COMPUTERISATION OF CREDIT FACILITY IN BANKING INDUSTRY

A CASE STUDY OF NIGERIA EXPORT- IMPORT BANK (NEXIM), ABUJA

BY

FRANCIS KAYODE JEGEDE (PGD/MCS/072/96

THE DEPARTMENT OF MATHS/COMPUTER SCIENCE FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA.

DECEMBER, 1999

TABLE OF CONTENTS	PAGE
TITLE :-	i
TABLE OF CONTENTS	ii
CERTIFICATION	iv
DEDICATION	V
ACKNOWLEDGEMENT	vi
ABSTRACT	viii
CHARPTER ONE	
INTRODUCTION	1
HISTORY OF NIGERIAN EXPORT IMPORT BANK	2
NEED FOR THE RESEARCH	6
AREAS OF APPLICATION	6
CHARPTER TWO	
PRELIMINARY INVESTIGATION	7
FLOWCHART OF THE EXISTING MANUAL SYSTEM	9
PROBLEMS ASSOCIATED WITH THE EXISTING SYSTEM	10
CHARPTER THREE	
SYSTEM DESIGN	12
INPUT DESIGN	12
DESIGN OF FORMS FOR DATA CAPTURE	12
requirement information	13
THE SYSTEM BLOCK CHART	14

TABLE DESIGNER	15
EVALUATION OF THE SYSTEM	19
TIMING	19
COSTS	20
CHARPTER FOUR	
SYSTEM IMPLEMENTATION	21
TIME SCHEDULING	21
ALL- AT- ONCE CHANGE OVER	22
PARALLEL TECHNIQUE	22
GRADUAL CHANGEOVER	23
OPERATION OF THE SYSTEM :-	24
LIMITATIONS	25
ANALYSIS OF RESULT	25
HARDWARE UTILIZATION	26
CHARPTER FIVE	
CONCLUSION AND RECOMMENDATION	27
BIBLIOGRAPHY	28
APPENDICES	29

CERTIFICATION

I certify that this work was carried out by Mr. F. K. Jegede of the department of Computer Science, Federal University of Technology, Minna, under my supervision.

MR. L. N. EZEAKO SUPERVISOR DATE

DR S. A. REJU HEAD OF DEPARTMENT **DATE**

EXTERNAL EXAMINER EXTERNAL SUPERVISOR

DATE

DEDICATION

This project work is dedicated to my lord J	lesus Christ, the Author and Finisher
of this Project.	

ACKNOWLEDGEMENT

Glory and adoration to Almighty God who made the completion of this project a reality. Special thanks to my able and wonderful supervisor, Mr L. N. Ezeako for his useful

couple with his brotherly contribution despite his tight schedule.

in giving credit to the evolution of this work, I have to recognise the magnificient role played by the coordinator of Post Graduate School of Maths/ Computer Science Mr R. Badmus. Also to other Lecturers in the department for their meaningful contribution.

guidance, suggestions and invaluable professional advice from time to time

Behind a successful man there is always a responsible woman among which is my inestimable jewelry, Mrs G. M. Jegede, I sincerely appreciate and thank her for her endurance, encouragement and support throughout the duration of the program. The following people too deserve to be mentioned and commended whose names if ommitted in this project, the project is incomplete because of the prominent roles they played in making this project work possible.

I can not but express my profound gratitude and sincere appreciation to Messrs Owadola and Segun Ajoloko for generating my enthuasiasim in the subject matter and their unflimsy support in completing this course work. My thanks go to my employer, NEXIM Bank, especially the MD/CE Alhaji. Abubakar Dalil and my honourable heads of various departments where I worked during my study: Mallam M. B. Mai-Bornu, Mr E. C. Enekwizu and T. D. Efi for their encouragement, support and understanding through the duration of this course.

I am also indebted to the following colleagues Mr Eric Sambo and Mrs Ada Ebebulem

for generating my enthusiasim in the subject matter

The last but not the least are the following wonderful people who at the time of distress and discouragement came as Messiah, Mr Jibson Odufuye MD/CE of Kontemporary Computers, Abuja and his staff Mr Abiodun for their professional advice and contributions especially in writing, debugging and testing of the programs involved in his project.

ABSTRACT

It is a well known fact that credit facilities in any Financial Institution is an enormous task especially where the Financial Institutions have to deal with thousands of loan application forms.

It is therefore expedient that a reliable, accurate and efficient means of processing loan application forms and monitoring /recovery of loans in NEXIM Bank shall be studied, analysed and a computer - based system which will take care of all the problems faced by existing system designed.

In this project, the instrument of data collection are interview and examination of the available resources, while the language used in writing the program is Visual Fox Pro. The scope of the project is primarily limited to the Export Credit division of the Bank to ensure adequate coverage.

The implementation of the research work will speed up the Banking services and information can then be easily stored and retrived at a faster rate.

The new system would be found adequate and adoptable in terms of cost, precision and timely information. It would also reduce or eliminate errors and rigour associated with the existing system. Also, the amount disbursed, with the outstanding balance can easily be obtained.

CHARPTER ONE

INTRODUCTION

The main objective of this project is to present a detailed study of the present system of recording credit facility granted the clients in NEXIM Bank with a view to computerising it. It shall be noted that every financial Institution needs a good record in order to effectively monitor and control the loans/advances given out and follow up the repayment schedule.

The system involves processing of application forms submitted by the prospective applicants/clients. The granting of loans must be appropriate in terms of unforseen changes especially the increase in the number of applicants at any time or introduction of new loan facilities into the system. The system must also be efficient and accurate in accepting, classifying, storing and processing of data and information related to the prospective clients. The production of various analysis based on the prospective clients' data may also be of importance to the system and outside bodies such as policy makers like the board of directors in the banks, Central Bank of Nigeria and Nigeria Deposit Insurance Corporation.

The realisation of these objectives efficiently can better be guaranteed by the use of electronic digital computer in recording/monitoring the loans granted which this project is all about.

The present system will be carefully studied and analysed and compared with a new computer based system to be

designed for the Bank, at the end which a package for implementing the new system will be produced.

The new system will be designed in line with current monetary policy guidelines governing the lending procedures.

This project consist of mainly the study of the current system which is manually oriented, the design and implementation of the new computer - based system.

HISTORICAL BACKGROUND OF NIGERIAN EXPORT - IMPORT BANK (NEXIM)

The Nigerian Export Import Bank was established by Decree 38 of 1991 as an Export credit agency with a share capital of = N = 500m held equally by the Federal Government and the Central Bank of Nigeria.

NEXIM Bank as the first Exim Bank in Africa formally took off in August 1991 with about 10 staff with the name Nigerian export Insurance Guarantee Agency, before the name was changed to Nigerian export Import Bank (NEXIM) in 1992.

The Bank is mandated to:

- Provide export credit guarantee and export credit insurance
- Provide credit in both local and foreign currency
- Establish and manage funds connected with exports
- Maintain foreign exchange revolving fund for lending to exporters who need to import foreign inputs to facilitate export production.
- Maintain trade information system in support of export business.

- Provide domestic credit insurance
- Provide credit insurance in respect of external trade, transit trade and entrepot trade.
- Purchase and sell foreign exchange and transmit funds to all countries.
- Provide investment guarantee and investment insurance facilities

The main services of Nigeria Export Import Bank include:

- Rediscounting and Refinancing Facility (RRF)
- Foreign Input Facility (FIF)
- Stocking Facility (SF)
- Repurchase Facility (RF)
- Treasury Operations
- Educating Exporters

NEXIM BOARD OF DIRECTOR

The Board which provides overall policy guidance to the Bank was incorporated in the year 1992 with the following as members:

- Mr V. A. Udozi Chairman
- ,, C. C. Edordu MD/CE Member
- ,, A.A. Adaba Executive Director- Member
- ,, R. A. Adeshina Member
- ,, M. I. Nwagu ,,
- Alh. M. S. Hamid ,,

- ,, Hassan Adamu ,,
- ,, A.A. M. Bulkachuwa ,

Following the decision of the Federal Government to dissolve the board of directors of government parastatals in 1994, NEXIM board of director was equally dissolved and since then the bank has been without board but being supervised by the abled MD/CE Alh. A. A. Dalli, who was appointed in 1994.

NEXIM has disbursed over 5billion Naira in RRF in support of both traditional and non- traditional exports. A sum of \$126.2million under FIF in support of 70 manufacturing projects = N = 339.3m under the Sf to enable the manufacturing projects to stock seasonal raw materials.

Under the RF, which is a rescue facility for supporting manufacturing projects, a sum of \$28.77m was repurchased involving 84 projects

THE EMERGENCE OF NEXIM BANK

The department of Agric Credit Finance an arm of CBN transformed into NEXIM. The decision came as a result of expansion of export processing zones in the country. In an attempt to encourage and boost export business in the country a decree was promulgated to establish the Bank.

