GIS for all

Democratization of benefits of GIS Technologies and Practices

Traditionally large scale industries like Utilities, Infrastructure and Government sectors etc have got large share of the GIS deployment.

Signs are emerging suggesting things are changing and more segments have needs for GIS.

Let's look at few examples….

An Emergency Service Provider…..

One of the challenges we face to launch services in a new state is availability of decent quality **base map data** which we can use to allocate and route the ambulances more efficiently and save precious times and more lives ………….

An e-commerce start-up……

I can optimize logistics costs if I can **determine accurate locations** of the customers from their addresses. I have to rely on "local knowledge" of the workforce to accomplish that thus limiting my flexibility in who I can hire…...

A mid size bank........

I want to embed a Branch/ATM locator in my website so my customers can see ATM locations on a map. But I don't know a **company** which can help in collecting the ATM locations as well as **implement the solution end-to-end.**

E-commerce, Emergency response, Services Industry etc represent new set of enterprises which'll need GIS technologies to succeed in delivering efficient services at lower cost
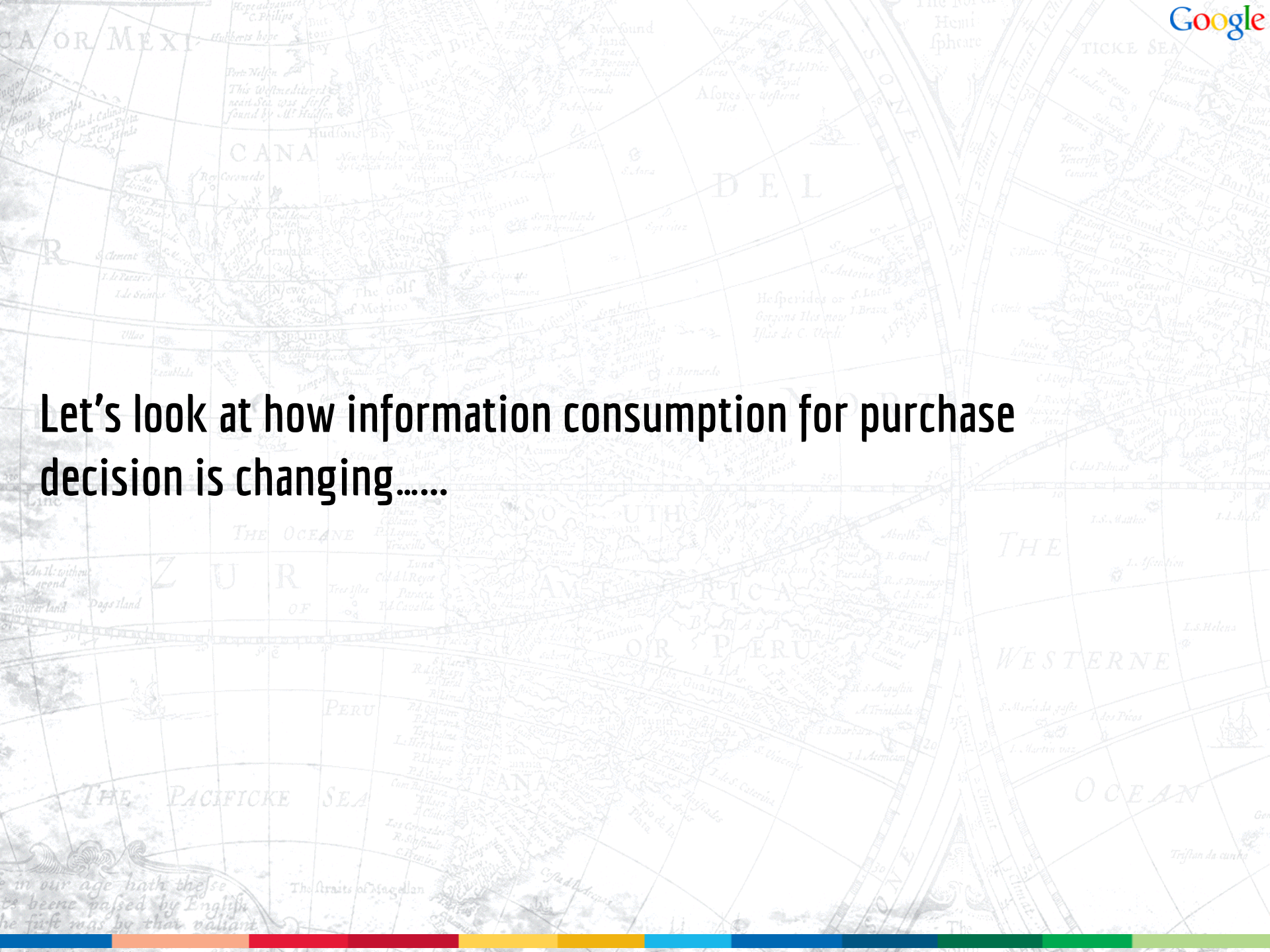
Let's look at how information consumption for purchase decision is changing……

Enterprises need to be GIS enabled to extend reach to their customers.....

