

# System Analysis, Design and Development Sessional (CSE 406N)

Group Number : 5

Group Members:

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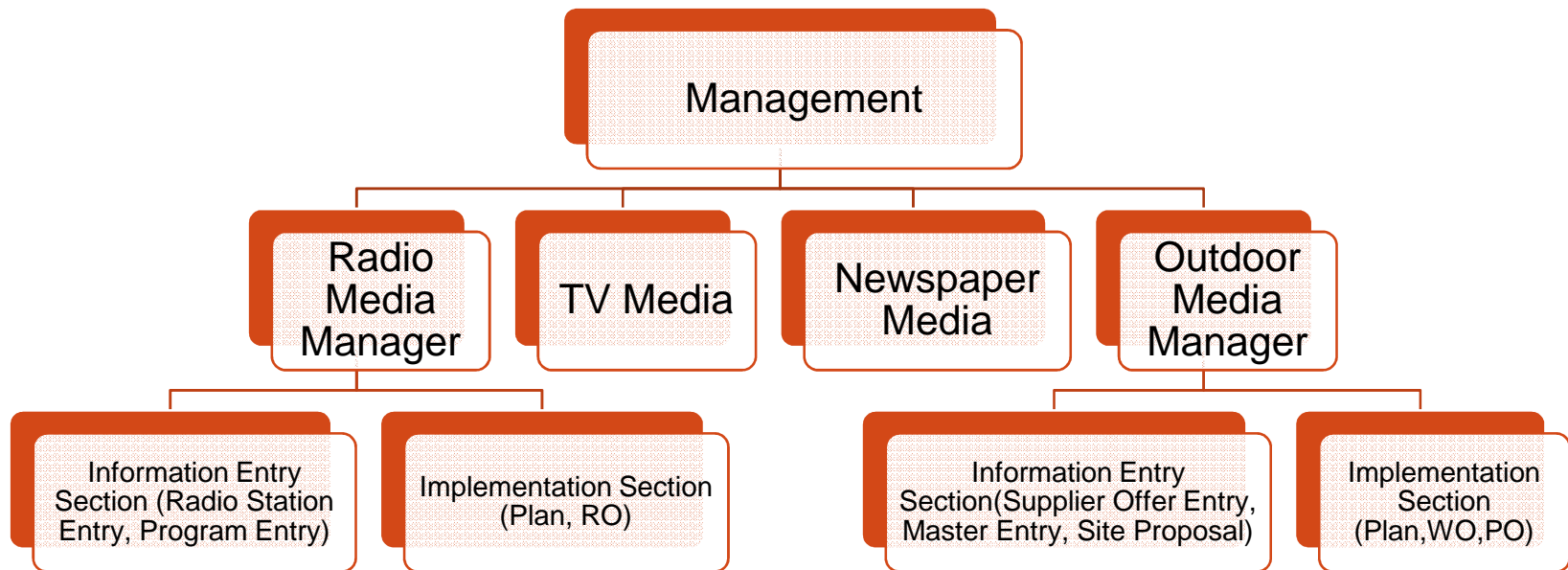
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# Organization Overview



# Actors

- We can divide the actors of outdoor/radio department of maxus in 2 basic parts:
- Information Entry Actors
  - Board entry (Outdoor)
  - BUS entry (Outdoor)
  - LED entry (Outdoor)
  - Proposal (both Outdoor and Radio)
  - Radio Station Information entry(Radio)
  - Radio schedule entry(Radio)
- Implementation Actors
  - Plan generator
  - WO (Outdoor) and RO(Radio) generator
  - PO generator
- Media Managers (for outdoor and radio)
- Director (Head of outdoor and radio management)

# Pieces classification of our System

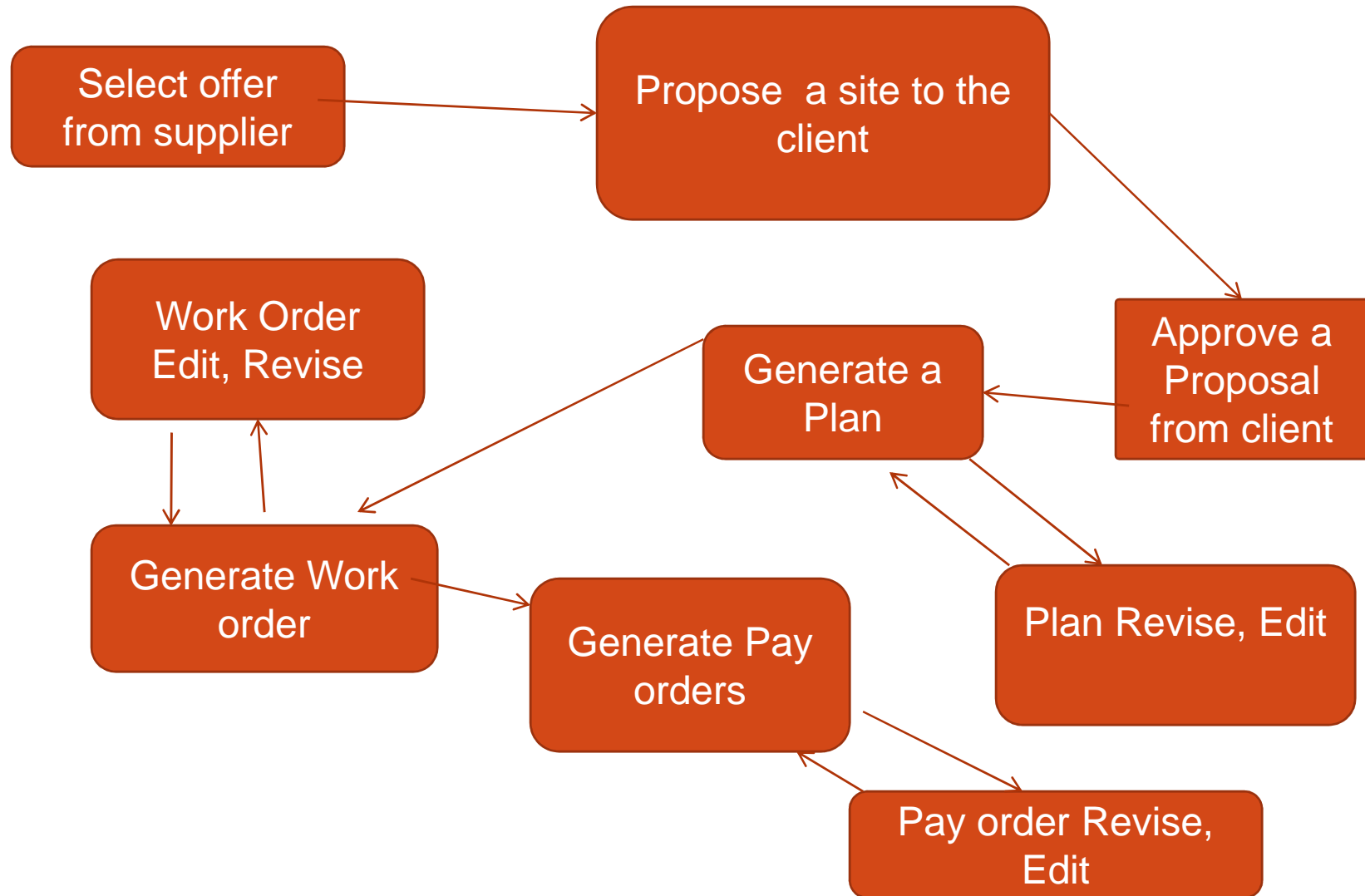
- Performance:
  - Previously the information were saved in XL files which was inconsistent and search inefficient. Different sections of outdoor and radio management system cannot work parallel because sections depends on each other. We impose modular structure on the overall system(described later). So the throughput of the system will be much faster than before.
  - From our observation we have found that this system has to maintain a huge database. Although we will use database server, the response time of data access may be greater than the acceptable range. We have also found that the recent entries are heavily used. So, we will use some temporary tables to store recent data which will increase search efficiency.

