

# Role of Management Information System in Telecom Agency

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## ABSTRACT

Data and information are two major component of an organization. The basic difference between data and information is that information is the processed form of data. Both data and information is managed by using the concept of an information system. Information system is used to gather, disseminate, manage and refine information. One of the commonly used information system in an organization is MIS. MIS stands for Management information system is one of the chief sorts of Computer Based Information Systems. The research has shown that MIS helps to middle level management. In this paper we are going to propose a MIS model that will put the light on the applicability of MIS in mobile or Telecom agencies for managing and expedite their work transaction. The major operations or tasks allocated to an agency by head office or regional office are verifying customer and its address, collecting pending bill (recovery), distributing bill to the customer so that payment can be made as early as possible. In this study we will put our focus on developing an MIS for automating the task of customer verification. We will develop an MIS that will manage the huge data of customer and provide the status of customer's verification cases, pendency if any at agency end, pendency if any at verification's executive end.

## Keywords

*Information, Information System, MIS, CPV etc.*

## 1. INTRODUCTION

Management Information System commonly abbreviated as MIS [1][5] is not new technique for managing information rather one can say that use of computers in MIS is new. Traditionally Management Information System techniques were used to provide information to the manager or higher authorities of an organization. By using the MIS provided information manager become able to plan and control the different operations of an organization that further helps them to take a good decision for the effective business. The computer has added one or more dimensions such as speed, accuracy, reliability and the increased volume of data that enables the consideration of more alternatives in a decision making process. The purpose is to meet the general information needs of all the managers in the firm. MIS provides information to the users in the form of reports. They offer summary reports on the operations of the enterprise and sometimes provide online link to individual transactions as well. That is why these systems are also called operations support systems. In simple words one can end with that MIS is an information system, which provides information support for decision-making in the organization.

Conceptually MIS is made up from three words or components as given below:

- Management
- Information
- System

Here management is responsible for developing plan for an organization, organize, initiate and control the required operations. The major objective of management is to provide or develop strategies and goals and by selecting the best cause of action to achieve a plan. Information is processed form of data, the general constituents of information are processed data, data received, or data used for different purposed in an organization. System is collection of interrelated components used for achieving some predefined goal in an effective manner. Computer based MIS is able to gather process and disseminate information in an efficient way.

One of the major objectives of MIS [3] is to improve the overall performance and working capacity of an organization by using the concept of information technology in an effective way. Management Information System [4] works at three layer of management called operational, middle management and top management.

## 2. PROBLE DEFINITION

Mobile companies have hired different agencies to perform their daily routine task as given below:

- Verification of customer
- Re-verification of customer
- Collecting money (recovery)
- Bill distribution etc

The objective of this study is to analyze the effect of using one of commonly used Computer Based Information System called MIS to manage and coordinate one of the major issue of Telecom agency i.e. to manage the data of customer verification in such a way that the required different reports can be formed in a flash. We will try to show how MIS expedite all the above said activities.

## 3. ANALYSIS

Research has shown that MIS [4] is mainly used to process data from the organization and present the output of it in the form of different types of reports used at regular intervals. One of the major needs of different levels of manager of higher authorities is to recognize of the purpose of the organization, its policies, programs, plans and goals however the decisions may be according to the ability of analytical approach of using the information of the manager. In our study the whole process of telecom/Mobile agency start when head office allocates Customer verification and bill distribution cases to Regional office. The Regional office

further allocates selected cases to different Telecom agencies. The agency mainly focus on three different issues as said above i.e. Customer Verification, Recovery and Bill Distribution. Without using an MIS it become cumbersome to check the status of customer verification, recovery or bill

distributed to the customer. But by using the concept of MIS, the Telecom agency can quickly determine the status of above said scenarios. The following screen shot show the different cases that are allocated from head office to regional office and further to agency to complete it.

