Volume 2/Number 5 September 2010

www.ngnmag.com

TMC

NGN™

Next Generation Networks

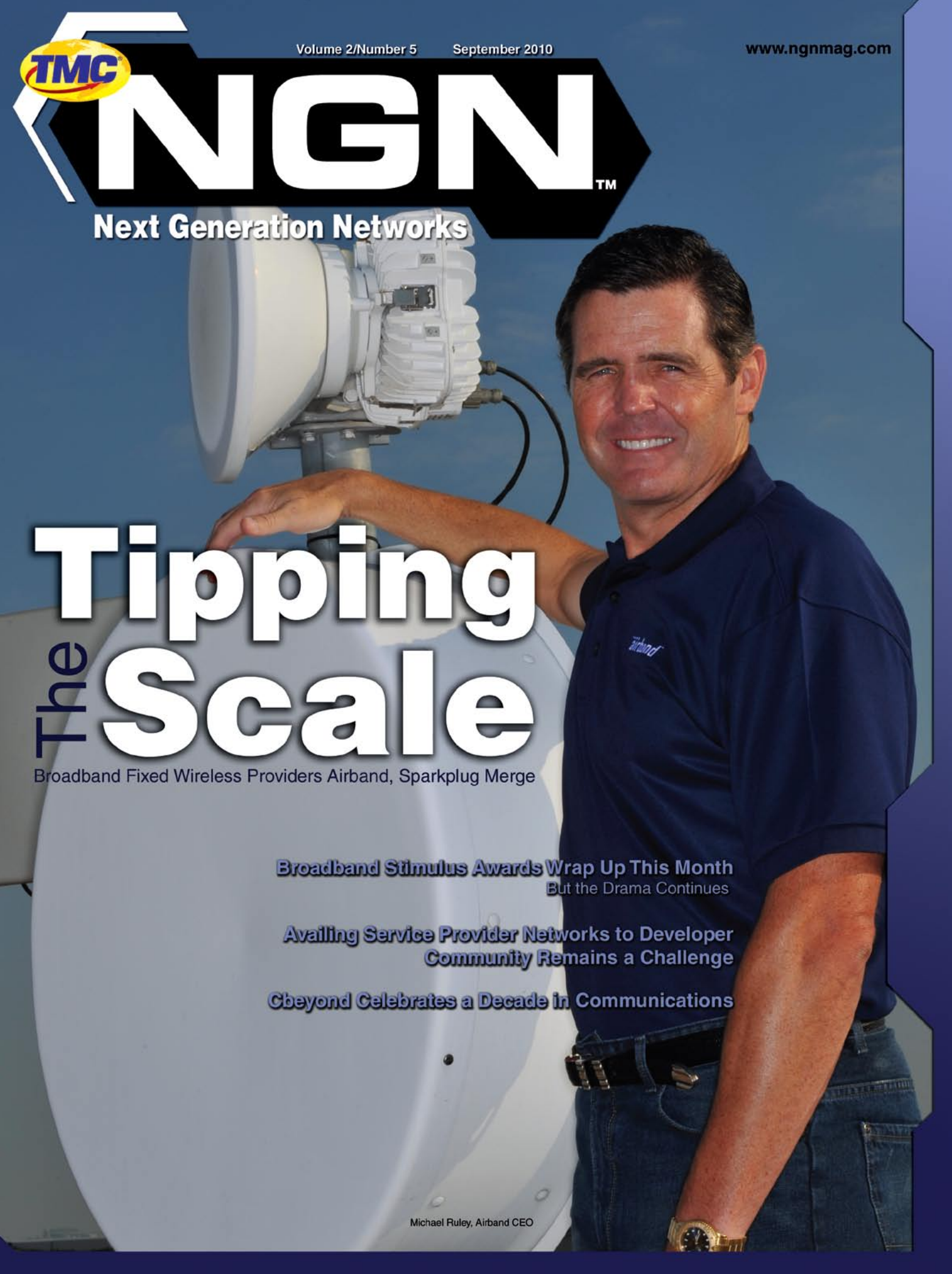
The Tipping Scale

Broadband Fixed Wireless Providers Airband, Sparkplug Merge

Broadband Stimulus Awards Wrap Up This Month
But the Drama Continues

Availing Service Provider Networks to Developer Community Remains a Challenge

Cbeyond Celebrates a Decade in Communications



Michael Ruley, Airband CEO

THE WORKS

with TBI and ADTRAN®

Make your deal a complete meal

- Complete Communication Solutions for your SMB Customer
- ADTRAN NetVanta® Hardware
- ADTRAN ACES Installation and Maintenance
- TBI Carrier Services
- Convenient Payment Options

You know how it goes: a sandwich does not make a meal. People want it all, and they demand value. It's no different in the communications industry. Your SMB customers are looking for complete solutions, ones that can help their bottom line. But all too often, we try to sell them just one piece.

With *THE WORKS*, TBI is revolutionizing the way agents sell solutions. Offer your customer everything they need: network services from all the best service providers, award-winning unified communications solutions from ADTRAN®, installation services, and financing options.

TBI makes it easy for you, and easy for your customer.

For more information contact TBI at 847.465.4500 or visit:

tbicom.com/theworks-tmc

TBI
Telecom Brokerage, Inc.

ADTRAN®

SEE US AT ITEXPO
Register Now!
October 4-6, 2010
Los Angeles, CA
BOOTH #213

Editor's Notes

Google, Verizon Jointly Address Net Neutrality

by Paula Bernier

After several weeks of reports about closed door net neutrality meetings at the FCC, and articles talking about who has or has not been negotiating special deals on this front, Google and Verizon last month jointly unveiled a seven-point policy framework on what they believe should be the guiding principles around this controversial topic.

"It is imperative that we find ways to protect the future openness of the Internet and encourage the rapid deployment of broadband," according to a blog posted Aug. 1 by Alan Davidson, Google director of public policy, and Tom Tauke, Verizon executive vice president of public affairs, policy, and communications.

To allow that to happen, the two big guns say that regulators and other players must ensure that consumers have access to all legal content on the Internet, and can use what applications, services, and devices they choose.

"This means that for the first time, wireline broadband providers would not be able to discriminate against or prioritize lawful Internet content, applications or services in a way that causes harm to users or competition," Google and Verizon say.

And they suggest that rules be created to prohibit discriminatory practices. However, the pair says the FCC should enforce openness only as complaints arise, on a case-by-case basis. Those found in violation of the proposed new rules could face a penalty of up to $2 million, according to the framework proffered by Google and Verizon.

"Importantly, this new non-discrimination principle includes a presumption against prioritization of Internet traffic – including paid prioritization," the blog continues.

That's interesting, considering that, while broadband operators and their suppliers never talked about "discriminating" against any traffic, there have been discussions about the idea of paid prioritization in an effort to ensure higher-level customer experiences and application requirements. However, Google and Verizon address that later in the blog by saying "we want the broadband infrastructure to be a platform for innovation. Therefore, our proposal would allow broadband providers to offer additional, differentiated online services, in addition to the Internet access and video services (such as Verizon's FIOS TV) offered today. This means that broadband providers can work with other players to develop new services."

Examples of this kind of thing, say Google and Verizon, might include health care monitoring, the smart grid, advanced educational services, or new entertainment and gaming options.

"Our proposal also includes safeguards to ensure that such online services must be distinguishable from traditional broadband Internet access services and are not designed to circumvent the rules," according to the blog, which says the FCC would be charged with policing these safeguards under the framework Google and Verizon are suggesting.

Other framework tenets include exempting wireline networks and services from all of the above (because Google and Verizon see wireless as a different beast), except for the suggestion calling for the creation of "transparency rules" for wireline and wireless services requiring providers of said offerings to provide clear information about their services' capabilities, and the support for USF reform in an effort to bring broadband to areas where it is not now available. **NGN**

NGN Next Generation Networks

Rich Tehrani, *Group Publisher and Editor-In-Chief* (rtehrani@tmcnet.com)

EDITORIAL

Erik Linask, *Group Editorial Director* (elinask@tmcnet.com)
Paula Bernier, *Executive Editor, IP Communications Group* (pbernier@tmcnet.com)
Erin E. Harrison, *Executive Editor, Strategic Initiatives* (eharrison@tmcnet.com)

TMC LABS
Tom Keating, *Executive Technology Editor/CTO/VP*

ART
Alan Urkawich, *Senior Director, Creative and Operations*
Lisa A. Mellers, *Graphic Designer*
Stephanie Thompson, *Production Manager*

EXECUTIVE OFFICERS
Nadji Tehrani, *Chairman and Founder*
Rich Tehrani, *Chief Executive Officer*
Dave Rodriguez, *President*
Michael Genaro, *Executive Vice President, Operations*
Tom Keating, *CTO, VP*

ADVERTISING SALES
Sales Office Phone: 203-852-6800

Anthony Graffeo, *VP Business Development,* 203-295-0234 (agraffeo@tmcnet.com)
Jaime Hernaez, *Executive Director of Strategic Accounts,* ext. 217 (jhernaez@tmcnet.com)
Laura Casal, *Account Executive,* ext. 299 (lcasal@tmcnet.com)
Jim Spangenberg, *Director of TMCnet Live Web Events,* ext. 211 (jspangenberg@tmcnet.com)

Editorial Offices: 203-852-6800 Customer Service: For all customer service matters, call 203-852-6800.

SUBSCRIPTIONS
Circulation Director, Shirley Russo, ext. 157 (srusso@tmcnet.com)
NGN Magazine® is published bi-monthly by Technology Marketing Corp. Annual digital subscriptions; Free to qualifying U.S., Canada and foreign subscribers. Annual print subscriptions; Free to qualifying U.S. subscribers; $24 U.S. nonqualifying, $34 Canada, $48 foreign qualifying and nonqualifying. All orders are payable in advance U.S. dollars drawn against a U.S. bank. Connecticut residents add applicable sales tax.

Postmaster: Send address changes to NGN magazine, Technology Marketing Corporation, River Park, 800 Connecticut Ave., 1st Fl, Norwalk, CT 06854-1628 USA

Canada Post: Publications Mail Agreement #40612608

Canada Returns to be sent to: Pitney Bowes International, P. O. Box 25542, London, ON N6C 6B2, CANADA

READER INPUT
NGN Magazine® encourages readers to contact us with their questions, comments, and suggestions. Send e-mail (addresses above), or send ordinary mail. We reserve the right to edit letters for clarity and brevity. All submissions will be considered eligible for publication unless otherwise specified by the author.

REPRINTS AND LIST RENTALS
For authorized reprints of articles appearing in *NGN Magazine*®, please contact The YGS Group Reprint Division at 3650 West Market Street, York, PA 17404, 717-505-9701 or 800-501-9571 x105 • tmcnet@theYGSgroup.com.

For List Rentals, please contact Glenn Freedman at GlennF@l-i-s-t.com or call 914-765-0700, ext. 104.

Endorsed by: IMS Forum The Voice of IP Convergence www.imsforum.org

A Technology Marketing Publication,
River Park, 800 Connecticut Ave., 1st Fl.
Norwalk, CT 06854-1628 U.S.A.
Phone: (203) 852-6800
Fax: (203) 853-2845, (203) 838-4070

An Update on Dilithium

by Rich Tehrani

There are rumors circulating that Dilithium Networks has gone bankrupt or is in receivership. You may recall I first wrote about the company's video transcoding and delivery solutions in April of last year.

But recently a competitor mentioned in passing that the company was gone, and I checked the website and found it was not operational. However, e-mail messages did not bounce and the phones still work, so my digging eventually led me to Marwan Jabri, the founder and CTO, who is now also acting CEO.

Jabri explained that the company is not in bankruptcy or receivership, but it is closing overseas offices, restructuring and will be divesting some assets. He blamed the global economic slowdown; but, as noted in my article from about a year and a half ago, the company said it was cash-flow positive and growing at 400 percent. It is obviously very difficult to reconcile the above numbers with the rest of this story. And a reliable source told me the company's investors are getting tired of funding a company that seems to have no exit after a decade.

I asked Jabri how, if mobile video is booming, the company is having problems. After all, I used the company's product for a while and was impressed at how it was able to transcode and deliver video from TV stations live to my mobile device over spotty 3G. Jabri responded that there are huge trials the company is in the middle of in both India and China, but the challenge is monetization – carriers are still trying to figure out how to make money from video.

As I have mentioned before, carriers sometimes seem to take joy in dragging their feet so as to bankrupt startups. I am not saying this is the case in this situation, but banking on wireless service providers taking advantage of new paradigms is a tough way for startups to make money. Indeed, Jabri noted that a delay in payments from carriers has forced the company to "do what it can do to protect [the] shareholders and technology and products it has."

He concluded by saying that carriers are investing heavily in video and that we are in an early stage of the market. However, my question is: If the company can't get its website up, how will it sell anything, ever?

Nonetheless, as a fan of mobile video and someone who was impressed with the technology as a user, I wish them the best. NGN

TMCnet (www.tmcnet.com)

TMCnet EDITORIAL
Group Editorial Director, **Erik Linask**
Executive Editor, Strategic Initiatives, **Erin Harrison**
Group Managing Editor, **Patrick Barnard**
Assignment Editor, **Stefania Viscusi**
Contributing Editorial: **Paula Bernier, Susan Campbell, Juliana Kenny, Erin Monda, Ed Silverstein, David Sims, Alice Straight, Beecher Tuttle**

TMCnet PRODUCTION
Webmaster, **Robert Hashemian**
Senior Director, Creative and Operations, **Alan Urkawich**
Senior Designer & Director of TMCnet Communities and Channels, **Maxine Sandler**
Senior Designer & Web Director, **Scott Bouchard**
Senior Designer & Director of Web Video, **Jean Louis**
Senior Web Designer, Director of Strategic Web Initiatives, **Chhityz Thapa**
Web Designer, **Lou Brevetti**
Operations Manager, **Tim Goins** (tgoins@tmcnet.com)

MARKETING
EVP of Operations, **Michael Genaro**
Creative Director, **Alan Urkawich**
Marketing Manager, **Jan Pierret**

FINANCE
Controller, **Allen Frydrych**
Senior Accountant, **Betsy Estes**
Accounts Coordinator, **Mary Hodges**

EXHIBIT SALES
Sales Office Phone: 203-852-6800
VP of Events, **Joe Fabiano** (jfabiano@tmcnet.com)
Global Events Account Directors Companies whose names begin with A-L or #s:
Maureen Gambino (mgambino@tmcnet.com)
Global Events & Webinars Account Manager,
Kevin Lake (klake@tmcnet.com)
Conference Sales Director,
Frank Coppola (fcoppola@tmcnet.com)

READER INPUT
NGN encourages readers to contact us with their questions, comments, and suggestions. Send e-mail (addresses above), or send ordinary mail. We reserve the right to edit letters for clarity and brevity. All submissions will be considered eligible for publication unless otherwise specified by the author.