Internet

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Mobile

⟷

Location

India **#1** in Internet growth globally
213 M internet users annual growth rate of **42%**

875 M mobile phone devices
49% internet capable
(50% of internet users Mobile only)

25% individuals using maps / directions on Mobile

Let me check some nice restaurants nearby

Which cab service can reach me the quickest
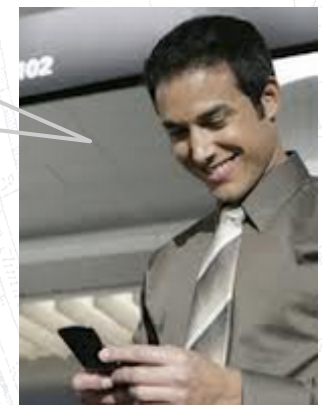
Lower penetration of GIS services in individual consumers.....
a big opportunity

Mobile Navigation

From Rajiv Gandhi International Airpo...
To HICC, Novotel & HICC Complex, Ne...

45 min (36 km)
Normal traffic via ORR
Preview

In-car Navigation

GARMIN
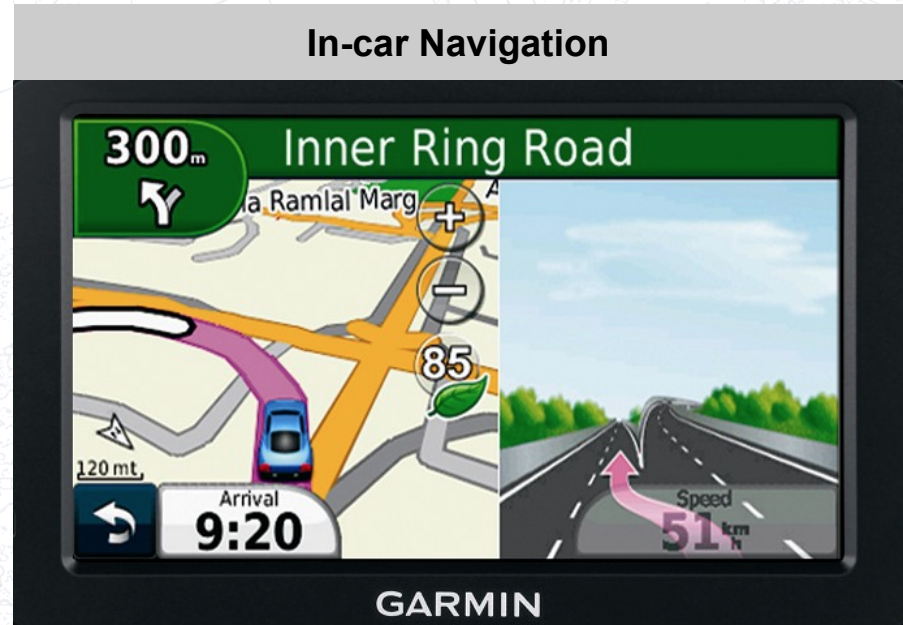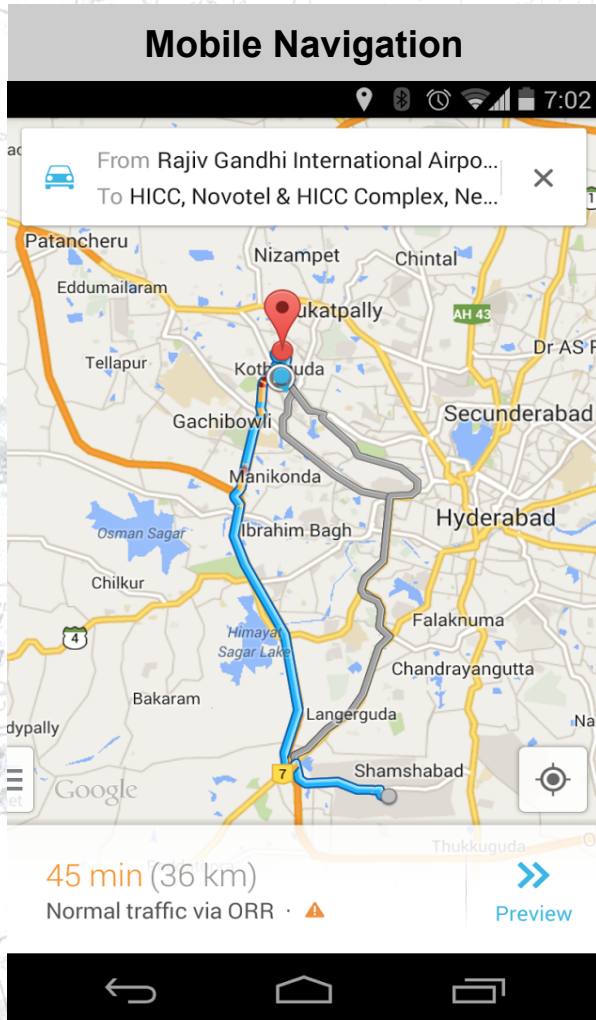
81% mobile users in the US access maps / directions

