

Mobile Handset distribution Sales Automation Project

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Abstract:

ML Infomap and partners undertook a full-fledged automation project for a mobile handset distributor. It links various sales related activities at all levels of the Sales hierarchy to deliver quality insights for quick decision making. Traditionally, as a consequence of using semi-automated processes and multiple stand-alone systems, there was delayed visibility into sales operations and using analytics for decision making.

Our solution is a mobile based automation tool along with backend GIS platform using Arc GIS desktop and server 10.2. The automation solution covers the various stakeholders in the distribution channel – Field Sales Executive, Team Leaders, Company Sales Hierarchy & Distributors.

The Automation project is organized along three broad modules covering the sales processes:

The Last Mile Counter Control involves data collection of outlets along with GPS co-ordinates and outlet photo. Data collection is through a mobile handset pre-loaded with the application. The output of this module is in form of basic dashboards (Outlet database file, Productivity report etc.) as well as map-based reporting. This provides great visual depiction of the outlets covered by the sales team. Maps throw up white spaces in terms of areas not covered, thereby helping in increasing outlet penetration. Further, the counter information can be dynamically managed to locate target outlets and plan routes for the Field Sales Executive to reach the targeted outlets.

The Execution Planner helps in planning of which outlets will have particular SKUs of the company. It also provides support for Merchandising planning, Media planning & Distributor Coverage.

The Sales Order Tool is a mobile application pre-loaded on a mobile handset. It consists of pre-loaded route plan for the Field Sales Executive to perform their daily sales related tasks. Their performance can be tracked on the ground at various levels of Company management & Distributor. The tool comprises various sales functionalities like Order Booking, Collection, Delivery, Beat Planning, Schemes, Targets & Incentives etc.

Key outcomes on implementing the Automation Project includes,

- 1 Sales analysis is now based on data captured from actual transactions and
- 2 Location data helps decision making in a short time.

About the Author:



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Dr. Manosi Lahiri is the Founder of ML Infomap, New Delhi. Dr Lahiri holds an MSc degree from SOAS, University of London and PhD from the University of Delhi. She was trained in GIS in 1986. In 1993, she founded ML Infomap, a Geographic Information company. The company is an independent developer of India focused maps and content, undertakes research and develops enterprise mobile and server applications on multiple platforms. Her published books include *The Bihar GIS* (1993), *Here Be Yaks: Travels in Far West Tibet* (2006) and *Mapping India* (2012), a cartographic history of the country, covering five hundred years. She has contributed to *The Times History of the World in Maps* (2014).

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Introduction

Mobile handset distribution in India is a tough and challenging business. The distribution is characterized by

- large number of Stock Keeping Units (SKUs) available in the market
- high obsolescence rate of models
- high inventory carrying costs
- quick response time to cater to market need and
- Highly competitive landscape.

In such a scenario, the relevant information available to the management on real-time basis for decision-making becomes critical. However, current practices in company are not in position to deliver the required information in a quick and efficient manner to the management.

Challenges

Earlier practices prevalent in the companies are submerged in the following major challenges:

- **Manual or semi-automated processes:** Loss of sales force market time due to paper work, follow-ups & administrative issues
- **Delayed visibility into sales operations:** Inability to use sales data effectively at various touch points, thereby having an impact on business growth
- **Multiple stand-alone systems:** Lack of consolidated information on a timely basis from different touch points resulting in delayed actions
- **Using analytics for decision making:** Inability to identify what actions to take based on which information since large sets of information is available.

Sales Workflow Automation Project

Sales Workflow Automation Project is a full-fledged automation project linking various sales related activities at all levels of Sales hierarchy to deliver quality insights for quick decision making. The objectives of automation project are:

- improve quality of information gathered at various customer touch points to
- apply bespoke tools & techniques
- enhance operational effectiveness of all users involved and
- Seek superior knowledge & insights for management action

The workflow automation solution is a mobile based automation tool. Data collected directly on the mobile phone at the counter of the retail outlet is sent directly to the database server, interfaced with backend GIS platform using Arc GIS desktop and server 10.2.

The automation solution covers the various stakeholders in the distribution channel – Field Sales Executive, In-Store Demonstrators, Team Leaders, Company Sales hierarchy & Distributors. The underlying principles followed for successful implementation are:

- it should be beneficial to all the stakeholders involved
- should include easy to use automation tools
- should not disturb the current way of working significantly
- And aim for continuous improvement.