# Pieces classification of our System (contd..)

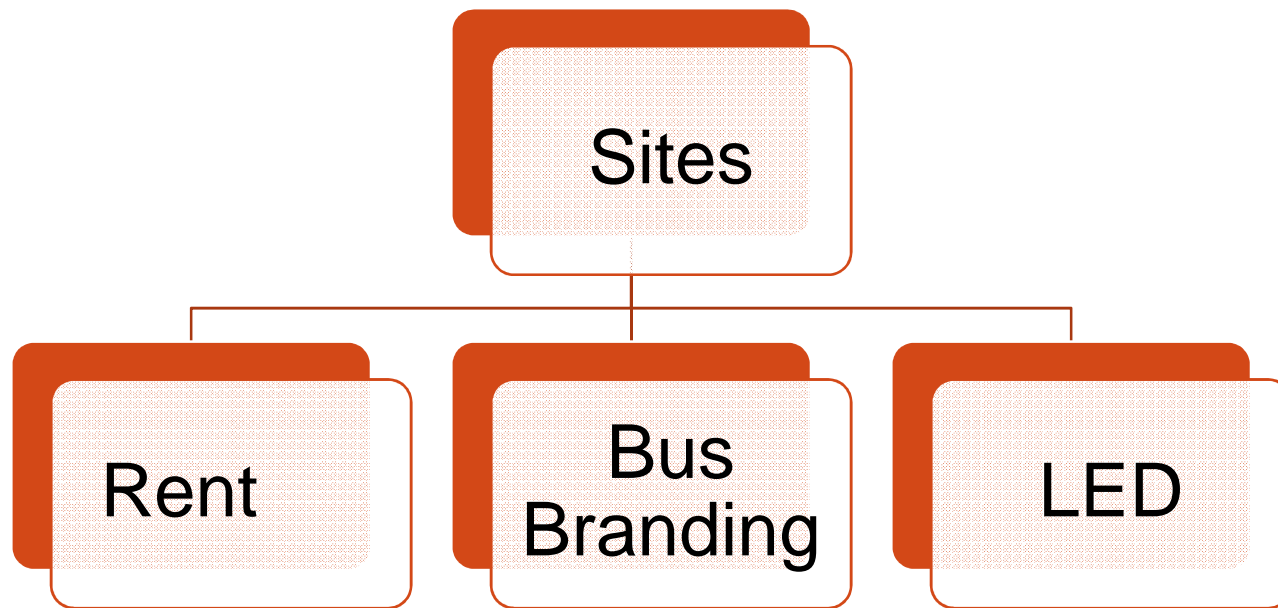
- Information

We now describe the necessary inputs, outputs and required data to be stored in our system

# Outdoor (Flow Chart)



# Module (Supplier Offer Entry)



## Sub module (Site Rent)

- Outdoor media management system works as a bridge between supplier and client.
- They stores information about sites and try to met client's demand.
- A site is mainly divided in 3 parts
  - Bill Board.
  - Shop Sign.
  - Mega Sign.
- Supplier means the owner of the boards.



## Sub module (Site Rent Entry contd..)

- Bill boards are large boards placed accross highways and streets.
- Shop signs are found on top of various shops , restaurant or chain stores.
- Mega Sign is a series of consecutive bill board or shop sign.
- In Bill boards and Shop Signs, number of board is normally 1. But in case of Mega Sign, number of boards  $\geq 1$ . So, costing is different in this case.

## Sub module (Site Rent Entry contd..)

- Information for a Site

  - Supplier information

  - Type of the board

  - District

  - Area

- On the basis of these information a site code will be auto generated to uniquely identify a specific site.

- The format of the sitecode we suggested is

  - Type-areaCode-districtCode-supplierCode-count

- Count is the cumulative number of a site in a area under a fixed supplier.

