

**AN AUTOMATED DAILY ADVERT SCHEDULE
SYSTEM.**

(A CASE STUDY OF MARKETING DEPARTMENT ASO RADIO)

ABUJA

BY

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CERTIFICATION

I certify that this project was carried out by Bello Lawal under the supervision of Dr. Y.M. Aiyesimi of the department of mathematics and computer science federal university of technology minna Niger state, Nigeria.

Dr Y.M. Aiyesimi

Date

Project Supervisor

Dr.L.N. Ezeako
Head Of Department

Date

External Examiner

Date

DEDICATION

**This Project Work Is Dedicated To the Late Memory of a Colleague
and Good Friend of Mine Muktar Ibrahim Gumel**

ACKNOWLEDGEMENTS

In the name of Allah the beneficent the merciful praise be to Allah the creator the cherisher and Sustainer of the world, most merciful, most gracious, may peace and blessing of Allah be to Prophet Mohammed (saw) his family his companions and entire Muslim ummah amen.

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ABSTRACT

The manual system of the daily advert schedule which has a lot of misconduct manipulation, mistake and time consuming, this bring in efficiency in the operation. However due to change brought by the technology, it is high time therefore to change this fast method to new one, which is all about this research work.

Implementation and analysis of the propose system is discourse in detail in this research, Microsoft access is used in design of this system.

CHAPTER ONE

INTRODUCTION

1.1 ADVERTISING

In this new modern age of competitive environment advertising became a pivotal variable with powerful communication force and important marketing tools, that help in selling goods, services, image and ideas, through channels of information and persuasion. Hardly existed anything that advertising has not been equated with ability to sell.

Advertising begun since 18 century during industrial revolution in Europe, which permitted mass production of goods. As a result of the revolution, large quantities of industrial and consumer goods were left unsold and many consumer goods companies were under the pressure of unsold stock, which meant added cost as well as other attendant problems. A need then arose to stimulate demand and widen the Market. Thus emerged the need for a vehicle to communicate product information to people who hitherto knew nothing about them. Advertising became the tool to create the mass awareness, convey information and education about goods and services towards extending the markets. Three main groups can be identified in the advertising business: - The Advertiser, the Advertising Agency and the Media. This division along functional lines was also part of the emergence in this process of Marketing Communication of products, services and ideas. By the end of the 19th century, the combined impact of those groups was its development of advertising into a specialized discipline. There were rules governing its practices, a body of knowledge,

example automobiles like Toyota, Peugeot and Mercedes Benz have registered trademarks, which no other company can use.

The same thing applies to the companies producing consumer products like the West African Portland cement plc etc.

Signs: - is just like the modern outdoor advertising that invites attention, Phoenician traders painted commercial messages on prominent rocks along trade routes, on the walls of buildings, and on planks and metal shelves which they referred to as sign boards. These messages extolled the virtues of wares that were for sale.

Inscriptions were also put on the walls next to the doors of shops to inform buyers of the types of goods that were available. Today, not only do we have more than eight types of billboards, creativity has been added into the way this form of advertising is used as typified by the modern illuminated signboard, which captures the attention and directs prospective customers to a particular store.

Town Criers: - the image of town criers is that of someone who helps diffuse an important message to the community so rooted in African culture is this traditional communication pattern that still exists side by side with modern mass media of communication. Infact, the town crier could be regarded as the earliest form of media of advertising to have been invented by the indigenous people of Africa to principally inform people. The system is akin to public service announcement.

Later on Commercialization of service of town criers crept in, men with pleasant voices were hired by shopkeepers and importers of merchandise to walk through the streets of a town and shout or sing sales messages. The town crier though still with us, has been largely supplanted by the

Radio. Advertising basically tends to reflect the level of development of a society at a given time.

Modern advertising practice in Nigeria has therefore been an outgrowth of the society's interaction with other development world. The country has thus moved rapidly from the earliest forms of rudimentary practice to the more advanced stage it is today.

1.2 COMPUTERIZATION OF A RADIO STATION

In this modern age of technology all Radio Stations all over the country, be it Private or Government owned are supposed to be computerized, but due to Economic situation in the country, it has not been fully carried out.

The use of computers as become very limited in most Radio Stations due to lack of funds.

However, Radio Stations like Ray Power, Cool FM, and Aso Radio etc have computers that are being used, although the use of computers is not in all departments, in such departments the manual method is still in progress.

So, this project is set to computerize the daily advert schedule of Marketing Department, Aso Radio.

1.3 AUTOMATED DAILY ADVERT SCHEDULE

The computerization of daily advert schedule is very important because it is the most difficult and tedious job in the Marketing Department of any Radio Station and also it is the most important that enhance customer confidence.

However, it is the contact between advertising agency or direct media buyers and Marketing Department of the Station. The relevance information

that is passed between Advertising Agency or Direct Media and Marketing Department is that the advertising Agency or Media Buyer will state all he wants in a contract agreement paper. It is then left for the Marketing Office that receives the order to transcribe his request on announcement form and past it to the Scheduling Officer to enter the information on daily advertising form and later in the day the Scheduling Officer will take it to the studio for airing. This job is made easier with the help of computer; advert will be broadcasted at stipulated time.

The daily advert schedule can be in writing as long as the following information is given: -

- Name of the Advertiser
- Product
- Duration
- Time of Transmission
- Material

1.4 AIM AND OBJECTIVES OF THE STUDY

Radio being the medium of mental images that has a vast audience especially in the developing world like Africa. It is a very powerful and penetrating medium as well as economical and profitable medium to Advertisers. Therefore, due to increase in patronize by various Advertisers. The Marketing Department has to introduce methods that will serve customer's preference and at the same time simplifies the duty of the Scheduling Officer.