EXPORT PROCESSING ZONES (EPZ)

EPZ are normally clearly delineated and fenced industrial estates forming a free trade enclave in the customs and trade regime of a country created to attract foreign manufacturing enterorises producing mainly for export markets. EPZs provide an otherwise not too attractive environment, through the provision of special regulatory and fiscal regimes which provide for freedom of operations at competitive costs. EPZ firms are free to import all the machinery, raw materials or semi finished goods they need on condition that the end products are mainly for export. Apart from not paying custom duties, they are not liable for local taxes, levies and rates. EPZ firms are not subject to foreign exchange restrictions and are allowed to remit their profits overseas.

LOCATIONS OF EPZS IN THE COUNTRY

EPZ, are generally located within an hours drive from a seaport or airport so as to benefit from lower freight and handling costs. They are located in area with steady source at required labour with required facilities and services to support and service the EPZ. Presently, Nigeria has three zones for export processing among which only two have and being developed i.e Lagos and Calabar. Kano is yet to be developed but has been approved as EPZ.

NEED FOR THE RESEARCH

The process of keeping records of credit facilities in this country is a very tedious task, especially if the financial institution concerned has to deal with numerous customers. It is therefore expedient that a more reliable, accurate and coefficient means of processing and keeping records of credit facility be introduced - that is computerisation of the present recording / book keeping system. Apart from the accuracy, reliability, efficiency etc by which a computerised system is characterised, mismanagement, embezlement and improper record keeping will be reduced to the bearest minimum if not completely eradicated. Because of the efficiecy of the computer reports will be made ready on time. Customers / clients seeking to know their accounts' position / balances will no longer be waiting for long before the information required is produced. With the present economic ailment of the country which has led to reduction of staff streight in banking industries, the possibility of employing more staff to cope with the rate of pressure is very slim. Hence, there is a need for this research under discussion.

AREAS OF APPLICATION

The computer program that would be developed in this project work have to be designed in such a way that with little modification or adjustment, they can be applied easily to administrative functions of any financial institution like; Merchant Banks, Nigerian development Bank, nigerian Agricultural and Insurance corporation etc.

CHAPTER TWO

PRELIMINARY INVESTIGATION

NEXIM Bank receives pplications from Exporter requesting for loan either in Local or Foreign currency. The application form is to be completed in triplicates, accompanied with feasibility report showing the viability of the specific business they intend doing. This application is enrouted through the sponsoring Bank. Original copy is forwarded to NEXIM Bank, while the duplicate copy is received by the consultant employed by NEXIMBank and the triplicate retained by the sponsoring Bank (SB) which could be Merchant Bank or Commercial Bank. The trio study the application, if the (SB) considers the business viable, they recommend the application to NEXIM for consideration.

The approval is now subject to the satisfaction of the consultant/NEXIM Bank using the following guidelines as basis for approval:

The exporter must have a limited liability company.

The company must be registered with Nigerian Export Promotion Council

There must be an evidence in writing showing the buyers consent to the Exporter's product i.e market must exist.

Evidence to show that the proceeds will be brought back to the country.

The products to export must not be a prohibited good

The sponsoring Bank must be ready to forfeit equivalent of the

loan granted from their deposit with CBN if defaulted. If the above

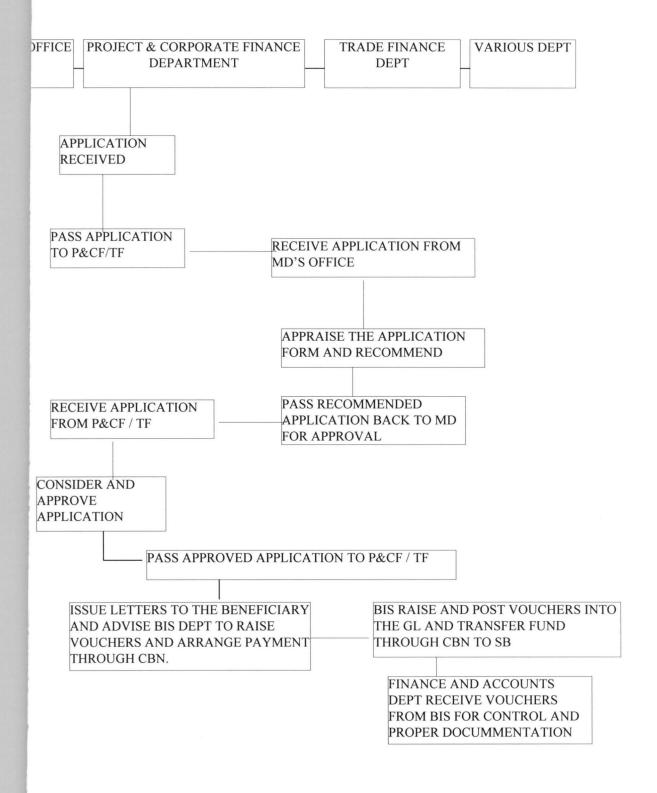
listed conditions are met, the loan may be granted, and disbursed

through CBN to the sponsoring Bank who in turn disburse to the clients.

EXISTING FACILITIES IN NEXIM BANK

There are various facilities available in NEXIM Bank but for the purpose of this study, only the current and common facilities will be mentioned such as Foreign Input Facility (FIF), Refinacing and Rediscounting Facility (RRF), Repurchase Facility (RP), and Stock Facility (SF). FIF is a hard currency loan i.e. the disbursement is in dollar term, while others are in local currency i.e. Naira term. FIF is always granted for the processing of local raw materials for export. While RRF is for the procurement of local products such as agricultural products or export and SF is to purchase seasonal raw materials in abundance and stock for the rainy day.

FLOWCHART OF THE EXISTING MANUAL SYSTEM.



PROBLEMS ASSOCIATED WITH THE EXISTING SYSTEM.

1. INACURACY

One of the problems associated with the existing system is inaccurate records. The bank's records are not uptodate.

LOSS OF DATA

It is also recorded that some vital documments are lost especially the documments enclosed with the application forms. Since there is no evidence from the applicants that those documments were actually attached to the form, there can be no disciplinary action taken against any staff handling such application form. In some cases, a whole application together with its documments may get lost in transit.

3. INEFFICIENCY

The summary of all the problems enumerated above is inefficiency. Thus it can be said with a very high degree of certainty that the system is ineffective to the extent initially intended. Hence, there is need for this study so as to help in formulating a new system that will not only be efficient, effective but also accurate.

THE PROPOSED SYSTEM

The proposed system would incorporate some aspect of the old system that cannot be done away with at this stage. In this system, computerisation commences with the data capture through the compilation of loan applications.

It should be noted that the selection/approval of loan application may still be done manually as computerisation of the whole process is a wide aspect to handle.

CHAPTER THREE

SYSTEM DESIGN AND IMPLEMENTATION

System design is concerned with the detailed procedures in the system as it shows on picture of the processing activities of the system.

3.1 INPUT DESIGN

The main input to the system is the appraisal form. The form consists of part A and B as shown below.

The form is to be completed by appraising Officer in the Bank based on the information provided in the application submitted by the clients.

The computer scientist refers to this form as INPUT FORM which supplies data into system.

3.2 DESIGN OF APPLICATION FORM FOR DATA CAPTURE

3.2(1) NIGERIAN EXPORT IMPORT BANK

(CHECKLIST/DOCUMMENTATION FOR TERM LOAN APPLICATION)

Country Code:	Class:
Location:	Date Of Incorporation:
Company Address:	
Company Name	

REQUIREMENT INFORMATION

Feasibility:	Proforma Invoice:
License:	Enviromental Report:
B. UPDATE APPLICATION	
Enter Form Number:	
GENERAL INFORMATION	
Surname:	First Name:
Middle Name:	State Of origin:
COMPANY INFORMATION	
Company Name:	
Company Address:	
Location:	Date Of Incorporation:\
Country Code:	Class:
LOAN INFORMATION	
Amount:	Date Given:
Due Date:	Pre-Paid:
Last Date:	Today:

3.3 THE SYSTEM BLOCK CHART

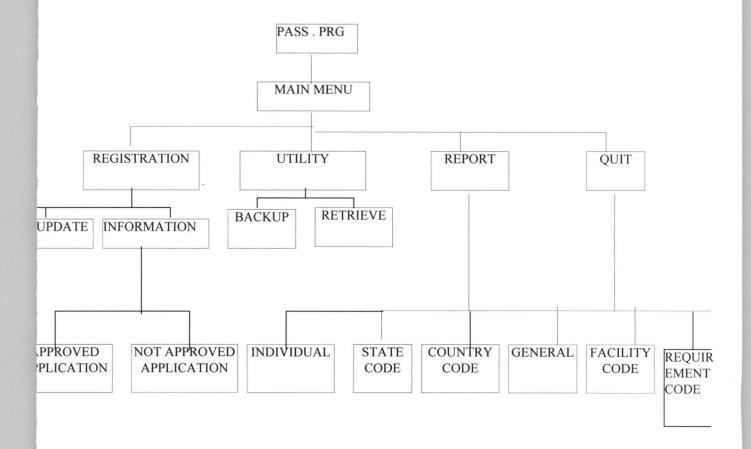


TABLE DESIGNER

GENERAL .dbf (STRUCTURE)

