BROADBAND DELIVERY

Inside:

- **Innovation In the Network**
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- **Life and Business Are Not "Zero-Sum" Games**
- **Walker's 2011 Performance Awards Winners**

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In This Issue . . .

Editor's Letter

My family was a late bloomer to advanced modes of entertainment, including high speed internet and high definition television. With very young children we were fine with PBS cartoons (Clifford the Big Red Dog, Curious George, Sesame Street, etc.). Spending a lot of time outdoors, it wasn't that important to my husband and me either. Now that our children are a little older, we now are the proud owners of our first online gaming system.

Just as my family has become users of advanced broadband services, so have many others. Companies like Apple and Microsoft continue to develop smarter, faster devices driving higher consumer demand. Therefore, service providers are required to keep pace with the latest technological trends.

It is estimated that in 2012 backhaul providers will continue to build networks that support multiple generation devices. The traditional T1 TDM networks for 2G and 3G devices will be important to keep around, but Ethernet build outs will be even more essential in order to support 4G and beyond devices. The most economical approach to this is to use a hybrid system such as a multiple-service protocol platform (MSPP) that supports existing SONET, xDSL, FTTx services, and allows the addition of Ethernet via a new system module.

More providers are looking harder at adding LTE (Long-Term Evolution Technology) to their networks. With over 350 million smart devices deployed today, it is estimated that 100 million more will be sold in 2012 (Source: Multichannel.com). With this demand LTE will become more prevalent later in 2012, with the majority of mobile networks adopting this technology within the next three years.

Google and Apple are leading an initiative to provide consumers with the latest device – Smart TVs. This would be an apps based delivery mechanism for video based services. Smart TVs allow viewers to easily search for movies, TV shows, browse the web, explore apps, chat with friends, and find many other types of new interactive television content.

With the inventions of smart devices and the ever growing demand to make them smarter and faster, FTTH deployment is expected to grow steadily over the next few years. However, some experts are concerned that once stimulus funding iscompletely absorbed, projects that are capital dependent will become sparse. Financing has rendered interest costs of 10-15 percent in some cases, which halts project build outs for some providers as they can't afford the costs. (Source: Broadband Communities) However, the stimulus program has been successful in creating more demand and higher take-rates of Broadband services, therefore helping providers with direct revenue.

There is definitely excitement in the air for both service providers as well as the end users. Broadband demand is continuing to grow, and home entertainment is becoming more elaborate. I can only imagine what my family will be buying next.

Jennifer Beck

Broadband Backhaul and Aggregation

The Wise Guy

By Rodney Wise
Director of Technology
Walker and Associates

> "When it comes to backhaul, there are probably as many ways to implement a solution as there are network engineers. "

Have you ever had one of those eye-awakening, humbling experiences when you realize times are changing at a faster rate than you seem to be capable of comprehending? I recently had one of those experiences while training new staff on what I now know I can refer to as the legend of telecommunications. As I was going through the training, I realized a lot of knowledge I have is not applicable today. I also realized that I have forgotten more in the last five years than I really want to admit. The good news is I didn't need it anyway! The attendees were gracious enough to say they learned something and enjoyed the class. I will have to conjure up new material for the next class on broadband.

There are multiple documents dedicated to the various methods of delivering broadband. In previous issues of the Skinny Wire, we covered the pros and cons of modems to satellite on a number of occasions without much thought to what happens to the traffic beyond the broadband delivery vehicle. In this article, I think it is wise to explore some technology used behind the scenes of the last mile, in addition to any new broadband delivery methods.

Broadband Loop Carriers and Multiple Service Access Platforms are usually deployed with multiple 1 GbE or 10 GbE uplinks. Whether configured in a point to point topology or ring topology this makes an effective backhaul for the service provider. However, the demands for broadband services and greater bandwidth for these services continue to grow. These demands are pushing 10 GbE to the access platforms and even greater speeds in the backhaul network and aggregation.

There are a few ways we are currently seeing these higher speeds for backhaul and aggregation implemented. In some backhaul networks, providers are deploying dense wave division multiplexing (DWDM) nodes capable of aggregating multiple 1 GbE and 10 GbE access platforms on a ring, thus reducing the bottleneck possibility of trying to use the access platform uplinks to carry ever increasing traffic. The DWDM nodes are deployed near the access network to transport traffic back to the provider edge router as illustrated in Figure 1. In this scenario, all the attributes such as reduced fiber deployment, multiple service types, and higher bandwidth through multiplexing that make DWDM successful in long haul and metro transport networks also makes a compelling story in the access backhaul equation. The scalability, agnostic behavior to service type, and energy efficiency of the DWDM systems also help to create an element of future proofing in the backhaul network.
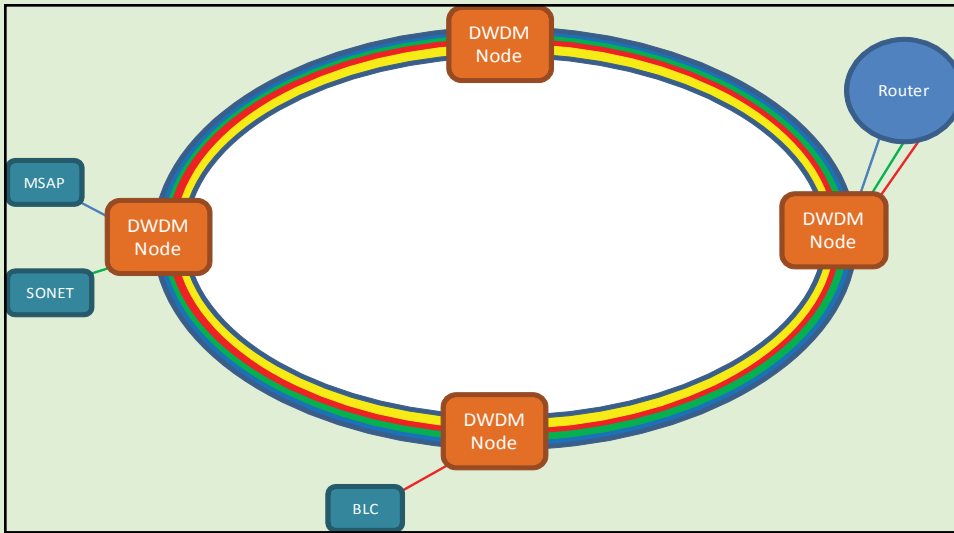
Figure 1: DWDM Broadband Backhaul

