



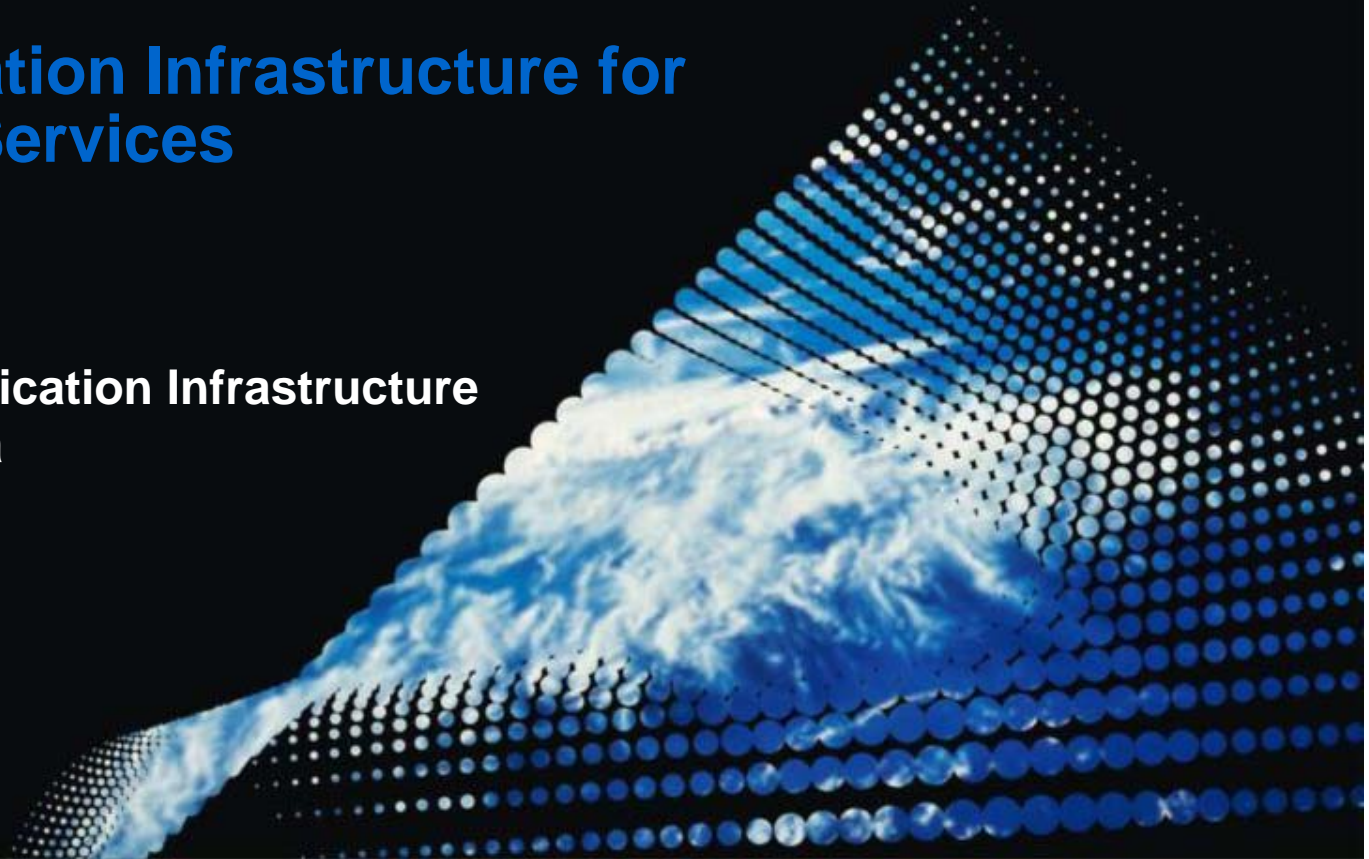
IBM Software Universe
Smarter Businesses, Smarter Industries.

8th March 2011, Pan Pacific, Dhaka.



Scalable Application Infrastructure for Citizen Centric Services

**Amol Mahamuni,
Program Director, Application Infrastructure
IBM Software Lab, India**



The Need to Progress is Clear



Establishing a perpetual collaboration approach is the first step toward helping the public sector meet its wide range of constituent needs. (*)

\$1: the cost to government of renewing a driver's license online.

\$8: the cost to renew in person.

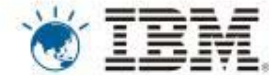


“In 1900 only 13% of the world's population lived in cities. By 2050, that number will be 70%.”

