

TELECOM SOLUTIONS

PERSPECTIVE OF TELECOM

Wireless has become so commonplace today, that we can safely assume that in another decade or so it will only be wireless. That will in turn lead to a whole new set of challenges for the wireless carriers; such as a lack of currently available spectrum and making the necessary investments to upgrade to fourth generation (4G) of cellular wireless standards.

The other changes will be exponential growth of mobile applications like in the areas of health- care, automotive, retail, education, etc. This will drive the telecom operators to come up with service models at a higher end of the value chain such as data management, privacy, security, and cloud services etc.

A mobile device today is without a doubt most important device owned by us and definitely today's consumer will give up everything but the mobile device; so well integrated has it become in our daily lives. This unique quality of mobile devices, presents telecom operators with a stable market undisturbed by the economic ups and downs of other technology related sectors. This goes hand in hand with the opportunity it affords the telecom company to put as much utility as possible into the mobile device to forever ensure they stay indispensable to our daily lives.

MAPMYINDIA OFFERINGS

MapmyIndia has worked closely with many telecom operators and OEMs since 1995 and understands the needs of changing telecom market. We over the

Thus MapmyIndia is very deeply conversant with the needs of telecom companies and consequently has prepared itself with map, data repository, services portfolio, and solutions for telecom companies that help them further their business objectives as well as provide solutions/applications which are marketable.

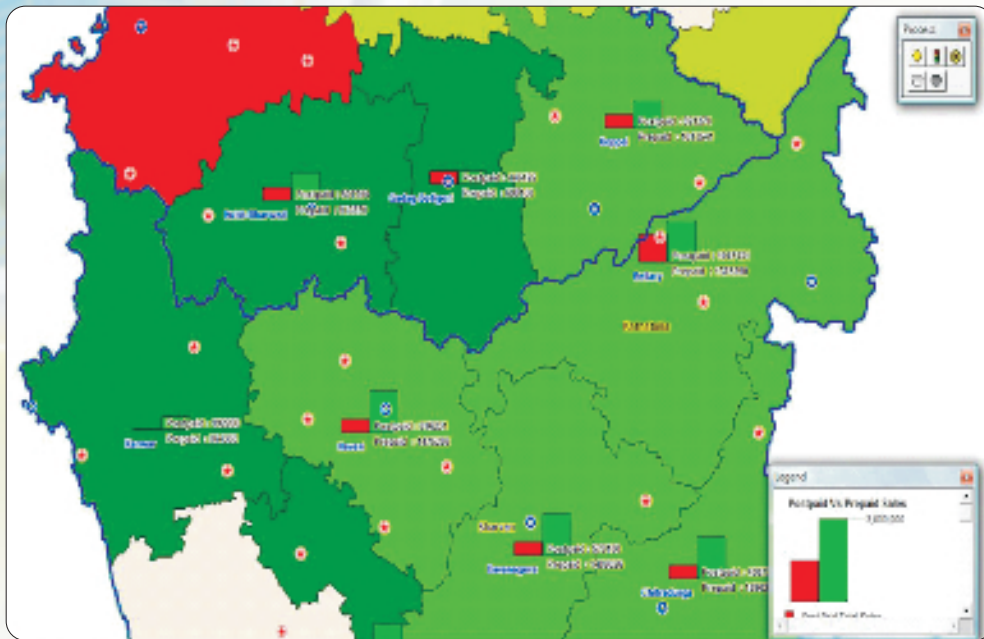
MapmyIndia has many products and services which can cater to telecom market needs which can be to understand the area topography for tower planning, to provide location based content to user, to provide value add mobile applications, to guide customer to the nearest point of sales etc. Following are the few services/solutions MapmyIndia can offer :