  - Example : MS-004-06-0018-10

## Submodule (Site Rent Entry contd..)

- Site specific information :

size(horizontal)

size(vertical)

side

- Costing information of a site depends on the contact Period with supplier . A site may have different costing for different contact year.
- In case of Mega Signs number of board is important for costing.
- One important part of site is the site picture. From our discussion with media manager we find the picture should have a specific name. The format is :

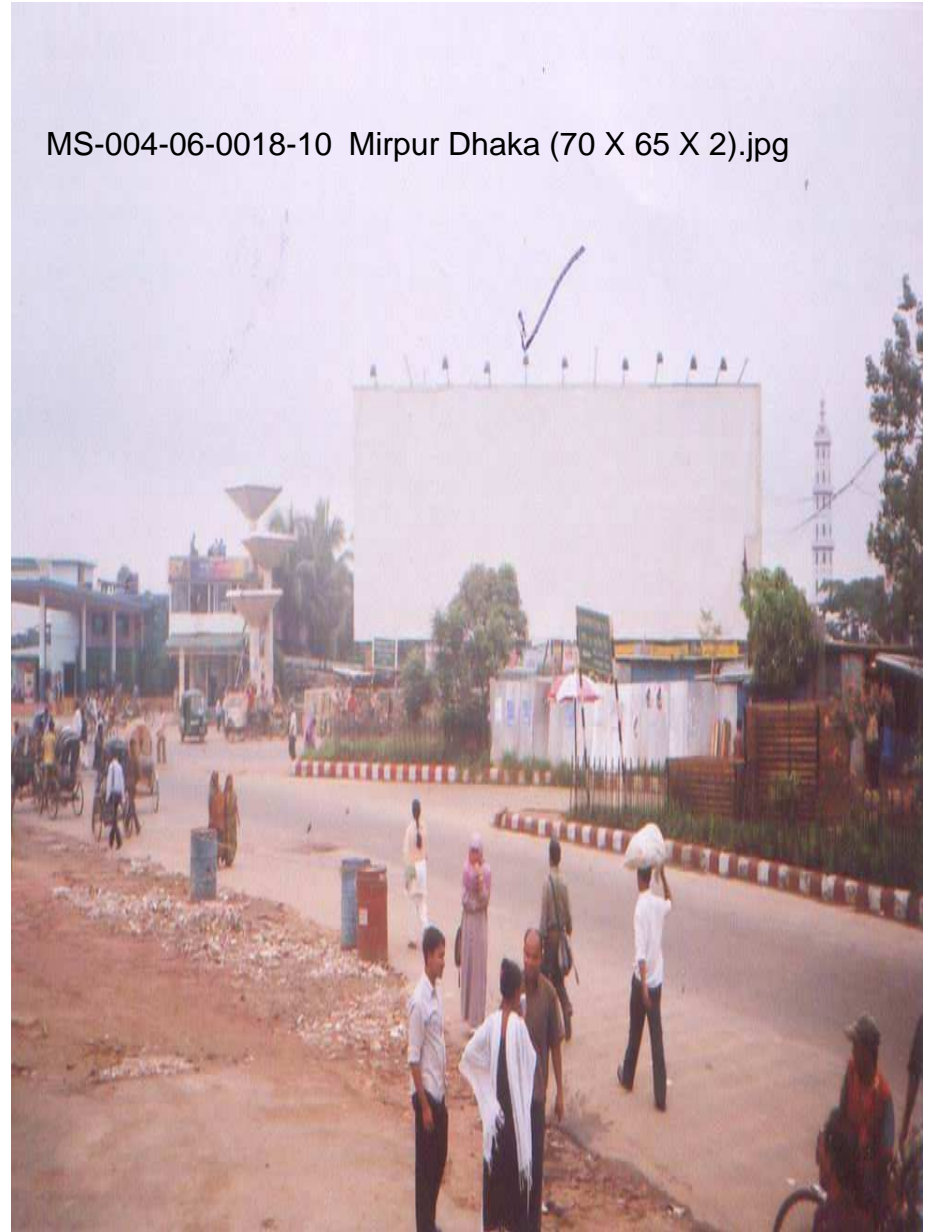
site code-areaName-District-(sizeh X sizeV X side)

while inserting the record in database the pictures will be copied to a specific folder.

CHITTAGONG ROAD NEAR SANIAKHRA FACING KACHPUR BRIDGE  
SIZE : 35' x 15' = 525 SFT



MS-004-06-0018-10 Mirpur Dhaka (70 X 65 X 2).jpg



## Sub module (Bus Branding)

- Bus Branding means the advertisement we see on the bodies of buses.
- Information for Bus Branding Entry
  - Bus Service Name
  - Bus Type(InterCity, IntraCity)
  - Routing Information
  - Branding Information
- Costing of Bus Branding is almost similar to site. It depends on contact periods.
- Like site, each bus has a unique site code.

