Bharti Airtel Unified GIS

Feb - 2012



Agenda

UGIS Solution Overview

Solution Architecture

UGIS feasibility & Functionality

Business Benefits

What were the Business Driver?



Reduce feasibility cost and Turn around time Reduce resolution time for customer complaint

Financial

Integrate Broadband, Carrier & Mobility network Management Drive new Revenue streams

Optimizing Mobility coverage with minimal cost

Duplication or lost opportunity for sharing resources

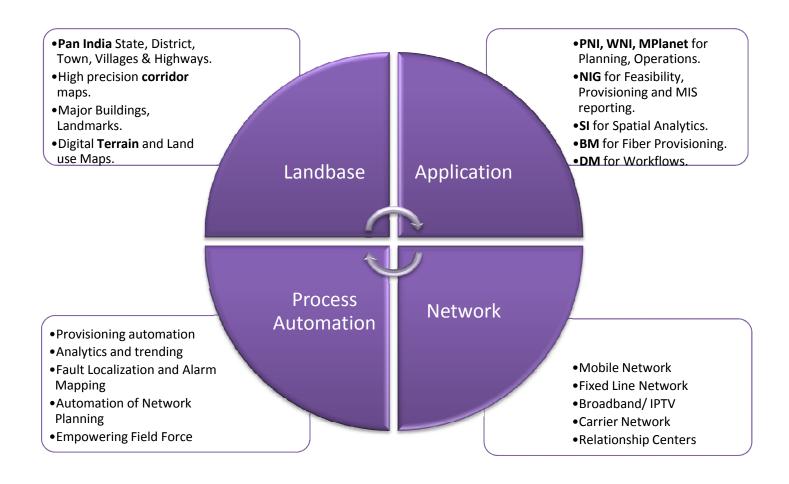
Process

Unable to Realize Key Prospects

Low visibility of spatially spread demographics and Network

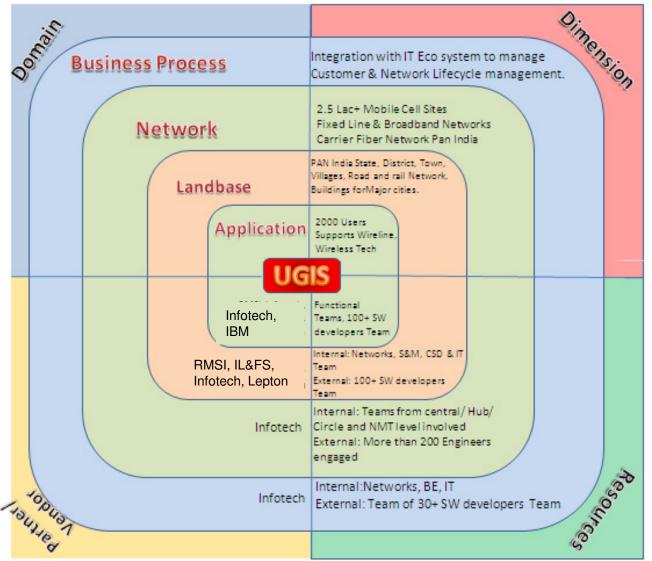


What has been deployed





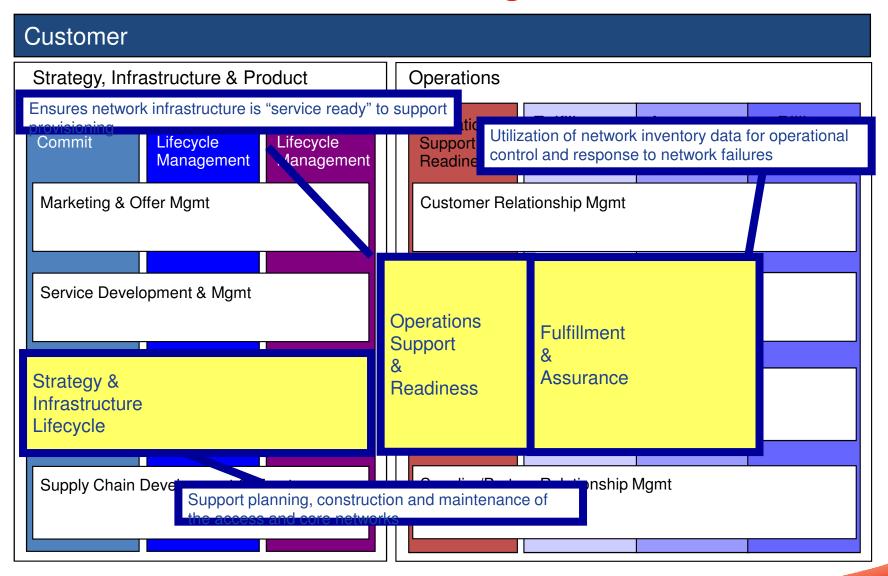
Project Execution Strategy







UGIS eTOM Positioning





Landbase

Access Network

L5 Landbase for 90 Cities

TOT SO CILIES

High Positional Inaccuracy

Non Standardized Specifications

Transport Network

No GIS was Available

Available

ABD's Used for Inventory

IIIVCIIIOI)

Omni-docs System managed ABDs

Mobile Network

MPetals for GIS

Inaccurate Positional Info

Positional Info

Incorrect Demographics Introduction of Five LB Levels

UGIS Landbase One Airtel Network and LB

Introduction of Landbase Policy

POST UGIS

PRE UGIS



Landbase – Introduction to Five Levels

 Roads – All India Mobile Planning & • Villages and 2001 Demographics - All India **Inventory** Clutter and DTM at 25/50 Meter Resolution Fibre Feasibility Corridor Maps for 1,00,00 KMs •All India Fiber Planning Complete ROW Information TNG Fiber Inventory High Positional Accuracy High Rise Building • 3/11 Maps for City Planning • Major Buildings and Roads - Complete City **Coverage Planning** DTM and Clutter at 5 Meter Resolution •PAI for L5 3/11 Maps for High Level Wireline Planning Wireline Planning **High Positional Accuracy** ANG Inventory Residential/Industrial/Commercial Classifications Fiber Inventory Complete ROW

