**NATIONAL CONFERENCE ON e-GOVERNANCE**
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# Leveraging emerging Technologies Social, Mobility, Analytics & Cloud (SMAC)

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Mobility Devices · Cloud · Social · Connected · Data Explosion · Time

The world has changed and is changing…

# Four megatrends – impacting today & tomorrow…

## Mobility

- 51 M [1] Smartphone Users in urban India today.
- 400 M [2] Smartphone Users estimated in India by 2016.
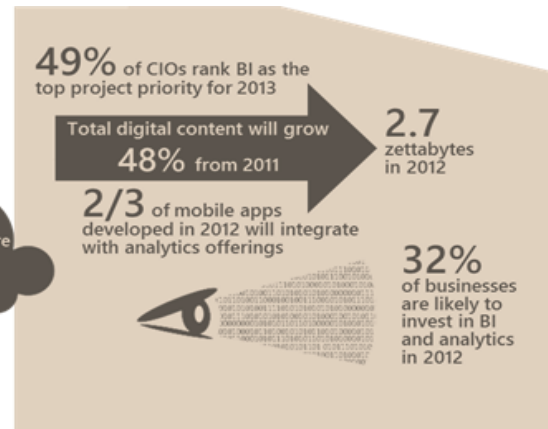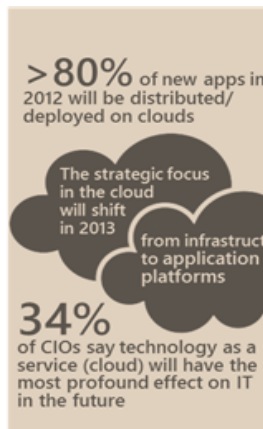- Tablets in India are expected to double this year to 6 M [3].

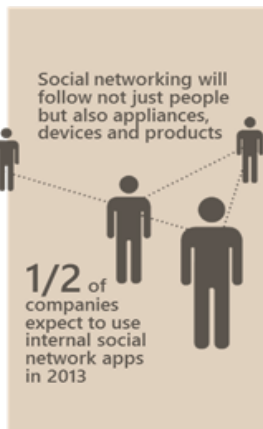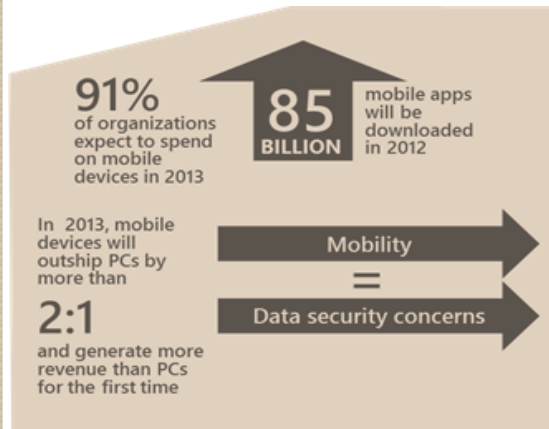## Social

- India poised to overtake US as Facebook's No 1 [4] market.
- Facebook India's mobile user base swells to 62 M [5]

## Cloud

- India now has nearly 74 million Internet users.
- Total Amount of digital information in the world is growing by 10X every 5 years.

## Big data

The Cloud is the enabling force for all these trends

91% of organizations expect to spend on mobile devices in 2013

85 BILLION mobile apps will be downloaded in 2012

In 2013, mobile devices will outship PCs by more than

Mobility = Data security concerns

2:1 and generate more revenue than PCs for the first time

Social networking will follow not just people but also appliances, devices and products

1/2 of companies expect to use internal social network apps in 2013

>80% of new apps in 2012 will be distributed/ deployed on clouds

The strategic focus in the cloud will shift in 2013 from infrastructure to application platforms

34% of CIOs say technology as a service (cloud) will have the most profound effect on IT in the future

49% of CIOs rank BI as the top project priority for 2013

Total digital content will grow 48% from 2011

2.7 zettabytes in 2012

2/3 of mobile apps developed in 2012 will integrate with analytics offerings

32% of businesses are likely to invest in BI and analytics in 2012

**Gartner.**

**FORRESTER**

**IDC** Analyze the Future

[1] http://timesofindia.indiatimes.com/business/india-business/Teens-drive-Indian-smartphone-sales-study-finds/articleshow/22406572.cms
[2] http://articles.economictimes.indiatimes.com/2013-11-25/news/44450079_1_mobile-apps-smartphone-users-62-9-million-units
[3] http://in.reuters.com/article/2013/01/04/india-tablet-pc-computers-forecast-idINDEE90306S20130104
[4] http://www.firstpost.com/tech/india-poised-to-overtake-us-as-facebooks-no-1-market-1250059.html
[5] http://articles.timesofindia.indiatimes.com/2013-08-14/social-media/41409040_1_facebook-india-platform-facebook-feature-phones

Mobility

# Mobility in Government

## Transform operations and infrastructure

Leveraging power of the cloud and reducing costs, governments aspire to increase efficiencies in a transformative way

## Engage citizens and government employees

Personalizing services and apps and enabling two-way dialogue via social media will allow governments to engage citizens and employees in a more productive, meaningful way

## Accelerate innovation and opportunity

Use modern day technology as a catalyst to accelerate economic development

| Every one, a consumer | Every one, a sensor | Anywhere, Anytime |
|---|---|---|
| Real-Time Data Flow | Collaboration | Flexibility |

# Illustrative Use Cases

LoB applications on portable devices

Collaboration

m-Governance

Patient Monitoring & Wellness

# Social

# Social in Government



**Rise of the social consumer**

**44%** of consumers **complain** via social media

**20%** expect a **response** within one hour via social media

**Always on** -- Consumers use an average of **4** devices every day

**Changes how we work**

**65%** of companies are deploying at least one **social software** tool

**90%** companies using social technologies that report **business benefit** from them

| Transparency | Citizen Engagement | Citizen Involvement |
|---|---|---|
| Grievance Management | Emergency Response | Moderated Self Help Groups |

# Capture Community Feedback and Interest

Understand how large and active the community is

See the most recent discussions

Ask questions and contribute to discussions

See Top Contributors

## Benefits

Crowdsource to surface new ideas

Encourage citizen feedback and engagement

**Use new social tools to increase community participation**

Create Community Sites for two-way interaction, including citizen feedback and suggestions on upcoming legislation or government proposals.

