



Bringing it all together

A phased approach to operational efficiency

Converging your infrastructure to become unified communications-ready

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Executive summary

Companies are under increasing pressure to remain competitive, increase revenue and improve efficiency. Most organisations are aware that convergence is key to achieving these goals and driving change. Convergence is changing the way we live and work, providing us with access to many different kinds of services over different networks. Among its numerous features and benefits, it has the power to transform supply chains, revolutionise customer service delivery, eliminate internal inefficiencies and reduce cost of ownership.

Despite this, many companies struggle to clearly map out their path to achieving operational efficiency and full convergence. In a complex and global environment, complete deployments are often stalled by the failure of departments to collaborate effectively, incompatible technology and a short-term focus on initial upfront costs only. The companies that overcome these barriers through a holistic and phased approach to achieving operational efficiency and a unified communications-ready infrastructure are set to thrive in our changing digital world.

In order to achieve full convergence, companies must first change their mindsets, by collaborating and converging departments, budgets and ideas in innovative ways. This breaks down barriers and enables technology to merge, driving positive change for the future of business, providers, governments and consumers.

Subsequent phases involve the close collaboration of providers and business to carefully assess several organisation- and technology-related variables to create a detailed plan and goal-orientated roadmap. Following through each stage of the roadmap results in a unified communications-ready infrastructure that enables you to “plug and play” the necessary applications. This will ensure that your organisation can profit from the convergence revolution.

The pace of convergence and operational efficiency

The need for convergence

In the digital networked economy, local and global pressures are driving the private and the public sector to evolve in order to meet the pressures of our changing world. Research conducted for BT by Globus Consult in 2006, shows that the main factors driving companies to introduce converged services are as follows in order of importance:

- 1) Competitive pressures
- 2) Maintain revenue
- 3) Efficiency increases
- 4) Cost savings
- 5) New revenue
- 6) Customer requests
- 7) Upgrades required

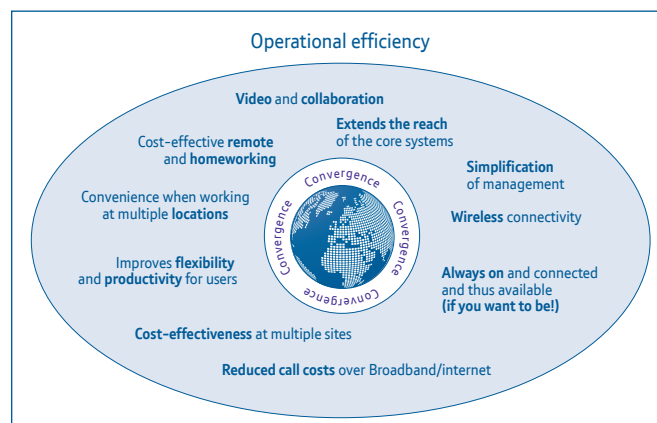
Globalisation and competitive pressures, including increasingly discerning consumers, are driving companies to offer better products with greater convenience and to support new business initiatives in new markets. Achieving competitive advantage and maintaining revenues can be further complicated by corporate re-alignment and consolidation of new acquisitions. At the same time, changing work styles, such as flexible and mobile working, requires systems to support multiple user profiles and access to numerous applications via a range of access types. Organisations must cope with internal and external pressures and simultaneously control costs and increase revenues.

As companies try to cope with rapid changes from all directions, legacy systems mean IT environments become increasingly complex and difficult to manage. The common result, writes Andy McCue in an article published in silicon.com's CIO Jury, in 2006, are disparate legacy systems which hinder business transformation and drain technology budgets. Old systems are also placing greater pressure on IT networks and staff than ever before. This presents obstacles to achieving change, controlling costs and maintaining specialised IT skills. As a result, organisations are experiencing a skills crisis with more than 60% of companies worried about core skills and lack of knowledge according to Globus Consult. In fact, a 2006 IDC report shows that the lack of in-house expertise is the main reason companies outsource the convergence process partially or completely.

The benefits of convergence

A cost-efficient seamless IP and IT infrastructure that supports business applications and helps organisations become unified communications-ready provides organisations with numerous benefits. A converged Local Area Network (LAN) and Wide Area Network (WAN) removes duplication and waste, simplifies systems, improves efficiencies, consolidates suppliers and reduces costs. Organisations are also looking to converge platforms for the ability to support the deployment and integration of new applications, such as video, multimedia and unified messaging. This provides companies with a communications infrastructure that can provide the right people the right access to the right applications. However, companies face the challenge of how to evolve and upgrade systems to achieve operational efficiency through convergence but still get the most out of their existing infrastructure while maintaining business continuity.

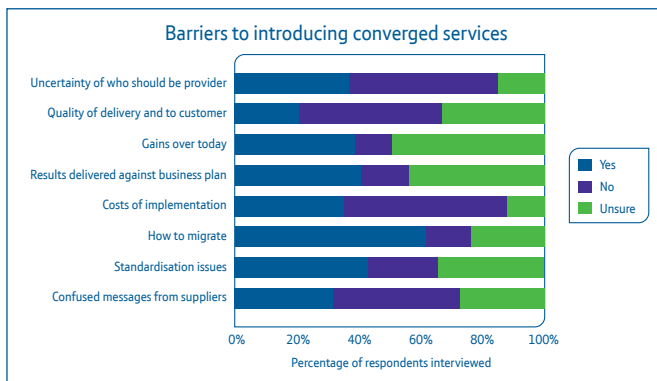
Figure 1: The benefits of convergence



Barriers to convergence

Most organisations are aware that convergence is key to achieving competitive advantage, increasing revenue and improving efficiency, yet many companies find it a daunting step. Research by Globus Consult indicates that executives consider convergence to be a strategic decision with wide ranging business implications and benefits. Despite this many customers are still unsure about its 'true value' and 'best adoption path'. Globus Consult reports that how to migrate effectively and painlessly are the biggest barriers to the implementation of converged services with standardisation issues and creating a business case other significant obstacles. In addition, these issues are compounded by the many confusing messages from the wide selection of potential suppliers.

