



IBM Software Group

# On Demand Government Point of View Discussion Document

**WebSphere** software



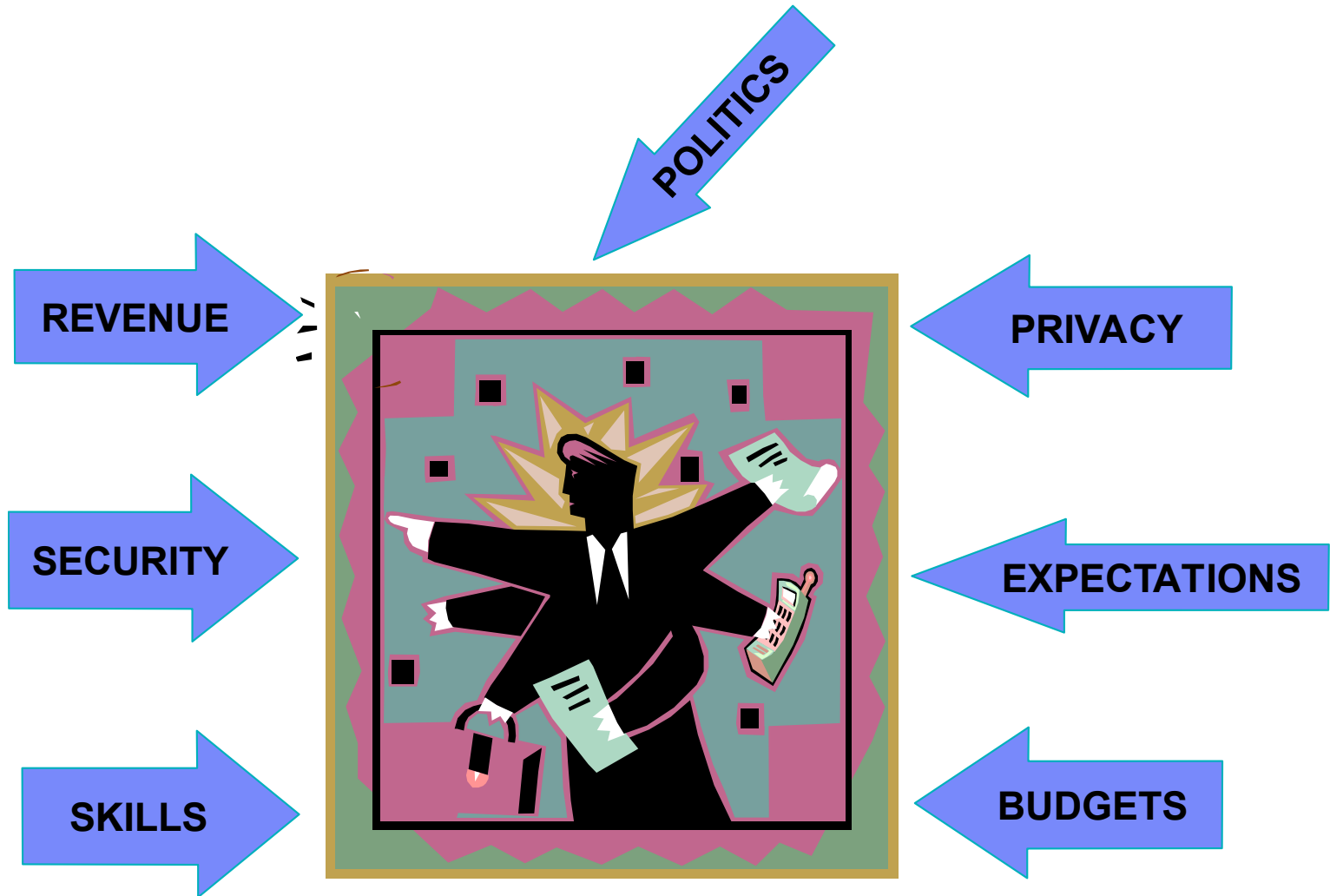
@.business on demand software

# On Demand Government

- Challenges for Government Leaders Today
- Defining 'On Demand' for Government
- Role of Integration in 'On Demand' for Government
- IBM Middleware for 'On Demand' Governments
- Case Examples



# Governments are under tremendous pressure to change



# Governments are facing an increasingly challenging environment:

## Budget Pressures

- Worldwide economic slowdown causing revenue shortfall
- Significant action required to balance budgets

## Increased Collaboration

- New safety/security issues require increased collaboration
- Cross-government integration required to increase efficiency in service delivery

## Safety, Privacy, Security

- Must balance conflicting demands for safety and privacy
- Funding required for new safety initiatives

## Human Resources

- Training required for new application areas
- Development needed to move from administrators to value providers
- Staffing challenges will be created by retirements over next few years

## Citizen & Business Expectations

- Citizens and businesses expect responsive government
- Increasing number of constituents prefer web access to government

## Longer Term Challenges

- Economic growth, Healthcare costs, Aging population, Education, Digital Inclusion



# Key Imperatives to meet current challenges

**Budget  
Pressures**

**Citizen &  
Business  
Expectations**

**Increased  
Collaboration**

**Safety,  
Privacy,  
Security**

**Human  
Resources**



- Transform Government Services
- Meet financial challenges
- Enable government employees



# Governments must transform themselves



FROM	TO
Silos	→ Integrated
Entitlements	→ Outcomes
Regulator	→ Facilitator
Agency focused	→ Customer focused
Protective	→ Collaborative
Administrator	→ Value provider
Rule based	→ Knowledge based

Transformation is critical for improving:

f Economic competitiveness

f Quality of life

f Relevance of Government in a networked world

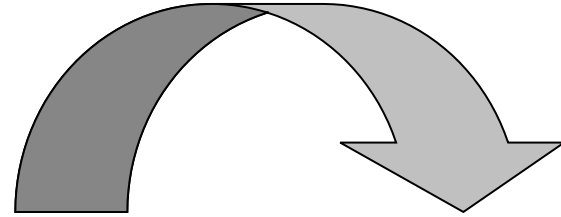


# On Demand Government

A Government whose business processes - - Integrated end-to-end across the organization and with other government agencies and partner institutions - - can respond with speed to citizen demands, business needs, changing economic conditions and legislative priorities and policies.