only ~20% of India's internet users use maps / navigation

Source: Mobithinking, BCG-Google Report on India Geospatial services

GIS Consumer Segments Evolution

Revenue potential per customer (y-axis)

No of potential customers (x-axis)

- Large Enterprise
- Small & Medium Business
- Individuals

Large Enterprises	Small & Medium Businesses	Individuals
Have resources for investment in GIS solutions	Budget constraints	Cost conscious Prefers an app over buying a new device
Large size but few customers	Long tail customers	Huge number of consumers
High awareness about new technologies	Low awareness	Varied awareness levels
Leverages diverse functionalities of GIS	Need limited functionalities	Use cases are dynamic and cover spectrum of savvy to first time users

SMB segment presents a viable opportunity as penetration is low but potential is huge

Google

○ **LOW**　● **HIGH**

Key Geospatial Services　　　　　　　　　　　　　　　　　**Usage among SMBs**

Consumer Facing

Web maps for customers / business present on maps

Resource locator (Branch locator etc.)

Internal

Location based business / consumer intelligence for strategic decisions

Handheld, vehicle based or other navigation and positioning devices

Fleet management, routing, or other geographic systems

45-50% of SMBs believe that geospatial services are important for carrying out their business

Challenges/Gaps in making GIS-for-All an attractive opportunity

Talent
Limited availability of GIS Talent, Research and Knowledge

Awareness
Lack of Awareness about GIS benefits in SMBs and individual segments

Focus @bottom of pyramid
GIS Industry focusing on the Long-Tail of Customers

Gaps in ⚡ Ecosystem

Accurate Data
Lack of Reliable, Accurate and Updated data

Locally relevant solution
Lack of investment in developing locally relevant solutions (Geocoding issues)

Affordability
Unavailability of Affordable GIS Solutions for SMBs

What needs to be done to enable the growth in new segments

Google

|	**What needs to be done**	**Relevant Initiatives**
Government - Industry Collaboration	• Skill development in GIS technologies • Awareness drive about GIS benefits among SMBs	1. National Taskforce on Geospatial Education 2. GIS Start-ups bringing cost effective solutions and catering to SMBs
Government Led	• Clear policy framework for data collection, dissemination and usage • Making more and more datasets available for open access	1. National Data Sharing and Accessibility Policy (NDSAP) under formation 2. UIDAI 3. NSDI 4. NLRMP
Industry Led	• Innovative and customizable solutions to cater to bottom of the pyramid SMEs • Making locally relevant solutions: Geocoding engine for unstructured addresses	1. Resource locator (ATM, Branch, Store etc) 2. Navigation in local languages 3. Offline navigation
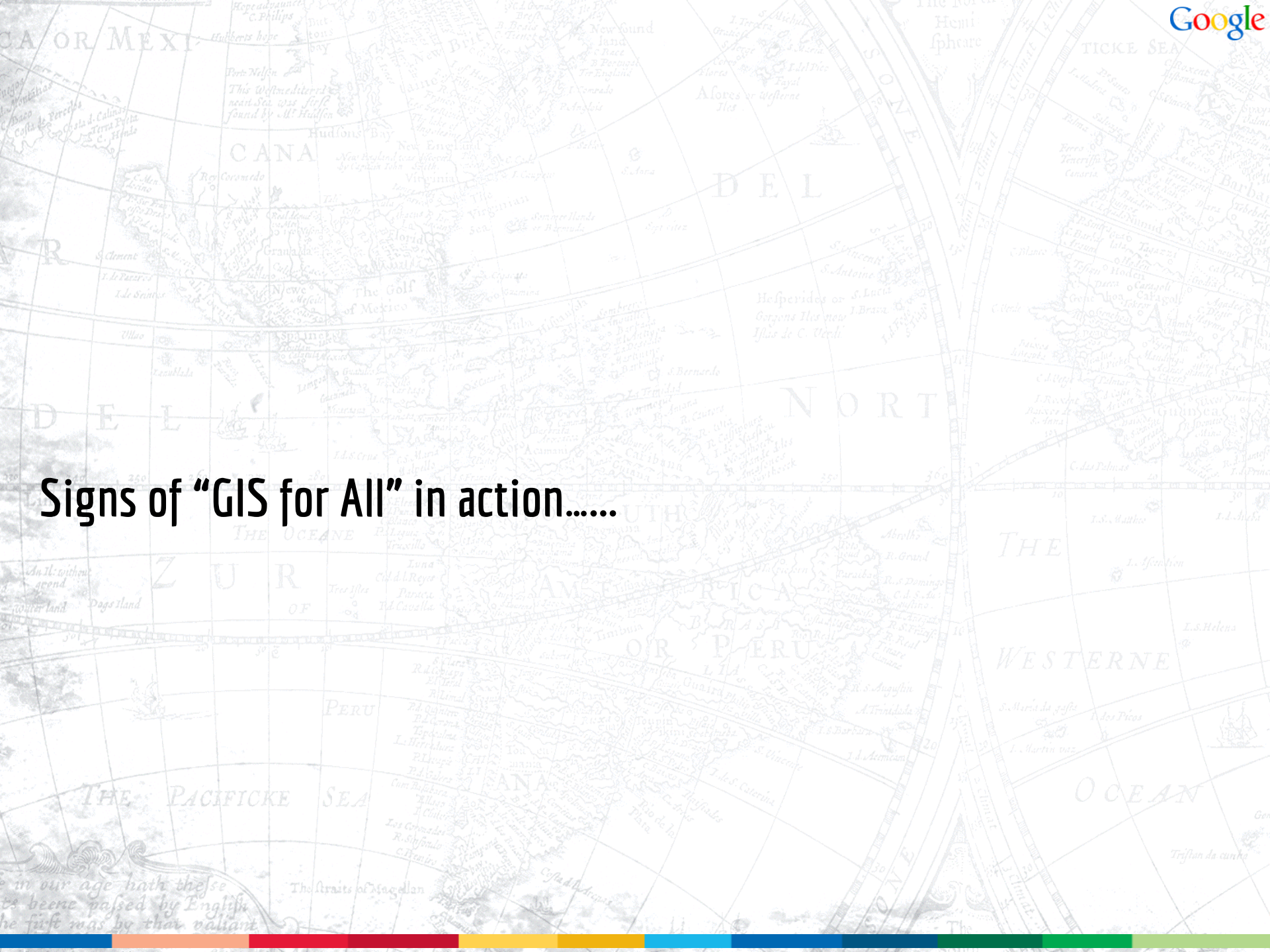
Signs of "GIS for All" in action……