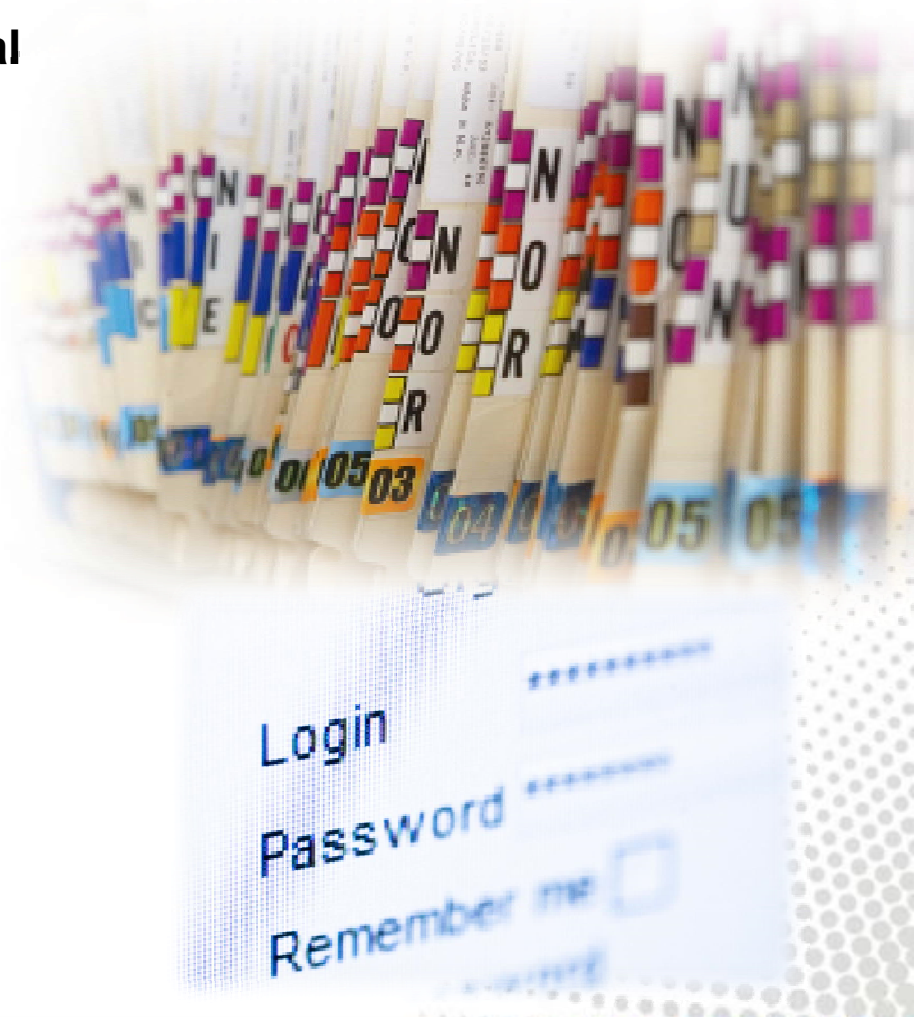
100 million people worldwide pushed below the poverty line by personal healthcare expenditures.

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Government Systems Today Siloed, Complex and Unfocused

