of patent** : Violation of patent has become very common in Bangladesh. Even though Government is taking legal action against it. Many companies are the brands name of BATB products. For example, there is a cigarette called " Five Five", which resembles to BATB' s popular brand " 555".
- 6) **Social pressure on the company is also increasing** : At present, people are becoming more and more health conscious and a strong social pressure is being

created on the cigarette on the cigarette companies worldwide. BATB is not free from this pressure.

- 7) **International competitors are coming to Bangladesh** : Marlboro international company has already started its operation in Bangladesh. This is a significant threat to BATB.
- 8) **Merger with Rothmans** : BATB has recently merged with Rothmans. After the merger, 51 factories around the world have already shut been down for cost minimization. BAT operation in Bangladesh can also shrink for the purpose of cutting cost.

Appendix - 1

SYSTEM DEVELOPMENT ON PERIODIC PAYMENTS



**BRITISH AMERICAN
TOBACCO**
BANGLADESH

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Introduction

This report is a part of the main Internship Report, and is termed "System Development on Periodic Payments". This is the system analysis and design of the Periodic Payments of the Corporate Finance Department of British American Tobacco Bangladesh (BATB). The outcome of this report was a Database Software named "Utility Register". This report includes a detailed analysis and the designing on the automation of the periodic payments of BATB, which would be focused in details in the later sections. The Periodic Payments were regular issues that were repeated on a daily basis. So converting this manual process was worthwhile and hoped would enhance the efficiency of the Finance Department of BATB.

Existing System

1.1 Background to the Problem

The Finance department of British American Tobacco Bangladesh, (BATB) is very hyperactive and an efficient department in processing bills and calculating expenses and other miscellaneous items. The department runs a wide variety of strong database management systems and they also have an integrated accounting software named Tetra CS/3, to maintain the accounts. But still there was some area where the traditional record keeping system prevails. One such area was the recording of periodic payments.

The register on periodical payments was maintained and calculated every monthly. Periodic payments are those payments that are recurring like the utility bills, rents, fees and other miscellaneous expenses. These repetitive tasks were time consuming and involved too much processing. Further more the manual calculation of these payments was prone to errors and came up to the deadlines. As a matter of fact created hustle in calculation and sometimes crossed the deadlines. This fusion of manual record keeping with other automated accounting journals by Tetra CS/3(the integrated accounting software for BATB), was not a good combination and therefore a proposal was raised to review the current manual periodic payment system to convert it into a computerised one.

1.2 Types of Periodic Payments:

House and Godown Rents

Electricity bills

Gas bills

Water bills

Internet bills

Telephone bills

➤ For official usage

➤ for personal usage by BAT's employee

Consultants Fees

Doctors remuneration

Smoking allowances

Generator fees

- Boiler expenses
- Factory Fees (annually)
- Cleaning and Servicing
- Security
- Renewal

3 Recording of Periodic Payments

A large part of the periodic payments are the Utility Bills. These bills came in the form of bill issued by the respective Utility Companies. Some of the bills came directly to the company. As for the electricity, water or gas that are used by the factory or the office, are directly billed to the company. Telephone on the other hand had two part. One is the official expense and the other is the employees personal expense. Some of the employees are entitled to receive telephone from the company and their bills would also be paid by the company up to a certain amount.

Therefore the official bills were directly sent to the company and the manager's personal telephone bills were sent to them by T&T and they would then submit their respective bills to the finance department.

All other expenses, other than the utilities, were directly generated by the company on a monthly or quarterly or yearly basis. For example the fees to the doctor or consultants and the costs of godown, allowances and cleaning & servicing and all these sort of expenses were prepared by the company and was paid to the respective recipient.

The finance department collected and then recorded these billing data to a Register book. The register book is then referred back for the calculation purpose in future.

4 Existing Register Books

The various register books and their fields are:

RETAINERS FEES

Fields:

ID

ACCT_HEAD

NAME

DATE_OF_APPT

BASIC_SAL

REMARKS

DATE

AMOUNT

FACTORY COMPOUND MAINTAINANCE

Fields:

ACCT_HEAD

BASIC AMOUNT

DESCRIPTION

DATE

AMOUNT

THRESHER MACHINE

Fields:

ID

ACCT_HEAD

NAME

AMOUNT

DESCRIPTION

DATE OF SERVICING

) CLEANING OF THRES MACHING

Fields:

ID
ACCT_HEAD
AMOUNT
DATE

) RENTAL FOR GODOWN

Fields:

ID
ACCT_HEAD
NAME
AMOUNT
DATE

) OPERATION DOCUMENTATION & CLEANING OF BMTF GODOWN

Fields:

ID
ACCT_HEAD
AMOUNT
DESCRIPTION
DATE

) SERVICING

Fields:

ID
ACCT_HEAD
NAME
AMOUNT
NEXT DUE DATE
DESCRIPTION

DATE

1) **SMOKING_ALLOWANCE**

Fields:

ID

ACCT_HEAD

NAME

AMOUNT

DATE

2) **RENEWAL**

Fields:

ID

ACCT_HEAD

NAME

PAYABLE_TO

DATE

AMOUNT

TELEPHONE

Fields:

ID

TELEPHONE NUMBER

USED BY

ADDRESS

PHONE TYPE

DATE

AMOUNT

ACCOUNT HEADING

ACCOUNT CODE

4) ELECTRICITY BILL***Fields:***

ID

METER NO

AMOUNT

DATE

USED AT

These are the some of the most common periodic payments recorded and calculated by the finance department.

2.5 Periodical payments associated with Salary Calculation

There were some calculations that were associated with SCI and VAT rebate. For example the telephone bill reimbursement and calculation plays a major part and was calculated at the end of the year. To trace and record these reimbursement, lots of register books were maintained and recorded.

3 Analysis of the Existing System

3.1 Data Flow Diagram of the Existing System:

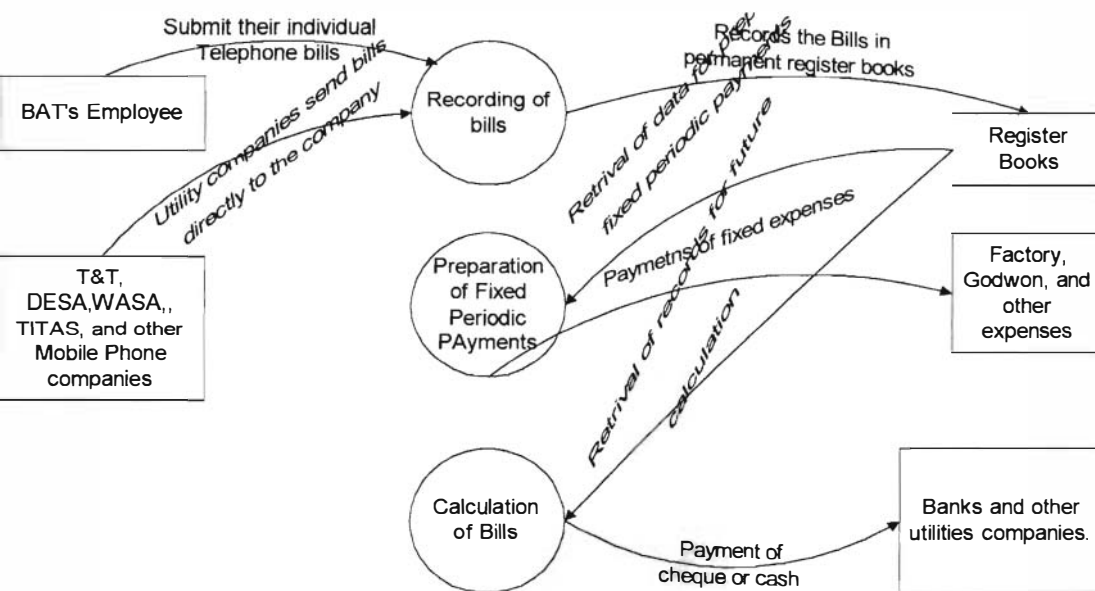


Figure - 1

3.2 Steps in Processing the Periodic Payments

Preparing the Periodic Payments there were two type of processes involved. One was the Utility Payments that was based on bills received form the Utilities companies and the other one was the fixed payments that were prepared by the finance department on periodic basis; like the smoking allowances or the servicing or rental fees.

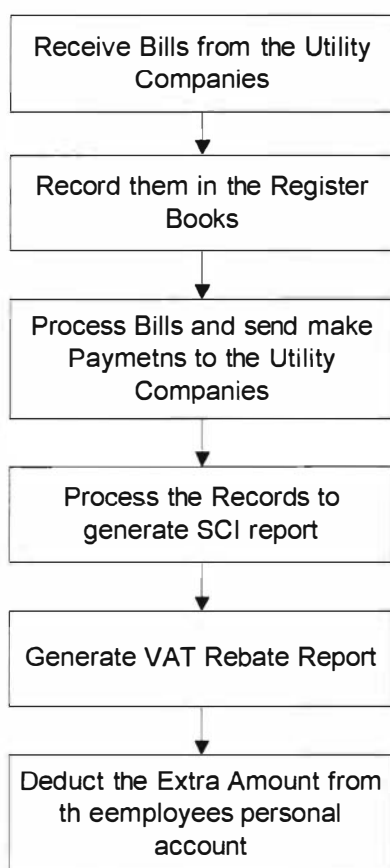
3.2.1 Fixed Periodic Payments:

The fixed Periodic Payments were those that is fixed for a certain specific period of time. and does not vary on monthly basis like the telephone or other utility bills. Therefore preparation of these fixed periodic payments were bit simple and took only one process that as the finance department had to calculate the fixed amount due at that outstanding period and charge it to the appropriate account.