Success Story – EMRI leveraging GIS

EMRI's new app to cut down response time

Bushra Baseerat, TNN Feb 2, 2014, 04.33AM IST

Tags: GVK EMRI

HYDERABAD: In an effort to cut down on the emergency response time, the GVK Emergency Management and Research Institute (EMRI) has now developed a mobile application, set to be launched later this month. The app, officials said, has been devised to automatically pick up the location of the caller and flash the same at its centralized call centre. This is expected to reduce the response time by a crucial three minutes. At present, the response time, in case of medical emergencies in urban areas, is 13 minutes.

"If the application is uploaded on a mobile, the call centre will pick up the location automatically. The call centre executive will not have to pose numerous questions to the distressed caller to verify the address. He will only need to confirm it and dispatch the nearest ambulance or police team," said Siddhartha Bhattacharya, chief operating officer, GVK EMRI.

Improving emergency response using GIS

Success Story – Live tracking of bus

Google

YourBus
Leave your bus schedule to us

HOME   FEATURES   TESTIMONIALS   FAQ   TEAM   CONTACT

Features

Passenger Alerts

The passenger gets realtime periodic SMSes about the location, delay info of the bus.

Using google maps, they can also track the exact location of the bus through out the journey.

YourBus

Your journey details:

Service Number: CHN-BNG
Destination: Bangalore
Date: 19th March 2012
Vehicle number: KA02AA4738

Departure Info: Your Bus crossed (Koyambedu) at 2:15 pm.
Location Info: National Highway 4, Tamil Nadu, India
Delay Info: Your Bus is delayed by **30 mins**.We apologize for the delay.

Current location of your vehicle, at **3:18 pm**, on **Google Maps** is here.

(**Note:** Refresh this page every time you want to access the Google Maps link.)

We love to hear your feedback about this service.

SMBs leveraging GIS – Live tracking of bus location

Success Story - pharmacy store locator

SMBs leveraging GIS to increase reach - Pharmacy store locator

To Sum it up.......

Historic Focus	● Large scale industries and sectors

Emerging segments	● SMBs in services and emerging sectors like E-commerce present untapped huge market opportunities ● This opportunity has to be leveraged by innovative, scalable, cost effective solutions ● Productivity improvement @ scale adds to economic growth

Developing the ecosystem	● Building talent pool ● Investment in driving innovations to make locally relevant solutions ● Progressive policy framework are prerequisite to tap the "GIS-for-All" Opportunity

Thank You
and
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