Individual Buildings

Maps Available for Core City Areas

ANG Inventory

Wireline Planning



Application Architecture



UGIS Architecture









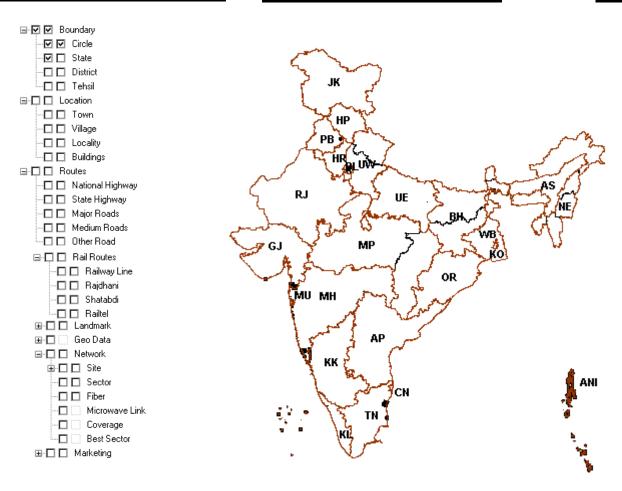
Application
Features &
Functionality

UGIS GUI Feature

Standardized Layer Control

UGIS Pan India View

Standardized Legend







Unified View

Latitude

Copper

28 4951 Not Feasible

28.6443 Not Feasible

28.6512 Not Feasible

31.6469 Not Feasible

31.6469 Not Feasible

28.6049 Not Feasible

24.2278 Not Feasible

26.2442 Not Feasible

34,1919 Not Feasible

19.1021 Not Feasible

23.0031 Not Feasible

23.743 Not Feasible