S/NO	FIELD NAME	ТҮРЕ	WIDTH	DECIMAL	INDEX	KEY
1	F - no	Character	5	-	-	Form Number
2	S - Name	Character	20			Surname
3	F - Name	Character	20			First Name
4	M - Name	Character	20			Middle Name
5	Con - Add	Character	30			Country Address
6	Com - Name	Character	20			Company Name
7	LOC	Character	20			Location
8	Origin	Character	20			State Of Origin
9	Code	Character	5			Nationality Code
10	Date - Inc	Date	8			Date of incorporation
11	Class	Character	15			Class
12	Feas	Character	1			Feasibility study
13	Pro - Inv	Character	1			Proforma Invoice
14	Lic	Character	1			License
15	en - rep	Character	1			Enviromental Report
16	L - Date	Date	8			Date of disbursement
17	Due - date	Date	8			Due Date
18	Prin	Numeric	15	2		Principal
19	Out - Bal	Numeric	15	2		Outstanding
20	Paid	Numeric	15	2		repayment
21	Las - Date	Date	8			Last date
22	Today	Date	8			Today
23	n	Numeric	10			

APPRO .dbf (APPROVAL APPLICATIONS)

S/NO	FIELD	TYPE	WIDTH	DECIMAL	INDEX	KEY
	NAME					10.000
1	F - no	Character	5	-	-	Form Number
2	S - Name	Character	20			Surname
3	F - Name	Character	20			First Name
4	M - Name	Character	20			Middle Name
5	Con - Add	Character	30			Country Address
6	Com - Name	Character	20			Company Name
7	LOC	Character	20			Location
8	Origin	Character	20			State Of Origin
9	Code	Character	5			Nationality Code
10	Date - Inc	Date	8			Date of incorporation
11	Class	Character	15			Class
12	Feas	Character	1			Feasibility study
13	Pro - Inv	Character	1			Proforma Invoice
14	Lic	Character	1			
15	en - rep	Character	1			
16	L - Date	Date	8			Date of disbursement
17	Due - date	Date	8			Due Date
18	Prin	Numeric	15	2		Principal
19	Out - Bal	Numeric	15	2		Outstanding
20	Paid	Numeric	15	2		repayment
21	Las - Date	Date	8			Last date
22	Today	Date	8			Today
23	n	Numeric	10			

NAPRO .dbf (NON APPROVAL APPLICATIONS)

S/NO	FIELD	TYPE	WIDTH	DECIMAL	INDEX	KEY
	NAME					
1	F - no	Character	5	-	-	Form Number
2	S - Name	Character	20			Surname
3	F - Name	Character	20			First Name
4	M - Name	Character	20			Middle Name
5	Con - Add	Character	30			Country Address
6	Com - Name	Character	20			Company Name
7	LOC	Character	20			Location
8	Origin	Character	20			State Of Origin
9	Code	Character	5			Nationality Code
10	Date - Inc	Date	8			Date of
						incorporation
11	Class	Character	15			Class
12	Feas	Character	1			Feasibility study
13	Pro - Inv	Character	1			Proforma Invoice
14	Lic	Character	1			
15	en - rep	Character	1			
16	L - Date	Date	8			Date of
						disbursement
17	Due - date	Date	8			Due Date
18	Prin	Numeric	15	2		Principal
19	Out - Bal	Numeric	15	2		Outstanding
20	Paid	Numeric	15	2		repayment
21	Las - Date	Date	8	8		Last date
22	Today	Date	8			Today
23	n	Numeric	10			Numeric

PASSWORD . dbf

NAME	TYPE	WIDTH	DEC	INDEX	KEY
User - id	Character	10	-	-	-
Name		25			
Status	Numeric	1			
Padlock					

EVALUATION

In the computational analysis the knowledge of evaluating the credit facility is an important aspect of the whole process.

The procedure used can be divided into three stages in each aspect of disbursing loans to the clients . The stages are as follows:

- 1. Sorting out applications received from the clients.
- 2. The appraisal of the applications received. The applications are further sorted out according to having met the requirements.
- Giving approval to those that met the requirements needed by the Bank.
- 4. The final stage disburses the loans to the successful applicants.

There must be some criteria for evaluating the performance of the system and these criteria must be clearly defined. The common criteria for evaluating any system which are applicable to this new proposed system are as follows:

3.4.1 TIMING

This is an important aspect in system evaluation. The following aspect should be taken into consideration:

- Lead or response time: this is the time that elapses before a system respond to the demands of the user.
- 2. Turn around Time: The period during which a system carries out the demand made before results are returned.

3.4.2 **COSTS**

Cost analysis of a new system should include the following:

A. **PERSONNEL**

- 1. Salary i.e. members of staff benefits and other allowances.
- 11. Overhead cost and fixed costs
- 111. Trial run cost

B. USER PERSONNEL

- 1. Training and Implementation cost
- 11. explanation and modification cost
- 111. Cost of new computer programs.

C. **EQUIPMENT COST**

- 1. Cost of new computers
- 2. Cost of storing data in magnetic tape or disk
- 3. Data entry cost

D. Other costs:

- 1. Cost of providing space to accommodate the new Hardware.
- 2. Cost of air conditioning including writing and U.P.S.

(UNINTERRUPTED POWER SUPPLY)

3. Cost of designing new forms.

CHAPTER 4

SYSTEM IMPLEMENTATION

The system was tested on Compatible Computer (Pentium 166) at Information Technology Unit (ITU) NEXIM Bank computer centre. The sample input and output are shown in the appendix.

All test data for implementing the system are arbitrary and fictitious but are the type that will be met in real life implementation.

The main activities to be considered here include:

- 1. writing and debugging all computer programs.
- 11. create master file. (general.dbf)
- prepare docummentation for data processing and user department.
- iv. acquire all necessary equipments and stationeries.
- v. train data processing and user personnel.
- vi supervise phasing in of the new system.
- vii anticipation and handling of psycological reactions of workers
- viii. adhering to time-schedule for implementation.

4.2 TIME SCHEDULING

In planning time-scheduling, the system designer has to establish certain goals or bench-marks to serve as check points during implementation.

There are basic methods employed in installing a new system . These are:

- a. All at Once change over
- b. Parallel change over
- c. Gradual change over

4.3 ALL - AT - ONCE CHANGE OVER

This is a method in which the old system is abandoned at once and the proposed new system becomes operational on predetermined data.

MERITS

- The bank pays for operating one system at a time which definitely be less than the cost of operating two system together.
- Once the change over is made, it is complete and the period of disruption is kept at minimum.
- 111. the benfits of the new system can be realized at once.

DEMERITS

- suddeness and abruptness of change itself may not give sufficient time to adjust.
- 11. unforseen problems or faults can also develop and with no other system to fall back on serious and disruption may set in.
- 111. loss of data, errors in processing etc.

4.4 PARALLEL TECHNIQUE

Both the old system and the proposed new system are operated concurrently for a given period of time. The old manual system must have been fully checked and okayed.

MERITS

- The old system is available as a back-up in the event of the new system's failure.
- 11. It gives room for comparism of the output of both system.
- 111. Changes and adjustment can be made in the new system without disrupting cash flows.

DEMERITS

- 1. The cost of operating the two systems is enormous.
- there may be confusion as to deciding which system to be used or trusted.

GRADUAL CHANGE OVER

This is known as step- To- Step change over. Part of new system is perfected and tested, that portion of the old system is replaced by the tested portion. This process continues until the whole old system is completely phased out.

MERITS

- 1. It allows users some time to adjust to the new system
- 11. It reduces the chances of complete

OPERATION OF THE SYSTEM

The system comprises about five comprehensive programms which are linked together. The programs were written in Visua Fox Pro. The programs capture data from the registration form and screen applicants in merit, approved and non-approved applications based on the information filled in the Registration forms and documments attached with the form. from this report list, the list of approved applications can be drawn up. Letters of approval for the loan can then be sent out to the successful applicants.

Remember that the system is a MENU-DRIVEN SYSTEM where you can pick the option you wish to perform at a particular time.

Owing to time constraints, the intended package for the project had to be split into smaller units or program:

There are five such programs, each having a specific role to play in the package. i.e.

- i. Accepting Password
- ii. Capturing data for registration into either new, update or information and creating data base files for approved and non approved applications while running the programs
- iii. Utility Program for back- up and retrieving of information
- iv. Facility for report which are divided into individual and general report.