In figure 1, the provider edge router is providing the aggregation of traffic and the avenues to various application servers and internet. Another way to provide the backhaul and aggregation is by deploying routers into the access network as illustrated in Figure 2. In this case, the edge routers aggregate the traffic close to the access platforms then transport the traffic back to the provider edge and core. An Ethernet switch is shown on the ring as well to illustrate how Active Ethernet Broadband circuits can be deployed from this solution as well.

An interesting aspect of both the DWDM and router solutions is the ability to incorporate access service into the solutions. In the router solution, adding a high density, carrier Ethernet capable switch into the ring topology provides a platform for providing Active Ethernet service. This unique service adaption provides flexibility to the backhaul network. The DWDM solution also has a unique access service delivery option based on DWDM PON architecture. In the DWDM PON architecture, each subscriber would receive their own wavelength. Theoretically, any service type could be

delivered over this wavelength using an active DWDM device in the Central Office with a passive WDM multiplexer/de-multiplexer closer to the subscriber. Once colored SFP and XFP costs get closer to the standard wavelength pricing due to rising demand, I expect more service providers will look at DWDM PON as a viable next-generation access solution.

When it comes to backhaul, there are probably as many ways to implement a solution as there are network engineers. There are merits to the DWDM backhaul solution and the Router backhaul solution, so the decision to go with either solution will be based on a net present value study based on the principles the service provider finds most important.

It is hard to predict which technologies in the future will lead the way in backhaul and next-generation access. Higher demand always seems to affect costs for any technology, so ROI calculations are constantly changing. My theory on the lower SFP and XFP costs proving in DWDM PON also applies to 10 GbE and 100 GbE interfaces, so there does not seem to be a limit on what new architectures and applications can be expected in the future.
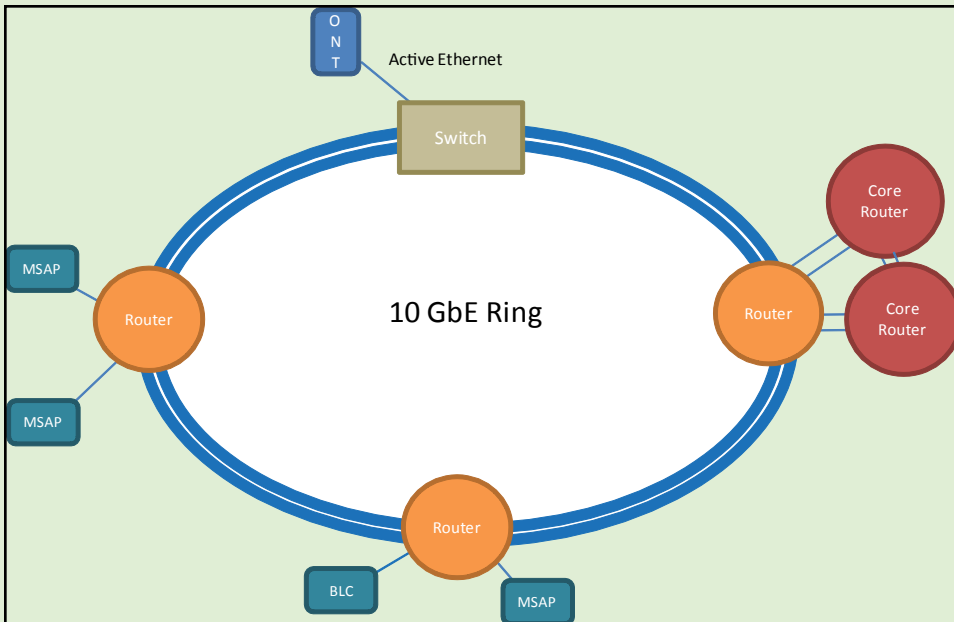
Figure 2: Ethernet Router and Switch Broadband Backhaul

As Director of Technology for Walker and Associates, Rodney Wise confronts a variety of technical questions on a daily basis. His broad background provides him a real-world perspective of challenges and opportunities telecom engineers and project planners face in the field. This experience, along with continual training from the manufacturing community and a staff of equally talented Sales Engineers provide customers with a wealth of pre and post-sales engineering support. The Wise Guy is a regular feature in The Skinny Wire and on our website, www.skinnywire.net.

TE CONNECTIVITY ANNOUNCES COMPACT CWDM MODULE FOR EASY FIBER CAPACITY EXPANSION

Small Size and Unique Snap-On Carrier Increase Flexibility

TE Connectivity (TE) announces its Compact CWDM (CCWDM) module available through Walker and Associates, Inc., a new addition to TE's Fiber Optic Splice Closure (FOSC) family of products for service providers that want to expand the capacity of their fiber plants without the expense of deploying additional fiber cables. TE's CCWDM module splits out four or eight wavelengths from a single fiber and can be installed in the field or in the factory. In addition, the CCWDM module comes with a unique carrier that snaps into TE's FOSC closure trays to securely hold the CWDM module in place.