Figure 2: Barriers to introducing converged services



Even though “more customers are evaluating Voice over IP (VoIP) technologies or conducting initial rollouts than ever before” according to Forrester in 2006, “their complete deployments are stalled.” Forrester says delayed deployments are caused by issues around the following three major factors:

- **Organisational divides**

For instance, employees with different expertise reporting to different department heads as opposed to the different groups working seamlessly together.

- **Technology challenges**

- Compatibility and interoperability
- The lack of VoIP-PSTN (public switched telephone network) feature parity
- Manageability
- Scalability
- Security
 - Consider the following security issues from the start:
 - Service function and availability bandwidth and assurance – ensuring full availability of the service and its proper functioning
 - Preventing fraudulent use
 - Ensuring privacy

- **The business case**

- Short-term thinking

Forrester finds that “many companies focus so much on upfront and capital expenses that they often neglect to assess the level of ongoing administration, monitoring and management that VoIP requires.”

- Budget issues

A larger proportion of the budget is often assigned to “higher priority projects, such as multiprotocol label switching (MPLS) deployments... or mobile data” and “many customers also recognise that deployments of IP telephony (IPT) and VoIP often require LAN and router upgrades—and customers tell us that their current budgets lack funding for such undertakings,” explains Forrester. As a result, upgrades and replacements are often postponed.

Organisations fear that they will incur large and hidden costs on the path to convergence and operational efficiency. However, they want to maximise the return on their legacy systems and achieve greater value for money and significant cost savings in terms of unit cost and management overheads. They are concerned about costs – including understanding where they are incurring costs, how to control them, and how to reduce them. They can achieve this understanding, but only through thorough assessment and planning of their business-specific roadmap to operational efficiency through convergence.

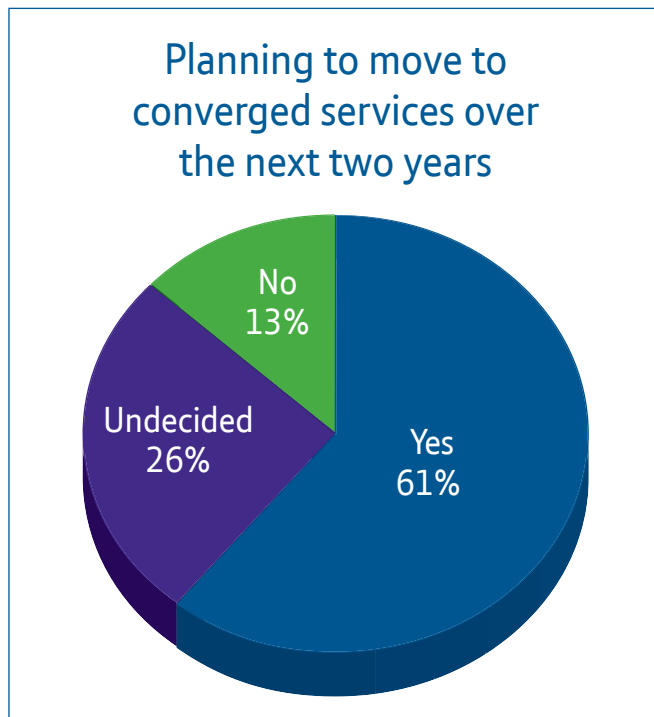
Adoption rates

Convergence and operational efficiency

Convergence is a reality and is happening now. In the UK in 2006, BT saw a 38% increase in revenues generated from 'new wave' services, which include broadband lines and next-generation voice, unified communications and collaboration (UCC) and entertainment services. The fact that converged and UCC-related services accounted for one-third of BT's total business in 2006 shows that convergence is taking hold.

Sixty one percent of European companies are planning to move to converged services over the next two years, reports Globus Consult. Twenty six percent are not sure they are going to make the move, while 13% have decided against it.

Figure 3: European companies are planning to converged services



Western European companies are embracing the convergence of voice and data, reports the IDC WAN Manager Survey 2006. The survey of 660 European medium and large enterprises showed that about 44% of respondents surveyed are at some stage in the convergence process, while in 12 months 51% expect to be in the convergence process.

Another recent report by Yankee Group commissioned by BT, *Overcoming Applications Ignorance: New Services to Enable Agility*, reports that only 12% of the multinational networks operated by European and North American firms are fully converged. The remainder connect their IT applications using a complex combination of legacy and IP networks. This indicates that there is still significant scope for organisations to take advantage of the benefits of convergence and enhance operational efficiency in their organisations.

IP telephony

Ninety three per cent of European enterprises have IP telephony activities underway or planned, while 16% have fully deployed them, according to a Yankee group report by Camille Mendler. By 2008, the IDC (2005) forecasts that 74% of large enterprises expect to have fully replaced their traditional voice networks with IP-based systems. The features organisations most want to get by switching to IP telephony systems, explains the report, are:

- Unified messaging,
- Remote moves, adds and changes, and
- Mobile extensions.

