

NORTEL



Next Generation Workforce

**How Unified Communications Can Be a Transformational Solution
In Making Government More Efficiency and Flexible**

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Tim Stone
Lead UC Consultant
Nortel Global Services

NORTEL



Agenda

- Next Generation Workforce Defined
- How Demographic Changes are Impacting the Workforce
- Unified Communications Defined
- Unified Communication – A Key Tool in Addressing Workforce Issues
- The UC Journey & Maturity Model
- The Market
- Key Questions
- Structure Approach To UC Success



4 Generations In Workforce

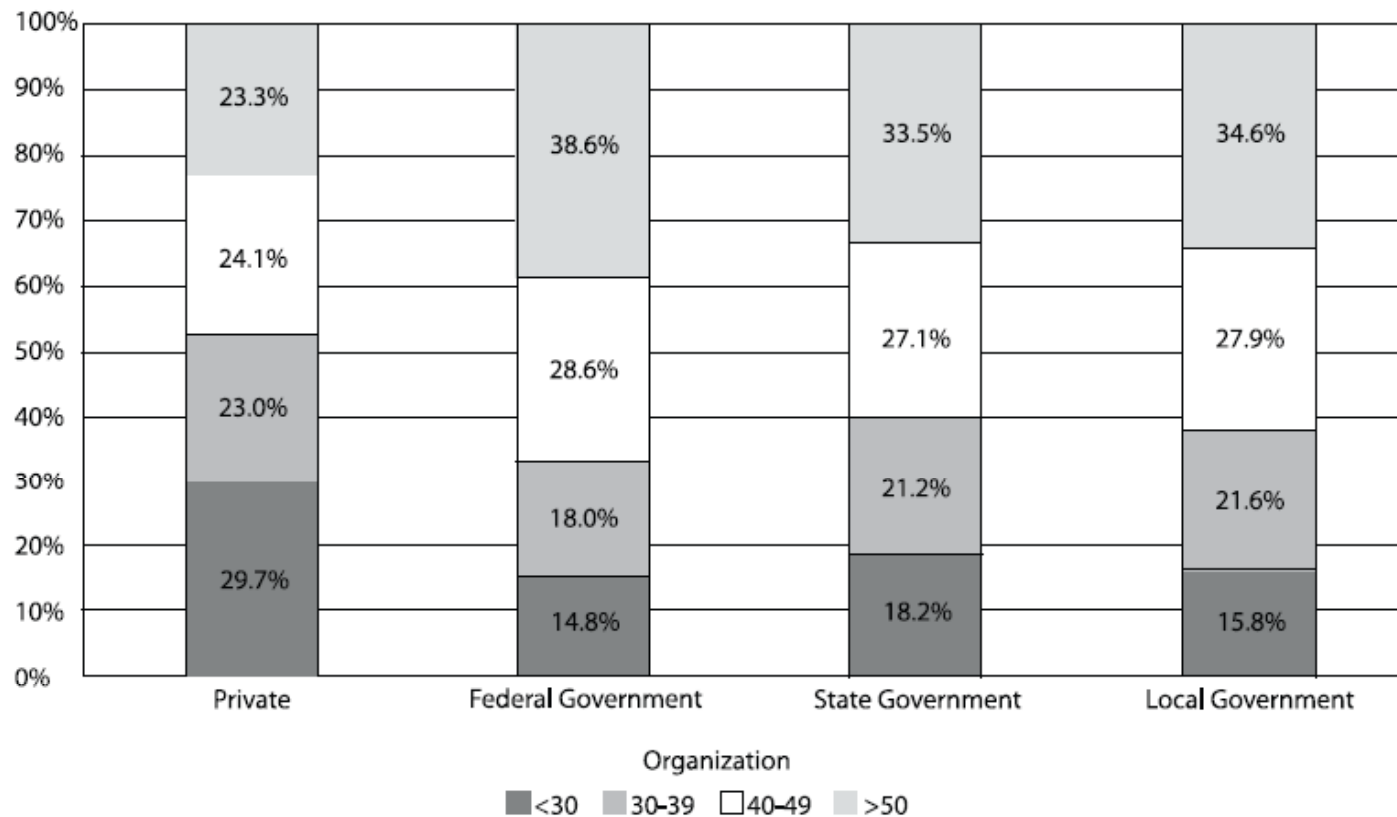
- The Matures - born prior to 1946 – Older then 62
- Baby Boomers - born between 1946 and 1964 44 - 62
- Generation X - born between 1965 and 1980 28 - 43
- Millennials - born between 1981 and 1994 14 - 27

Additionally, today's workforce has the greatest gender and ethnic diversity in history.

Workforce is also experiencing an increase in the number physically handicapped in IT and services positions.



Age Distribution of Workers in Government & Private Sector, 2005



Source: Bureau of Census, Current Population Survey (CPS), Annual Demographic File, March 2005