3.2.2 Varying Periodic Payments

Payments like the utility bills, were varying in nature and changed on the basis of its usage. So there was no certain limit as such or any fixed amount that will be charge. The more the item would be used, more the bill would incur. For example telephone, water, electricity and gas are such item whose bills will depend on the usage pattern. So the steps in preparing the varying periodic payments was bit more complicated than the fixed payments and would involve some more steps. An example of the steps of the telephone charge is illustrated below.

Figure - 2



3.3 Data Redundancy and Duplication

Studying the existing system it had been found that there were instances of Data Redundancy and duplication. This data redundancy had lengthened the processing steps and involved unnecessary steps. Which is in other words wasted time and efforts.

The first instance of data duplication is the repetition of common fields in the register books.

The repeated fields in all the register books are :

- 1) ID
- 2) Date
- 3) Amount

If there were a single table in a database, then the repetition of the common fields would have been eliminated. But if the register books were left as it was, then the data duplication would increase and the number of register books would grow in size unnecessarily.

A list of transactions under each periodic payments are given below which will show the frequency and the susceptibility of data redundancy

Transactions under each Periodic Payment

Payments	Transactions
House and Godown Rents	40 transaction
Electricity bills	23 Transactions
Gas bills	15 Transactions
Water bills	15 Trisections
Internet bills	2 Transactions
Telephone bills	220 Transactions
Consultants Fees	4 Transactions
Doctors remuneration	2 Transactions
Smoking allowances	15 Transactions
Generator fees	5 Transactions
Boiler expenses	3 Transactions
Factory Fees (annually)	10 Transactions
Cleaning and Servicing	3 Transactions
Security	2 Transactions
Renewal	7 Transactions

Table - 1

3.3.1 Periodic Payments processes in details and their drawbacks

From the data above it can be seen that the Telephone bills processing alone has 220 transactions. Therefore it was the highest repetitive process and was given more priorities to convert it in to a data redundant and duplication free process.

Some of the common task that were reviewed in to details are given below.

3.3.1.1 Telephone bill payment for personal use.

- The management team of grade 35 and above were allowed to use personal telephone and the company will pay the bills up to 2400 and 3600 calls per year.
- The management employees paid the bills by their own and submitted the billing copy to the company for reimbursement.
- The company added the amount to the salary and if they exceeded the call limit the company deducted it at the year-end.

Disadvantages of this process are:

- Double bookkeeping for one task: reimbursing the amount and then again cutting it back at the year-end caused double book keeping for one task and was an unnecessary process
- Employee who left the company in the middle of the year evaded the payment of the extra bills used by them.
- Calculating the total bill amount is difficult as it was done once at the year end.

3.3.1.2 Smoking Allowance, Renewal of Licenses and other utilities

- The smoking allowance was prepared by a requisition made by the finance department to the distribution department.
- In case of absence of employee responsible for the requisition preparation, the allowances were not done in time.
- Similarly the utilities and the renewal of licenses were also a major part of the deadline problem.

3.3.1.3 Other problems:

Like this smoking allowance and the renewals, there were several other periodic payments that were fixed in value and have to be calculated on timely basis. i.e. the servicing and cleaning, doctors' remuneration, consultants' fees and several others. These payments too faced the same problems as the smoking allowances.

3.4 Overall problem of the Existing System

Apart from the specific problem outlined in each of the periodic payments, there were several other problems that could be viewed as an overall-general problem for the existing manual system. These problems are:

- The bills made the government utility companies might contain some errors and might come with excess figures. These could not be traced by the manual system.
- Keeping records for all the calculation involved huge volumes of register books.
- The processing was very expensive in terms of opportunity and financial cost.
- Instead of involving an employee dedicated to just the calculation, he could have been placed to some more meaningful task.
- Payments sometimes crossed the dead lines and huge loss had to be borne by the company to adjust the late payments.

3.5 Solution to the problem

Since in every facet of BATB it is computerised, this manual Periodic Payments calculation could also be converted to an automated computerised one. A computerised system could be implemented to eliminate the entire quoted problem and would raise the efficiency of the Finance Department. In order to implement a proper solution for the problem, the system should be able to satisfy these three basic requirements:

-) The system should support decision.
-) The system should support changes in business rule.
-) The system should ensure consistent information.

3.6 Analysis of the Proposed System

A database could be designed which would replace the manual register books and could be used for future referrals. This database would be able to add records, store them and calculate bills, SCI and also VAT rebate. Reports could be generated from this system and also this would support the three basic requirements stated in the previous section.

3.6.1 Objectives of the New system

Main Objective:

The main objective of the database would be to automate the manual system and reduce the register books.

This would be done in two processes.

1. The fixed payables would be calculated and printed automatically before the due dates.
2. After entering the meter readings for the utilities, it would print out doing all the calculation necessary automatically.

Other objectives would be:

1. To calculate the **periodical payments automatically** and print out the reports to transmit to the concerned departments.
2. An **alarming system** could be incorporated that would give notices about the renewals and servicing dates in advance and would print out the forms.
3. A **graphical report** could be generated that would show that current usage patterns of the utilities and would report any abrupt change in the data. This would be very helpful to trace out any mistake in the data entered for calculation.
4. The **totals and the sub totals** for each Account Heading could separately calculated for viewing at a glance and make any necessary comments and strategic analysis by the finance departments.

3.7 Data Flow Diagram of the Proposed System

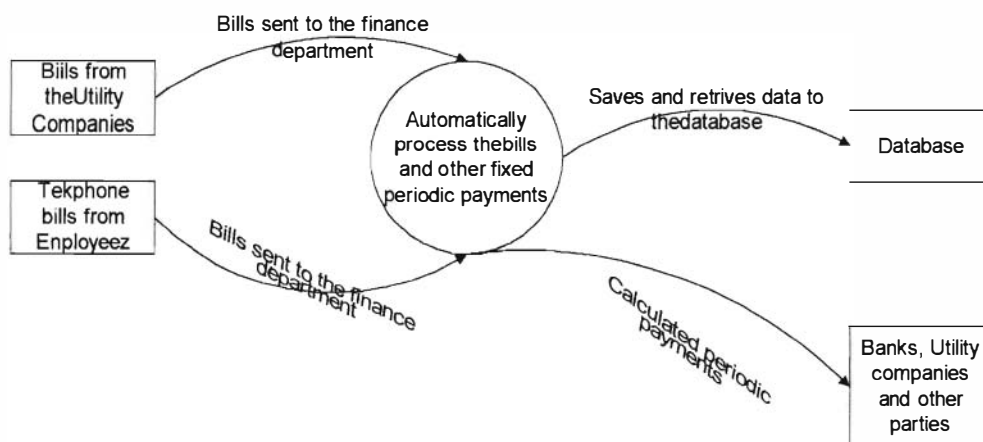


Figure - 3

The DFD of the new system had only one process instead of three processes present in the existing system. Therefore it is both reducing the steps and processing time for the processing of the Periodic Payments.

3.8 Consequence of the Proposal

MAIN TARGET:

The proposed system would be able to reduce the time and the processes, that was at previously required by the manual system, to calculate the periodical payments.

Employee's time saved:

The staff, who was in charge of preparing the periodical payments, Required 70% of his total working hours per year to process and prepare the payments. Even he had to work overtime to complete his work.

The proposed system would be able to reduce his work to almost by **one fourth**. He would not have to work overtime to prepare the payments and would his and company's time.

The computerised system would be able to save the processing time by **273 days per year** which is equivalent to **2184 hours per year**.

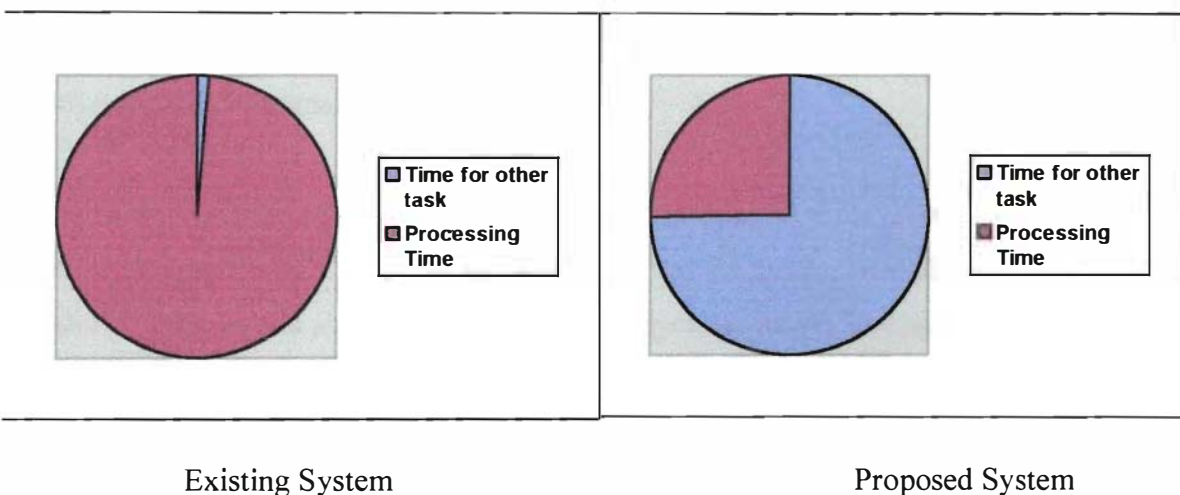


Figure - 4

Management's time saved:

To authorise the final payments and the calculations, the management employee had to spend almost 2 hours every month in signing the register books.

