

SPHERE CONSULTING GROUP, LLC



Corporate Management Services

CUSTOMER RELATIONSHIP MANAGEMENT (CRM) CAMPAIGN MANAGEMENT SYSTEM (CMS) TOOL PRODUCT DEVELOPMENT -PRODUCT REQUIREMENTS DOCUMENT (PRD)

PRESENTED TO:

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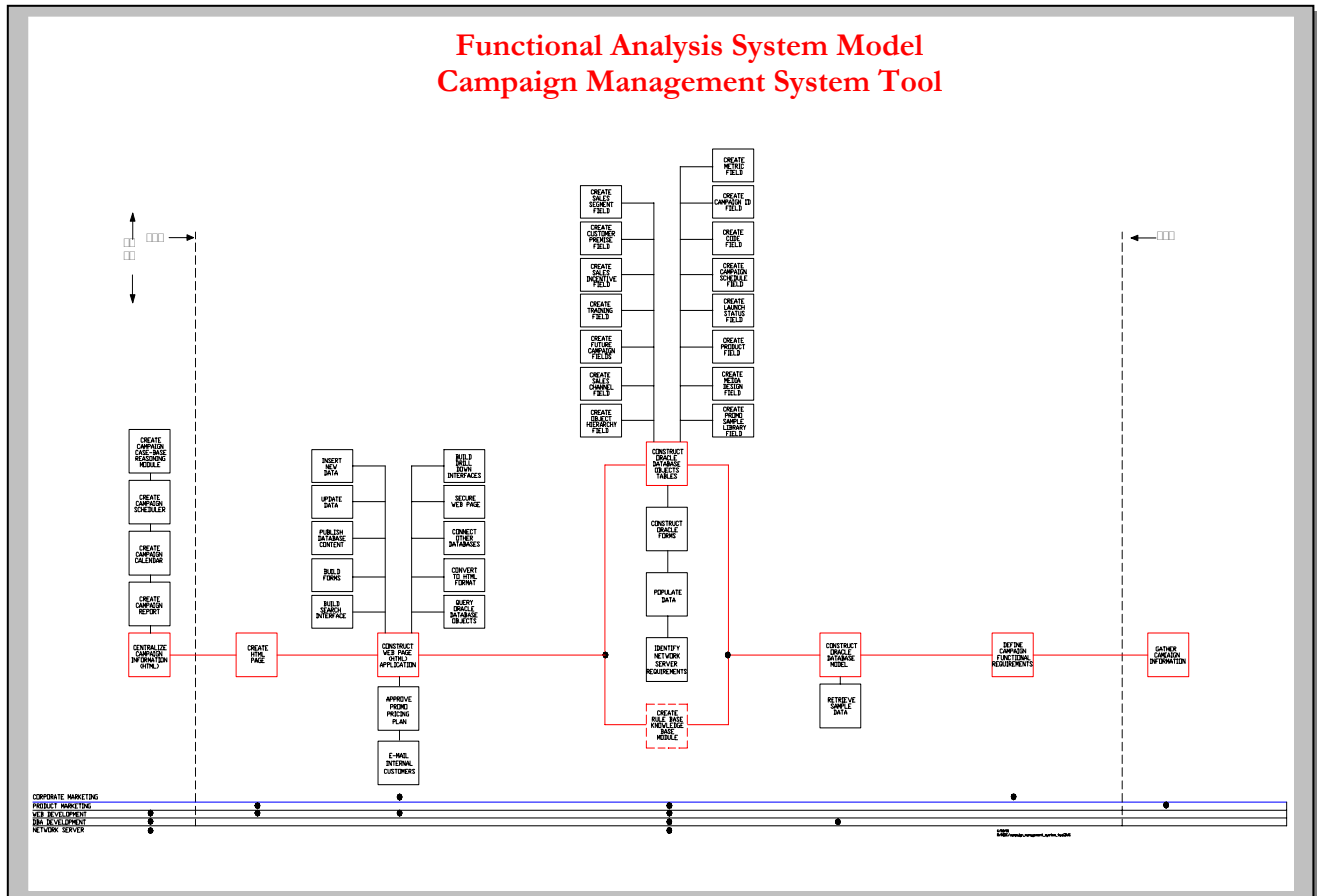


PRODUCT REQUIREMENTS DEFINITION (PRD)

FUNCTIONAL DEFINITIONS AND DEVELOPMENT STATEMENT OF WORK CAMPAIGN MANAGEMENT SYSTEM TOOL

1.0 Introduction

Campaign Management System (CMS) Tool is a Web-based application that shall integrate browser, server and database technologies to centralize marketing campaign information (MARCOM) and improve internal customer notification, media development tracking, and notification and management decision making. The Campaign Management System Tool design will be for Corporate and the Regions data entry, tracking and notification.



1.1 Components and Features



The components include the ColdFusion Application Server and ColdFusion Studio. ColdFusion shall be the most effective way to build and deliver scalable Web Applications that integrates browser, server and database technologies.

Some of the features include advanced database connectivity, native database drivers, e-mail generation and retrieval, file management capabilities. It can be managed and administered from any Web browser anywhere.

It offers scalable deployment and can be deployed on multi server clusters, and offers security for remote development across Intranets and Extranets.

ColdFusion server shall process the data and convert it to an HTML format and will connect to a variety of data sources on many types of platforms. Security of database files, simultaneous viewing, database support for multi-users, data maintenance operations, and the data shall be stored in an ORACLE relational database management system.

ORACLE also supports backup and recovery routines, disk space management, open connectivity to other vendor software, and supports a wide range of development tools. ORACLE is referred as the "database engine."

1.2 Mail Server

The e-mail generation and retrieval to support the Campaign E-mail Notification System shall have connectivity to the ColdFusion Application Sever and to ILEC's mail server.

The e-mail notification system shall consist of corporate and field individuals that will be notified when a campaign is an approved campaign and will notify intervals of 1, 5 and O days prior to a campaign release.

2.3 ORACLE Database Server

Web Development, DBA and Network Server Groups shall determine sample and actual data retrieval and storage.

Web Development, DBA and Network Server Groups shall determine data retrieval, storage feasibility and validation from the Sales and Marketing's DataWarehouse, CABs, CMIS, Legacy, SAP and AMDOCs.

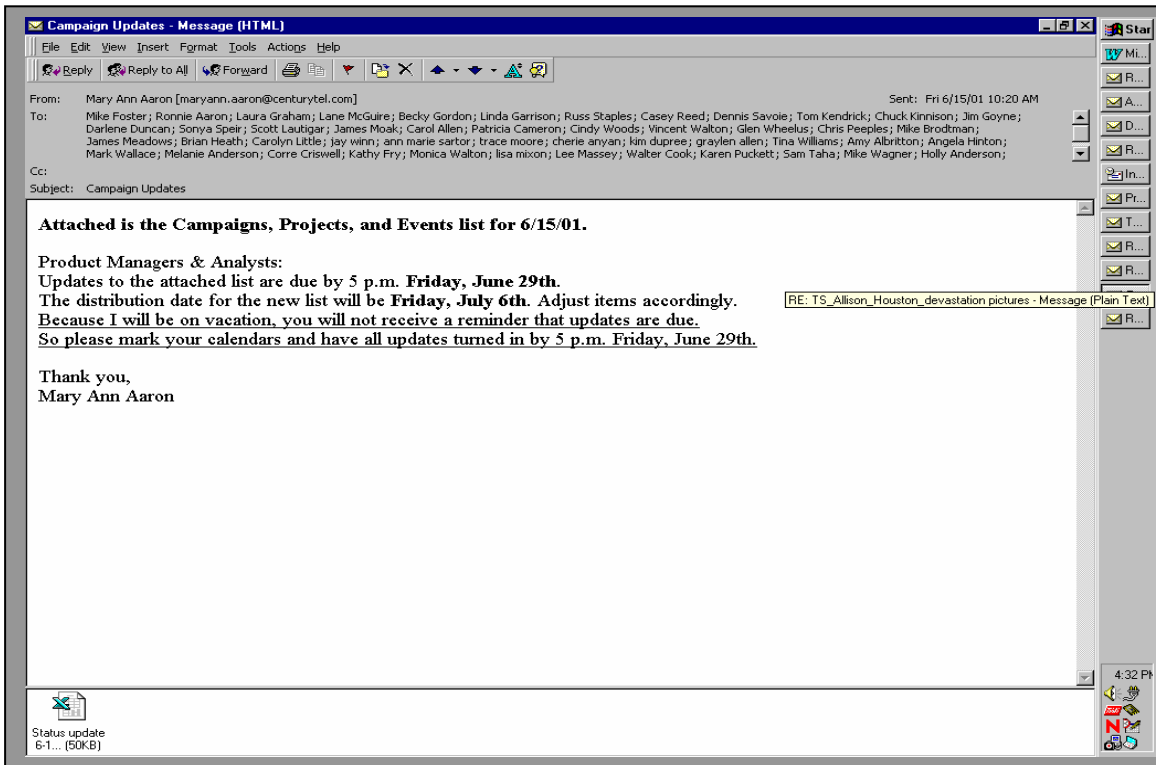


Figure 1 Present Email List

1.3.1 Querying On-line Campaign Reports

A typical Campaign Report will be populated from a relational database called ORACLE and shall define activity needed to track multi-level and specific campaign activity and multi-level media design type activity with relational fields defined by: Region, market

Cluster, state, company number, MSA/RSA, county and parish, city and exchange name, and NPA/NXX, campaign identification, metrics, code, campaign schedule, launch status, product, media design, sales segments, customer premise equipment, sales incentives, training, sales channels and future campaigns.