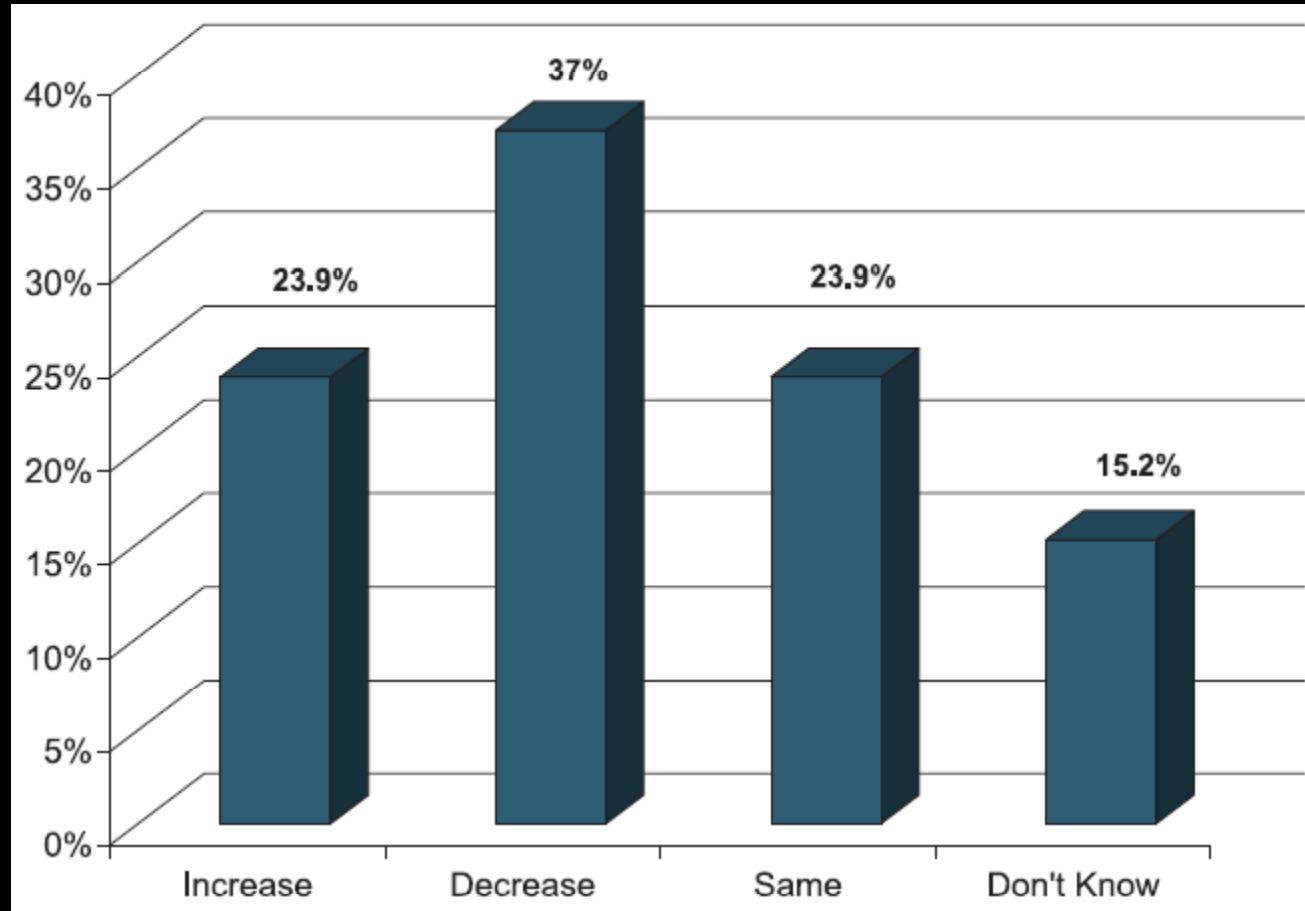


Workforce Is Changing

- More Generations Working Together Then Ever Before
 - How do we effectively meld different work styles.
- “Knowledge Retirement”
 - How are key skills and organizational knowledge passed on in a positive way?
- Expectations Are Higher
 - Career Satisfaction
 - Flexibility
 - Tools
- Needs Are Different
 - Single Parents
 - Elder Care demands
 - Leveraging Post Retirement Age Resources
 - Both Parents Working with Equal Responsibilities and Expectations



Percentage Change in IT Applicants Within Past Five Years



Generation Characteristics



The Matures

- born prior to 1946 (approx 5% of workforce)
 - Dedicated
 - Willing To Sacrifice
 - Hard Work
 - Conformity
 - Law And Order
 - Have Respect For Authority
 - Patient
 - Loyal
 - Duty Before Pleasure
 - Adhere To Rules

Generation Characteristics



Baby Boomers

- between 1946 and 1964 (approx 45% of workforce)
 - Optimism
 - Team Oriented
 - Personal Gratification
 - Health And Wellness
 - Personal Growth
 - Involvement
 - **Live To Work**

Generation Characteristics



Generation X

- between 1965 and 1980 (approx 40% of workforce)
 - Diverse
 - Think Globally
 - Believe In Balance
 - Techno-literacy
 - Fun
 - Informality
 - Self-reliance
 - Pragmatic
 - **Work To Live**

Generation Characteristics



Millennials

- between 1981 and 1994 (approx 10% of workforce)
 - Optimistic
 - Civic Duty
 - Confident
 - Achievers
 - Sociable
 - Street Smarts
 - Diverse
 - **Live In The Moment**

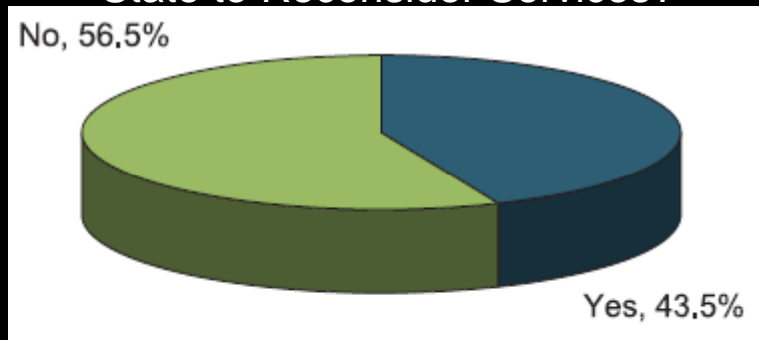


HOW IS THIS AFFECTING THE WORKFORCE & IT CAPABILITIES?

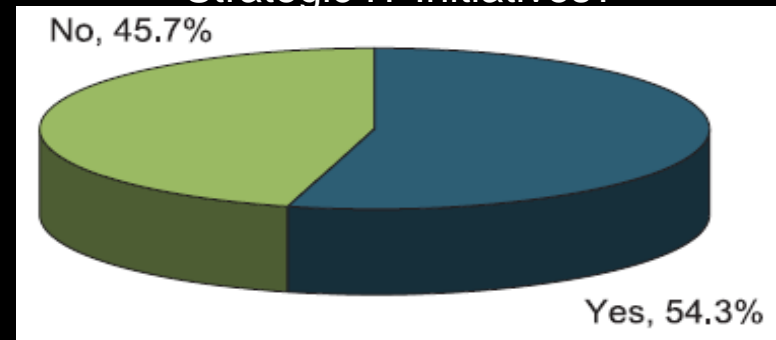
Some Interesting Statistics



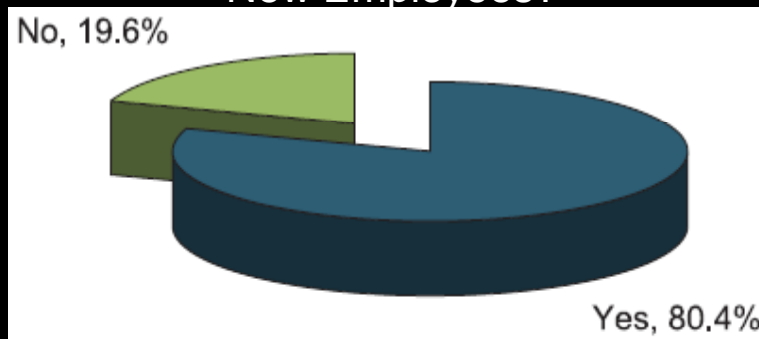
Has Number of Retirements Caused State to Reconsider Services?