23.743 Not Feasible

13.069 Feasible

28.5984 Feasible

28.643 Feasible

28.6587 Feasible

28.5492 Feasible

Longitude

77.1895

77.2032

77.274

77.2773

77.231

77.2235

77.6188

77.6188

77.3212

77.3395

77.6728

84.1624

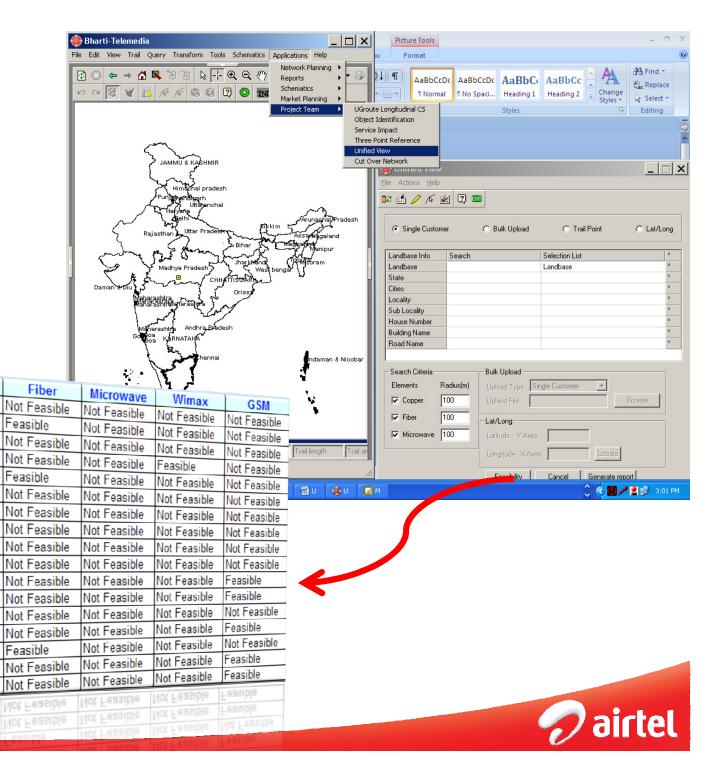
77.0731

72.8927

80.1487

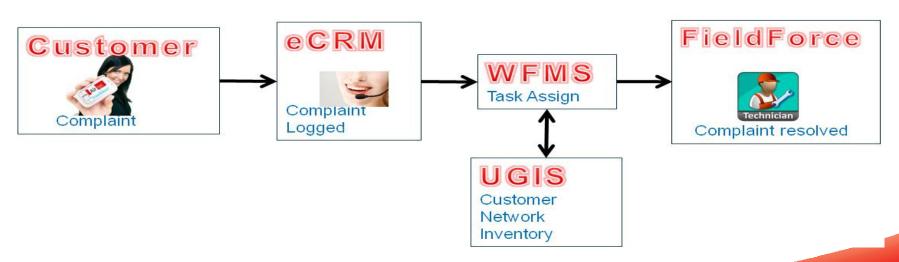
72,1165

68,773



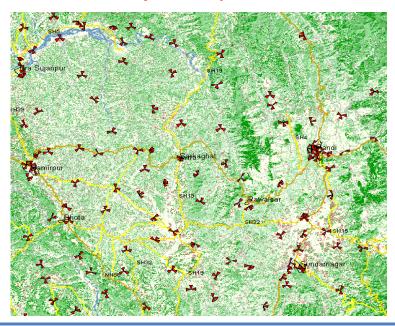
Empowerment through Automation



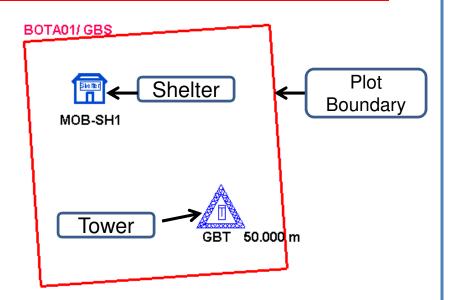




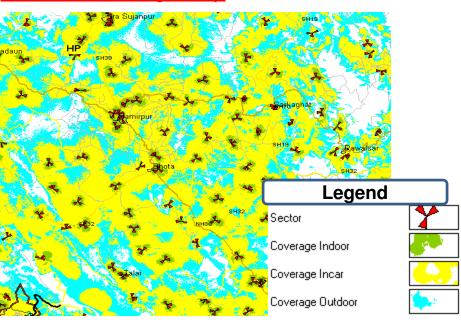
Cell/Site Inventory on Map



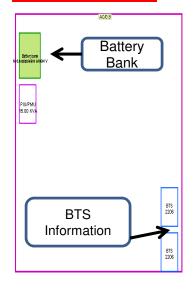
Plot View with Shelter & Tower Information