Likewise, user is also allowed to view or print the report, while there is a provision for state, country, facility and requirement code.

v. Quit program - to enable you get out of working environment

PROCEDURES

Start the system, click start, click program, click microsoft visual fox pro, then click fox pro. Type do c:/jed/intro.prg

LIMITATIONS

There are some constraints / limitations encountered with the program such as:

Date:- the program cannot accept the year 2000 date due to the millenium problem. The program is on-line, results are displayed on the screen. The password is designed for only one person i.e. cannot be changed or accept another password the program is designed in such a way that the loan payment are not on - line i.e stored in dbf

ANALYSIS OF RESULT

The computer programs used in this project can further be manipulated to suit the processing of loans/advances of any financial Institution.

When compare with the old manual system, it is clear that retrival of information or records is much more easier in the new automated system than the old one. sorting of applications in different orders like facility, company, location, country, state etc can be effected by mere pressing a button which had been defined.

The problem of loss of records will be a thing of the past if the new system is fully implemented. since there is a facility to backup the system into a floppy disk or another disk, records can easily be updated at little or no extra cost.

This is effected by the use of disk storage system with a backup facility which is cheap and cost effective. The overall efficiency of the members of staff will also be enhanced.

The overall efficiency of the members of staff will also be enhanced.

HARDWARE UTILISATION

The system hardware used in carrying out the task involved in the processing of loans consists of the following:

1. VISUAL DISPLAY UNIT (VDU)

This device displays the program and data on the screen for easy accss. It enables correction to be made immedeately as soon as an error is detected

KEY- BOARD

This is an input device. data are keyed into the system via the keyboard for processing. It links the user to the system.

3. CENTRAL PROCESSING UNIT (CPU)

The CPU consists essentially three parts namely the immedeate access store, the Arithmetic and Logic Unit and the Controller. The CPU direct and controls all the activities within the computer system.

4. THE PRINTER

This device produces hard copy of the result of the program .

CHARPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 CONCLUSION

Introducing computer into some or all our activities is not a mere change. It is something rather much more fundamental and far reaching which can affect the structure of an organisation, the nature of work, attitudes and behaviour of employees.

This research has gone a long way in advocating the use of computer in processing application for loans and advances. Without any controversy, the use of computer to achieve such feats gives credence to the versatility of computer technology.

This will also help the regulatory banks like CBN, NDIC and other bodies concerned with credit facility in the country to recognise and appreciate the fact that, computerising the Banking industry is a right step at the right direction.

5.2 RECOMMENDATION

The proposed system is strongly recommended for any financial institution that involves in granting loans to their customers so as to eliminate most human lapses.

Adequate training programme is recommended in Data Base application and data entry for the bank's staff so as to enable them handle amd operate the proposed system effectively

Finally the parallel method of implementation is recommended by virtue

of the fact that no extra cost will be incurred for now.

5.3 **BIBLIOGRAPHY**

1.	Bingham and Grath:	1982	A Handbook of System Analysis 2 nd Edition, Macmillan Press Ltd. Hong Kong.
2.	Breadmare, R. G.:	1976	Organisation and Method; Hodder & Stoughton Press Ltd Houston.
3.	Asto-Tee R. G.:	1990	Programming with dbase 10 Oxford Programme.
4.	Ada Demb:	1979	System Analysis Oxford Pergman
5.	Fepohunda J. O.:	1979	System Analysis and Design by Understanding Computer Macmillan Ltd.
6.	Gloson T. A.:	1980	Introduction to System Analysis Wedlock Migrant Hill Press, Chicago.
7.	Senn J. A.:	1985	Analysis & Design of Information System, Micgraw Hill Ltd, New York.

```
HIDE MENUS ALL
HIDE POPUP rep
CLEAR
defi wind trans from 6,10 to 18,65 panel colo rb+/b+
acti wind trans
do while .t.
@ 0,0 to 10,55 double
@ 0,20 say [Report Setup]
@ 4,2 say [
                                 Datel
store ctod(" / / ") to dat
store 1 to dest, option
@ 1,29 get dest funct '^cn Screen ; Printer' default 1 messag
e 'Select Device to Print Report on'
@ 4,29 get dat pict "@D" message 'Enter Date to print for'
read
deact wind trans
USE C:\JED\GENERAL
if dest=1
DO ONSCREEN
EXIT
RETURN
ENDIF
if dest=2
DO ONPRINT
EXIT
RETURN
endif
ENDDO
CLEAR
RETURN
PROCEDURE ONSCREEN
CLEAR
DO WHILE .T.
USE C:\JED\GENERAL
 GO TOP
 CLEAR
 store space(5) to mf no
 @3,5 say 'Enter Form Number:' get mf no
 read
 if upper (mf no) = space(5)
        clear
        deac wind test
        return
```

endif

```
locate for upper(f no) = upper(mf no)
 if .not.found()
        @13,27 say 'Such Form Number does not exist'
        wait ' '
        @13,35 say '
        loop
  endif
clear
@ 2,18 SAY year(dat)
wrap=.t.
alignment='CENTER'
@ 2,25 say ' General Report on ' style 'BU'
wrap=.f.
alignment='LEFT'
@2,55 say mdy(dat)
03,5 say 'Form Number:'
@3,20 say f no
@5,2 to 5,78
@5,35 say 'GENERAL INFORMATION'
@7,5 say 'Surname :'
07,15 say s name
@7,40 say 'First Name:'
07,55 say f name
09,5 say 'Middle name:'
@9,20 say m name
@9,40 say 'State of Origin:'
@9,60 say s origin
@11,2 to 11,78
@11,35 say 'COMPANY INFORMATION '
@13,5 say 'Company name:'
@13,25 say com name
@15,5 say 'Company Address:'
@15,25 say con add
@17,5 say 'Location :'
@17,17 say loc
@17,45 say 'Date of Incorporation:'
@17,70 say date inc
@18,2 to 18,78
@19,5 say 'Country Code :'
@19,20 say n_code
@19,40 say 'Class:'
@19,50 say class
@21,2 to 21,78
@21,35 say 'REQUIREMENT INFORMATION'
@23,5 say 'Feasibility:'
@23,20 say feas
@23,40 say 'Proform Invoice:'
@23,60 say pro inv
@24,5 say 'Licence:'
```

```
@24,15 say lic
@24,45 say 'Environmental Report:'
@24,70 say en rep
@26,2 to 26,78
wait ' '
ans = ' '
DO WHILE .NOT. ans $ 'yYnN'
 @ 25,25 SAY 'Do you want to view another record? (Y/N)' GET
ans
 READ
ENDDO
IF UPPER(ans) = 'Y'
@ 24,25 SAY '
LOOP
ENDIF
EXIT
ENDDO
USE
CLEAR
SET COLOR TO GB/N+
SET COLOR TO W/B
CLOSE DATABASES
RETURN
PROCEDURE ONPRINT
@ 12,31 say 'Please Wait'
@ 13,26 say 'Printing in progress !!!'
SET CONSOLE OFF
SET DEVICE TO PRINT
SET PRINTER ON
DO WHILE .T.
USE C:\JED\GENERAL
GO TOP
 CLEAR
 store space(5) to mf no
 @3,5 say 'Enter Form Number:' get mf_no
 read
 if upper(mf no) = space(5)
        clear
        deac wind test
        return
 endif
 locate for upper(f no) = upper(mf no)
 if .not.found()
        @13,27 say 'Such Form Number does not exist'
        wait ' '
        @13,35 say '
        loop
```

```
endif
 clear
@ 2,18 SAY year(dat)
wrap=.t.
alignment='CENTER'
@ 2,25 say ' General Report on ' style 'BU'
_wrap=.f.
alignment='LEFT'
@2,55 say mdy(dat)
@3,5 say 'Form Number:'
@3,20 say f_no
@5,2 to 5,78
@5,35 say 'GENERAL INFORMATION'
@7,5 say 'Surname :'
07,15 say s name
07,40 say 'First Name:'
07,55 say f name
09,5 say 'Middle name:'
@9,20 say m name
@9,40 say 'State of Origin:'
09,60 say s origin
@11,2 to 11,78
@11,35 say 'COMPANY INFORMATION '
@13,5 say 'Company name:'
@13,25 say com name
@15,5 say 'Company Address :'
@15,25 say con add
@17,5 say 'Location :'
@17,17 say loc
@17,45 say 'Date of Incorporation:'
@17,70 say date inc
@18,2 to 18,78
@19,5 say 'Country Code :'
@19,20 say n code
@19,40 say 'Class:'
@19,50 say class
@21,2 to 21,78
@21,35 say 'REQUIREMENT INFORMATION'
@23,5 say 'Feasibility:'
@23,20 say feas
@23,40 say 'Proform Invoice:'
@23,60 say pro inv
@24,5 say 'Licence:'
@24,15 say lic
@24,40 say 'Environmental Report:'
@24,65 say en rep
@26,2 to 26,78
wait ' '
```