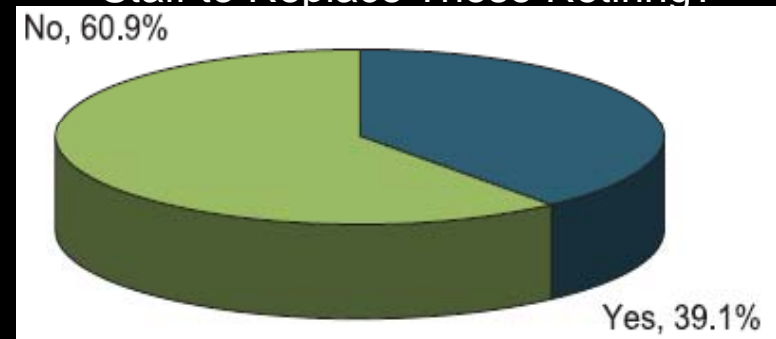
Is Shortage of Candidates Hindering Strategic IT Initiatives?



Is State Having Difficulty Recruiting New Employees?

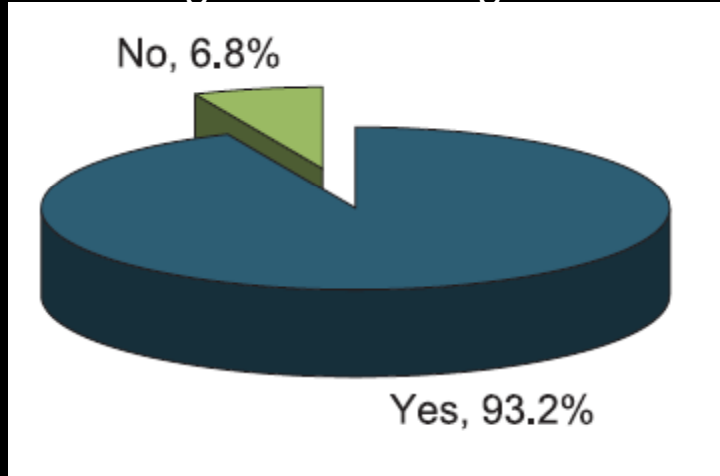


Will State Be Able to Promote Qualified Staff to Replace Those Retiring?