1.3.2 Querying On-line Promo Scheduler

A typical Promo Scheduler includes the sequence of campaign activities, the relationships between the activities, and the timing of each activity similar to a Gantt Chart.

Features shall include viewing all campaigns on weekly, monthly, yearly and quarter basis.

The Scheduler shall define key campaign milestones and name. The milestones shall be campaign start and end dates and also totals % completion.



Microsoft Access - [qryRpt01]

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Campaign Name	Geographic Location	Product	Billing Code	Company Name	Media Category	Campaign Date
ADVO Shared Mail with c		Cent Long Distance	5379		Direct Mail	5/20/01
ADVO Shared Mail with c		Cent Long Distance	5379	Century Cellunet NLA	Direct Mail	5/20/01
ADVO Shared Mail with c	Southern	Cent Long Distance	5379		Direct Mail	5/20/01
Engenius "Clip It & Go Lo						3/12/01
Operation Migration Norst		Key Systems - CPE	N573		Collateral Design	6/1/01
Operation Migration Norst		Key Systems - CPE	N573		Newspaper	6/1/01
Share d Newspaper FSI wit		Opt Calling Plans	L100			5/6/01
SimpleCents Campaign 6		Cent Long Distance	5379		Bill Stuffer Design	2/1/01
SimpleCents Campaign 6		Cent Long Distance	5379		Direct Mail	2/1/01
SimpleCents Campaign 6		Cent Long Distance	5379		Logo Design	2/1/01
SimpleCents Campaign 6		Cent Long Distance	5379		Newspaper	2/1/01
SimpleCents Campaign 6		Cent Long Distance	5379	CenturyTel of San Marcos, Inc.	Bill Stuffer Design	2/1/01
SimpleCents Campaign 6		Cent Long Distance	5379	CenturyTel of San Marcos, Inc.	Direct Mail	2/1/01
SimpleCents Campaign 6		Cent Long Distance	5379	CenturyTel of San Marcos, Inc.	Logo Design	2/1/01
SimpleCents Campaign 6		Cent Long Distance	5379	CenturyTel of San Marcos, Inc.	Newspaper	2/1/01
SimpleCents Campaign 6		Centrex Service -Custo	1208		Bill Stuffer Design	2/1/01
SimpleCents Campaign 6		Centrex Service -Custo	1208		Direct Mail	2/1/01
SimpleCents Campaign 6		Centrex Service -Custo	1208		Logo Design	2/1/01

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Figure 2 Typical Campaign Report

Microsoft Access

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Campaign Scheduler

Id	CampaignName	Duration	StartDate	EndDate	ActualCost	March			April			May					
						3/4	3/11	3/18	3/25	4/1	4/8	4/15	4/22	4/29	5/6	5/13	5/21
1	SimpleCents Campaign 6 mo	35	2/1/01	3/8/01	\$0.00	1											
2	Operation Migration Norstar I	213	6/1/01	12/31/01	\$0.00												
3	Shared Newspaper FSI with c	55	5/6/01	6/30/01	\$0.00												
4	ADVO Shared Mail with curre	41	5/20/01	6/30/01	\$0.00												
5	Engenius "Clip It & Go Long"	294	3/12/01	12/31/01	\$0.00												
6	LD OTM to Non-CLD custom				\$0.00												
7	LD Promo to wireless Custon				\$0.00												
8	LD Promo to Wireless Custoi	50	2/9/01	3/31/01	\$0.00	1											
9	ADVO shared mail LD offer ir	36	3/25/01	4/30/01	\$0.00					1							

Record: 1 of 9

Figure 3 Typical Promo Scheduler



1.3.3 Querying On-Line Promo Calendar

A Campaign Calendar includes the sequence of campaign activities, the relationships between the activities, and the timing of each activity in a monthly calendar design. Features shall include viewing campaigns for each month and in the future.

2.3.4 Querying On-Line Promo Price Adjustment Plan (PAP)

The Campaign Promo Price Adjustment Plan is a business analysis that shall involve a promotional pricing adjustment and a projection of units.

PAP shall be defined in "Phase B" Statement of Work.

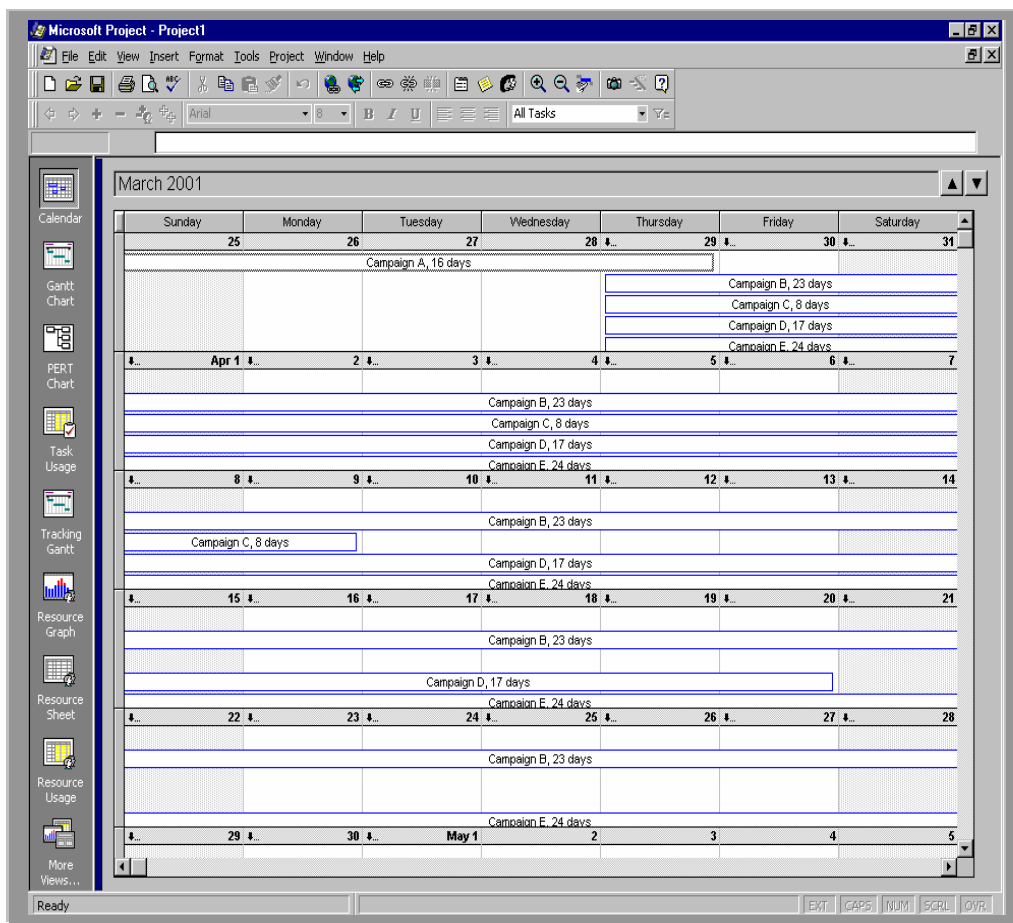


Figure 4 Typical Promo Calendar

2.0 ORACLE Objects

The ORACLE objects shall store and access CMS data in a manner consistent with a defined model known as the relational model. Data in a database is stored in tables. Relational tables shall be defined by their columns, and are given a name.