REPRINTS AND LIST RENTALS
For authorized reprints of articles appearing in NGN, please contact: The YGS Group, 717-505-9701 or 800-501-9571 x105, tmcnet@theYGSgroup.com

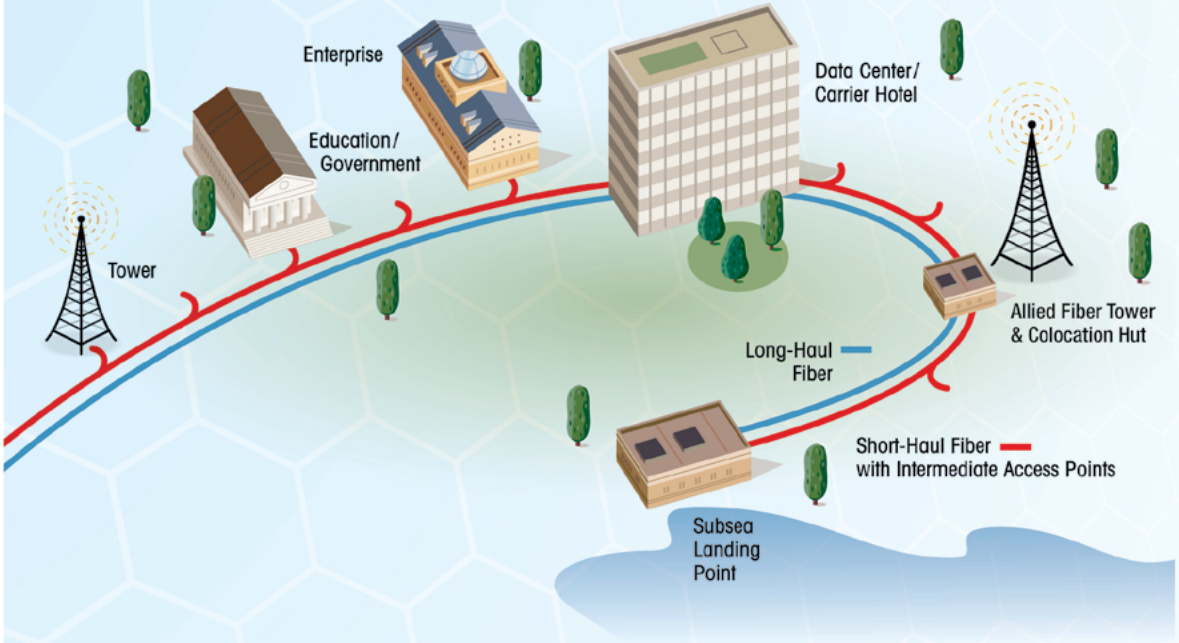
FOR LIST RENTALS
please contact Glenn Freedman at at LIST Inc. glennf@l-i-s-t.com or call 914-765-0700 x 104

A Technology Marketing Publication, River Park, 800 Connecticut Ave., 1st Floor, Norwalk, CT 06854-1628 U.S.A.
Phone: 203-852-6800 Fax: 203-853-2845 and 203-866-3826

DARK FIBER COMMUNITY MEMBERS

ADVA Optical Networking
Allied Fiber
Brickhouse Small Business
Calix
ciena
Cisco
EKINOPS
FORCE10
GIGABEAM
i3 AMERICA
infinera
integrationpartners
LightSpeed
Nokia Siemens Networks
Optelian
POWDER RIVER Development Services LLC
RUBICON Professional Services
SKYFIBER
SYNCHRONET Connecting the Future
tellabs
THERMO Credit, LLC Funding the Communications Industry
XKL
XO

Introducing the Dark Fiber Community



The Online Resource for Network Operators to Build and Support Efficient Broadband Networks

Visit the Dark Fiber Community and connect to communications equipment providers, data center and tower builders, financing sources and more.

The online directory offers contact details and information on industry-leading vendors and the opportunity to plan-one-on-one meetings with these suppliers anywhere in the world, through the Dark Fiber Community DealCenter®.

Allied Fiber created this free educational platform to drive awareness of network-neutral, physical layer models that provide physical access to dark fiber and major carrier transport services.

If you are a network vendor and would like to be part of the community, with increased PR coverage, SEO rankings and business opportunities, **email pr@alliedfiber.com.**

- **> Equipment**
- **> Support**
- **> Infrastructure Builders**
- **> Materials**
- **> 3rd Party Colocation**
- **> Financing**
- **> Industry Associations**
- **> Carrier Services**

ALLIED FIBER™

It's free - visit ***dark-fiber.tmcnet.com*** now

NGN Next Generation Networks

Contents

Volume 2 • Number 5 • September 2010 • www.ngnmag.com

Cover Story

In Every Issue

Columns

Feature Articles

Join the Broadvox IP Communications Community at TMCnet

The World's Premier IP Communications Resource for Business VoIP/SIP Trunking

White Papers	*Press Releases*	*SIP and Serve Blog*	*SIP Trunking Solutions*	*Enterprise VoIP*
Industry Innovations	*Industry News*	*IP Communication Resources*	*eNewsletters*	*Webinars*

broadvox™
BUSINESS CONNECTS HERE

Visit the Community at: http://ipcommunications.tmcnet.com/

http://tmcnet.com/35418.1

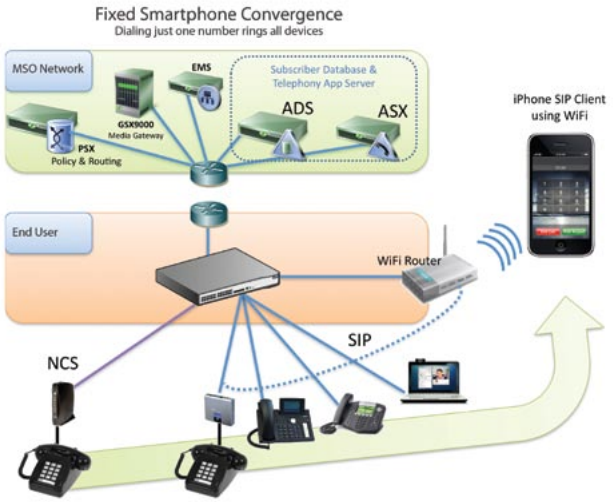
Time Warner Cable Loses VoIP Share

While the U.S. VoIP market should hold promise for a number of companies, Time Warner is not enjoying a windfall. In fact, despite the fact that revenues in the U.S. VoIP market continue to grow, Time Warner Cable is losing share. On the upside, Time Warner has enjoyed growth on the digital subscriber side of the second quarter of 2010.

www.timewarnercable.com

http://tmcnet.com/35422.1

Sonus Takes the Smartphone Home



Sonus Networks Inc. has introduced a new solution for cable operators to add value to their existing home line services. Dubbed "Fixed – Smartphone Convergence," cable operators can use new capabilities in the Sonus Networks ASX Telephony Application Server to allow cable subscribers with home phone service to combine their existing phone lines with up to five additional SIP-enabled devices including 3G/Wi-Fi enabled smartphones. Sonus demonstrated this new solution at the CableLabs Summer Conference 2010 from Aug. 15-18 at the Keystone Resort and Conference Center in Keystone, Colo.

www.sonusnet.com

http://tmcnet.com/35423.1

Big Cablecos Exceed Telcos in Broadband Adds

After second quarter reporting, it appears all the larger telcos are facing sluggishness in the broadband segment, with AT&T, Qwest and Verizon reporting a rather dramatic slowing of net broadband additions. To be sure, cable operators are seeing smaller increases as well. But in the first six months of the year, Time Warner Cable and Comcast added 834,000 high-speed Internet customers, while the four largest telephone companies (AT&T, Verizon, Qwest and CenturyLink) welcomed combined broadband customers totaling just 427,000. And in the second quarter, the four telcos collectively lost 28,000 subscribers.

www.comcast.com

http://tmcnet.com/35424.1

New Study Addresses DOCSIS 3.0 Questions

Research and Markets has announced the addition of the "DOCSIS 3.0 - Cable's Migration to Broadband - IP Services: Global Market Trends & Forecast - 2010" report to its offering. The new report measures the growth of DOCSIS 3.0 and Euro-DOCSIS 3.0 that is enabling global cable operators worldwide to upgrade to 50 to 200mbps broadband services, and to take another step toward using all-IP networks. For MSOs, this report addresses key questions such as where, when and at what costs they can upgrade to DOCSIS 3.0.

www.researchandmarkets.com

http://tmcnet.com/35425.1

In-Stat Study Examines the Hybrid STB

Blu-ray players, game consoles and TV sets are connecting to the Internet, and everything on the Internet is becoming accessible on smartphones and other connected devices. As a result, Gerry Kaufhold, principal analyst for In-Stat, says: "The set-top box industry is scrambling to create designs that facilitate all these new features." And while some hybrid-capable STBs are shipping today, only a small percentage of them are using the capabilities, he says.

www.in-stat.com

http://tmcnet.com/35426.1

The Rise and Fall of Cableco Pricing

Cox Communications Inc.'s customers in August saw their monthly rates rise almost 6 percent for the most popular cable television package. The cost for Cox's standard 70 analog channel package, called TV Essential, climbed from $51.95 a month to $54.99 as of Aug. 16. Prices also are increasing for basic cable service, which has different rates depending on the customer's city. The cost of two of Cox's digital TV packages, meanwhile, has fallen.

www.cox.com

http://tmcnet.com/35427.1

NCTA, Dolby Partner on 3D

Dolby Laboratories, a dealer in audio technologies and systems, and the National Cable & Telecommunications Association have forged a partnership to make the industry's first cinema quality 3D feed utilizing a cable set-top box presented in a digital movie environment enabled with Dolby 3D. Dolby 3D was recently installed at the NCTA theater and its 3D display efficiency was demonstrated with the broadcast of ESPN's 3D coverage of the recently concluded 2010 FIFA World Cup.

www.dolby.com

8x8, Inc.

Introducing the

Small Business VoIP Online Community

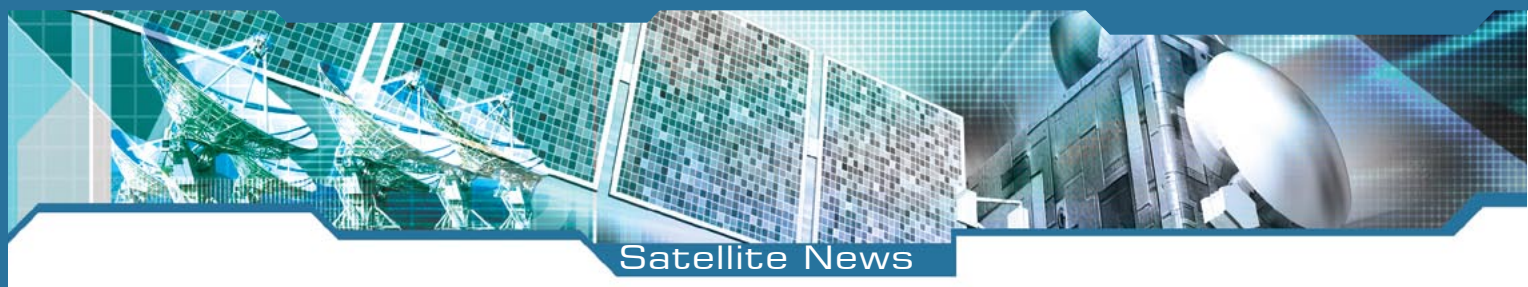
Small business VoIP adoption is growing, largely because of the cost benefits, but the fact is that hosted VoIP services for small business, like 8x8's Virtual Office, provide much more than cost savings. The greater versatility of hosted VoIP system allows businesses to customize their telecommunications packages to meet their unique needs, but without requiring large up-front expenditures for equipment,installation, maintenance, or IT staff. For the latest news and information on VoIP services specifically designed for the small business market, visit the Small Business VoIP community on TMCnet, sponsored by 8x8. 8x8 Virtual Office is an affordable, robust and easy-to-manage phone solution with all the premium PBX features and functionality of a traditional telecom system.

On the Small Business VoIP Community, you'll find:

- Free consultations
- Free trials
- Free quotes
- Feature articles
- Case studies
- Technology briefs

http://small-business-voip.tmcnet.com

Powered by: TMCnet



http://tmcnet.com/34912.1

Paper Discusses the Role of Satellite in Digital Media

Digital media applications, including digital signage, interactive distance learning, business TV and digital content distribution, are increasingly being used by retailers and businesses as a way to increase revenues, lower employee training costs, and improve efficiencies. For more about that and how satellite fits in, check out the white paper from Spacenet at the above link.

www.spacenet.com

http://tmcnet.com/34913.1

Exec Forecasts Surge in Satellite Capacity

Howard Teicher, one of Expand Networks' founders as well as the company's vice president of public sector and satellite markets, says satellite is an ideal technology to enable military operations to communicate in remote, hostile environments, where the infrastructure we take for granted in the developed world does not exist. "Even in parts of the world where we're seeing the widespread deployment of cellular or WiMAX technologies, you still don't find that capability in all of the areas where combat is taking place in the world today, particularly in southwest Asia or obviously... out at sea," he says. Teicher adds that satellite is becoming "ever more ubiquitous" as more companies around the world are putting communications satellites into orbit. "I expect we'll see quite a surge in the next three to five years of satellite capacity," he adds.

www.expand.com

http://tmcnet.com/34914.1

Satellite M2M to Hit $1.9M by 2016

Frost & Sullivan's "World Satellite Machine-to-Machine Communications Market" study reveals that this market earned revenue of $726 million in the year 2009 and the revenue is estimated to reach $1.9 billion by 2016. The world satellite M2M communications market is strongly dominated by companies in the United States, which hold 62 percent market share. But the Asia-Pacific region is expected to experience maximum growth in terms of regional share in the years to come.

www.frost.com

http://tmcnet.com/34915.1

Rural Telco Picks DirecTV

CenturyLink, a rural telephone company, plans to resell DirecTV instead of rival Dish Network. Once known as CenturyTel, CenturyLink has had a marketing relationship with Dish since 2005. CenturyLink is also in the process of buying Qwest Communications.

www.centurylink.com
www.directv.com

http://tmcnet.com/34916.1

Army Awards TCS $1M VSAT Deal

An additional $1 million in funding from the U.S. Army has been accepted by TeleCommunication Systems Inc. to support equipment and maintenance of VSAT satellite systems. Michael Bristol, senior vice president and general manager of government solutions at TCS, says: "Superior communications with instant access to data is a force multiplier for our combat troops. Advancements in ground equipment like SwiftLink have transformed the way our military goes to war. TCS is committed to giving the war fighter the best technology to obtain critical intelligence in real-time, anytime and anywhere."

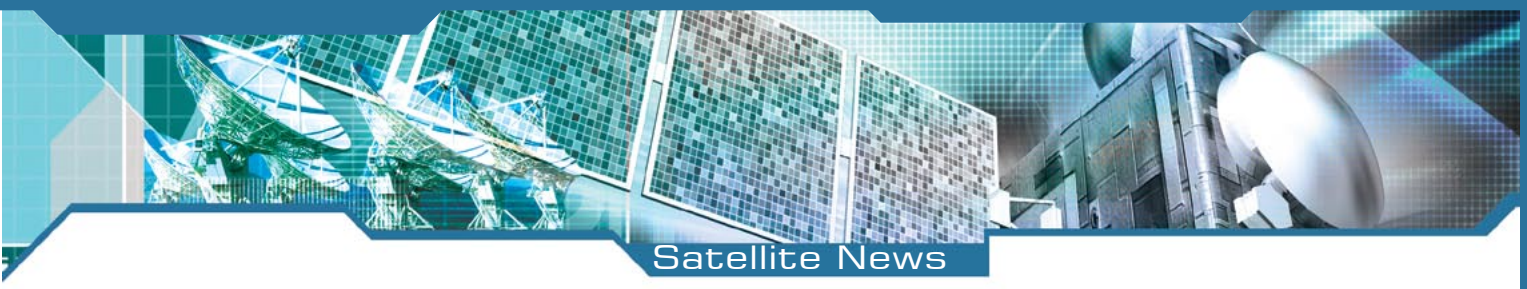
www.telecomsys.com

http://tmcnet.com/34917.1

Rock Hard to Sell NavStar Vehicle Tracker

NavStar Technologies Inc., which specializes in the provision of tracking solutions for cargo and other assets, says field trials have been almost completed for its updated vehicle asset tracker. NavStar is involved with the production and commercialization of products and services required for tracking and monitoring the location and condition of high value cargo and assets. Rock Hard Systems Inc. will be the first U.S. distribution partner to sell the NSTRAK vehicle asset tracker system, which is expected to be rolled out this quarter.

www.navstarinc.com
www.rockhardsystems.com



http://tmcnet.com/34918.1

Broadcom Wins Business at Germany's Sky

German pay-TV operator Sky Deutschland has selected Broadcom technology to enable multi-channel HD and DVR functionality. The single-chip BCM7325 will power the enhanced HD non-DVR STBs, while the single-chip BCM7335 will be at the heart of Sky Deutschland's first integrated digital video recorder, called the Sky+. Both services support MPEG-4 and integrate with NDS MediaHighway STB software to enable a Flash-based user interface.

www.broadcom.com

http://tmcnet.com/34919.1

Cisco Grows IRIS

Cisco's Internet Routing in Space, or IRIS, is a program to build a radiation-tolerant IP router for satellite and related spacecraft. IRIS recently achieved another major milestone with the successful completion of in-orbit testing for the United States' Department of Defense.