This Research work aim at achieving a faster process of entering information in the daily advert schedule.

border primarily on appointments, promotions, discipline and other personnel related matters. Similarly, the Department is responsible for other administrative matters, such as purchases, stores, security etc. It is noteworthy that the office of the General Manager and Internal Auditor also form part of the Department. A chief Administrative Officer on Grade Level 14 heads the Department as Manager Admin & Supplies.

2. Finance and Accounts: -

The Department is responsible for the budget, control and disbursement of funds accruable to the Station. The primary task of the Department is the control of income and expenditure of the Station. A Chief Finance Officer on Grade Level 14 heads the Department as Finance Manager.

3. Marketing Department: -

This Department is responsible for generating the revenue needed by the Station through the sale of airtime. This is done by way of canvassing for advert from advertising agencies or direct media buyers. The department has the Assistant General Manager on Grade Level 15 as its head.

4. News and Current Affairs: -

The Department is vested with the responsibility of sourcing, processing and disseminating News on all issues in the society. An Assistant Chief News and Current Affairs Officer on Grade Level 13 heads the Department. As News and Current Affairs Manager.

5. Programmes: -

The Department is responsible for programmes planning and control. It also carries out programmes audience research periodically to assess the programmes being aired. A controller of programmes on Grade Level 13 heads the Department as Manager Programmes.

6. Technical Services: -

The Department is responsible for the operation and maintenance of the equipment installed in the Station. These include the transmitters, studio machine, power generating plant etc. The Department has a Chief Technical Officer on Grade Level 14 as its Manager.

The Station has Sixty-Five (65) people as its Staff.

2.3 RESEARCH METHODOLOGY

The methodology used in any research is very important to determine the validity of data collection and the relevance of findings. There are two major types of data collection techniques that can be used in findings facts of a situation.

There are also different methods of collecting data such as observation, questionnaire, experiment interview and written facts etc.

The data used in this research project were collected by: - written facts and participating observation.

- Written facts: - Some documents were obtained from the Marketing Department, in respect of the manual method used and how they have been trying the computerized method which is not properly in use. Some setbacks were also observed and all are being taken care of, in the proposed system.

- Participating Observation: - It was noticed that the manual method is tedious and very difficult, the time consumption, will be taken care of by this proposed system.

2.4 Definition Of The Key Term's

Advertisement:- An Advertisement Is A Communication In The Media Paid For, By An Identified Sponsor And Directed At A Target Audience With The Aim Of Imparting Information About A Product, Service, Idea Or Opinion.

Advertisement Agency: - An Advertising Agency Is Dependent On Creative People And Business People Who Specialize In The Development And Preparation Of Advertising Plans, Advertisement And Other Promotional Tools. The Agency Also Arranges On Contract For The Purchase Of Advertising Space And Time In The Various Media. It Does All These On The Half Of Difference Sellers, Who Are Referred To As His Clients. In An Effort To Find Customers For Their Goods Service Or Ideas.

Media:- Media Constitute One Of The Four Categories Of Business That Make Up The Advertising Industry. Though Entertainment And Information, Media Owners And Managers Capture The Attention Of Audience Which They Deliver To Advertisers.

Radio: - Is A Medium Of Mental Image That Has A Vast Audience Especially In Developing Nation Like Nigeria Also Radio Is Very Powerful And Penetrating Medium As Well As Economical And Profitable Medium To Advertisers.

Data: - Data Is The Name Given To Basic Facts, E.g. The Number Of Items Sold By A Business, The Name Of Customer, A Line Of Text, Or The Numerical Value Used In Mathematical Formulae. It Has Become Standard Practice To Treat The Word "Data" As Singular Rather Than Plural.

Information: - A Distinction Is Sometimes Made Between Data And Information. When Data Is Converted Into A More Useful Or Intelligible Form Then It Is Said To Be Processed Into Information.

System: - A System Is An Assembly Of Component Connected In An Organized Way. The Components Are Affected By Being In The System And The Behavior Of The System Is Changed If They Leave It. This Organized Assembly Does Something And Has Been Identified As Of Particular Interest.

Schedule: - Is a List That Show the Time of an Event, In This Regard Can Be Define as a List of Advert, Programme or announcement

Daily: - Simple Mean Happening or Done Every Day.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

3.1 THE MANUAL METHOD:

The Manual Method Used In Preparing Daily Advert Schedule Are As Follows:-

(A) The Advertising Agencies Will Make a Purchase of an Airtime by Sending M.P.O or Contract Order to the Marketing Department, Describing Their Request.

(B.) The m.p.o. Or The Contract Order will be stamp; Sign and Date will be written As an Acknowledgement That the Order Is Received.

(C) From There The Marketing Officer Who's Received The Order Will Transcribed This Request In To Announcement Form, Which Is In Three Duplicate Copies, One For Finance, One For Audit And Original Copy Is For Marketing Department.

(D) A Photo Copies of This order Will Be Made into Three Copies, Each Then Will Be Attack to the Duplicated copy of Announcement Form and Send to the Appropriate Department and the Original Will Be Filed for Record Purpose.

(E) Now The Marketing Copy Will Be Pass To The Schedule Officer On Duty Who's Going To Prefer The Daily Advert For Tomorrow Use.

(F) Later In The Day The Schedule Officer Will Transfer Those Information Into The Daily Advert Form For Tomorrow Broadcast. Such Information Inter Are As Follows:-

- Agency Name
- Product Name
- Duration
- Time Of The Advert
- Material

All The Above Listed Process Are Done Manually.