In 2006, 37% of North American enterprises whose networks extend beyond North America are evaluating or piloting VoIP for communications between facilities, reported Forrester. Twenty three percent had fully deployed the technology while 28% had partially completed deployment. Eleven percent had no plans to move to VoIP for site-to-site communications.

The path to convergence and operational efficiency

Convergence falls into three overlapping areas:

- Network infrastructure,
- Collaboration and communications, and
- Mobility and flexible working.

In the “sweet spot,” where all three areas overlap, organisations benefit from the integration of voice, data, fixed and wireless networks together with a new generation of application technology. These aspects work together to take enterprise convergence to the next level. This changes the way people work by enabling real-time collaboration from any device, no matter where a company and its people are located.

In order to deliver a new generation of compelling converged communications services, organisations need an IP-based network infrastructure. Old networks cannot support the convergence revolution or the future direction of business and an all IP next-generation network is the foundation required before a company can reap the benefits of convergence and UCC. A next-generation network is:

- Simpler and cheaper to build and maintain
- Flexible and adaptable to enable speedy rollouts
- Higher quality, more resilient and reliable
- Broad, global and able to support changing needs.

In order to achieve this, BT recommends a holistic and phased approach, involving two phases, each with specific steps:

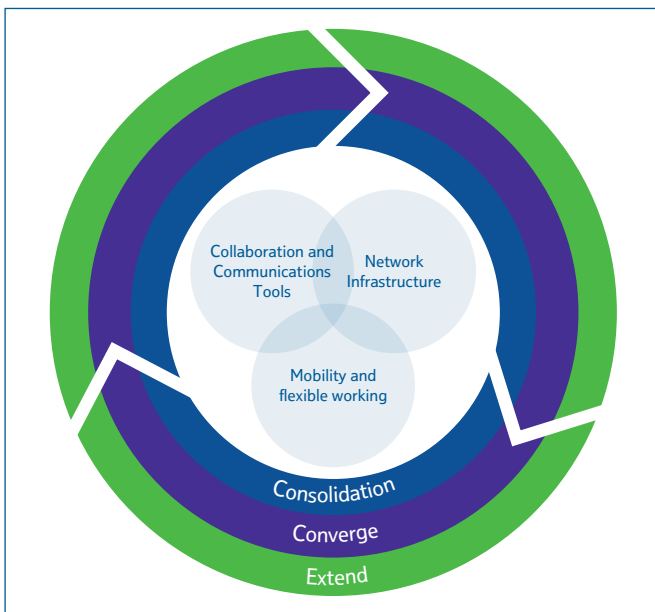
Phase One: Pre-implementation procedures

- 1) Assess
- 2) Plan

Phase Two: Steps to operational efficiency

- 1) Consolidate
- 2) Converge
- 3) Extend to UCC

Figure 4: A holistic approach to convergence



Phase One: Pre-implementation procedures

Assess

The assessment phase involves carefully considering several factors that are inline with Forrester's recommendation. Reviewing and optimising the following five areas before embarking on the convergence plan will enable you to create your company's roadmap to convergence.

- **Cost**

It is critical to consider maximising the investments made in existing equipment while optimising the cost benefits across the entire convergence journey and not only the initial upfront costs.

- **Risk**

Taking a low risk approach to convergence enables you to maintain existing customer service levels during your path to convergence.

- **Functionality**

Assess and decide what functionalities and applications you plan to "plug and play" once you have achieved convergence. This must be considered in the context of how ready your people are for this change and how organisation can help your users migrate with the technology.

- **Geography**

Your company's local and global footprint, your plans to expand into new markets and the degree to which your industry depends on communications to connect employees, partners and suppliers around the world are key considerations.

- **Resources**

This involves careful scrutiny of the human and IT resources at your disposal. You should consider:

- IT and networks' organisational structures (e.g. create an accurate network architectural diagram)
- Staffing and training requirements
- Current and projected budgets
- Traffic volumes and patterns
- Current WAN bandwidth and projected requirements (e.g. security requirements should also be considered)
- Connectivity challenges

Evaluating internal factors enables you to determine:

- whether in-house or outsourced resources or a combination of both will work best for your business and
- which option will enable you to best maintain focus on your core business.

- **Vendor, product and service offerings**

Evaluate the attributes of potential vendors and their product and service offerings against your business requirements. Forrester recommends you assess vendors on:

- Expertise
- Viability
- Product portfolio
- Services that interact with VoIP such as MPLS and PSTN services.

Forrester says products and services, such as VoIP products, should be assessed based on their:

- Reliability
- Compatibility
- Interoperability
- Security scalability
- Manageability
- Lifecycle costs
- Ongoing end-to-end network monitoring, modification and support.

Plan

Forrester emphasises the importance of providers to address technology, support and business case issues, while customers “must still quantify the benefits of these migrations, carefully plan them out, and ensure that their organisational structures are aligned to support these critical efforts”. Therefore, providers and business need to work closely together to devise a planned convergence strategy.

A carefully thought-out strategy based on collaborative efforts enables:

- **Better control and management**
 - Enable an organisation to view their whole telephony estate so it is within their management and control
- **Financial benefits**
 - Present a business case which clearly forecasts results and shows the benefits
 - Squeeze the maximum out of existing telephony and IT systems
 - Offers value for money and significant cost savings in terms of unit cost and management overheads.
- **Greater efficiency**
 - Achieve efficiencies via converged communications and consolidation of suppliers

• Improved communications

- Prioritise business critical applications such as voice
- Provide user satisfaction through up-to-date technology that facilitates mobile working and enhances the customer experience.