"This technology will significantly reduce the time from ground to space for the military and the private sector, which will make future satellite applications quicker and easier to deploy," Steven Boutelle, CEO of Cisco IRIS and vice president of Cisco's global government solutions group, says.

www.cisco.com

http://tmcnet.com/34920.1

Satellite Service Provider Readies for Second-Gen Constellation

Globalstar Inc., a provider of mobile satellite voice and data services to businesses, governments and retail customers, has installed new hardware and software upgrades at its satellite operations and control center located in Milipitas, Calif., and in its backup control center in El Dorado Hills in California. The upgrades, provided by Thales Alenia Space, were initiated to support the 15-year plus lifespan of the new Globalstar second-generation satellite constellation that is scheduled for launch this fall.

www.globalstar.com

http://tmcnet.com/35411.1

Google Acquires Jambool

Jambool, a company that makes the platform for managing online payments for virtual goods sold on gaming and social networking sites, is now the property of Google. Jambool offers the only platform with an API that has the ability to manage purchases done in a Flash-based game during game play and for first-time users without details yet on record. Each transaction is charged 10 percent by Jambool, although that fee goes down to 7 percent if a client is processing a minimum of $25,000 per month.

www.google.com

http://tmcnet.com/35412.1

IBM to Buy Web Marketing Outfit for $480 Million

Big blue plans to acquire Unica Corp. for approximately $480 million. The latter organization is a publicly held company out of Waltham, Mass., that hawks interactive marketing, Web campaign and analytics solutions. The planned acquisition is just IBM's latest move to expand its portfolio of software designed to help companies automate, manage, and accelerate core business processes across marketing, demand generation, sales, order processing and fulfillment. IBM this May announced plans to buy Sterling Commerce from AT&T for $1.4 billion; a month later, it revealed its intention to bring Coremetrics into the IBM fold.

www.ibm.com

http://tmcnet.com/35413.1

T-Mobile USA Leader Resigns

Top management at T-Mobile USA will change next spring. The company's parent, Deutsche Telekom AG, announced this summer that Robert Dotson will step down as T-Mobile USA president and CEO in May. Philipp Humm has been tapped as his replacement. Humm is the former CEO of T-Mobile Deutschland and currently is responsible for sales and service in Europe.

www.t-mobile.com

http://tmcnet.com/35414.1

Packingham to Leave Sprint

Sprint Nextel executive Kevin Packingham has left the company. Packingham, who had been senior vice president for product development and a Sprint employee for more than a decade, reportedly plans to take the helm of a new Kansas City area business, the name of which has not been disclosed. This comes on the heels of news that Sprint's prepaid services leader, Dan Schulman, is jumping ship for a gig with American Express.

www.sprintnextel.com

http://tmcnet.com/35415.1

Cincinnati Bell Launches Business Services Company

Cincinnati Bell has formed a new subsidiary, Evolve, to offer businesses of all sizes VoIP, cloud-based phone and data services. Evolve offers service packages that combine local and long-distance phone services, high-speed Internet, MPLS access and conferencing. The company's products fit into two buckets. One, called eMerge, is a cloud-based solution through which businesses can completely replace their existing phone systems. The other group of services, marketed under the name eVantage, interfaces with a customer's new or existing telephone system.

www.evolvebusinesssolutions.com

http://tmcnet.com/35416.1

AT&T U-verse Goes Mobile with ABC

AT&T for years has promoted the idea of "three screens" and talked about the concept of delivering and enabling customers to share applications and content between different devices, and among wireless and wireline networks. However, in reality most of the company's wireline and wireless efforts have been on separate, parallel tracks. That's starting to change, however, as AT&T begins to do some cross pollination between its U-verse and mobile services. The company recently introduced an updated U-verse Mobile app that allows U-verse subscribers to download for no extra charge TV programming for viewing on the iPhone, for which AT&T is the exclusive service provider in the U.S.

www.att.com

http://tmcnet.com/35417.1

Democrats Comment on Google/Verizon Framework

The nation's largest over-the-top service provider and one of the biggest of the telephone companies have put aside their differences to collaborate on a policy framework on net neutrality. But although Google and Verizon have come to terms on the matter, the powers that be in Washington, D.C., have not. Four Democratic politicians have said that the proposal put out by the pair doesn't give the federal government enough power over the Internet and related wireless services. The letter, written by Rep. Ed Markey (D-Mass.), also was signed by Anna Eshoo of California, Mike Doyle of Pennsylvania, and Jay Inslee of Washington state.

http://tmcnet.com/36505.1

Verizon Demonstrates FiOS in 1gbps Range

In a recent FiOS field test of 1gbps technology, Verizon reportedly demonstrated download speeds to a local server at 925mbps and connections to a remote server at 800mbps. That's compared to Verizon's existing FiOS download speeds of up to 50mbps. The test took place in Taunton, Mass., and involved a local FiOS business customer.

www.verizon.com

BlackBerry

Mobilize Your PBX

Office Phone. Smartphone. Unified.

Introducing the

Fixed Mobile Convergence Global Online Community

Fixed Mobile Convergence addresses the growing demand in today's business environment for seamless connectivity between fixed and wireless communications services. It is the ultimate convergence of all voice, video, and data communications, independent of location, device, or access technology.

The Fixed Mobile Convergence Community, sponsored by Research In Motion and powered by TMCnet, is your resource for staying up to date on the latest news that's important to optimizing your business' communications.

Community Features:

- » FMC Showcase
- » Ask the Expert
- » RSS feed for FMC news
- » Feature articles
- » White papers

http://fixed-mobile-convergence.tmcnet.com

Powered by: TMCnet

Sponsored by: BlackBerry

by Carl Ford

Return of the Jedi: Enable the Ewoks

Enable the Ewoks.

Recently, Google and Verizon have teamed up to suggest a net neutrality framework, which is outlined on page 3 in this magazine. In light of that, Jonathan Askin in TechCrunch compared Google to Anakin Skywalker, aka Darth Vader, in the Star Wars series. In his analogy Verizon is the Empire. I'd like to expand the theme. I want to use the analogy as a call to arms to Internet engineers, who should wrestle this argument away from legal frameworks and bring it back to the reality of network operations.

While Google and Verizon speak well to most of my issues, I believe the issue of net neutrality is focused on the right thing – promoting competition. Our entire country is underserved by competitive alternatives and promoting competition should be our goal. Here is why.

Let's talk about what the Internet has always been about. The Internet was designed to eliminate the possibility of single carrier failure, by enabling packets to travel in multiple directions based on a variety of protocols. The system also was designed to be an overlay using best effort.

imagined when multicast was specified. Using HTML to deliver video as will be standardized in HTML5 indicates that innovation is still the part of the Internet industry.

The billions of dollars of wealth that has been generated on the Internet and the thousands of jobs it has created all are the result of no one guaranteeing the quality of service.

No guarantee by an individual carrier was ever required for the Internet. And yet services have some form of quality on the Internet. If the Internet is built to not rely on a carrier, what is the concern regarding net neutrality?

In some ways I would submit we are hearing the echoes of problems past and the realities of our future markets. The assumption of carriers monopolizing the bottleneck assumes a lack of competition. While this is true in many ways, the problem like the one associated with quantifying best effort may be the result of having limited our thinking to the concept of a carrier.

It's like the Return of the Jedi movie where the Ewoks beat high-end technology with low-tech alternatives. If we know the ubiquitous symmetrical Internet services should be our goal, perhaps our

Internet engineers should wrestle this argument away from legal frameworks and bring it back to the reality of network operations.

Best effort is a deliberately nebulous term. As a Bell head, I have often asked the Jedi Internet engineering talent to quantify what best effort means. To their credit they have told me that the act of quantifying it would in effect limit it. Once you make best effort a quality of service standard you in effect limit the innovation of the Internet.

And the Internet has been the home of tremendous innovative strategies to deliver better quality. Video being delivered on the Internet is often a good place to see this innovation. At the client we have the ever lighter weight compression mechanism. At the core, the content delivery network is heavy with processing and speed. In between we have caching and other delivery strategies that were not answers are found in alternative delivery methods. Our friend Brough Turner would point to the generations of Wi-Fi coming in the near future. Our friend Rick Whitt would point to the opportunities with TV white space. David Reed would point to an entirely distributed system of our peers. Others would point to unlicensed spectrum being managed by cognitive radios and beam forming. All of these represent strategies for innovators to adopt and adapt and refine. Undoubtedly new methods are on the way as well.

If we want to insure the Internet's success, the first goal should be something akin to the Hippocratic oath: First, do no harm. I think this is a more obtainable goal than Don't be Evil, but I grew up a Calvinist.

The way to do no harm is to recognize that innovation is going to happen from many sources and that many of these companies will want to partner with the other companies to offer better solutions through bundling. Some of these may involve preset bandwidth availability, and others will try to run similar services without an allocation. For example, let's say that my friend Alice has created a magnifier application that shows me anything I want to point my camera at in real time with broadcast quality video at speeds of 135mbps. She has partnered with a fiber carrier to bring the service to her customers. While she uses Internet technology since it has become the lingua franca of transport, her requirements make it a special service only available with direct connection. However, presently the backbone supports her system and the carrier uses its backbone for both the magnifier application and the Internet. Then my friend Bob comes along and builds Microscope. Microscope does amazing things with just a little bandwidth and is competitive to Alice's system in some situations. My view is as long as no discrimination exists, then our goal has been achieved.

However, if Alice's magnifier system is limiting the Internet availability and in the process Bob's microscope solution, then we have a cause for concern.

Finally, let me add to the mix Carol's invention of the Periscope Prioritizer. This device looks for the best paths on the Internet for Alice's traffic to travel. When Carol first built it, the system monitored the traffic and in effect made super routes. However she has been in talks with carriers that see her solution as a way to segment the shared backbone. It could be that the deployment facilitates better services for all, but it also could be that it is used for preferential service delivery.

The issue of discriminatory business practices can be investigated and documented. All of these points are implicit in the discussion of prioritization being made well in the Google/Verizon suggestion.

However, we then get on to the subject of wireless, and we clearly see a digression. Either the Internet principles apply to all transport or we are not talking about the Internet. Remember, the Internet was delivered to you over dial-up. You chose to buy a better access method when it was available. It is wrong to think of wireless as nascent. We have saturated the market with wireless services, and the wireless world looks much like the PSTN did in the 1990s when people were buying modems for the first time. (Yes, we can make the case that the iPhone is nothing more than an integrated dongle).

The current network architectures for wireless are being migrated to an Internet model, but to allow companies to claim it is not part of the need for competitive services is wrong. The innovation at the edge needs to be encouraged, and solutions that enable more transport power on the edge should be part of the goal. Calling wireless nascent leaves the status quo on the road to long term to evolution and off the tracks of competition.

Enabling access from a variety of solutions regardless of communication is what the Internet is about. The Internet works over all the transport technologies, and the framework should be the same for any method of access. Brough Turner has pointed out that the concepts of common carriage are appropriate for our dilemma of avoiding bottlenecks.

Most policy experts point out that we need more than three operators to make a competitive marketplace and without the wireless operators we have little chance of seeing competition. In addition, wireless solutions (including satellite) are the only place where the bottleneck is most likely to result in true redundant infrastructure, which is important from a public safety and emergency services perspective.

In Europe the common carriage requirement is being used to promote more competition by having the backbones interconnected and shared to reduce cost and maximize coverage.

However, for whatever reason, the U.S. government is looking to change the rules. It may be that the resemblance of ATT's logo to the Empire's death star has people looking for the emperor lurking in the shadows. But the reality is that the bogey man is not there. A case to make my point is the request in Washington about Apple's choice to not allow Google to put Google Voice in the App Store.

As you will recall, the blogosphere, Congress and the press all looked toward AT&T as the company blocking the service. However, AT&T had little to do with the Silicon Valley turf war.

Apple and Google transcended the transport and were at the application layer. This also points out that the problem of monopolistic control may not be in the hands of the operator, but may be with the equipment manufacturing world. It may be that the whole role of guaranteeing access to services has more to do with Federal Trade Commission and less to do with the bottleneck.

If we stop treating the transport services as separate (but not equal) technologies and treat them the way that the Internet does, as a means to delivery, then our goals should be simple.

Best effort means that services can be designed with the expectation of experiencing the same issues as the rest of the Internet. Discriminatory practices cannot be maintained in a competitive market of access services.

I believe a network operator can guarantee services but not at the cost of the supporting overall Internet use. The application that runs on the Internet well with one carrier should work well on alternative providers.

If companies are allowed to create solutions that access the Internet with the best up/down speeds possible (wireless will always lag fiber), companies will form solutions that will deliver new services and the emperor will be proven to have no clothes.

USF reform that gives money to innovation at the edge makes sense to me, but only because the method is in place. I would rather see a grant system for new access methodologies.

In conclusion, I feel for the advocates in Washington; when it comes to telecom and the Internet, each person must feel like he or she is Luke Skywalker walking around in the Mos Eisley Cantina looking for safe passage with Obi Wan. The solution was Hans Solo's Millennium Falcon; our goal should be to make this millennium full of alternatives. It will happen if we fund it, and not regulate it.

Enable the Ewoks. **NGN**

Carl Ford is co-founder of Crossfire Media, 4G Wireless Evolution Community Developer (http://www.4GWE.com).

by Grant Lenahan

Mobile Broadband Advertising
Being Part of the Content Value Chain

In the last installment I talked about the necessity for innovative pricing. The gist of that column was that in mobile broadband, one size fits all is really one size fits none – and is optimum neither for consumers (who have diverse needs, wants and budgets) nor for mobile operators. By tailoring various plans to various consumer niches, consumers can get more closely what they want, and communication service providers can maximize revenue.

This month, I will take this a step further, and discuss how CSPs can derive revenue beyond basic data plans and become an integral part of the content/information delivery value chain. In doing so, they can both receive a percentage of the revenue, which is of course good business, and, at the same time, improve the value proposition to both consumers and content providers – in effect their partners – another win-win if executed properly.

There are many ways that CSPs can be part of the value chain including billing on behalf of others; bandwidth or quality of service fees; or catalog/sales fees. But one stands apart from the others in its ability to generate higher quality profits and fundamentally change the economics of content. This is advertising.

Everyone is talking about advertising. And for every proclamation that it's the next big thing, there is an equal and opposite proclamation that consumers don't want it and it's the next big bust. Both are simplistic analyses. To generate a win-win, we must fundamentally change advertising so that it is both more effective (that means more revenue available) and more relevant and useful (which means consumers will accept it more readily). Fortunately, relevance and effectiveness are tightly related.

I have written before about the virtuous cycle that can be created if consumers' preferences and history are treated with respect and kept private, yet are used to send ads that are of value. Respect begets trust, trust begets opt-in information, and opt-in information begets better and more useful ads for both sides. It also strengthens the cycle. Yet this cycle depends, in part, on a single trusted entity to hold data in confidence with the ability to reveal it anonymously to improve the ad experience. Given the multitude of agencies, campaigns, ad engines, etc., there are very few entities that can do this in a holistic fashion, and only one that collects, by definition, each consumers context info: You, the CSP.

But there is more. The other key ingredient in most effective ads is context. Football is a strong context for beer ads. Roaming is a strong context for taxi ads. The Wall Street Journal is a good context for financial products ads. Location is a strong context for proximity-based promotional ads – the oft-quoted location-based services. Google searches are strong context for the search topic. Context, overall, sells advertising at far higher rates.

Respect begets trust, trust begets opt-in information, and opt-in information begets better and more useful ads for both sides. It also strengthens the cycle.

Context and user preference and history are very strong drivers of relevance and revenue. But together, they are even more powerful, and this is the combination that CSPs can exploit – across sites, devices, media, technology and agencies. CSPs alone have access to much signaling data. And CSPs are one of the very few single points that can observe and hold relevant data and are trusted with it.

Interestingly, CSPs have the ability to drive up the price of ads and drive up the acceptance of ads by consumers. This is a unique position to improve fundamentally the product, and, of course, to take a portion of the economic surplus created by this new paradigm. Many content providers have been struggling to make their business models work. Free is not a business model, neither are ads that don't generate sufficient revenue to cover the costs of premium content. Over time, I am certain, online content, whether from walled gardens (such as digital cable and IPTV), or over-the-top players must be supported by a combination of non-negligible fees and ad revenues. And CSPs are in an ideal position to help make those fees and revenues larger and more sustainable.

That's another win-win. **NGN**

Grant F. Lenahan is vice president and strategist for service delivery solutions at Telcordia Technologies (www.telcordia.com).

inGate®

INTERNET TELEPHONY Conference & Expo ITEXPO Our 10th Year!

SIP TRUNK network

NEW

SIP Trunk-Unified Communications Summit @ ITEXPO

Get the Facts About SIP Trunking and Unified Communications

Learn everything you need to know from the industry's top experts at these educational seminars, ***free*** for all ITEXPO attendees.