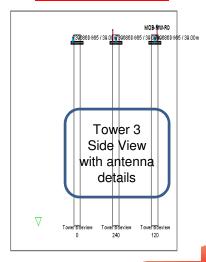
Cell/Site Coverage Map



Shelter Internal

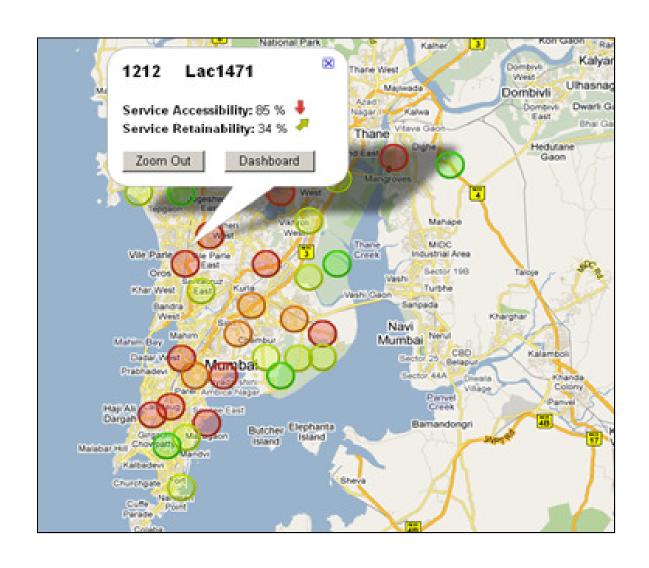


Tower Internal





Customer Experience Management View







Business Benefits



360° view of Network

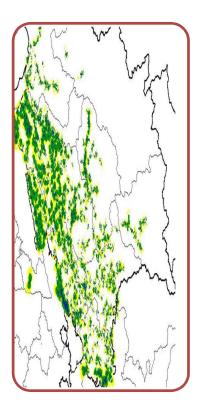


Benefits

- Infrastructure Sharing Opportunity
- Integrated Market Planning
- Leverage on Synergy Opportunities
- Visibility of Pan India Network Deployment and Rollout



Wireless Market and Network Planning

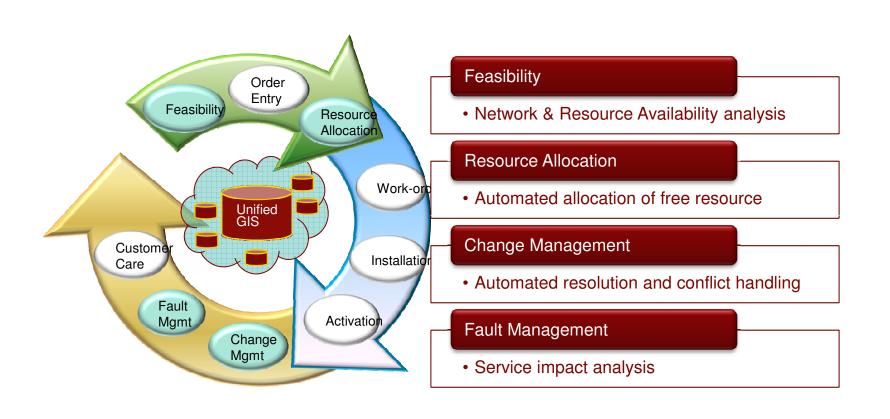


Benefits

- Optimize Mobility Coverage
- Accurate Coverage Prediction with 20 new models
- Identification of untapped potential and revenue leakages
- Retailer/distribution planning by spatially analyzing competitor market share
- Launching new marketing schemes by analyzing performance reports