• Business continuity

- Minimise the risk of migration
- Ensure changes to the business environment are accounted for.

Making tactical decisions without a carefully planned out long-term plan can cause problems, such as:

- **Networks and their management that become increasingly complex**
- **More complex problems with a need to resolve issues between multiple providers**
- **Integrating legacy with new technology that become increasingly challenging**
- **Dissatisfied users.**

Companies that fail to plan adequately will be reactive to their environment and its challenges, instead of proactive in avoiding them and being ready for the changes affecting their business.

Phase Two: Steps to operational efficiency

Consolidate legacy systems

Most organisations procure on a commodity basis which inevitably results in multiple vendors and multiple technologies. In order to increase control of existing information and communications technology (ICT) and drive out cost, waste and duplication, companies need to consolidate their existing estate by:

- 1) Understanding the existing infrastructure
- 2) Reviewing current application performance
- 3) Rationalising technologies, contracts and suppliers
- 4) Simplifying their existing estate

This involves taking a hard look at the market and working out which service providers are really qualified to go the distance. Too many IT departments today are forced into tactical procurement decisions based on extreme cost targets from the business or top down pressures for innovation. This can lead to a reversal in the drive to reduce suppliers and a move toward dead end procurement arrangements. For this reason, it is important to choose a suitable provider early on.

Converge technologies

In this stage, companies need to evaluate how convergence can reduce cost, improve efficiencies and the effectiveness of an organisation. Following the consolidate phase, an organisation may have decided to install an IP WAN that is “convergence ready”. They will be focussing on building the basic end-to-end IP platform that will support future business systems. In this phase, organisations should be moving towards a single converged infrastructure which is going to significantly improve business communications. They could be doing this by consolidating fixed and mobile services or trialling IP voice or video services.

To converge technologies, organisations must:

- 1) Combine multiple infrastructures into IP centric networking
- 2) Implement COS (Class of Service) enabled WAN (Wide Area Network)
- 3) Upgrade the LAN
- 4) Deploy IP Telephony

Figure 5: Consolidate legacy systems

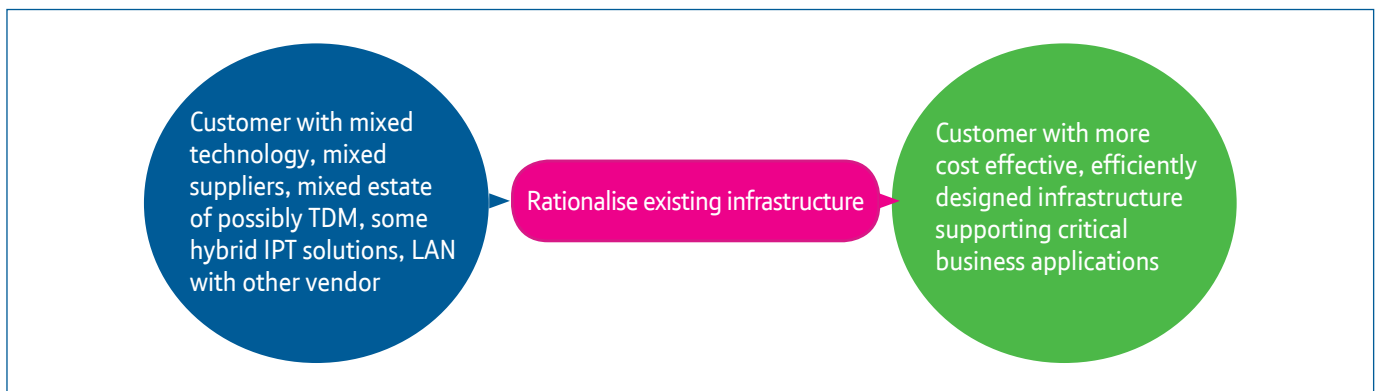
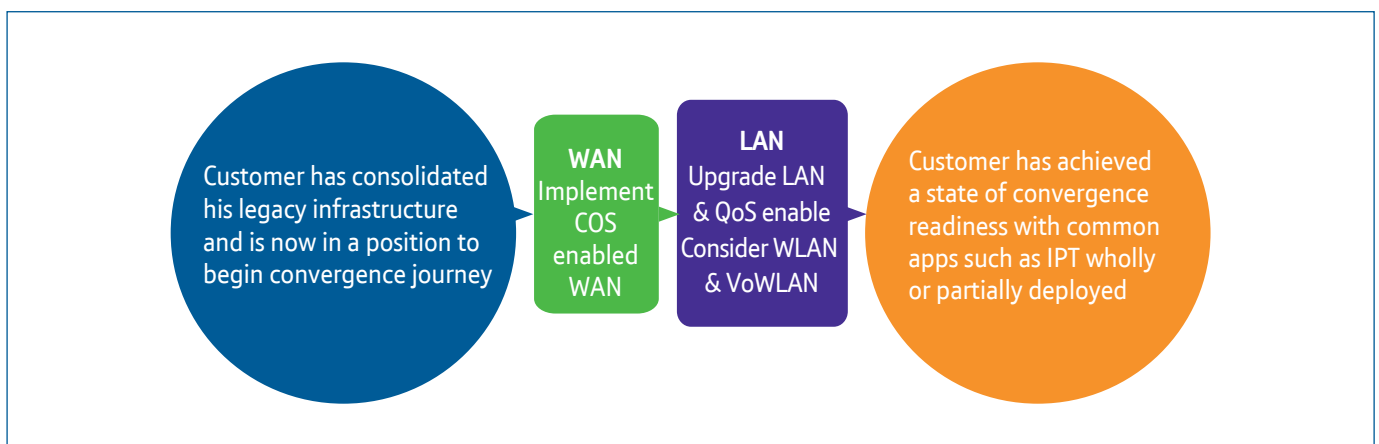