Organized by Modules

The following areas are broadly covered by the automation solution – Last Mile Counter Control, Execution Planner, Sales Order Tool & Distribution Diagnostics.

The Last Mile Counter Control involves data collection of outlets on relevant information fields along with GPS co-ordinates and outlet photo. The data collection happens through a mobile handset pre-loaded with mobile application.

The benefits of this activity are as follows:

- Outlet-wise data points captured by company's sales team ensures discipline of the sales team knowing the exact outlets
- Geo-location & Outlet photo captured enables unique and easy identification allowing visibility to the company
- Availability of competition products/ brands details at the outlet helps in aligning execution planner and thereby empowers focused sell-in, resulting in productive calls and reducing costs and risks
- Outlet database (with Geo-location & Outlet photo) becomes company's property.

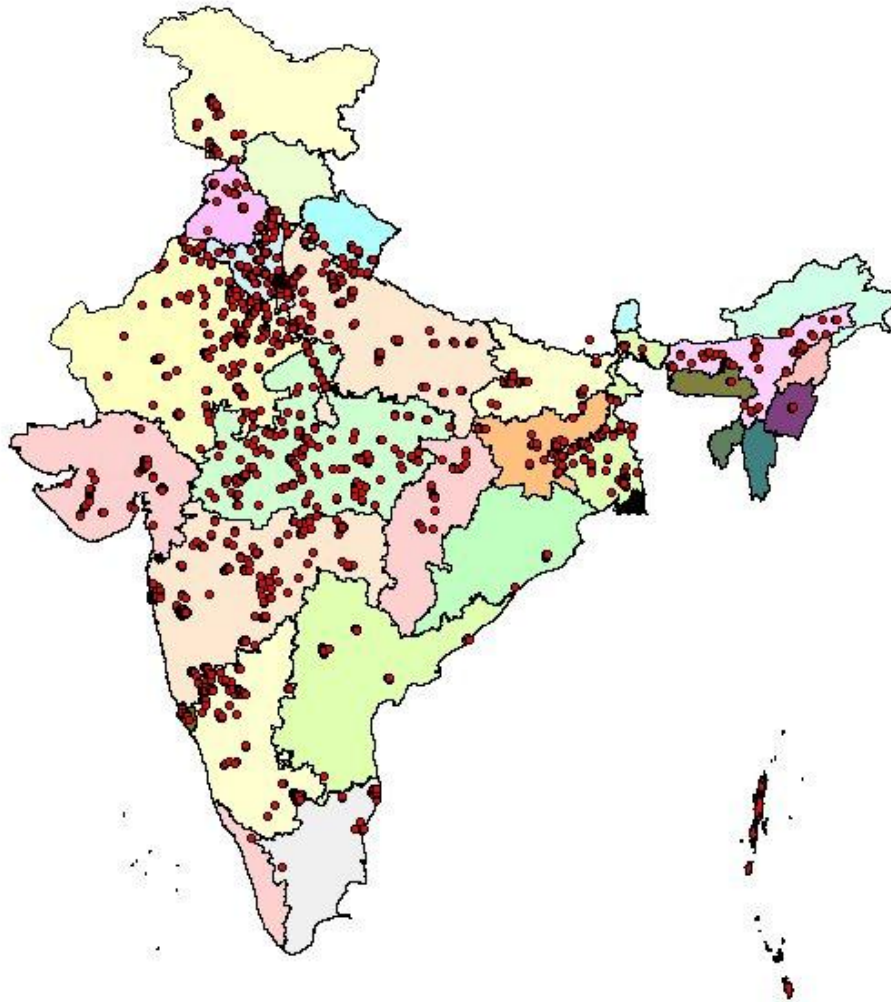


Fig: 1 – Distribution of Outlets across the country

The output of Last Mile Counter Control is in form of basic dashboards (Outlet database file, Productivity report etc.) as well as map-based reporting. The map-based reporting provides great visual depiction of the outlets covered by the sales team. The visual depiction throws up white spaces in terms of areas not covered, thereby helping in increasing outlet penetration. Also, the counter information can be dynamically managed to locate target outlets and plan routes for the Field Sales Executive to reach the targeted outlets.