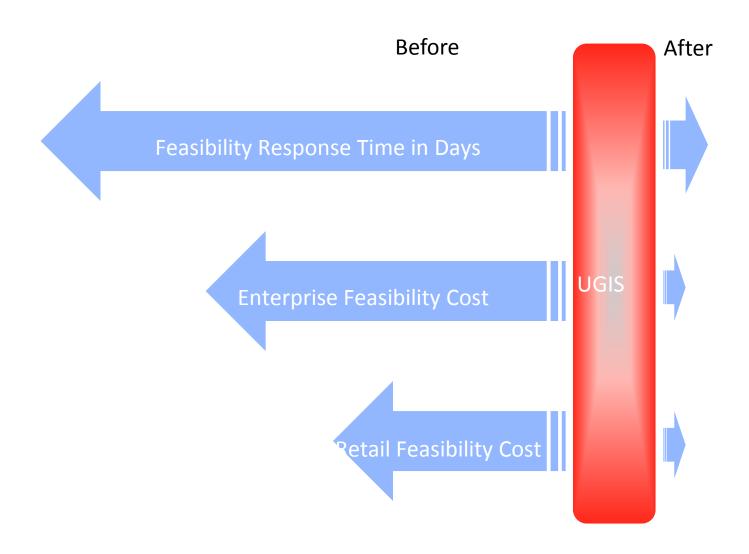


Customer Lifecycle Management





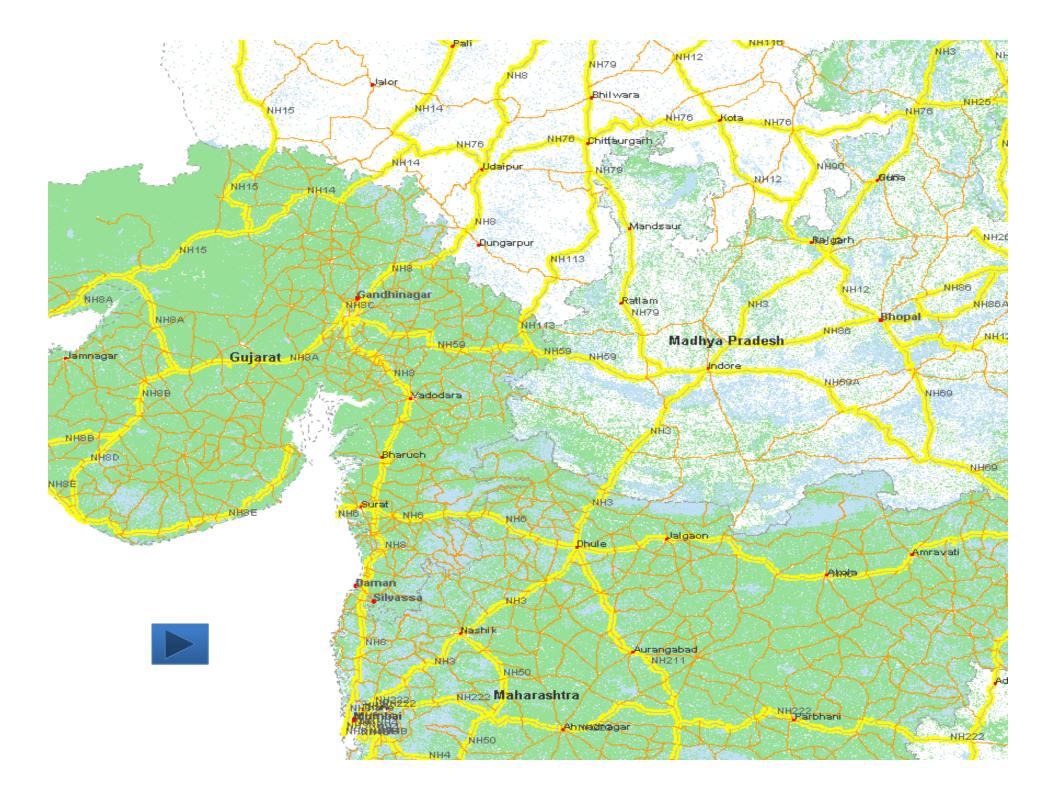
Customer Feasibility