Figure 6: Converge technologies



Converged IP infrastructure

This stage involves implementing a single infrastructure that brings voice, data, video and applications together via a variety of access transport technologies. This begins with the WAN and extends into the LAN. The provisioning of a converged WAN/LAN allows the enterprise increased use of network resources at a lower cost. For example, decreasing existing voice circuit bandwidth requirements and carrying the traffic over existing data circuits, reduces the monthly management fees and the overall bandwidth requirements and cost.

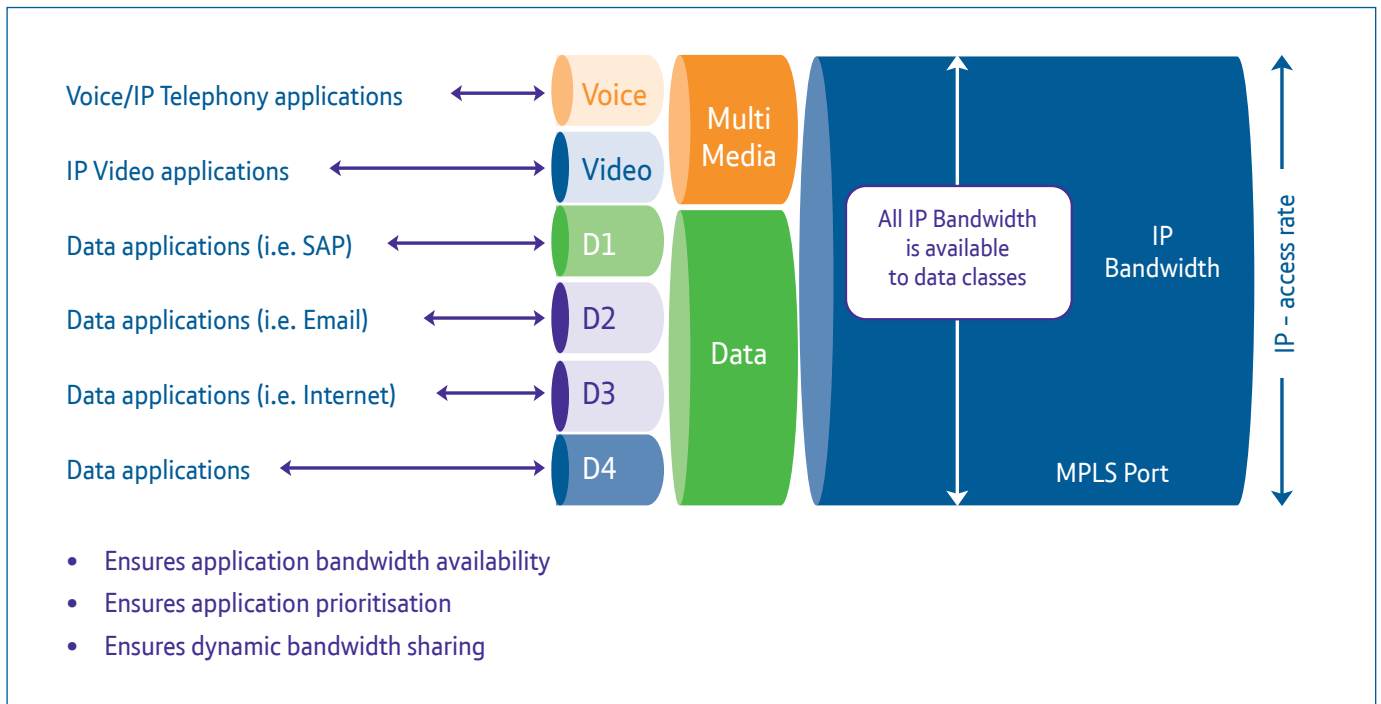
Key to the management of the converged WAN/LAN are support for Class of Service (CoS). A network that supports CoS (e.g. via MPLS) can guarantee the enterprise high application performance by prioritising mission critical applications and real-time communications (including VoIP) into distinct prioritised data classes, enabling multiple applications to run simultaneously, as shown in Figure 7.

Converged IP Voice and data communications

The IPT infrastructure allows the transport of digitised voice traffic on the same network as the enterprise’s data traffic. Typically deployed as a managed or hosted IP PBX, this approach can generate cost savings through the use of a single, converged communications infrastructure, both on capital and operational expenses. Increased productivity comes with tight integration of the IPT platform into the desktop. Examples of this integration include providing a software-based phone user interface client integrated with the corporate directory, integrating IP voicemail with email for unified messaging, and providing additional value-added VoIP capabilities, such as “click-to-dial.”

On the management front, Moves, Adds and Changes (MACs) are facilitated using “plug and play” VoIP-enabled IP devices, reducing cabling and cross connections costs and simplifying operations.