ACCOUNT NUMBER	MOBILE NUMBER	FIRST NAME	Second Residential Address1	Residential Address2	Residential Address3	Residential Address4	TELEPHONE NUMBER	DATE
83929	985506573	KULVANT SINGH	S/O SH SW VILL P O HAROK	TEH KHADOOR SAH	DISTT AMRITSAR		01859-209165	01-Mar-05
83898	9855622631	BALVINDER KAUR	V/O SH HA BALVINDER KAUR	TEH BATALA	DISTT GURDASPUR		98144-77733 P P	01-Mar-05
838972	9855617805	JAGTAR SINGH	S/O GURB VPO DHOTA	TEHSIL TARANTAR	DISTT AMRITSAR		01852-247680	01-Mar-05
839072	9855492393	NIRBEHAL SINGH	S/O HARJ VILL GAZZAL P O	NR GURDWARA TH	DISTT AMRITSAR		0.0	01-Mar-05
839060	9855620418	SARABJIT SINGH	S/O CHAR VPO SARUP VALI	NR VADDA GURDM	TEH BATALA DIST GURDASPUR		0.0	01-Mar-05
839049	9855430022	AJAY KUMAR	S/O JAGDI KOTHI NO 23 GUR	NR INCOME TAX V	DIST GURDASPUR		0-09884443317	01-Mar-05
839165	9855605267	MOHINDERPAL SINGH	S/O S. LAB # HNO. 439, GALI	MOHALLA RODPU	DISTT AMRITSAR		01852-225267	01-Mar-05
839155	9814736240	JASPAL SINGH	S/O S. HAR VILL GHASIT PUR	DISTT AMRITSAR			01859-237240	01-Mar-05
839062	985569704	KISHAN LAL	S/O SOHAN LAL	127 D RAILWAY COL	AMRITSAR		0	01-Mar-05
839785	9855408433	RUPINDER SINGH	S/O TEJINDER SIM	4457A RANJIT PUR	AMRITSAR		0	01-Mar-05
839693	985512039	HARDEEP SINGH	S/O GURJ VICKY MUSIC CEN	NANAKSAR, MAIN E	TARANTARN, AMRITSAR		0.0	01-Mar-05
839692	9855226766	RAVEL KAUR	V/O S. DA VPO BAL ARHWAL	NR GURDWAR & OP	DISTT GURDASPUR		01872-269266	01-Mar-05
839677	985503039	AVTAR SINGH	S/O HIRA KANDU JEWELLER	GURU BAZAR, TARJ	AMRITSAR		0.0	01-Mar-05
839672	9855175575	TARSEM LAL	S/O DEVIA RAM	H NO 624 BLOCK NO	BAKHEVAL NEW DANA MANDI RD BATALA		0	01-Mar-05
839670	9855157957	SAVINDER KUMAR	S/O S. KRIS # HNO. B1-276, OLI	KHANUWAN ROAD,	SHAKUNTLA, DISTT GURDASPUR		01871-28525 P P	01-Mar-05
839586	9855614625	NAVDEEP SINGH	S/O MANG H NO 14 C/O PAR	VIKAS NAGAR, NR C	AMRITSAR		0-3872730872	01-Mar-05
839584	985540369	RANKISORE	S/O RAM KUMAR	1273 GALI NO 13 LA	NEEFA NAWA SHAH DARGAH ASR		0	01-Mar-05