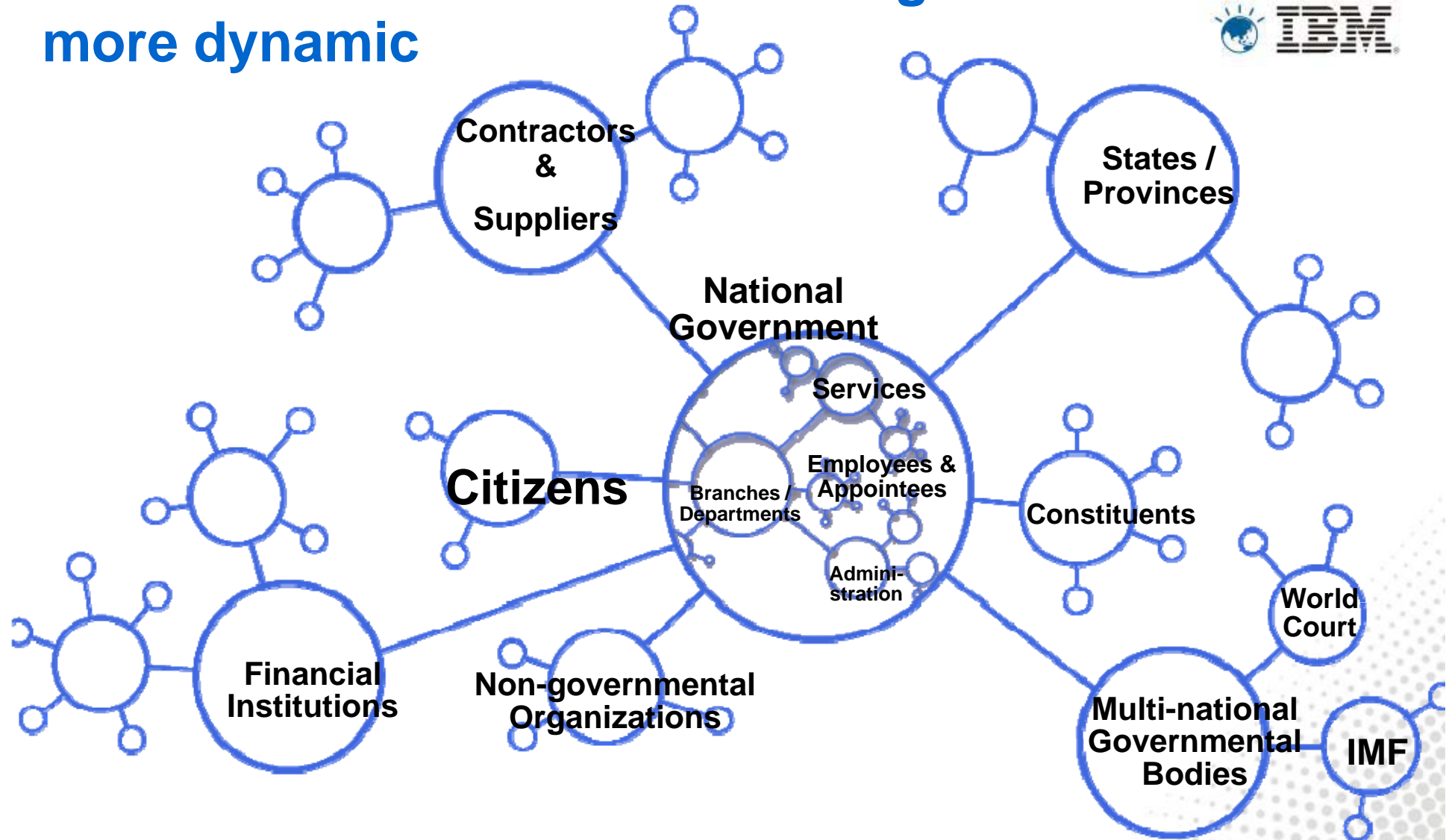
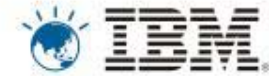


- **Departments and other branches of local government are disconnected with manual processes**
 - Public Services are fragmented and co-ordination and sharing of resources and information inconsistent
- **Government mandated change can be costly, and time consuming**
 - Inability to offer new services as required
- **Focus on service provision**
 - Services and applications not designed for citizen needs but based around service provision
- **Concerns over value for money and trust**
 - Reluctance to spend on enhancing infrastructure and delivering a better service and can lead to damaging failures in security and practices