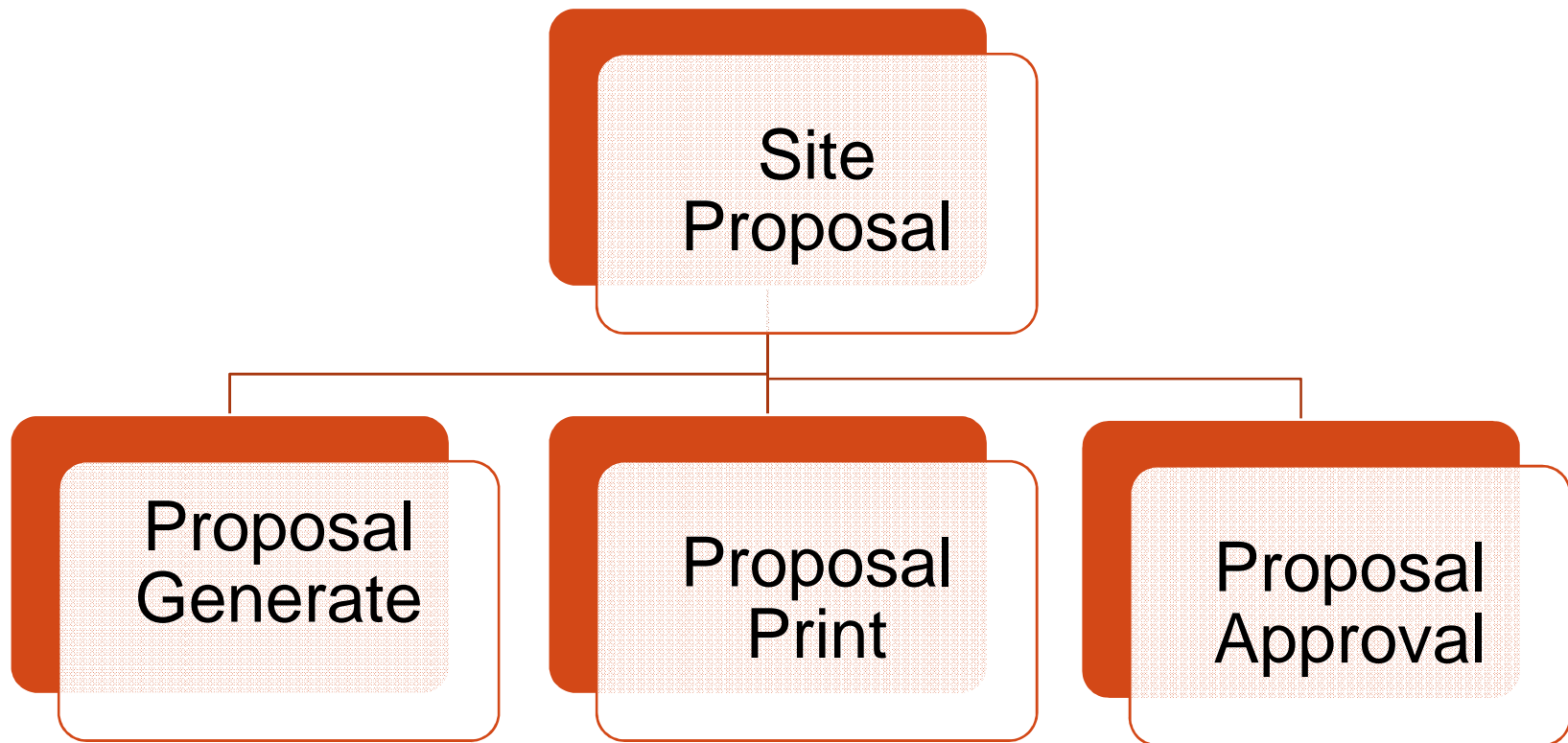
# Sub module(LED)

- LED is seen on the side of the streets, highways flashing at night.
- Like site and bus LED also has specific supplier, district ,area and a site code based on these information.
- Costing of LED depends on screening time each day. Normally, the rent of LED at night is 2 or 3 times more then the rent at day. It also depends of screening time each day (in minutes).

# Key point Information Entry

- Although media has the database of supplier under them, they want to contain another database of supplier offers which are not currently at their hand. These information are called key point.
- Key point information are almost similar to normal one with one difference, they do not have any supplier field.
- In our system, we will add the feature of key point report which will help management to have a view almost all sites in our country.

# Module (Site Proposal)





## Sub module(Proposal Generate)

- In this section media manager will search the entire supplier offer database for available sites according to the client's demand.
- Searching will be done by category, district, area, sitecode.
- Some specific site is selected among all the sites and a client, validation period is attached with the site.
- All sites have status available at the beginning. When a site is taken for proposal, it's status is proposed. Same site can be proposed to different client.
- When a same site is proposed to different client, our system will give notification to the manager about the previous proposals.
- When a site is proposed, the images of those sites will be copied to another prespecified directory. The directory name is started by currentdate+count.

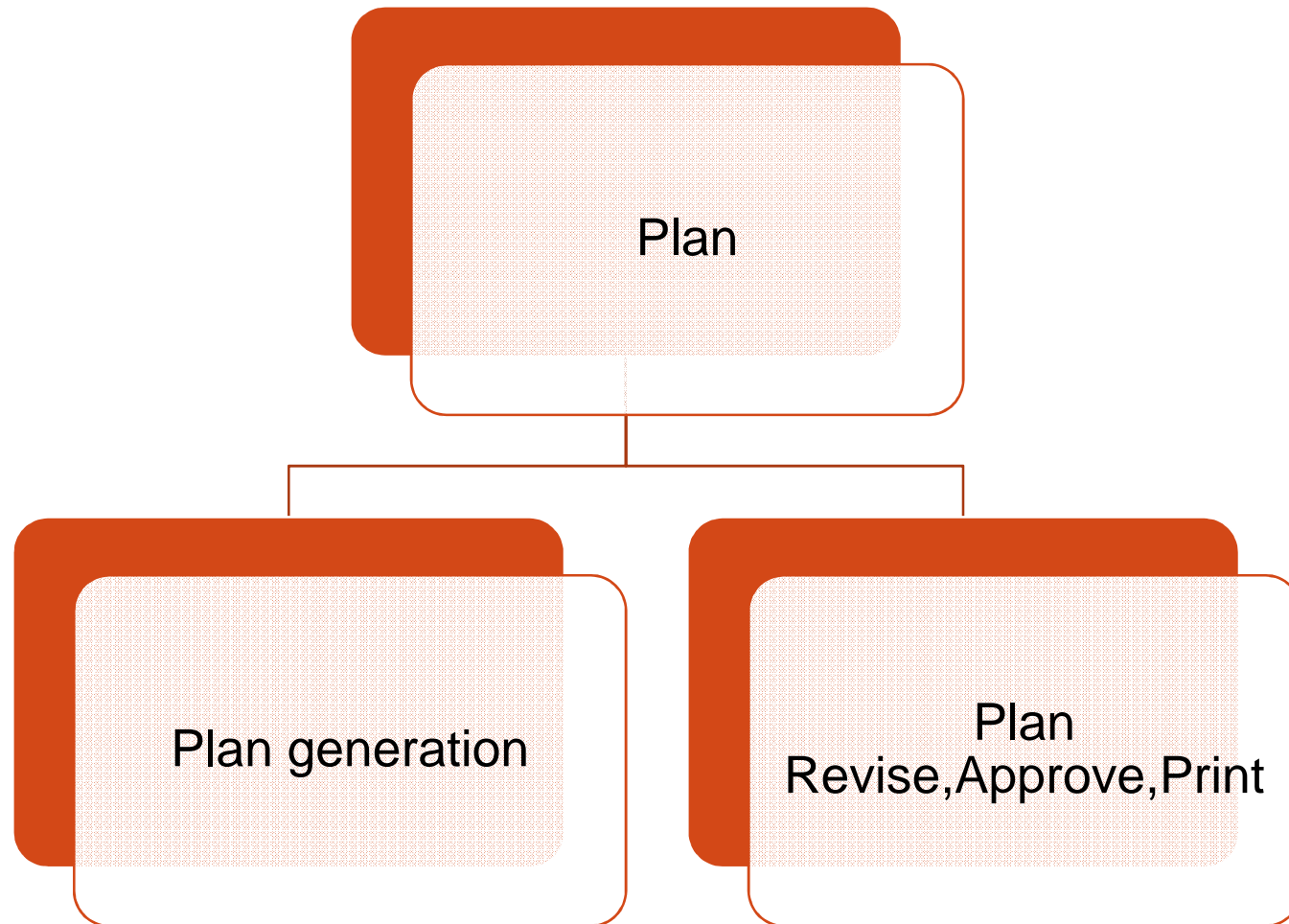
## Sub module (Proposal Print)

