

Innovation/Web 2.0

The Global Human Capital Journal

Delivering Telecom's Converged Network and Entertainment Experience

By Christopher S. Rollyson — Saturday, 11 August 2007

Converged Experience Presages Telecoms Transformation—Reexamining the Value Proposition

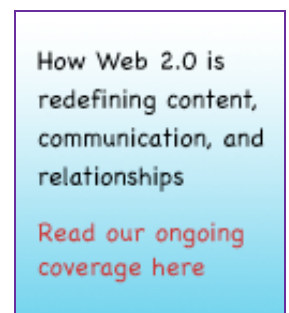
CTOs Chris Rice (AT&T), Pieter Poll (Qwest), Mark Wegleitner (Verizon) and Matt Bross (BT) agreed that the discrete services that telecoms now offer would morph into a seamless, hyperavailable cloud of communications services. The converged experience will be seamless, feature-rich and accessible when, how and where consumers want. Telecoms' ability to deliver will drive their stock prices in the near term and was the focus of the discussion.

From an operational perspective, telecoms have been too focused on product/service P&L. Now they have to eliminate barriers between products, so the customer can have a context-appropriate, seamless experience. The first phase of this transformation is bundling existing services; however, the real value will come from innovating new services. All applications will be unified around an IP (Internet Protocol) infrastructure. Telecoms don't need to integrate networks; they need to build networks that interoperate.

Between the lines and longer term, telecoms must reexamine their value propositions because we are coming to the end of the era in which custom applications and proprietary interfaces were necessary to integrate networks' "islands of automation." Network-centric software and distributed applications increasingly interoperate natively.

Panelists

- Chris Rice, Chief Technology Officer, AT&T**—Chris Rice oversees the Network Planning and Engineering Group for the new AT&T Inc. His responsibilities also include overseeing the development and deployment of advanced access, switching, and routing technologies for the company. Prior to being appointed to his current position in March 2004, he was responsible for SBC Communications' enterprise-wide technology direction, new technology introduction, platform development and network regulatory.
- Pieter Poll, Chief Technology Officer, Qwest**—Pieter Poll facilitates the strategic technology direction of the company. In addition, he directs network planning and engineering functions. Dr. Poll started his career at AT&T Bell Laboratories where he contributed to the architecture and evolution path of the 5ESS Digital Switch. He helped develop network evolution plans for the AT&T long distance network and product requirements for that network. He was a strategic and portfolio planner for what is now Lucent Technologies. Pieter joined the former U S WEST Advanced Technologies organization in 1994 to develop switching and network intelligence evolution plans for Qwest.
- Mark Wegleitner, Chief Technology Officer, Verizon**—Mark Wegleitner directs technology assessment, network architecture, platform development and laboratory testing for the local and long distance wireline communications businesses, as well as network planning for local wireline communications. His organization supports all wireline business units in the management of technology and network matters. Formerly, Wegleitner served as vice president, Technology & Engineering at Bell Atlantic Network Services, where he handled all technology and engineering functions, as well as CTO at Bell Atlantic Network Services.
- Matt Bross, Group Technology Officer, British Telecom**—As BT Group CTO, Matt directs technology strategy, vision and innovation across BT. He is the leading force behind BT's 21st Century Network transformation program, and he heads up a global BT technology, research and development organisation that spans the US, Europe and Asia-Pacific. Matt has had a long and distinguished career in communications and innovation, including senior positions at ConTel, MasterCard and Williams.



- **Moderator: Susan M. Miller, President & CEO, Alliance for Telecommunications Industry Solutions**—Susan Miller leads ATIS, a leading standards development and technical planning organization committed to rapidly developing and promoting technical and operations standards for the communications and related information technologies industry worldwide using a pragmatic, flexible and open approach. Participants from more than 300 communications companies are active in ATIS' 22 industry committees, Incubator Solutions Programs, and other activities.

The Converged Experience

- Consumers will experience content from any screen, and it will be device-appropriate and seamless.
- All applications will be unified around an IP (Internet Protocol) infrastructure. Much content will be video. Think way beyond wireless vs. wireline.
- Telecoms have been too fragmented and too focused on product (service) P&L. Now they have to eliminate barriers between products, so the customer can have a context-appropriate, seamless experience.
- The first phase of this transformation is bundling existing services; however, the real value will come from innovating new services. One example is having one voicemail for all devices.
- Telecoms need to adopt open architectures. They don't need to integrate networks; they need to build interoperable networks.
- IMS (Infrastructure Managed Services) will be a stepping-stone, not a big bang. Operators will move toward IMS gradually.
- Web 2.0 services will be strong drivers of innovation. CTOs' challenge is enabling connectivity and collaboration across the enterprise boundary.

IPTV

- IPTV will take us into a new era, "more than TV." Text search will make content more accessible, and electronic program guides will be drastically improved.
- People will be able to access and share video via any broadband connection, including mobile devices (integrating the third screen), the same way they do now via their computers and Slingbox.
- Customers want flexibility—access and choice of content—not more linear broadband channels.
- With IPTV, consumers can interact with each other while they are experiencing the game, and time shifting will be routine.
- TV will integrate "web widgets" for content like weather, traffic and time (an example of external, Web 2.0 content?).

Managing Consumers' Home Networks

- The home network is the final frontier (in owning the customer relationship because a lot of content will reside there, and helping the customer to access it will be key).
- It's key to deliver all this technology to consumers without creating frustration. In effect, consumers are running fairly complex home networks, and that begs the question of who is responsible for the interoperation of devices, network services and content. Telecoms don't control consumer networks and infrastructure, but the ability to deliver services is affected by the home network.
- Currently, home network operation is a gray area. DSL providers service their routers but not PCs. Cable operators service their set-top boxes, but when these become interactive, complexity will increase.