The CCWDM module is available in 4- or 8-wavelength versions, with or without up-grade and 1310nm ports, to multiplex or de-multiplex wavelengths. This provides greater cable plant versatility while provisioning commercial customers with high speed data, digital phone and video services. The module features low optical loss and is compatible with most TE FOSC closures. Up to two CCWDM modules can be mounted in a single FOSC A, B or C closure tray and more than two devices can be mounted into a single FOSC D closure tray. And, when used without the carrier, the CCWDM module can be mounted in most competitive splicing trays as well.

"The new CCWDM module further expands our market-leading FOSC closure product family," said Jaxon Lang, vice president of Telecom Networks Americas at TE. "Its compact size and carrier tray set it apart from the competition by making it easier to deploy in a variety of field situations."

ABOUT TE CONNECTIVITY
TE Connectivity is a global, $12.1 billion company that designs and manufactures over 500,000 products that connect and protect the flow of power and data inside the products that touch every aspect of our lives. Our nearly 100,000 employees partner with customers in virtually every industry—from consumer electronics, energy and healthcare, to automotive, aerospace and communication networks—enabling smarter, faster, better technologies to connect products to possibilities. More information on TE Connectivity can be found at http://www.te.com/.

Reinforcing Mobile Backhaul Using a Multi-Technology Approach

By Ken Morris
Channel Program Development Director
Fujitsu Network Communications, Inc.

As high-bandwidth mobile traffic continues to increase, both challenges and opportunities arise for mobile backhaul providers. The rapid uptake of 4G technologies such as Long Term Evolution (LTE) means that broadband mobile backhaul must keep up. The answer is not as simple as just adding bandwidth, however. Backhaul providers must support TDM transport in 2G and 3G networks while they make the transition to packet transport for 4G. There is still a large installed base of 2G/3G systems;

Diversity Creates Challenges

In contrast to previous generations, 4G LTE technologies are based on new packet-based architectures, including Ethernet physical interfaces, which carry the same expectations for 99.999% availability as SONET implementations.

Most cell sites will need to support CDMA, GSM 2G and UMTS 3G networks for many years to come. Therefore the addition of 4G means backhaul providers must support

to the existing SONET MSPP and provision Ethernet services with no service interruption, providing minimal latency and negligible jitter and frame loss. This single platform provides true carrier-grade quality, reliability, performance and protection for both T1 and Ethernet services.

At the Mobile Switching Center, an aggregation node can combine traffic from hundreds of cell sites. This is a superior and more economical approach than overlaying new Ethernet-centric equipment at cell towers, where footprint is scarce. Newer hybrid Ethernet/SONET systems provide a seamless transition from a TDM to a packet network, morphing from a SONET MSPP into a native Ethernet edge platform.

> "The industry estimates TDM traffic accounts for as much as 30%–40% of a wireless operator's op-ex budget."

Newer hybrid Ethernet/SONET equipment will also provide Connection-Oriented Ethernet (COE) services. Available over SONET and native Ethernet topologies, COE offers efficiencies in bandwidth not available with legacy GFP-F SONET MSPPs. COE provides guaranteed services with 99.999% availability, protected, broad-scale aggregation for Ethernet service backhaul traffic.

of the approximately 190,000 cell sites in the United States, almost all require T1 TDM backhaul. More than 75% of cell sites employ more than one generation of technology.

Reliance on T1 physical interfaces has, until now, driven mobile backhaul requirements. Given the wide availability of T1 copper, fiber and microwave services, T1 TDM was a logical choice for 2G/3G wireless connectivity. However, providing backhaul using TDM (T1/E1) becomes uneconomical as 4G traffic proliferates. The industry estimates TDM traffic accounts for as much as 30%–40% of a wireless operator's op-ex budget.

T1 TDM and Ethernet services side-by-side. Additionally, some wireless carriers require T1 TDM traffic in native TDM format as opposed to utilizing Circuit Emulation Services (CES), because CES brings tradeoffs between latency (delay) and bandwidth efficiency; CES also requires all network elements be synchronized, which increases cost and complexity.

A blended TDM/Ethernet model offers an economical and forward-looking solution in environments that require T1 TDM, or where a SONET Multiservice Provisioning Platform (MSPP) exists at the cell site. The optimum MSPP allows the backhaul provider to add a Framed Generic Framing Protocol (GFP-F) Ethernet interface card

4G wireless networks will soon challenge DSL and cable modem wireline service, opening up great opportunities for mobile backhaul providers. Providers who embrace the future of wireless communications should fully evaluate potential technology partners for the many-faceted task of implementing a modern mobile backhaul system, if they are to profit from these opportunities.

Walker's 2011 Performance Awards Winners

By Jennifer Beck
Senior OEM Development Manager
Walker and Associates

Walker and Associates celebrated outstanding 2011 performances at its Annual Walker Awards Banquet in January at the Hilton Resort in Clearwater, FL following Walker's End of Year Sales Meeting. Attendees included Walker's management team, Outside sales, Inside Sales management, Marketing, and top performing manufacturer partners for 2011.