3.2 MERITS OF THE MANUAL METHOD

Even Though the Manual System of Preparing Daily Advert Schedule Has Many Short Comings, Still the System Has Some Advantage

Such As:-

1. It Is Easy To Handle, When The Number Of Orders Are Very Few.
2. This Old System Needs No Professional To Handle It, So The Cost Of Personal Is Not Much, Because A School Cert Is Capable Of Handling It.

3.3 DEMERIT OF THE MANUAL METHOD:

The Demerit Of The Present System Have Led To The Discovery Of The Proposed System. However The Proposed System Will Serve. In Reducing Or Eradicating The Difficulties In Counted. In The Old System. The Following Are The Disadvantage Of The Manual System Of Operation.

(A) A Lot Of Errors Are Committed. In Accurate Information Due To Human Error. I.e. Put in Rouge Time Of broadcast Or the Duration of the Advert.

(b) The Manual Way Of Preparing Daily Advert Is Slow And Time Consuming.

(c) Lack of Safe Keeping of Record

(d) There Will Be Mixed up Some Time by Placing Rouge Material in booking a rouge Day.

(e)The Job Became Very Difficult When The Order Is Many.

(f)The Problem Of Space Is Another Disadvantage Space Will Be Needed For File Cabinets And CD, Cassette.

3.4 ANALYSIS OF THE PROPOSED SYSTEM

In The Proposed System, The Request Of An Agencies Will Be Reflected When The Order Is Record And Transcribe In Announcement Form And The Duplicate Copies Will Send To The Appropriate Department. The System Is Allowed Registering Of Advert Until All Time Request Or Booking Made The Agencies Finish.

The System Will Allow Enquires To Be Made, Record To Be Updated, A Report To Register. The Automated System Of Daily Advert Schedule Can Be Dividing Into The Following Sections.

Add new order.

Edit existing order.

Allocate time.

Print announcement.

Print daily advert schedule.

- **Add New Order:-** This The Section Of The Program That Permit Addition Of An Order Or Addition Of Task To The System.
- **Edit Existing Order:** Order Can Be Reduce, Cancel Or Increase In This Section.
- **Allocate Time:** - This Section Provides Time Allocation.
- **Print Announcement:** In This Part Announcement Can Be Print.
- **Print Daily Advert Schedule:** In This Section The End Product, I.E. The Daily Advert Schedule Can Be Printed.

3.5 ADVANTAGE OF THE PROPOSED SYSTEM

From All That Has Been Said About Computerized System, A Lot Of Advantage Are Being Drive From Using Computer In The Daily Advert Schedule Such Advantage Are:-

1. **Difficulties In Counter During The Scheduled, Has Been Totally Eliminated.**

2. In This System Manipulation Of Advert That Are Not Paid, Is Reduce or Eliminated.
3. This System saves A Lot of User Time.
4. The System Produce Large And Safe Keeping Of Record.
5. Since The System Is Computerized Which Involved Using password, this will ensure proper security to private Data and Information from Unauthorized User.
6. The Program Is Design To Use Models And This Will Ensure Easy Modified And Maintenance, To Suit Future Occasion.
7. The System Is Written In A Generalized Form Which Can Be Used By Any Radio Station.

3.6 SYSTEM ANALYSIS:-

System Analysis Can Be Define As The Study Of A Problem For A Purpose Of Recommending, Improvement And Specifying The Requirement For The Solution. System Analysis Involved A Detailed Study Of Current System, Leading To Specification Of The New System. In This Analysis Data Are Collected On Available Files, And Transactions Handled By The Present System. Therefore Interviews, Participating Observation Are The Tool Used For Analysis Of This Research Work, However System Analysis Constitute Part Of The Lifecycle Of This New System (Automated Daily Advert Scheduled System). Specifically The Process Involved In Changing This Manual Method With The Newly System Is Called Software Development Lifecycle Or System Lifecycle. The Major Study Used Are As Follows:-

1. System Study

2. Feasibility Study
3. System Analysis
4. System Design
5. Coding
6. Testing
7. Implementation
8. Maintenance

System Study Is The First Stage Of System Development Lifecycle This Give You A Clean Picture Of What Actually The Physical System Is, On The Basis Of Result Of The Initial Study, Feasibility Study Takes Place. The Feasibility Study Is Basically The Test Of The Proposed System In High If Its Work Ability, Meeting User's Requirement From This Stage, The Next Is System Analysis Then To System Design Which Will Be Fully Discourse In 3.7 Of This Chapter. Coding Simple Mean Converting the Whole System into Computer Understanding Language. Testing Is Done Before Actual Implementation Of The New System A Test Is Running Of The Program For The Purpose Of Removing All The Bugs. Implementation Simply Turning the Theory into Practice. The Test Stage Is Maintenance, This Mean Eliminating All Errors In The System During Its Work Life And To Turn The System To Any Variation In The Working Environment.

3.7 SYSTEM DESIGN:-

System Design Is The Specification Or Construction Of A Technical, Computer Based Solution For The System Requirements Identified, In A System Analysis. This System Is Designed To Bring Efficiency Into Daily Advert Schedule. It Is Specifically Designed to Accomplish the Process of

Also Is Used In Program Verification. This Automated System Has The Following As An Input.

- Advertisement Name Or Campaign Name
- Time Of Transmission
- Material
- Date Of Placement
- Name Of The Agency Or Name Of The Advertiser
- Remarks

3.7.2 OUTPUT SPECIFICATION:-

Output Is The Opposite Of Input, Output Simply Mean An Information Sent Out Or Drive Out Of The Computer System, So The Output Of This Automated System Will Shown On The Screen Later Will Be Print Out For The Consumption Of Other Department. The Output Will Be Show in Eight Columns in Which Two of Those Column will appear Blank, This Because Is Not for the Marketing Consumption.