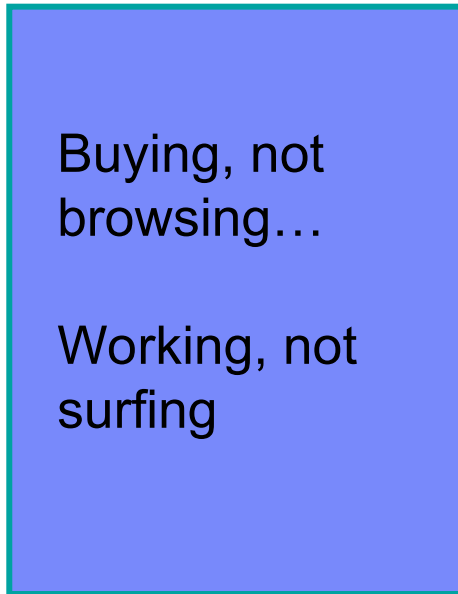
# On Demand evolution



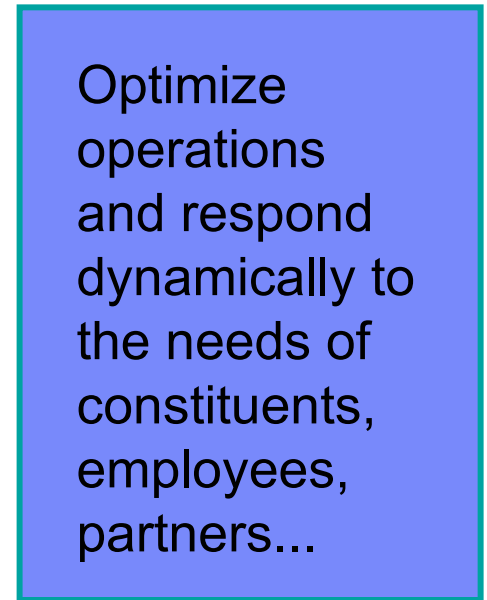
## Access



## Enterprise Integration



## On Demand



Access Publish

Transact

Integrate Internally

Integrate Externally

Adapt Dynamically





# What does the On Demand vision encompass?

**On Demand is about Business Transformation:**

**Creating more value in the organization**

**On Demand is about IT Infrastructure:**

**Delivering more IT Value through an On Demand Operating Environment**

**On Demand requires Culture change:**

**Culture change to achieve transition to the new environments**

**On Demand can include Utility Computing:**

**Internal OR external variable cost model (After transformation plans in place)**

**On Demand environment**

- Focused
- Responsive
- Variable
- Resilient



# Characteristics of ‘On Demand’ for Governments

## Governments’ challenges

## Characteristics of an On Demand enterprise

## Description

Changing expectations of citizens & businesses



**Responsive**

“Responsive in real-time”

*Able to sense and respond in real time to the changing needs of citizens, businesses, employees, and other governments*

Collaboration across governments & w/partners, Managing skills shortages



**Focused**

“Focused on what’s core and differentiating”

*Concentrating on core competencies – areas where it has a differentiating advantage – and using strategic partners to manage needs outside of these competencies*

Sustained budget & resource pressures



**Variable**

“Using variable cost structures”

*Employing variable cost structures to operate at high levels of productivity, cost control, capital efficiency and financial predictability*

Balancing demands of safety and privacy



**Resilient**

“Resilient around the world, around the clock”

*Able to handle changes in political, economic, and physical environment and manage changes and threats with consistent availability, security and privacy – around the world, around the clock*



# A focused strategy enables governments to deliver more with less

## A Focused Government...

- Defines core functions critical to their key missions - areas where the most value can be added
- Establishes a clear value/service proposition to citizens/businesses, employees and partners
- Develops competencies around its mission and core functions
- Consolidates or streamlines non-core functions

## Key Performance Indicators Affected



<p><b>Administer &amp; deliver services:</b></p> <p>Clear definition of desired long term position &amp; role in public services</p>
<p><b>Process &amp; information management:</b></p> <p>Processes integrated across government departments and with partners</p>
<p><b>Employee productivity &amp; development:</b></p> <p>Organizes workforce and training around the organization's top priorities</p>
<p><b>Financial improvement:</b></p> <p>Obtaining efficiencies through economies of scale and sharing of resources</p>



# A responsive Government adds greater value to its community

## A Responsive Government...

- Capable of sensing and dynamically responding to internal or external changes
  - ▶ Changes in Government policy
  - ▶ Emerging citizen, partner, employee or Government needs
  - ▶ Unpredictable external influences – terrorism / world affairs
  
- Enables its employees to rapidly make well-informed, citizen/business-focused decisions

## Key Performance Indicators Affected



The business proposition

By creating more variability in their operating model, Governments can achieve higher service performance and predictability

## A more Variable Government...

- Scales service/budget capacity etc. smoothly in line with actual demand or supply factors
- Able to deploy the right process and organizational capabilities for each product or service
- Partners with third-party providers, and integrates with other Government agencies in flexible “value networks”

## Key Performance Indicators Affected

### Administer & deliver services:

The right services delivered as / when required

### Process & information management:

Accurate information delivered to all departments as and when required

### Employee productivity & development:

Employee training available with new and changing initiatives

### Financial improvement:

Fixed operating costs reduced



The business proposition

Governments must be resilient to deal effectively with an increasingly dynamic political, social and economic environment

## A Resilient Government...

- Able to deliver consistent, reliable service 24 hours a day, 365 days a year
- Develops an agile, adaptable business and technological operating environment
- Prepares for unforeseen 'shocks' to protect public assets, safeguard citizens and reduce operational risks