Sales Person of the Year Awards

Sales Management took a special moment to announce two of the highest achieving sales awards attainable at Walker and Associates. Those were the inside and outside Sales Person of the Year. Along with a trophy, the outside sales person of the year also earns the prestigious Red Blazer. The Chris Walker Red Blazer is the highest award attainable by an Outside Sales Executive. It represents strong sentiments, values, and emotions for everyone at Walker. Co-founder Chris Walker made the Red Blazer his trademark when calling on his customers during the establishment of Walker in the early 1970s.

The 2011 Inside Sales Person of the Year award was presented to Lee Ann Gilley. Lee Ann is a previous winner of this award and this past year she has proven once again why she is worthy of this honor. Scott Stoll, NC Inside Sales Manager, stated "Lee Ann serves her customers with professionalism and a positive attitude. She is a team player and leads by example. Not only was Lee Ann the ISE of the year, she was Walker's overall top producer".

The 2011 Outside Sales Person of the Year Award was presented to Ben Dierker. A multiple Salesperson of the Year Award winner, as well as a multiple Top Performer Award winner, Ben is no stranger to understanding what it takes to excel. Derek Granger, Director of Sales for the West coast stated the following about Ben, "His approach to his business rarely changes, coupling tireless work habits with tireless customer advocacy, leading to a consistent and unprecedented result in 2011. As the anchor member of our West Region sales team, Ben understands that the customer is the #1 person in our business and often treats his world-class vendors like customers as well. 2011 was a year that Ben set the standard for performance and teamwork. He is appreciated by me and his peers, and he is the consummate teammate. We congratulate him and all of Ben's customers and vendor partners who helped Ben win his personal accolades, as well as a great year of growth for the West Region Team!"

Outside and Inside Sales Performance Awards

Walker recognized multiple sales individuals who worked hard in 2011 to perform at optimal levels. The award winners for Outside Sales were Ben Dierker, Eddie Lester, Lynn Soldano, and Vicki Stone. Tony DiMatteo, Director of Sales, East stated the following about the winners from his team: "Eddie Lester has been with Walker for 16 years and has covered several territories and regions in that span. He has been in the Carolinas since 2004 and has helped numerous customers expand and upgrade their networks, including several Fiber to the Home projects and large scale customer CPE deployments. Lynn Soldano has been with Walker for 9 years and has been instrumental in many Central Office upgrades and network expansions for key strategic customers. Vicki Stone has been with Walker for 13 ½ years. Her excellent project management skills have helped her customers meet strict regulatory broadband coverage requirements in New England."

The top performing award winners from Inside Sales were Lee Ann Gilley and Emma Hanes. Lee Ann's professionalism and drive to exceed her customer's expectations helped her earn this award. Emma has been a longtime Walker associate and has once again delivered at a high level of performance for us. Emma's enthusiasm and dedication keeps her in the high ranks amongst the sales team. These ladies have raised the bar for everyone in 2012.

OEM Awards Presented to Walker

Walker and Associates was recognized by ADTRAN for outstanding sales achievement in 2011 as ADTRAN's largest service provider distribution partner of the year. This marks Walker's ninth consecutive year winning this prestigious award. Walker proudly accepted the award and the honor it represents as a reflection of the hard work and dedication that Walker puts into growing the ADTRAN business each year

Telect paid a special tribute to its 25 year business relationship with Walker and Associates, presenting Mark Walker with a commemorative sword imported from Sweden. Wayne Williams, Telect's President and CEO spoke of the strong business partnership the companies have enjoyed the past quarter century, and anticipation of new opportunities to meet customer requirements in years to come.

The **Walker Jacket**
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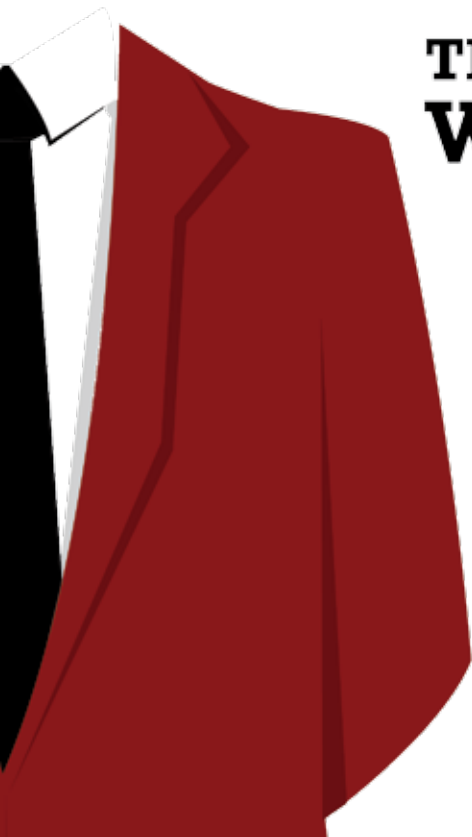
Hank Ford Award

Lisa Smiley, Walker's Vice President of Marketing, presented the annual Hank Ford Award. The purpose of this award is to recognize a manufacturer representative who understands and exemplifies the ideal vendor partner. The award is in honor of Hank Ford, formerly of Symmetricom, who died of cancer is 2003. Hank's years of service to Walker were performed at a superior support level, setting the bar for other representatives. The 2011 award was presented to Walt Takisaki, Telect's Regional Vice President of Strategic Sales. Lisa stated that "Walt has been a constant throughout many changes at Telect. He is consistent, available, strategic, and embodies the qualities that we look for in an award winner. He has worked hard to overcome obstacles and repair open issues." It is an honor for Walker to recognize Walt for his outstanding achievement.

Walker Recognizes Strategic Partners

This year Walker honored two manufacturer partners for their assistance in helping the company achieve a record breaking year with their product solutions. ADVA Optical Solutions was presented an award for having the highest percentage growth over 2010. ADTRAN was presented with an award for having the highest dollar growth over 2010. Both of these partners invested a great deal of time and effort to Walker's team in 2011.