- After proposal generation, it is sent to client for their approval. In Proposal print section, manager will search by a client and proposal validity range.
  -
- Proposal Report will be sent to client for their approval.

## Sub module (Proposal Approval)

- If client agrees with media's proposal, manager will use this module for updating the status of the Proposal.
- Manager will search by client, district, area, sitecode to find the site and update it's status to booked.
- When a site is booked, it cannot be proposed to other clients. Our system will automatically track this.
- A negotiated cost may be introduced in this section. The original cost remains intact for suppliers but media changes the cost for this particular proposal. This cost is used in the remaining modules. But if this site is proposed again, then the original cost is used.

# Module (Plan)



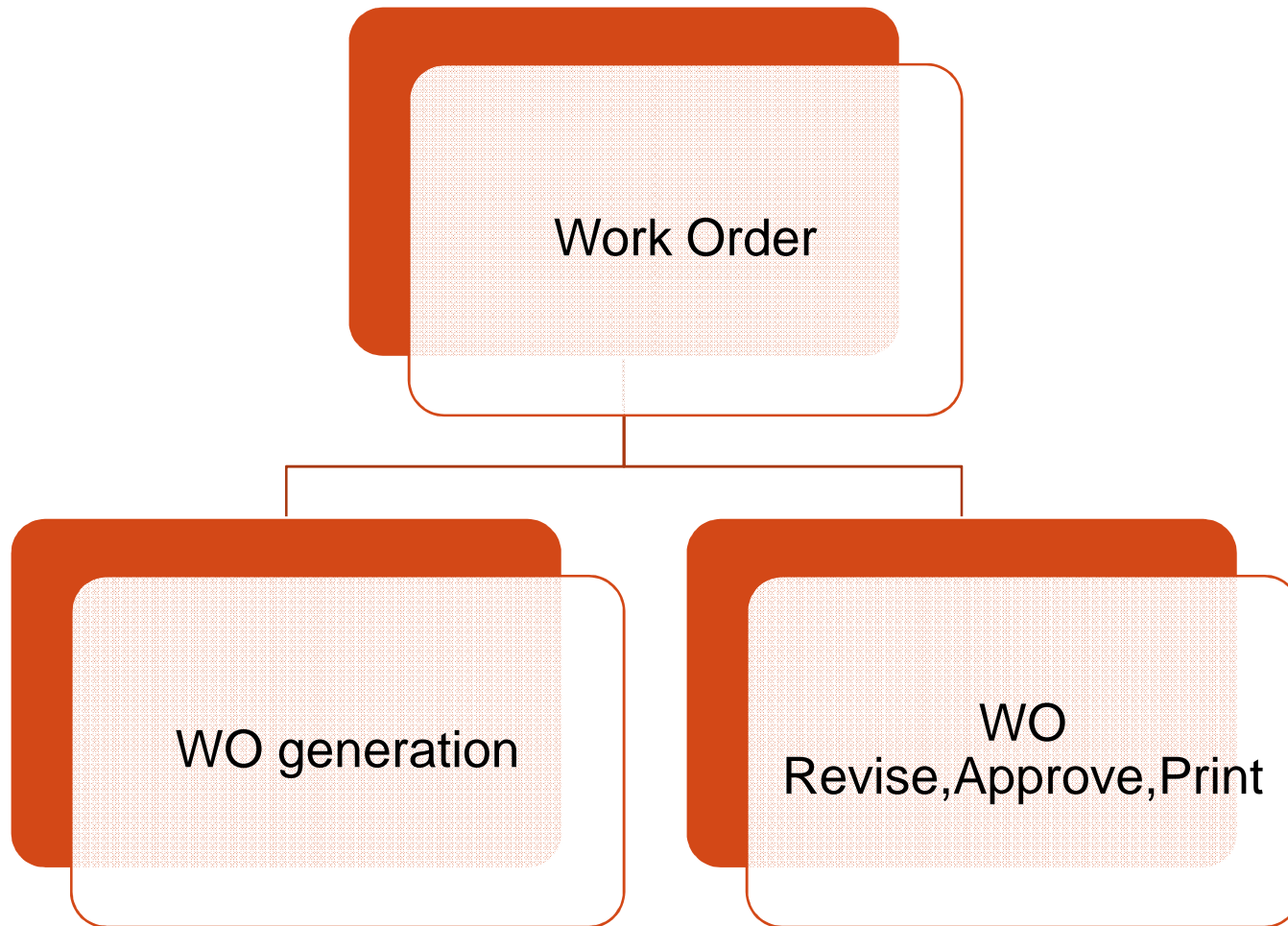
# Sub module (Plan Generation)

- Generating a plan is the most important task of this system.
- Only booked sites from site proposal module are the input of this section.
- Here manager will search by client and select appropriate plans. If the client has some specific brand, then it is attached to the plan. A campaign name is added with the plan.
- Other information like period code, gl code, cc code are added with the plan.
- An estimate number is given to the plan. This uniquely identifies the plan for further modules.
- Job description is added here. Site Rent, Print, Installation, Print and Installation are job descriptions. Normally a site is taken for site rent. If print and installation is added then extra costing is required. All these are identified by the same estimate numbers.