Tables can be related to each other, and the database can be used to enforce these relationships. ORACLE uses an SQL query statement to view a customized selection of one or more tables that are stored in the database.

2.1 Tables

Tables are storage mechanism for data within the ORACLE database and comprised of a fixed set of columns. The columns of a table describe the attributes of the entity being tracked by the table. Each column has a name and specific characteristics.

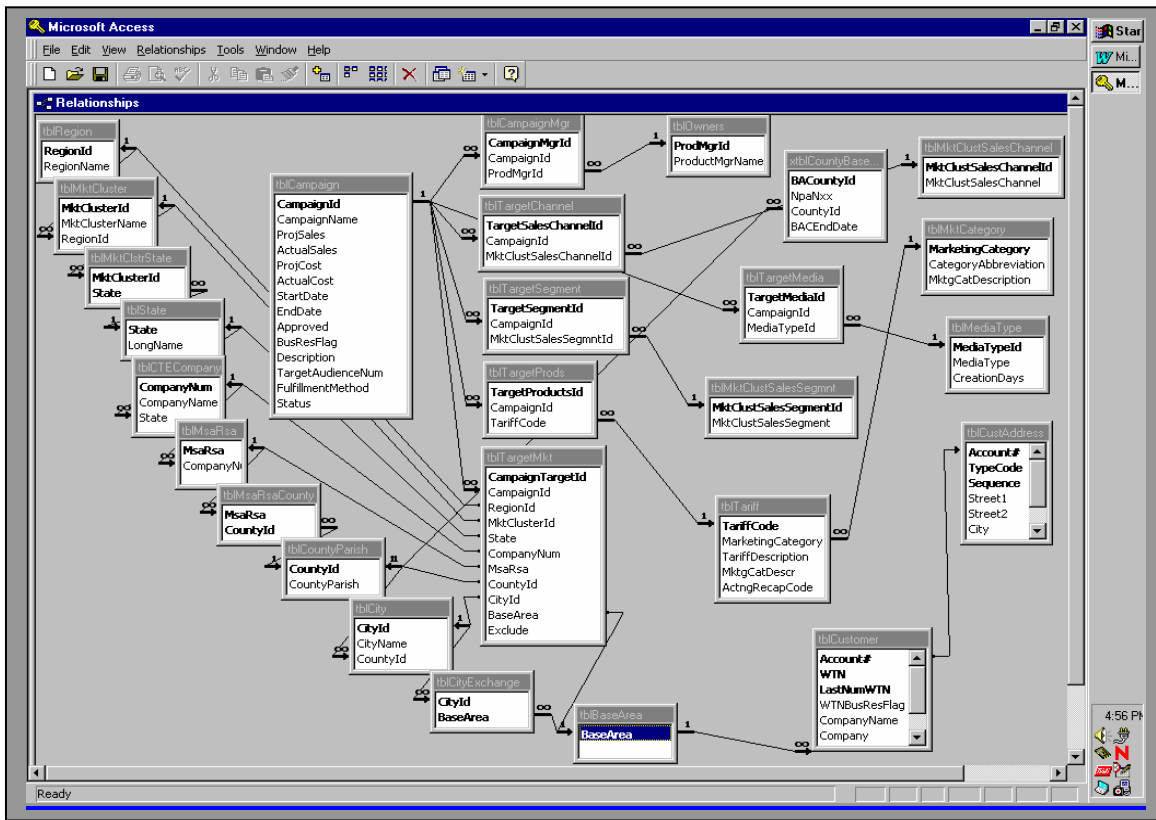


Figure 5 Typical Query Hierarchy

2.1.2 ORACLE Database Object Hierarchy

2.1.2.1 Region

This shall be a CHAR data type. [Pull down menu.]

- Great Lake Region

Defined as Northern Michigan Market, Southern Michigan Market, and Ohio-Indiana Market.

- Midwestern Region



Defined as Appleton, Wisconsin Market, La Crosse, Wisconsin Market, and Northern Wisconsin Market.

➤ Southern Region

Defined as Louisiana-Arkansas Market, Northern Arkansas Market, Southern Louisiana Market, and Mississippi-Tennessee Market.

➤ Western Region

Defined as Montana Market, Oregon Market and Washington Market. Montana Market shall include Arizona, Colorado, Idaho, Montana, Nevada, New Mexico and Wyoming Markets.

2.1.2.1.1 Market Cluster

This shall be a CHAR data type. [Pull down menu.]

➤ Great Lake Region

Defined as Northern Michigan Market, Southern Michigan Market, and Ohio-Indiana Market.

➤ Midwestern Region

Defined as Appleton, Wisconsin Market, La Crosse and Northern Wisconsin Market.

➤ Southern Region

Defined as Louisiana-Arkansas Market, Northern Arkansas Market, Southern Louisiana Market, and Mississippi-Tennessee Market.

➤ Western Region

Defined as Montana Market, Oregon Market and Washington Market. Montana Market shall include Arizona, Colorado, Idaho, Montana, Nevada, New Mexico and Wyoming Markets.

2.1.2.1.1.1 State

This shall be a CHAR data type. [Pull down menu.]

➤ Wireline Local Exchange Service Areas

Missouri, Washington, Oregon, Montana, Arizona, Colorado, Idaho, Nevada, New Mexico, Wyoming, Mississippi, Tennessee, Arkansas, Louisiana, Wisconsin, Michigan, Ohio, Indiana, Texas, Minnesota and Iowa.

➤ Operated Wireless Service Areas

Arkansas, Louisiana, Michigan, Mississippi, Texas, and Wisconsin

2.1.2.1.1.1.1 Company Number

This shall be a CHAR data type. [Pull down menu.]



2.1.2.1.1.1.1 Metropolitan Statical Area/Rural Service Area (MSA/RSA)
This shall be a CHAR data type. [Pull down menu.]

➤ **Exceptions (See Wireless MSA/RSA Relationships)**
Coding shall need to be implemented and workarounds.

- **Biloxi and Pascagoula because Biloxi and Pascagoula are considered one market (MGC – Mississippi Gulf Coast), but have different company numbers. Biloxi is M266 and Pascagoula is M268. [Biloxi and Pascagoula are presently considered to be separate markets]**
- M1001 and M1002 are two separate markets, but for accounting and budgeting purposes, they are grouped into the same company number M298.
- W1001, W1006, and W1007 are not marketed under the ILEC name. The customers in these markets know us by the name Cellulink. No reference can be made to the name ILEC when contacting these customers, including mailings and telemarketing.

➤ **WIRELESS MSA/RSA RELATIONSHIPS**

Old Region

New Region

Region 1 (AR, LA, Texarkana)
Region 2 (Michigan and LaCrosse, WI)
Region 3 (Mississippi and Rio Grande Valley, TX)
Region 4 (Wisconsin, except for LaCrosse)

Southern
Great Lakes (except LaCrosse; went to Midwestern)
Southern
Midwestern

SOUTHERN REGION:

Old Mkt Code	Old Market Name (MSA / RSA)	Cmpy#	New Market Cluster
ALEX	Alexandria, LA	M262	Louisiana / Arkansas
AR12	Arkansas 12 (El Dorado)	M232	Louisiana / Arkansas
AR23	Arkansas 2 & 3 (Mt. Home)	M220	Northern Arkansas
JAX	Jackson, MS	M270	Mississippi / Tennessee
LA1	Louisiana 1 (Ruston)	M254	Louisiana / Arkansas
LA3	Louisiana 3 (Natchitoches)	M258	Louisiana / Arkansas
LA4	Louisiana 4 (Columbia)	M236	Louisiana / Arkansas
MGC	Miss. Gulf Coast (Biloxi & Pascagoula)	*	Mississippi / Tennessee
MONR	Monroe, LA	M218	Louisiana / Arkansas
MS2	Mississippi 2 (Tupelo)	M282	Mississippi / Tennessee
MS5	Mississippi 5 (Vicksburg)	M316	Mississippi / Tennessee
MS6	Mississippi 6 (Columbus)	M278	Mississippi / Tennessee
MS7	Mississippi 7 (Meridian)	M284	Mississippi / Tennessee
PINE	Pine Bluff, AR	M276	Louisiana / Arkansas
SHRE	Shreveport, LA	M208	Louisiana / Arkansas
TEXA	Texarkana	M222	Louisiana / Arkansas

**Biloxi and Pascagoula are considered one market (MGC – Mississippi Gulf Coast), but have different company numbers. Biloxi is M266 and Pascagoula is M268.*



GREAT LAKES REGION:

Old Mkt Code	Old Market Name (MSA / RSA)	Cmpy#	New Market Cluster
BATT	Battle Creek, MI	M226	Southern Michigan
BENT	Benton Harbor, MI	M214	Southern Michigan
GRAN	Grand Rapids, MI	M204	Southern Michigan
JACK	Jackson, MI	M224	Southern Michigan
KALA	Kalamazoo, MI	M212	Southern Michigan
LANS	Lansing, MI	M202	Southern Michigan
MI35	Michigan 3 & 5 (Traverse City)	M246	Northern Michigan
MI4	Michigan 4 (Cheboygan)	M280	Northern Michigan
MI6	Michigan 6 (Harrison)	M242	Northern Michigan
MI7	Michigan 7 (Ithaca)	M244	Northern Michigan
MI9	Michigan 9 (Adrian)	M252	Southern Michigan
MUSK	Muskegon, MI	M210	Southern Michigan
SAGI	Saginaw, MI	M206	Northern Michigan

MIDWESTERN REGION:

Old Mkt Code	Old Market Name (MSA / RSA)	Cmpy#	New Market Cluster
LACR	LaCrosse, WI	M216	LaCrosse
MI001	Michigan 1 (Three Rivers)	M298*	Appleton
MI002	Michigan 2 (Escanaba)	M298*	Appleton
WIAON	Appleton, WI	M286	Appleton
WIEAU	Eau Claire, WI	M288	LaCrosse
WI001 **	Wisconsin 1 (Barron)	M290	Northern Wisconsin
WI002	Wisconsin 2 (Ladysmith)	M292	Northern Wisconsin
WI006 **	Wisconsin 6 (Tomah)	M294	LaCrosse
WI007 **	Wisconsin 7 (Waupaca)	M296	Appleton
WI8	Wisconsin 8 (Platteville)	M314	LaCrosse

* MI001 and MI002 are two separate markets, but for accounting and budgeting purposes, they are grouped into the same company number M298.

** WI001, WI006, and WI007 are not marketed under the ILEC name. The customers in these markets know us by the name Cellulink. No reference can be made to the name ILEC when contacting these customers, including mailings and telemarketing.

NON-ILEC MARKETS:

Old Mkt Code	Old Market Name (MSA / RSA)	Company #	New Market Cluster
THUM	Thumb Cellular (Pigeon, MI)	-----	-----

Thumb Cellular is a company that pays ILEC for use of Billing System and Switches. This market is not counted for Sales and Marketing. Also, this market is excluded from all mailings and telemarketing lists.

2.1.2.1.1.1.1.1 County and Parish
This shall be a CHAR data type. [Pull down menu.]



2.1.2.1.1.1.1.1.1 City/Exchange Name

This shall be a CHAR data type. [Pull down menu.]

2.1.2.1.1.1.1.1.1.1 NPA/NXX

This shall be a NUMBER data type. [Pull down menu.]

2.1.3 Campaign Identification

Campaign data entry shall be the Product Manager. [Pull down menu.]

2.1.3.1 Campaign NAME

This shall be a CHAR data type.

2.1.3.2 Product Manager NAME

This shall be a CHAR data type.

2.1.3.3 Campaign Code*

This shall be a NUMBER data type.

2.1.4 Metrics

The Gross and Net sales, units and cost shall link to accounting and billing databases for regulated and deregulated products. [Pull down menu]

2.1.4.1 Projected Total Sales per Campaign (\$Gross/Campaign) [Pull down menu] This shall be a NUMBER data type.

- 2.4.4.1.1 Project Retail Sales (\$Gross/Units)
- 2.4.4.1.2 Projected Agent Sales (\$Gross/Units)
- 2.4.4.1.3 Projected Kiosks Sales (\$Gross/Units)
- 2.4.4.1.4 Projected Telemarketing Sales (\$Gross/Units)
- 2.4.4.1.5 Projected Direct Mail Sales (\$Gross/Units)
- 2.4.4.1.6 Projected Business Sales (\$Gross/Units)
- 2.4.4.1.7 Projected Web Sales (\$Gross/Units)

2.1.4.2 Projected Total Units per Campaign (Gross/Units) [Pull down menu] This shall be a NUMBER data type.

- 2.4.4.2.1 Project Retail Units (Gross/Units)
- 2.4.4.2.2 Projected Agent Units (Gross/Units)
- 2.4.4.2.3 Projected Kiosks Units (Gross/Units)
- 2.4.4.2.4 Projected Telemarketing Units (Gross/Units)
- 2.4.4.2.5 Projected Direct Mail Units (Gross/Units)
- 2.4.4.2.6 Projected Business Units (Gross/Units)
- 2.4.4.2.7 Projected Web Units (Gross/Units)

2.1.4.3 Actual Total Sales per Campaign (\$Net/Units) [Pull down menu] This shall be a NUMBER data type

- 2.4.4.3.1 Actual Retail Sales (\$Gross/Units)
- 2.4.4.3.2 Actual Agent Sales (\$Gross/Units)
- 2.4.4.3.3 Actual Kiosks Sales (\$Gross/Units)
- 2.4.4.3.4 Actual Telemarketing Sales (\$Gross/Units)
- 2.4.4.3.5 Actual Direct Mail Sales (\$Gross/Units)
- 2.4.4.3.6 Actual Business Sales (\$Gross/Units)
- 2.4.4.3.7 Actual Web Sales (\$Gross/Units)



2.1.4.4 Actual Total Units per Campaign (Net/Units) [Pull down menu] This shall be a NUMBER data type.

- 2.4.4.1.1 Actual Retails Units (\$Net/Units)
- 2.4.4.1.2 Actual Agent Units (\$Net/Units)
- 2.4.4.1.3 Actual Kiosks Units (\$Net/Units)
- 2.4.4.1.4 Actual Telemarketing Units (\$Net/Units)
- 2.4.4.1.5 Actual Direct Mail Units (\$Net/Units)
- 2.4.4.1.6 Actual Business Units (\$Net/Units)
- 2.4.4.1.7 Actual Web Units (\$Net/Units)

2.1.4.5 Actual Total Costs Per Campaign (\$Net/Campaign) [Pull down menu] This shall be a NUMBER data type.

- 2.4.4.5.1 Actual Retails Cost (\$Net/ Campaign)
- 2.4.4.5.2 Actual Agent Cost (\$Net / Campaign)
- 2.4.4.5.3 Actual Kiosks Cost (\$Net /Campaign)
- 2.4.4.5.4 Actual Telemarketing Cost (\$Net / Campaign)
- 2.4.4.5.5 Actual Direct Mail Cost (\$/Net Campaign)
- 2.4.4.5.6 Actual Business Cost (\$Net /Campaign)
- 2.4.4.5.7 Actual Web Cost (\$Net/ Campaign)
- 2.4.4.5.8 Subsidy Promo Waiver Cost (\$Net/Campaign)
- 2.4.4.5.9 Obsolesce Equipment Inventory Cost (\$Net/Campaign)
- 2.4.4.5.10 Surplus Equipment Inventory Cost (\$Net/Campaign)

2.1.4.6 Projected Total Cost per Campaign (\$ Gross/Campaign)
This shall be a NUMBER data type.

- 2.4.4.6.1 Projected Retails Cost (\$Gross/Campaign)
- 2.4.4.6.2 Projected Agent Cost (\$Gross/ Campaign)
- 2.4.4.6.3 Projected Kiosks Cost (\$Gross/ Campaign)
- 2.4.4.6.4 Projected Telemarketing Cost (\$Gross/ Campaign)
- 2.4.4.6.5 Projected Direct Mail Cost (\$Gross/ Campaign)
- 2.4.4.6.6 Projected Business Cost (\$Gross/ Campaign)
- 2.4.4.6.7 Projected Web Cost (\$Gross/ Campaign)

2.1.4.7 Budget Dollars per Campaign (\$Gross/Campaign)
This shall be a NUMBER data type.

- 2.4.4.7.1 Projected per Campaign (\$Gross/Campaign)
- 2.4.4.7.2 Actual per Campaign (\$Net/Campaign)

2.1.4.9 Campaign Return on Investment per Campaign (ROI %/Campaign)
This shall be a NUMBER data type.

2.1.5 Expense Account Code
Connectivity to the other billing and account databases.
[Pull down menu.]

2.1.5.1 Center Code
This shall be a NUMBER data type.

2.1.5.2 Account Code
This shall be a NUMBER data type.



2.1.5.3 Billing Code/Tariff Code
This shall be a NUMBER data type.

2.1.5.4 Promo Code (ISCI-Code)
This shall be a NUMBER data type.

2.1.5.5 Adjustment Code
This shall be a NUMBER data type.

2.1.5.6 Material Code
This shall be a NUMBER data type. Defined in the

2.1.5.7 Credit Code [Pull down menu.]

2.1.5.7.1 Pre-approved (Yes/No)
This shall be a CHAR data type.

2.1.5.7.2 Credit Class
This shall be a CHAR data type.

2.1.5.7.3 OC&C Code (Wireless)
This shall be a NUMBER data type.

2.1.5.7.4 Geo Code
This shall be a NUMBER data type.

2.4.6 Campaign Schedule [Pull down menu.]

The campaign shall define the specific campaign that has been approved by the Marketing committee with an Approval (yes or no) and a Date. Only the Marketing committee individuals shall have access to the approved status. The product manager shall determine the start and end date. The campaign % completion shall be determined from the AVG % completion from specific media design projects. [Pull down menu.]