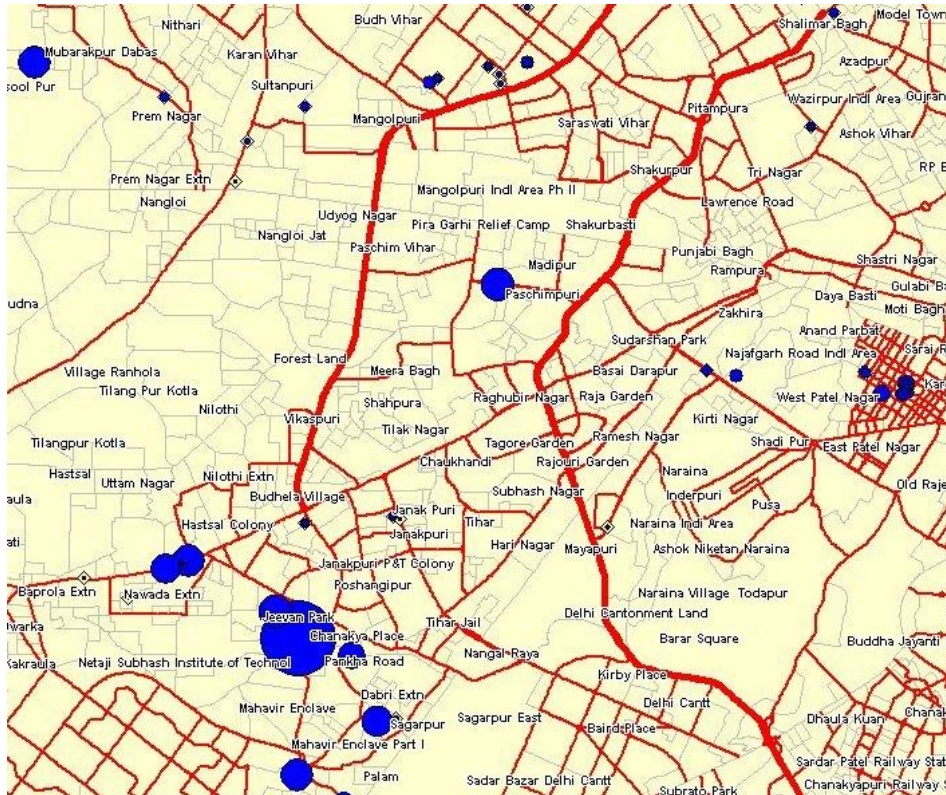


Fig: 2 – Volume of Sale by Retail Outlets

The Execution Planner helps in planning of which outlets will have particular SKUs of the company. It also provides support for merchandising planning, media planning & Distributor coverage.

The Sales Order Tool is a mobile application pre-loaded on a mobile handset. The tool consists of pre-loaded route plan for the Field Sales Executive to perform their daily sales related tasks. The performance of Field Sales Executive on the ground can be tracked at various levels of Company & Distributor. The tool comprises various sales functionalities like Order Booking, Collection, Delivery, Beat Planning, Schemes, and Targets & Incentives etc.

Various basic dashboards & visual tools for Sales Ordering process are provided to the sales team to help in the following manner:

- Manage Field Sales Executive work to visit outlets effectively & efficiently
- Ensure outlets that provide minimum revenues are covered and eliminate others to keep fixed costs under control
- Ensure contribution ratios are managed. Ensure right/ focus products are promoted by Field Sales Executive
- Visual tools on Map for analysis to study sales (SKU by Volume/ Value) by regions.