SET PRINTER OFF

```
set device to screen
SET CONSOLE ON
REP = '
CLEAR
DO WHILE .NOT. rep $ 'YyNn'
@ 12,31 SAY '
@ 13,26 SAY '
@ 12,31 SAY 'Print another record? (Y/N)' GET rep
READ
ENDDO
IF UPPER(rep) = 'N'
CLEAR
RETURN
ENDIF
loop
enddo
SET COLOR TO GB/N+
SET COLOR TO W/B
CLOSE DATABASES
RETURN
```

```
HIDE MENUS ALL
HIDE POPUP rep
CLEAR
defi wind trans from 6,10 to 18,65 panel colo rb+/b+
acti wind trans
do while .t.
@ 0,0 to 10,55 double
@ 0,20 say [Report Setup]
@ 4,2 say [
                      Date]
store ctod(" / / ") to dat
store 1 to dest, option
@ 1,29 get dest funct '^cn Screen; Printer' default 1 message 'Select Device to Print Report on'
@ 4,29 get dat pict "@D" message 'Enter Date to print for'
read
deact wind trans
USE C:\JED\GENERAL
if dest=1
DO ONSCREEN
EXIT
RETURN
ENDIF
if dest=2
DO ONPRINT
EXIT
RETURN
endif
ENDDO
CLEAR
RETURN
PROCEDURE ONSCREEN
CLEAR
DO WHILE .T.
USE C:\JED\GENERAL
GO TOP
CLEAR
store space(5) to mf no
@3,5 say 'Enter Form Number:' get mf no
read
if upper(mf_no) = space(5)
        clear
        deac wind test
        return
endif
 locate for upper(f no) = upper(mf_no)
 if .not.found()
        @13,27 say 'Such Form Number does not exist'
        wait''
```

@13,35 say '

loop

endif clear @ 2,18 SAY year(dat) wrap=.t. _alignment='CENTER' @ 2,25 say ' General Report on ' style 'BU' wrap=.f. alignment='LEFT' @2,55 say mdy(dat) @3,5 say 'Form Number:' @3,20 say f no @5,2 to 5,78 @5,35 say 'GENERAL INFORMATION' @7,5 say 'Surname:' @7,15 say s name @7,40 say 'First Name:' @7,55 say f name @9,5 say 'Middle name:' @9,20 say m name @9,40 say 'State of Origin:' @9,60 say s origin @11,2 to 11,78 @11,35 say 'COMPANY INFORMATION' @13,5 say 'Company name:' @13,25 say com name @15,5 say 'Company Address:' @15,25 say con add @17,5 say 'Location:' @17,17 say loc @17,45 say 'Date of Incorporation:' @17,70 say date inc @18,2 to 18,78 @19,5 say 'Country Code:' @19,20 say n code @19,40 say 'Class:' @19,50 say class @21,2 to 21,78 @21,35 say 'REQUIREMENT INFORMATION' @23,5 say 'Feasibility:' @23,20 say feas @23,40 say 'Proform Invoice:' @23,60 say pro_inv @24,5 say 'Licence:' @24,15 say lic @24,45 say 'Environmental Report:' @24,70 say en_rep @26,2 to 26,78 wait'' ans = ' ' DO WHILE .NOT. ans \$ 'yYnN'

@ 25,25 SAY 'Do you want to view another record? (Y/N)' GET ans READ ENDDO
IF UPPER(ans) = 'Y'
@ 24,25 SAY ' '

```
LOOP
ENDIF
EXIT
ENDDO
USE
CLEAR
SET COLOR TO GB/N+
SET COLOR TO W/B
CLOSE DATABASES
RETURN
PROCEDURE ONPRINT
@ 12,31 say 'Please Wait'
@ 13,26 say 'Printing in progress !!!'
SET CONSOLE OFF
SET DEVICE TO PRINT
SET PRINTER ON
DO WHILE .T.
USE C:\JED\GENERAL
GO TOP
CLEAR
store space(5) to mf_no
@3,5 say 'Enter Form Number:' get mf_no
read
if upper(mf no) = space(5)
       clear
       deac wind test
       return
endif
locate for upper(f_no) = upper(mf_no)
if .not.found()
        @13,27 say 'Such Form Number does not exist'
        wait''
        @13,35 say '
        loop
 endif
clear
@ 2,18 SAY year(dat)
wrap=.t.
alignment='CENTER'
@ 2,25 say 'General Report on 'style 'BU'
wrap=.f.
alignment='LEFT'
@2,55 say mdy(dat)
@3,5 say 'Form Number:'
@3,20 say f_no
@5,2 to 5,78
@5,35 say 'GENERAL INFORMATION'
@7,5 say 'Surname:'
@7,15 say s_name
@7,40 say 'First Name:'
@7,55 say f_name
```

@9,5 say 'Middle name:'

```
@9,20 say m name
```

@9,40 say 'State of Origin:'

@9,60 say s origin

@11,2 to 11,78

@11,35 say 'COMPANY INFORMATION'

@13,5 say 'Company name:'

@13,25 say com name

@15,5 say 'Company Address:'

@15,25 say con add

@17,5 say 'Location:'

@17,17 say loc

@17,45 say 'Date of Incorporation:'

@17,70 say date inc

@18,2 to 18,78

@19,5 say 'Country Code:'

@19,20 say

n code

@19,40 say 'Class:'

@19,50 say class

@21,2 to 21,78

@21,35 say 'REQUIREMENT INFORMATION'

@23,5 say 'Feasibility:'

@23,20 say feas

@23,40 say 'Proform Invoice:'

@23,60 say pro_inv

@24,5 say 'Licence:'

@24,15 say lic

@24,40 say 'Environmental Report:'

@24,65 say en rep

@26,2 to 26,78

wait''

SET PRINTER OFF

set device to screen

SET CONSOLE ON

REP = ' '

CLEAR

DO WHILE .NOT. rep \$ 'YyNn'

@ 12,31 SAY'

@ 13,26 SAY '

@ 12,31 SAY 'Print another record? (Y/N)' GET rep

READ

ENDDO

IF UPPER(rep) = 'N'

CLEAR

RETURN

ENDIF

loop

enddo

SET COLOR TO GB/N+

SET COLOR TO W/B

CLOSE DATABASES

```
Procedure infreg
do case
    case bar () = 1
      do c:\jed\apinf
     case bar () = 2
      do c:\jed\napinf
 endcase
 clear
 show menus all
 show popups inf, reg
 return
HIDE MENU BARMENU
HIDE POPUPS ALL
CLEAR
DEFINE WIND TEST FROM 0,0 TO 35,80 SYSTEM COLOR W+/B+ TITLE 'NEW APPLICATION'
ACTI WIND TEST
DEFINE window CHECK FROM 14,20 TO 19,65
SET TALK OFF
SET SAFE OFF
USE C:\JED\GENERAL
GO TOP
DO WHILE .T.
 SELECT 1
 USE C:\JED\GENERAL
 SELEC 1
GO TOP
 CLEAR
 store space (5) to mf no
 @5,5 say 'Enter Form Number:' get mf no
 read
 if upper (mf no) = space (5)
        clear
        deac wind test
        return
 endif
 locate for upper(f no) = upper(mf no)
 if found()
        @13,27 say 'Form Number already exist'
        wait ''
        @13,35 say '
        loop
  endif
        store space(20) to ms name, mf name, mm name, mcom name, mloc, ms origin
        store space (30) to mcon add
        store space(5) to mn code
        store space(15) to mclass
        store space(1) to mfeas, mpro inv, mlic, men rep
        store ctod(" / / ") to mdate inc
        store 0.00 to mprin, minter, mcbn_com, mout_bal
        @3,2 to 3,78
        @3,35 say 'GENERAL INFORMATION'
        @7,5 say 'Surname :' get ms_name
        @7,40 say 'First Name:' get mf name
```

@9 5 sav 'Middle name:' get mm name

```
HIDE MENUS ALL
HIDE POPUP rep
CLEAR
defi wind trans from 6,10 to 18,65 panel colo rb+/b+
acti wind trans
do while .t.
@ 0,0 to 10,55 double
@ 0,20 say [Report Setup]
@ 4,2 say [
                                 Date]
store ctod(" / / ") to dat
store 1 to dest, option
@ 1,29 get dest funct '^cn Screen ; Printer' default 1 message 'Sel
ect Device to Print Report on'
@ 4,29 get dat pict "@D" message 'Enter Date to print for'
read
deact wind trans
USE C:\JED\GENERAL
if dest=1
DO ONSCREEN
EXIT
RETURN
ENDIF
if dest=2
DO ONPRINT
EXIT
RETURN
endif
ENDDO
CLEAR
RETURN
PROCEDURE ONSCREEN
CLEAR
DO WHILE .T.
USE C:\JED\GENERAL
GO TOP
 CLEAR
 store space(5) to mf no
 @3,5 say 'Enter Form Number:' get mf_no
 if upper (mf no) = space(5)
        clear
        deac wind test
        return
 endif
```