This valuable time would be saved by the reports generated by the proposed system.

Deadlines and late fees can be avoided:

BATB pays a huge amount of utilities bills to the government companies. And by any chance the deadline is crossed it had to pay a huge amount of late fees or other penalties.

Design

A database would be designed by using MS Access and the data would be stored in the central system for accessing from any point and department.

A user friendly GUI would be associated for easy maintenance and operating by any employee by the department.

The database would be developed in two phase. In the first phase the utility payment part would be automated and a database would be designed for that and would be called "Utility Register". In the second phase the fixed periodic payments would be attached to the first module of the database and a complete Periodic Payment database will be designed.

The present module would include the Telephone, Electricity, Water and Gas bill payments records. The database would include reports based on the entry made and reports embedded with queries that would allow searching function on the billing month and the telephone or meter number. It will also calculate the SCI charges and the tax rebate in the form of reports.

4.1 Information Flow (Input /Output)

The main source of information for the processes in the database would be the bills made by third party i.e. the Utility companies like T&T Board for the telephone board. Sometimes the telephone bills were also directly sent to the management employee, who were entitled to have phone from the company. These management employee, who were entitled to receive payment from the company, submit their telephone bills to the finance department. The finance department then processes the bills and makes all the record keeping. And then they pay the bills to the concerned banks or add the payments to the personal salary account of the employee for their personal bills. Therefore the "ADD FORMS" would be used to get the inputs for the program and the "REPORTS" would be the outputs that would be generated by the program for BATB.

1.2 Proposed System Operational Hierarchy

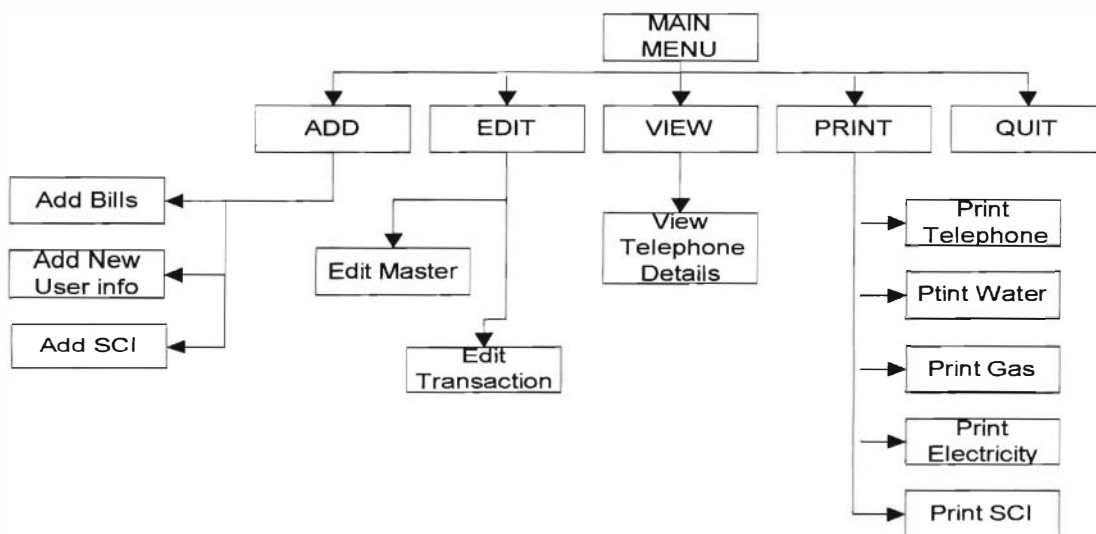


Figure - 5

4.3 Database Schema

4.3.1 Tables

The tables that would be used in this database are:

AccountCodeTable		
Fields	Types and Constraints	Size
AccountCode	Text, Primary Key	9
Description	Text, Not Null	155

Mastercopy		
Fields	Types and Constraints	Size
UtilityID	Text, Primary Key	15
UserID	Text, Foreign Key	6
Number	Text, Not Null	16

AccountCode	Text, Not Null	9
Type	Text, Not Null	20
UseAt	Text, Not Null	10
PayableTo	Text, Not Null	20
AccountNumber	Text, Not Null	50
Status	Text	10

SCICodeTable

Fields	Types and Constraints	Size
UserID	Text, Primary Key	6
Name	Text, Not Null	50
Limit	Number (Long),	4

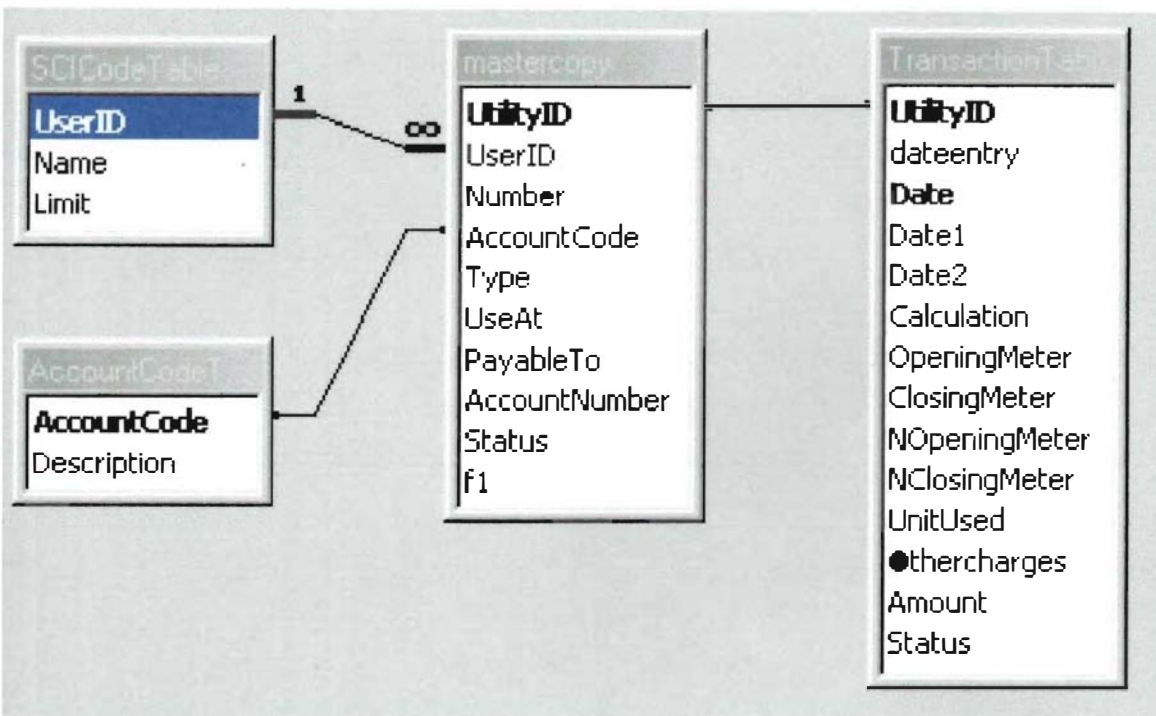
Mastercopy

Fields	Types and Constraints	Size
UtilityID	Text	15
dateentry	Date/Time	8
Date	Date/Time	8
Date1	Date/Time	8
Date2	Date/Time	8
Calculation	Text	10
OpeningMeter	Number (Double)	8
ClosingMeter	Number (Double)	8
NopeningMeter	Number (Double)	8
NClosingMeter	Number (Double)	8
UnitUsed	Number (Double)	8
Othercharges	Number (Double)	8
Amount	Number (Double)	8
Status	Text	10

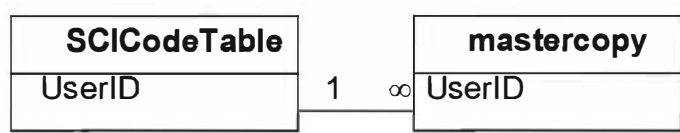
4.3.2 Entity Relationship Model

Tables and their relationships:

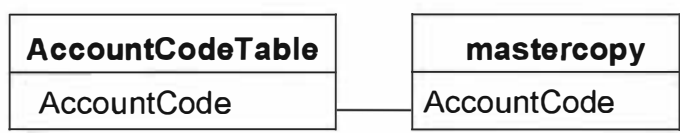
Figure - 6



Properties :