## Key Performance Indicators Affected



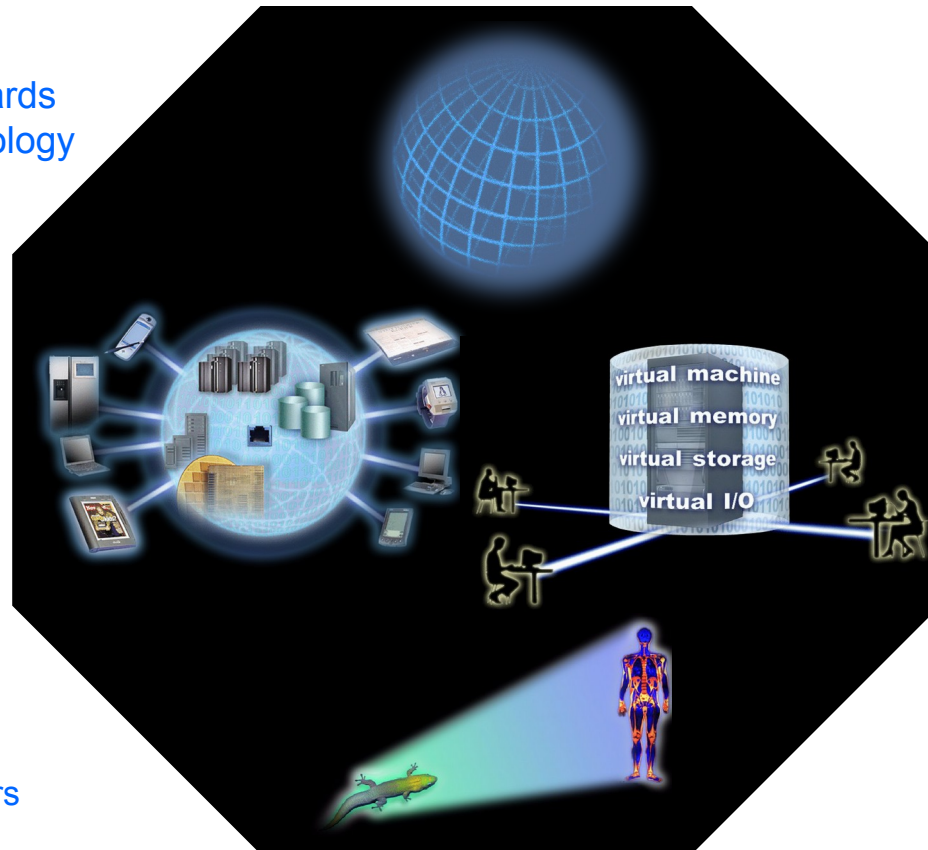
# Characteristics of an On Demand operating Environment

## Open

- Meet Industry Standards
- Adaptability to technology changes

## Virtualized

- Utility-like
- Lower cost of ownership
- Usage-based pricing



## Integrated

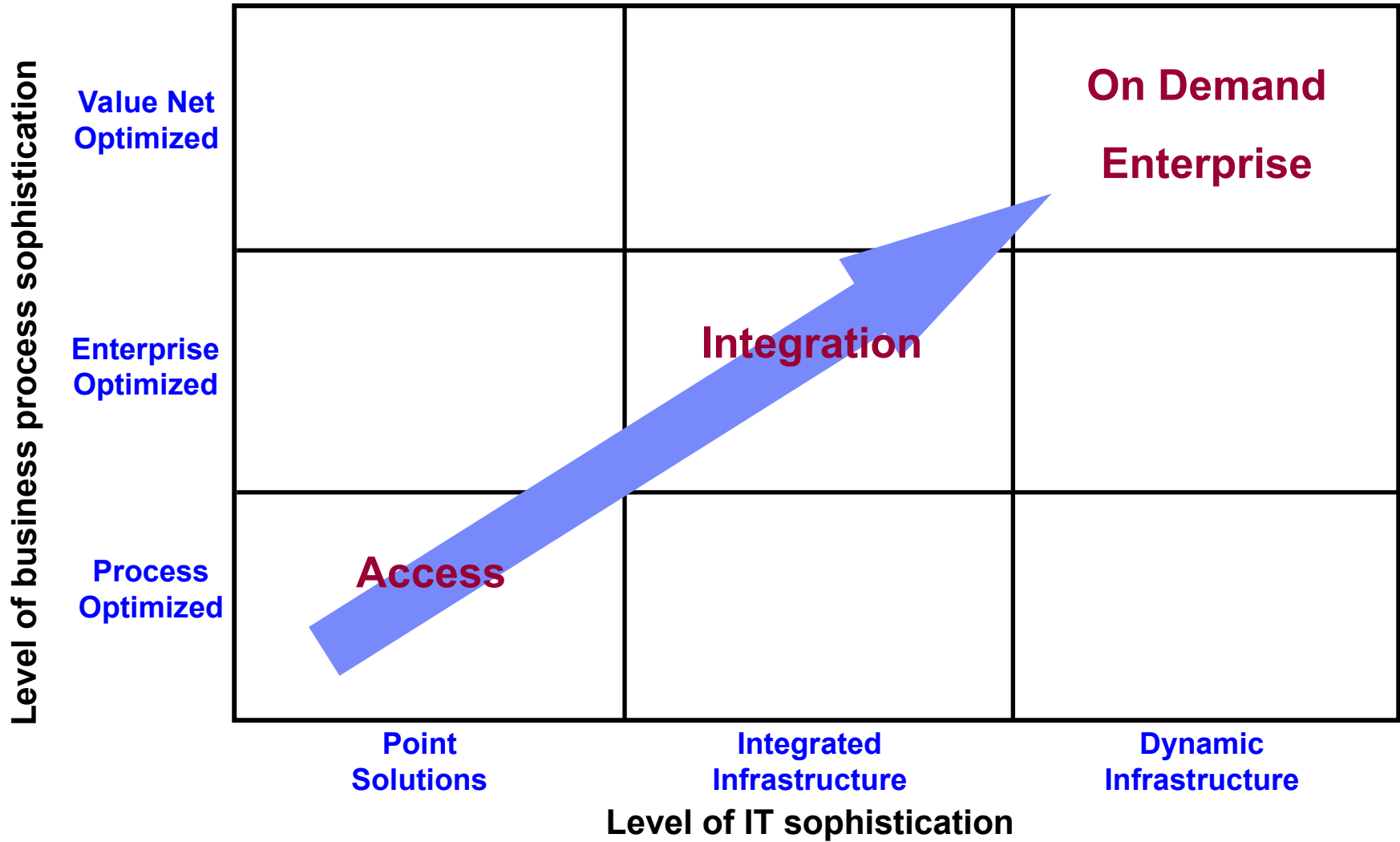
- Integration with legacy systems
- Connection to partners, suppliers and customers

## Autonomic

- Self-diagnosis and self-healing
- Remote monitoring and management
- Embedded security capabilities