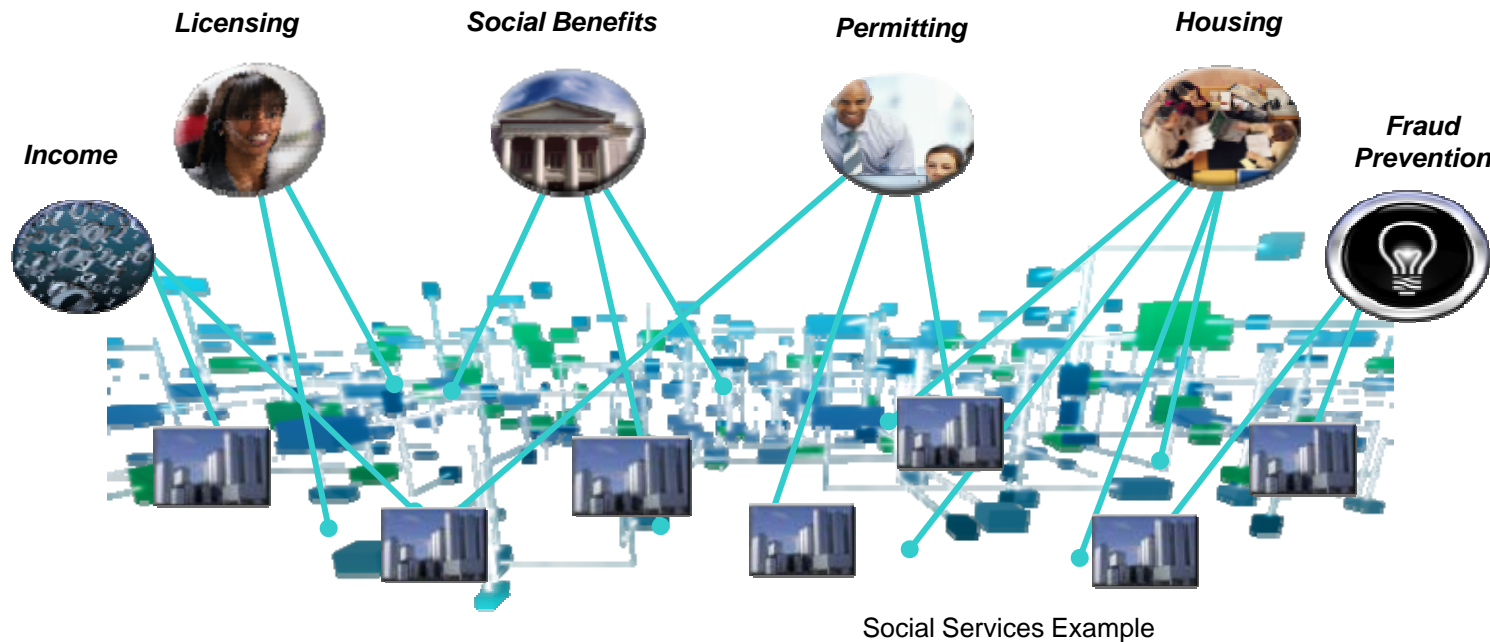
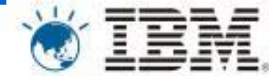


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Business networks are becoming broader & more dynamic



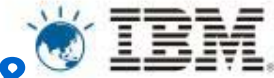
Achieving information and services coordination across numerous branches, agencies & partner organizations is a challenge



Social Services Example

- Point-to-point connections between agencies
- Duplicate applications and citizen records
- Lack of common standards for sharing information
- New programs and information channels create new silos

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To ensure the economic health, welfare & security of their citizens, smarter governments are working towards...

Smart Social Services

- **Intelligent citizen-services** to reduce resource wastage & improve outcome
- **Optimizing resources** to connect people to needed programs

Manage Resources Effectively

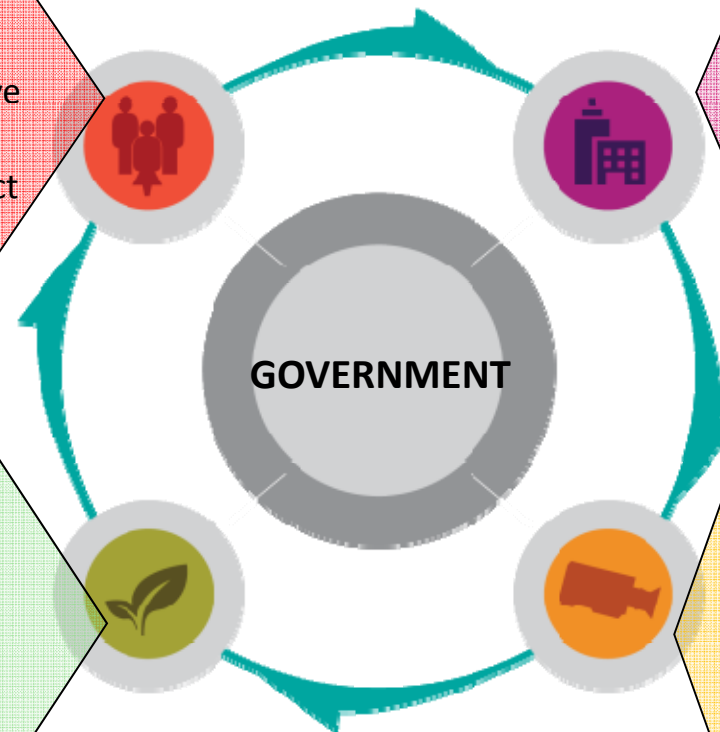
- **Business Analytics and Performance Management**
- **Government Accountability and Cost Efficiency**

Ensure a Sustainable Environment

- **Smarter Transportation** - driving multi-modal transport & reduce congestion
- **Water Management** – to leverage technology to manage efficiently & reduce wastage