LIVE DEMOS -- Watch as a SIP trunk is deployed live — on-site — in 20 minutes or less.

Monday, October 4, 2010

SIP Trunking Professional Development Program

- The State of SIP Trunking
- Building for ROI
- Service Provider Perspective
- Telia: Lessons Learned from Across the Pond
- **TOWN HALL MEETING: SIP, UC and Security**
- The Need for an E-SBC
- Legacy PBX/PSTN and SIP Trunking

Tuesday, October 5, 2010

Unified Communications Day

- Introduction to Unified Communications
- Case Study: SIP Trunking at the core of Unified Comms and Mobile UC
- Fax-Over-IP
- UC: The Future for Service Providers
- Hosted UC
- Deploying SIP Trunks - Getting it Right the First Time
- Enterprise-Centric UC

Wednesday, October 6, 2010

- How to Sell SIP
- SIP Trunk-UC Workshop for Service Providers
- Deeper Dive: Ingate/Intertex Demos

Los Angeles Convention Center, ITEXPO

For more information: http://www.ingate.com/SIP_Trunk_UC_Summit_LA_2010.php

Platinum Sponsors:

broadvox BUSINESS CONNECTS HERE

Dialogic Making Innovation Thrive

IWATSU VOICE NETWORKS

MITEL NetSolutions

ShoreTel Brilliantly simple

Sponsors and Guest Speakers:

interteX

The SIP School Learn and Qualify

Market Strategy and Analytics Partners, LLC

unwired revolution

Maloff NetResults

SIPconnect SIPFORUM

by Marc Leclerc

Keeping It Real

The last 10 years have seen a huge increase in the importance of personal electronic media in people's lives. Mobile communications, digitized music, user-generated content and social networking have changed the way we behave. As a consequence, our expectations of personal electronic media have evolved.

Consumers want all of their content, applications and services everywhere they go and from any device they choose. Essentially, they want to use communications to enhance their lives all the time. This includes sharing experiences and interacting with family, friends and colleagues across service and platform boundaries. But most importantly, they want to do all this without complications and without budgetary challenges at the end of the month.

It would be very easy to lose track of consumer needs in all this complexity. To help stay focused on driving value for consumers, here is an approach that establishes three main wants, or aspects of the user experience, and how they relate to the key strengths of telecoms:

Living in real-time – Consumers want to be on the grid at all times. Telecoms must focus on the need for users to always be in touch and to be able to share experiences whenever the mood strikes.

Feeling close – Communications is about people and enabling their interactions no matter what technology they use. The global interoperability of telecommunications allows consumers to take part in a community of more than 4 billion.

Convenience and control – Consumers want communications to be easy and controllable. To enable this, telecoms must focus on the relationship between operators and subscribers, how people can project their own brand image and how they can better manage, secure and protect their investments in media and personal data.

Living in Real Time

Mobile communications has been such a great success because it lets people communicate when they need to. Anyone is accessible anywhere and whenever they choose. They can receive messages and status updates without delay and without needing to boot up, log in or find a hotspot. People can share their experiences when the moment strikes and not have to wait until later. People live in real time and want to share their lives in real time. Location, presence and status enable people to coordinate daily interactions, discover who is in the neighborhood and available for contact.

Here's an example: Abby, Fred, John and Linda are friends who have hectic jobs, but they keep each other aware of what each is doing all day long by sending status updates and sharing pictures many times a day. They keep an eye on each other's location and try to get together when they are in proximity to each other and have the time to meet up. They enjoy sharing their lives in real time. Waiting until they can connect to a personal computer just wouldn't be the same.

Feeling Close

When you know where your family and friends are, what they are doing, and how they are feeling, you feel closer to them. The combination of mobile communications with social networking makes it possible for people to feel closer, even when they are far apart. This interaction crosses media barriers, including voice, text, photos, video, music, and any other element of an experience that can be shared. More than 4 billion people have access to telecoms with no barriers across social communities, unlike most social networking services, which don't interact with each other or require specialized clients in order to support devices other than personal computers.

Here's an example: Laura and Jim are a couple that lives in town, but work in jobs that require them to visit customers. They text each other all day, and frequently have lunch "together" by sending each other pictures. They also like to plan their evening throughout the day.

Convenience and Control

Finally, people want this to be easy without having to re-enter the same information multiple times. An update to a contact should be automatically forwarded to all the user's address books. It also should be easy to manage multiple identities, contacts and groups across devices and social media services. People want to keep both media and contacts secure and assure easy backup in case of device breakdown or loss.

Here's an example: Bill uses an active address book solution to keep all his contacts across mobile and fixed devices up to date. He also uses a social media portal site to update automatically status lines, photos and other media across different social networking sites according to rules he has established toward various groups.

Of course, using this approach does not guarantee that a service will be successful, but it may help clearly express the value of the service to the consumer while linking that value to operator assets, both of which are key in the marketing of a successful service. It also can help bring out the competitive advantage of a mobile/convergent service as opposed to a purely over-the-top based service. In essence, it places the competition for the consumer's choice on telecom's playing field, where mobility, real-time access, interoperability and a global community of more than 4 billion make the difference for consumers and service providers alike. **NGN**

Marc Leclerc is manager of the Global IMS Expert Centre at Ericsson (www.ericsson.com).

Is Your Physical Infrastructure Ready to Meet the Changing Needs of Your Data Center?

As consolidation, virtualization and automation become more widely adopted to increase data center efficiency and agility, the elements of power, cooling, resource utilization, and transmission speed become a very important part of the processes to operate data centers.

This makes physical infrastructure management tools, in conjunction with existing system software management tools, critical to support the changing needs of your data center.

Panduit's Physical Infrastructure Manager™ (PIM™) Software Platform and intelligent PanView iQ™ (PVIQ™) System Hardware work together to provide continuous, local and remote visibility of data center connectivity, power usage, and environment thresholds within a data center...in real-time.

This end-to-end, physical to logical view of the network enables complete data center infrastructure management to minimize downtime, improve overall infrastructure agility, and reduce costs.

For more information on our solutions, visit us at www.panduit.com/pim, call us at 800-777-3300 or email us at cs@panduit.com.

Unified Physical Infrastructure

PANDUIT®

building a smarter, unified business foundation

Connect. Manage. Automate.

by Ken Osowski

Does Web 2.0 Go Mobile?

We all have gotten so used to hearing the term Web 2.0 that we are becoming immune to what it means. To be fair, there is a common understanding that it means a new level of interactivity for users on Web 2.0 websites. This interactivity promises to go way beyond clicking on hyperlinks to include live voice and video communications, user-generated content, and messaging.

Social networking sites have incorporated some of these capabilities but in most cases have stopped short of integrating live voice and video communications. E-commerce Web sites that support instant messaging and live voice communications are a bit further advanced in this regard because they want to insure their customers the highest level of customer service to drive their revenues. This businesses driver justifies making richer communications readily accessible.

These highly interactive Web sites usually are accessed through PCs connected to wired, high-speed broadband networks. So will these advanced Web 2.0 capabilities ever reach users on their mobile handsets? Without a doubt.

The evolution of cellular mobile networks toward ever increasing data throughput and transition to end-to-end IP communications will in fact guarantee this will happen. Combine this with the latest in smartphones incorporating operating system environments and development tools that rival the PC, along with high-resolution displays and high-performance CPUs, and the stage is set for Web 2.0 to go mobile.

There already is evidence of this with a rush to enable rudimentary mobile access for popular high volume, interactive Web 2.0 social networking and e-commerce sites. These companies are bringing purpose-built applications to mobile handsets to encourage use of their sites. The interfaces in the mobile case are typically "skinnied down" as compared to access through full browsers running on PCs, but are effective in giving users access to basic functions.

Future Web 2.0 applications will not only rely on faster networks and more advanced mobile handsets but an abstraction of mobile network resources that makes these services possible.

But mobile Web 2.0 services will go well beyond mimicking their big brother websites. The primary reason for this is that mobile handsets are indeed mobile, and the network knows where they are. This starts to create a new breed of applications that can take advantage of knowing where you are. Location-based services will emerge that enable businesses to reach customers on their mobile handsets with deals based on how close they are to the businesses location; initiate text messages to a friend who may be nearby to meet for an unplanned lunch then connect via video to make arrangements; or simply to contact a friend automatically when you are close by.

Even with all these new interactive mobile services around the corner, many current mobile network technologies will need to be leveraged to make them a reality. This includes SS7 signaling, text messaging, audio and video media processing, and connectivity between mobile handsets and legacy circuit-switched networks and computers connected on broadband networks. All of these new interactive service use cases will require a combination of network elements to make them possible, in combination with advanced mobile handsets running Web 2.0 applications.

For mobile Web 2.0 applications running on these handsets to interact with device capabilities and network resources, they will need what are called Web services or Web APIs that adhere to RESTful APIs. This allows application developers to leverage their knowledge building Web 2.0 applications and reach into the mobile network as well to deliver rich, interactive mobile services without needing to understand how mobile networks internally function. RESTful APIs abstract handset and device capabilities for application programmers, opening up new capabilities for mobile subscribers and the services they use.

So, future Web 2.0 applications will not only rely on faster networks and more advanced mobile handsets but an abstraction of mobile network resources that makes these services possible. This next wave of mobile value-added services will go beyond the current crop of app store applications to include new levels of interactivity with multimedia-enabled mobile services.

The combination of nearly ubiquitous cellular mobile network access with advanced Web 2.0 websites that are built around interactivity and collaboration will be a game changer. These new services will help service providers monetize their significant network investments and break down the wall between transitional voice communications and data services. **NGN**

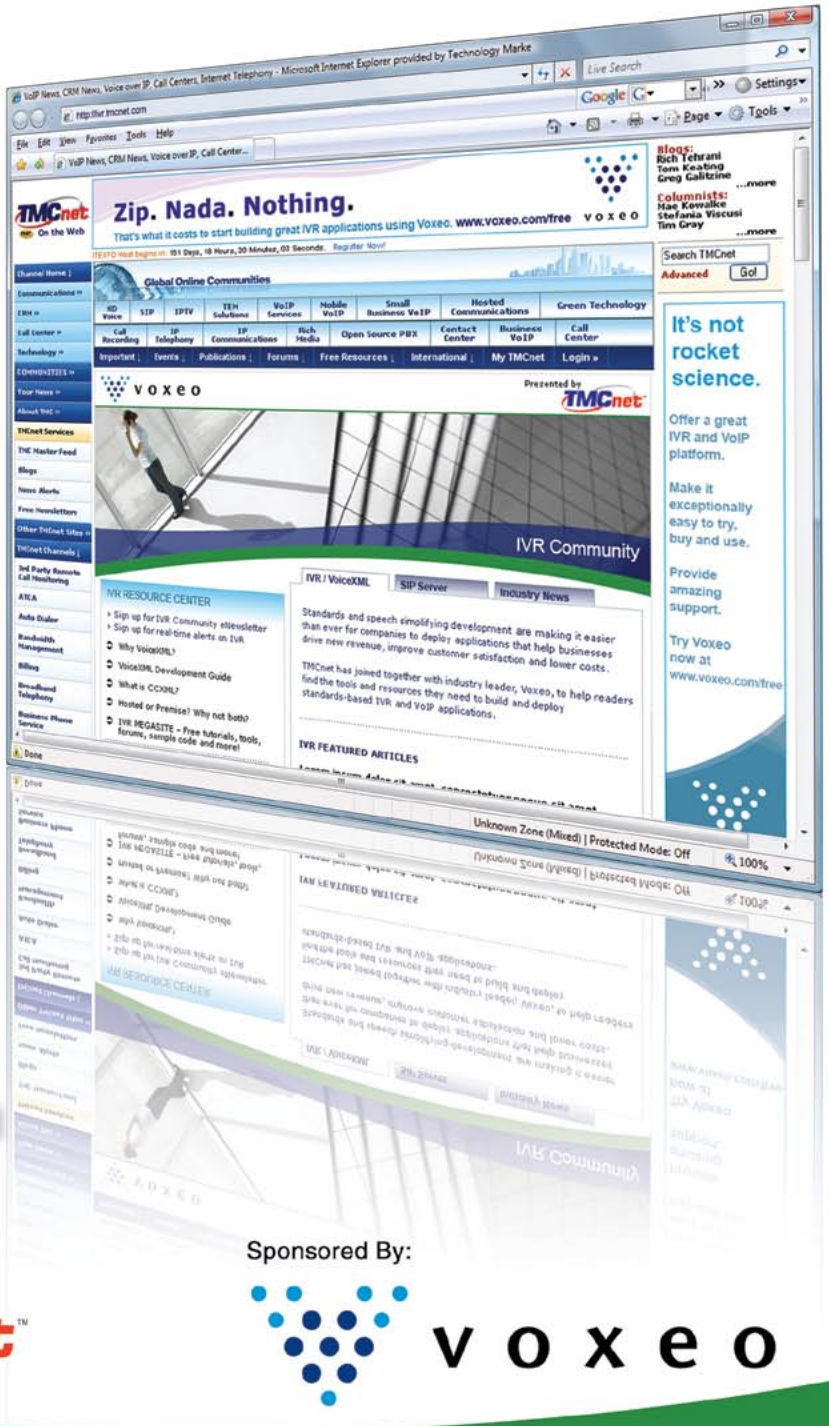
Ken Osowski is director of service provider product marketing at Dialogic (www.dialogic.com).

Introducing the Global
IVR Community

Evolving standards and speech technologies are driving the business case for companies to deploy new speech applications to create additional revenue streams, increase customer satisfaction, and trim costs. Voxeo's IVR Global Online Community on TMCnet is the industry destination for tools, information, and resources for building and deploying enhanced IVR and VoIP applications.

- **Hosted and on-premise IVR**
- **VoIP Platforms**
- **Free developer tools**
- **VoiceXML, CCXML and SIP Standards**

http://ivr.tmcnet.com



Powered By: TMCnet

Sponsored By: voxeo

by Lisa Rhodes

Data Centers Still Steaming in Iceland

As ash from last spring's volcanic eruption in Iceland was starting to disrupt seriously European travel plans, the data center industry began seeing increased media focus surrounding the event's impact on development in the area. Green data center projects, like our Verne Global campus, certainly have received a fair share of attention as carbon emission concerns intensify and Iceland continues to establish the industry's most optimized alternative.

The eruptions of Eyjafjallajökull actually have provided a unique opportunity to illustrate why Iceland remains such an ideal spot for data centers and what careful planning must be done to secure sensitive IT infrastructure in such a distinctive landscape. Indeed, preparation is key, and a smart strategy can keep a facility out of harm's way when unexpected situations like this occur.

It's impossible to ignore the volcanic activity that has instigated world-wide interest in Iceland. The most recent eruptions certainly won't be the last in the land of ice and fire, but that is precisely what makes the area so uniquely energy efficient. Geothermal energy, along with available hydroelectric resources, put Iceland in a "green" world of its own, running on 100 percent renewable energy as other regions struggle to adapt to fluctuating energy prices and stricter carbon legislation taking form. This, combined with the ability to offer year-round free cooling in Iceland, enables a one-of-a-kind data center package that can't be found anywhere else. The solution is 100 percent renewable, which is no small task and certainly has its own unique position inside an industry with a notorious history as a carbon emissions producer.

With volcanoes acting as a major catalyst in the Icelandic green data center vision, the question has never been how to avoid them, but how to utilize their energy without causing any dangers or major disruptions to the data center facility and procedures. Finding a location isn't as complicated as one might think, as Iceland's predictable landscape clearly points to the most stable area in the region. Most of Iceland's volcanic activity happens on the eastern side, so naturally development is best in the west. The chances of volcanic activity on the western side actually would be comparable to any uneventful city in the U.S. Iceland's predominant wind and weather pattern flows from west to east as well, so ash plumes are blown far away from the area toward Europe.

The recent eruptions acted as a live test of sorts to demonstrate this process and everything went exactly according to design while Europe, unfortunately, experienced most of the consequences. It really has been business as usual for cities like Keflavik in southwest Iceland. As European air travel stalled, flights out of Keflavik never stopped taking off with media and tourism providing more of a disruption than the volcano itself.

The recent events pose as a perfect reminder that the unexpected is a possibility; however, the story for Iceland data center development is that there was no story.