## Sub module(Plan Revise, Approve Print)

- In this section, manager will search by client, brand , campaign to find a plan.
- In plan revision, the original plan record remains intact and another insert operation is done with the changed parameters.
- Plan is sent to client for their approval and it's status is updated in this module.

# Module (Work Order)



# Sub module(WO generation)

- Work order is generated for a plan.
- Work order is sent to supplier for starting the task.
- Before work order manager can search for plan by client, brand and camping name.
- Every work order has a specific reference number and it is auto generated.
- Issue date and tentative starting date are another required element for work order.



## Sub module(WO Revise, Approve, Print)

- After generating work order manager can revise this work order with changed information.
- Manager can print this work order and send it to the supplier for approval.
- Revision, approve and print process of work order are similar to plan.

WO# NOK/XM/BB/03/08/01



February 26, 2008

AB Art Ltd. (from supplier master)  
10/A Nayapaltan, Gr. Floor, Motijheel C/A,  
Dhaka-1000

Contact Person: Mr. A F M Mahabubul Islam Bhuiyan

Subject: Work order for Billboard Site Rent & First Display.

Dear Mr Mahabub:

This is to confirm you that following job has been approved by the client. Please treat this letter as 'work order'.

**Client :** Marico Bangladesh Ltd. (from plan)  
**Brand :** Parachute Advanced C oil (from plan) (in edit interface, have the option or checkbox to show this option)  
**Campaign Name:** XpressMusic (from plan) (in edit interface, have the option or checkbox to show)  
**Job Type:** Site Rent & First Display. (From Plan)

**Billboard Specification**

District	Location	Horizontal (feet)	Vertical (feet)	Side	Total Net Payment (BDT)
Dhaka	Mohakhali Flyover	60	20	1	100000

**Site Description:** (from proposal but can be edited) (in edit interface, have the option or checkbox to show)

**Additional Benefits:** One display (60'x20') print & installation free of cost. (Manual entry here)

**Contract Duration:** 1 Year (from plan) (if job type is 'Display Print' or 'Display Installation', it will not show)

**Tentative Display date:** February 28, 2008 (manual entry here) (in edit interface, have the option or checkbox to show) (if job type is 'Display Print' or 'Display Installation', it will not show)