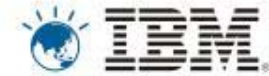
Strengthen National Security and Public Safety

- **Customs Modernization**
- **Immigration & Border management**
- **Identity Management**
- **Network Centric Operations**
- **Public Safety solutions**



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IBM is Helping Governments across the globe to



**Integrated View
of Citizen
Relationship**

- Gain an accurate and integrated view of a citizen's relationship with government agencies
- Improve coordination of service offerings
- Reduce duplication and errors



**Integrated Case
Management**

- Deliver service across all communication channels
- Streamline various process flows
- Enable collaboration across the agency and service providers



**Citizen Services
Portal and
Intelligent Forms**

- Increase citizen self-service and reduce office visits
- Increase speed of response
- Enable digital signing, routing, and approval

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Deliver citizen-centric experiences for trust, efficiency and constituent value

With a Smart SOA Application Foundation



Government challenges

- ❖ Changing societal expectations for on-demand, personalized and secure online services and 24x7 access to integrated information
- ❖ Disparate systems across agencies, departments and organizations resulting in data errors and omissions that erode efficiency and trust

What WebSphere delivers

- ❖ **24-x7 availability across multiple channels** e.g. agency locations, kiosks, websites
- ❖ The ability to quickly roll out new & innovative **web-based services** to deliver the right information to the right individual at the right time
- ❖ Innovative, **real time communications including voice and click to call technology** to help citizens navigate often complex government processes
- ❖ Ability to **protect sensitive citizen information**

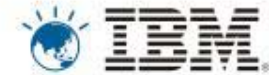
Did you know?

... almost one third of the world's population will be on the Web by 2011.

... more than 30% of citizens in OECD countries used the Internet to communicate with public authorities in 2007.*

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Reach Citizens in New Ways



The Situation

- Difficult to differentiate and deliver personalized government experiences
- New applications need to make the most of existing apps and services
- Increasing demand for mobile access to online services

Your Opportunity

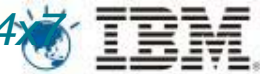
- ✓ Achieve 24% faster ROI with SOA reusing retail apps and services
- ✓ Quickly deliver dynamic Web based retail apps using Web 2.0
- ✓ Enable real-time retail transactions from mobile devices



Smarter Businesses, Smarter Industries.

Innovate for Citizen Accessibility and Service

Offer citizens new and customized ways to access government applications 24x7 without constraint of time, location or device type



- ✓ Broaden the accessibility and reach of government services and programs cost-efficiently by reusing existing packaged apps and extending them to the web
- ✓ Rapidly deliver new, innovative or time sensitive citizen services using situational Web 2.0-based apps
- ✓ Prevent costly security breach exposures with security domains that deliver granular & flexible control
- ✓ Improve government service and program accessibility and navigation using innovative real-time communications like online click-to-call features
- ✓ Enable real time access from mobile devices



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WAS V7 Feature Pack for CEA

Simplifying delivery of communications capability in government apps



Deliver personalized services through application innovation

- ✓ **Delivers** Innovative programming model to access communications services without requiring expertise in communications technologies or SIP
- ✓ Enhance the on-line experience by adding “**click-to-call**” or “**co-browsing**” to existing government and healthcare applications
- ✓ Increase user and patient satisfaction with real-time assistance when completing online ordering forms

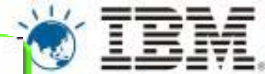


[Watch the demo now!](#)

State Healthcare Company Improves Patient Service



Texas Health and Human Services Commission



Industry Pains

- Improve customer service
- Support more programs
- Increase operational efficiencies and enhance accountability
- Reducing costs

Smarter Business Outcomes

Customers have multiple channels to use to access the agency

\$350 million investment leveraged

Project management realigned to support business objectives



Why Smart SOA Application Foundation?

“The fact that we were able to take our \$350 million legacy investment in IT and convert it to support the new business model went a long way toward our achieving acceptance.”

Mohammed Farooq, Chief Technology Officer, State of Texas Health and Human Services Commission

Smarter Businesses, Smarter Industries.

Manage resources effectively and efficiently for government accountability

With IBM WebSphere Intelligent Management capabilities



Government challenges

- Maximizing the value to taxpayers by reducing costs and streamlining IT operations
- Reducing energy costs and improving performance in the face of budget constraints

What WebSphere delivers

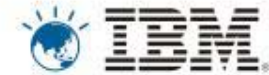
- ✓ Reduced costs with **centralized, streamlined IT management** across geographically dispersed locations
- ✓ Dynamic allocation of resources to handle variable needs such as times of **natural emergencies**
- ✓ **24x7 availability** of websites and interconnected agency, department and partner systems
- ✓ **Modernization of legacy applications** to leverage existing investments

Did you know?