Further alleviating concerns with volcanoes and ash dust is a lesser-known fact that Iceland possesses some very stable ground, which has remained secure for millions of years. The Verne Global data center campus is being developed on the former Naval Air Station Keflavik, surrounded by a 1.5 million-year-old bedrock base, which served as a major attraction for the original NATO facility. The military can no more afford the consequences of being unprepared than a data center can, and the stable bedrock goes deep to provide extra protection in case of earthquakes and other types of natural disasters. It's safe to say that the area is spot on for risk management, but Iceland actually is quite a bit more resistant to natural disaster than other data center hot spots like the U.S and U.K.

Volcanoes surely aren't the only danger Mother Nature has in her repertoire, and a detailed contingency plan is a must for any company looking to protect its investment, not to mention that of its customers. The recent events pose as a perfect reminder that the unexpected is a possibility; however, the story for Iceland data center development is that there was no story. The region's predictable, but unique landscape ensured that projects like ours could advance clear from volcanic consequences, with no disruption to power or communications. In the end, smart planning and making the appropriate safety precautions allow for easy rest knowing facilities remain secure while others gamble with the headache of uncertainty. **NGN**

Lisa Rhodes is vice president of marketing and sales at Verne Global (http://verneglobal.com/).

BIG UNIFIED COMMUNICATIONS

DELIVERED AS A SERVICE THAT ANY SMALL BUSINESS CAN AFFORD

UNIFIED EMAIL, IM, VOIP TELEPHONE AND PBX SOFTWARE AS A SERVICE

HOSTED unison™ FROM INTERMEDIA

All you need is a computer and an internet connection for fully unified communications

LEARN MORE AT WWW.INTERMEDIA.NET/BIGUC OR CALL 800-379-7729

by Paula Bernier

Tipping the Scale

Broadband Fixed Wireless Providers Airband, Sparkplug Merge

In an effort to achieve greater scale, Airband Communications and Sparkplug Communications have merged. The deal, for which the financial details were not disclosed, creates the largest fixed wireless company for businesses in the U.S., according to the company – which is headed by the former Sparkplug CEO, but goes by the name Airband.

A move by Sparkplug to combine with another service provider was expected, as indicated in a June 16 TMCnet story titled "Sparkplug CEO Expects Further Consolidation in Fixed Wireless Broadband Space." In it, Michael Ruley, who had been Sparkplug CEO and is now CEO of the new Airband, talked about how wireless broadband outfits that do business in just a handful of markets are limited in the scope of their offerings to customers, as well as in their financial prospects related to the investment community.

Prior to the merger, which closed Aug. 18, Sparkplug offered services over its own networks in Des Moines, Iowa; Las Vegas; and Phoenix metropolitan areas. The new Airband, however, provides a suite of voice and data services in 17 markets.

Services run over Airband's broadband wireless network and include data offers from 1mbps into the gigabit Ethernet speeds as well as VoIP services, including hosted VoIP and SIP trunking. Now Airband can not only deliver its services over a wider swath of markets, but it provides new opportunities to sell to larger business customers with offices in multiple Airband markets.

When NGN Magazine, a sister publication to the TMCnet site, initially spoke with Ruley this June in Sparkplug's Scottsdale, Ariz., office, he said that company was a late stage VC-backed company with less than $20 million in annual revenue. The newly enlarged Airband has annual revenue in the sub-$50 million range.

Airband's Mike Ruley

Neither company was net income profitable prior to the merger, and the new Airband won't be profitable for a little while, Ruley told NGN Magazine on Aug. 18. But he said the company will be operating profitable "very quickly," meaning this year.

Now Airband can not only deliver its services over a wider swath of markets, but it provides new opportunities to sell to larger business customers with offices in multiple Airband markets.

Helping the new Airband hit that and other goals is $20 million in financing that it received as part of the transaction. Previous equity backers Ignition Partners, Key Venture Partners, M/C Venture Partners and Trilogy Equity Partners are leading the $11 million equity investment. In addition, Airband got $9 million in debt financing from Silicon Valley Bank and MMV Financial.

The new financing will be used to fund growth and acquisitions. Ruley declined to provide details on whether or when Airband

IMS PLUGFEST™

www.imsforum.org

Invitation to join the IMS and NGN Forum™ Applications Technical Working Group

Addressing the explosion in demand for new applications and revenues for fixed, cable and 3G/ 4G mobile broadband networks

You are invited to join the IMS and NGN Forum Working Group accelerating the development of IMS applications and services such as Voice over IP and Voice over LTE/WiMAX, SMS, Security, OSS/BSS and QoS. The group focuses on methods and business planning for delivery of new revenues from high quality end-user experiences that are consistent across fixed and mobile broadband networks, including 3G, 4G LTE and WiMAX.

These and other topics are scheduled for our Plugfest 9 interoperability test event in Q4 of 2010.

Technical / Business Working Group & Plugfest participation is open to all Operators, Integrators & Vendors

RSVP to info@IMSForum.org
Register online at www.imsforum.org
For More Information Contact: info@imsforum.org
NGN IMS Plugfest™

NGN™ FORUM

WWW.NGNFORUM.ORG

might be involved in additional M&A activities, but he indicated the company is open to opportunities on this front.

In addition to Ruley, who will be moving to Dallas, where Airband is headquartered, company leadership includes Tim Kinnear. Formerly CEO of Airband, Kinnear now occupies the CFO post. Other key folks at the company are Jeff Owens, chief technology officer; Jim DaBramo, executive vice president of sales; Jennifer Mao, vice president of marketing; and Daman Wood, vice president of wholesale markets.

The combined company operates in the following markets: Atlanta; Austin; Baltimore; Dallas; Des Moines; Fort Lauderdale; Fort Worth; Houston; Las Vegas; Los Angeles; Miami; Orange County, Calif; Philadelphia; Phoenix; San Antonio, San Diego and Washington, D.C. The only one of those markets in which the former companies had overlap was Phoenix.

Both Sparkplug and Airband networks use the BroadSoft platform to deliver hosted VoIP services. For access, the Sparkplug network today employs Alvarion and Motorola Canopy gear.

The company will be operating profitable "very quickly," meaning this year. Helping the new Airband hit that and other goals is $20 million in financing that it received as part of the transaction.

"We'll be looking to migrate to one technology over time," Ruley said. "It's really important that we deliver our VoIP services over our own wireless network; the Alvarion equipment gives us quality of service to do that.

"Alvarion is the current vendor within Airband and most likely will be the vendor that we migrate to over time within the Sparkplug network," he added.

Fixed wireless broadband offers businesses some nice benefits, including access to areas not reached by fiber, fast turn-up times, and connectivity that's diverse from wireline, Ruley noted during the interview with NGN Magazine earlier this summer.

"The key for us is owning the last mile," said Ruley at the time, noting that many CLECs can't make that claim. "Not many companies own [their] own independent network. I don't touch other competitors' networks, nor do I need to rely on a competitor to offer service to my customer. [That] means that I can control my customer relationship. I can make sure that it's provisioned correctly. I can make sure the quality of service is there. I can make sure the bandwidth we commit is delivered. And I can monitor it myself." **NGN**

About Airband

Airband Communications Inc. is the largest fixed-wireless broadband provider for businesses in the U.S. The company offers a comprehensive portfolio of high-speed data, voice over IP, security and other managed solutions – delivered over one of the industry's most scalable last-mile networks. Airband bypasses the local phone company to provide faster provisioning intervals, immediate scalability and complete redundancy for its customers. Thousands of businesses nationwide already count on Airband for their broadband service.

About Sparkplug

Sparkplug was the leading fixed-wireless broadband service provider that was operating networks across five states, including the metropolitan markets of Des Moines, Phoenix and Las Vegas. The company offered a suite of high-speed data, voice over IP, and other managed services over its own network to business, education and government customers. Its portfolio included a complete range of symmetrical bandwidth service options starting at 2mbps with speeds up to 1gbps at a fraction of the typical cost. The company also provided high-capacity data services and transport to many of the nation's leading telecommunications providers.

Introducing the

UNIFIED COMMUNICATIONS

Global Online Community

Community Features:

» Breaking news in the Unified Communications market as it happens

» Valuable resources including white papers, feature articles, and best practices to guide UC adoption decisions

» In-depth look at the features and benefits of UC as well as important issues such as planning, buying, and deploying a solution

» Examination of the key sub-components (email, voice, mobility, web conferencing) integrated within unified communications

Sponsored by:

APPTIX™
EMAIL · CALL · UNITE

Powered by:

TMCnet™

http://unified-communications.tmcnet.com/

by Paula Bernier

Broadband Stimulus Awards Wrap Up This Month
But the Drama Continues

Sept. 30 is the date by which the National Telecommunications Information Administration and Rural Utilities Service are required to disclose publicly all the winners of the broadband stimulus program. But just 45 days before that deadline, there was still a significant amount of money left to be awarded, a question about just exactly how much money would be available for the program, and at least a handful of winners that indicated they didn't want the funds they'd been awarded after all.

On the up side, however, money from the first round of the broadband stimulus program started flowing in the second quarter of 2010, which meant new capital for network operators, new business for equipment suppliers and engineering firms, and potentially new jobs for the people in the communities in which these efforts are taking place. While the first networks to use the stimulus funding could launch as early as this year, it could take a couple months for award winners to start spending enough to have a real impact on the economy.

As of Aug. 16, when this article was being written, several round one and at least one round two broadband stimulus award winners had named their equipment suppliers for the network builds.

For example, Wabash Mutual Telephone, a subscriber-owned telephone exchange and first round broadband stimulus fund winner, selected Occam's BLC 6000 multiservice access platform to expand broadband services in west central Ohio. The $4.3 million broadband stimulus fiber project, through which Wabash will provide digital television, high-speed Internet and voice services to Fort Recovery and the surrounding area, is being funded through a combination of RUS Broadband Initiatives Program, or BIP, grants and loans.

Meanwhile, TEC revealed it will use ADTRAN's Total Access 5000 Multi-Service Access and Aggregation Platform and Total Access fiber-to-the-node DSLAMs for its broadband stimulus project at Bay Springs Telephone Co. That network, for which TEC received a broadband stimulus award from RUS in the first round, will employ FTTN technology.

Then, in early August, Calix Inc. said it had been tapped by South Central Telephone Association and Madison Telephone LLC to supply broadband gear for three separate initiatives. As a result, rural subscribers across southern Kansas will be served via a combination of fiber access technologies, including gigabit passive optical network, active Ethernet, and 10-gigabit Ethernet transport technologies, capable of delivering broadband of up to 1gbps.

Taking Count

All told, round one of the broadband stimulus effort ended up totaling $2.2 billion in 150 grant and loans.

As noted above, round two of the program is ongoing, but as of mid August, an estimated $640 million in BIP funds remained to be awarded by RUS, and the NTIA still had between $2.5 billion and $3.5 billion on hand, according to ADTRAN's estimates.

About 74 percent of the BIP money and 26 percent of the NTIA BTOP round-two money had been spoken for as of mid August. At that point, about 73 percent of the round-two money had been allocated to last mile projects; 24 percent had been earmarked for the middle mile; and the other 3 percent had been awarded for public computer center and sustainable broadband adoption efforts. To get a sense of how that compares to round one, in the first round about 41 percent of the funding went to last mile projects; 48 percent went to middle mile efforts; and 11 percent went to public computer centers, sustainable broadband adoption programs, and mapping.

The initial plan for the broadband stimulus program, as laid out in the American Recovery and Reinvestment Act of 2009, was for RUS and the NTIA to dole out $7.2 billion in federal monies in an effort to expand broadband to a larger set of the population, create new jobs, and otherwise stimulate the economy. ARRA indicated RUS would allocate $2.5 billion of that in loans and grants, while the NTIA would provide $4.7 billion, primarily in grants. But Kevin Morgan of ADTRAN notes that RUS at the time also said it had budget authority of up to $7 billion to $9 billion, so its exact allocation would depend on how the agency split loans and grants. As of mid August, Morgan says, RUS had announced $1.6 billion in grants and $1 billion in loans relative to broadband stimulus.

Rules around dividends seem to be one key reason that some are thinking twice about taking broadband stimulus monies, he says. Apparently, the government wants to have some input into the decision process relating to dividends for broadband stimulus award winners, at least in some cases.

"The concept is this: If I'm the government and I'm giving out money, I don't want the shareholders of a company to benefit just because I'm passing them money, and there's a chance that a company could then just take it and pass it on to the shareholders in terms of dividend," says Morgan. "So there's language in the contracts to try to prevent that from happening."

Rules around dividends seem to be one key reason that some are thinking twice about taking broadband stimulus monies.

While that would seem to be a windfall for the broadband stimulus, at the same time, Congress was working on legislation that could pull several hundred million dollars in federal funds away from broadband efforts. In mid August, following the Senate's lead, the House voted to pass HR 1586. The legislation has to do with funding education and Medicaid, but that would come at the expense of the broadband stimulus, from which it would pull $302 million in funding.

On a separate front, Morgan of ADTRAN says the Department of Agriculture has been talking about a rescission of $122 million in unobligated funds, but it's unclear at this point what exactly that means, although Morgan says this would not seem to impact broadband stimulus/ARRA funds.

However, while the moves by Congress could mean less money is available for the broadband stimulus, it also appears that there are now fewer organizations seeking that money. As noted earlier, at least a handful of broadband stimulus award winners have indicated they no longer want the funds they've been awarded. At least that was the case at press time in mid August.

"I do know some customers that were initially awarded money have decided that they're not going to take it, for a variety of reasons," Morgan tells NGN Magazine. "A lot of it had to do with the way the terms were – just not very favorable in terms of ... reporting structures and other things."

Morgan says he's heard of three or four broadband stimulus award winners that ultimately decided against taking the money, and talk about three or four others that may do the same. He declined to provide the names of these organizations.

So, one might logically ask, didn't these organizations know what the rules were for all this at the onset of the broadband stimulus effort?

"The requirements for qualifying for the applicants were very clear," explains Morgan. "When you get the award though, you basically start the negotiation process...." And each negotiation is unique.

That said, the federal government agencies involved in the broadband stimulus could potentially adjust their rules or requirements on this front. Morgan notes that the government showed a fair amount of flexibility earlier in the broadband stimulus program, when it adjusted its second round NOFA rules in response to industry input.

But even after all of the award winners have been named, the negotiations have been tied up, the equipment suppliers have been selected, and the networks have built, more work will remain to be done, notes Diane Duffy, Telcordia's executive director of advance technology solutions. She says that as these broadband stimulus fund winners design and build their networks, they need to ensure they are bringing into service networks that will operate cost effectively, scale as growth requires, and deliver secure communications over both the near and long terms. **NGN**

by Paula Bernier

Cbeyond Celebrates a Decade in Communications

It's been a decade since Cbeyond was established, and although much has happened over the past 10 years, there's a lot that hasn't changed.

"We're still maniacally focused on small business customers," says Terry Trout, one of Cbeyond's founding employees, who serves as vice president of customer experience.

When talking with new employees, Trout says she always mentions that Cbeyond has the same mission today that it had 10 years ago: to bring big business communications tools to smaller businesses at prices they can afford.

Cbeyond does that for more than 52,000 small business customers in 14 markets, with Boston one of the latest additions to the list. That's a far cry from the 1,000 customers the company had garnered after a year in service. At that point, the company was offering services in just three markets – Dallas, Denver, and its initial market of Atlanta.

The company has made a business out of delivering an array of services via T1 connections. Today the company has 30 applications it integrates and delivers to its customers. Its solutions include voice, data, Hosted Microsoft Exchange, data backup and mobile services, all of which customers can manage via Cbeyond's customer portal, CbeyondOnline.

"With CbeyondOnline, our customers have the ability to make instantaneous updates and changes to their account, such as modifying e-mail accounts, setting up online bill payment or scheduling when to forward calls or backup important files," says Trout. "Our small business customers told us they wanted features and functionality that they could manage, at their convenience, and without picking up the phone. We delivered."

SIP trunking, a service for which Cbeyond considers itself a pioneer, is a central component to the company's value proposition. And it added mobile services to its portfolio in 2006, and has been expanding on that ever since. (The HTC Hero is among the latest addition to Cbeyond's BeyondMobile service, which features a selection of smartphones, mobile devices, broadband access and cloud-based applications that run on a nationwide 3G network, and integrate with Cbeyond's core IT and communications services.) Today, 37 percent of Cbeyond customers use its mobile services.