CHAPTER FOUR

IMPLEMENTATION OF THE SYSTEM

4.1 IMPLEMENTATION:

After acceptance of the new system developed, the implementation stage begins. Implementation is the stage of which theory is turned into practices. During this phase all the programs of the system loaded onto user's computer. After loading the system, training of the users starts. The training of the users in the project research will be in topic bellow:

- How to execute the package
- how to enter the data
- How to process the data (processing details)
- How to take out the report

After the users are trained about the computerized system of the daily advert schedule this system will be run. In parallel system of running, incase both the two system will be run together in parallel. This strategy help in the following:-

*Manual result s can be compared with the result of the computerized system.

*Failure of the computerized system at the early stage, does not affect the working of the organization because the manual system continues to work as it used to do.

4.1.1 CODING

At this stage of software development, the design is coded or transformed into a suitable computer language. Some languages are more

suitable in some application areas than others. In view of these, Microsoft access application is used in developing the program's database because of the improved numerous facilities it provides, it's ability to handle large program's of this nature and it's excellent file handle large programs of this nature and it's excellent file handling capabilities. In addition Microsoft access has facilities for manipulating array's which is fundamental in the solution of this problem. See appendix for program code.

4.1.2 TESTING AND DEBUGGING:

Before actually implementing the new system into operations, a test run of this system is done to remove all the bugs. It is an important phase of a successful system. The output of the test run should match the expected results. The test run of this system is done in two ways:

-UNIT TEST:-This is done after the programs have been coded and Compiled and brought to working conditions, Unit test is undesirable happening must be noted and debugged (Error corrections).

-SYSTEM TEST:-After carrying out the unit test for each of the prepared test for each of the programs of the system and when errors are removed, then system test is done. At this stage, the test is done on actual data. The complete system is executed on the actual data. At each stage of the execution, the results or output of this system is analyzed. During the result analysis, the outputs that are not match are identified and are fixed and further tested for the actual output. This is done until the system is error free.

4.1.3 CHANGE OVER METHOD:

change over method refers to the intention of the station to implement this program which is parallel running i.e. running the current method (Manual system or daily advert schedule) and the newly system together until the computerized system proves to be adequate for its defined purpose are seen to be attaining project level or performance.

4.2 CHOICE OF PROGRAMMING LANGUAGE

Microsoft access is used for implementation of this system. It is most suitable choice for this system due to the following:

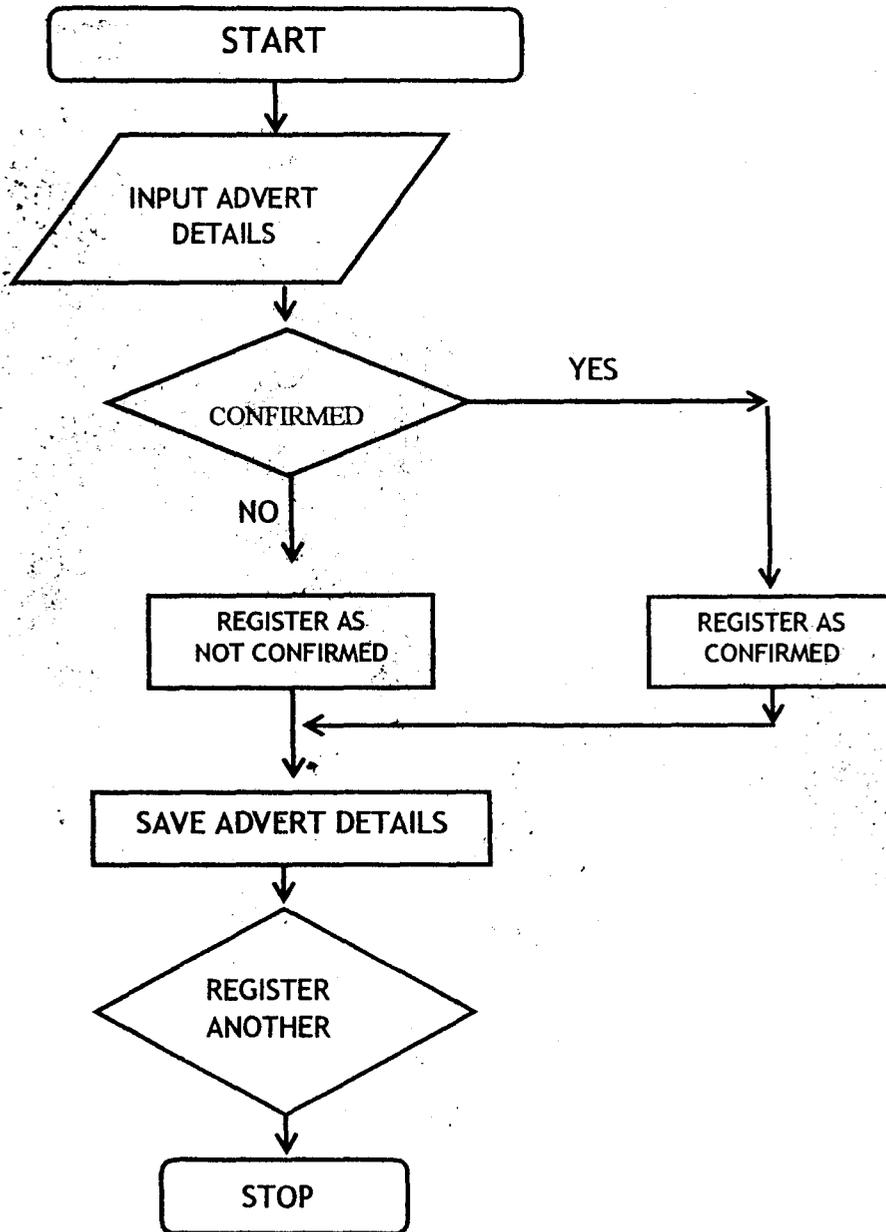
- It has the ability of easy control of all data.
- The program is very interactive in nature.
- It is files that record the data base.
- It uses visual access in entering program.