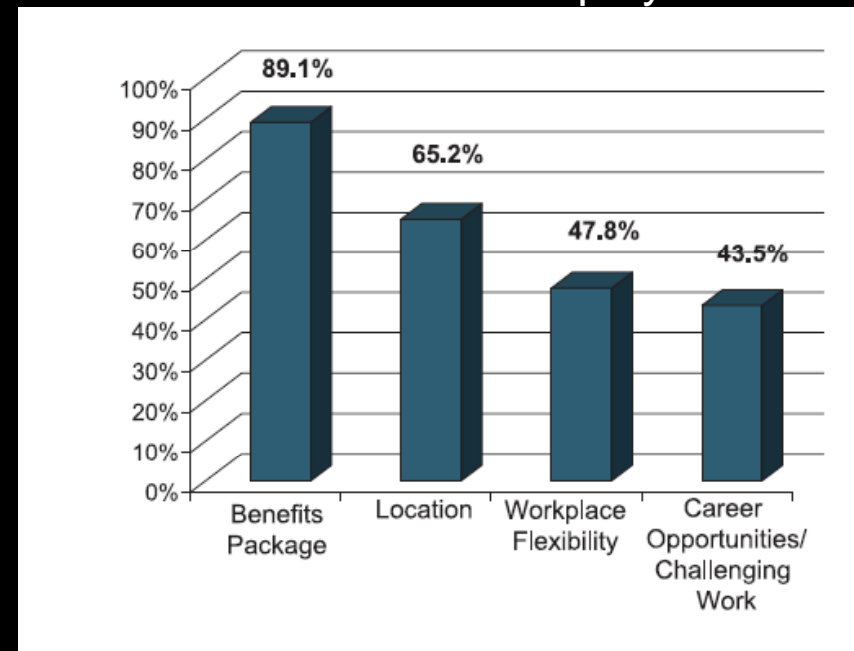




Do State's Salary Rates Present a Challenge in Retaining IT Talent

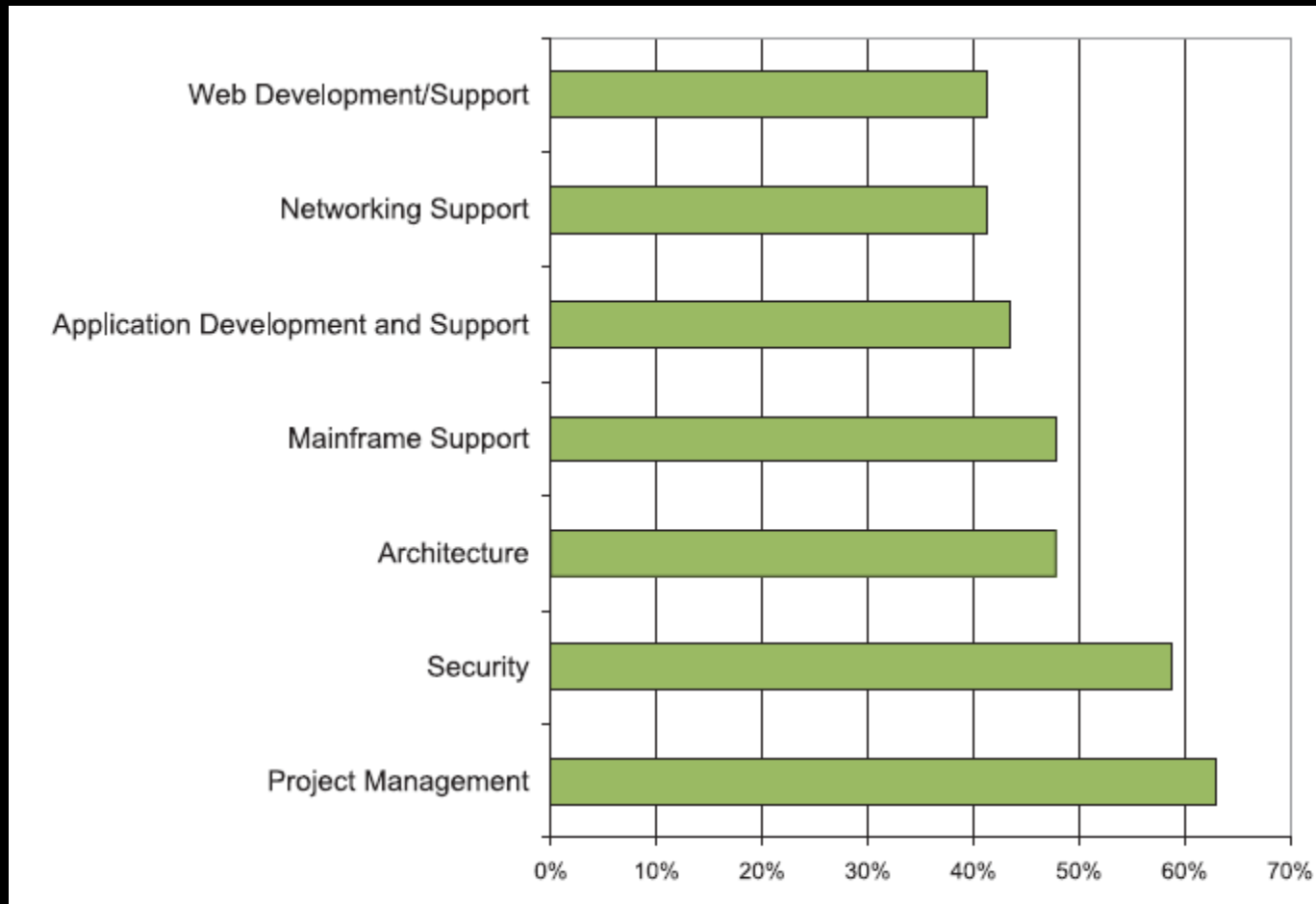


What Attracts New Employees?



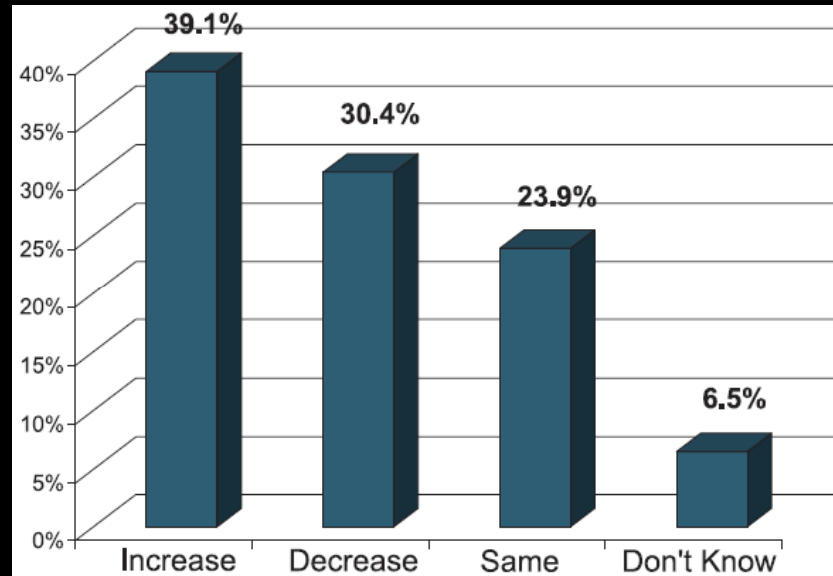


What Skills Present the Greatest Challenge in Attracting & Retaining IT Employees?

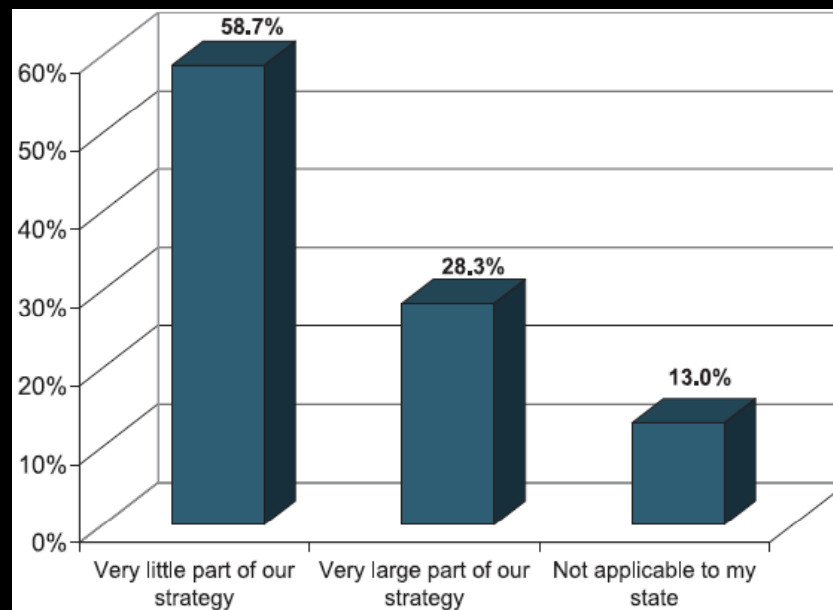




Has There Been a Change in Number of Contracted IT Positions Over Past Five Years?



How Much of a Role Will Outsourcing Play to Maintain Legacy Systems?



So???



This is an opportunity as well as challenge!

- The next generation workplace will be built from the ground up far more than by top-down interventions. It will evolve through experimentation - trying new things, implementing new practices, doing work differently, interacting with colleagues in innovative ways and managing people with the vision and belief that any organization can be a place where passion is inspired and talent unleashed.
- The workplace can be changed for the better if enough people devote their hearts and minds to making it happen. The most important thing is to make a start because the future of work begins now.

How?