... it costs governments \$1 USD to renew a driver's license online and \$8 USD to renew in person?*

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Reduce Costs & Increase Availability of Government Applications



The Situation

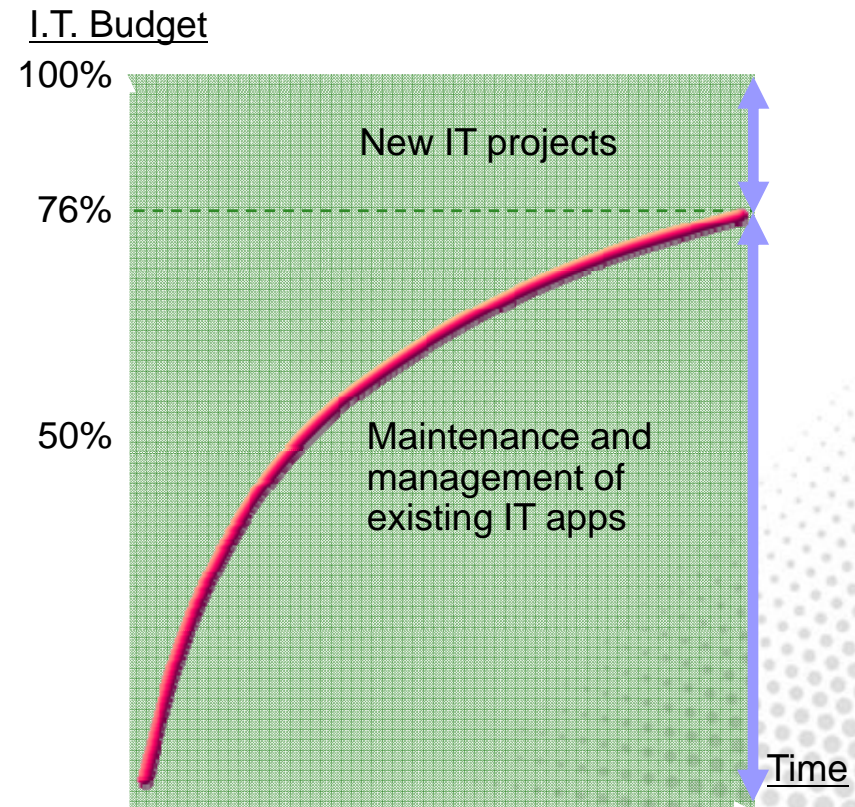
- Maint. / Mgmt. costs 4x IT spend
- Low server utilization rates
- Unavailable or slow online services
- Slow roll-out of new applications

Your Opportunity

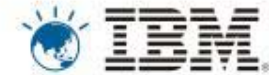
- ✓ Lower App Infrastructure costs
- ✓ Allocate resources to the highest priority applications
- ✓ Increase government application availability
- ✓ Increase deployment speed of new applications and services

*“76% of I.T budgets are spent on **maintenance**, leaving only **24%** for **new investments**.”*

Forrester Research



Intelligent Solutions for Governments



- **IBM WebSphere Application Server Network Deployment**
 - For your mission-critical applications that require high qualities of service
- **IBM WebSphere Application Server Hypervisor Edition**
 - Optimized to instantly run in server virtualization environments
- **IBM WebSphere CloudBurst Appliance**
 - Secure appliance to rapidly deploy and manage SOA applications and services in a cloud
- **IBM WebSphere Virtual Enterprise**
 - Virtualizes application infrastructure to increase availability, improve performance and service



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Defense forces winning the battle for closer cooperation between service branches



The Finnish Defence Forces *90 years*
Puolustusvoimat › Försvarsmakten

Industry Pains

- Managing and adapting to increasingly dynamic and complex situations with limited resources
- Deeply entrenched silos in command, control, communications and computing (C4) systems

Smarter Business Outcomes

- ✓ Projected 75% reduction in required infrastructure through consolidation and virtualization
- ✓ Projected 80% reduction in time required to develop new C4 systems via SOA service reuse
- ✓ Get new applications out to the field in a fraction of time & closely connect ops with other nations

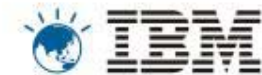


Why Smart SOA Application Foundation?