Figure 7: MPLS class of service



Extend to unified communications and collaboration

This stage involves further manipulation of the converged platform to enable UCC and to get more from the infrastructure by:

- 1) Joining up convergence initiatives and
- 2) Introducing new collaborative working solutions

In this phase, organisations can take three steps to transform their efficiency and improve performance:

- **Facilitating flexible working**

In traditional fixed-network phone systems, handsets were tied to locations, not people. IPT is different. Any phone with access to the right network can have any number – users must simply log in to make a phone theirs. Calls are then routed to them regardless of which desk they are at.

- **Improving performance**

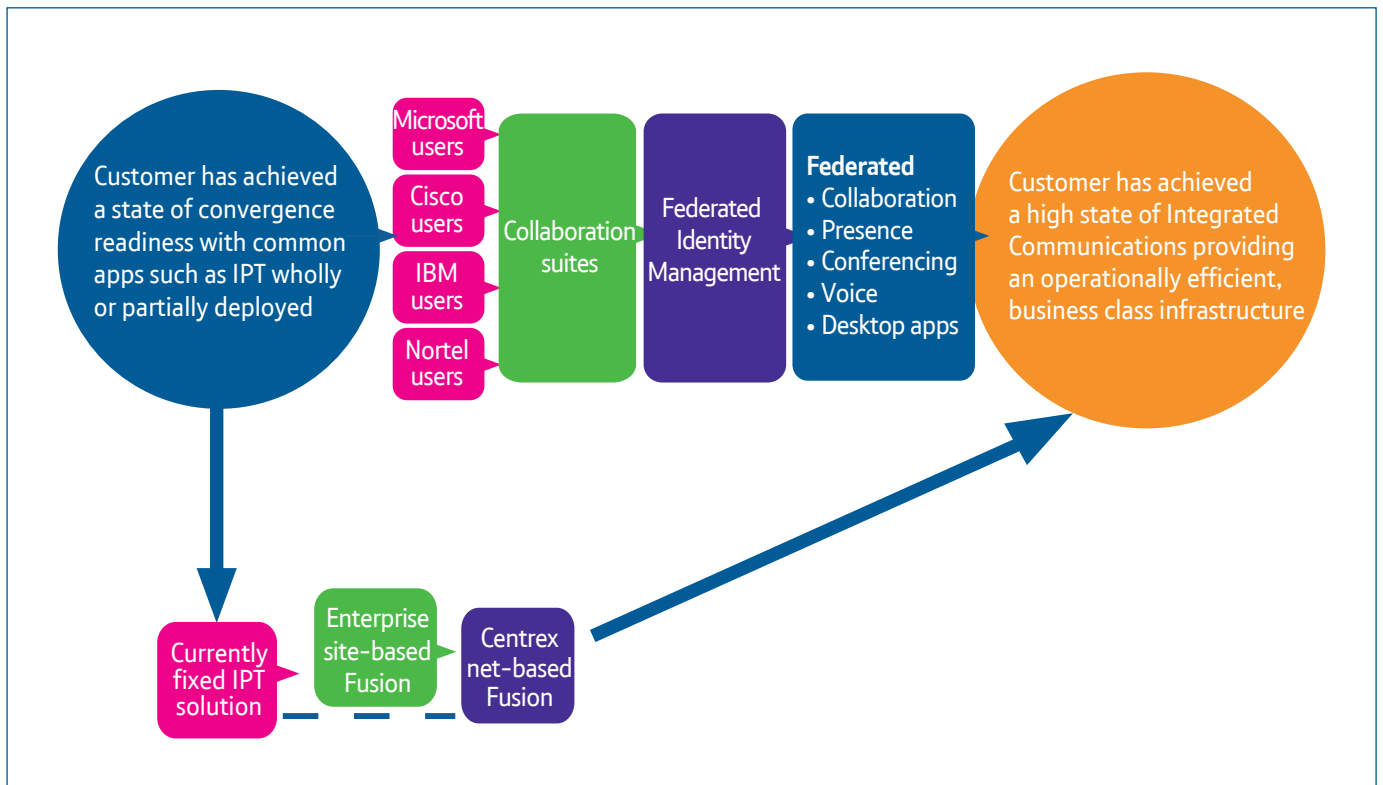
Since IP phones are networked computing devices, they can offer screen-based services that extend what the phone can offer and make it easier to use. For example, organisations can make their internal directories accessible from the phone, allowing employees to search for the colleague they need and place calls by name, rather than by number. Savings of seconds a call quickly add up.

- **Offering multimedia applications**

Still and moving images can be exchanged through the phone’s screen, making conferencing faster and more effective. The close integration of the phone and the video facility enables greater ease-of-use than with traditional conferencing options.

In addition to changing how an organisation makes decisions and collaborates with all parties, it also offers opportunities for innovation. Pervasive converged networks connect computer systems easily to automate service delivery and enable customers to serve themselves providing greater flexibility in terms of access to a broader range of more innovative products and services.

Figure 8: Extend to unified communications and collaboration



The range of UCC technologies available today causes many users and organisations problems that adversely affect their productivity. These problems include:

- Higher communication costs
- Lower productivity
- Greater difficulty in finding and sharing information
- Inefficient use of technology
- Overburdened infrastructure.

As a result, companies are turning to UCC, such as instant messaging, conferencing and virtual office, to avoid these problems and deliver the following benefits:

Productivity gains

- Collaboration between organisations, suppliers and customers in locations across the globe enables productivity gains such as faster time to market
- Presence provides the ability to automatically see an individual's availability and immediately contact hard-to-reach individuals on their preferred device.

Business agility

- Integration of voice and data communications can provide instant message alerts of urgent situations
- Presence enables users to automatically prioritise incoming communications across networks and devices so they can react more quickly to critical information.