**Notes:** (manual entry here) (in edit interface, have the option or checkbox to show)

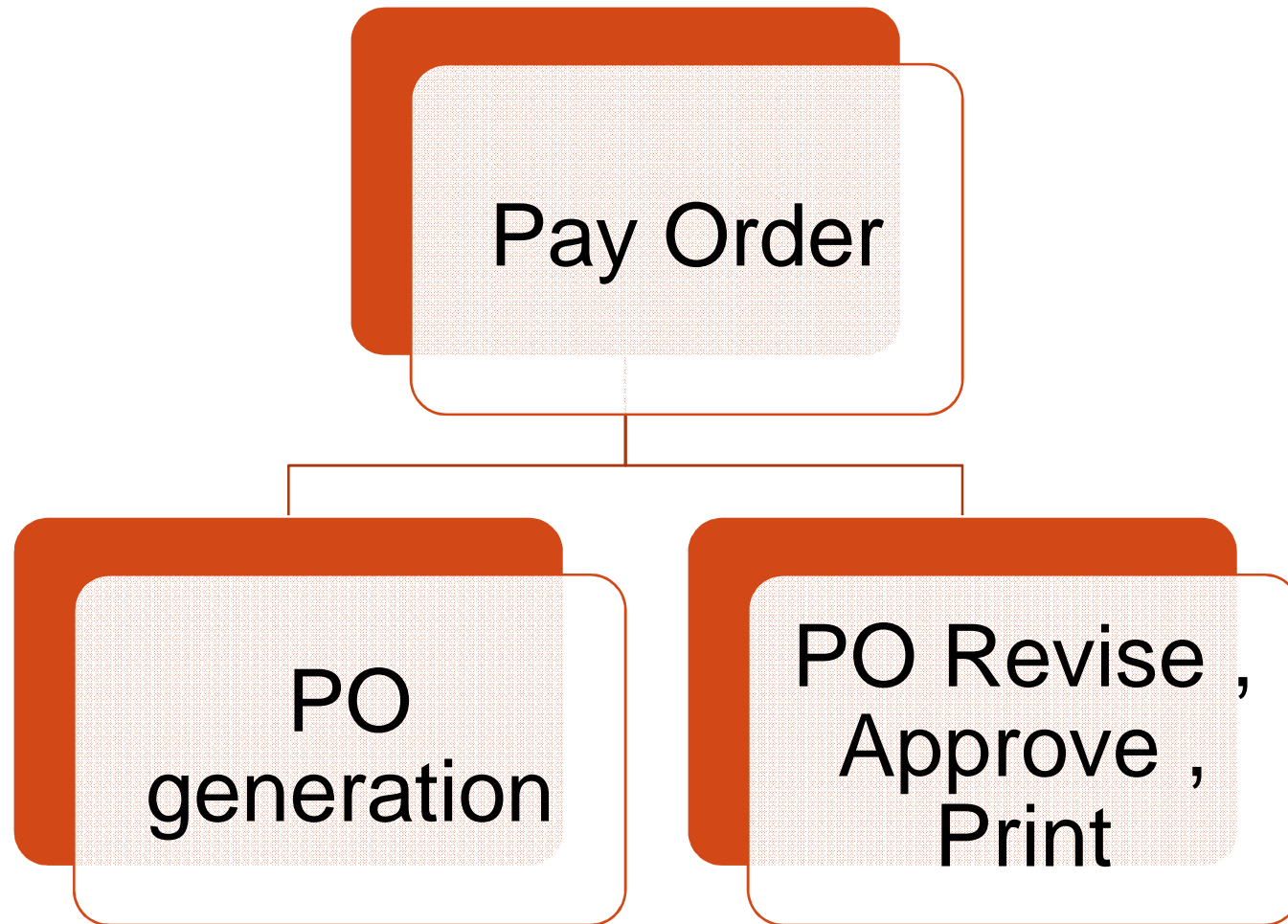
**Terms & Conditions:**

1. The above cost includes Site Rent & First Display cost as per above mentioned specification.
2. If the site is terminated by the government or shifted in the middle of campaign the supplier shall return the amount for rest of the period;
3. Supplier cannot install/allow installation of any other site around/ above of this board without prior consent of MAXUS.
4. MAXUS reserves the right to terminate the contract with one month prior notice.
5. Site location and size must be same as it is given in the proposal and written in work order. If the supplier fails to provide their proposed site in time and install the site in wrong location and wrong size, the contract will be terminated and the supplier will have to return money to MAXUS.
6. After installation of the approved site, the supplier will have to submit bill in our given format. The site picture hard copy with new ad (long view & short view with site location & size mentioned in back in English) must be attached with bill. One picture must be of same view as proposed by the supplier. The site picture soft copy must be submitted by 1 day from installation (in case of Dhaka city) & 2 days from installation (in other areas). Bills must be submitted by 3 days from display. Maxus will only pay against the valid bills received during this period.
7. All maintenance costs for this site will be carried out by the supplier and he will have to solve all kinds of problem during the contract period.

Thanking You,  
**Kazi Shawkat Hyder**



# Module(Pay Order)



## Sub module (Pay order Generation)

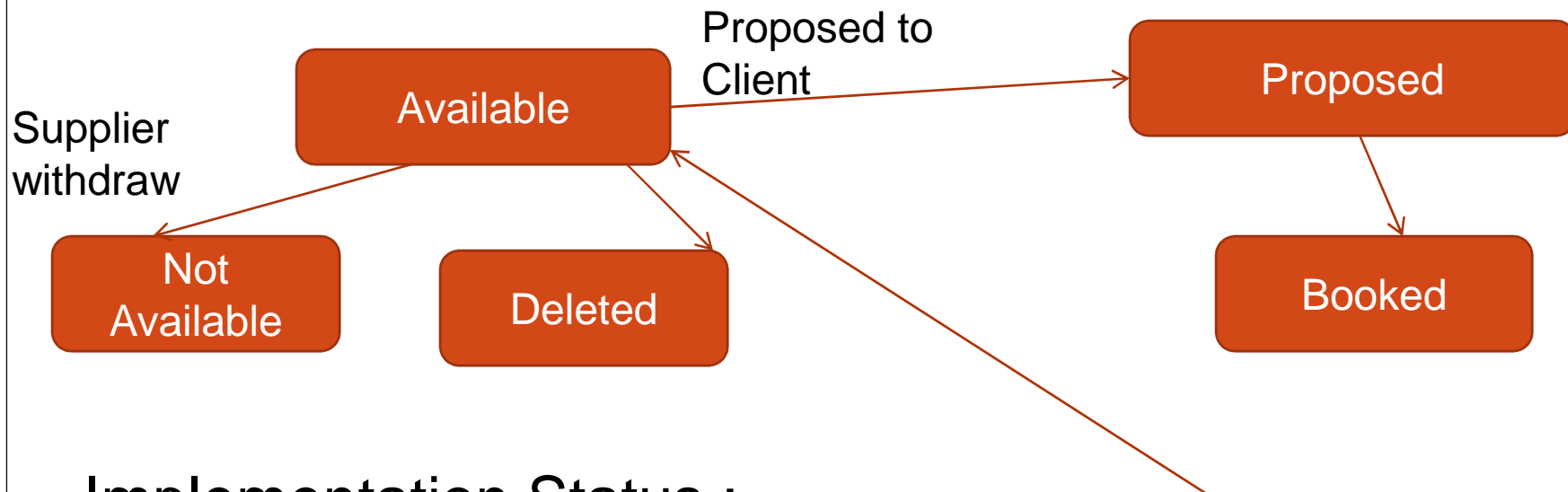
- Pay order generation is the payment schedule for supplier.
- Payment schedule is divided into five installment.
- Payment schedule is normally created after a week of sending work order to supplier.
- In the mean time manager collect the payable cost from client.

## Sub module(PO Revise, Approve, Print)

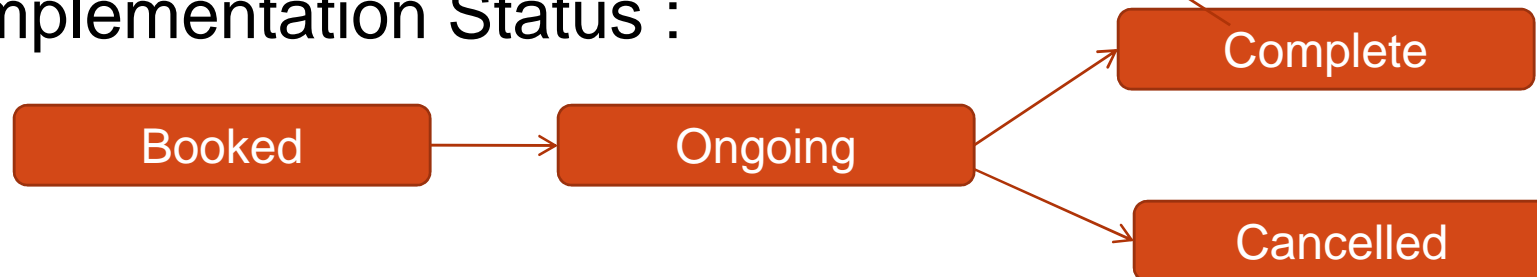
- In pay order revision another insert option is done with changed information.
- Manager can search all pay order by different parameters.
- A pay order is printed by manager and send it to the supplier.