4.3 PROGRAM OUTLINE

This program is written in modular form, which is a style of programming, where an upper most module is programmed following its logical path to the end, before backtracking to the next on programmed uppermost module.

4.4. FLOW CHARTS

DAILY ADVERT SCHEDULE



CHAPTER FIVE

POST IMPLEMENTATION

5.1 LIMITATION OF THE AUTOMATED SYSTEM

Consequently, the following factors serve as limitation factors to this system,

- (a) In this system unauthorized access to data is not totally eliminated, because if the password to the program is known, access can be gained into the system, in which records can be tampered with.
- (b) The system is designed into modules, if any of the modules is infected, this will result in errors and incorrect information.
- (c) Due to limitations of memory space, the records of the system for a month will be deleted or stored on a diskette.
- (d) Lastly, since the system was designed and tested on one computer alone, the system may or may not be able to work on a network.

5.1 RECOMMENDATION

This project is developed and designed in a generalized way, so it is strongly recommended for any marketing department of a radio station to eliminate human lapses.

Adequate training of marketing staff on Microsoft Access application and data entry is recommended to enable them to handle and operate the automated system effectively.

Finally, the parallel method of implementation is recommended by virtue of the fact that no extra cost will be incurred for now.

5.2 CONCLUSION

The automated system of daily advert schedule is design purposely to save time and provide efficient service with free errors information and execute efficient service to the customers.

The automated system is design in a way that modification could be easier.

With dynamic changing of technology this system provide a room of any change as a result of dynamic in technology.

The system will last long if proper maintenance and checking is done from time to time.

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Appendix

MAIN FORM

```
Private Sub Command94_Click()  
DoCmd.OpenForm "order form"  
End Sub
```

```
Private Sub Command95_Click()  
DoCmd.OpenForm "Edit order form"  
End Sub
```

```
Private Sub Command96_Click()  
DoCmd.OpenForm "Time Allocation"  
End Sub
```

```
Private Sub Command97_Click()  
DoCmd.OpenForm "Print Annoucement Form"  
End Sub
```

```
Private Sub Commiand98_Click()  
DoCmd.OpenForm "Print Daily Advertisement"  
End Sub
```

```
Private Sub Command99_Click()  
DoCmd.Quit acQuitSaveNone  
End Sub
```

ORDER FORM

```
Option Compare Database  
Dim NDay%  
Sub UpdatepTotal()  
Dim MyTotal%
```

```
MyTotal = 0
```

```
For r = 1 To NDay  
If Not (IsNull(Me.Controls("p" & r)) Or Me.Controls("p" & r) = "") Then  
MyTotal = MyTotal + CInt(Me.Controls("p" & r))  
End If  
Next r  
pTotal = MyTotal  
End Sub
```

```
Private Sub AddBttm_Click()
```

```

Dim MyRec As Recordset
If IsNull(pClient) Or pClient = "" Then
    MsgBox "Select the client's name!", vbOKOnly + vbInformation, MyTitle
    pClient.SetFocus
    Exit Sub
End If

If IsNull(pBrand) Or pBrand = "" Then
    MsgBox "Select the brand name!", vbOKOnly + vbInformation, MyTitle
    pBrand.SetFocus
    Exit Sub
End If

If IsNull(TimeBelt) Or TimeBelt = "" Then
    MsgBox "Select the a time belt!", vbOKOnly + vbInformation, MyTitle
    TimeBelt.SetFocus
    Exit Sub
End If

If IsNull(Duration) Or Duration = "" Then
    MsgBox "Specify the duration!", vbOKOnly + vbInformation, MyTitle
    Duration.SetFocus
    Exit Sub
End If

If IsNull(pMonth) Or pMonth = "" Then
    MsgBox "Specify the month!", vbOKOnly + vbInformation, MyTitle
    pMonth.SetFocus
    Exit Sub
End If

If IsNull(pMaterial) Or pMaterial = "" Then
    MsgBox "Specify the material to be used!", vbOKOnly + vbInformation, MyTitle
    pMaterial.SetFocus
    Exit Sub
End If

If IsNull(pYear) Or pYear = "" Then
    MsgBox "Specify the Year!", vbOKOnly + vbInformation, MyTitle
    pYear.SetFocus
    Exit Sub
End If

If IsNull(pCode) Or pCode = "" Then
    MsgBox "Enter the code!", vbOKOnly + vbInformation, MyTitle
    pCode.SetFocus

```

Exit Sub
End If

For r = 1 To NDay
If Not (IsNull(Me.Controls("p" & r)) Or Me.Controls("p" & r) = "") Then
AllocateTime pClient, pBrand, _
r & "-" & pMonth & "-" & pYear, _
pMaterial, Me.Controls("p" & r), Status, Duration, DurationMeasure
End If

Next r
DoCmd.GoToRecord acDataForm, "Order Form", acNewRec
pClient.SetFocus
For r = 1 To 30
Me.Controls("p" & r).Enabled = False
Next r
pTotal.Enabled = False
End Sub