Page 1

```
locate for upper(f no) = upper(mf no)
 if .not.found()
        @13,27 say 'Such Form Number does not exist'
        @13,35 say '
        loop
  endif
 clear
@ 2,18 SAY year(dat)
_wrap=.t.
 alignment='CENTER'
@ 2,25 say ' General Report on ' style 'BU'
wrap=.f.
alignment='LEFT'
@2,55 say mdy(dat)
@3,5 say 'Form Number:'
@3,20 say f no
@5,2 to 5,78
@5,35 say 'GENERAL INFORMATION'
@7,5 say 'Surname :'
07,15 say s name
@7,40 say 'First Name:'
07,55 say f name
@9,5 say 'Middle name:'
09,20 say m name
@9,40 say 'State of Origin:'
09,60 say s origin
@11,2 to 11,78
@11,35 say 'COMPANY INFORMATION '
@13,5 say 'Company name:'
@13,25 say com name
@15,5 say 'Company Address :'
@15,25 say con add
@17,5 say 'Location :'
@17,17 say loc
@17,40 say 'Date of Incorporation:'
@17,65 say date inc
@18,2 to 18,78
@19,5 say 'Country Code :'
@19,20 say n code
@19,40 say 'Class:'
@19,50 say class
@21,2 to 21,78
@21,35 say 'REQUIREMENT INFORMATION'
@23,5 say 'Feasibility:'
@23,20 say feas
@23,40 say 'Proform Invoice:'
@23,60 say pro inv
@24,5 say 'Licence:'
```

```
ind.BAK
@24,15 say lic
@24,45 say 'Environmental Report:'
@24,70 say en rep
@26,2 to 26,78
wait ' '
ans = ' '
DO WHILE .NOT. ans $ 'yYnN'
 @ 25,25 SAY 'Do you want to view another record? (Y/N)' GET ans
READ
ENDDO
IF UPPER(ans) = 'Y'
@ 24,25 SAY '
LOOP
ENDIF
EXIT
ENDDO
USE
CLEAR
SET COLOR TO GB/N+
SET COLOR TO W/B
CLOSE DATABASES
RETURN
PROCEDURE ONPRINT
@ 12,31 say 'Please Wait'
@ 13,26 say 'Printing in progress !!!'
SET CONSOLE OFF
SET DEVICE TO PRINT
SET PRINTER ON
DO WHILE .T.
USE C:\JED\GENERAL
GO TOP
CLEAR
store space(5) to mf no
@3,5 say 'Enter Form Number:' get mf no
read
 if upper(mf no) = space(5)
        clear
        deac wind test
        return
 endif
 locate for upper(f no) = upper(mf no)
 if .not.found()
```

@13,27 say 'Such Form Number does not exist'

wait ' ' @13,35 say '

loop

endif

```
clear
@ 2,18 SAY year(dat)
wrap=.t.
alignment='CENTER'
@ 2,25 say ' General Report on ' style 'BU'
wrap=.f.
alignment='LEFT'
@2,55 say mdy(dat)
@3,5 say 'Form Number:'
03,20 say f no
@5,2 to 5,78
@5,35 say 'GENERAL INFORMATION'
@7,5 say 'Surname :'
07,15 say s name
@7,40 say 'First Name:'
07,55 say f name
09,5 say 'Middle name:'
09,20 say m name
@9,40 say 'State of Origin:'
@9,60 say s origin
@11,2 to 11,78
@11,35 say 'COMPANY INFORMATION '
@13,5 say 'Company name:'
@13,25 say com name
@15,5 say 'Company Address :'
@15,25 say con add
@17,5 say 'Location :'
@17,17 say loc
@17,40 say 'Date of Incorporation:'
@17,65 say date inc
@18,2 to 18,78
@19,5 say 'Country Code :'
@19,20 say
                n code
@19,40 say 'Class:'
@19,50 say class
@21,2 to 21,78
@21,35 say 'REQUIREMENT INFORMATION'
@23,5 say 'Feasibility:'
@23,20 say feas
@23,40 say 'Proform Invoice:'
@23,60 say pro inv
@24,5 say 'Licence:'
@24,15 say lic
@24,40 say 'Environmental Report:'
@24,65 say en rep
@26,2 to 26,78
wait ' '
SET PRINTER OFF
set device to screen
```

SET CONSOLE ON

```
REP = ' '
CLEAR
DO WHILE .NOT. rep $ 'YyNn'
@ 12,31 SAY '
@ 13,26 SAY '
@ 12,31 SAY 'Print another record? (Y/N)' GET rep
READ
ENDDO
IF UPPER(rep) = 'N'
CLEAR
RETURN
ENDIF
loop
enddo
SET COLOR TO GB/N+
SET COLOR TO W/B
CLOSE DATABASES
RETURN
```

ind.prg

```
HIDE MENUS ALL
HIDE POPUP rep
CLEAR
defi wind trans from 6,10 to 18,65 panel colo rb+/b+
acti wind trans
do while .t.
@ 0,0 to 10,55 double
@ 0,20 say [Report Setup]
@ 4,2 say [
                                Datel
store ctod(" / / ") to dat
store 1 to dest, option
@ 1,29 get dest funct '^cn Screen ; Printer' default 1 message 'Sel
ect Device to Print Report on'
@ 4,29 get dat pict "@D" message 'Enter Date to print for'
read
deact wind trans
USE C:\JED\GENERAL
if dest=1
DO ONSCREEN
EXIT
RETURN
ENDIF
if dest=2
DO ONPRINT
EXIT
RETURN
endif
ENDDO
CLEAR
RETURN
PROCEDURE ONSCREEN
CLEAR
DO WHILE .T.
USE C:\JED\GENERAL
GO TOP
CLEAR
 store space(5) to mf no
@3,5 say 'Enter Form Number:' get mf no
 read
 if upper(mf no) = space(5)
        clear
        deac wind test
        return
 endif
```

ind.prg

```
locate for upper(f no) = upper(mf no)
if .not.found()
        @13,27 say 'Such Form Number does not exist'
        wait ' '
        @13,35 say '
        loop
 endif
clear
@ 2,18 SAY year(dat)
wrap=.t.
alignment='CENTER'
@ 2,25 say ' General Report on ' style 'BU'
wrap=.f.
alignment='LEFT'
@2,55 say mdy(dat)
@3,5 say 'Form Number:'
@3,20 say f no
@5,2 to 5,78
@5,35 say 'GENERAL INFORMATION'
@7,5 say 'Surname :'
@7,15 say s name
@7,40 say 'First Name:'
@7,55 say f name
@9,5 say 'Middle name:'
09,20 say m name
@9,40 say 'State of Origin:'
@9,60 say s origin
@11,2 to 11,78
@11,35 say 'COMPANY INFORMATION '
@13,5 say 'Company name:'
@13,25 say com name
@15,5 say 'Company Address :'
@15,25 say con add
@17,5 say 'Location :'
@17,17 say loc
@17,45 say 'Date of Incorporation:'
@17,70 say date inc
@18,2 to 18,78
@19,5 say 'Country Code :'
@19,20 say n code
@19,40 say 'Class:'
@19,50 say class
@21,2 to 21,78
@21,35 say 'REQUIREMENT INFORMATION'
@23,5 say 'Feasibility:'
@23,20 say feas
@23,40 say 'Proform Invoice:'
@23,60 say pro_inv
@24,5 say 'Licence:'
```

```
ind.prg
@24,15 say lic
@24,45 say 'Environmental Report:'
@24,70 say en_rep
@26,2 to 26,78
wait ' '
ans = ' '
DO WHILE .NOT. ans $ 'yYnN'
@ 25,25 SAY 'Do you want to view another record? (Y/N)' GET ans
READ
ENDDO
IF UPPER(ans) = 'Y'
@ 24,25 SAY '
LOOP
ENDIF
EXIT
ENDDO
USE
CLEAR
SET COLOR TO GB/N+
SET COLOR TO W/B
CLOSE DATABASES
RETURN
PROCEDURE ONPRINT
@ 12,31 say 'Please Wait'
@ 13,26 say 'Printing in progress !!!'
SET CONSOLE OFF
SET DEVICE TO PRINT
SET PRINTER ON
DO WHILE .T.
USE C:\JED\GENERAL
GO TOP
CLEAR
 store space(5) to mf no
 @3,5 say 'Enter Form Number:' get mf no
 read
 if upper(mf no) = space(5)
        clear
        deac wind test
        return
 endif
 locate for upper(f no) = upper(mf no)
 if .not.found()
        @13,27 say 'Such Form Number does not exist'
        @13,35 say '
        loop
  endif
```