Citizens can use Community Sites to search for existing knowledge and talk to people who have interesting information to share.

# Illustrative Use Cases



## Citizen Engagement

2 way interaction with citizens creating awareness and provide information on Govt initiatives.

## Decision making

Referendum, law enforcement, public opinion, scheme monitoring etc.

## Talent Management

Provide social platforms within government for employees to showcase their talents and expertise for use within govt and for citizen services..

# Big Data & Analytics

# Analytics in Government

Immersive insights, wherever you are

Connecting with the world's data

Any data, any size, anywhere

**Better outcomes with available resources**

**Changing demographics**

**Data explosion**

**IT to self-service**

# Illustrative Use Cases



Traffic flow optimization

Weather forecasting

IT infrastructure optimization

Natural resource exploration

Fraud detection

Social network monitoring

Web app optimization

Taxation Revenues

"Government in **Italy** follows people's lifestyle, travel and spending pattern so as to track those who could be evading taxes using Analytics"

## Managed self-service BI

## Deliver BI on your terms

"Physicians finally have an easy way of accessing data on the various devices and hospital recommendations on which device is best suited for a given patient and clinical scenario. This helps physicians maintain their focus where they want it to be—on giving their patients the best care possible."

The information I need is right in front of me on the SharePoint dashboard. Instead of trying to figure out what the problems are, my job has become trying to figure out the solutions.

**Jennifer Sanders
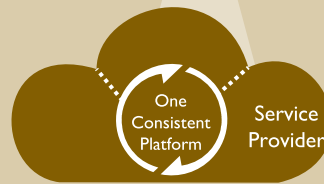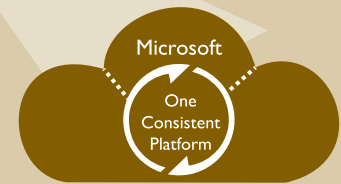Assistant Director of Nursing,
Texas Children's Hospital**

**Dr. Richard Lemon, Orthopedic Surgeon**

**Meriter Hospital**

Cloud

# Cloud in Government



Device and Identity Management

Consumer Clouds

Private Cloud

On-Premises / One Consistent Platform

Service Provider Cloud

One Consistent Platform / Service Provider

Public Cloud

Microsoft / One Consistent Platform

| Virtual Desktop | Prod | Hosted Voice | ERP CRM | Unix/Linux VMS | Legacy Apps | Apps |
| | | | | | | SQL |

| Virtual Desktop | Prod | Hosted Voice | ERP CRM (future) | Unix/Linux VMS | Legacy Apps | Apps |
| | | | | | | SQL |

| Intune | Office 365 | CRM Online | Unix/Linux VMS | Legacy Apps | Apps | PaaS/ Azure |

*National Cloud – Hybrid Model*

Improved Agility

Better Economics

Growing Expectations

# The role of government

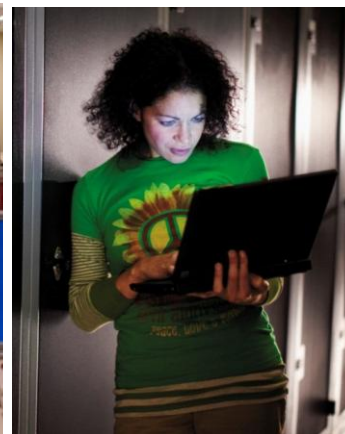| Government cloud framework | Government sponsored cloud | Government as service provider |
|---|---|---|
| Government service registry | Hosted in 'trusted partner' datacenter in country | Transform existing government departments into cloud providers |
| Government manages certification process , SLA and commercial requirements | Strong partnership between partner and government | Hosted in government data centers |
| Managed in data centers by Cloud Providers | Service registry through service provider | Highly secure environment |
| Leverage economies of scale and innovation of cloud provider | Leverage innovation of service provider while retaining some control | Necessity to continuously innovate and drive costs down |

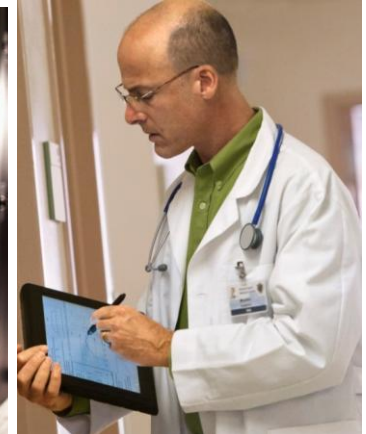# Health Cloud Scenarios



Enterprise Image Archive

Compliant Storage & Analytics

Disaster Recovery

Collaboration

Clinical Groupware and EMR

# Illustrative Use Cases

## Websites

IaaS & Cloud Storage, PaaS

## Payroll Processing

PaaS – processing time reduction, Scalability, Reduce IT infra

## Project management

PaaS & Cloud Storage – Processing time reduced, common operating picture across

## Government Services

IaaS, PaaS – IT infra consolidation, improved efficiency, better service levels, reduced administration costs.

## Rapid Replication

SaaS – Reduce development costs. Quickly replicate LoB Applications across states, AppStore.

Real Impact for Better