1. **Mapping services:** MapmyIndia provides mapping services both through ground survey, in house geo tagging and preparing thematic maps for business area analysis. Today, MapmyIndia services and map data are being used by major telecom operators and OEMs like Airtel, Aircel, TTSL, MTS, Samsung, Nokia and Virgin Mobile (Now, Tata Docomo). These services can be used to update current or create new land base database, city and customer profiling, market segmentation mapping all POS/POIs and updating map database
 - a. In House geo-coding services
 - b. Large Scale Mapping
 - c. Network Mapping
 - d. Asset Mapping
 - e. Land base survey
 - f. Retail Survey
 - g. Every Dealer Survey

POTENTIAL MAPPING: like prepaid vs. postpaid sales, or market potential vs. market share

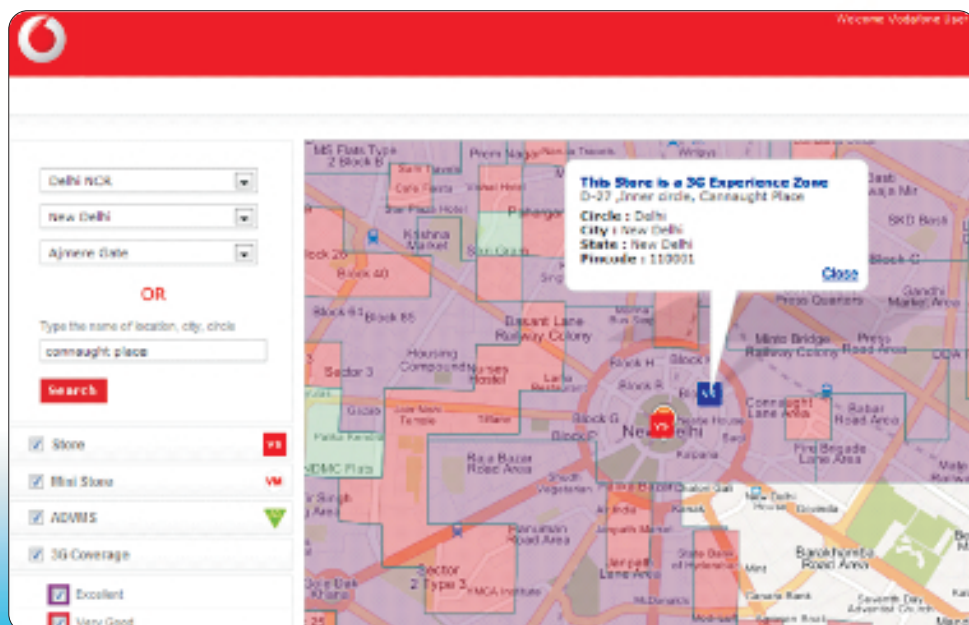
2. MapmyIndia Map Data: MapmyIndia maintains large repository of data which can be used by telecom sector. The key to keeping this map database the largest, most comprehensive dataset in the country is continuous and very short/frequent update cycles since map making is our core exercise and the map is monetized across every product and solution offered to our customers. Some of the key points:

- a. GIS National/State/City Level Data in .shp/.tab
- b. Pincode National/State Level Map and Data
- c. RF Planning State and City Map data
- d. Demographic Data in terms of household, population and income
- e. Raster data
- f. POI Data; MapmyIndia maintains point of interests for entire India in 160 Categories. Currently, our database is 6.21 Million points rich and counting.