Access Key: One-To-Many
 Attributes: Enforced, Cascade Updates, Cascade Deletes



Attributes: Not Enforced
 Attributes: One-To-Many

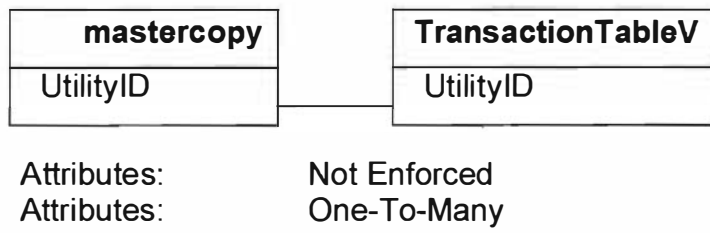
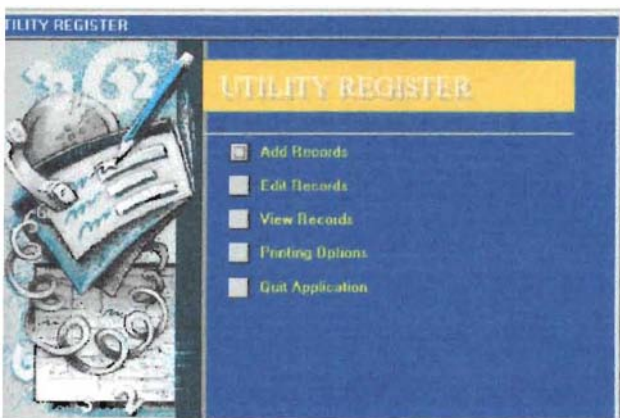
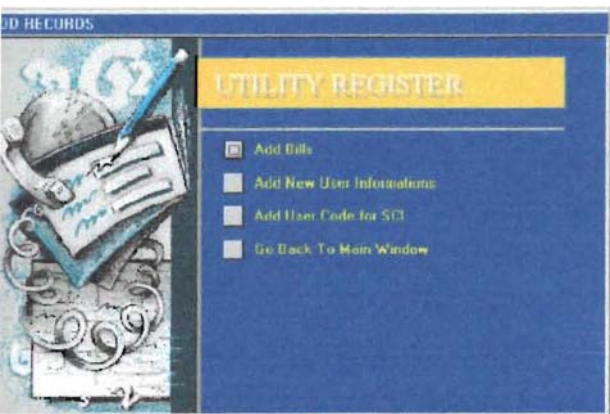


Figure - 7

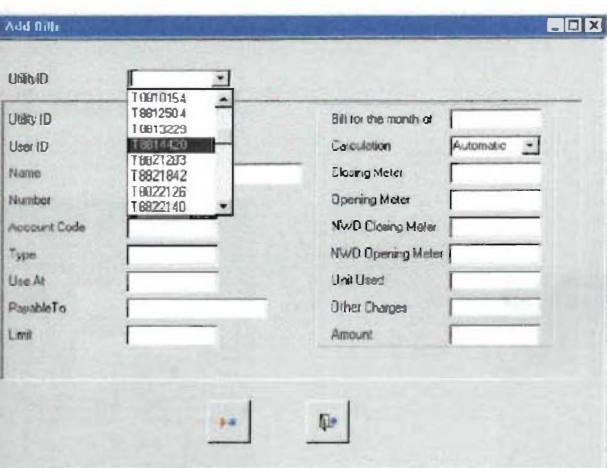
1.3.3 Proposed System interaction Forms



Main Menu



Add Menu



Add Bills

Proposed System Interaction Firms (.../cont)

New User Code

Add New User

UserID	Name	Utility	AccountCode	Type
S00014	FAX-HO-HASINA	E7766	123-04-22	Electricity
M00078	SHAMA R. ALAM	G88899	567-56-77	Gas
X00004	TEST DATA	G988	234-43-23	Gas
M00335	HUMAYUN KABIR	G999999		Gas
S00049	PACIFIC-SHAMI -CONTRACT	T01180889	1145-02-1	Mobile Phone
S00050	PACIFIC-ZULFIKAR HYDER	T011858942	140-22-01	Mobile Phone
S00010	CITYCEL-PACIFI-DIDARUL HAQ	T011859792	145-21-06	Mobile Phone
M00500	GOLAM MAINUDDIN	T017526176	145-21-06	Mobile Phone

Edit Master Records

Print Bills by Name

Print Bills by Entry Date

Figure - 8

4.3.4 Reports

Screen captions of the Reports that would be generated by the Proposed System

Calculation for entries made on : 7/24/00 To 7/25/00

Name	Type	Number	UseAt	Account Code	PayableTo	Limit	Date	Opening Meter	Closing Meter	NVD Opening Meter	NVD Closing Meter	Units Used	Other Charge	Amount in TK	Vat In Tk
ZUGLUL KABIR	Mobile Phone	017526177	Office	145-21-06	Gazmen Phone	3600	Dec 2000	75	827	75	98	934		1,998	261
PACIFIC SHAMI-CONTRACT	Mobile Phone	011805559	Office	1145-02-1	City Cell		Jul 2000	87	827	8287	87987	90100		1,56,768	20,446
Mobile Phone Total														1,58,766	20,709
QUANTUM - HO	Telephone	9827413	Office	151-20-01	T&T		Jul 2000	6787	867897	987	9890	950013		1,935,648	252,476
DF-PLANT	Telephone	8822150	Office	148-22-01	T&T		Jul 2000	867	878	7878	8889	2122		4,321	564
Telephone Total														1,939,969	253,039
Grand Total For Mobile and Normal Telephone Charges														2,098,735	273,748

Report by Entry Date

Phone Bill Details for MUALLEM A CHOWDH

Name	Type	Number	UseAt	Account Code	PayableTo	Limit	Date	Opening Meter	Closing Meter	NVD Opening Meter	NVD Closing Meter	Total Units Used	Other Charge	Amount in TK
Residence														
MUALLEM A. CHOWDHURY	Telephone	9127684	Residence	146-01-15	T&T	3600	Aug 2000	85	8767	87567	87567	8702		17185
Telephone Total														17185
Total for Aug 2000														17185
MUALLEM A. CHOWDHURY	Telephone	9127684	Residence	146-01-15	T&T	3600	Sep 2000	767	8789	98	656	8530		16946
Telephone Total														16946
Total for Sep 2000														16946
Total Bills use at Residence														34131

Report by Specific Employee ID Search

Water and Gas Bills Calculation

Name	Type	Number	Account Number	Use At	Account Code	Description	Payable To	Entry Date	Date	From	To	Amount In Tk	Vat Paid In Tk
STEATA	Gas	6765678	656	Office	234-43-23		Titas Gas	7/27/00	May 2000	4/17/1999	5/12/1999	875.00	114.26
IAMA F. ALAM	Gas	6775	876	Residence	567-56-77		Titas Gas	7/27/00	May 2000	4/12/1999	5/12/1999	78,678.00	10,262.35
Total:												79,554.00	10,376.61
RS SHAMIMA RAHMAN	Water	93799	67567	Residence	121-23-43		WASA	7/27/00	Aug 2000	6/12/1999	7/12/1999	96,798.00	12,986.70
RS FARVIN SULTANA	Water	87785	5675786	Office	123-44-53		WASA	7/27/00	Aug 2000	5/12/1999	6/12/2000	0.00	0.00
RS FARVIN SULTANA	Water	87785	5675786	Office	123-44-53		WASA	7/27/00	Jul 2000	5/12/1999	6/12/1999	87,667.00	11,434.83
Total:												186,465.00	34,698.13

Water and Gas Bill Report

Figure - 9

4.4 Estimated Development Time

DEVELOPMENT PHASE	TIME REQUIRED (In Man Hour)
Analysis	96
System Design	96
Program Coding	336
De-Bugging and Error checking	72
Data Entry for Testing	72
Implementation	36
Documentation	24
TOTAL	768

Table - 2

The project started from 15th May 2000 and has been successfully completed by 30th July 2000, according to the estimated time schedule.

4.5 Resources Requirement

4.5.1 Minimum Hardware Requirements

Processor	: Pentium II, 260 Mhz or higher.
RAM	: 64 MB
Free disk space	: 20 MB
Operating System	: Windows 95/98/NT
Additional Program	: MS Office or MS Access
Printer	: 138 Column Dot Matrix Printer(Fujitsu DL 6600 is the standard printer for BATB for printing accounting ledgers.

4.5.2 Software Requirements

This database would be designed by using MS Access. Visual basic would be used to make the data base self executable, so that it will run in computer where MS Access is not present, and to create distribution diskette.

Main Programming Tool:

MS ACCESS, for system coding and database creation.

Other Programming Tool:

MS Visual Basic to create executable file and create distribution diskette

4.5.3 OS Requirements

The database would run under Windows 95x platform OS and could also be operated in Win NT or other higher version of Windows 95x i.e. Windows Millennium, or Windows 2000.

4.6 Implementation, Test Run and Training

The system would be test run in a Parallel running method, with the existing system running for 2 months. One staff would be trained to use the system and he would be responsible to calculate the existing payment calculation and compare and see the results generated by the proposed system.

5 Scope for Development

Apart from the current system the accounting process could be simplified more and reduced if the telephone reimbursement system is calculated monthly instead of yearly and deducted from the SCI directly on monthly basis. This would enhance the account department to cut down the reimbursement from deducting the salary at the year-end and would help the company from any evasion of payments by managers who would leave the organisation in the middle of the year.

Appendix - 2

Add New Users Information

Utility ID

User ID

N=

View

View Report

Print Report

Class

Type

Use At

Payable To

Account Number:

Record: 14 | < | 1 | > | >>

USER MANUAL OF UTILITY REGISTER

UTILITY REGISTER

- Add Bills
- Add New User Informations
- Add User Code for SCI
- Go Back To Main Window

New User Code

User ID

Name

Unit

14 of 335

Utility Register User's Manual

Version 1

November 1, 2000

Utility Register

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All Rights Reserved : Shams Arifin

Contributing Author : Shams Arifin

This software was developed by Shams Arifin, during his Internship period at BATB, as a requirement of the Internship course of East West University. This software was developed within a very short time, and might contain bugs or can be developed further. For future development of the Database, permission has to be taken from BATB, who has exclusive rights over this Database. Any alteration, or misuse or representation of the software without the permission of the authority is a criminal offence.