839552	9855614729	KULVANT KAUR	D/O BHAG KULVANT KAUR Y	H NO 1264 HUSANP	NR SINGH SABHA GURDWARA, AMRITSAR		0.0	01-Mar-05
839534	9855622359	SARABJIT SINGH	S/O ATTAR SINGH	28 GURU TEHG BAH	BATALA		01871-222359	01-Mar-05
839467	9814432240	SURINDERJIT KAUR	V/O RAM C/O S. M. COMPU	DERA BABA NANAK	DIST - GURDASPUR		01871-247746	01-Mar-05
839439	9855603360	TARSEM SINGH	S/O GURJ SANDHU KARYAN	VILL RAJA TAL, TE	DISTT AMRITSAR		0183-2370146	01-Mar-05
839426	9855605710	JALIPA PARSHAD	S/O MAHA 202, POVER COL	GOPAL NAGAR,	AMRITSAR		0.0	01-Mar-05
839418	9855188843	ASHISH GUPTA	S/O VINOD R S TOVER	HALL BAZAR, ICICI E	AMRITSAR		0183-5066467	01-Mar-05
839396	9814808035	KESHAV CHANDER	S/O VARINDER M	MAHAJAN & SONS	(KHANA KATRA SHER SINGH AMRITSAR		0183-5056785	01-Mar-05
840078	9855613247	NARESH KUMAR	S/O SH OM NARESH KUMAR	CIVIL HOSPITAL PA	DISTT AMRITSAR		98721-53247	01-Mar-05
839965	9814019711	TARANDEEP SINGH	S/O S. AMR A-264, GURU AMA	PROPERTY DELAR	AJNALA RD, AMRITSAR		0	01-Mar-05
839355	9855613393	SARFANCH SINGH	S/O SH PR 3912, GURU NANAK	PATTI TEH PATTI C	AMRITSAR		01851-226521	01-Mar-05
839354	9855605618	TILAK RAJ	S/O ROOP LAL	H NO 2437 GALI GUJ	KATRA DULLON AMRITSAR		0	01-Mar-05
839338	9855619685	VIJAY KUMAR	S/O SARINDER KU	2053/8 KHU SUNJARI	AMRITSAR		0	01-Mar-05
839335	9855614382	SARFANCH SINGH	S/O SH PR 3912, GURU NANAK	TEH PATTI	DISTT AMRITSAR		01851-226521	01-Mar-05
839332	9855602078	TARSEM SINGH	S/O S. GUR VPO DINEVAL	TEH KHADOOR SAH	DISTT AMRITSAR		0	01-Mar-05
839325	9855603448	VIJAY KUMAR	S/O SARINDER KU	2053/8/8 KHOO SUNJ	AMRITSAR		0	01-Mar-05
839283	9855604524	MANJIT SINGH	S/O BAKHISH SH	FRANCE MOTOR CH	TARAN TAARAN ROAD AMRITSAR		0	01-Mar-05
839241	9855243302	GURMEET KAUR	V/O SURIN 1022, BHARAT NA	DERA NIHANGA DA	PIRA VALI GALL BATALA ROAD, AMRITSAR		0183-2279146	01-Mar-05
839011	9814536445	BAKSHISH SINGH	S/O TARA SINGH	GALI WAKIL VALLIM	B/S CIVIL HOSPITAL TARAN TAARAN AMRITSAR		0	01-Mar-05
839471	9855608806	JAGTAR SINGH	S/O GURJ VPO DHOTA & TEH	DISTT AMRITSAR	DISTT AMRITSAR		01852-247680	01-Mar-05