2.4.6.1 Start Date

This shall be a DATE data type. This shall also link to the active status and media design type and shall be campaign specific.

2.4.6.2 End Date

This shall be a DATE data type. This shall also link to the active status and media design type and shall be campaign specific.

2.4.6.3 Campaign % Completion (0-100%)

This shall be a NUMBER data type. This shall also link to the active status and media design type and shall be campaign specific.

2.4.7 Launch Status (Yes/No) [Pull down menu.]

This shall be a CHAR data type. Marketing committee has approved, password protected, and email notification system is engaged to notify the approved status. The life cycle shall range from 0-100 days. The email notification database shall not notify that a campaign has not been approved. The Marketing Committee will provide the text for email notification at Final Build Phase.



2.4.7.1 Campaign Approved Date

This shall be a DATE data type. This shall also link to the approved status and shall be campaign specific. Notify via email notification PASSWORD Sensitive.

2.4.7.2 Launch 15 (Days)

This shall be a NUMBER data type. Notify via email notification system 15 days prior to an active launch.

2.4.7.3 Launch 5 (Days)

This shall be a NUMBER data type. Notify via email notification system 5 days prior to an active launch.

2.4.7.4 Launch 0 (Days)

This shall be a NUMBER data type. Notify via email notification system that the campaign is running or is launch and is an active campaign. This date shall link to the start date of the campaign regarding a time reference.

2.4.8 Product Market Category

The product market category will be defined in the database. [Pull down menu for Wireless and Wireline Categories]

2.4.8.1 Wireless [Pull down menu]

- Toll
- Roaming
- Disconnects
- Connect fee
- Access fee
- Usage fee
- Roaming Outbound
- Roaming Inbound
- Local Usage

2.4.8.2 Wireline [Pull down menu]

- Yellow Pages
- Emerging
- Internet DSL CPE/Installation
- Internet DSL Service
- Key IP
- Online Payment Processing
- Additional Lines
- Basic Business
- Centrex Service -Custom Calling Features
- ISDN Service



- Key Trunks
- PBX Trunks
- Single Line Service
- Basic Business
- Other
- Customer Call Features - Other
- Cellnet Phones -Other
- Class Service
- Centrex Service -Custom Calling Features
- Centrex - CPE
- Cent Long Distance
- Opt Calling Plans
- Directory Services
- Switched 56/DDS
- Data CPE
- Fire Reporting
- Frame Relay
- FX/Mile
- InterState
- IntraState
- Other Sales - Internet
- ISDN Service
- Key Systems - CPE
- Key Trunks
- Customer Call Features MISC
- Business CPE
- Opt Calling Plans
- Paging-IMTS-Cell
- PBX Systems - CPE
- PBX Trunks
- PUB/SemiPub/PayStation
- Other
- Single Line Service
- CPE Single Line - Leased
- Video Conferencing
- Voice Mail
- Wire Watch
- Internet - Dialup access
- Additional Lines
- 911 service
- General Public Relations Regulated
- General Public Relations Deregulated
- General Public Relations Internet
- LAN/Wan
- CATV
- Usage Sensitive - 3Way
- Call Waiting



- CNAME
- Single Line CPE Sales
- Direct Connect Internet
- E-Commerce/Web Hosting
- EYP/Webhost - Internet
- Netscape Software Setup - Internet
- Cyber Patrol - Internet
- Other Sales - Internet
- Internet Call Waiting
- Web Development - Internet
- Call Forwarding
- Caller ID
- Three Way Calling
- Repeat Dial
- CCF Package
- Call Return
- E-Rate
- Hitachi PBX
- xDSL
- CLASS Packages
- Employee Discounts
- VM CPE
- Companion Wireless
- Custom Works
- FX/Mile
- Private Line
- Security
- Switched 56/DDS
- T1 & DS1

2.4.8.2 Message

This shall be a CHAR data type. The message shall define the specific theme for each specific campaign.

2.4.8.3 Features

This shall be a CHAR data type. This shall be a text field. The features shall define the specific features of the product or service.

2.4.8.4 Benefits

This shall be a CHAR data type. This shall be a text field. The benefits shall define the value of the features and need satisfaction to the customer.

2.4.9 Media Design

The MARCOM group shall enter the data for start and end date and % completion for each media design type. The % completion for media design shall average (AVG) of each media design % and shall link to a specific campaign % completion. [Pull down menu.]



2.4.9.1 Newspaper Ad

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 19 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.2 Collateral

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 19 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.3 Direct Mail

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 27 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.4 Presentation

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 10 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.5 Retail POP

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 16 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.6 Bill Insert

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 23 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)



2.4.9.7 Sponsorship Ad

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 8 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.8 Logo/Identity

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 13 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % **Completion (0-100%)**

2.4.9.9 Active Media Samples (i.e. Library) Event

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 13 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.10 Retail Design

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 13 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.11 Investor Relations

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 13 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.12 Employee Communications

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 13 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.13 Signage



This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 13 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.14 Packaging

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 13 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.15 TV Spot

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 90 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.9.16 Radio Spot

This shall be a CHAR data type. This field shall link to Campaign Start Date and shall have duration of 20 days. This shall also link to the launch status and campaign name.

- Start Date
- End Date
- % Completion (0-100%)

2.4.10 Promo Sample Library (PSL)

The PSL shall consist of campaign design samples of audio, video and data .pdf format files for active campaigns. [Pull down menu]

2.4.10.1 TV Spots

- TV Ad View
This shall be video activated.

2.4.10.2 Newsprint (.pdf file)

This is a view of all MARCOM media design other than voice and video. Files shall be in .pdf format.

- Direct Mail View



- **Bill Insert View**
- **Telemarketing Script View**
- Outdoor View
- Collateral View
- Door Hanger View
- Promo Equipment View
- Feature Product Offer View

2.4.10.3 Radio Spots

- **Radio Ad**
This shall be voice activated.

2.4.11 Market Segments

This shall be a CHAR data type. [Pull down menu.]

- SOHO
- Consumer
- Commercial

2.4.12 Feature Premise Equipment

The Product Manager shall define. [Pull down menu.]

2.4.12.1 Feature Equipment

This shall be a CHAR data type.

2.4.12.2 Model Number

This shall be a NUMBER data type.

2.4.12.3 Vendor Name

This shall be a CHAR data type.

2.4.12.4 Quantity (Units/Campaign)

This shall be a NUMBER data type.

2.4.12.5 Availability (Date)

This shall be a DATE data type.

2.4.12.6 Distribution Center (Region) [Pull down menu.]

This shall be a CHAR data type.

- Monroe
- Lorain
- Chesaning
- LaCrosse
- Gig Harbor

2.4.12.7 Campaign Pricing (\$Net/Campaign)

This shall be a CHAR data type.

2.4.12.8 % Equipment Cost (\$Net/Campaign)

This shall be a CHAR data type. Link to Metrics 2.4.4.5.



- Gain/Loss (-/+ \$)
- Obsolete Equipment Inventory Cost
- Surplus Equipment Inventory Cost

2.4.12.9 Run-rates (Units/Day/Campaign)

This shall be a CHAR data type.

2.4.13 Sales Incentives

This shall be a CHAR data type. [Pull down menu]

- Customer
- Employee
- Agents
- Vendor

2.4.14 Training

This shall be a CHAR data type. [Pull down menu.]

- Class Room
- Computer Base
- Manual ONLY
- Conference Call Training
- Audio
- Video
- Training Video

2.4.15 Sales Channels [Pull down menu.]

This shall be a CHAR data type [Pull down menu.]