Preface

Welcome to the User's Guide of Utility Register. This manual will give you a comprehensive idea on installing and using this database to record, calculate and print the utility bills of British American Tobacco on a day to day basis.

This guide includes installation, un-installation, adding new data, adding utility bills, calculating, updating and printing of calculated bills and calculating VAT rebate and also SCI.

It includes sample screen of the actual software and describes every action in details. This software uses a very user friendly graphical user interface, with mouse driven action. This software is developed by using Visual Basic 5, and database and interface by MS Access 97. Though the database file can be directly opened and run by MS Access, but an executable file with necessary library files was created with visual basic so that it can run in computer where MS Access is not present.

Your comments are welcomed.

If you feel there is a need for improvement or have any suggestion, you can contact me directly by phone or send me e-mail.

Shams Arifin

Phone : 9117645 (Res)

e-mail : shams@shamsarifin.com

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1. GETTING STARTED

To start working with the database, first it is needed to installed and then it can be opened to work with it. The database comes in two distribution form – 1) In CD Rom and 2) in 3,5" Floppy Disk. For both the cases the database has to be installed in the computer's local hard disk for operation. The minimum system requirements for installation of the program are:

System Requirements:

Processor	: Pentium II, 260 Mhz or higher.
RAM	: 64 MB
Free disk space	: 20 MB
Operating System	: Windows 95/98/NT
Additional Program	: MS Office or MS Access
Printer	: 138 Column Dot Matrix Printer(Fujitsu DL 6600 is the standard printer for BATB for printing accounting ledgers.

Software Requirements:

Though the database is designed by using MS Access, but it is not mandatory to have MS Office or MS Access to run the database. The Utility Register executable file will be able to run the database with out MS Access. But if there is MS Office already installed then it will be added advantage in case the database fails to open with the executable file supplied at installation.

Date Format

The default Date Format is the US (MM/DD/YYYY) format. Therefore before installation or use of the database, the date should be changed to this format. **Any other date format would create problem in the database.** Therefore on US date format should be used.

To change the system date setting, go to Control Panel and then click on to Regional settings. And then change the date format.

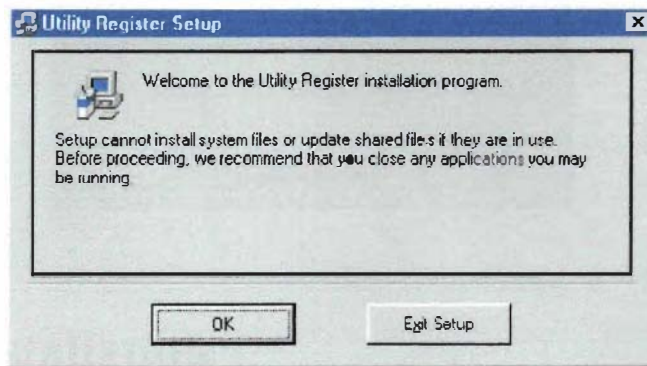
The installation procedure in described in details in the next topic.

1.1 Installation

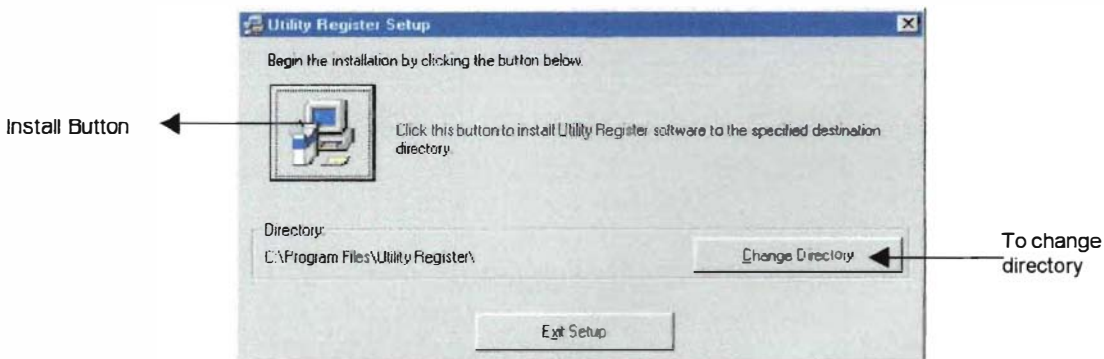
If the Database comes in a CD Rom then put the CD Rom in the CD Drive and run the Setup.exe icon by clicking to it or by running it. For Floppy source, insert the 1st disk of the three disk set and click the Setup.exe icon or run the setup program directly from the disk.

The path is "a:\setup.exe"

This dialogue box will appear and click Ok to follow the rest of the installation process. But before installing the software make sure no other application is running.



The next dialogue box will ask for the default path where the program will be installed. By default it will be installed in the Program Files directory in the root directory i.e in drive C.



To install the software in different folder other than the default folder, click the Change Folder button and specify the path and directory where it will be installed.

Then click in the install button with a setup icon on it to complete the installation.



The installation program will then copy and install necessary file in the system and program folder and update as necessary.

The installation will be complete once this dialogue box appears. And press Ok to finish the installation program.



1.2 Un-Installation

To uninstall the product, in task bar, go to "Settings" then "Control panel" and then click to "Add/Remove Programs" icon and select "Utility Register" from the list. Click "Add/Remove" button to uninstall the product form the system.

1.3 Running the Database for the first time

In the Task Bar click "Start" and then "Programs" and then in the program list there will be one item called "Utility Register". Click the item to start the Database. In case the program does not respond or if there is any other problem, then select the "Utilityh.mdb" file from the directory c:\Program Files\Utility Register, and double click the item. But in order to run this database directly there must be MS Access 97 or later version installed in the system.

To directly access the database file by MS Access, a short cut can be created on the desktop of the "Utilityh.mdb" file.

The Database when opened for the first time there will be no data or any information about the utility bills or users. So the data has to be entered in to the blank database and then the utility bills can be entered any time later according to need.

There are two types of data that will be entered in to the Database,

- i) **Master Records**
- ii) **Transaction Records**

i) **Master Records** are those records that have to be entered in the Database in order to run the calculation of the utility bills. These are the records of the person or the place where the Telephone, Electricity, Water, or Gas line is being used by. For example : for telephone bills it uses the user's information of the telephone to calculate the SCI, so the manager's name, address, and the limit to which he is entitled to make free phone calls. This master record is needed to be entered once and will be used as the base record unless being altered or updated. The general attributes that are associated for Utility Bill Master Records are:

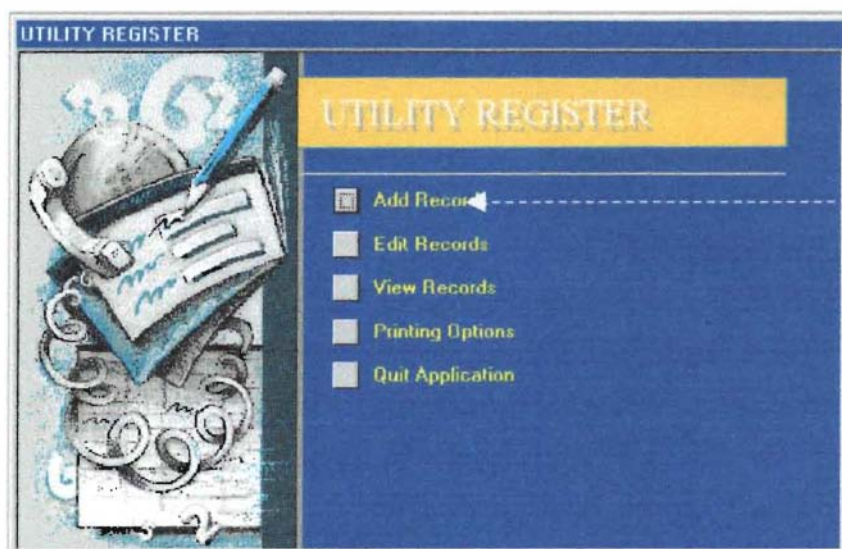
- a) Utility Id : Telephone number or meter number is used as Id starting with an alphabet (usually T for telephone, W for Water meter etc.)
 - b) User Id : Manager's code or Factory's code
 - c) Name : Manager's name or the factory or plant's name
 - d) Limit : For telephone only the limit of call per year
 - e) Number : The Meter number of the telephone number
 - f) Account Code: The account to which the Billing charge will be debited.
 - g) Type : Utility type (telephone, gas or water or etc)
 - h) Use At: Either office or residence.
 - i) Payable To: The utility companies or the authority, to whom the bills are being paid.
 - j) Account Number: The Bank's account number of Utilities Company or Authority, to whom the bills will be credited
- ii) **Transaction Records** are those records that are entered in periodical basis and is used to calculate the Utilities bills for a particular period of time.

These records unlike the Master Records are need to be entered as many times as there is a need to calculated new bills. The general attributes that are associated for Utility Bill Transaction records are:

- a) Utility Id: The Id for telephone or meter to be billed
- b) Bill of he month: The billing months
- c) Meter Readings: The opening and closing meters
- d) Other charges : Any other charges that might be associated with the utility billing.

2. USING THE DATABASE

The database once opened, either by clicking the "Utility Register" icon on the taskbar or by using MS Access, it will start with a Switch Board, which will be the navigational control center of the Database. The opening Switch Board will be the "Main Menu" or the main window, from where other sub menus can be accessed.