Figure1: MIS Head Office Allocation

The MIS executive on receiving the allocation, develops TAT (Time Allocation Table) in MIS to give predefine time to each customer verification executive to complete the case. The TAT will show the case, assigned executive, date of case allocated to executive and date limit within which the

verification case should be completed. By using such TAT, the MIS executive or manager can easily check the status of performance of allocated cases from head office. Beside this this TAT (MIS) will also tell the performance of verification executive. The look and feel of TAT (MIS) is as given below:

SERIAL NUMBER	ACCOUNT NUMBER	EXECUTIVE NAME	SAF TO EXECUTIVE	SAF FROM EXECUTIVE	CITY	DIFFERENCE IN DAYS	PENDING STATUS
1	826893	PATTI	12-Apr-05	17-Apr-05	TEH PATTI	5	OUT OF TAT
2	836781	TT	12-Apr-05	24-Apr-05	TEH TARN TARAN	12	OUT OF TAT
3	854678	TARSEM	05-Apr-05	08-Apr-05	AMRITSAR	3	OUT OF TAT
4	856770	TARSEM	02-Apr-05	03-Apr-05	AMRITSAR	1	OK
5	860877	RUPINDER	01-Apr-05	03-Apr-05	AMRITSAR	2	OK
6	861086	PATTI	01-Apr-05	04-Apr-05	PATTI	3	OK
7	861081	PATTI	08-Apr-05	12-Apr-05	TEH PATTI	4	OUT OF TAT
8	860943	BATALA	01-Apr-05	04-Apr-05	BATALA	3	OK
9	860888	PATTI	01-Apr-05	04-Apr-05	PATTI	3	OK
10	860883	PATTI	01-Apr-05	04-Apr-05	TEH PATTI	3	OK
11	860360	BATALA	01-Apr-05	04-Apr-05	BATALA	3	OK
12	863372	RUPINDER	08-Apr-05	11-Apr-05	AMRITSAR	3	OUT OF TAT
13	863355	RUPINDER	08-Apr-05	11-Apr-05	AMRITSAR	3	OUT OF TAT
14	863108	TT	07-Apr-05	10-Apr-05	TEH TARN TARAN	3	OK
15	862711	OL	07-Apr-05	#N/A	#N/A	#N/A	OK
16	862817	BATALA	08-Apr-05	15-Apr-05	BATALA	7	OUT OF TAT
17	859907	BATALA	02-Apr-05	04-Apr-05	BATALA	2	OK
18	861828	BATALA	02-Apr-05	05-Apr-05	TEH BATALA	3	OK
19	862898	TARSEM	01-Apr-05	03-Apr-05	AMRITSAR	2	OK
20	863673	BATALA	07-Apr-05	15-Apr-05	TEH BATALA	8	OUT OF TAT
21	863985	BATALA	07-Apr-05	10-Apr-05	TEH BATALA	3	OK
22	863934	RUPINDER	05-Apr-05	08-Apr-05	AMRITSAR	3	OUT OF TAT
23	864178	RUPINDER	12-Apr-05	14-Apr-05	AMRITSAR	2	OK
24	864134	PATTI	07-Apr-05	10-Apr-05	TEH TARN TARAN	3	OK
25	864098	RUPINDER	07-Apr-05	10-Apr-05	AMRITSAR	3	OUT OF TAT
26	864070	JAGDEEPAK	08-Apr-05	15-Apr-05	AMRITSAR	7	OUT OF TAT

Figure 2: Time Allocation Table

The final MIS of developed by us is as given below. By using this MIS one is able to perform and analyze the customer verification task as allocated by head office effectively.