Rather than blanketing the country with services, Cbeyond has continued its effort to bring services to select markets and then doing all it can to capture and retain customers in those markets. The company calls this the "inch wide and a mile deep" strategy. Trout says this practice, and Cbeyond's services, customer care and community outreach, have enabled the company to maintain its "super high" retention rate. (In reporting its second quarter 2010 financial details, Cbeyond said its monthly customer churn in the second quarter was 1.4 percent, the same as it was during the first quarter of 2010.)

Terry Trout

"We're good to each other, we're good to our customers," says Trout, adding that Cbeyond now employs between 1,600 and 1,700 staffers, all of which are encouraged to volunteer in the communities they serve.

"We thought it would be good for our employees, and we thought it would be good for the company," she says, adding that the Cbeyond staff logged 13,000 outreach hours last year alone.

But while its mission, core services and culture have remained consistent over the past 10 years, a few things at Cbeyond have changed.

For example, Trout notes, this year Cbeyond altered its packages, each of which initially was based on the number of T1s a customer needed. Now, however, it offers regular and mobile editions of its packages – and those packages introduce some personalization. Cbeyond has designed packages to allow customers to add band-

digium | Asterisk

Introducing the
Asterisk Global Online Community

Open Source Telephony is taking the world by storm.

The Asterisk Global Online Community — sponsored by Digium and powered by TMCnet — is designed to serve as the information hub for the exciting world of Open Source Telephony based on Asterisk.

This online community features the latest information concerning Asterisk and Open Source Telephony and how it applies to enterprise communications.

The community showcases daily content updates highlighting:

- Feature stories
- Breaking news
- Whitepapers
- Case studies
- Tutorials
- Asterisk Developer Blog

Participants in this community will be better prepared to make the proper decisions when it comes to selecting enterprise communications solutions based on Asterisk.

http://asterisk.tmcnet.com

Powered by:

TMCnet™

width or mobile or applications as they need them, instead of force-fitting them into a certain package, Trout explains.

Also new this year is Smart Start, an initiative through which Cbeyond does on-boarding of new customers by spending three hours to get the newbies comfortable with the service provider's solutions.

And later this year Cbeyond expects to open a second call center, this one in Denver. That's in addition to the call center in its home base of Atlanta. Trout says Cbeyond is proud to keep its call center operations on U.S. soil.

Cbeyond also fairly recently took steps to increase its customer responsiveness by arranging for "solutions advisors" to visit customers every six months or so. The idea here is for Cbeyond to keep abreast of the needs of customers, to understand what they're using and not using, and how their needs have changed. Of course, this allows the company to be more active in addressing the requirements of customers with new or different services, for example.

These are the kinds of things that have enabled Cbeyond to add new customers despite what Cbeyond Chairman, President and CEO Jim Geiger calls "the still-sluggish small business sector."

During the second quarter, Cbeyond reported net customer additions of 1,787, an increase of 15.3 percent in total customers year-over-year. However, ARPU went down; it was $708 in the second quarter vs. $723 in the first quarter and $748 during the same quarter last year. The company says the decline in ARPU from the first quarter of 2010 was primarily due to the lower prices of the new packages introduced in 2010, the decline in customers' demand for mobile hardware and services, decreased charges for usage above levels of voice minutes included in the company's packages, and from customers reducing the number of additional lines and services with incremental charges. Cbeyond, which says these declines are related to the effects of the economic recession on customers and increased competitive pressures, has moved to offset some of that by selling additional applications.

"We are pleased to report continued strong results in adjusted EBITDA and free cash flow during the second quarter of 2010," says Geiger, who also has been with Cbeyond from the start. "Our adjusted EBITDA of $18.4 million represents an increase of approximately 33 percent over the second quarter of 2009. We are also pleased to note that Cbeyond posted 'free cash flow' of $3.2 million in the second quarter, with free cash flow totaling $8.6 million in the first half of 2010. Free cash flow is a non-GAAP measure that we define as adjusted EBITDA less capital expenditures. While adjusted EBITDA and free cash flow results have developed largely as planned, revenue and ARPU have continued to be challenging in this tough economic and increasingly price-sensitive environment. Our efforts are focused on trying to optimize profitability in our target markets while continuing to grow and maintain our customer base." NGN

The Cbeyond Network

Cbeyond uses a private IP network and softswitch technology to deliver communications services. It is a peer to the local phone company and supports the primary line telephone services including E911, operator services, line features such as call waiting, caller ID with name, three-way calling, call forward and more.

At customer locations Cbeyond installs and manages a Cisco integrated access device, which connects to both a customer's existing phone system and LAN. IP traffic runs across Cbeyond's private Cisco-based backbone network, while handing off Internet data to Internet service provider partners and phone calls to the PSTN. No voice traffic ever goes over the Internet.

And since voice and data travel over the same path, when voice lines aren't in use, the full T1 connection is used for data transfer.

The Cbeyond team

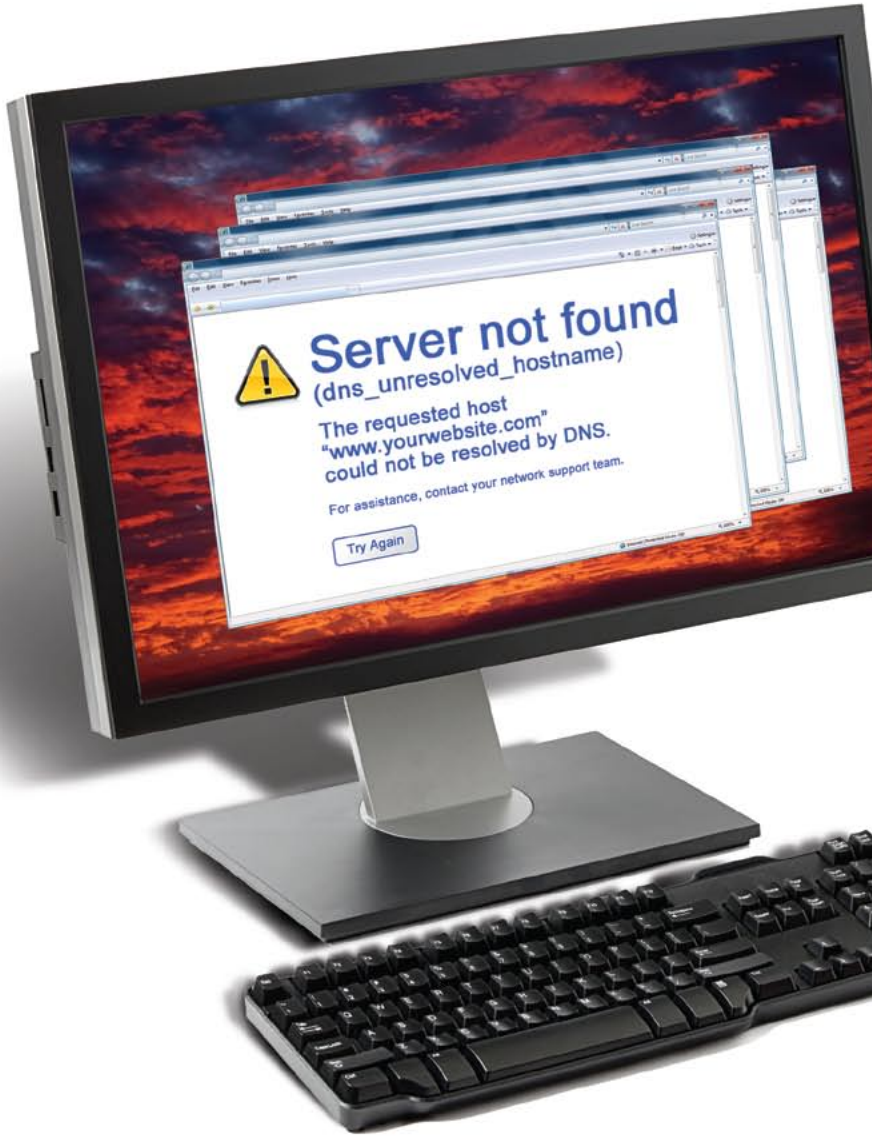
THE DNS ZONE

Everything current. Everything relevant. Everything DNS.

When your DNS is down...

it doesn't matter if your servers, storage, and network are up...

your Web site is not available!



And yet for many IT and business professionals, DNS is a mystery.

Unravel that mystery by visiting The DNS Zone, a global online community where you'll find podcasts, feature articles and breaking industry news describing how DNS impacts:

- **Internet Security**
- **Web Traffic Management**
- **Business Continuity**
- **Web Performance & Testing**

Sponsored By:
Neustar® UltraDNS® Services

HTTP://DNS.TMCNET.COM

By Paula Bernier

Availing Service Provider Networks to Developer Community Remains a Challenge

Historically, service creation in the telecom world took place on a platform-by-platform basis. You'd have your Alcatel-Lucent environment or your Ericsson platform, as two examples, but they didn't come together especially well.

Today, some of the large vendors, like ALU, Ericsson, Huawei and Nokia Siemens Networks, are delivering complete service creation solutions that live in a Web services environment. Meanwhile, some of the big systems integrators are responding to the challenge of bringing telcos into the Web world by leveraging middleware from companies like IBM and Oracle to offer customized service creation solutions within a Java environment. However, these solutions are frequently knocked for their inability to scale. A third group, including Telcordia Technologies Inc., believes there will be an SOA-type infrastructure and integrated development environment, but that it doesn't make sense to go one place to get everything.

The history lesson and current state of things noted thus far come courtesy of Grant Lenahan, vice president and strategist of service delivery for Telcordia.

"We are not a location vendor. We are not a content management vendor, at least not now. We are not a SOA vendor," says Lenahan.

What Telcordia does, and does well, is OSS, charging, policy, session and event control, advertising control and profile control, he says. And the company provides a rich set of solutions carriers can expose into a broader environment.

"Ultimately, we think that approach has merit," he says.

Meanwhile, Alcatel-Lucent has been building tools and a wide-ranging ecosystem through which it hopes to marry service providers like the telcos and developers in an effort to unleash a bounty of new applications on carrier networks.

Its latest move involved the acquisition of ProgrammableWeb. Five-year-old ProgrammableWeb has created a repository of all the important Web APIs – more than 2,000 of them. The company, whose resources are used by hundreds of thousands of developers, will continue to operate as a separate entity; however, Alcatel-Lucent plans to pull those APIs into its Open API Service and Developer Platform in an effort to help accelerate developer activities related to its service provider customers, says Laura Merling, ALU's vice president of global development strategy.

"If you look at any organization that launches an API, you quickly realize that the one thing the most successful APIs have in common is a vibrant developer ecosystem," says Merling. "Our goal is to protect the uniqueness and independence of ProgrammableWeb

Visit the **Voice Quality** Community

On TMCnet

While the cost-saving benefits of VoIP are well documented, voice quality has emerged as one barrier to adoption, for businesses and consumers alike. Now, consumers have access to a device from Ooma that provides free U.S.-based telephone calls and advanced telephony features for superb voice quality.

Ooma's appliance offers exceptional voice quality and the reliability of a traditional phone service, but at a fraction of the cost. You don't need a headset. You simply connect the device to your high-speed Internet and your existing phone, and that's it. You're ready to start calling and experience Ooma's great voice quality.

Community Features:

- **Listen to recorded samples and compare voice quality with Ooma vs. a leading VoIP provider.**
- **Track breaking news about voice quality in VoIP appliances and services.**
- **Read white papers relating to IP telephony.**
- **Get access to case studies detailing successful deployments of Ooma's products.**

Ooma Telo

Powered By:

Sponsored By:

Visit Today:

http://voice-quality.tmcnet.com/

And Now for Something Completely Different

Service Creation in the Call Center

by Paula Bernier

Service creation means different things to different people. For folks in the call center space, and their customers, the term brings to mind capabilities like ACDs, call recording, CTI, predictive dialing and the like.

Steve Kaish, vice president of product management and marketing, says CosmoCom's VoIP-based call centers deliver all of the above, and address a variety of different mediums including e-mail, video, voice, voicemail and Web chat.

"There are many different capabilities that are available on the platform," he says. "We have a full IVR capability that can do self-service IVR with speech or touch tone. We have the call recording capability as another capability on the platform. We have the call routing. We have CTI-type integration... and on and on."

All of the capabilities are delivered on one platform and controlled through a central service creation environment. It lets the user, which may be a service provider or a medium or large enterprise, to control a voice call or other type of contact throughout its lifecycle – from before it's answered through answering the call, doing IVR, if it's going to an agent waiting for an agent, routing to an agent, and even through to post-call activities.

Service providers that are using the solution to offer services to multiple customers can allow for customer customization through the CosmoDesigner. That can include adding specific functionality, or hiding or blocking certain functionality to select customers, says Kaish. Enterprise customers could do the same thing to control what's available to different departments or offices. Kaish says that provides the agility businesses require today.

as an API repository and developer resource, while adding beneficial technologies and service provider relationships to the mix for everyone's benefit."

This move advances Alcatel-Lucent's earlier announced Application Enablement strategy. In line with that strategy, the company in December unveiled a trio of new offers aimed at helping network operators and developers more easily enable and create new applications that are manageable, reliable, scalable and secure. The trio includes the Application Exposure Suite, the Open API Service and Transformation Services.

The Application Exposure Suite allows service providers and enterprises to accelerate application innovation by outfitting them with a simple way to expose various APIs to the developer community. The idea behind the suite is to enable service providers to monetize their capabilities by allowing developers to access and use functionalities such as billing, location or connection optimization in their applications. The suite allows for the composition of and normalization related to various APIs. For example, APIs can be created around things like certain legacy interfaces in the network, and interface definitions within various standards, as just two examples. There are also systems management and reporting components included in the suite to allow for end-to-end visibility into application performance, user experience and resource use.

Alcatel-Lucent's Open API Service, meanwhile, is being sold primarily to application developers, which can use the service's Web-based portal at http://developer.openapiservice.com to access network enablers such as SMS, location and more. The benefit to service provider partners, according to Alcatel-Lucent, is that the Open API Service eliminates the expense of registering, provisioning and supporting multiple developers. Sprint was the first user of this solution, which it employed to expose location and geofencing capabilities.

Transformation Services are a collection of professional services around integration of multivendor networks and applications; migration to IP-based networks; and the automation of processes.

Following that news in December Alcatel-Lucent in February announced cloud-based efforts to open carrier APIs to application folks, as well as to outfit these software types with tools to test and distribute their wares.

Merling at the time told NGN Magazine that the cloud-based initiative took its previously announced efforts to the next level by not only exposing APIs, but also providing an end-to-end ecosystem through which developers can build, test, manage and distribute their applications.

That includes developer tools, available through the cloud, that provide an abstraction layer to enable applications to run on any device; support for debugging; and more. It also includes a "sandbox in the sky" that allows developers to test their applications at scale. A developer dashboard, meanwhile, allows developers to track traffic on their applications, look at what other developers are charging for their apps, and more. The management piece Merling mentions has to do with exposing APIs; she says it enables carriers to expose APIs securely, and in a rate limiting way so they don't bring down the network. From

Visit the **Business Solutions** Community **Today !**

The Business Solutions Community on TMCnet is your one-stop source for breaking news and expert opinions on how communications technology applies to:

- **Internet fax**
- **Virtual phone service**
- **Email marketing**

Visit Today

http://business-solutions.tmcnet.com

PROTUS®

myfax®

www.myfax.com

The fastest growing Internet fax service.

- Send and receive faxes through email, the web or smart phone.

my1voice™

www.my1voice.com

A feature-rich virtual phone service.

- Be reached on any phone at any location, all from one number.

campaigner™

www.campaigner.com

A targeted, automatic email marketing service.

- Send professional email newsletters, coupons and sales announcements.

a distribution standpoint, Alcatel-Lucent offers a platform on which developers can load applications, and those applications can be tested as well as made available to interested parties.

The ecosystem is paid for by those carriers that wish to expose their APIs, says Merling. She notes that's an important change from the current model in which developers typically have to prepay something like $8,000 to $10,000 a month for access to particular network resources, like SMS. This way, she says, it's a pure revenue share model in which only the service provider assumes risk, but in which the service provider also has a lot to gain.

With this part of the discussion, Merling alludes to a key point. Figuring out the business cases around such environments and being sure the right companies join the party will be among the key challenges to make them live up to their potential.

"It has far more to do with the business model than it has to do with technology," says Telcordia's Lenahan.

Inconsistencies between telco ecosystems and environments could be one barrier to telco success in attracting new apps, he says, although he notes that China Mobile, Verizon Wireless, Vodafone and Softbank are making a lot of noise around their Joint Innovation Lab effort.