- Effective, Positive Skills Transfer is Essential
 - Skills Inventory
 - White/Yellow Pages
 - Mentoring
 - Both Classroom and Web Based Training
- Leverage previously overlooked candidate pools
- Communicate Government Career Opportunities in New Ways
- Deploy New Communications & Collaborative Tools
 - Tools Need To:
 - Be Intuitive
 - Support Different Levels Of Knowledge
 - Reduce Learning Curve
 - Handle Repetitious Tasks
 - Communications Enable Productivity and Business Applications
 - Allow Flexibility based on Individual capabilities and needs
 - Facilitate Natural Communications Independent of Geography



Technology Has Changed

- Market Place Is Changing
- Needs Are Changing
- Abilities Are Changing



Technology Release Cycles are Compressing

- 10 Years Ago 16-18 Months
- 5 Years Ago 10-12 Months
- Today 6 Months (Maybe)

People And Technology



- People Are Different
- Technology Is Advancing
- Match Tools To Job And People

Viewing Alarms

Command Line

```
ICNC1# umon -u bilo
```

```
*****  
** Entering the NETWORK MONITOR - Wed Jul 30 14:40:49 2008. **  
** Enter help for information. USER: bilo **  
*****
```

```
LOS ALARM: for User bilo on Service View ne3076_ls.30193.1-28 NE=3076.  
NSA LOS ALARM: for User bilo on Service View ne3075_ls.30193.1-28 NE=3075.  
NSA LOS ALARM: for User bilo on Service View ne3076_h1.3.1-28 NE=3076.  
LOS ALARM: for User bilo on Service View ne3075_h2.3.1-28 NE=3075.
```

```
***** NETWORK MONITOR -- Wed Jul 30 14:40:50 2008 *****
```



WEB GUI

The screenshot displays the 1340 INC web GUI. The main window shows an "Alarm List Report" with the following table:

Select	Type	SEV	ATYPE	SA	User	Circuit ID	NE	AID	Level	SBNK	AC
<input type="checkbox"/>	FAC	MN	RAI	NSA	bilo	30/HFGS/400687	MLDNSCDDHC10110100A/3075	b-2 (ne3075_ls.30193)	T3	382	
<input type="checkbox"/>	FAC	SC	AIS	SA	bilo	NONE	MLDNSCDDHC10110100A/3075	m2-1-3 (ne3075_h2.3)	T3	382	
<input type="checkbox"/>	FAC	SC	AIS	SA	bilo	30/HFGS/400687	GNVLSCDTHCF0336037A/3076	b-2 (ne3076_ls.30193)	T3	382	
<input type="checkbox"/>	FAC	SC	RAI	NSA	bilo	NONE	GNVLSCDTHCF0336037A/3076	m1-1-3 (ne3076_h1.3)	T3	382	

Below the table, it indicates "Lines 1 to 4 of 4 Lines, 1 Page" and provides "Acknowledge" and "Comment" buttons.

The background shows a network diagram with nodes labeled "0C-12" and "BT-LO Corp".



Next Generation Workplace Framework & Where UC Can Help

Next Generation Workplaces inspire the passion and unleash the talent of the people that work in them by delivering six key attributes of a fulfilling work experience:

- Providing staff with a rich work and learning environment – and the tools and support they need to do the work they like most and are best at.
- Making sure everyone feels valued for their contribution to the organization.
- Maintaining a work environment that allows staff to perform at peak without compromising their personal priorities and interests.
- Giving workers large degrees of discretion to act in pursuing the goals of the organization and trusting them to exercise their discretion wisely.
- Developing rich person-to-person connectedness and belonging that individual employees share with others within or affiliated with an organization.
- Making the mission purposeful – giving employees something they can believe in, something that gives their work and their lives meaning – something that involves a higher purpose.

Source: <http://www.nextgenerationworkplace.com/>



WHAT IS UNIFIED COMMUNICATIONS?

**And How Can it Help in Addressing
The Needs of the Next Generation
Workforce?**

What Is Unified Communications?



“Gartner defines UC products (equipment, software and services) as those that enhance individual, workgroup and organizational productivity by enabling and facilitating the control, management, integration and use of multiple enterprise communication methods. UC products achieve this through the convergence and integration of communication channels (that is, media), networks, systems and business applications, as well as through the consolidation of controls over them. UC products may be made up of a stand-alone product suite or a portfolio of integrated applications and platforms.”

“A Framework for Unified Communications”
Gartner, 2007

UC&C services are delivered through enabling technologies, which can be organized into 3-tiers



1. Clients provide the means through which users access UC&C capabilities. Clients can be software or hardware.

Clients	IM Client	Soft Phone	Desktop Video Client	Web Conf. Client	Unified Clients	Productivity Applications (Office)	Portal	Contact Center Agents Apps	Business Apps
	Mobile Devices	Desktop Phone	Thin Clients	Thick Clients	Telepresence Units	Room Based Conferencing Units			

2. Components provide UC&C capabilities related to Voice, Messaging, and Conferencing.

Components	Unified Communications			Collaboration	
	Voice	Messaging	Conferencing	Wiki	Doc. Mgt
	Click to Call (RCC/TCI)	IM	Vmail/UM		
	Peer to Peer				
	Softphone				
	Simultaneous Ring	Persist. Chat	Email	Blogs	Document Sharing
	Personal Call Asst				
	Telephony Presence	RSS & Notif.	Fax	Forums & Discussions	Social Networking
	White Pages				

3. Enabling infrastructure is common and supports all of the UC&C components.

Infrastructure	Presence	Security & Entitlement Management
	Directories	Network Monitoring and Management
	Search	Network & Data Center
	Calendar & Scheduling	Provisioning
	PKI /Digital Rights Management	Reporting
	Voice	

State Government Business Challenges



- Flat or declining tax revenues, budget shortfalls
- Healthcare cost and quality
- Maximizing technology
- Aging government workforce
- Aging Infrastructure



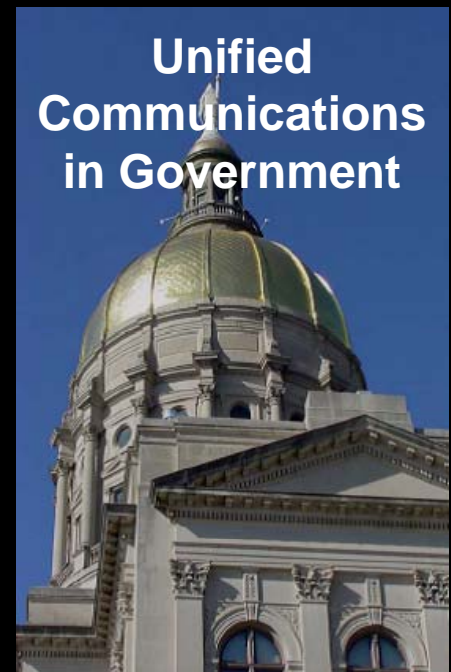
Fiscal and business pressures continue to drive programs that remove cost, improve productivity and enhance citizen accessibility to government