Innovation

- One billion new people will be on the Internet by 2011, and most will be in "emerging" economies. This will drive new thinking and unprecedented innovation. Telecoms will be challenged to scale networks to handle the increased activity.
- Telecoms can add value by collaborating with ISVs. They also need to target offerings for SMBs (small/medium businesses). Optical switching should help.
- Taking complexity out of services is critical to preventing adoption.
- Content will come from everywhere, and carriers' value is to distribute it, make it available in as many places and formats as customers want.
- However, telecoms' biggest challenge is their immense barriers to collaborating with external parties.

Analysis and Conclusions

- The phrase "Converged Network and Entertainment Experience" epitomizes the crisis in telecoms' value proposition. As we wrote in [AT&T CEO Unveils Telecoms Vision](#), we predict that technology maturation will increasingly enable network components to interoperate natively, which will remove a large portion of telecoms' value add, which is assuring the delivery of data and services.

In the medium term, this will be taken for granted.

- In our opinion, this is the real message behind Randall Stephenson's assertion that telecoms need to reflect on the definition of "a communications company." AT&T is aggressively moving into content to maintain margins.
- The last mile will provide extensive opportunity for new services that help customers manage their networks. People make fun of setting the VCR and other gadgets. They are so complex that people don't use the features. This also holds true for smartphones, whose advanced features are used by fewer than 90% of customers.
- Telecoms are going to have difficulty breaking out of their role as purveyors of "dumb pipes." Their processes and infrastructures are tightly coupled and inflexible. Panelists' remarks about IMS and its difficulty interfacing with Web 2.0 do not bode well.
- The same inflexibility prevents telecoms from external collaboration and innovation.
- Telecoms will have their hands full just coping with doubling the size of their networks to accommodate one billion new users.
- Because the bulk of new users will come from emerging markets, which often have vastly different usage contexts (from mature markets), innovation will be far more varied than in the past.
- Question: if the goal is to standardize on Internet Protocol networks, that will mature the technology and remove much of its current "value subtraction" character. Currently, telecoms are focused on evolving their networks to interoperate seamlessly. That is how they define value. Medium- to long-term, however, they may have to shift their business model to content.
- IPTV converges watching with gaming, one of the most rapidly growing areas of activity among younger demographics.

About the Author

Christopher S. Rollyson launched *The Global Human Capital Journal* in 2005 to address the most poignant issues of day for chief executives, namely global transformation, the reinvention of the enterprise, technology and culture. Mr. Rollyson has been a technology and marketing visionary and pioneer for twenty years, with distinction in corporate strategy and innovation. As a consultant and marketing executive, he has had a leading role in launching such game-changing offerings as: Java with Sun, e-business strategy with PwC Consulting, and SOA, Web services and architecture solutions with IBM and nVISIA. In 2006, he launched The Consumer Empowerment Adoption Curve™ and Transourcing™, a new approach to innovation that leverages high performance collaborative partner networks. He currently advises global enterprises on collaborating with Web 2.0-enabled customers—to drive innovation and to engage emerging markets.

Formerly the Vice President of Marketing at nVISIA, he developed executive marketing programs and service offerings to drive the value of software transformation through service-oriented architecture and Web services, working with IBM, Rational and Grand Central. Previously a subject matter expert for e-business and knowledge strategy in PricewaterhouseCoopers' Strategic Change practice, Mr. Rollyson developed original models and services frameworks for e-business strategy consulting. He consulted to clients in automotive, software, telecoms, consumer electronics, chemicals and petroleum industries, advising global enterprises in e-business strategy and technology start-ups on innovation and business strategy. Prior to PwC, he led marketing for KPMG's Midwest High Technology practice, where he built one of the firm's first intranets to transform the marketing organization to a real-time team. Before that the head of marketing at a leading edge Java consultancy, he played a key role in co-launching Java via marketing alliances with Sun and Netscape. Mr. Rollyson has done graduate work in corporate strategy and economics at the University of Chicago, with additional studies at Die Freie Universität Berlin, L'Université de Clermont-Ferrand in France and il Liceo Americano d'Aviano in Italy. He earned his undergraduate degree from Kalamazoo College. <http://rollyson.net>

About the Global Human Capital Journal

The Global Human Capital Journal addresses the global shift from the Industrial Economy to the Knowledge Economy, which is changing how human beings work and deliver value. In the Industrial Economy, products encapsulated the value of human work; in the Knowledge Economy, information produces the lion's share of value, and customer experience itself is the focus of commerce and government. A greater degree of collaboration among people of the world is possible than ever before, and increased interaction will bring unprecedented surprise and opportunity, especially because the potential is great to "level the playing field" among people of the world. Obviously, these developments hold significant ramifications for business and organizational strategy.

Global Human Capital covers two prongs of economic transformation: 1) strategically, how organizations can rejuvenate their relationships with customers and constituents by collaborating with them to drive innovation and 2) operationally, how organizations can build strong collaborative cultures and skills to engage the world's emergent network of expertise, both within and without their walls. We analyze how global sourcing and collaboration are transforming enterprise and government organizations, as they transition from relatively self-contained, closed entities to more networked, open organizations. Current categories (threads) are: Beyond Sourcing; China, India and Globalization; Economy; Innovation/Web 2.0; Technology/Leaders; and The Enterprise. Please visit us at <http://globalhumancapital.org>