The solution we are developing with IBM will give us the flexibility and resource efficiency our military needs to adapt to a more dynamic and uncertain world.” – Mika Hyytiainen, CIS Chief Architect, Finnish Defense Forces

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Leverage SOA Connectivity & Integration To Address Critical Government Business Needs



Social Services and Social Security Business Needs

Adoption Patterns for Integrated View of Citizen Relationship

“Fast, flexible & reliable access to citizen information across agencies, departments and levels.”



ESB Messaging & Enrichment

“Trust, management & security for government information and citizen data”



Service Visibility & Governance

“Make it easy for the government agencies to collaborate between them and with external partners”

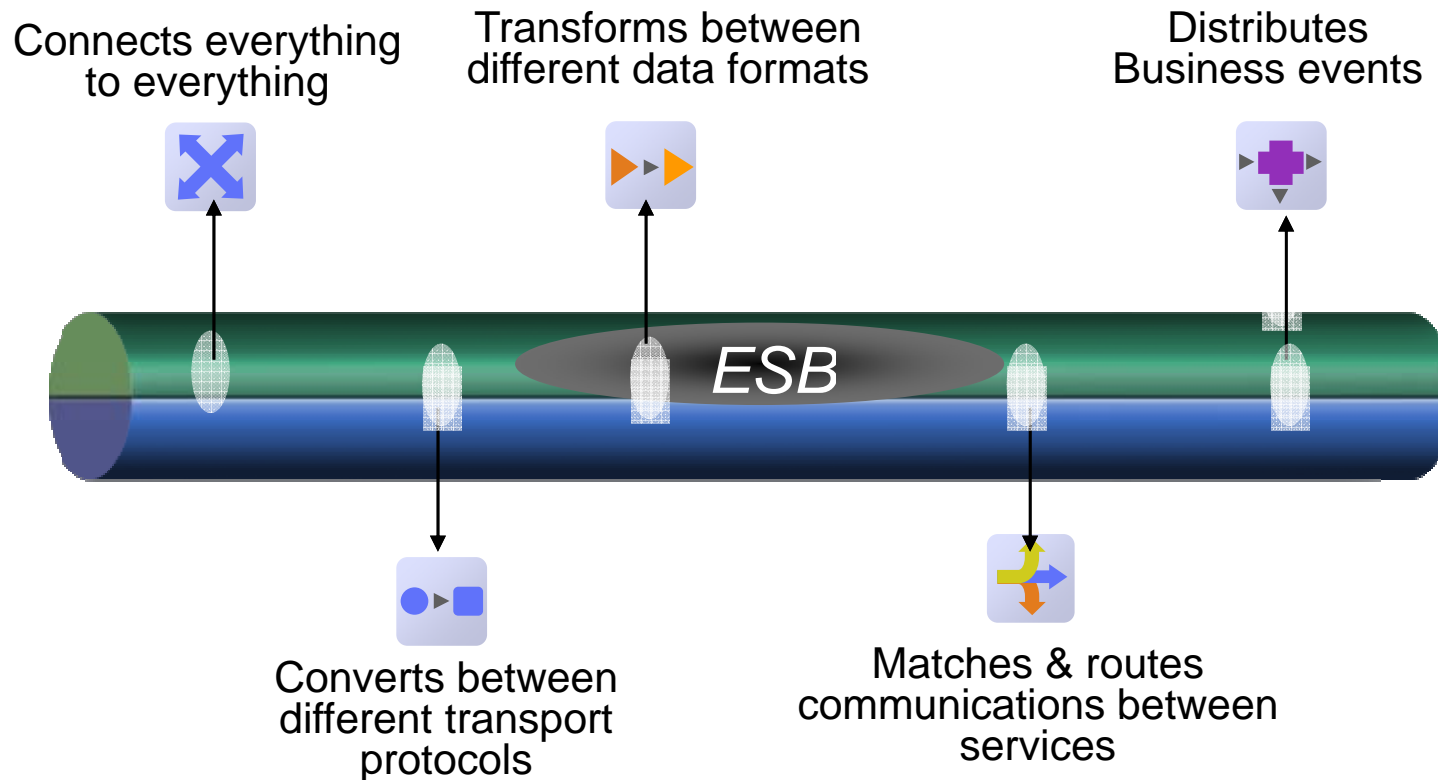


Extend Connectivity to Partners & Customers

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Agility and Savings Begin with Integration

The Enterprise Service Bus (ESB)

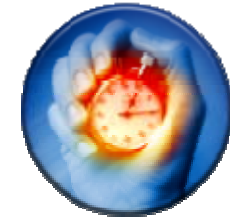


Optimizing Costs

- Integrate new customers and partners up to 80% faster
- Improve performance more than 10x, with lower costs
- Achieve full ROI within as few as 6 months

Smarter Businesses, Smarter Industries.