President's Citation Award

The President's Citation Award is presented each year to Walker's Marketing Development Managers who achieve 100% of their annual sales plan. The marketing manager role is a technical marketing position, and it is important for the person doing this job to understand the dynamics of the products and technologies that drive the telecommunications industry. The goal of this position is to apply and develop market strategies to increase sales growth in particular technologies, product types, and over all OEM sales levels. Awardees who achieved their performance level expectations in 2011 were Tyson Philyaw, Jennifer Beck, and Todd Mathes.

OEM Awards Presented to Walker Sales

In addition to Walker giving out awards for outstanding achievements, the Vendor Success Partners are invited to present awards to Walker's top performers. It is a great honor for Walker's highest performing manufacturer partners to participate in the ceremony and recognize Walker's associates. Those who were honored at this year's event were Eric Dowson, Eddie Lester, Mike Shoemaker, Ben Dierker, Todd Kruegler, Larry Pratka, Melissa Daly, Vicki Stone, Lynn Soldano, Matt Flowers, Lee Ann Gilley, Brandi Greene, Philesa Rutledge, Kevin Foster, and Annette Bittner.

Mary Kay Ash once stated "When you reach an obstacle, turn it into an opportunity. You have the choice. You can overcome and be a winner, or you can allow it to overcome you and be a loser. The choice is yours and yours alone. Refuse to throw in the towel. Go that extra mile that failures refuse to travel. It is far better to be exhausted from success than to be rested from failure." Walker's associates begin and end each day with the decision to be winners. This determination shows in Walker's internal results as well in results of strategic business partners. Congratulations to all 2011 award recipients!

Opposite Page - Ben Dierker receives Salesperson of the Year Award from Derek Granger, West Region Sales Director;
Left - Mark Walker receives award from Wayne Williams, Telect President and CEO;
Center - Alex Theirer, Juniper Networks Strategic Channel Sales Manager announces Walker award recipients;
Above Top - Lynn Soldano receives performance award from Tony Dimatteo, East Region Sales Director;
Above Bottom - ADTRAN's Director of Service Provider Distribution Sales,, Mark Ogden, presents Service Provider of the Year Award to Jennifer Beck, a Senior OEM Development Manager at Walker.

Ensuring Competitive Connectivity
Regulators' Impacts on Consumer Choices

By: Steven K. Berry, President & CEO,
RCA – The Competitive Carriers Association

The public switch telephone network (PSTN) has been the envy of the telecommunications world for years because it has connectivity. When a consumer makes a call, whether it goes across one network or five, the call still connects. What kind of world would we live in if we didn't have this capability and the largest two carriers were responsible for denying connectivity? As we move to an all IP world, the need for ensuring connectivity is not lessened.

Representing over 100 competitive carriers throughout the United States, RCA (Rural Cellular Association) is a strong supporter of "competitive connectivity," and supports maintaining the conceptual framework that made the PSTN an engine of economic growth and prosperity for America.

Consisting of telephone lines, fiber optic cables, cellular networks, satellites and undersea telephone cables – all inter-connected by switching centers – the PSTN allows any device in the world to communicate with any other. In fact, the PSTN exists today because every telephone company in the nation can interconnect directly or indirectly with every other carrier on non-discriminatory conditions, including just and reasonable terms. These nondiscriminatory interconnection principles have benefited consumers, businesses and the American economy for years, and it is absolutely critical that policymakers continue these practices in the wireless arena, such as voice and data roaming and interoperability.

Each and every day, consumers are choosing wireless services to connect, and it is up to the Federal Communications Commission (FCC or Commission) to ensure opportunities for robust competition. Nondiscriminatory interconnection policy

was honored in Section 251 of the 1996 Communications Act, and, more recently, in its National Broadband Plan, the FCC rightly noted, "basic interconnection regulations" have been "a central tenet of telecommunications regulatory policy for over a century." As the wireless industry moves toward a 4G/LTE world and new technologies are developed, it is imperative that policymakers preserve the strong national interconnection policy embodied in Section 251.

In previous filings, the FCC has recognized that, even where local telephone markets become robustly competitive, the need to preserve interconnection mandates remains. For example, in 2005, when Qwest sought leniency from various unbundling and dominant carrier regulations in Omaha, the Commission did not withdraw Qwest's interconnection obligations under Section 251. Instead, the Commission rightly recognized that even where competitors gain a significant foothold in the marketplace, they cannot remain competitive if their customers lose the ability to place calls to and receive calls from the incumbent LEC's (local exchange carrier) customers.

In short, while the PSTN as we know it may be going away, it does not and should not mean that we abandon our national commitment to a pro-competitive policy of nondiscriminatory interconnection. Any weakening of interconnection rights would be devastating to competition and innovation, and it would greatly harm consumers and the American economy. Decisions on issues such as data roaming, interoperability and spectrum access will greatly affect the competitiveness of the wireless industry, and it is critically important for policymakers to make decisions that ensure competition and protect the public interest.

Steven K. Berry is President & CEO of the Rural Cellular Association (RCA), the nation's leading association for competitive wireless providers serving regional and rural markets in the United States. The licensed service area of RCA members covers more than 95 percent of the nation.

A seasoned lawyer who worked for Congress, the Executive Branch and as a partner at Holland & Knight law firm, Berry has held positions as the Senior Vice President of Government Relations for three associations, the National Cable & Telecommunications Association (NCTA), the CTIA-The Wireless Association, and the Direct Marketing Association (DMA).