Private Sub Command86_Click()
DoCmd.OpenForm "New Client"
End Sub

Private Sub Command86_LostFocus()
pClient.Requery
End Sub

Private Sub Command87_Click()
DoCmd.OpenForm "New Brand"
Forms("New Brand")![pClient] = pClient
End Sub

Private Sub Command87_Exit(Cancel As Integer)
pBrand.Requery
End Sub

Private Sub Command88_Click()
Me.Undo
DoCmd.Close
End Sub

Private Sub Duration_BeforeUpdate(Cancel As Integer)
If Duration = "" Or IsNull(Duration) Then Exit Sub

If Not IsNumeric(Duration) Then
MsgBox "You must enter a numeric value or nothing!", vbInformation + vbOKOnly, MyTitle

```
Cancel = True
DoCmd.CancelEvent
Exit Sub
End If
```

```
End Sub
```

```
Private Sub p2_AfterUpdate()
If IsNull(P2) Or P2 = "" Then Exit Sub
UpdatepTotal
End Sub
```

```
Private Sub p3_AfterUpdate()
If IsNull(p3) Or p3 = "" Then Exit Sub
UpdatepTotal
End Sub
```

```
Private Sub p4_AfterUpdate()
If IsNull(p4) Or p4 = "" Then Exit Sub
UpdatepTotal
End Sub
```

```
Private Sub p5_AfterUpdate()
If IsNull(p5) Or p5 = "" Then Exit Sub
UpdatepTotal
End Sub
```

```
Private Sub p6_AfterUpdate()
If IsNull(p6) Or p6 = "" Then Exit Sub
UpdatepTotal
End Sub
```

```
Private Sub p7_AfterUpdate()
If IsNull(p7) Or p7 = "" Then Exit Sub
UpdatepTotal
End Sub
```

```
Private Sub p8_AfterUpdate()
If IsNull(p8) Or p8 = "" Then Exit Sub
UpdatepTotal
End Sub
```

```
Private Sub p9_AfterUpdate()
If IsNull(p9) Or p9 = "" Then Exit Sub
UpdatepTotal
End Sub
```

```
Private Sub p10_AfterUpdate()
```

End Sub

```
Private Sub p20_AfterUpdate()  
If IsNull(p20) Or p20 = "" Then Exit Sub  
UpdatepTotal  
End Sub
```

```
Private Sub p21_AfterUpdate()  
If IsNull(p21) Or p21 = "" Then Exit Sub  
UpdatepTotal  
End Sub
```

```
Private Sub p22_AfterUpdate()  
If IsNull(p22) Or p22 = "" Then Exit Sub  
UpdatepTotal  
End Sub
```

```
Private Sub p23_AfterUpdate()  
If IsNull(p23) Or p23 = "" Then Exit Sub  
UpdatepTotal  
End Sub
```

```
Private Sub p24_AfterUpdate()  
If IsNull(p24) Or p24 = "" Then Exit Sub  
UpdatepTotal  
End Sub
```

```
Private Sub p25_AfterUpdate()  
If IsNull(p25) Or p25 = "" Then Exit Sub  
UpdatepTotal  
End Sub
```

```
Private Sub p26_AfterUpdate()  
If IsNull(p26) Or p26 = "" Then Exit Sub  
UpdatepTotal  
End Sub
```

```
Private Sub p27_AfterUpdate()  
If IsNull(p27) Or p27 = "" Then Exit Sub  
UpdatepTotal  
End Sub
```

```
Private Sub p28_AfterUpdate()  
If IsNull(p28) Or p28 = "" Then Exit Sub  
UpdatepTotal  
End Sub
```

```
Private Sub p29_AfterUpdate()  
If IsNull(p29) Or p29 = "" Then Exit Sub  
UpdatepTotal  
End Sub
```

```
Private Sub p30_AfterUpdate()
```

```

If IsNull(p30) Or p30 = "" Then Exit Sub
UpdatepTotal
End Sub
Private Sub p31_AfterUpdate()
If IsNull(p31) Or p31 = "" Then Exit Sub
UpdatepTotal
End Sub
Private Sub p1_AfterUpdate()
If IsNull(P1) Or P1 = "" Then Exit Sub
UpdatepTotal
End Sub

```

```

Private Sub p1_BeforeUpdate(Cancel As Integer)
If IsNull(P1) Or P1 = "" Then Exit Sub
If Not IsNumeric(P1) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub

```

```

Private Sub p10_BeforeUpdate(Cancel As Integer)
If IsNull(p10) Or p10 = "" Then Exit Sub
If Not IsNumeric(p10) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub

```

```

Private Sub p11_BeforeUpdate(Cancel As Integer)
If IsNull(p11) Or p11 = "" Then Exit Sub
If Not IsNumeric(p11) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub

```

```

Private Sub p12_BeforeUpdate(Cancel As Integer)
If IsNull(p12) Or p12 = "" Then Exit Sub
If Not IsNumeric(p12) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent

```

End If
End Sub

```
Private Sub p13_BeforeUpdate(Cancel As Integer)
If IsNull(p13) Or p13 = "" Then Exit Sub
If Not IsNumeric(p13) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p14_BeforeUpdate(Cancel As Integer)
If IsNull(p14) Or p14 = "" Then Exit Sub
If Not IsNumeric(p14) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p15_BeforeUpdate(Cancel As Integer)
If IsNull(p15) Or p15 = "" Then Exit Sub
If Not IsNumeric(p15) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p16_BeforeUpdate(Cancel As Integer)
If IsNull(p16) Or p16 = "" Then Exit Sub
If Not IsNumeric(p16) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p17_BeforeUpdate(Cancel As Integer)
If IsNull(p17) Or p17 = "" Then Exit Sub
```

```
If Not IsNumeric(p17) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p18_BeforeUpdate(Cancel As Integer)
If IsNull(p18) Or p18 = "" Then Exit Sub
If Not IsNumeric(p18) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p19_BeforeUpdate(Cancel As Integer)
If IsNull(p19) Or p19 = "" Then Exit Sub
If Not IsNumeric(p19) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p2_BeforeUpdate(Cancel As Integer)
If IsNull(P2) Or P2 = "" Then Exit Sub
If Not IsNumeric(P2) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p20_BeforeUpdate(Cancel As Integer)
If IsNull(p20) Or p20 = "" Then Exit Sub
If Not IsNumeric(p20) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p21_BeforeUpdate(Cancel As Integer)
If IsNull(p21) Or p21 = "" Then Exit Sub
If Not IsNumeric(p21) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p22_BeforeUpdate(Cancel As Integer)
If IsNull(p22) Or p22 = "" Then Exit Sub
If Not IsNumeric(p22) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p23_BeforeUpdate(Cancel As Integer)
If IsNull(p23) Or p23 = "" Then Exit Sub
If Not IsNumeric(p23) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p24_BeforeUpdate(Cancel As Integer)
If IsNull(p24) Or p24 = "" Then Exit Sub
If Not IsNumeric(p24) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p25_BeforeUpdate(Cancel As Integer)
If IsNull(p25) Or p25 = "" Then Exit Sub
If Not IsNumeric(p25) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
```

```
DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p26_BeforeUpdate(Cancel As Integer)
If IsNull(p26) Or p26 = "" Then Exit Sub
If Not IsNumeric(p26) Then
MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
Cancel = True
DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p27_BeforeUpdate(Cancel As Integer)
If IsNull(p27) Or p27 = "" Then Exit Sub
If Not IsNumeric(p27) Then
MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
Cancel = True
DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p28_BeforeUpdate(Cancel As Integer)
If IsNull(p28) Or p28 = "" Then Exit Sub
If Not IsNumeric(p28) Then
MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
Cancel = True
DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p29_BeforeUpdate(Cancel As Integer)
If IsNull(p29) Or p29 = "" Then Exit Sub
If Not IsNumeric(p29) Then
MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
Cancel = True
DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p3_BeforeUpdate(Cancel As Integer)
```

```

    MyRec.MoveLast
    TheNewID = CInt(MyRec![ID])
End If
TheNewID = TheNewID + 1
pClientID = TheNewID
End If
DoCmd.GoToRecord acDataForm, "New Client", acNewRec
pClientName.SetFocus
End Sub

```

```

Private Sub Command89_Click()
Me.Undo
DoCmd.Close
End Sub

```

```

Private Sub Form_Open(Cancel As Integer)
DoCmd.GoToRecord acDataForm, "New Client", acNewRec
End Sub

```

NEW BRAND

Option Compare Database

```

Private Sub Command85_Click()
DoCmd.OpenForm "New Client"
End Sub

```

```

Private Sub Command86_LostFocus()
pClient.Requery
End Sub

```

```

Private Sub Command88_Click()
If IsNull(pBrand) Or pBrand = "" Then
    MsgBox "Enter the new brand name!", vbInformation + vbOKOnly, MyTitle
    pBrand.SetFocus
    Exit Sub
End If
If IsNull(pClient) Or pClient = "" Then
    MsgBox "Specify the client's name!", vbInformation + vbOKOnly, MyTitle
    pClient.SetFocus
    Exit Sub
End If
DoCmd.GoToRecord acDataForm, "New Brand", acNewRec
pBrand.SetFocus

```

```
If IsNull(p3) Or p3 = "" Then Exit Sub
If Not IsNumeric(p3) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p30_BeforeUpdate(Cancel As Integer)
If IsNull(p30) Or p30 = "" Then Exit Sub
If Not IsNumeric(p30) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p31_BeforeUpdate(Cancel As Integer)
If IsNull(p31) Or p31 = "" Then Exit Sub
If Not IsNumeric(p31) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p4_BeforeUpdate(Cancel As Integer)
If IsNull(p4) Or p4 = "" Then Exit Sub
If Not IsNumeric(p4) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p5_BeforeUpdate(Cancel As Integer)
If IsNull(p5) Or p5 = "" Then Exit Sub
If Not IsNumeric(p5) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p6_BeforeUpdate(Cancel As Integer)
If IsNull(p6) Or p6 = "" Then Exit Sub
If Not IsNumeric(p6) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p7_BeforeUpdate(Cancel As Integer)
If IsNull(p7) Or p7 = "" Then Exit Sub
If Not IsNumeric(p7) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p8_BeforeUpdate(Cancel As Integer)
If IsNull(p8) Or p8 = "" Then Exit Sub
If Not IsNumeric(p8) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub p9_BeforeUpdate(Cancel As Integer)
If IsNull(p9) Or p9 = "" Then Exit Sub
If Not IsNumeric(p9) Then
    MsgBox "You must enter a numeric value", vbOKOnly + vbInformation, MyTitle
    Cancel = True
    DoCmd.CancelEvent
End If
End Sub
```

```
Private Sub pClient_AfterUpdate()
pBrand.Requery
End Sub
```

```

Private Sub pMonth_AfterUpdate()
If pMonth = "" Or IsNull(pMonth) Then
  For r = 1 To 31
    Me.Controls("p" & r).Enabled = False
  Next r
  pTotal.Enabled = False
End If

```

```

Select Case pMonth
Case "September", "April", "June", "November"
  NDay = 30
Case "February"
  If (Year(Now) / 2) = Int(Year(Now) / 2) Then
    NDay = 29
  Else
    NDay = 28
  End If
Case Else
  NDay = 31
End Select