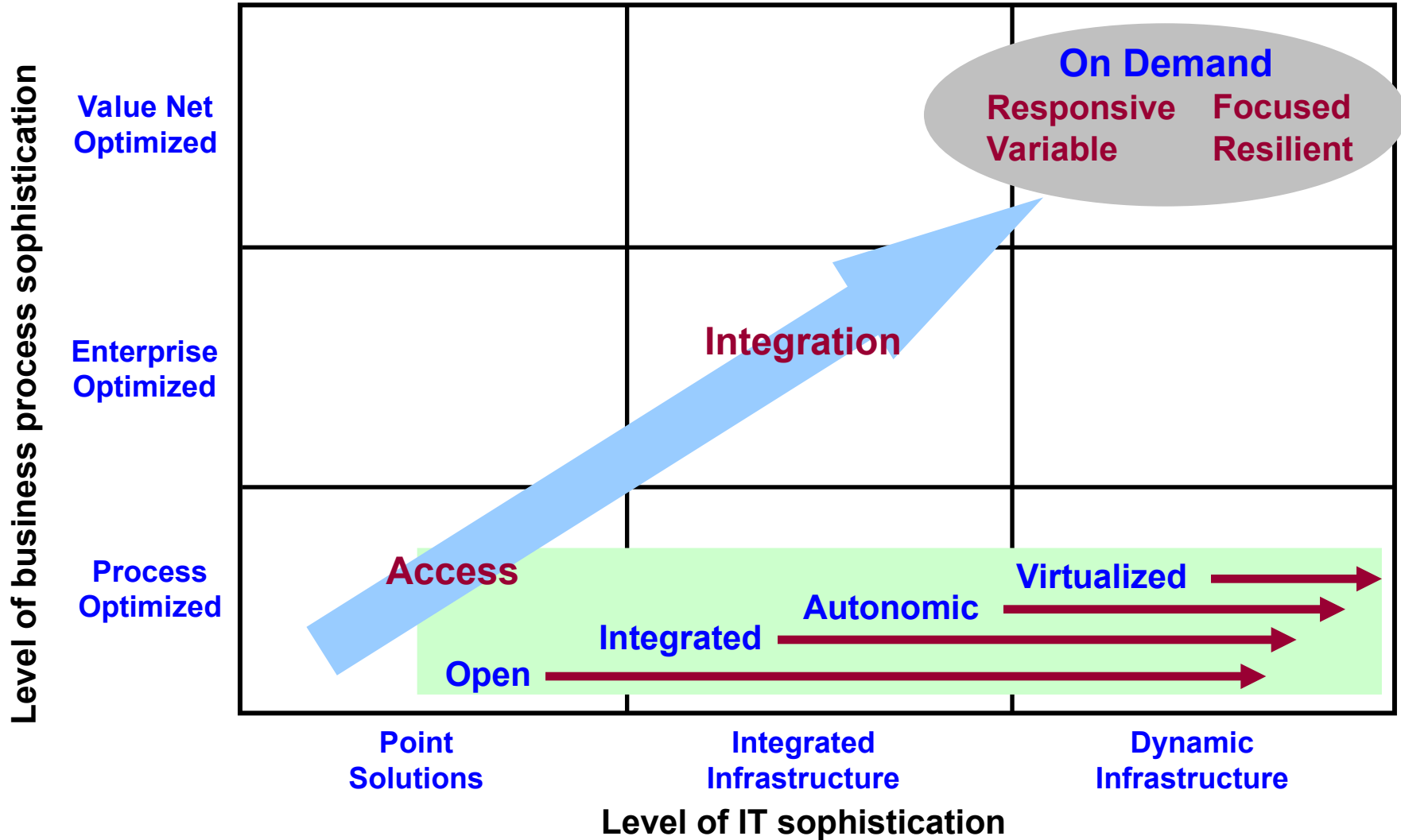


# The On Demand Journey

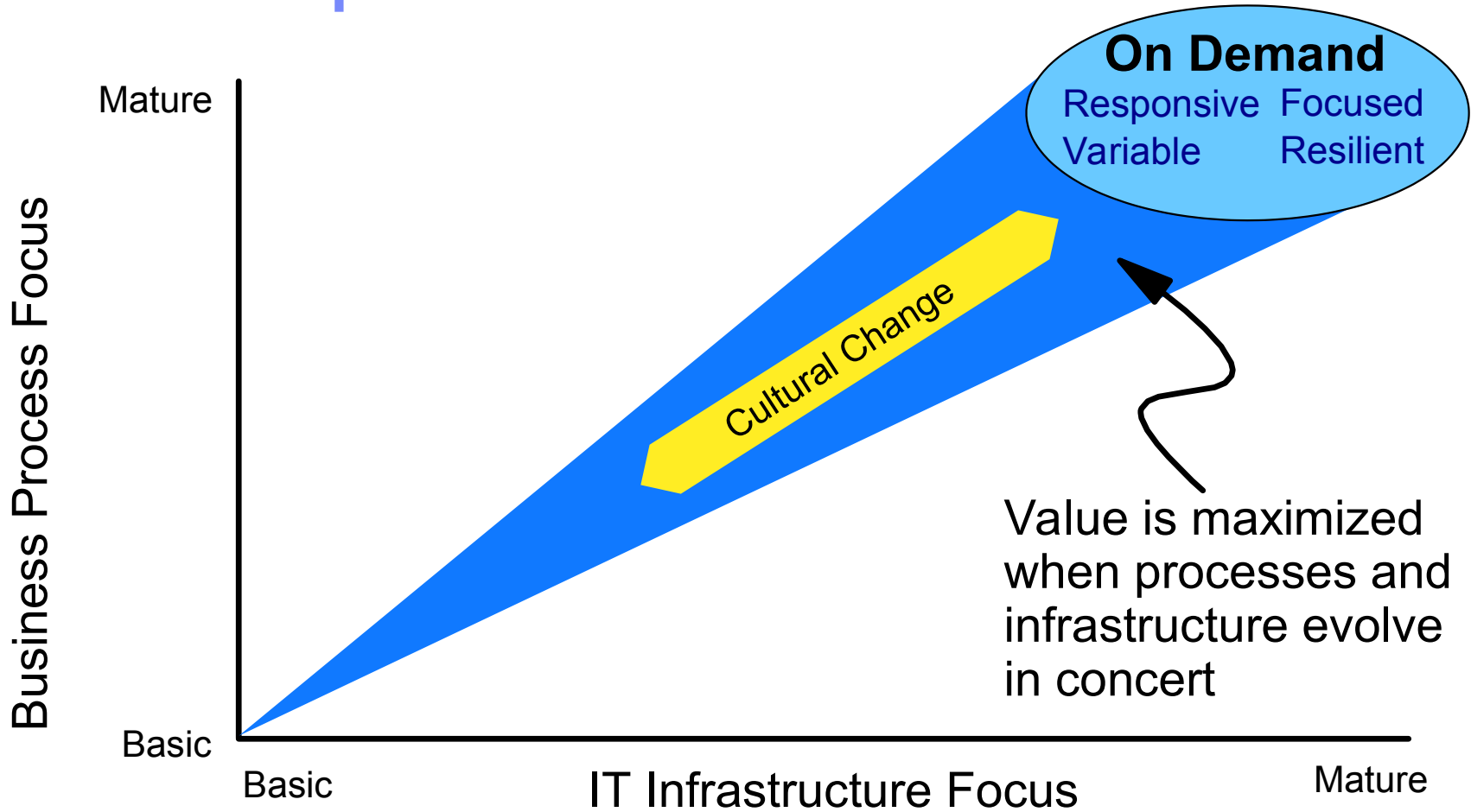




# The On Demand Journey



# On demand Government requires balanced focus on processes and infrastructure



# Canadian Navy

## Collaboration-at-Sea

### WHY BECOME ON DEMAND:

The Canadian Navy needed a robust, dynamic information-sharing and collaboration system to enable realtime communications for rapid-response deployment and operations