Prior to joining RCA, Berry served as Director Governmental Affairs (Global) at Merrill Lynch & Co. Inc., New York and Washington, DC.

The Rural Cellular Association will hold its 2012 Competitive Carriers Global Expo March 28 - 30 at the Walt Disney Dolphin Resort in Orlando, FL. For more information on this important industry event, go to www.rca-usa.org.

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WALKER AND ASSOCIATES INC

Innovation in

By Michael Snyder
Director, PR & Communications
Telecommunications Industry Association (TIA)

The broadband communications industry is in a constant state of fast-paced change and great opportunity –this is true in the technology arena and increasingly in the business realm as well.

For network operators and communications service providers, even the very business model of the carrier is undergoing a significant transformation. Traditional differentiators for service providers — network speed, depth of product/service portfolio and price — are no longer enough to attract and retain customers.

No matter what the subject – M2M, Cloud, Optical Transport or Network Convergence – it is clear that innovation is the order of the day in Information and Communications Technology (ICT). Whether companies are opening Innovation Centers, working as part of diverse ecosystems or collaborating internally across vast geographic boundaries, at the heart of today's Innovation model is The Network.

TIA 2012 Conference and Exhibition is designed to capture this transformation on multiple levels for the global ICT industry. The event brings together leading minds in technology, in the network business model, in network innovation showcasing a transformed customer experience.

Alcatel-Lucent, the event's host sponsor, reprises its role from the 2011 show as the forward-thinking technology company delivering new thinking and new products to carriers and enterprise customers alike. Attendees to TIA 2012 will hear from Alcatel-Lucent's leadership, including North American President, Robert Vrij, and other product and technology executives as they provide insight and knowledge on topics ranging from network infrastructure to new services.

Highlights of TIA 2012

The Network Makes the Cloud
As demand for interactive communications and compute-intensive applications continues to rise, performance in the cloud becomes increasingly important. Speed matters. Availability is business critical. Not all clouds are created equal however – and performance of the network matters in a cloud services environment.

Optical Networking
The telecommunications industry has seen rapid adoption and deployment of 100G optical technology, for applications ranging from data center interconnection and cloud service delivery to backbone network transformation. It takes time to unite the industry on any new technology like 100G, on common standards, develop an ecosystem, operationalize the technology and reach volume production levels that achieve economies of scale. The market traction of 100G optical demonstrates the demand for higher capacity, scalable, cost-effective transport and the maturity of 100G technology.

M2M and the Internet of Things
The numbers and the projections may be at issue, but I think it is safe to say that Machine-to-Machine (M2M) is an exploding marketplace for the entire ICT industry. Whether or not you subscribe to the "50 billion connected devices" forecasted by AT&T or the "1 trillion plus" number of devices projected by IBM, it is clear that connected computing solutions are proliferating across all industries.

TIA 2012 discusses the next era in M2M adoption – the platforms, standards, and tools to allow service providers to rapidly adopt M2M applications that actually add value to enterprise customers.

Green ICT
The cost of energy is increasing as is the power usage for next generation network gear. While the politicians and pundits debate energy and climate change, the Information Communications and

the Network

Keeping Pace With the Speed of Change

"Traditional differentiators for service providers . . . are no longer enough to attract and retain customers."

Technology community is not waiting for any more data to begin collaboration and discussion about the requirements in energy efficiency for next generation network equipment. Join GreenTouch and other thought leaders in this exploration of new products and new thinking as it relates to core, access and mobile broadband infrastructure technology.

Optimizing the Edge of Mobile Broadband – Backhaul and Small Cell Architecture

It's no secret that smartphones and tablet devices are driving huge access network bandwidth usage, while users are demanding high quality, low delay voice and video services with ubiquitous coverage. This increase in bandwidth across limited spectrum is driving a growing number of cell sites, which in turn, puts pressure on mobile operators to find new ways to meet the capex and opex demand. TIA 2012 takes a new look at the market dynamics of the mobile backhaul market, the architecture and applications that are driving business opportunity and the opportunities for broadband network operators and wireline carriers, as well as infrastructure partners and new entrants, to participate in the business of providing affordable, reliable bandwidth for the mobile network operator.

Optimizing Datacenter Infrastructure and Interconnect

In today's datacenter, fiber optic links have become more vital than ever for handling the explosion of data traffic to and from a large number of sources – within the data center and inter-datacenter traffic. As bandwidth requirements continue to evolve, datacenter managers, enterprises and cloud services firms need intelligent data on the infrastructure needs and upgrade path to optimally handle traffic at 10G, 40G and 100G speeds.

This specialty conference taking place at TIA 2012 focuses on the proactive investments and decision-making requirements for long-haul and metro area network carriers supporting the growing volume of data traffic between regions.

Connecting Communities

The model for job creation and innovation for the 21st century is likely to be centered on regions with broadband infrastructure and a vibrant community of private and public interests working closely to speed to market new technologies, services and businesses. TIA and Connected Nation are collaborating on an educational component to TIA 2012 that features new business models that would bring connectivity to regional centers that are historically underserved. At the same time, the Texas Broadband Summit will host its annual event at TIA 2012 – a perfect opportunity to see a new model of public/private partnerships to deliver the global information marketplace to North American communities.

The Connected Home

TIA and Parks Associates are working together to showcase a critical area of innovation in the ICT industry – the Connected Home. This showcase of leading applications, protocols and devices that are converging in the home, will demonstrate a new era of service delivery and value for consumers, network operators and solutions vendors alike.