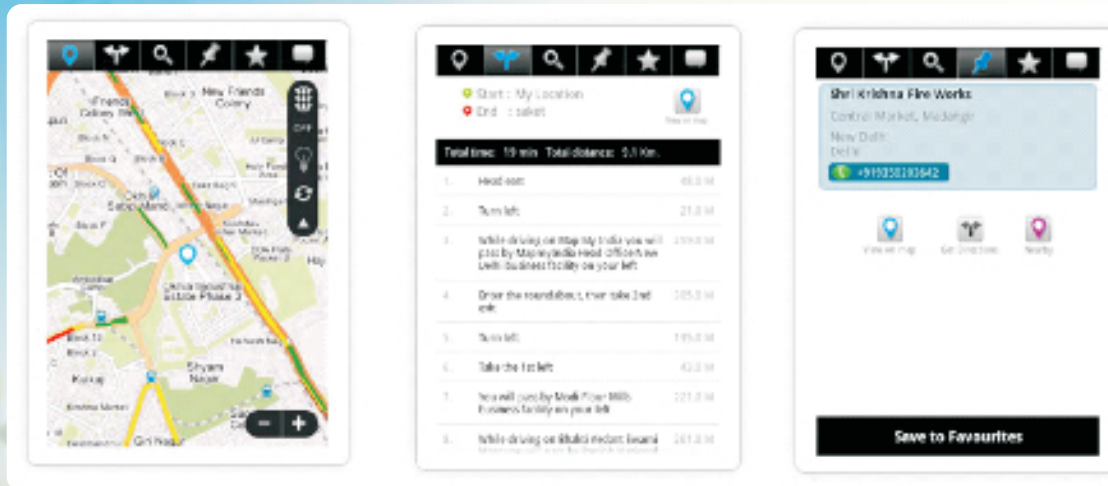


3. Web based Applications: MapmyIndia also provides web based applications which our both consumer centric and planning centric. MapmyIndia has worked with many companies in this vertical like Vodafone, Airtel, Virgin Mobile, Nokia, Samsung and many others. These applications are thoroughly customizable and can be tailored to business/customer needs.

- a. Store Locator
- b. Network Coverage Applications for Call centre usage (Vodafone #G Coverage)
- c. Web analytic apps for mapping POS, cell sites, distributors and customer base to understand the market penetration



4. **Location based Applications** : MapmyIndia also provides applications which are consumer centric and are aimed at helping current and potential customers discover point of sales of brands like lifestyle, shoppers stop, big bazaar, domino's, pizza hut around them through web, mobile and WAP channels .
- MapmyIndia Shownearby Application (Free Usage)
 - MapmyIndia Maps (Free Usage) (m.mapmyindia.com)
 - MapmyIndia Explore
 - MapmyIndia Traffic Portal (traffic.mapmyindia.com)