Lenahan describes a recent roundtable involving advertisers, ad agencies and telcos as a battle of the Hatfields and the McCoys.

She adds that in this model developers also get a lot of added value given that they are offered bundles of APIs for specific verticals.

The first version of this SaaS-based ecosystem is Alcatel-Lucent branded. Longer term, the goal is to give service providers the dashboard to offer as part of their developer programs.

Merling in February noted that while the developer community is clearly the target of the cloud-based ecosystem initiative, it would also make sense for over-the-top service providers as well as enterprise network operators to get in on the action. For example, she says, Netflix might want to take advantage of a carrier's API to ensure QoS for a video-on-demand service. Conversely, she says, enterprise network operators might want to open their networks with APIs to enable new capabilities on their networks. In fact, she says, enterprises such as Best Buy, the BBC and Tesco are already opening their networks in efforts to drive customer engagement and otherwise meet their business objectives.

Lenahan goes on to say that telcos also need to make sure the developer community can leverage their network assets without too heavy a toll in upfront costs, whether those costs be related to API access, legal costs around them, or both. (Alcatel-Lucent does address that, as noted above.)

All that said, he continues, telcos have a lot to offer, especially in terms of helping the advertising industry deliver targeted ads. However, again, there are big challenges here.

Lenahan describes a recent roundtable involving advertisers, ad agencies and telcos as a battle of the Hatfields and the McCoys. The ad side didn't understand the telco play, but when it was explained they indicated disinterest in sharing advertising proceeds in any case. While at the time he listened to the conversation in disbelief, perhaps it shouldn't have come as a surprise, he says, given the telcos and their partners probably haven't been active enough in reaching out to advertising types as well as the strategy folks at the content companies. **NGN**

October 4–6, 2010 • L.A. Convention Center • Los Angeles, CA

www.scrmexpo.com

It's Time To Utilize Social Media!

Meet Influential Executives Learning How to Use Social Media Channels to Improve Their Contact Centers

Attendees come to discover how social media can provide a more complete view and understanding of customers… boosting retention, increasing sales and improving profitability.

Here is a just sample of the topics that will be covered at the SocialCRM Expo:

- Why The Social Channel
- Social Channel Applications
- Social Challenges
- Integrating Social With Other Channels
- Enabling At-Home Agents
- Automating Customer Interactions
- IVVR and the Video-Enabled Contact Center
- The Work at Home Model for Customer Contacts
- Speech Analytics Trends in Contact Centers
- Hosted Contact Center Solutions

Who Will Attend?

- Enterprise Contact Center Management Across All Vertical Markets
- Outsourced Contact Center Management
- Influential Marketing Executives
- Resellers and VARs

For more information,
please contact Maureen Gambino
at 203-852-6800 Ext. 109 or mgambino@tmcnet.com

SocialCRM™ EXPO

www.scrmexpo.com

Colocated with:

TMC INTERNET TELEPHONY Conference & Expo ITEXPO®

www.itexpo.com

by Tom Donnelly

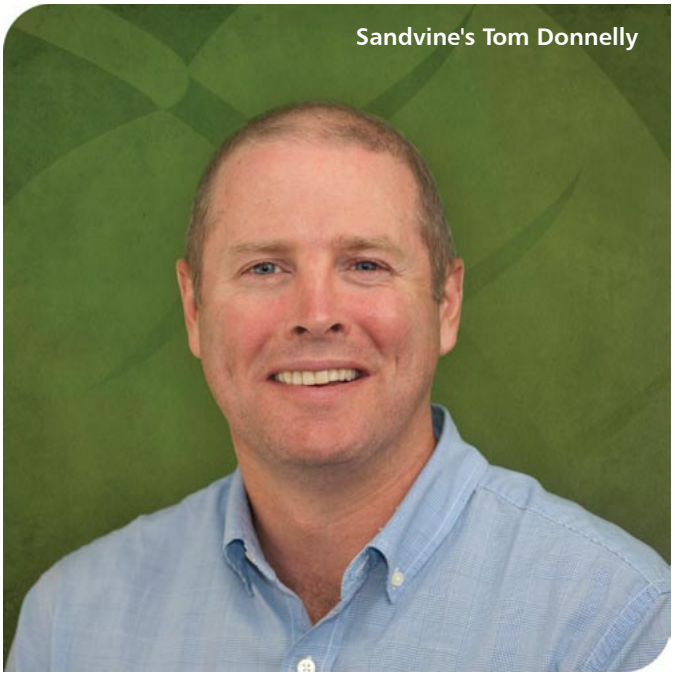
Mobile Traffic Trends Parallel Fixed Networks

Consumers across the globe have embraced a new generation of mobile data applications that emphasize real-time on-demand attributes and functionality. Smartphones as a whole are being used less for traditional voice and more for connecting to the Internet to perform tasks more associated with PC activities such as streaming video and VoIP communications. According to a March 2009 report by analyst Chetan Sharma, a member of the GigaOM Pro Analyst Network, U.S. traffic data exceeded voice traffic by almost 400,000GB in 2009, and that ratio is expected to double this year. These figures fit in line with a mobile traffic trend report recently released by Sandvine based on information culled from millions of mobile subscribers from around the world.

The Mobile Internet Phenomena Report indicates that mobile networks are now mimicking fixed broadband networks (DSL, cable) in terms of real-time traffic growth and subscriber usage patterns. In fact, YouTube now accounts for 10 to 15 percent of total bytes on a given mobile network, and globally, the top 5 percent of subscribers account for 50 percent of all network traffic. Not surprisingly, social networking is another exploding area with one out of five subscribers now regularly using their mobile devices to check messages, communicate with friends and post videos to Facebook. The Caribbean and Latin American sectors lead the way in mobile access to Facebook, with 30 percent of subscribers logged into the social networking site at any given hour.

From the subscriber's perspective, the Internet is the Internet, whether it's accessed through a fixed or mobile connection. At one time, news and time-sensitive information such as sport scores and stock prices primarily were accessed via crude text-only messaging; today's consumers demand a rich and seamless user experience when it comes to information gathering and Web surfing on fixed or mobile devices. With the emergence of powerful new devices, like the iPad, Sprint's EVO 4G phone and now the iPhone 4 (with video-conferencing capabilities), more and more consumers will be foregoing traditional voice in favor of data-centric, bandwidth-intensive applications, placing even more pressure on the mobile networks.

Marketing and business executives are increasingly requesting network-wide visibility to grasp fully how resources are being utilized at any given moment. Measurable business intelligence has become paramount for developing market segmentation, powerful subscriber personas and maintaining a high-quality user experience. A common business example for operators is determining service tiers based on which devices and applications actually are being used on a mobile network. Operators are keen to get a better understanding of customer requirements and communities of interest to develop service plans that meet real customer requirements. This sort of analysis can be invaluable for marketing and business development.



Sandvine's Tom Donnelly

For the most part, engineers today contend with mountains of raw network traffic data and crunch it down into digestible information so marketing and other departmental units can understand and make use of it. The entire process can take days, limiting a service provider's ability to adjust to the rapid and ever-changing needs of the subscribers.

Better and faster analysis of how subscribers are using the network will be particularly important to mobile operators whose broadband services are continuing to develop in ways not entirely anticipated. Network data analytics can identify quickly unexpected usage trends on the network, like how thousands of iPads connecting to the 3G network directly impacts overall subscriber quality of experience.

The lines between mobile and fixed network services have begun to, and will continue to, blur as real-time applications (video, gaming and voice) surpass all other activities on the Net.

Consumers expect their experience on the Internet to be the same, whether they access it through their DSL services at home or their 3G devices while on the go. To preserve a high-level quality of experience, mobile operators (as we have seen with AT&T's recent decision), are re-thinking their strategies for data billing and service creation. A more holistic approach with network policy control that reaches all major business units is no doubt a critical first step toward a better Internet. NGN

Tom Donnelly is a co-founder and executive vice president of sales and marketing at Sandvine (www.sandvine.com).

by Paula Bernier

Talking with the i3forum

Industry Group Aims to Ease Carrier Transition to IP

The road to IP can be a bumpy one. But an organization called the i3forum aims to help smooth the transition from TDM to IP.

NGN Magazine recently interviewed Philippe Millet, chairman of the i3forum (and an executive at Orange), about the group and what it is doing to assist network operators as they traverse the path to IP.

What is the purpose of the i3forum?

Millet: The i3forum is not incorporated and works as a non-profit organization dedicated to helping the industry as a whole transition to an all-IP world as quickly as possible, focusing on international carrier interconnections, with a priority on migrating voice interconnections from TDM to IP.

What was the catalyst for the group's formation?

Millet: The transition to IP is inevitable, but the sooner it happens the better it will be for the entire telecoms industry. With that said, no single telecom operator can achieve this goal on its own. By definition, our world is a world of interconnections; we need to have everyone on board to make things happen. There are many things that can potentially slow down the transition, and we need to collectively find the solutions that would best address the various challenges in slowing down that migration.

The i3forum helps make that happen. As a group we pool our expertise, experience and vision and provide sets of recommendations to the industry (everything we publish is public) that we believe are relevant to all, covering all topics from technical issues to business issues to operational issues. We have a really good diversity in the forum, with many different types of operators, and that helps us achieve this goal.

Who are its members?

Millet: We are now 37 very diverse members, with different business models, from around the world, all operators with an international carrier business arm. The growing membership allows us to get the contribution and support of as many carriers as possible. Together we serve more than 1.5 billion retail customers in 100-plus countries, and we carry over 80 percent of the international voice traffic.

Philippe Millet

Although we want to remain a carriers-only organization, we are cooperating closely with other industry bodies (including standardization bodies), forums and organization (e.g. GSMA), as well as the vendors community. We recently held a joint workshop in Warsaw with 20-plus top vendors; 100-plus people attended.

What exactly is the group's relationship to the GSMA?

Millet: We have a very close and fruitful working relationship with the GSMA, which we initiated more than 18 months ago. We have joint working sessions with various GSMA sub-groups, and we provide the carrier industry's views.

We have been very successful at looking at the GSMA's IPX specification and clarifying jointly how to make international voice work in an IPX environment, leading to the specification of what we call Voice Over IPX. The GSMA is in the process of approving several change requests to the original IPX model, that we pushed through the various groups to enable international voice.

We are also working with them on the new paradigm for routing and addressing in an all-IP world (a.k.a. ENUM).

What key initiatives is your group working on?

Millet: Our first priority is to accelerate industry-wide transition from TDM to IP of international carrier interconnects used for voice and additional legacy services such as fax, ISDN, etc.

We're working on the various issues related to this (technical aspects, but also operational issues and business-related concerns), in an effort to provide industry-approved recommendations where there are no clear standards, and many legitimate but unanswered questions – for example: What happens to business model? How do we manage quality and security?

Other initiatives include interconnection models (private and public), signaling, codecs, VoIPX, quality, security, fraud, fax-over-IP, service definitions, business models, routing and addressing, etc.

What is the status of those initiatives?

Millet: We have been delivering white papers, specifications and recommendations on many topics for the past three years, and improving them from year to year. All those documents are 100 percent public and are posted on our website, www.i3forum.org.

What's next for the i3forum?

Millet: There is still a lot of work to be done on transitioning the legacy TDM interconnects.

In addition to this, routing and addressing is one of the key topics in an all-IP world (it starts with enabling number portability resolution, but will bring about much more than that). We have started work in interconnection and interoperability of high-definition videoconferencing, a.k.a. telepresence – bridging the HDVC islands is one of the major issues to be resolved.

More broadly, we are tracking many new IP-based services currently being developed by telcos and service providers (a lot of i3forum members represent the international carrier divisions of such operators) and are ready to work with them on interconnection and interoperability. NGN

Members of i3forum

Arbinet (U.S.)
AT&T (U.S.)
Belgacom BICS (Belgium + Switzerland)
Bharti Airtel (India)
British Telecom (U.K.)
Citic 1616 (Hong Kong)
Deutsche Telekom (Germany + Europe)
Etisalat (U.A.E.)
Globacom (Nigeria)
iBasis / KPN (U.S. +Netherland)
IDT (U.S.)
KDDI (Japan)
Neutral Tandem (U.S.)
NTT (Japan)
Orange (Europe & Africa)
OTE Globe (Greece)
PCCW (Hong Kong)
PLDT (Philipines)
Reach (Australia + HK)
Rogers (Canada)
SFR (France)
Singtel (Singapore)
Softbank (Japan)
Sprint (U.S.)
Tata Communications (Canada + India)
Telecom Italia (Italy)
Telefonica (Spain + Latin America)
Telenor (Norway + Asia)
TeliaSonera (Nordics + Baltics + Asia)
Telkom South Africa (RSA)
Telkon Austria (Austria)
Telus (Canada)
TNZI (New Zealand)
TPSA (Poland)
Verizon (U.S.)
Vodafone Germany (Germany)
Wind International Services (Italy + Africa)

by Lara Albert

The Mobile Battleground
Who's Going to Win the Customer Relationship?

BlackBerry, Facebook, Skype, Bing, Pandora – how many mobile providers do you interact with on a daily basis? The explosion of mobile services has presented new and more convenient ways to communicate, transact, and even be entertained, arguably transforming how we go about our everyday lives. But has anyone noticed there's one provider that seems to be excluded in people's everyday conversations about the latest and greatest mobile offerings? It's the carriers.

We all talk about our iPhones, BlackBerrys, and apps we've just discovered, but how often do we share an amazing user experience based on a service our carrier has provided?

The proliferation of data services poses several challenges to mobile carriers. Increased data traffic is straining network bandwidth. Fast never seems fast enough for rolling out the new technology. And infrastructure upgrades are burdening to finances and resources. Addressing these challenges alone may allow carriers to compete amidst this shift in the mobile ecosystem, but to prevail as a winner, they need to not only overhaul their systems and technologies but also place more focus on strengthening relationships with their customers.

In a recent Yankee Group report titled "Surviving the Mobile Data Revenue Roller Coaster," analyst Sheryl Kingstone stresses the need for mobile network operators to leverage the unique wealth of data they have. That data can help them, and their content partners, understand subscribers' needs, interests and behaviors to avoid becoming simple dumb pipe providers. As she explains: "In order for MNOs to grow revenue and provide a differentiated customer experience, they must have visibility into the subscriber experience and behavior on everything in the service delivery chain, from the handset, to the mobile service, to the applications. Only then can they proactively identify new revenue opportunities and improve customer experience."

So, how can operators turn the vast amount of data they have into monetizable intelligence? First, they need to shift their mindsets from that of service providers to that of sophisticated marketers – focusing more on their customers' ever-changing needs. As Kingstone outlines in her report, some MNOs have built data warehouses to converge customer and network data to enhance the customer experience, but this doesn't solve the problem. Operators must be able to act on this data in real-time, based on the context of a customer's specific needs.

By combining rich behavioral and profile data with contextual marketing capabilities to target the right person with the right offer in the right context, operators can improve the customer experience through enhanced


Lara Albert

relevancy and value. A commuter is exposed to a real-time bus tracking app just before leaving the office to head home from work. A father is notified of a better data plan to accommodate his daughter's new found love for text messaging in advance of anticipated bill shock. A college student receives an offer for mobile Skype to stay in touch with family members. A mother receives an offer for a free month of unlimited texting with a link to a how to text your teenager promo page. By providing contextually-relevant offers and communications, a customer's loyalty goes beyond just depending on reliable service to actually appreciating the operator's recommendations that align with real needs.

The promise of data revenue to offset the decline in voice is enticing, but in their attempts to meet customer demand, operators must ensure that they manage openness in a way that doesn't cause them to lose a direct connection with the customer. The wealth of data that lies within their networks and the ability to turn that data into actionable insight to make contextually relevant recommendations is key to operators' success in the mobile space. **NGN**

Lara Albert is senior director of global marketing with Globys (www.Globys.com), a provider of contextual marketing solutions for the worldwide telecommunications market.

October 4-6, 2010 - Los Angeles Convention Center

4GWE™

4G WIRELESS EVOLUTION

CONFERENCE

The Wireless Tipping Point Is Here

www.4gwe.com

The Wireless Network is "bursting at the seams" and we are only on the surface of what is possible with Wireless Broadband.