- Retail (ILEC)
- Agents
- Kiosks (Wal-Mart)
- Customer Service
- Telemarketing
- Direct Mail
- Business Sales
- Web
- Greeter Stations

2.4.16 Future Campaigns

This shall be a CHAR data type. The product manager shall select 1st QTR that shall be defined as January, February and March, 2nd QTR shall be defined as April, May and June, and 3rd QTR shall be defined as July, August and September, and 4th QTR shall be defined as October, November and December. [Pull down menu]

2.4.16.1 CY2001 Campaigns

This shall be a CHAR data type. This shall link ALL campaigns running or to be launch 6 months prior to the launch date for 2001. [Pull down menu.]

- 1st QTR
- 2nd QTR
- 3rd QTR
- 4th QTR



2.4.1.6.2 CY2002 Campaigns

This shall be a CHAR data type. This shall link ALL campaigns running or to be launch 6 months prior to the launch date for 2002. [Pull down menu]

- 1st QTR
- 2nd QTR
- 3rd QTR
- 4th QTR

2.5 ORACLE Forms

ORACLE Forms shall utilize data stored in a database. Objects, graphics, sound, video, word processing documents, and spreadsheets can be embedded. Web development and DBA group shall determine the overall design and make recommendations to the CMS Project Manager.

2.6 ORACLE Reports

ORACLE Reports outputs shall use data from an ORACLE database. Web development and DBA group shall determine modeling design, importing and exporting of sample data, and connectivity to other databases.

2.6.1 ORACLE Modeling

Web development and DBA group shall determine ORACLE modeling design. Table modeling and relationships were developed during the Proof of Concept Phase 0, however additional objects/tables were added.

2.6.2 ORACLE Sample Data

Sample data can be retrieved from the MS ACCESS Proof of Concept database. Web Development and the DBA shall determine what database to import and export the sample data for CMS.

2.6.2.1 CMS Data

Creating and populating the ORACLE tables can be imported from Data Warehouse-ORACLE database, SAP-Envision, Legacy & CMIS-AMDOCs, and CABs.



Microsoft Access - [NEW CAMPAIGN]

File Edit View Insert Format Records Tools Window Help

CampaignId: (AutoNumber) Description

Campaign Name

Projected Sales: \$0.00

Actual Sales: \$0.00

Projected Cost: \$0.00

Actual Cost: \$0.00

Start Date

End Date

Approved:

Target Audience Num: 0

Fulfillment Method

Status

BusResFlag

Preview List

Campaign Owner Channel Target Segment Target Product Target Media Target Market

Campaign Mgr

CampaignId	ProdMgrId

Record: 1 of 1

Form View

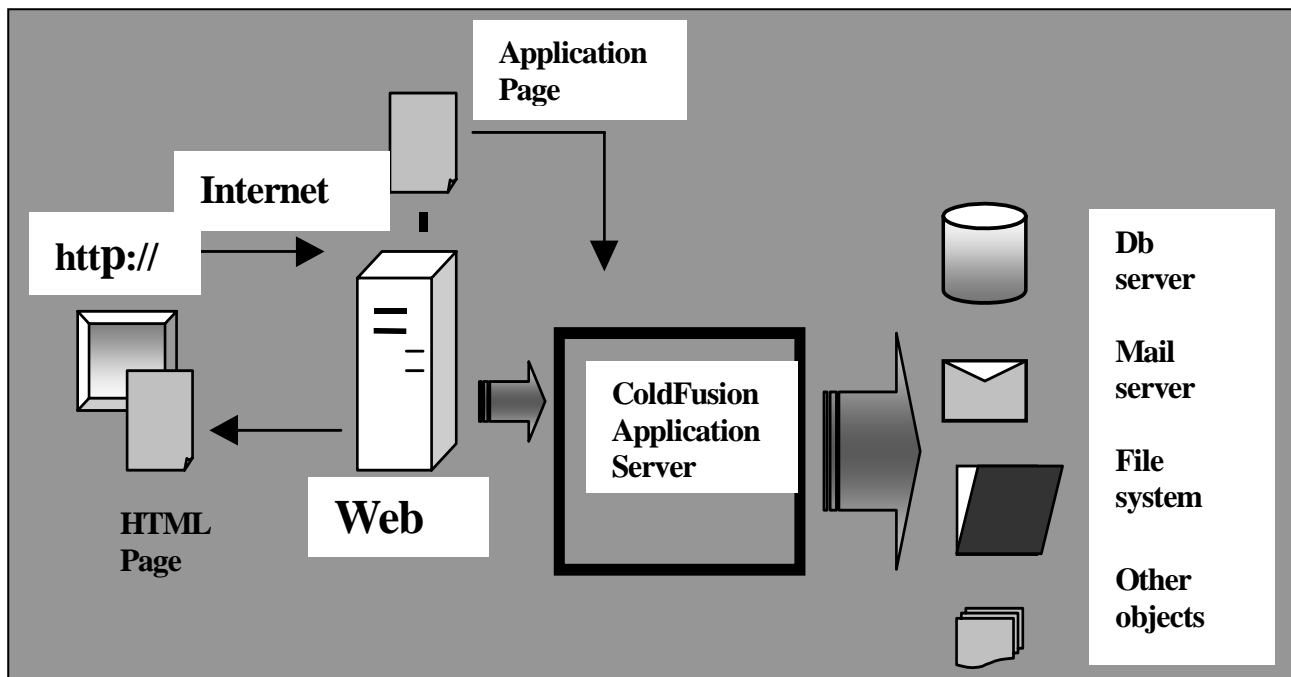
Figure 6 Typical Form

3.0 Network Server Requirements

The Network Server Group, Web Development Group, and Database Development Group shall determine hardware and system requirements, and make recommendations.

3.1 ColdFusion Configuration

Network Server Group shall determine the best server scenarios for ColdFusion Application Server.



4.0 Administration and Development

Web development assumes project leadership for setting up and managing the ColdFusion and ORACLE development environment that shall consist of:

Demonstration, feasibility, testing and validation, evaluation, identification, construction, design, deployment, operations and support determination and recommendation, Web and database development and recommendations to the CMS Project Team regarding the Campaign Management System architecture.

4.1 Web Administration and Development

The work of Web development may include but not limited to server and system requirements, along with ColdFusion publishing database content, reusing template, building forms, building search interfaces, building drill-down interfaces, inserting new data, updating data, and securing the Web pages.

4.1.1 Database Administration and Development

The work may include but not limited to contributing to the effective operation of all systems that run with ORACLE. ORACLE database development, installation and upgrades of ORACLE Server, performance tuning, backup and recovery strategies, allocation of resources to support ORACLE: memory, disk space, and user account management, consultation with Web Development and Network Server Groups, and developers.



5.0 "Phase A"- Statement of Work (SOW)

The CMS Statement of Work Phases A-C and CMS development Phases I-IV shall consist of evaluating, identifying, constructing and designing a fully interactive, database driven web application tool called Campaign Management System (CMS). The CMS Tool design and development shall be used for Corporate and Regional data entry supporting campaigns not events. Exceptions for relational development shall be considered in the CMS development.

CMS shall provide Intranet access in an HTML format and shall retrieve data from database(s) that shall: Provide e-mail notification of a approved campaign launch and intervals of 15, 5 and 0 days after approval; on-line reporting, scheduling in the form of a calendar and Gantt Chart design (Defined in Phase A); on-line price adjustment plan (Defined in Phase B) and a campaign rule-base reasoning capability (Defined in Phase C) and data connectivity to billing and accounting database(s) for "Phases A, B and C- Statements of Work.