Click on the "Text" or the square button

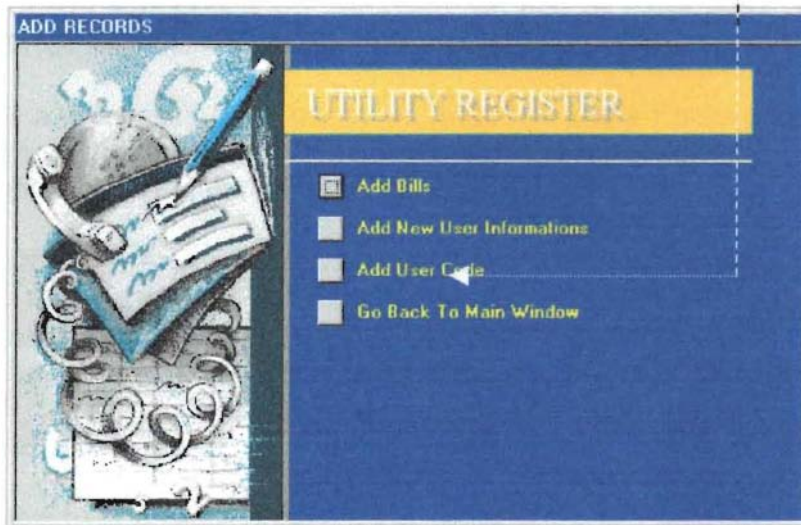
The screen above is the main menu from where by clicking on to the buttons respective sub menus can be selected.

The main menu headings are:

- i. *Add Records*: To add user information or the utility bills or to add the limit for user to charge their SCI.
- ii. *Edit Records*: To edit the records on users master records or the edit the utility billing information.
- iii. *View Records*: To view the Telephone details based on searching criteria.
- iv. *Printing Options*: To print utility bill calculation of the Telephone, based on "Entry Date", based on "Billing Month", based on "User Id". To print Gas, Water and Electricity bills based on Month billed for. There is also calculation of SCI and the VAT Rebate calculation automatically in every billing being printed.
- v. *Quit Application* : It saves the changes and close down the Database.

3. ADDING RECORDS

To add records for the first time, it has to be noted that, unless the User's Information has been inserted, the billing calculation can not be done. So at first the Users' Information has to entered by clicking to the "Add Menu" in the Main Menu and then to the third option that is "Add User Code" in the Add Records Menu. (as shown in the diagram below)



3.1. Add User Code

This code is the Management code that is being used by BATB's Managerial employees. Along with the code, the Managers name will have to be entered and the limit for those managers who are entitled to make telephone calls up to certain amount. The SCI will be calculated with the limit figure entered in the Limit field. This Limit field or box can only hold two value either 2400 or 3600. That is 200 and 300 calls per month.

3.1.1. Coding Convention

The user code will mainly comprise Code for the Managers. But also it will hold the Code for the Location or Building or factory by which the Utility is being consumed.

For example telephone can either be used by a manager or entirely for official purposes or in a project. In the same way the factory uses a huge Electricity, and a major head for Electricity Bills will be the factory. So according to the managers Code convention, the building or any project or item that will be responsible for making any utility charges will be entered. But the format of the code will be different.

The management staffs code will start with "M" and all other code will start with "S" (for building, factory, office and etc.).

For example a managers code might be : M00356 and a Factory's code can be S00025. All together it will be 6 digits (One alphabetical character on the beginning and 5 numerical digits after that).

Note: Since the manager already have a management code given from the company so it is not needed to record or keep track of them. But the codes for the factory or building or office is not there so it has to be created by the user. And therefore it has to be recorded so that reference can be made when later on adding utility bills. It can be also printed out from the database from the printing commands, discussed later on.

Click Add Next to add more codes in the same session. Or close to close the current form and resume the code entry later on.

3.2. Adding New user Information.:

This form will pop out by clicking the second button in the Add Records Menu.

The records that will be entered through this form will be referred as the Master Records. These records will be entered once and will stay there forever unless deleted. This Master Records will be used by the transaction records later on for calculation and processing purposes i.e during calculation or printing or reports. There is no need to enter any other records to this form, unless there is new manager or any new head for the utility consumption.

Making Entries:

1. In the Utility ID field type in the telephone or meter number of the utility proceeded by a character. This character will be either
 - 'T ' for Telephone numbers (T&T or Mobiles)
 - 'E' for Electricity meter numbers
 - 'W' for Water meter number
 - 'G' for Gas meter number
2. Then type in the User Id (i.e. the Management code or the Utility user that was entered previously in the "Add User Code". If wrong User ID is entered then the database will not save the record and would generate error messages. So check the right User ID and enter it.

Note: If correct user id is entered in the field then after pressing enter the "Name" should automatically come and will be displayed in the Name field. If

there is no name being displayed then there is error in the user id entered. The "Limit" filed will show data for the those managers who is entitled to make personal phone calls for Telephone only. So it might remain empty for maximum time.

3. In the "Number" Field type in the meter number or the telephone number (it will be the same as the Utility Id except for the first alphabetical character)
4. In the "Account Code" Type in the accounting head in the ledger where the utility will be charged.
5. In "Type" field, click the drop down Combo Box to see what are the available fields. It is the type of the utility bills. I.e. Telephone, Water, Gas etc.
6. "Use At" is the place where the utility is mainly used at. This is important for the Telephone utility bills for calculating SCI. There are only two choice for this option either "Office" or "Residence".
7. "Payable To" is the name of the authority for the utility bills. I.e. T&T for Telephone.
8. "Account Number" is the Utility company's bank account number which will be credited upon payments.

To save records press the Save Button and then quit or press Add Next to follow the next bill and follow the same sequence.

To close the Add New User Information form press "Close" or "Alt+C"

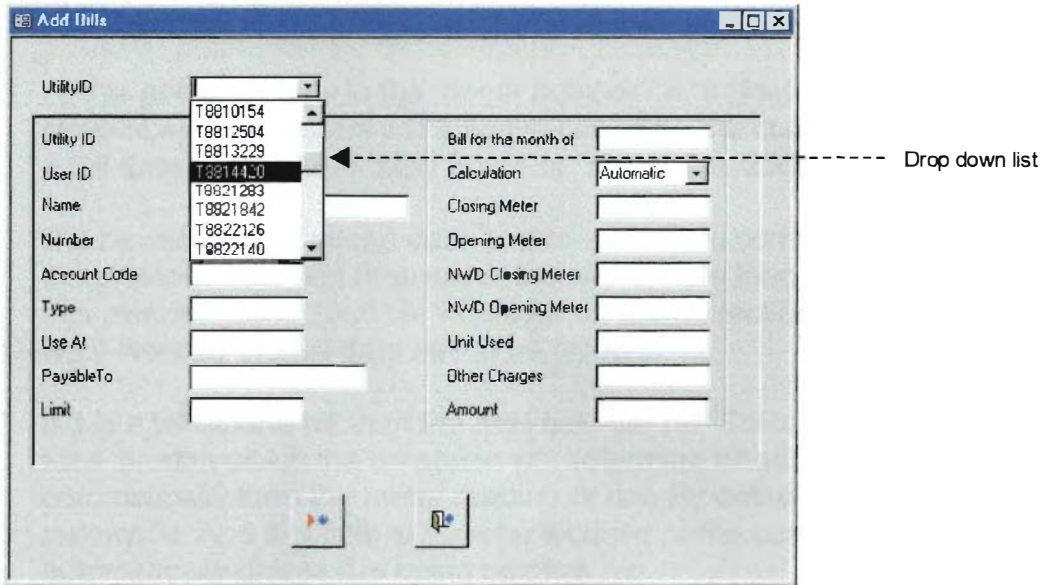
3.3. Adding Bills

This is the option or the form that will be used in maximum of the time. Therefore this button, linked to the Add Bills form, is places at the top according to its priority. The records that will be entered through this form will be used to calculate the bills. And these records will be the Transaction Records since these are recursive and will use the Master records to make the calculation.

So until or unless these transaction records are not entered, the database can not record or calculate the bills for the utility. Therefore the central point of this Utility Register is the data entered at this point or through this form.

A clear understanding is needed at this point to proceed further and continue with the data entry. Because this data entry form is ID sensitive and can change its parameter for Telephone and for Electricity gas etc. and even in Telephone billing

information it can change to manual state from automatic state for calculating the bills.



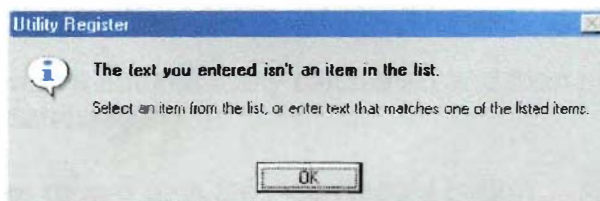
Steps for Adding Bills :

1. If it is Telephone bill then, click on to the drop down list and select the Utility ID or type in the Utility Id and press enter.



To expand the list click on the downward marking arrow on the right hand side of the drop box, like shown above.

A list of ID numbers will be show and select the appropriate one. But if the Utility ID is not entered previously or if it is not in the Master record, then this error message will be displayed.




Type or select the correct ID from the drop down list and then press enter. If the Utility ID is not present then close the form and enter the master records about the utility and then come back again and reinsert the billing information.