Be Where Professionals Delve Into Key Issues:

- **4G Technology Platforms** including WiMAX and LTE
- **4G Devices –** Going beyond today's smartphone
- **4G Applications –** Video, Voice, messaging and more
- **Net Neutrality –** How will open be governed?
- **Broadband Stimulus –** Its potential to provide ubiquitous access
- **Whitespace –** Its potential to deliver services and solve the "spectrum crisis"

Diamond Sponsor:

BridgeWave COMMUNICATIONS

by Paula Bernier

New Book from Alcatel-Lucent Guides Communications Players Through 'The Shift'

Alcatel-Lucent has published a book to share its research on consumer market opportunities within North America. According to the work, there is a $100 billion revenue opportunity for U.S. service providers that open up their networks to third parties.

The book, which is titled "The Shift: The Evolving Market, Players and Business Models in a 2.0 World", is self-published by Alcatel-Lucent and available at www.theshiftonline.com.

NGN Magazine recently interviewed Allison Cerra, the book's author, who has extensive experience studying emerging markets. Cerra is vice president of marketing, communications and public affairs for Alcatel-Lucent in the Americas region.

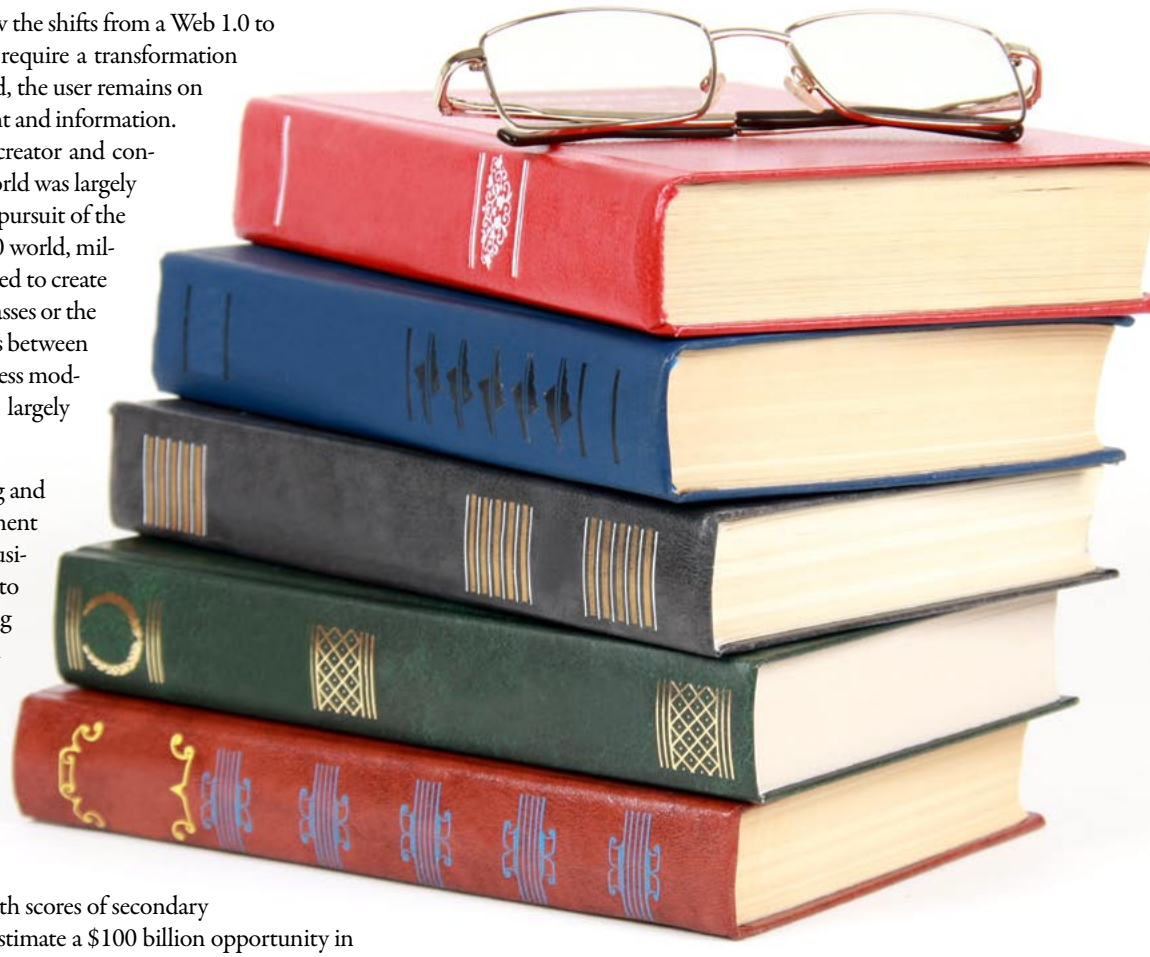
What was the motivation for this book?

Cerra: We wanted to explore how the shifts from a Web 1.0 to a 2.0 orientation fundamentally require a transformation of business models. In a 1.0 world, the user remains on the receiving end of entertainment and information. In a 2.0 world, the user is both creator and consumer. At the same time, a 1.0 world was largely characterized by a few providers' pursuit of the next proverbial killer app. In a 2.0 world, millions of developers can be leveraged to create applications that appeal to the masses or the niches. Yet for all of these changes between 1.0 and 2.0, the broadband business model popularized in the 1990s still largely remains in play.

However, if we shift our thinking and view the network as a development platform, we can create new business models and value chains to augment the existing retail pricing model that exists between end users and providers today. Using the findings of an Alcatel-Lucent primary research study aimed at thousands of developers, end users and advertisers to measure their appetite for such an idea and corroborating the conclusions with scores of secondary data among these segments, we estimate a $100 billion opportunity in the U.S. when networks are leveraged as development platforms and new business models are created. In essence, we're talking about creating agile business models that are able to keep pace with technology to help fuel future innovation. And that benefits everyone in the ecosystem – including end users, developers, advertisers and service providers.

Who is the target reader of the book?

Cerra: The book is aimed at anyone with an interest in the health and vitality of our ecosystem and the emerging business models required as users, developers and advertisers continue to shift their needs. Certainly service providers are a key target, but we also want to open the dialogue to developers, advertisers, regulators and even end users to explore what could be possible with this approach. In the end, this is not a zero-sum game, and we believe the entire ecosystem stands to benefit when new value is created and inserted. Further, the book



Upcoming TMCnet Webinar Schedule

Wed. Sept. 15, 2010 • 2:00 pm ET/ 11:00am PT

The Best of Both Worlds: Legacy Handsets in a VoIP Environment

Sponsored by: Citel.

http://www.tmcnet.com/webinar/Citel_06_01/The_Best_of_Both_Worlds.htm

Tuesday September 21, 2010 12:00 pm ET/ 9:00am PT

Breaking Lab Barriers: A Unified Solution for Test Automation & Lab Management

Sponsored by: QualiSystems

http://www.tmcnet.com/webinar/QualiSystems_08_01/Breaking_lab_barriers.htm

Tuesday October 5, 2010 2:00 pm ET/ 11:00am PT

Using Sophisticated Strategic Planning Software, Liberty Mutual, Discovers New Opportunities

Sponsored by: Bay Bridge Decision Technologies

http://www.tmcnet.com/webinar/bay-bridge-series2

Archived • View Today!

Voice of Customer Best Practices: Leveraging Customer Feedback as an Enterprise Asset

Sponsored by: MarketTools.

http://www.tmcnet.com/webinar/Market_Tools_08_01/Voice_of_Customer_Best_Practices.htm

Archived • View Today!

Facebook for Business: How to Engage and Support Your Customers Directly on Your Facebook Page

Sponsored by: PARATURE.

http://www.tmcnet.com/webinar/parature_08_01/Facebook-for-Business.htm

Archived • View Today!

Service Brokers: Exploring the Next Generation Application to Network Connectivity Alternative

Sponsored by: Service Broker FORUM

http://www.tmcnet.com/webinar/ServiceBroker_07_01/Service_Brokers.htm

discusses the larger societal benefits to health care, government and education when innovation is accelerated, rather than sub-optimized, with agile business models. As global citizens in a 2.0 world, these are topics that would be of interest to all of us.

What is the key takeaway of the document?

Cerra: Using the network as a platform for what we call application enablement inserts an estimated $100 billion in value to our ecosystem. In addition, it creates better end user experiences, addresses fragmentation challenges facing developers and advertisers, and supports service providers with new revenue streams to fund the next wave of broadband investments.

The book says there is a $100 billion revenue opportunity for U.S. service providers that open up their networks to third parties. Explain.

Cerra: We've seen the success Apple has generated with the iPhone – hundreds of thousands of applications on one device alone. Apple and other smartphone providers have unlocked key intelligence within their hardware to allow developers to create their next masterpiece. In the end, developers have an outlet to showcase their wares, end users benefit from multiple applications, and the smartphone provider creates additional value to attract customers to its brand.

If the intelligence in one device can create such value, imagine when capabilities within the network are exposed in the same way. Networks have advantages – they are device-agnostic and powerful. The network knows where the user is, the type of device he is using, the bandwidth available, and his habits and preferences across devices, among other things. If service providers offer developers access to these capabilities in a managed and controlled way, they stand to gain incremental revenue.


Author Allison Cerra

To be clear, this is not to suggest that device intelligence goes away. As devices become more powerful, so do networks. We also are not proposing that developers must choose to either develop for devices or networks. Instead, we believe that incremental value is inserted into the ecosystem when network capabilities are exposed as additional ingredients for developers to create their next application. Finally, and perhaps most importantly, it requires that the end user remain in control of his profile and privacy at all times through a conspicuous and clearly defined opt-in approach.

What is Alcatel-Lucent doing to enable service providers to open up their networks to third parties?

Cerra: We offer a suite of solutions that allow service providers to expose capabilities of their networks in a managed and controlled way. We also provide a variety of go-to-market support tools, aggregation capabilities and expertise to service providers interested in attracting developers and advertisers. Finally, we offer operators an elegant glide path toward an intelligent, multiservice IP network, what we call the High Leverage Network, which can be instrumental in extracting value from the network while transporting traffic at the lowest cost per bit.

What are the benefits of service providers opening their networks to those service providers?

Cerra: Service providers face a challenging dichotomy today. On one hand, they are faced with exponential traffic increases on fixed and mobile networks due to a seemingly insatiable user appetite. On the other, they are not seeing ARPUs increasing at a commensurate rate. The book articulates an opportunity for service providers to tap into new revenue streams to extract more value from their networks. In the end, they can deliver a better end user experience while generating a return on their invested capital.

To third parties?

Cerra: Developers and advertisers both face an increasingly fragmented marketplace comprised of multiple device and OS environments. By tapping into network capabilities that sit at a higher abstraction layer, these stakeholders benefit from faster speed-to-market capabilities at reduced costs.

To end users?

Cerra: End users benefit from a richer experience – from more choices to smoother, more ubiquitous access. Once we accelerate innovation, the end user perhaps has the most to gain. We explore through the book, end users from every walk of life – including gamers, social networkers, online video enthusiasts, small/medium businesses, large enterprises, governments, educators and health care decision makers. Each of these segments benefits when we unleash the potential of smart network capabilities as additional ingredients incorporated by a burgeoning developer community. **NGN**

8x8, Inc.

Join The 8x8 Hosted VoIP Community!

Whether you are a start up or an established company, a one-person business or an organization of 100 employees, a Hosted VoIP phone solution with a lower TCO, reduced complexity and more advanced communication features is the obvious and smart choice.

But, one size does NOT fit all! As such, TMCnet has joined together with one of the industry's leading IP communication service providers, 8x8, Inc., originator of the 8x8 Virtual Office service, to educate the business communities on the advantages and efficiencies of Hosted VoIP phone service.

VoIP Services for Today's SMB

hosted-voip.tmcnet.com

by Michael Khalilian

NGN Forum Launches the Smart Energy & Smart Grid Forum

The NGN Forum focuses on two main areas: next-generation communications and NGN energy applications.

The IMS Forum's NGC group will continue to focus on the areas of IMS, SDP, 4G, VoIP, RCS/RMS, IP video, IP billing, IP security and interoperability/plugfests.

Our new Smart Energy Forum will focus on NGN energy applications and delivery systems such as smart grid, renewable energy, security, billing and integration for NGN revenue generating apps.

A number of major telecom operators and vendors are driving the initiative to expand into the growing energy management field and apps delivery.

Telecom & Smart Grid

Utilities traditionally have developed their own networks and communication systems. However, with the NGN smart energy products and systems required to integrate with smart grids, utility companies are looking toward telecommunications industry partnerships with apps, technology development and OSS/BSS as well as to manage consumer demand.

Smart grid technologies help improve power reliability through smart devices and applications that adapt real time to consumer demand and environmental conditions. Governments are promoting this sophisticated electricity network as a way to address energy independence, global warming and emergency resilience issues.

Smart grids also will require a higher level of security because they link large and small utilities. In addition, utility companies are interested in securing their individual customer product data to include advanced IP addressing such as IPv6.

What is the smart grid, and what is its significance to the telecommunications industry?

According to DOE, the smart grid is defined as the system that delivers electricity from suppliers to consumers using digital technology to save energy, reduce cost, and increase reliability and transparency, using megabytes of data to move megawatts of electricity more efficiently, reliably and affordably. In the process, the electric system will move from a centralized, producer-controlled network to a less centralized, more consumer-interactive model. The fully functioning smart grid will feature sensors throughout the transmission and distribution grid to collect data, real-time two-way communications to move that data and electricity between utilities and consumers, and the computing power necessary to make that intelligence actionable and transactive. Indeed, only by bringing the tools, techniques and technologies that enabled the Internet to the utility and the electric grid is such a transformation possible. It also is able to integrate renewable electricity such as solar and wind power.

The smart grid is basically the integration of two networks: the electrical transmission and distribution network, and the IP communications network.

Where are the smart grid telecommunication opportunities (technology design, engineering and development)?

According to the DOE, some smart grid technology examples include: Integrated two-way communications, advanced components including next-generation FACTS/PQ (security/power quality) devices, wide area monitoring systems, plug-in hybrid electrical vehicles, fault current limiters, microgrids, data collection and monitoring of all essential grid components, integration with enterprise-wide processes and technologies, advanced system protection, and cybersecurity.

Home networking apps and management, which will be one of the forum's focus areas, is one of the biggest markets for smart grid. Some chip makers already have started to install smart grid "smart chips" in products such as appliances globally.

Some immediate challenges around smart grid implementation strategies include developing interoperability standards and protocols.

Smart Grid Apps Market Outlook

According to Smart Grid News, the U.S. smart grid industry is valued at about $21.4 billion – by 2014, it is projected to exceed $42.8 billion. Given the success of the smart grids in the U.S., the world market is expected to grow at a faster rate, surging from $69.3 billion to $171.4 billion by 2014.

The American Recovery and Reinvestment Act allocates billions for energy projects, including $4.5 billion to modernize the electric grid. In addition, other major government initiatives that will increase telecom-related funding include $7.2 billion in broadband deployment grants administered by the National Telecommunications and Information Administration and the Rural Utility Service.

Telecommunications operators and vendors are recognizing that the commercial potential for these new NGN and NGC apps will be a growing and lucrative market.

The NGN Forum has launched the IMS 4G Apps Technical and Marketing Working Group and will be launching the Smart Energy/Smart Grid apps group this quarter. We welcome the telecom and utility industries to become more involved in helping us move the bar for NGN IMS and smart energy services deployment. **NGN**

Michael Khalilian is president of the NGN Forum (www.NGNForum.org) and the Smart Energy Forum.

Mobile Backhaul: End-to-end Solution

End-to-end Solution for Converged Mobile Backhaul Simplifies Operations

Mobile broadband services are driving a transformation to IP and Ethernet with the deployment of new technologies — Long-term Evolution (LTE), High Speed Packet Access (HSPA), Evolved Packet Core (EPC) and IP Multimedia Subsystems (IMS). The access network between Ethernet edge and IP core must keep pace or become a quality of service bottleneck, and the main component of a growing operational expenditure.

The NetVanta® 8044M, combined with the ADTRAN® Total Access® 5000 Multi-Service Access and Aggregation Platform, provides a complete end-to-end Ethernet access migration solution including a single operational model regardless of access technology. This solution enables service providers to compete effectively in any market while planning and implementing their transition to 3G and 4G mobile networks.

Total Access 5000
Multi-service Access Platform

NetVanta 8044M

Visit ***www.adtran.com/mobilebackhaul for a FREE Mobile Backhaul Solutions Pocket Guide.***

Smart Solutions for a Connected World.

ADTRAN®