User empowerment

- An individual's status is automatically updated as locations change
- Calls on a mobile can be quickly and seamlessly moved to a nearby workstation
- Users can handle, manage and switch between different forms of communications with greater control.

A strategic collaboration framework can provide a comprehensive and flexible environment to support these goals, enabling real-time decisions anywhere on the enterprise's application network. It aims to create visibility across the enterprise and ensure that appropriate knowledge is available at the right place at the right time. Such a framework adapts to continuously improving technologies and provides a means for handling change.

Figure 9 shows a component model for such a framework, including a collection of services, protocols and interfaces that allow business applications to interact with collaborative applications in a flexible and seamless manner.

Core components of this framework include:

- **Messaging**

For example, email and alerts between project managers and customer representatives ensure all parties have the latest available information.

- **Conferencing**

For example, individuals select to share/discuss the same data and messages in real-time. A project representative can prepare a web and audio conferencing meeting with supplier(s) via a hosted virtual meeting. Within this virtual space they would be able to capture and display information to individuals in various locations across the globe.

- **Workspaces**

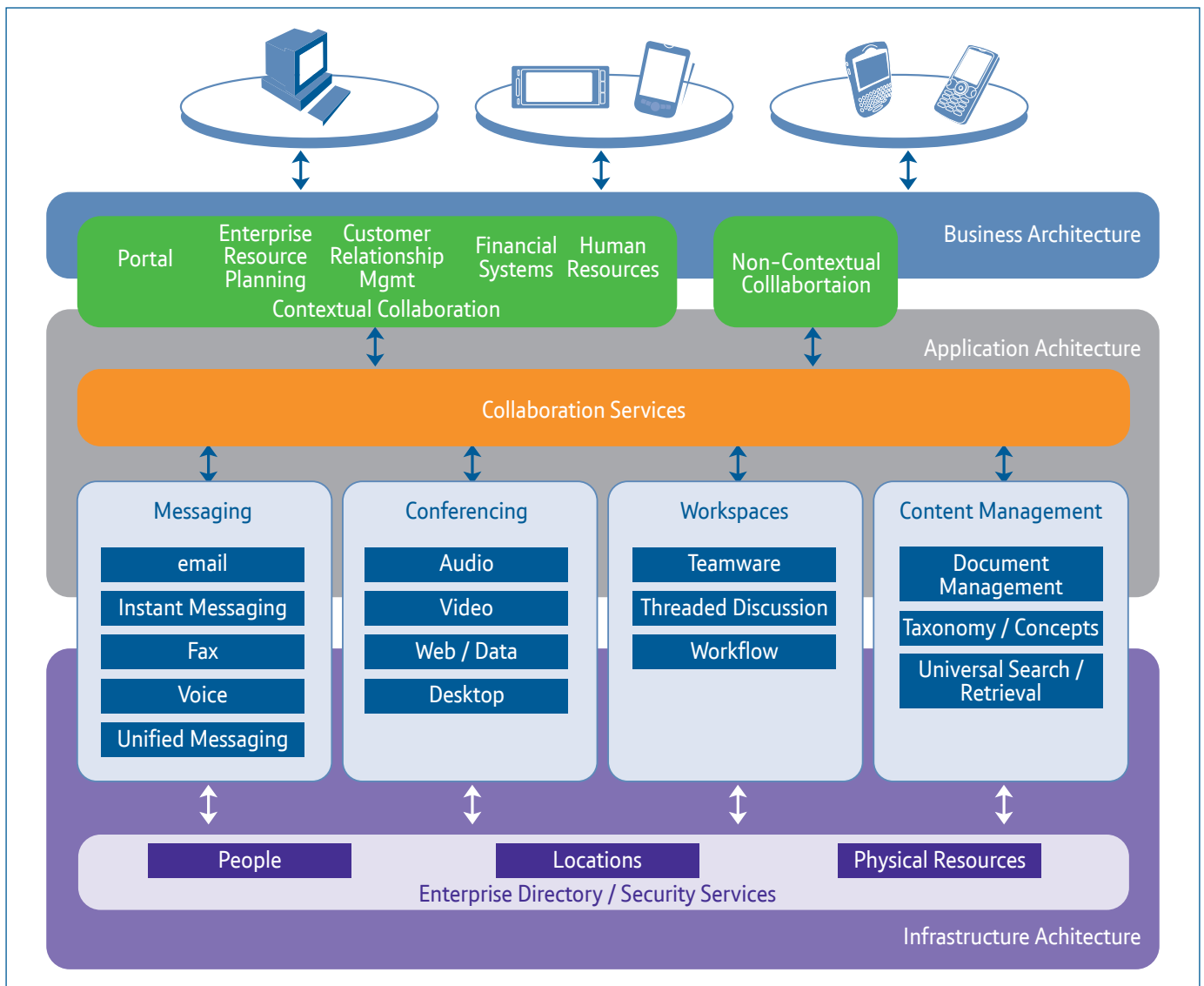
For example, a cross-functional team may formalise knowledge generation and increase business value of the previous phases of Data/Information/Ad Hoc Knowledge Generation through dedicated forums and threaded discussions for interactions.

- **Content Management**

For example, a structured enterprise-wide document management repository.

Convergence does more than enable a unified communications and collaborative environment. It also changes the dynamics of workflow and document sharing. Through convergence and UCC, organisations can develop an intelligent portal that seamlessly connects users, teams and knowledge to improve and speed up access to information. A document sharing and information management application suited to your business needs integrates information from various systems into one system. It also customises portal content and layout to provide users with access to relevant up-to-date information through single sign-on.