### SOLUTION:

“Collaboration-at-Sea” solution enables fast, reliable data transfer over low-bandwidth networks using Lotus Domino. SameTime collaboration tools allow the Navy to communicate in realtime between ships, and ship-to-shore, anywhere in the world

### BENEFITS:

- Responsive: Realtime information delivery and on-line collaboration tools shorten planning time, speed operational deployment
- Variable: Highly flexible, open system allows rapid deployment of new applications, such as video conferencing or ship-to-shore medical imaging
- Resilient: Collaboration-at-Sea operates over highly secure networks, and its ability to recover from data transfer interruptions allows seamless recovery of data once connectivity is restored



# Regione Lazio

## Why on demand?

Regione Lazio is in central Italy that includes the cities of Rome, Frosinone, Latina, Rieti and Viterbo. The region is moving toward e-government as part of a national move to increase efficiency and responsiveness to its citizens. The regional authorities realized that this would require them to automate and streamline its business processes, permitting a move from static to dynamic systems that support real-time interaction with the public.

## How and where did they start?

- Started with a self-service system for citizens and businesses that allows such activities as applying for permits and responding to bids for government contracts, while connecting the regional government to all its municipalities.
- Solution components include WebSphere Application Server, DB2 Universal Database, Lotus Domino and SuSE Linux running on an existing IBM mainframe and an IBM *@server* zSeries 800.
- IBM Global Services BCS and ITS worked with Regione's IT team to integrate content and backend applications, enabling inter-organizational workflow.

## What benefits did they achieve?

- Enhanced responsiveness to constituencies
- Reduced total cost of ownership through use of Linux and server consolidation
- Ease of management of new function-rich portal
- Maximized application performance, availability and security
- The resilience to adjust to rapidly changing demand by taking advantage of the zSeries Capacity Upgrade on Demand
- The portal was launched within a 2-month timeframe in order to secure funding from the Italian government and satisfy other constraints.



# Department of Human Services

## Why on demand?

The Department of Human Services (for a US state) is a government agency that administers and manages all welfare-related programs operates a large database that stores critical information. This database is crucial to not only the department but also law enforcement agencies and the district attorney's office, yet at times it was inaccessible to employees due to infrastructure downtime. The department also faced the challenge of improving its ability to respond in realtime without adding additional staff. It needed a resilient infrastructure that would increase availability, reduce inflated costs and increase overall responsiveness.

## How and where did they start?

- IBM developed and configured the new infrastructure, allowing the department to migrate its database to a more stable platform
- IBM Global Services - Integrated Technology Services implemented the solution, which consists of an IBM eServer™ zSeries® 900 running SuSE Linux Enterprise Server V7 and z/OS® V1.1

## What benefits did they achieve?

- The new solution has improved the department's responsiveness to urgent matters, such as those involving child abuse cases, food stamps and Medicaid
- Employees can now rely on the new system to provide 24x7 availability for critical data
- The department has reduced the risks associated with unscheduled downtime – lost productivity could have cost it an estimated US\$95 thousand
- The increased reliability of the new infrastructure will help the department avoid ongoing maintenance charges of US\$87 thousand per year
- zSeries running Linux provides a reliable, stable and open-standards platform



# UK Police Department

## Why on demand?

Gathering and lining up suspects and lookalikes for identification is an essential part of police work: fast identification of suspects has been shown to increase conviction rates. Unfortunately, setting up an “identity parade” in the UK can take six-to-ten weeks -- and cost as much as US\$2,000. In order to be more responsive to citizen concerns about public safety, the police knew they needed to streamline and automate the process of setting up an identity parade.

## How and where did they start?

- They created a nationwide digital video solution, called VIPER, that permits identity parades to be rapidly created and shared online.
- The system was developed, implemented and managed by IBM TotalStorage Solutions Center and IBM Business Partner Sagitta
- The solution is based on an IBM infrastructure featuring Linux, IBM IntelliStation workstations, IBM General Parallel File System (GPFS), IBM TotalStorage FASTT 500 Storage Servers, IBM Storage Area Network and LTO Ultrium Tape Library and Tivoli Storage Manager

## What benefits did they achieve?

- With the solution, which includes a database of more than 10,000 digital images, identity parades can be assembled within two hours, while the witness still has a fresh recollection of the incident. In the first year, the solution delivered 18,000 identity parades.
- Costs were cut to under US\$250 per identity parade, compared to US\$1,200 - US\$2,000, resulting in savings of more than US\$11 million during the first year.
- Traditionally, 50 percent of live identity parades are abandoned. This has been reduced to less than 10 percent with the digital video solution.
- The reliable, long-term infrastructure for imaging is now in place to grow with demand.



# On Demand Government: Considerations

- On demand re-energizing e-government
- Infrastructure investments can streamline costs and enable transformations
- Invest savings in business process integration
- Consider support functions as well as primary service areas to select first area for process integration
- Extend to clients and suppliers over time
- Proactive leadership required to drive transformation



# Helpful Resources...

## IBM Institute for Electronic Government

- A Resource for Leaders in Policy and Technology Strategy

### Strategic Collaboration

- Kennedy School, Harvard
- Maxwell School, Syracuse
- European Institute of Social Security
- Governance in Digital Economy
- Council of State Governments
- US Internet Council

### Washington DC Facility

- Strategy sessions
- Best practices demonstrations
- Innovation center
- Whitepapers
- [www.ieg.ibm.com](http://www.ieg.ibm.com)

## IBM Endowment for the Business of Government

- Grants, reports, seminars
- Magazines, books
- Cutting edge ideas/concepts
- [www.businessofgovernment.org](http://www.businessofgovernment.org)





## \*\*\*\*\* Delete in final presentation

- Extra slides \*\*\*\*\* Delete in final presentation



## On Demand Government: *How IBM can help*

- **Assessments** ...of your current e-government state and readiness for advanced stages
- **On Demand roadmap** ...joint development
- **Infrastructure optimization recommendations** ...to free up funds for business process investments
- **Building business cases** ...for process transformation and new initiatives
- **Executive education** ...on e-Government leadership
- **Business transformation consulting and outsourcing**



# Governments are facing an increasingly challenging environment (Business area view):

## Revenue Collection

- Revenue decline in economic downturn
- Political aversion to raising taxes
- Ensuring current tax laws enforced
- Require ROI on all technology investments