A	B	C	D	E	F	G	H	I	J
SERIAL NUMBER	ACCOUNT NUMBER	ALLOCATIO N RECEIVED	SAF RECEIVED	FORM NUMBER	CITY	EXECUTIVE NAME	SENDING DATE	SMS CODE	REMARKS BY EXECUTIVE
1	69	838938	1-Mar-05	4-Mar	130750	ASR	BATALA	1-Mar-05	HRD: SUB IS A STUDENT AND FATHER IS KARYANA MARC
2	236	843798	4-Mar-05	4-Mar	129432	ASR	BATALA	1-Mar-05	HRD: SUB IS A LINEMAN IN ELECTRICITY BOARD
3	239	843750	4-Mar-05	4-Mar	129437	ASR	PATTI	1-Mar-05	HRD: SUB IS GOVT. DOCTOR IN CIVIL HOSPITAL PATTI
4	414	847104	9-Mar-05	9-Mar	129441	ASR	UC	1-Mar-05	HRD: SUB IS OWNER OF CARPENTER SHOP AT GURDASPUR
5	415	847098	9-Mar-05	9-Mar	129476	ASR	UC	1-Mar-05	HRD: SUB IS TEACHER IN GOVT.SEN.SEC.SCHOOL PATTI
6	524	848016	10-Mar-05	12-Mar	130747	JAL	BATALA	1-Mar-05	HRD: SUB IS OWNER OF ELECTRIC GOODS SHOP
7	732	851309	14-Mar-05	14-Mar	130751	JAL	BATALA	1-Mar-05	HRD: SUB IS HEAD CONSTABLE IN FOREST POLICE
8	744	851176	14-Mar-05	20-Apr	129519	JAL	BATALA	1-Mar-05	HRD: SUB IS A FARMER
9	849	852947	16-Mar-05	16-Mar	129442	JAL	TT	1-Mar-05	HRD: SUB IS GOVT.EMPLOYEE IN FOOD SUPPLY CORP. C
10	852	853419	16-Mar-05	16-Mar	129445	JAL	UC	1-Mar-05	HRD: SUB IS FARMER
11	852	853419	16-Mar-05	16-Mar	129445	JAL	UC	1-Mar-05	HRD: SUB IS FARMER
12	858	853385	16-Mar-05	16-Mar	130746	JAL	UC	1-Mar-05	HRD: SUB IS A FARMER
13	897	852663	16-Mar-05	16-Mar	129522	LDH	UC	1-Mar-05	HRD: SUB IS A FARMER
14	922	848367	16-Mar-05	17-Mar	129532	LDH	UC	1-Mar-05	HRD: SUB IS A OWNER OF WATCH SHOP
15	954	854183	17-Mar-05	17-Mar	129524	LDH	BATALA	1-Mar-05	HRD: SUB IS A FARMER
16	1042	855109	18-Mar-05	18-Mar	129539	LDH	TT	1-Mar-05	HRD: SUB IS A FARMER
17	1080	845914	19-Mar-05	29-Mar	129426	LDH	AGDEEPA	1-Mar-05	HRD: SUB IS A TEACHER IN GOVT.MIDDLE SCHOOL SABH
18	1125	851646	19-Mar-05	21-Mar	129479	LDH	PATTI	1-Mar-05	HRD: SUB IS A TEACHER IN SEN.SEC.SCHOOL PATTI
19	1254	852672	22-Mar-05	23-Mar	129480	VERKA	PATTI	1-Mar-05	HRD: SUB IS A CONSTABLE IN POLICE AT PATTI
20	1274	858588	23-Mar-05	23-Mar	129526	VERKA	TT	1-Mar-05	HRD: SUB IS A FARMER
21	1305	854479	23-Mar-05	24-Mar	129478	VERKA	AGDEEPA	1-Mar-05	HRD: SUB IS CONSTABLE IN POLICE AT PATTI
22	1362	857143	24-Mar-05	25-Mar	129481	VERKA	UC	1-Mar-05	HRD: SUB IS A TEACHER IN GOVT. SCHOOL BATHA BAIN
23	1367	857295	24-Mar-05	25-Mar	129533	VERKA	BATALA	1-Mar-05	HRD: SUB IS A MUNSHI AT BHATHA
24	1379	861246	28-Mar-05	28-Mar	129544	ASR	BATALA	1-Mar-05	HRD: SUB IS A FARMER
25	1449	860210	28-Mar-05	28-Mar	129474	ASR	BATALA	1-Mar-05	HRD: SUB IS A OWNER OF TEED SHOP
26	1540	861757	29-Mar-05	29-Mar	129549	FEH.PATTI	BATALA	1-Mar-05	HRD: SUB IS A OWNER OF PAINT SHOP
27	1608	862835	30-Mar-05	30-Mar	129551	ARN TARN	BATALA	1-Mar-05	HRD: SUB IS A OWNER OF GENERAL STORE
28	1612	862815	30-Mar-05	30-Mar	129543	ARN TARN	TARSEM	1-Mar-05	PL #N/A

Figure 3: Complete MIS For Telecom Agency

4. COCLUSIONS

MIS stands for Management Information System is one of the effective systems for collecting and managing the data for an organization. From the above study it is clear that by developing a single a MIS for Telecom agency, one is become able to find several types of report like pendency at executive level, pendency at agency level, the overall performance of an agency etc. in an effective way.

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