Figure 9: BT's collaboration component / services model



Convergence shapes the future

Globalisation and convergence are bringing sweeping changes, which Ed Richards, the chief executive of the UK's Office of Communication, says are "rapidly altering and in many cases undermining business models". Consequently, businesses can no longer think and operate as they have done in the past and still remain competitive. Like technology, business decision makers need to converge their thinking, departments and budgets, collaborate more effectively with each other and develop a more unified vision. This is pushing carriers and businesses to work more closely together and produce more innovative products to achieve the best possible outcomes.

Business and providers do not operate in isolation. Regulators, governments and consumer bodies are responsible for encouraging innovation and removing barriers to entry, while developing suitable regulations that protect consumers and industry. Governments need to continue to work closely with providers, businesses and each other to move towards constantly evolving models of regulation with converged regulatory bodies. At the same time, consumer bodies need to be proactive, auditing business, reporting on industry benchmarks and enforcing regulations, explains Teresa Corbin, executive director of the Consumers' Telecommunications Network in Australia.

Business and regulators also have a responsibility to consider the effects progress has on society and to ensure that convergence does not widen the digital divide between and within countries. For instance, programmes that educate users and promote inclusive and equal access to ICT services have the power to help unite society. Converging society through technology has never been more possible than in today's digital world.

Achieving operational efficiency is creating an IP-centric environment. By 2009, the IDC predicts that 75% of organisations will have migrated completely towards IP-based telephony and, according to the IDC white paper, convergence is happening now. Despite this, some companies have yet to embark on a path to operational efficiency. These are the companies that will be left behind, unable to compete in our rapidly advancing world. By contrast, the companies that are “forging ahead into new areas of converged communications, seeking newer services and service providers”, says Julie Wall, IDC research analyst, are set to be the market leaders. In fact, CIO Magazine says “how well your organisation achieves convergence will determine its profitability and its very survival.”

The choices organisations make today will determine their future success. Understanding how operational efficiency can transform your business and determining what stage your company is in on its path to convergence are the first steps in your journey to achieving competitive advantage. Assessing your needs and the challenges you face is the next step. Developing an effective convergence strategy with the guidance of a suitable provider represents the fundamental turning point on your path to getting the most out of the convergence revolution and to achieving operational efficiency.

Liz Edwards, global programme manager, Convergence, BT Global Services, is responsible for driving and supporting the sale of BT convergence propositions including IP to IT services. With eight years experience in the industry, Liz has been instrumental in the move from TDM traditional voice to IP Telephony and has been involved in the research of new wave networked IT services.

Simon Farr, head of marketing, Convergence Infrastructure, BT Global Services, is responsible for BT Global Services’ convergence infrastructure propositions. He has almost 20 years experience in the communications industry and has been involved in the evolution of IP convergence and mobile communications as well as in the launch and marketing of voice and data services on an international scale.

About BT Operational Efficiency IP

BT Operational Efficiency IP propositions ensures a seamless IP and IT infrastructure that removes unnecessary cost and supports existing and future applications. A converged WAN and LAN service offers efficiency savings while application performance monitoring supports new application deployment and identifies rogue traffic with managed service providing necessary expertise.

Contact

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References

Brown, Duncan., Barnard, Chris., Bilderbeek., Odgers, Phil. (Dec 2005) White Paper. Voice and Data Convergence Hits the Mainstream: Why Enterprises are Quickly Migrating their Networks. IDC (sponsored by BT & Cisco Systems)

Globus Consult (Aug 2006) Globus 2006 Research Project: Convergence. Globus for BT

Mendler, Camille. (Feb 2006) Enterprise VoIP Momentum Builds in Europe's Top Three Economies. Yankee Group,

Mendler, Camille and Ashley, Caroline. (Apr 2006) Overcoming Applications Ignorance: New Services to Enable Agility, Yankee Group, Available at:
http://www.networked.bt.com/pdfs/Overcoming_applications_ignorance.pdf

Corbin, Teresa (Mar 2006) Consumers' Telecommunications Conference 2006: Content, Convergence and Consumers Setting the Scene: Is there Life After Convergence. Consumers' Telecommunications Network (Australia) Available at:
http://www.ctn.org.au/admin/ktmlpro/files/uploads/Conference_2006/Teresa_Corbin.pdf

IDC (Nov 2006) Press Release: IDC WAN Manager Survey: Western European Companies Embrace Voice/Data Convergence Available at:
http://www.idc.com/getdoc.jsp?containerId=pr2006_11_27_153644

McCue, Andy. (Mar, 2006) Legacy is Biggest IT Headache. CIO Jury. Available at:
<http://www.silicon.com/ciojury/0,3800003161,39157236,00.htm>

Pierce, Lisa., Daley, Ellen., Atwood, Christine. and Bartolomey, Francesca. (Aug 2006) The Protracted North American Enterprise Migration to VoIP. Forrester

Richards, Ed (Nov 2006) Keynote Speech: Communications and Convergence Challenges for 21st Century for Digital Economies. UK Office of Communication (Ofcom). Available at:
<http://www.ofcom.org.uk/media/speeches/2006/11/ofcom2006>

Ryland-Glynn, Cindy (Apr 2005) IP Convergence: A New Era of Communications CIO Magazine Available at:
<http://www2.cio.com/consultant/report3569.html>

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