Today the pace of Innovation is occurring at a pace unlike any time before, as companies are looking beyond their walls to tap new resources, ideas and explore new business models. In 2012, the best opportunity for the North American market of communications suppliers, integrators, network operators and service providers to gain an immersive experience into these changes is TIA 2012 "Inside the Network." Plan on attending the event – June 5-7, 2012 in Dallas, Texas and check www.tia2012.org for updates on speakers, exhibitors and specialty conferences.

Life and Business Are Not "

By Mark Walker
President, Walker and Associates

Flying recently from Greensboro, NC to Washington, D.C., I had the good fortune and privilege of sitting next to US Senator Richard Burr of North Carolina. We exchanged a few thoughts on the state of the economy and asked each other what we could do to help the other's cause. Senator Burr wanted to know what would improve the business climate in NC for companies like Walker. And I asked how we could help him pass business friendly legislation in Washington. The answer was one and the same: Elect a more business-friendly legislative branch and a business-friendly executive branch in Washington so that we can grow faster and hire more citizens into sustainable jobs.

Our conversation was timely because I was preparing for a visit with the Policy Committee of the Telecommunications Industry Association (TIA). TIA gives us a loud voice in the halls of our legislators and agency-based rule-makers. The TIA policy team finds consensus among the equipment providers in telecom and IT on issues that our government can guide or control. Some of the government control is welcome, some is necessary, some is neither.

Always a matter of debate, the reach of government in our space is constantly changing and in need of regular checking or modulating in order for businesses to prosper and for consumers to be protected. The idea is to create win/win policies where the interests of businesses and consumers otherwise tend to conflict. Ever at risk with the rules is the return available to business leaders on investments that they hope to make. TIA tends to take a pro-business stance on matters of industry health and

each of us as members has an open opportunity to influence those positions.

Per a recent TIA policy statement, "The President should continue efforts to engage with Congress on tax reform this year. Lowering the corporate tax burden by 10 percent would increase investment in Information, Communications and Technology (ICT) by nearly $71 billion, which in turn will raise productivity and total business spending on wages, salaries and other compensation by nearly $450 billion while generating an estimated $990 billion in additional capital investments."

Wow! That's a huge national economic benefit that could be derived from the stroke of a pen. The rationale? ICT spending benefits nearly every other industry in terms of fostering greater productivity and processing capacity. The executive branch seems to understand at least a portion of that message, recently saying that "high-tech" manufacturers should be offered greater tax deductions for making products domestically. This would be a great first step. Thanks to TIA's Washington office, our legislators and rulemaking agencies (FCC, SEC, Department of Homeland Security (DHS), FAA and the DOD) all tend to listen when the manufacturing and supply community speaks.

As we lobby for greater change, our message must attend to basic economic principles that encourage businesses to innovate, grow and hire:

1. Innovation, growth and hiring all require business investment.
2. Investment levels depend upon the return. When the return is low, we cannot invest. When the return is high, we can and will invest.
3. The return is dependent upon several variables, including things that government controls, most significantly regulations and tax rates.

When given a chance to operate with low levels of regulation and low levels of taxes, businesses tend to thrive and hire. And more people prosper.

So let's look at regulation and taxes, and consider how they affect economic prosperity in this challenging economic time. The following are my thoughts and not necessarily the views of TIA.

Regulation of business is intended to protect consumers and markets. Not surprisingly, when business regulations are built without the consult of business, they invariably keep business from providing the competitive value that both consumers and economies need. In recent years, we have witnessed the addition of exhaustive regulations in:

- corporate governance (Sarbanes-Oxley and Dodd-Frank)
- environmental protection ('Cap and Trade' and others)
- labor law (open ballot proposal for voting on unions)
- mandatory, underfunded health care.

While these may have been crafted with good intentions, each carries large measures of added cost and taxation on the essential functions of business. The combined cost of these actions to our economy will be staggering by any practical account. We cannot allow unchecked regulations to blanket our industries under the assumption that everyone has to live by the same rules, and that markets should still prosper beneath them. As businesses' costs are forced upward, prices must rise and our competitiveness falls. Foreign competitors vie for consumer spend, both overseas and right here at home.

All rules considered, consumers and markets should have some basic protections. Yet there still must be a foreseeable, calculable opportunity for healthy profit in order for domestic businesses to mightily compete and invest. To significantly modify the over-regulation that is upon us, we must elect more business-friendly leaders this fall.

On the issue of tax policy, Americans are at risk of being convinced that our value creation capacity is limited and that what we earn from it is unfair. Judging the corporate

> **"Business prosperity is the one sustainable driver of both individual prosperities and public revenues."**

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"Zero-Sum" Games

tax rate from the angle of "fairness" is always a highly debated area and it's where the executive branch and the US Senate are intensely focused. They say that corporate America, in total, ought to pay "more of their fair share" back into the public domain. So we must ask, "What then is the size of the pie of which our "share" is unfair?". Effectively they argue that our "share" is of a limited overall pie, as if when we create new value, earn a profit, and retain much of that profit, we are effectively taking it from someone.

The truth is that every time we create value, we increase the size of the overall economic pie. The pie grows when we grow and it feeds more mouths when we prosper. Therefore, the economic pie is not static in size. It has the ability to expand if the right incentives to invest are in place.

The value businesses create has a positive 'domino effect' on other businesses who buy and enjoy that value. When we grow, we help other businesses grow. In Walker's case, our logistics value allows our customers to reallocate their own resources toward those things that are most essential to their core competency. So our growth and value benefits others to also grow and provide value. When we prosper, we help others prosper.