Sharing information with other public service providers and governing bodies can be complex and expensive



SEPA, SWIFTNet FIN,
SWIFTNet Funds, FIX, NACHA

ACORD

HIPAA, HL7, NCPDP

EDIFACT, X12,
EANCOM

Changing Standards

Industry Formats

Error handling

Reliability

Security

Compliance

Validation

Maintenance

Your Opportunity

- 50% reduction in administration cost
- Reduced cost of compliance

Smarter Businesses, Smarter

District Health Bureau consolidates patient information

With Smart SOA Connectivity and Integration



District Health Bureau – China

Government Customer Pains

- No single, comprehensive electronic medical record (EMR) consolidating patient data from all providers

Smarter Business Outcomes:

- ✓ Maximize the efficient shared utilization of medical resources
- ✓ Integrate community healthcare service centers with large hospitals

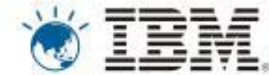


Why Smart SOA Connectivity & Integration?

‘From an investment point of view, it is more cost-effective for us to use SOA than to purchase more siloed products that will just have to be replaced by more integrated, reusable technologies, which will cost us in the long run. Technology becomes a burden if we cannot reuse it.’ ---- Official, District Health Bureau

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Insufficient Service Reuse slows the integrated approach to citizen services



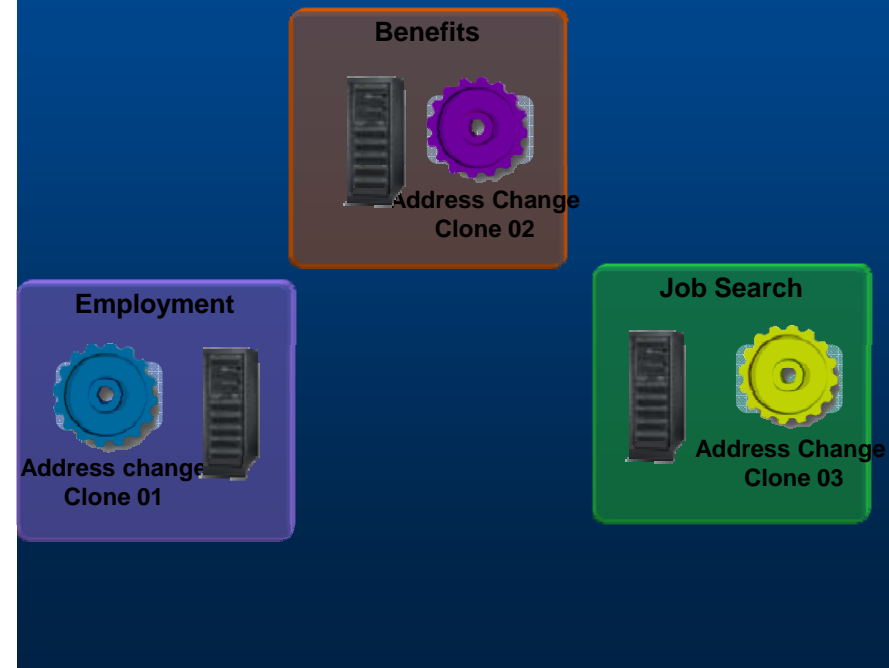
The Situation

- Each government agency creates their own services to access citizen data
- Reliability and compliance are compromised
- Expected efficiencies are not gained

✓ ***Your Opportunity***

- ✓ Share services between agencies and departments
- ✓ Increase software reuse by 30%
- ✓ Reduce integration costs by 25%

Instead of reusing, each agency created its own



Ball State University extends access to services With Smart SOA Connectivity and Integration



Government Customer Pains

- 40 different siloed internal departments with duplication, overlap confusion and lack of integration
- No central repository for student data

Smarter Business Outcomes:

- End to end connectivity allows developers to connect reusable code to assemble complex applications
- Student data standardized across integrated departments with updates available in real-time



Why Smart SOA Connectivity & Integration?

“SOA has been such a gift to us. It enables us to embrace a new technology that provides services at a level that we couldn’t even imagine before.”

—Dr O’Neal Smitherman, CIO, Ball State University

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THANK YOU