Unified Communications

Value to Government

- Fosters collaborative culture across all staff including dynamic working groups, tele-workers & mobile workers
- Increases efficiency through new communications modalities, presence awareness and collaboration tools
- Increases responsiveness and speeds decision making through greater information sharing and collaboration
- Supports green initiatives and reduces fuel and travel cost through web & video conferencing and other collaboration tools.
- Increases customer satisfaction through new and more personalized citizen access.
- Assists in recruitment by providing technologies recent college graduates are accustomed to using in private life



Unified Communications has a clear role in addressing business challenges



How UC Can Help

- Mentoring & Knowledge Transfer
- Extending Skills
- Flexible Working Hours and Location
 - Enables New Candidate Pools
 - Allows flexibility for
 - Single Parents
 - Workers with Elder Care responsibilities
 - Multi-Working Parent Families
- Leveraging Skilled Workers From all Geographies
- Efficiency
- Location Based Dispatch
- Attracting Recent Grads with UC Tools



Application Integration

- Provide New Capabilities Through Familiar Interfaces
 - Leverage Existing Productivity Applications
 - UC Enabling Line of Business Applications

Microsoft Application Integration

Outlook

The screenshot shows the Microsoft Outlook interface. On the left is the navigation pane with folders like 'Inbox', 'Deleted Items', and 'Mailbox - Alex Hankin'. The main pane displays an 'Alert: Daily summary - 7 results' for 'Contoso [administrator@contoso.com]'. A context menu is open over a contact, listing actions such as 'Schedule a Meeting...', 'Send Mail', and 'Add to Outlook Contacts...'. A red circle highlights the contact name 'Contoso Administrator' in the list.

Word

The screenshot shows a Microsoft Word document titled 'Government Drug Standards Meeting Invitation'. The document content includes the date 'June 10, 2004' and attendees: 'Attendees: Alex Hankin, Brian Hodges, Contoso Administrator'. A context menu is open over the name 'Contoso Administrator', showing options like 'Schedule a Meeting...', 'Send Mail', and 'Add to Outlook Contacts...'. A red circle highlights the name 'Contoso Administrator' in the text.

Excel

The screenshot shows a Microsoft Excel spreadsheet titled 'Sales Figures'. The spreadsheet has columns for quarters (Q1-Q4) and rows for various product categories like 'Adult Vitamins' and 'Senior Vitamins'. A context menu is open over a cell, showing options like 'Schedule a Meeting...', 'Send Mail', and 'Add to Outlook Contacts...'. A red circle highlights the menu options.

SharePoint

The screenshot shows a SharePoint web page titled 'Home - Vitamin Sales Team'. It displays a list of 'Sales Call Reports' with columns for 'Type Name' and 'Modified By'. A context menu is open over a list item, showing options like 'Schedule a Meeting...', 'Send Mail', and 'Add to Outlook Contacts...'. A red circle highlights the menu options.

Custom Office Communicator Sign-in



Nortel can create custom Sign-in /Sign-out user interfaces that can be combined with business requirements to deliver role based collaboration, enhanced notification and workflow capabilities

OCS Communicator: Login

Login Name:

Password:

Desk: ▾

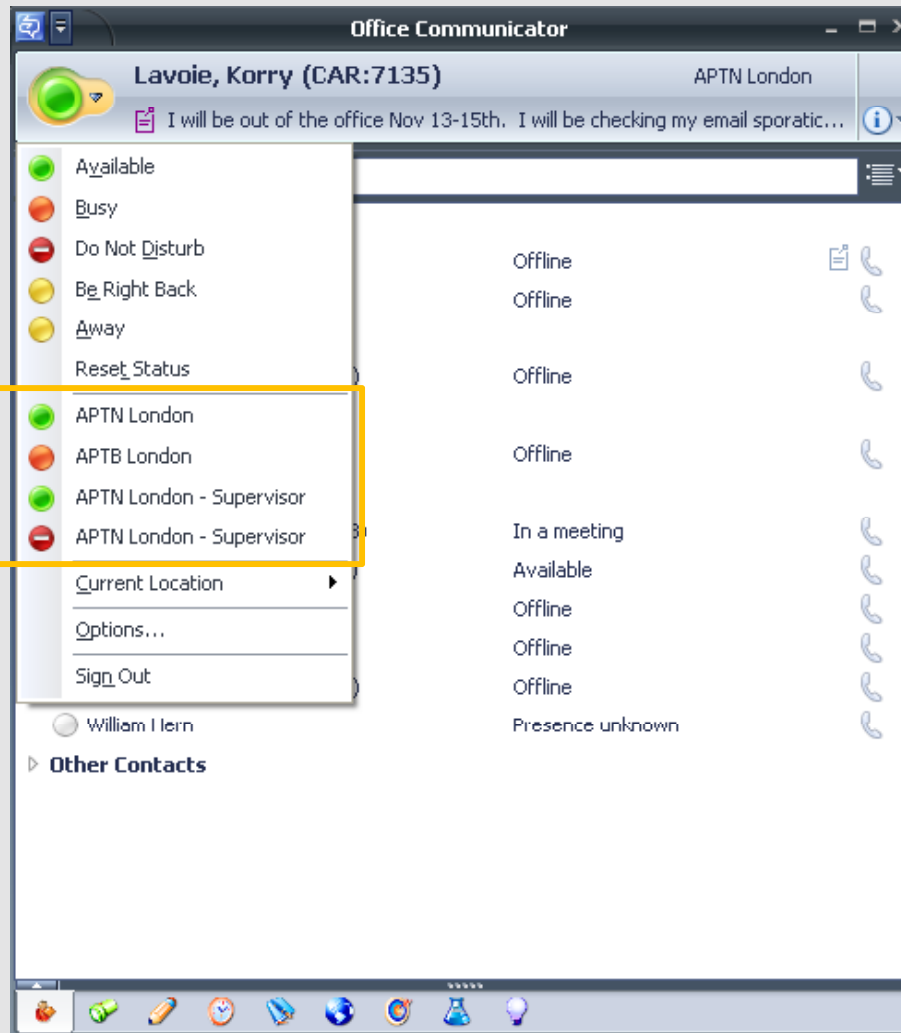
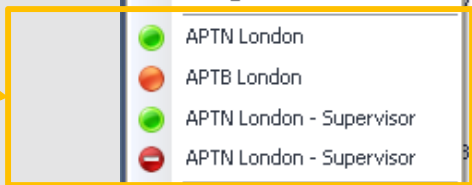
Role: ▾

- Supervisor
- Artist
- Assignment Manager
- Coordinator
- Copy Desk Supervisor
- Copy Editor
- Desk Assistant
- Editor of the Day