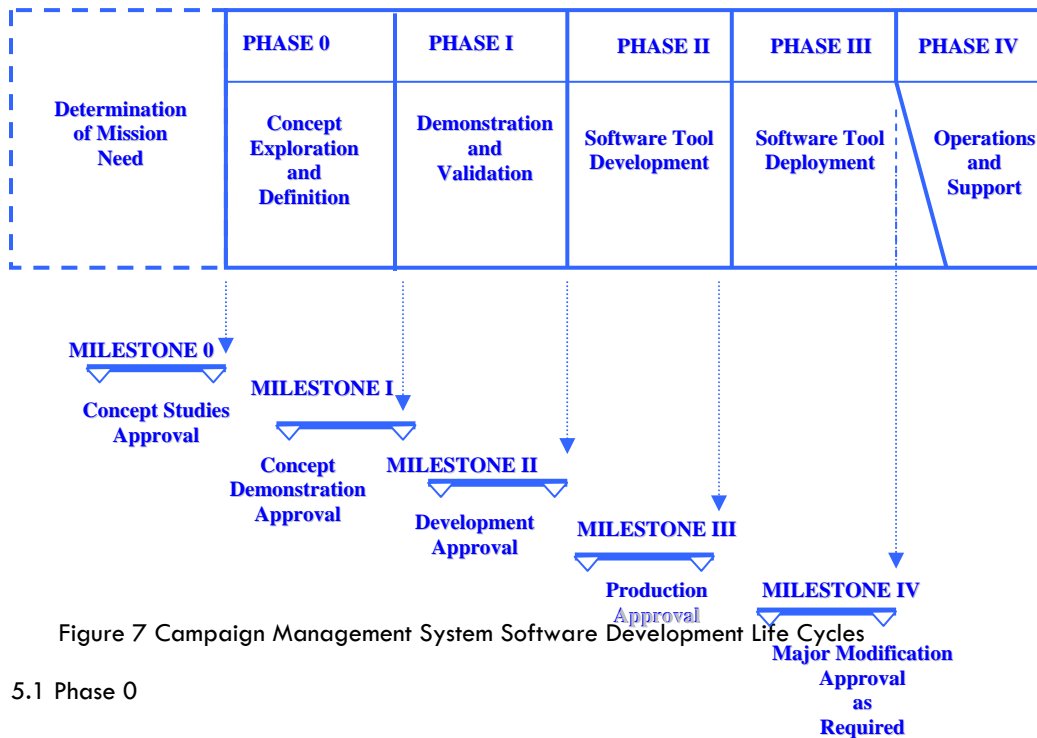


Figure 7 Campaign Management System Software Development Life Cycles

5.1 Phase 0

5.1.1 Concept Exploration and Definition

The business requirements, conceptual design, proof of concept and risk analysis were considered during the concept exploration and definition phase. Exceptions were determined and table relationships validated. [See Exhibit 1 titled Champaign PT.mdb Relationships]

5.2 Phase I

5.2.1 Concept Exploration and Definition

Web Development and DBA shall determine the Web browser, Web server, ColdFusion Application Server, ColdFusion Studio, ORACLE database and connectivity software.



Web Development and DBA shall determine the integration of CMS Tool design to support Corporate and Regional usage.

Web Development and DBA shall determine ColdFusion Web development work that may include but not limited to:

- Testing the development environment and process; creating a page using Studio;
- Set local variable; output variables to a page; format data using functions; comment your code;
- Create an ODBC data source (ORACLE); create a home page using Studio; query database tables from ORACLE;
- Display query data on a page; create a ColdFusion map;
- Call custom tags from the application;
- Create HTML form; code conditioning; detect form variables;
- Populate dynamically; query form data; use URL parameters to pass data from one page to another and drill down page;
- Create ColdFusion insert form; implement server-side validation;
- Build an update form and an update action page;
- Perform server and client-side validation, update a database using SQL,
- And securing the Web pages.

Web Development and DBA shall determine ORACLE table relationship design and validation.

Web Development and DBA shall determine ORACLE form design, modeling, sample data retrieval and Web page design.

Web Development and DBA shall determine feasibility and validation regarding integration of CBC/Web Solution's development and VTA on-line Wireless development and determine what is in within the CMS design scope or out of scope. Recommendation regarding the feasibility and validation should be presented to the CMS Project Team. [Web Solutions is using ColdFusion and mySQL stored on Jeeves for CBC.]

[Note: Web sites to view CBC are <http://www.marketing.ILEC.net> and VTA <http://www.vta.com/ILEC/index.htm>.]

Web Development and DBA shall determine feasibility and validation regarding populating accounting and billing data from SAP-ENVISION, CABs and AMDOCs conversion regarding connectivity, accessibility and determining manual data entry versus automating to each database for CMS report generation.

Web Development shall present and make CMS development recommendations to the CMS Project Management Team consistent with Phase and Milestones I-IV of the Campaign Management System Life Cycle approval process.

Web Development and DBA shall determine feasibility and validation regarding determining % completion status of each campaign by linking to % completion of individual media type projects to each campaign total % completion. Media design type start date, end date and % completion shall be a manual data entry.

Web Development and DBA shall determine feasibility and validation regarding the on-line reporting and determine pull down designs, and manual data entry recommendations defined by the functional requirements.



Web Development and DBA shall determine feasibility and validation and design regarding the on-line scheduler and calendar and the usage and integration of CBC/Web Solution and VTA development designs.

Web Development, DBA and Network Server Groups shall determine server and software requirements and make recommendations to the CMS Project Management.

Web Development and DBA shall determine feasibility and validation and method to deliver the CMS deliverables in a timely matter.

Web Development and DBA shall determine feasibility and validation and design for the e-mail notification system, pass words, updating new e-mail addresses, linking to the existing mail server and synchronizing with approval status from the Marketing Committee, 15 day release notification, 5 day release notification, and 0 day notification.

Web Development and DBA shall determine feasibility and validation, design, pull downs, sample data and querying on-line campaign reports, on-line promo scheduler and on-line calendar during Phase A.

Web Development and DBA shall determine feasibility and validation and design of ORACLE object/tables and any exceptions regarding ORACLE database hierarchy.

Web Development and DBA shall determine feasibility and validation and code design for querying ORACLE objects/table data exceptions that were not defined during Phase 0.

Web Development and DBA shall determine feasibility and validation and responsibility for importing the actual data for the Final Build and deployment of the Campaign Management System tool.

5.2.2 Demonstration and Validation

The work shall include but not limited to identifying system requirements, designing a logical design, and constructing and evaluating the *first build*.

Demonstration and validation shall consist of evaluating, identifying, designing and constructing a *first build* design for reporting, tracking and notification, and displaying of data, audio and video files on the Web in HTML format.

5.2.2.1 First Build Deliverables

The *first build* deliverables shall include but not limited to identifying system requirements, design a logical system design, constructing *first build*, and evaluation of the *first build* for a campaign report generation, campaign scheduler and a campaign calendar generated from a relational database, campaign e-mail notification and a campaign promo sample library and:

- System requirements
- Construct *first build*
- Resources required
- Cost and time estimate
- Risks for the project
- Schedule
- Goals for *first build*
- Activities and tasks
- Logical system design



- System testing
- Evaluation and recommendations and
- Presentation for management approval-Milestone II.

Software development shall consist of evaluating, identifying, designing and constructing a *second build* design for campaign reporting, tracking and notification, and displaying of data, audio and video files on the Web in HTML format.