## Public Safety, Privacy & Security

- Homeland security concerns raise public safety profile
- Communications across jurisdictions limited
- Imperative to maintain crime rate progress of the 90's

## Social Services

- Must take a holistic view of services to families
- Need to replace aging legacy systems
- Aging populations increase demand for services while key staff are retiring
- Economic downturn increases client needs and reduces inflow of funds

## Public Adm & Infrastructure

- Administrative functions slow & labor-intensive
- Governments late to adopt ERP solutions
- Staffing challenges will be created by retirements over next few years

## Postal

- Improved customer service & delivery scheduling
- Reducing operational costs
- New value-added services

## Defense

- Enhanced operational readiness & support for the warfighter
- Interoperability among Service, Allies, and Government/Industry
- Implement better utilization/accountability in defense spending

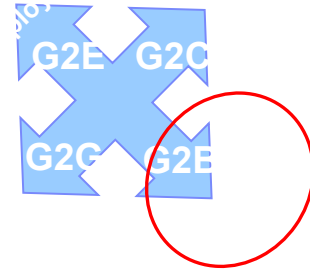


# Why On Demand?

- Increasing expectations of constituents
- Legislative & policy changes
- Government re-organizations
- Government consolidations (Local government)
- European Union initiatives
  
- Optimized social service delivery
- Collaborative defense operations
- Integrated taxes
  
- Healthcare
- Economic growth
- Education
- Social programs



# New York State: Governor's Office of Regulatory Reform *Integrated Offerings for New Business*



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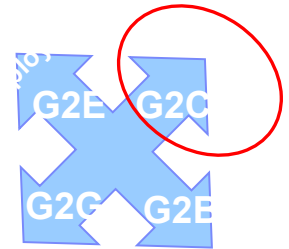
## On Demand Characteristics:

- Improved responsiveness to businesses
- Future direction is to simplify the internal processes in multiple agencies

The screenshot shows the website for the Governor's Office of Regulatory Reform (GORR) in New York State. The page includes a header with the state name and a navigation bar. A main menu lists various services, with 'Regulatory Reform' and 'Permits' highlighted in red. A large graphic on the right features a cartoon illustration of a man pulling a cow in multiple directions, with the text 'Is Government Bureaucracy Pulling You in Too Many Directions?' and '...then Contact GORR!' below it.

# Manitoba - Integrating Social Services Programs

- Common entitlement
- Enhanced operational effectiveness
- Improved outcomes & metrics for program effectiveness

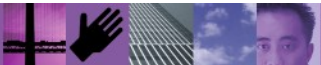


## On Demand Characteristics:

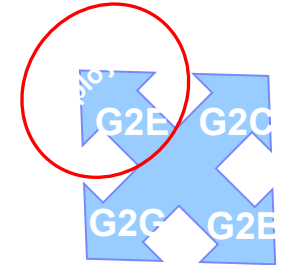
- Reengineering simplified the processes, shortened cycle times, and saved money.
- The services are much more responsive to constituent needs

**Human Services Guide**

**Business Services Guide**



# U.S. Army ... eArmyU



## ■ Objectives

- Remove barriers to further education - finance & access
- Increase retention, Improve critical thinking

## ■ Results

- Acquired students new to higher ed - 27% had never taken a college course
- Removed access barriers - Army pays up to 100%
- 20% re-enlisted - \$96M in recruitment savings



### On Demand Characteristics:

- Value Net: military, universities, IBM
- Outsourced: education & enrollment
- Responsive: anytime, anywhere

# Principado de Asturias - Spain

## The business challenge:

- ▶ Increase responsibility, accessibility & efficiency in the Public Administration - citizens relationship
- ▶ Quality services through a multi-channel Citizen's Service Bureau

## The solution:

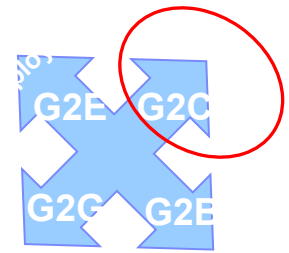
- ▶ Definition of the services to be offered by the CSB
- ▶ Design and implementation of a multi-channel CRM application based on Siebel technology
- ▶ Integration of all the channels of communication through a front office technology platform

## The client benefits:

- ▶ Allows the regional government to become a modern organization that can meet its citizens' needs
- ▶ Provision of better quality of service to the public
- ▶ Improved information management processes for the provision of services
- ▶ The new service offers application and status information online via its web interface

## 'On demand' Preparation :

- ▶ An **integrated** state of the art solution that will meet future needs; a **focused** and **responsive** service to the citizen



Business



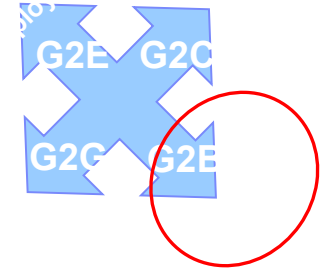
*"To be effective in the eGovernment sphere...you must provide the multichannel functionality that the private sector offers"*

*Adolfo Arana, BCS Partner*





# Virk.com – Danish G2B Portal



## The business challenge:

- ▶ Pursue economic development and improve public services
- ▶ Relieve businesses from administrative burdens through the a portal for all relationships between SME and Danish Government
- ▶ Authentication of digital signatures at no extra cost

## The solution:

- ▶ ‘One-stop-shop’ for relevant Government information and services
- ▶ Advanced personalized web front-end for both businesses and individuals
- ▶ Public - private innovative partnership and joint initiative supported by 5 Ministries and more than 24 institutions
- ▶ Secure e-form environment where reporting can be done electronically
- ▶ Portal provides related information from private partners – e.g. banks, insurance companies, accountants and law firms etc.

## The client benefits:

- ▶ Better services to businesses
- ▶ Decrease in costs of duplication and paper-driven processes
- ▶ Expected cost savings from 30M to 150M Euros over three years
- ▶ Lessen administrative burden for companies working with Public Administration

## ‘On Demand’ Preparation:

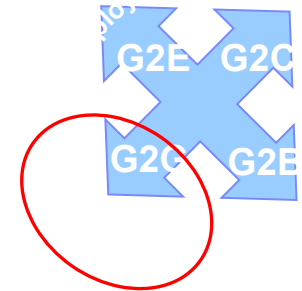
- ▶ Exploring on Demand enterprise opportunities: e.g. a **variable** Shared Services Centre approach for HR.