Custom Presence



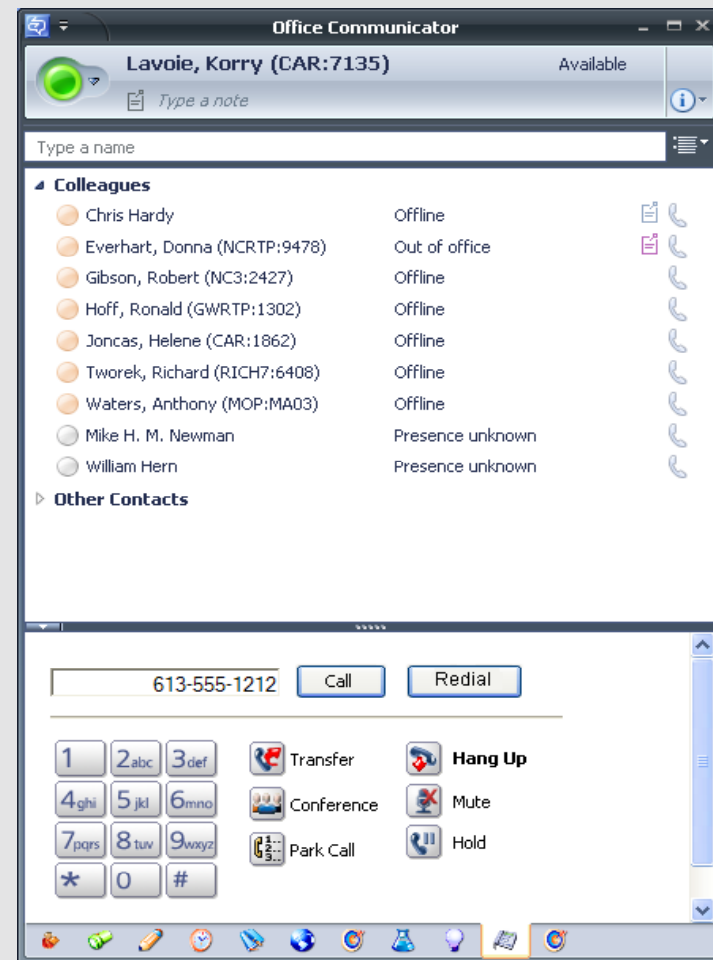
Customer
Specific
Context



Office Communicator Tabs: Custom Telecommunications Integration



Nortel provides unique capabilities related to communication-enabled applications. In this scenario, we can provide call control capabilities to various call server Technologies..



Custom Mash-ups

Nortel can create very unique applications including Web 2.0 mash-ups to leverage existing social computing and internet sites to “bridge” information from multiple, disparate sources.

The screenshot displays the Office Communicator interface. At the top, a contact card for 'Lavoie, Korry (CAR:7135)' is shown with a status of 'APTN London' and a message: 'I will be out of the office Nov 13-15th. I will be checking my email sporadic...'. Below this is a search bar labeled 'Type a name'. The main contact list is organized into several categories:

- NY Business**
 - Chris Hardy (Offline)
 - Joncas, Helene (CAR:1862) (Offline)
- NY International Supervisor**
 - Tworek, Richard (RICH7:6408) (Offline)
- NY Business Supervisor**
 - Joncas, Helene (CAR:1862) (Offline)
- Supervisors**
 - Everhart, Donna (NCRTP:9478) (In a meeting)
 - Waters, Anthony (MOP:MA03) (Available)
 - Hoff, Ronald (GWRTP:1302) (Offline)
 - Joncas, Helene (CAR:1862) (Offline)

At the bottom of the window, a map is displayed showing the New York City area, including locations like Yonkers, New Rochelle, and Fort Lee. The map is powered by Google and includes navigation controls and a toolbar.

Greater value is derived as UC technology capabilities are leveraged to improve business processes and individual work practices