2. On correct ID the information of the Master Record will automatically come on the screen and fill the fields in the left hand side of the columns. And the cursor will blink on the Field "Bill for the Month of".

At this point just type in the month number i.e "5" for May or "11" for November. The system will automatically take the current year and will display a full date form. Like = "May 2000" or "November 2000".

But by mistake if a wrong date is entered then to correct it point the mouse to the previous field and then erase the wrong date then type in the full date in this manner "June 2000" or whatever. In the correction mode just typing "6" wont work so the full date has to be typed in.

3. If it is a telephone bill then the next field will be "Calculation", this the type of field through which the database will determine whether to calculate the bills automatically from the meter reading or not. By default the calculation mode is automatic. And this field will not be focused or the cursor will not move to this automatically unless it is being pointed.
4. The next field will be the "Closing Meter", type in the reading from the bill.
5. The next field will be then "Opening Meter", here type in the opening meter reading. (Here in both the case this meter reading will be the meter reading for local telephone calls.)
6. Then in "NWD Closing Meter", type in the number from the bill.
7. Follow the same for "NWD Opening Meter".
8. At this point the Units Used will be automatically calculated and will be displayed in this field.
9. If there is other charges like Trunk Call booking or any other charge then with the mouse pointer click on to the Other charges field. Other wise this field will be kept empty and the cursor will automatically jump to the Amount field. Or by mistake if the other charges field is not selected and if there is charges then simply point the field with mouse then type the charge amount.
10. The Amount will be automatically calculated and then press enter to save this record to the database.
11. To enter another record click the Add Record button  or press the other button to close the form.

3.3.1. Making Manual Calculation for lost Bills

In certain cases there is incident that the bill is lost. And when a copy of the bill is collected form T&T, it only gives the amount figure for the billing. Therefore there is no meter reading given in the billing copy. So in this case the manual calculation is need to record the billing information and to find out the meter reading for the calculation of the SCI.

After entering the "Month", click to the "Calculation" field and select "Manual" from the drop down list.

The screenshot shows the 'Add Bills' form with the following fields and values:

UtilityID	T8912097	Bill for the month of	May 2000
Utility ID	T8912097	Calculation	Manual
User ID	M00064	Closing Meter	Disabled
Name	ARIFUL ISLAM	Opening Meter	Disabled
Number	8912097	Previous Reading Meter	Disabled
Account Code	146-01-15	Next Reading Meter	Disabled
Type	Telephone	Unit Used	
Use At	Residence	Other Charges	
PayableTo	T&T	Amount	0
Limit	2400		

Annotations in the image:

- A dashed arrow points to the 'Manual' option in the 'Calculation' dropdown menu with the text: "Select 'Manual' from this drop down list".
- A dashed arrow points to the 'Closing Meter' field with the text: "Disabled".

The cursor will automatically move to the "Amount" field and just type in the value that is there in the copy of the bill. Press Enter again and the "Unit Used" will automatically be calculated and will be displayed. In Manual calculation the Closing and Opening meters will remain disabled.

Note : If there is any "Other Charges", then type in the value to the charge field by moving back the cursor to the "Other Charges" field. And then press "Enter" again. This will automatically calculate the Unit Used.

3.4. Adding Bills other than telephone:

For adding Utility Bills other than telephone i.e. Gas, Water and Electricity, the form will be slightly different. Because the "Adding Bills" form is ID sensitive and when the ID starts with "T" then the form is adjusted for taking in information for telephone bills. But if the ID starts with "E" or "W" or "G", then the form's look will be somewhat different. After entering the ID for Gas, Water or Electricity bills, the

form will not contain the Field "Limit", which was present in the Form for Telephone bills. And also there will be no Automatic or Manual calculation field. So the form would be simple and just contain the dates and the value for the utility. The system would not make any calculation since there is no SCI calculation for these utilities. The steps in filling out the form for other utilities are :

Enter the exact billing date in the format mm/dd/yyyy

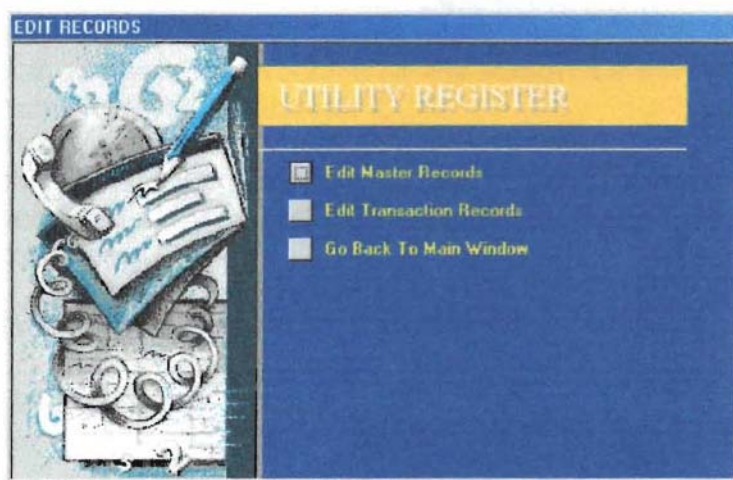
1. Enter the ID, starting with "E", "W" or "G" and then press "Enter", the billing information of the master record will automatically will come to the fields in the left hand side.
2. In the right hand side there will be "Bill for the Month", here type in the number of the month like 5 for May or 8 for August. The system will automatically take the current Year.
3. Then type in the exact billing period. Because the billing period might be from a broken month like 12 August to 12 September. So to enter this period type in 08/12/2000 in the "From" field, and 09/12/2000 for the "To" filed. **Remember that the format will be mm/dd/yyyy.**
4. In the "Amount" field type in the amount for the bill. There will be no system generated amount for these utilities other than the Telephone. So type in the exact total amount from the bill
5. Click the Add record icon or button to continue with inserting new records or the close button to close the form.

To return back to the main menu, in the Add Menu switchboard screen, click to "Go Back To Main Window".

4. EDITING RECORDS

E editing records might be necessary when there might be some mistakes or any changes in the records for the updating purpose. Other than that this editing purpose will not be need in a regular basis. One important thing is to be noted here, that there has been no option for deletion. As because the records will remain here permanently and can be referred back any time in the future for accounting purpose. So it is not needed for any record to be deleted. But incase for any reason there is a need to delete the record, then this can be done in the edit mode.

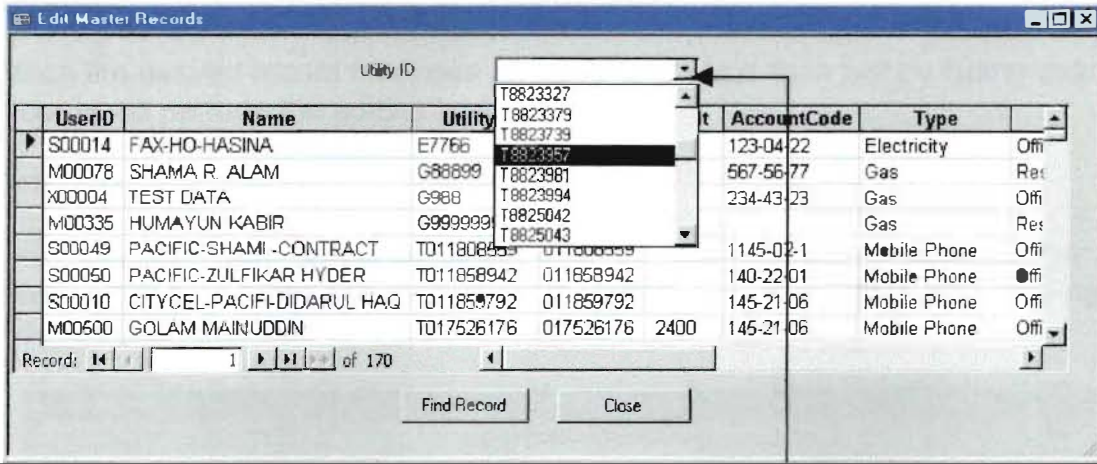
To go to the edit screen click on to the “Edit Records” in the Main Menu. This “Edit Records” menu will appear.



Click on the buttons to perform specific task like for Editing Master Records click the first button and for Editing the Transaction Records click the second button and the last button to go back to previous window or menu.

4.1 Edit Master Records

To edit the master records for any omissions, updating data, or deletion, this form can be used to update the data. Though deletion of data is highly discouraged as the data can be used to refer back to any transaction later and as this will not use additional space. For record tracking for future use, this deletion should be avoided. The form for this editing purpose is displayed in the next page.



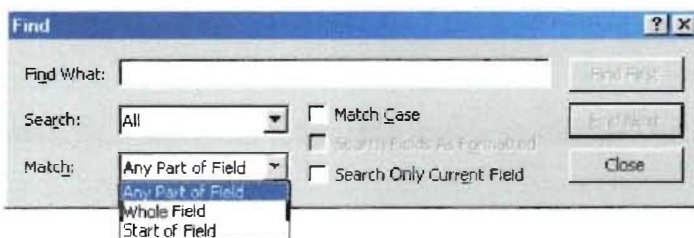
Using the Combo Box:

To quickly find a record for the whole list, expand the Combo box and find the required ID or type in the required ID. If the ID is present there then it will automatically show the related records on the screen. Or the records can be browsed manually to find the required ID.

Note: Using this Combo Box, only the matching Utility ID will be sought. To find out the required records by any other fields then the "Find Record" button or the options should be used.