Page 3

ind.prg

```
clear
@ 2,18 SAY year(dat)
_wrap=.t.
 alignment='CENTER'
@ 2,25 say ' General Report on ' style 'BU'
wrap=.f.
alignment='LEFT'
@2,55 say mdy(dat)
@3,5 say 'Form Number:'
@3,20 say f no
@5,2 to 5,78
@5,35 say 'GENERAL INFORMATION'
@7,5 say 'Surname :'
@7,15 say s name
@7,40 say 'First Name:'
07,55 say f name
@9,5 say 'Middle name:'
@9,20 say m name
09,40 say 'State of Origin:'
@9,60 say s origin
@11,2 to 11,78
@11,35 say 'COMPANY INFORMATION '
@13,5 say 'Company name:'
@13,25 say com name
@15,5 say 'Company Address :'
@15,25 say con add
@17,5 say 'Location :'
@17,17 say loc
@17,45 say 'Date of Incorporation:'
@17,70 say date inc
@18,2 to 18,78
@19,5 say 'Country Code :'
@19,20 say n code
@19,40 say 'Class:'
@19,50 say class
@21,2 to 21,78
@21,35 say 'REQUIREMENT INFORMATION'
@23,5 say 'Feasibility:'
@23,20 say feas
@23,40 say 'Proform Invoice:'
@23,60 say pro inv
@24,5 say 'Licence:'
@24,15 say lic
@24,40 say 'Environmental Report:'
@24,65 say en rep
@26,2 to 26,78
wait ' '
SET PRINTER OFF
set device to screen
```

Page 4

SET CONSOLE ON

```
REP = '
CLEAR
DO WHILE .NOT. rep $ 'YyNn'
@ 12,31 SAY '
@ 13,26 SAY '
@ 12,31 SAY 'Print another record? (Y/N)' GET rep
READ
ENDDO
IF UPPER(rep) = 'N'
CLEAR
RETURN
ENDIF
loop
enddo
SET COLOR TO GB/N+
SET COLOR TO W/B
CLOSE DATABASES
RETURN
```

c_code.prg

HIDE MENU BARMENU HIDE POPUPS ALL

CLEAR

DEFINE WIND TEST FROM 0,0 TO 35,80 SYSTEM COLOR W+/B+ TITLE 'COUNTRY CODE'

ACTI WIND TEST

USE C:\JED\C_CODE

BROWSE

DEAC WIND TEST

f_code.BAK

HIDE MENU BARMENU HIDE POPUPS ALL CLEAR

DEFINE WIND TEST FROM 2,1 TO 35,80 SYSTEM COLOR W+/B+ TITLE 'FACILI TY CODE'