```

```

For r = 1 To NDay
  Me.Controls("p" & r).Enabled = True
Next r
If NDay < 31 Then
  For r = NDay + 1 To 31
    Me.Controls("p" & r).Enabled = False
  Next r
End If
pTotal.Enabled = True
End Sub

```

```

Private Sub pYear_BeforeUpdate(Cancel As Integer)
If IsNull(pYear) Or pYear = "" Then Exit Sub

```

```

If Not IsNumeric(pYear) Or Len(pYear) <> 4 Then
  MsgBox "You must enter a 4-digit numeric value for the year! e.g. 1999 or 2000." _
    , vbOKOnly + vbInformation, MyTitle
  Cancel = True
  DoCmd.CancelEvent
  Exit Sub
End If
End Sub

```

TIME ALLOCATION

```
Private Sub ClearBtn_Click()
Dim myDB As Database, myReal As Recordset
Set myDB = CurrentDb
Set myReal = myDB.OpenRecordset("Select * from [time allocation table] where( client="" & _
    pClient & "" and brand="" & pBrand & "" and date=#" & pDates & "#);", dbOpenDynaset)
myReal.MoveFirst
Do While myReal.EOF = False
    myReal.Edit
        myReal!Status = "Okay"
        myReal!Hrs = Null
        myReal!Mins = Null
        myReal!Period = "AM"
    myReal.Update
    myReal.MoveNext
Loop
Subform.Requery
End Sub
```

```
Private Sub Command88_Click()
DoCmd.Close
End Sub
```

```
Private Sub Command97_Click()
Dim MySQL$
DoCmd.OpenForm "Same As Form", acNormal, , , acHidden
MySQL = "select [date] from [time allocation table] where([client]=" & _
    & pClient & "" and brand="" & pBrand & "") group by date having(not(date= #" & pDates &
    "#));"
Forms("same as form")!OtherDates.RowSource = MySQL
Forms("same as form")!OtherDates.Requery
Forms("Same as form")!pDates = pDates
Forms("Same as form")!pClient = pClient
Forms("Same as form")!pBrand = pBrand
DoCmd.OpenForm "Same As Form", acNormal, , , acWindowNormal

End Sub
```

```
Private Sub pBrand_AfterUpdate()
pDates.Requery
pDates_AfterUpdate
End Sub
```

```
Private Sub pBrand_GotFocus()
pDates_GotFocus
```

```

    & ", material=" & Material & " where ([client]=" _
    & pClient & " and brand=" & pBrand & " and date=#" & pDates & "#);"
Subform.Visible = False
Material.Visible = False
Annoucement.Visible = False
Command97.Visible = False
Status.Visible = False
ClearBtn.Visible = False
Status = ""
Material = ""
Annoucement = ""
End Sub

```

```

Private Sub Status_AfterUpdate()
Dim myDB As Database
Set myDB = CurrentDb
myDB.Execute "update [time allocation table] set status=" & Status _
    & ", material=" & Material & " where ([client]=" _
    & pClient & " and brand=" & pBrand & " and date=#" & pDates & "#);"
Subform.Requery
End Sub

```

NEW CLIENT

Option Compare Database

```

Private Sub Command88_Click()
Dim MyRec As Recordset, myDB As Database
Dim TheNewID%
If IsNull(pClientName) Or pClientName = "" Then
    MsgBox "Enter the new client's name!", vbInformation + vbOKOnly, MyTitle
    pClientName.SetFocus
    Exit Sub
End If
If IsNull(pClientAddress) Or pClientAddress = "" Then
    MsgBox "Enter the new client's Adress!", vbInformation + vbOKOnly, MyTitle
    pClientAddress.SetFocus
    Exit Sub
End If
TheNewID = 0
If pClientID = "" Or IsNull(pClientID) Then
    Set myDB = CurrentDb
    Set MyRec = myDB.OpenRecordset("select * from [Client Table] order by id;",
dbOpenSnapshot)
    If MyRec.EOF = False Then

```

End Sub

```
Private Sub pClient_AfterUpdate()  
pBrand.Requery  
pBrand_AfterUpdate  
End Sub
```

```
Private Sub pClient_GotFocus()  
pDates_GotFocus  
End Sub
```

```
Private Sub pDates_AfterUpdate()  
Dim MySQL$, myDB As Database, MyRec As Recordset
```

```
If pDates = "" Or IsNull(pDates) Or pBrand = "" Or _  
IsNull(pBrand) Or pClient = "" Or IsNull(pClient) Then Exit Sub
```

```
Set myDB = CurrentDb
```

```
MySQL = "select * from [time allocation table] where([client]=" _  
& pClient & " and brand=" & pBrand & " and date=#" & pDates & "#)order by  
period,hrs,mins;"
```

```
Set MyRec = myDB.OpenRecordset(MySQL, dbOpenSnapshot)
```

```
If MyRec.EOF = True Then Exit Sub
```

```
Material = MyRec!Material  
Annoucement = MyRec!Annoucement
```

```
Subform.Form.RecordSource = MySQL  
Subform.Requery  
Subform.Visible = True  
Material.Visible = True  
Annoucement.Visible = True  
Command97.Visible = True  
Status.Visible = True  
ClearBtm.Visible = True  
End Sub
```

```
Private Sub pDates_GotFocus()  
Dim myDB As Database  
If Subform.Visible = False Then Exit Sub
```

```
Set myDB = CurrentDb  
myDB.Execute "update [time allocation table] set annoucement=" & Annoucement _
```