Using the Find Record option:

To find the relevant records by using fields other then the Utility ID, this option is the best solution.



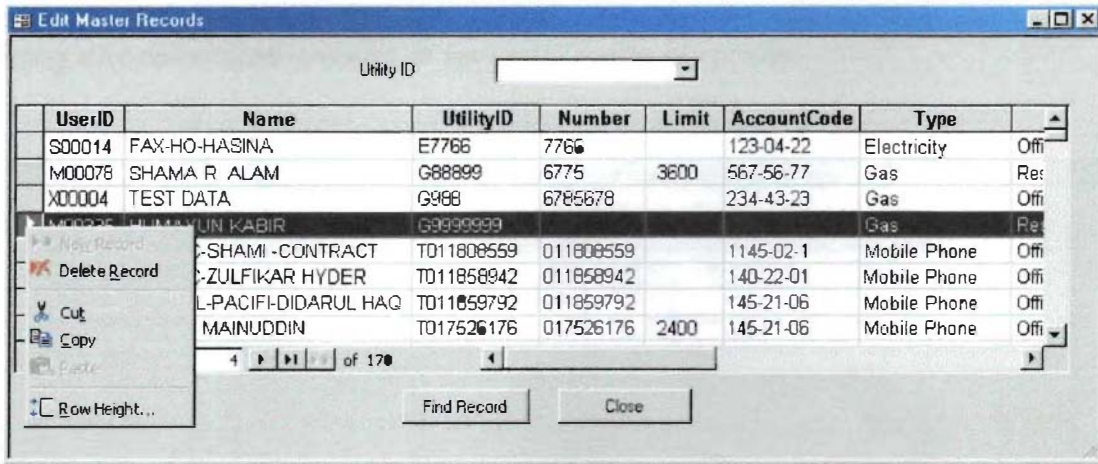
First click on to any record in the form and then press the "Find Record" button. Then select "Any part of the Field" in the Match criteria to find records with matching the word in any part of the field. To have an exact match, select "Whole Field". Then type in the word to math or find in the "Find What" field. Click to Find First to find the first matching records. Then click on to Find Next to find the next matching Field.

Editing

When the desired record has been successfully found then just by typing over the records will perform the editing task.

Deletion

Like using MS Excel, select the whole record by the record selector at the left most part of the record and then select the whole record and then press the right mouse button and then select delete to delete the whole field.



4.2 Edit Transaction Records

To edit the Transaction Records follow the same procedure as editing the Master Records.

5. VIEW RECORDS

To view the Telephone Records click to the “View Records” in the Main Window. At this stage only the details of the Telephone Records have been created. Other views such as the “Electricity” or the “Water” have not been made. But in the later version these views will be added.

This view can be used as an instant view of the desired records for query or finding any calculated amount or for just viewing purposes.

The screenshot shows a window titled "View Telephone Bill Details". At the top, there are three dropdown menus: "Name" (selected: MUJALLEM A. CHOWDHURY), "Utility ID" (empty), and "Month" (empty). Below these is a table with the following columns: UserID, Name, Utility ID, Date, Entry Date, Unit Used, Limit, Other Charge, and Amount. The table contains two rows of data. At the bottom of the window, there is a record navigation bar showing "Record: 1 of 2".

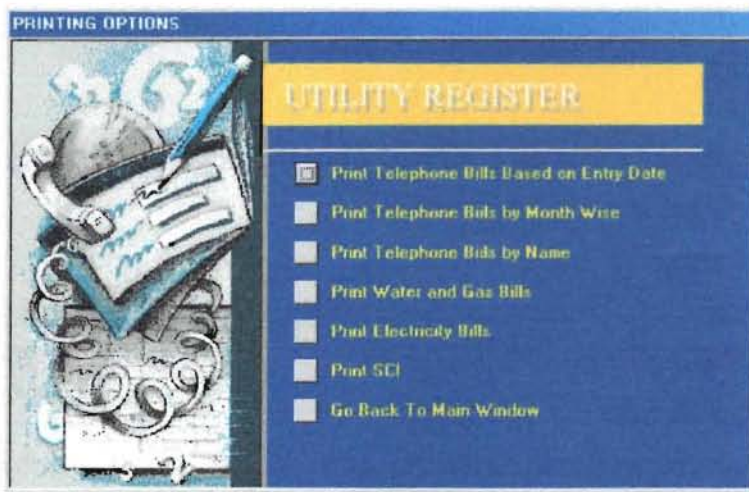
UserID	Name	Utility ID	Date	Entry Date	Unit Used	Limit	Other Charge	Amount
M00006	MUJALLEM A. CHOWDHURY	T9127684	Aug 2000	7/30/00	8702	3600		17,185
M00006	MUJALLEM A. CHOWDHURY	T9127684	Sep 2000	7/30/00	8560	3600		16,946

The three Combo Boxes can be used alternatively to find the desired records by Name wise search, by Utility ID wise search or by Month wise search.

6. PRINTING

Printing reports is the most important part of the database since it is the only output, which gives the final calculated information. A clear understanding is needed for these printing procedures in order to generate accurate printing reports.

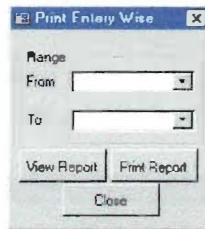
To go to the printing options, click on to the "Printing Options" in the main menu. A menu will appear like the one shown below.



6.1 Printing Telephone Bills Based on Entry Date

Sometimes it might be necessary to print the telephone bill calculation according to the entries made. For example 30 bills have been entered and recorded today. And if these bills, that have entered today, are need to be printed out. Then this option will be used. And again if tomorrow few more bills are entered and are needed to be printed out. Then this option will be used. No matter what the billing months is but, the bills that are entered today or during a specified dates will be printed. Some bills might be for 2 months back and some might be for 4 months back and some might be for the current months, then these bills can be printed by this option. This is essential needed to match the records with the ledger. And might be needed to print in most of the times.

To set the printing date range click the first option in the Printing Menu,

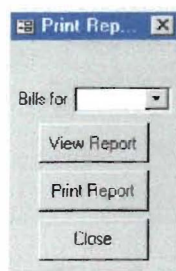


Specify the range in the "From" field and in the "To" field. It will be in the format mm dd yy. This is date when the billing entries have been made. And this is not the billing month of the bills. So it should not be confused with the billing month.

6.2 Printing Telephone Bills By Month Wise

In this option it the telephone bills calculation can be printed in the billing month order. For example all the bills for the month of "Feb 2000", no matter when the entries have been made.

For this option click the second option in the Printing Options menu window and this dialogue box will appear.

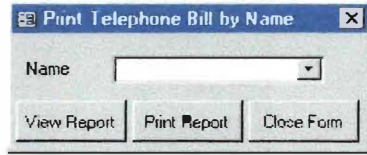


In the "Bill For" field type in the bill for the month of by selecting the month in the combo box.

Only the months will be there in the Combo Box, for which there is at least one entry. If there is any month that is not shown in the list of the Combo Box, then it means that no billing has been done for that specific month.

6.3 Print Telephone Bills by Name Wise

This option can be used to print the billing calculation for a particular user. And all records relevant to this user will be printed out.

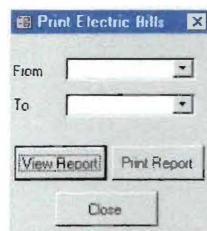


This is use full when the SCI for particular user is needed or the total for a specific user is needed.

Note: The "View Report" button can also be used to view the report on the screen instead printing it out.

6.4 Print Water, Gas and Electricity Bills

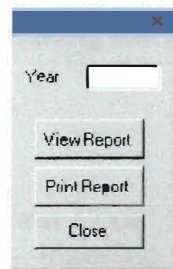
To print Water, Gas and electricity bills, just click the relevant options from the Printing Option menu and this dialogue box will appear.



Just select the billing month in the "From" and "To" field and the report will be generated.

6.5 Printing SCI

The SCI for the employee can be printed out for a specific year by using the option "Print SCI". click this option and this dialogue box will appear



Type 00 for year 2000 or the last 2 digits of any year and the SCI for that total year will be in a report.

7. SUMMARY OF THE SEQUENCE OF USING THE DATABASE

To view the sequence for operating the database, follow the steps to get a generic idea:

- a) Open the database.
- b) Go to Add Records.
- c) Enter the user code by "Add User Code" for inserting data regarding users.
- d) Add new user information, after inserting the user codes. This will be the master record. This will be used every a bill is processed. To enter data click "Add New User Information".
- e) Add billing information by clicking to "Add Bills". This will be used most of the times and through this option the bill calculation is accomplished.
- f) Edit the records if there is any mistake. By clicking to "Edit Records"
- g) View Records to see it is alright and for any online query.
- h) Print the reports by clicking on the "Printing Options" and then select the desired means to find or search the data and view or print the reports.

8. TO QUIT THE DATABASE APPLICATION.

To quit the database, simply click the “Quit Application” button in the main window or menu.

Bibliography

- Kotler, P., Marketing Management. 9th Edition, Prentice-hall of India, New Delhi, 1997
- Barter, Alison, Mastering Access 2000 Development, 1st Edition, BPB-Publication, new Delhi, 1999
- Annual Reports of 1996,1997,1998 and 1999 , BATB.
- Interview of Mr. M. Mahudul Kabir, Corporate Finance Manager.
- Interview of Mr. B.R. Khan, Staff, Finance Department.