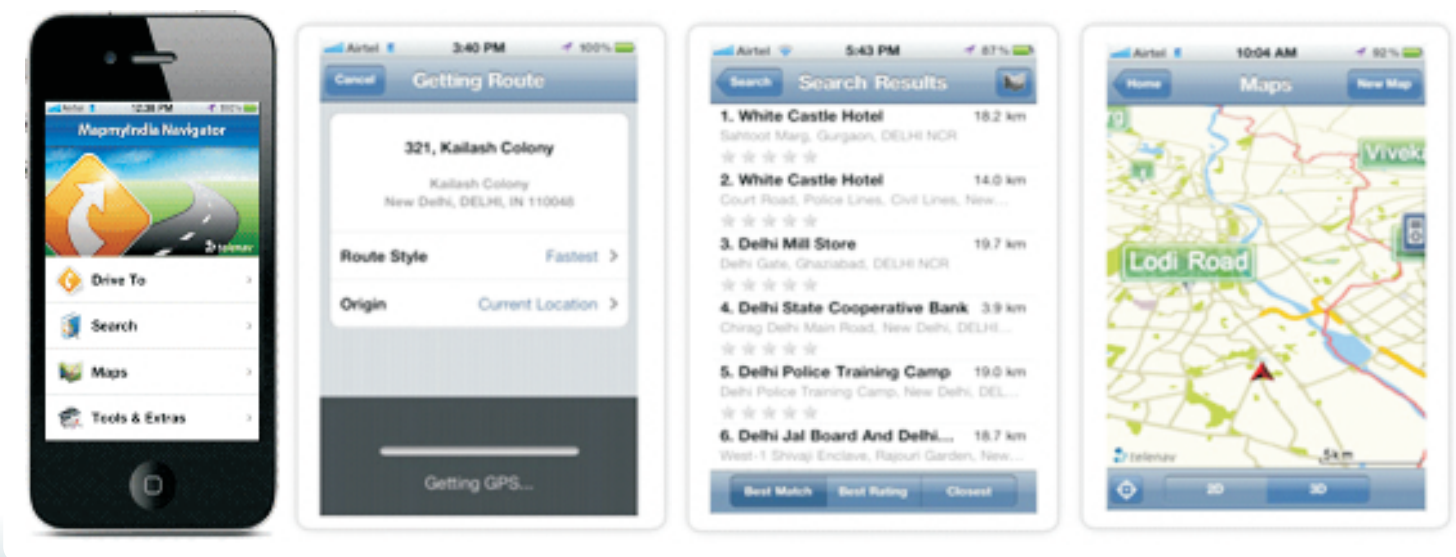


Mobile Maps UI

MapmyIndia has built many applications across platforms which help the end consumer in getting to nearby outlet/dealer/shop. These applications include the following:

- Web and mobile locators powered by MapmyIndia Maps with interactive driving directions
- Offer locators : User can discover location based offers and promotions for a brand let's call it X. MMI has developed location based applications for major brands in India to help them connect with their TG directly

5. **Navigation Applications:** MapmyIndia using its navigation data and software has developed award winning applications like Sygic – MapmyIndia Navigator and MapmyIndia Telenav across source platform which can be provided as value add application for operators as well as OEMs for its customers.



Server based navigation: Ready, set, go! No need for a large one time download. Just get a small client app and start navigating in seconds.

Automatic update of map and places data: No need to remember to download map updates. The maps are updated automatically on the server, whenever MapmyIndia releases a map update for this app.

Uninterrupted navigation: While the application runs over the air, it's saves your entire route when you start navigating. That means, once you've generated the route, even if you lose network, it would continue giving you turn directions till you reach your destination.

Cost efficient: Experiencing navigation on your smartphone is much cheaper now!

Automatic re-routing: The application automatically generates a new route, in case you miss a turn.

Places of interest information: The application has millions of places listings to choose from – whether you want to go to a restaurant, ATM, hotel, hospital or any other place. You can just select and navigate to the destination chosen.

6. **Tracking Applications:** MapmyIndia also provides enterprise solutions using its tracking technology powered by MapmyIndia maps which can be device dedicated , app dedicated or sim dedicated (Use Case :Airtel Trace Mate)

The following salient features are:

- User friendly interface
- Billing, provisioning and customer care interface
- Subscriber profiling system and its database along with easy to manage GUI helping in managing all the permissions user wise/ application wise and various business rules etc and simultaneously will also have privacy protection facility.
- Support for various types of subscription services
- Support for MapmyIndia maps and map data along with different types of API's for Geocoding/ reverse geocoding/ Map zooming/ PAN etc.
- Feature to configure emergency requests/ priorities/ black lists/ white lists/ access rights for each application/ user. Interface for Emergency Services will also be provided
- Provision to identify Emergency Service Request from Network and processing for the same will be done on priority as compared to other application requests

Admin Module for managing the following:

1. Password management for system administration
2. Subscriber & Service Management through Web Interface
3. KPI Management
4. Privacy Management

Person Name	Total Time	Start Date	End Date
Employee2	02:27:07	19/12/2011 00:00	19/12/2011 23:59

Sno	Location	Date	Time	Time Spent
1	Near Bajpai Hotel, Charbag, Lucknow, Lucknow District, Uttar Pradesh, India	19/12/2011	00:12:07	01:16:02
2	Near Employment Exchange, Charbag, Lucknow, Lucknow District, Uttar Pradesh, India	19/12/2011	01:27:09	02:14:58
3	Near Bajpai Hotel, Charbag, Lucknow, Lucknow District, Uttar Pradesh, India	19/12/2011	01:42:07	02:45:00

MIS Location Reports

Live Location | Map | List View

Live Track with Address & Time Stamp