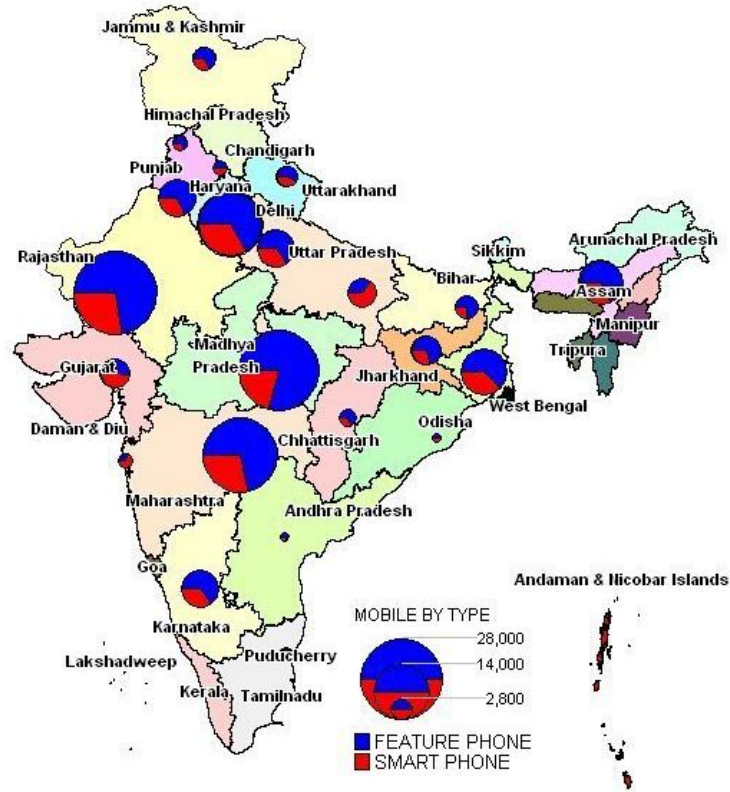


Fig: 3 – Proportion of sale of Feature Phones and Smart Phones

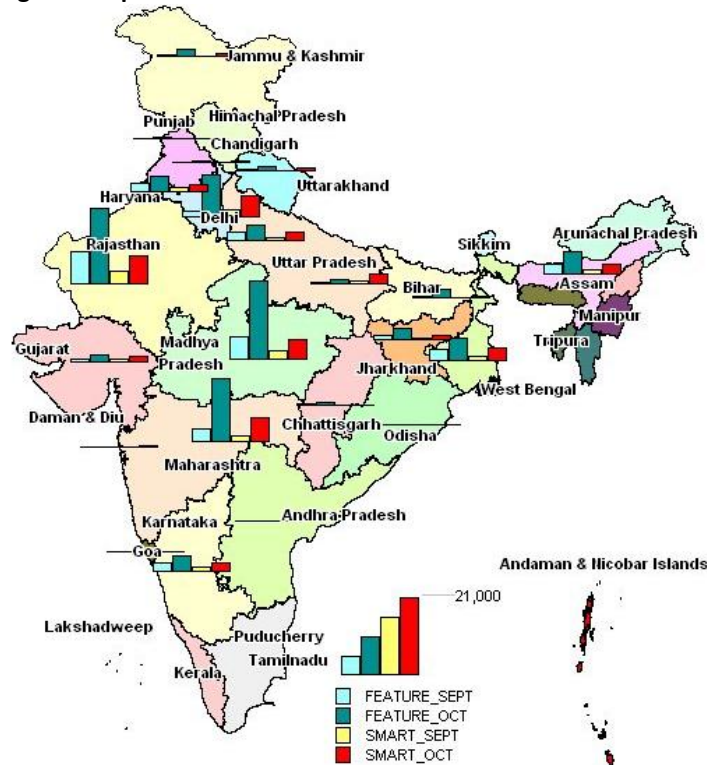


Fig: 4 – Monthly Monitoring of sale of Feature Phones and Smart Phones

Conclusion: Key Outcomes

The key outcomes of the Distribution Diagnostics for the company are as follows:

- Sales analysis emanating from the actual transaction captured on the Sales Order tool
- Determine key strategies relating to distribution, merchandising and local level intervention
- Determine key issues faced by the Sales team
- Data visualization helps decision making at very short cycle time.

In addition, several advanced analytics are carried in the Diagnostic phase. Advanced analysis tools & techniques like Affinity Analysis, Sales Forecasting, and Outlet Targeting through Pareto Principle, Sales Territory Alignment, Optimization & Mapping, and Local Area Potential Estimation etc. are used to meet the business requirement of superior knowledge and insights for decision making.

Many companies undertake different aspects of sales automation. However, this Sales Automation Project is rare in that it has interfaced all location based sales activities to a powerful backend GIS, in this case Arc GIS desktop and Server 10.2. This has added great value in terms of spatial analysis and visualization to the sales data and enabled the project to meet its objectives.