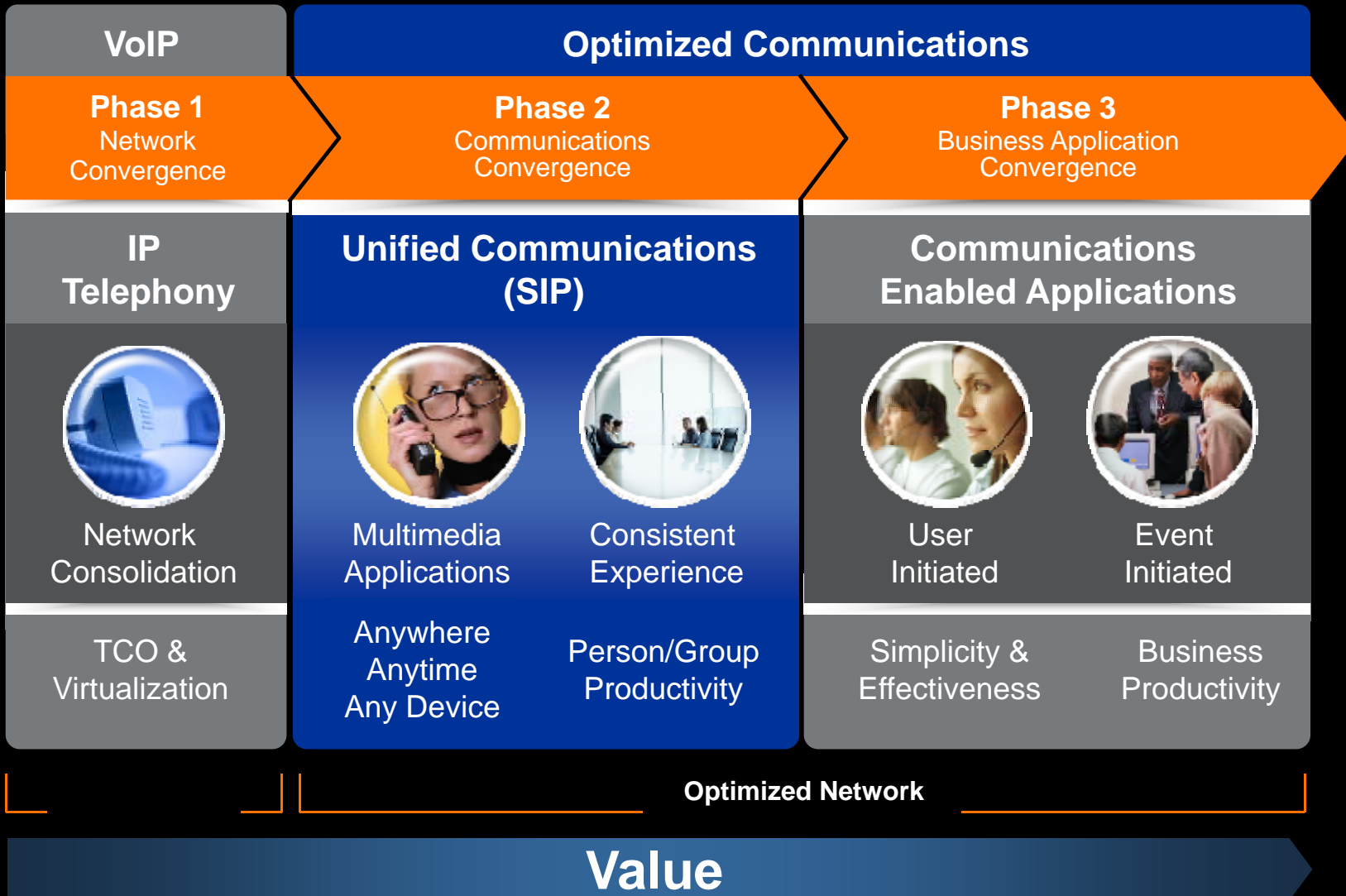
Time

Basic	Standardized	Expanded	Pervasive
<ul style="list-style-type: none"> Basic email with no calendar Public or no IM Limited web conferencing No IP enabled PBX No standard collaboration tools 	<ul style="list-style-type: none"> Standard platforms for email, calendar & IM Presence in desktop applications IP Telephony pilots Collaboration tools in use by selected groups 	<ul style="list-style-type: none"> Full range of UC&C tools are provided Some processes contain integrated UC&C capabilities Mobile Device Access Complete Desktop telephone integration 	<ul style="list-style-type: none"> Collaborative culture pervades organization UC&C creates competitive advantage UC&C integrated into most applications Seamless collaboration across firewall
Cost Center	More Cost Efficient	Business Enabler	Strategic Asset

Successful deployments require architectural discipline and senior executive sponsorship

Adapted from Gartner and Microsoft

The UC Journey





Unified Communications



- There are many commercial UC players evolving from different spaces
 - Traditional communications vendors are extending their offerings to include collaboration.
 - Likewise traditional collaboration vendors are extending their offerings to include communications.
 - Many vendors are forming integration and compatibility relationships

Team Collaboration and Social Software

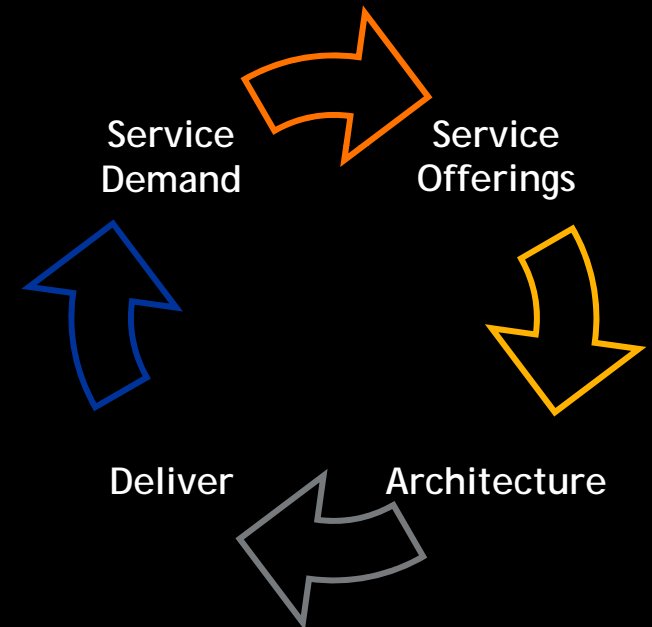


- In addition to commercial vendors, there are a large number open source UC solutions.
- It is important to carefully analyze not only individual vendors or solution capabilities but also the ability of the solution to integrate into business and other current and planned applications
- Lastly, it is important to assess the vendors commitment to industry standards and interoperability

Critical Path Questions



- Which UC services will be delivered?
- What is the end-state architecture that is needed to support these services?
- How and through which vendors will UC services be delivered?



A Structured Approach to UC Success



- Document Business Imperatives & Pain Points
- Define Success Criteria
- Model Business Case
- Identify Business/Operational Impacts
- Identify Technology Pain Points
- Identify Compliance Requirements
- Operational Capabilities
- Cultural Readiness

- Assess Current Infrastructure
 - Data
 - AD/DNS/PKI
 - Voice
 - Conferencing
 - Desktop
- Define Requirements
 - Staff Readiness
 - Data Network
 - Operations
 - UC Components
- Develop Architecture
- Define Deployment Strategy

- Test deployment model
- Validate features, functions & interoperability
- Build staff skills
- Validate business model

Creating Business Value

Achieving Operational Excellence

A Structured Approach to UC Success



- Evaluate pilot learning's
- Plan Deployment
- Address Infrastructure Evolution
 - Data
 - AD/DNS/PKI
 - Voice
 - Conferencing
 - Desktop
- IT Staff Training
- Help Desk Training
- Compliance Validation

- Deploy in phases based on readiness
- Install/Expand UC Server Components
- Build-Out Network As Needed
- Desktop Hardware Augmentation As Needed
- Client Deployment
- User Enablement
- User Training

- Maintaining operational excellence
 - Proactive Management
 - Quality of Experience Monitoring
 - Measure & Report Against Metrics
 - Continuous Quality Improvement

Creating Business Value

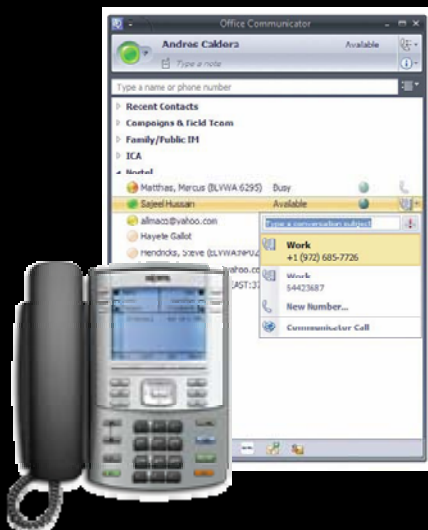
Achieving Operational Excellence



QUESTIONS & ANSWERS



Thank You



Visit Nortel booth
#557 for a
Unified
Communications
demonstration



Pick up your
FREE Unified
Communications
White Paper



NQRTTEL