ACTI WIND TEST

USE C:\JED\F_CODE

BROWSE

DEAC WIND TEST

s_code.prg

HIDE MENU BARMENU

HIDE POPUPS ALL

CLEAR

DEFINE WIND TEST FROM 0,0 TO 35,80 SYSTEM COLOR W+/B+ TITLE 'STATE

CODE

ACTI WIND TEST

USE C:\JED\S CODE

BROWSE

DEAC WIND TEST

```
HIDE MENUS ALL
HIDE POPUP rep
CLEAR
defi wind trans from 6,10 to 18,65 panel colo rb+/b+
acti wind trans
do while .t.
@ 0,0 to 10,55 double
@ 0,20 say [Report Setup]
@ 4,2 say [
                                Date]
store ctod(" / / ") to dat
store 1 to dest, option
@ 1,29 get dest funct '^cn Screen ; Printer' default 1 message 'Sel
ect Device to Print Report on'
@ 4,29 get dat pict "@D" message 'Enter Date to print for'
read
deact wind trans
USE C:\JED\GENERAL
if dest=1
DO ONSCREEN
EXIT
RETURN
ENDIF
if dest=2
DO ONPRINT
EXIT
RETURN
endif
ENDDO
CLEAR
RETURN
PROCEDURE ONSCREEN
CLEAR
DO WHILE .T.
USE C:\JED\GENERAL
GO TOP
CLEAR
 store space(5) to mf no
 @3,5 say 'Enter Form Number:' get mf no
 if upper (mf no) = space(5)
        clear
        deac wind test
        return
 endif
```

```
locate for upper(f no) = upper(mf no)
if .not.found()
        @13,27 say 'Such Form Number does not exist'
        wait ' '
        @13,35 say '
        loop
 endif
clear
@ 2,18 SAY year(dat)
wrap=.t.
alignment='CENTER'
@ 2,25 say ' General Report on ' style 'BU'
wrap=.f.
alignment='LEFT'
@2,55 say mdy(dat)
@3,5 say 'Form Number:'
@3,20 say f no
@5,2 to 5,78
@5,35 say 'GENERAL INFORMATION'
@7,5 say 'Surname :'
07,15 say s name
07,40 say 'First Name:'
07,55 say f name
@9,5 say 'Middle name:'
09,20 say m name
@9,40 say 'State of Origin:'
@9,60 say s origin
@11,2 to 11,78
@11,35 say 'COMPANY INFORMATION '
@13,5 say 'Company name:'
@13,25 say com name
@15,5 say 'Company Address :'
@15,25 say con add
@17,5 say 'Location :'
@17,17 say loc
@17,40 say 'Date of Incorporation:'
@17,65 say date inc
@18,2 to 18,78
@19,5 say 'Country Code :'
@19,20 say n code
@19,40 say 'Class:'
@19,50 say class
@21,2 to 21,78
@21,35 say 'REQUIREMENT INFORMATION'
@23,5 say 'Feasibility:'
@23,20 say feas
@23,40 say 'Proform Invoice:'
@23,60 say pro inv
@24,5 say 'Licence:'
```

```
ind.BAK
```

```
@24,15 say lic
@24,45 say 'Environmental Report:'
@24,70 say en rep
@26,2 to 26,78
wait ' '
ans = ' '
DO WHILE .NOT. ans $ 'yYnN'
@ 25,25 SAY 'Do you want to view another record? (Y/N)' GET ans
ENDDO
IF UPPER(ans) = 'Y'
@ 24,25 SAY '
LOOP
ENDIF
EXIT
ENDDO
USE
CLEAR
SET COLOR TO GB/N+
SET COLOR TO W/B
CLOSE DATABASES
RETURN
PROCEDURE ONPRINT
@ 12,31 say 'Please Wait'
@ 13,26 say 'Printing in progress !!!'
SET CONSOLE OFF
SET DEVICE TO PRINT
SET PRINTER ON
DO WHILE .T.
USE C:\JED\GENERAL
GO TOP
CLEAR
store space(5) to mf no
@3,5 say 'Enter Form Number:' get mf no
read
if upper (mf no) = space(5)
        clear
        deac wind test
        return
 endif
locate for upper(f no) = upper(mf no)
 if .not.found()
        @13,27 say 'Such Form Number does not exist'
        wait ' '
        @13,35 say '
        loop
  endif
```

```
clear
@ 2,18 SAY year(dat)
wrap=.t.
alignment='CENTER'
@ 2,25 say ' General Report on ' style 'BU'
wrap=.f.
alignment='LEFT'
@2,55 say mdy(dat)
@3,5 say 'Form Number:'
@3,20 say f no
@5,2 to 5,78
@5,35 say 'GENERAL INFORMATION'
@7,5 say 'Surname :'
@7,15 say s name
@7,40 say 'First Name:'
@7,55 say f name
@9,5 say 'Middle name:'
@9,20 say m name
@9,40 say 'State of Origin:'
09,60 say s origin
@11,2 to 11,78
@11,35 say 'COMPANY INFORMATION '
@13,5 say 'Company name:'
@13,25 say com name
@15,5 say 'Company Address :'
@15,25 say con add
@17,5 say 'Location :'
@17,17 say loc
@17,40 say 'Date of Incorporation:'
@17,65 say date inc
@18,2 to 18,78
@19,5 say 'Country Code :'
@19,20 say
                n code
@19,40 say 'Class:'
@19,50 say class
@21,2 to 21,78
@21,35 say 'REQUIREMENT INFORMATION'
@23,5 say 'Feasibility:'
@23,20 say feas
@23,40 say 'Proform Invoice:'
@23,60 say pro inv
@24,5 say 'Licence:'
@24,15 say lic
@24,40 say 'Environmental Report:'
@24,65 say en rep
@26,2 to 26,78
wait ' '
SET PRINTER OFF
set device to screen
```

```
SET CONSOLE ON
```

```
REP = ' '
CLEAR
DO WHILE .NOT. rep $ 'YyNn'
@ 12,31 SAY '
@ 13,26 SAY '
@ 12,31 SAY 'Print another record? (Y/N)' GET rep
READ
ENDDO
IF UPPER(rep) = 'N'
CLEAR
RETURN
ENDIF
loop
enddo
SET COLOR TO GB/N+
SET COLOR TO W/B
CLOSE DATABASES
RETURN
```

```
(IDE MENUS ALL
HIDE POPUP rep
CLEAR
defi wind trans from 6,10 to 18,65 panel colo rb+/b+
acti wind trans
do while .t.
@ 0,0 to 10,55 double
@ 0,20 say [Report Setup]
@ 4,2 say [
                                Datel
store ctod(" / / ") to dat
store 1 to dest, option
@ 1,29 get dest funct '^cn Screen ; Printer' default 1 message
'Select Device to Print Report on'
@ 4,29 get dat pict "@D" message 'Enter Date to print for'
read
deact wind trans
USE C:\JED\GENERAL
if dest=1
DO ONSCREEN
EXIT
RETURN
ENDIF
if dest=2
DO ONPRINT
EXIT
RETURN
endif
ENDDO
CLEAR
RETURN
PROCEDURE ONSCREEN
DO WHILE .T.
@ 2,18 SAY year(dat)
wrap=.t.
alignment='CENTER'
@ 2,25 say ' General Report on ' style 'BU'
wrap=.f.
alignment='LEFT'
@2,55 say mdy(dat)
@ 6,1 TO 6,78 DOUBLE
@ 7,1 SAY 'FORM NO. SURNAME COMPANY CLASS COUN
TRY CODE INC. DATE
@ 8,1 TO 8,78 DOUBLE
r=9
```

```
GO TOP
OO WHILE .NOT. EOF()
@ r,2 SAY F NO
@ r,10 SAY S NAME
@ r,23 SAY COM NAME
@ r,45 SAY CLASS
@ r,62 SAY N CODE
 @ r,72 SAY DATE INC
@ 4,1 SAY '
r=r+1
IF r = 22 .AND. .NOT. EOF()
rep=' '
   @ 23,22 SAY 'Press any key to view more data OR -X- to exit'
 get rep
  READ
  IF UPPER (REP) = 'X'
  USE
   CLEAR
  RETURN
  ENDIF
  @ 11,0 CLEAR TO 23,79
  r = 11
ENDIF
  IF r#22 .AND. EOF()
   EXIT
  ENDIF
SKIP
ENDDO
ans = ' '
DO WHILE .NOT. ans $ 'yYnN'
@ 24,25 SAY 'Do you want to view again? (Y/N)' GET ans
READ
ENDDO
IF UPPER(ans) = 'Y'
CLEAR
LOOP
ENDIF
EXIT
ENDDO
USE
CLEAR
RETURN
PROCEDURE ONPRINT
do while .t.
@ 12,31 say 'Please Wait'
@ 13,26 say 'Printing in progress !!!'
SET CONSOLE OFF
```

```
SET DEVICE TO PRINT
SET PRINTER ON
wrap=.t.
alignment='CENTER'
@ 2,28 SAY ' General Report on ' style 'BU'
_wrap=.f.
_alignment='LEFT'
@ 2,56 SAY mdy(dat)
@ 4,1 SAY '
@ 6,1 TO 6,78 DOUBLE
@ 7,1 SAY 'FORM NO. SURNAME COMPANY CLASS
                                                          COUN
TRY CODE INC. DATE
@ 8,1 TO 8,78 DOUBLE
r=9
GO TOP
DO WHILE .NOT. EOF()
@ r,2 SAY F NO
 @ r,10 SAY S NAME
 @ r,23 SAY COM NAME
 @ r,45 SAY CLASS
 @ r,62 SAY N CODE
 @ r,72 SAY DATE INC
@ 4,1 SAY '
r=r+1
IF r = 22 .AND. .NOT. EOF()
rep=' '
   @ 23,22 SAY 'Press any key to view more data OR -X- to exit'
 get rep
   READ
  IF UPPER (REP) = 'X'
  USE
  CLEAR
  RETURN
  ENDIF
  @ 11,0 CLEAR TO 23,79
   r = 11
 ENDIF
  IF r#22 .AND. EOF()
    EXIT
  ENDIF
SKIP
ENDDO
SET PRINTER OFF
set device to screen
SET CONSOLE ON
REP = '
CLEAR
```

```
DO WHILE .NOT. rep $ 'YyNn'
@ 12,31 SAY '
@ 13,26 SAY '
@ 12,31 SAY 'Print Again? (Y/N)' GET rep
READ
ENDDO
IF UPPER(rep) = 'N'
CLEAR
RETURN
ENDIF
loop
enddo
RETURN
```

```
HIDE MENUS ALL
HIDE POPUP rep
CLEAR
defi wind trans from 6,10 to 18,65 panel colo rb+/b+
acti wind trans
do while .t.
@ 0,0 to 10,55 double
@ 0,20 say [Report Setup]
@ 4,2 say [
                                Date
store ctod(" / / ") to dat
store 1 to dest, option
@ 1,29 get dest funct '^cn Screen ; Printer' default 1 message
'Select Device to Print Report on'
@ 4,29 get dat pict "@D" message 'Enter Date to print for'
read
deact wind trans
USE C:\JED\GENERAL
if dest=1
DO ONSCREEN
EXIT
RETURN
ENDIF
if dest=2
DO ONPRINT
EXIT
RETURN
endif
ENDDO
CLEAR
RETURN
PROCEDURE ONSCREEN
DO WHILE .T.
@ 2,18 SAY year(dat)
wrap=.t.
alignment='CENTER'
@ 2,25 say ' General Report on ' style 'BU'
_wrap=.f.
 alignment='LEFT'
@2,55 say mdy(dat)
@ 6,1 TO 6,78 DOUBLE
@ 7,1 SAY 'FORM NO. SURNAME COMPANY CLASS COU
NTRY CODE INC. DATE
@ 8,1 TO 8,78 DOUBLE
r=9
```

```
gen.BAK
```

```
GO TOP
DO WHILE .NOT. EOF()
 @ r,2 SAY F NO
 @ r,10 SAY S NAME
 @ r,23 SAY COM NAME
 @ r,45 SAY CLASS
 @ r,62 SAY N CODE
 @ r,72 SAY DATE INC
@ 4,1 SAY '
r=r+1
IF r = 22 .AND. .NOT. EOF()
rep=' '
   @ 23,22 SAY 'Press any key to view more data OR -X- to exit
' get rep
   READ
  IF UPPER (REP) = 'X'
  USE
   CLEAR
  RETURN
  ENDIF
   @ 11,0 CLEAR TO 23,79
   r = 11
 ENDIF
  IF r#22 .AND. EOF()
    EXIT
  ENDIF
SKIP
ENDDO
WAIT ''
ans = ' '
DO WHILE .NOT. ans $ 'yYnN'
 @ 24,25 SAY 'Do you want to view again? (Y/N)' GET ans
READ
ENDDO
IF UPPER(ans) = 'Y'
CLEAR
LOOP
ENDIF
EXIT
ENDDO
USE
CLEAR
RETURN
PROCEDURE ONPRINT
do while .t.
@ 12,31 say 'Please Wait'
@ 13,26 say 'Printing in progress !!!'
SET CONSOLE OFF
SET DEVICE TO PRINT
```

```
gen.BAK
```

```
SET PRINTER ON
wrap=.t.
alignment='CENTER'
@ 2,28 SAY ' General Report on ' style 'BU'
wrap=.f.
alignment='LEFT'
@ 2,56 SAY mdy(dat)
@ 4,1 SAY '
@ 6,1 TO 6,78 DOUBLE
@ 7,1 SAY 'FORM NO. SURNAME COMPANY CLASS COU
NTRY CODE INC. DATE
@ 8,1 TO 8,78 DOUBLE
r=9
GO TOP
DO WHILE .NOT. EOF()
@ r,2 SAY F NO
 @ r,10 SAY S NAME
 @ r,23 SAY COM NAME
 @ r,45 SAY CLASS
 @ r,62 SAY N CODE
@ r,72 SAY DATE INC
@ 4,1 SAY '
r=r+1
IF r = 22 .AND. .NOT. EOF()
rep=' '
   @ 23,22 SAY 'Press any key to view more data OR -X- to exit
' get rep
  READ
  IF UPPER (REP) = 'X'
  USE
   CLEAR
  RETURN
  ENDIF
   @ 11,0 CLEAR TO 23,79
  r = 11
 ENDIF
  IF r#22 .AND. EOF()
   EXIT
 ENDIF
SKIP
ENDDO
wait ' '
SET PRINTER OFF
set device to screen
SET CONSOLE ON
REP = '
```

gen.BAK

```
CLEAR
DO WHILE .NOT. rep $ 'YyNn'
@ 12,31 SAY '
@ 13,26 SAY '
@ 12,31 SAY 'Print Again? (Y/N)' GET rep
READ
ENDDO
IF UPPER(rep) = 'N'
CLEAR
RETURN
ENDIF
loop
enddo
RETURN
```