*“...It is of strongest importance that the portal lessens the administrative burden for companies. Companies should focus on growth and not on reporting to the public institutions...”*  
 Deputy Prime Minister



# UK Whitehall Knowledge Network



## The Business Challenge:

- Enable a government Knowledge Management system to provide up-to-date information to elected representatives, to the media and to the general public.
- Bring senior levels of government into close and swift communication on policy and issues and the departments to talk to each other

## The Solution:

- Creation of a Government-wide knowledge network, 24-hour electronic 'one stop shop' for policy briefing, facts & figures.
- Notes Domino collaboration tools

## The Client Benefits:

- Instant internal communication of Departments with each other
- Joined-up policy making
- Increasing Government policy information to the public
- Helping staff access information and respond efficiently: 250,000 users per week
- Improved coordination of different communications channels
- Enhanced ability to respond to "quickfire" changes and questions in a united fashion

## 'On demand' Preparation:

- A perfect tool to dynamically drive policy changes in **response** to demand. A **resilient** service to both citizens and government employees



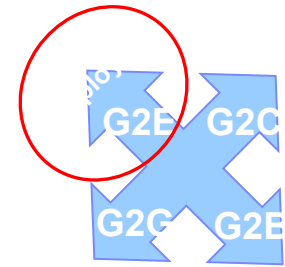
*"It has entailed every single government department working in a coordinated fashion to a shared goal ... We are the first government in the world to have delivered this capacity"*

*Andrew Pinder, e-envoy*



# IBM Web-Based Employee Site

## *A Productivity and Collaboration Tool*



- Customize information
- Access benefits
- Career planning
- Personal administration
- Expense management
- Travel planning
- Collaborative Tools

e-meetings

Lotus Notes

Teamrooms

Sametime

**On Demand Characteristics:**

- Rapid implementation of new HR applications
- Low cost learning infrastructure
- Influences cultural changes





# CapWIN

## Capital Wireless Integrated Network

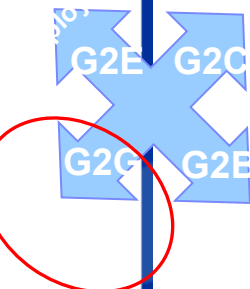
- Home
- What's New
- The Project
- Sponsors
- Goals
- Objectives
- Roles
- Tasks
- Timetable
- Documents
- Links
- Contact

# CAPWIN

## Capital Wireless Integrated Network



*Building a Bridge in Transportation and Public Safety Communications*



[top ▲](#)



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Webmaster

### On Demand Characteristics:

- Multi-enterprise participation
- Cross-organization data access
- Shared infrastructure

# On demand Roadmaps for Government business areas....

**Note: These are preliminary roadmaps that will be further refined by our consulting and solution teams. As new material is available, it will be shared worldwide.**



# e-Government Cross-Agency Functions - Human Resources

## Key Customer Pain Points

- Real costs of administrative services
- Lack of efficiency due to redundancy
- Need to do more for less
- Fragmented approach to inter-government operations
- Fear of change

### Current Process State

- Silos
- Vertical agency funding
- Rules-oriented
- Manual-limited automation
- Rigid
- Multiple applications, systems, etc

### **Solutions/Offerings**

- ERP services
- HR call center
- Assessment services

### Intermediate Process State

- Enterprise
- Cross-agency funding
- Value provider
- On-line
- Flexible
- Enterprise (ERP)

### **Offerings**

- ERP services
- Web services
- Dynamic workplace

### On demand Process State

- Self-Service
- Usage-based funding
- Knowledge provider
- Interactive
- Responsive
- Outsourced