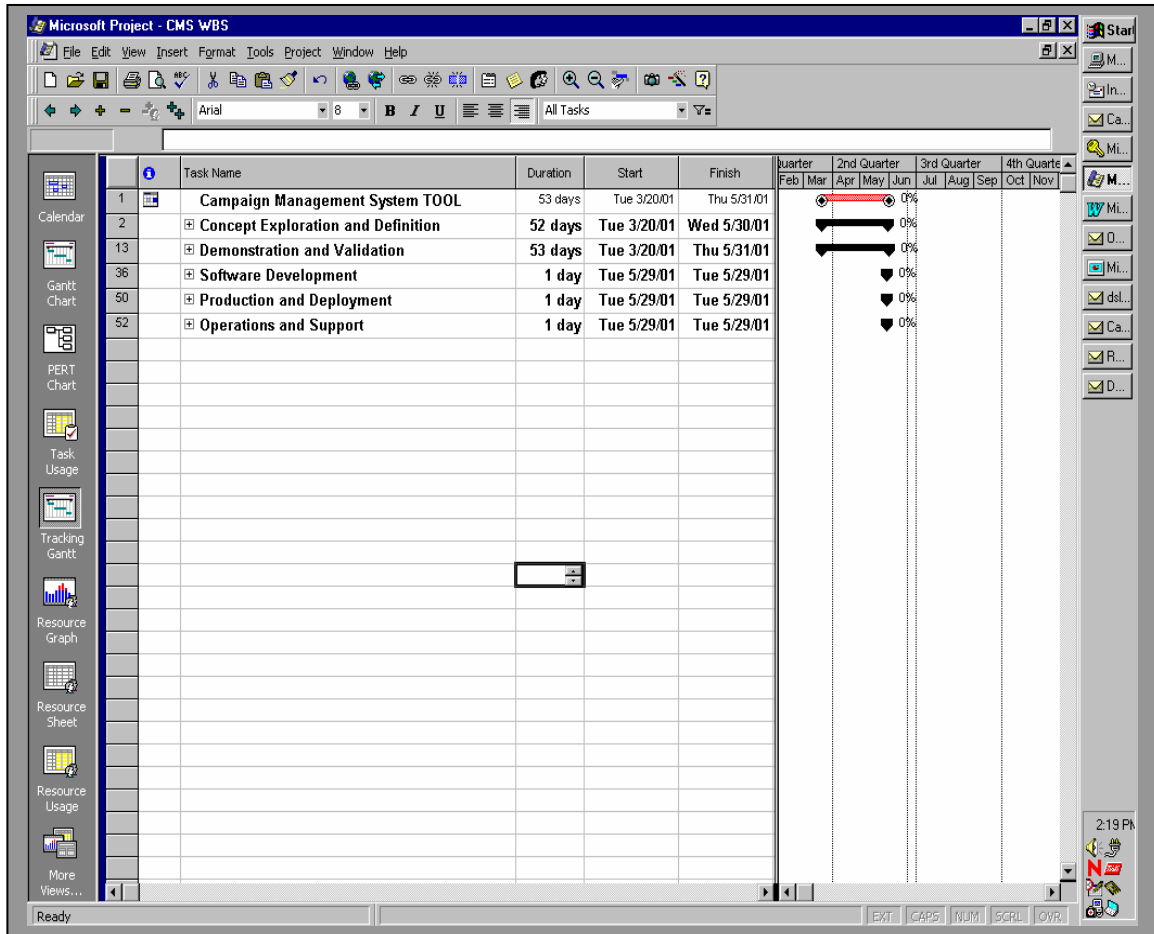


Figure 9 Typical Project Task Definition and Gantt Chart

5.2.3 Software Development

The work shall include but not limited to identifying subsystem requirements, design physical design, construct *second build*, and evaluate physical design.



5.2.3.1 Second Build Deliverables

The *second build* deliverables shall include a physical design of a campaign report, campaign scheduler and a campaign calendar generated from a relational database, campaign e-mail notification and a campaign promo sample library and:

- Subsystem requirements
- Activities and tasks
- Schedule
- Goals for *second build*
- Physical design
- System test plans
- Evaluate *second build* and make recommendations and
- Presentation for Management Approval-Milestone III

5.3.4 Software Deployment

The work shall include but not limited to identifying unit requirements, design final design, construct the *final build*, test and deploy *final build*.

Software deployment shall consist of evaluating, identifying, designing and constructing a *final build* design for campaign reporting, tracking and notification, and displaying of campaign data, audio and video files on the Web in HTML format.

5.2.4.1 Final Build

The *final build* deliverables shall include a approved and constructed final design and build of a campaign report, campaign scheduler and a campaign calendar generated from a relational database, campaign e-mail notification and a campaign promo sample library and:

- Completed unit requirements,
- *Final design*
- Activities and tasks
- Schedule
- Construct and approved *final build*
- Perform unit, subsystem, system and acceptance tests.
- Determine Operations and Production supports.
- Presentation for Management Approval-Milestone IV

5.3.5 Operations and Support

Web Development and DBA shall determine operations and support requirements of the CMS deliverables after release and approval of the *final build*.

5.3 “Phase B” Statement of Work (SOW)

5.3.1 Concept Exploration and Definition

Web Development and DBA shall determine feasibility and validation and “Phase A” CMS Final Build and deployment with the development for campaign metrics and cost information accounting and billing databases. [CABs, SAP-ENVISION and Legacy/CMIS-AMDOCS.]

5.3.2 Demonstration and Validation



The work shall include but not limited to integrating and identifying system requirements, designing a logical design, and constructing and evaluating the *first build* from the “Phase A” Final Build.

Demonstration and validation shall consist of evaluating, identifying, designing and constructing a *first build* design for campaign metrics and cost information from accounting and billing databases.

5.3.2.1 First Build Deliverables

The *first build* deliverables shall include but not limited to identifying system requirements, design a logical system design, constructing *first build*, and evaluation of the *first build* of the “Phase A” Final Build and design.

- System requirements
- Construct *first build*
- Resources required
- Cost and time estimate
- Risks for the project
- Schedule
- Goals for *first build*
- Activities and tasks
- Logical system design
- System testing
- Evaluation and recommendations and
- Presentation for management approval-Milestone II.

5.3.3 Software Development

The work shall include but not limited to identifying subsystem requirements, design physical design, construct *second build*, and evaluate physical design for the integration of Phase I Final design to incorporate campaign metrics and cost information from accounting and billing databases.

Software development shall consist of evaluating, identifying, designing and constructing a *second build* design for “Phase A” Final Build.

5.3.3.1 Second Build Deliverables

The *second build* deliverables shall include a physical design of the integration of “Phase A” Final Build to incorporate campaign metrics and cost information functionality from billing and accounting databases and:

- Subsystem requirements
- Activities and tasks
- Schedule
- Goals for *second build*
- Physical design
- System test plans
- Evaluate *second build* and make recommendations and
- Presentation for Management Approval-Milestone III

5.3.4 Software Deployment



The work shall include but not limited to identifying unit requirements, design final design, construct the *final build*, test and deploy *final build*.

Software deployment shall consist of evaluating, identifying, designing and constructing a *final build* design for integration “Phase A” Final Build with campaign metric and cost functionality from accounting and billing databases.

5.3.4.1 Final Build Deliverables

The *final build* deliverables shall include a approved constructed final design and build of a integrated “Phase A and B” CMS with campaign metric and cost functionality from accounting and billing databases and:

- Completed unit requirements,
- *Final design*
- Activities and tasks
- Schedule
- Construct and approved *final build*
- Perform unit, subsystem, system and acceptance tests.
- Determine Operations and Production supports.
- Presentation for Management Approval-Milestone IV

5.3.5 Operations and Support

Web Development and DBA shall determine operations and support requirements of the Phase B CMS deliverables after release and approval of the *final build*.

5.4 “Phase C” Statement of Work (SOW)

5.4.1 Concept Exploration and Definition

Web Development and CMS Project Manager shall investigate the feasibility and validation of integrating and incorporating rule-base reasoning modules with CMS “Phase B” Final Build.

5.4.2 Demonstration and Validation

The work shall include but not limited to integrating and identifying system requirements, designing a logical design, and constructing and evaluating the *first build* from the “Phase B” Final Build.

Demonstration and validation shall consist of evaluating, identifying, designing and constructing a *first build* design for incorporating rule-base reasoning within CMS “Phase B.”

5.4.2.1 First Build Deliverables

The *first build* deliverables shall include but not limited to identifying system requirements, design a logical system design, constructing *first build*, and evaluation of the *first build* for incorporating rule-base reasoning within “Phase B” Final Build

- System requirements
- Construct *first build*
- Resources required



- Cost and time estimate
- Risks for the project
- Schedule
- Goals for *first build*
- Activities and tasks
- Logical system design
- System testing
- Evaluation and recommendations and
- Presentation for management approval-Milestone II.

5.4.3 Software Development

The work shall include but not limited to identifying subsystem requirements, design physical design, construct *second build*, and evaluate physical design for the integration of “Phase B” Final design for incorporating rule –base reasoning modules design.

Software development shall consist of evaluating, identifying, designing and constructing a *second build* design from “Phase B” Final Build.

5.4.3.1 Second Build Deliverables

The *second build* deliverables shall include a physical design of the integration of “Phase B” Final Build to incorporate rule-base reasoning module design.

- Subsystem requirements
- Activities and tasks
- Schedule
- Goals for *second build*
- Physical design
- System test plans
- Evaluate *second build* and make recommendations and
- Presentation for Management Approval-Milestone III

5.4.4 Software Deployment

The work shall include but not limited to identifying unit requirements, design final design, construct the *final build*, test and deploy *final build*.

Software deployment shall consist of evaluating, identifying, designing and constructing a *final build* design for integration “Phase B” Final Build with rule base reasoning modules.

5.4.4.1 Final Build Deliverables

The *final build* deliverables shall include a approved constructed final design and build of a CMS with rule base reasoning functionality and:

- Completed unit requirements,
- *Final design*
- Activities and tasks
- Schedule
- Construct and approved *final build*
- Perform unit, subsystem, system and acceptance tests.
- Determine Operations and Production supports.
- Presentation for Management Approval-Milestone IV



5.4.5 Operations and Support

Web Development and DBA shall determine operations and support requirements of the “Phase C” CMS deliverables after release and approval of the *final build*.