# Flow of Status of a site (Outdoor)

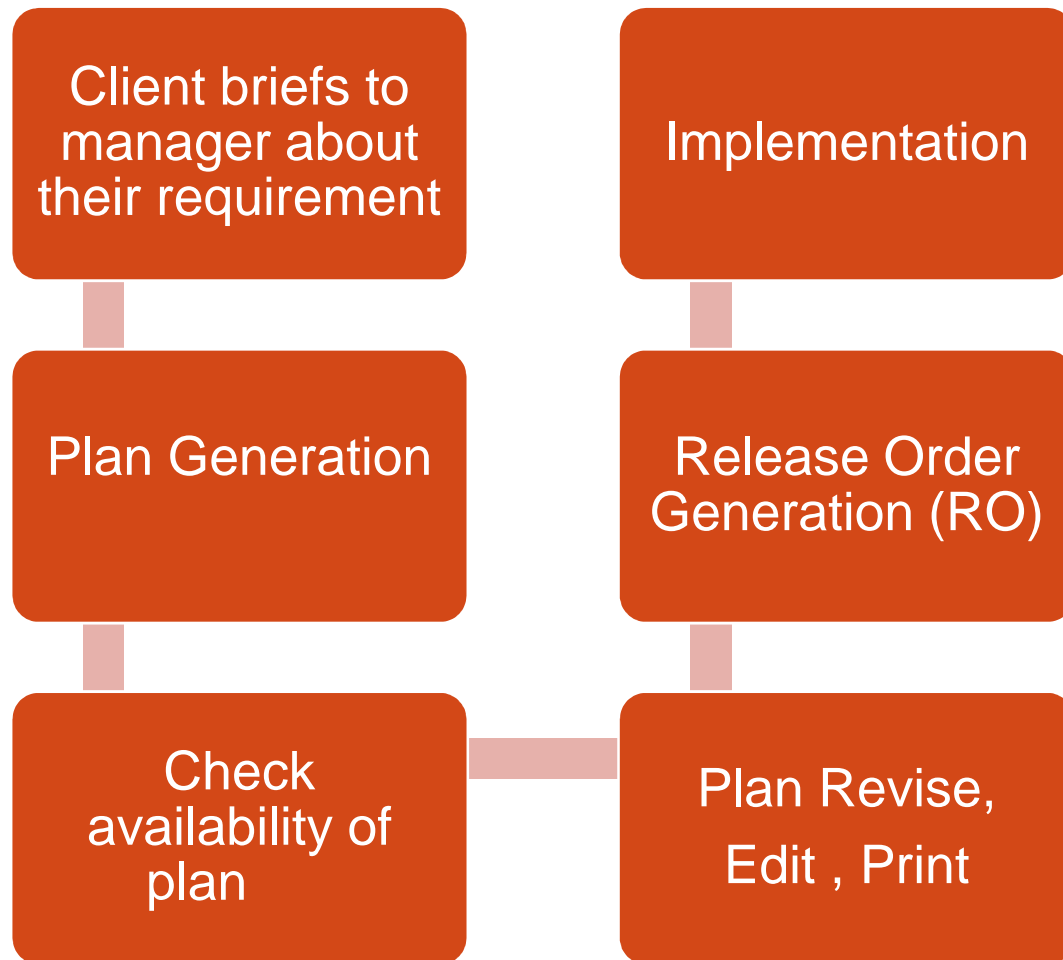
## Supplier Offer Status :



## Implementation Status :



# Radio (Flow Chart)



# Module (Radio Channel Entry)

- Media Manager should have the information of Radio Channel.
- Each radio channel entry the following information are required:
  - Radio Station name
  - Radio Channel name
  - Address
  - Phone
  - E-mail address
  - Contact person
  - Account number



# Module (Radio Program Entry)

- On the basis of client requirements media manager entry the radio program.
- For every radio channel program there are four category
  - Prime time spot
  - Endorsement
  - Slot
  - Branded slot
- After client briefs to manager about their requirement a contact period is given.
- For each client a brand is selected here.

# Module (Plan Generation)

- Plan generation is the most important part of this system.
- To generate a plan, manager will search all the programs by client and brand name.
- The specific time duration for a program is given here.
- For each category the net cost is calculated for a month.
- Total payable cost for media is added by total net cost, agency commission and vat on gross.

## Module (Plan Generation Cont.)

- When cost of the plan is calculated , campaign duration and issue date is given.
- When a plan is generated, it is send to the specific radio station to check the availability of the plan and ensure the manager for this plan.

# Module ( Plan Revise, Edit , Print)

- For plan revision manager first search the plan by client and brand name.
- Plan is revised with changed information.
- After plan is revised, manager can print the plan and send it to the client for approval.
- Plan is ready for release order after plan is approved by client.

## Module(Release Order Generation )

- Release order(RO) is prepared for supplier by the system.
- Media manager can search all the plan by client, brand and campaign name.
- For each release order there is a specific reference number which is auto generated.
- For a specific plan there is a specific release order for supplier.

## **Module(Release Order Generation cont.)**

- After generating release order, manager can revised the order with changed information.
- Manager can print the plan and send it to the supplier.

# Pieces classification of our System

- Control and Security
  - Different sections of Radio and Outdoor part will simultaneously use this software. We will impose privilege levels on every section. So, this is will increase the overall security a lot than before.
  - Management will be able to control the system more efficiently than before. A higher privileged officer can easily see all kinds of reports about employees under him/her.



Thank You