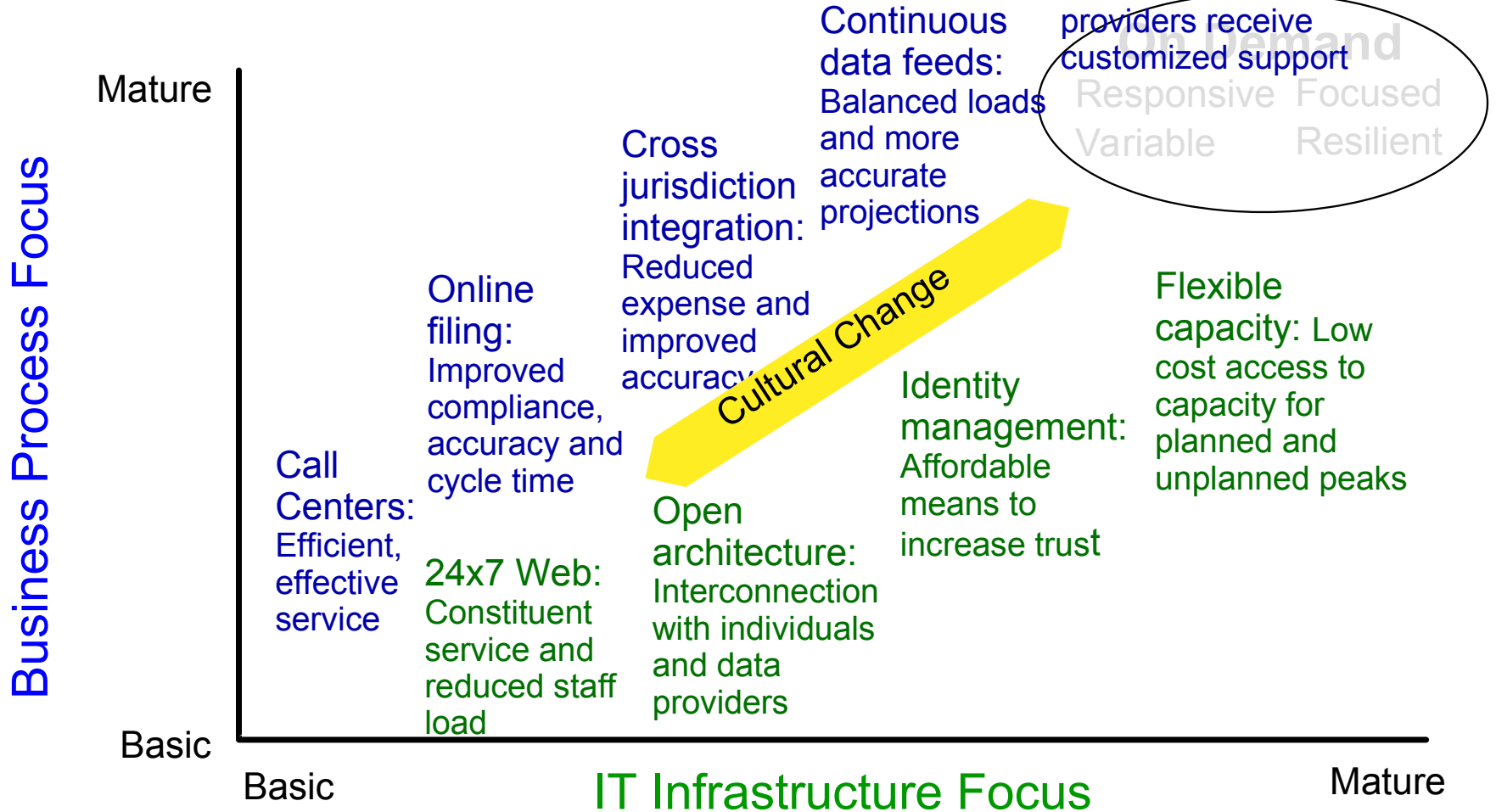
### **Offerings**

- On Demand Workplace
- Hosted HR applications

Source: BCS,  
Americas



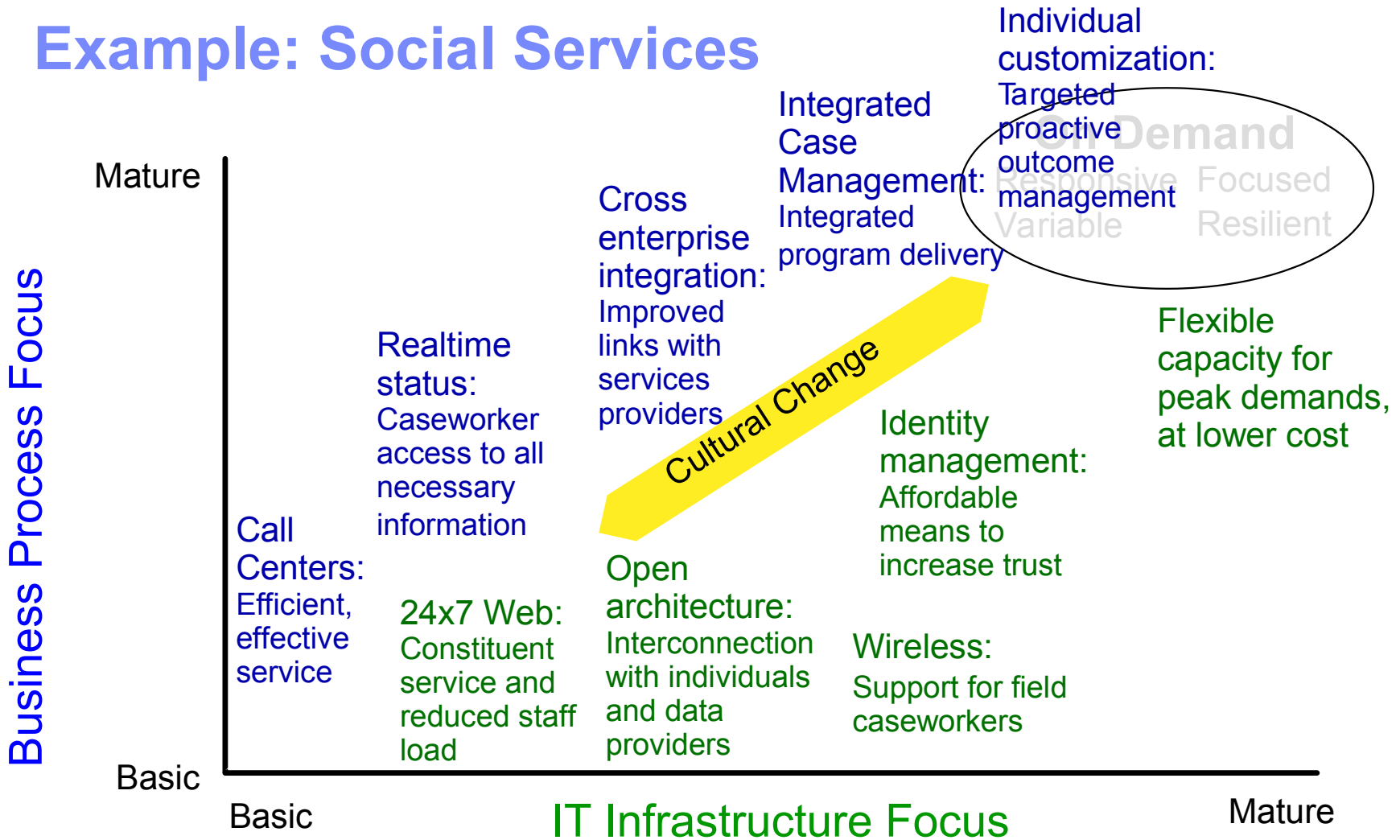
# End-to-End Tax Administration Evolution



Source: BCS, Global Revenue/Fiscal Segment



# Example: Social Services



Source: BCS, Global Social Segment





# Moving Forward....



# Nine Key Steps to On Demand Government: *Building the Foundation*

Building the Foundation

Where do we start?

Step **1** **Optimize the Infrastructure**

- Consolidate to reduce cost & complexity
- Build security into the system – it is not an ‘add-on’

Step **2** **Establish architecture & standards**

- Use real industry standards – not product defaults
- Define overall enterprise architecture
- Define enterprise portal strategic – look/feel, linkages, updates

Step **3** **Create cross-government Governance system**

- Establish e-government leader reporting to CEO or CFO
- Business leaders as champions
- Clear ownership for results



# Nine Key Steps to On Demand Government

## Driving Integration/Transformation

### Step 4 Identify natural candidates for integration

- Administrative processes (eg. HR, Finance, Procurement)
- Critical functions (Security, tax, social services)

### Step 5 Demonstrate proactive senior leadership

- Compelling vision & reason to change
- Senior leaders acting as one
- Focus on 1 or 2 priorities at a time
- Sound business cases and metrics
- Regular reviews & communications on status

### Step 6 Change the culture

- Utilize advocates
- Focus on customer experience, not government offerings
- Utilize customer advocates to define needs
- Change processes & organization to meet customer needs
- Clear plan for employee development
- Balance “carrots & sticks” to move forward

# Nine Key Steps to On Demand Government: *Extending the Impact*

Extending the Impact

Step **7** **Extend infrastructure to suppliers & customers**

- Identity, security, privacy
- Interfaces based on industry standards
- Force electronic interchange whenever possible

Step **8** **Optimize value chain around key constituents**

- Small businesses - entrepreneurs
- Social services clients – senior citizens
- Healthcare - education

Step **9** **Consider utility-like I/T capabilities**

- Grid computing – dynamic/variable compute power
- Autonomic features – manageability, availability
- Sourcing alternatives