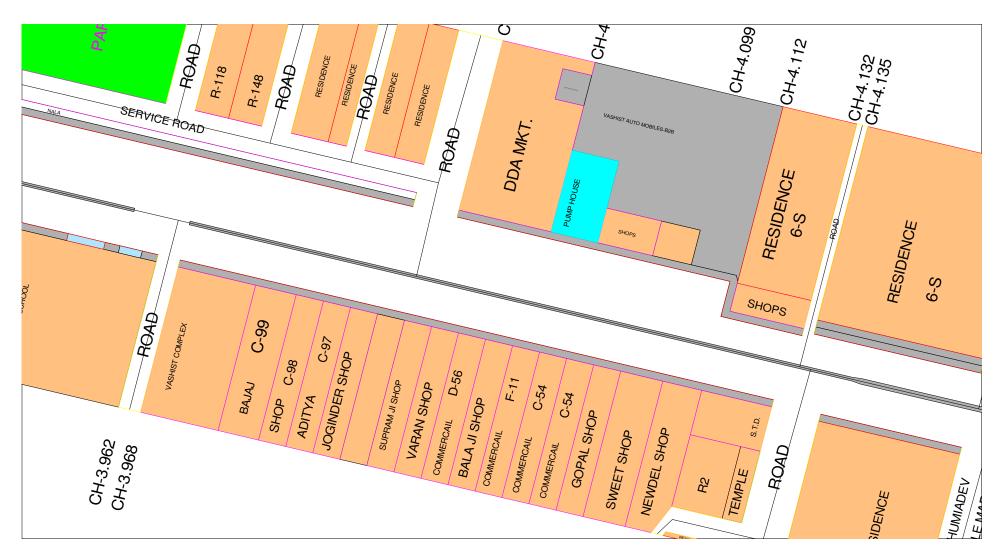


thank you



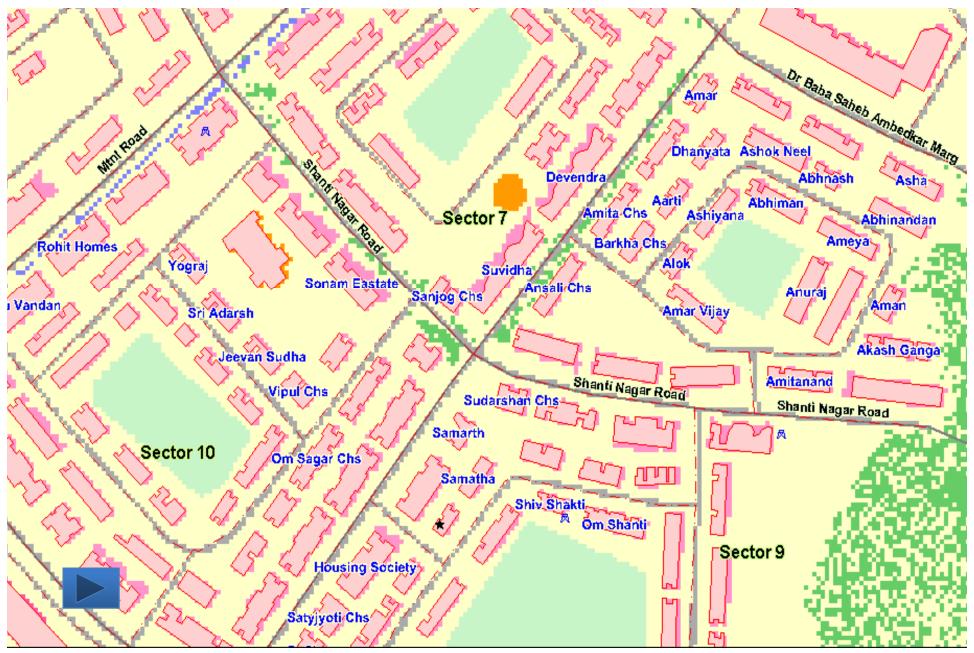


Level 2





Level 3



Level 5