We cannot allow ourselves to be convinced that we merely have a "zero-sum" game here of give vs. take, concerning who pays what taxes. We do not. We have a pie that grows or declines depending upon how much value we all create. With tax rate policy, we should be looking forward at what we want to incentivize vs. just look back at what we should have divided amongst ourselves. It is a "making" approach to an expanding set of possibilities vs. a "taking" view of a perceived finite set of benefits.

When businesses produce value and prosper we employ more people and pay more tax dollars. Business prosperity is the one sustainable driver of both individual prosperities and public revenues. So we must encourage business growth in constructive ways. Paying nearly the highest corporate tax rate (40% in combined taxes) among nations does not properly encourage US economic expansion.

Most business leaders and most legislators agree that some types of corporate expenses get overly favorable tax treatment due to bad legislation. So certainly, we should end tax deductions that are isolated in their benefit and do not help the overall economy grow. At the same time, we should commend the executive branch's recent assertion that the "high-tech" ICT space is the right place to offer tax deductions for domestic investment due to our proven, healthy impact on other domestic industries. Most importantly, let's reduce the overall corporate tax rate by 10% to encourage all businesses to make more pies. That should be a central part of a sustainable national economic growth plan.

We live in a great country with great economic potential. We are fortunate to have witnessed strong economic expansion in prior decades. We are fortunate that the expansion was mostly under pay-as-you-go spending policies and where taxation was fashioned as an incentive more than as a penalty. We are fortunate that our vote for our government leadership counts. There are many legitimate factors other than business and economics that figure into our voting choices. My intent here is not to counsel our associates or friends in the market on other issues which figure into voting decisions. Yet as Senator Burr pointed out to me, it is important that all employers share some facts with their employees and constituents about what a business friendly environment looks like and what it means for the health of our markets.

2012 is a challenging time of slow economic growth, a massive US budget deficit and a colossal debt crisis in Europe. This is no time to handicap domestic businesses. Thankfully, we have great opportunities in ICT with increased broadband adoption, fiber deployments, network upgrades to IP/Ethernet, mobile data and enterprise data management. We need less regulation and lower corporate tax rates to spark business investment, raise employment levels and enjoy sustainable economic growth.

I hope this logic influences your thinking about November 2012. Let business health be a significant factor in your vote decision and in your own sphere of influence as we approach the elections.

" . . . the reach of government in our space is constantly changing and in need of regular checking and modulating in order for businesses to prosper and for consumers to be protected. "

Mark Walker is President of Walker and Associates and a current TIA Board Member. He has been actively involved in the telecommunications industry for over thirty years, working in field sales, product manufacturing, and operations in addition to his leadership role in his family's business. Mark is also an active member of TIA's Public Policy Committee. This committee is primarily responsible for establishing and advocating TIA positions on domestic public policy issues and strategies that represent the consensus of the membership.

Research: Home Video Calling Is Set To Boom; Better Technology Is Making It Happen

By Jim O'Neill
Editor
FierceEnterpriseCommunicaitons, FoerceOnlineVideo and FierceIPTV

If you own a relatively new smartphone or tablet like Apple (Nasdaq: AAPL)'s iPad, chances are you've at least noodled around with video calling through any number of apps including Facetime, Tango, Skype and more.

Ditto in the office. Videoconferencing isn't yet ubiquitous, but the gains in popularity it has seen as a cost-cutting tool and for collaboration among teams point to it becoming so.

So, if you think you're likely to avoid it at home, think again. The technology is a na-scent one, and there are only a few vendors pushing it hard, but, according to new research, it's likely to grow more than tenfold by 2015.

Attribute it, in large part, to the popularity of social networks like Facebook and Google+, which, with the increasing prevalence of services like Microsoft (Nasdaq: MSFT)'s Skype are beginning to push living room video calling to the forefront.

In the U.S., cable provider Comcast (Nasdaq: CMCSA) is teaming with Skype to launch video calling for its customers; globally, Logitech (Nasdaq: LOGI) continues to introduce new high-end, low-cost webcams, like its 1080p C920 for $99 that it introduced earlier this month.

NPD In-Stat, in research released today, forecasts total users will increase from 1.5 million in 2011 to 16.4 million in 2015. Granted, the numbers aren't huge, put the potential is.

While video calling has been around for several years, the ease of connecting on mobile devices has helped push it to the forefront of consumer adoption.

The digital home market, however, has been slow to ripen. But, with social networking as a catalyst, expect that to change.

As NPD analyst Amy Cravens points out, "While the mobile market is experiencing the strongest growth in usage, the PC and living room calling markets are also experiencing a surge of large player activity."

She said Skype's integration with Facebook and Google+'s incorporation of Hangout has provided a new perspective.

"Introducing this capability to the living room, enabling HDTV video chat, is an additional aspect of the market that is being endorsed by industry giant Microsoft as well as leading device OEMs including Panasonic, Samsung and LG," she said.

Her forecast? A whopping increase in video calling minutes approaching 550 billion minutes in 2015, up from just 141 million minutes in 2010.

But despite increasing bandwidth to homes, Internet connection speeds have remained the weak-link in HD video calls. While VGA only requires 147 Kbps of data, full 1080p HD requires nearly one Mbps.

For video calling technology to reach full acceptance by consumers, HD calls likely will be required.

Logitech's VP and GM for business Eric Kintz agreed, telling FierceEnterpriseCommunications that its own research and customer feedback shows users want simplicity of use and "sheer quality" of picture. He says the new C920 is "the best quality camera we've produced to date," both in terms of optics and technology. The C920, he said, encodes the video at the camera rather than relying on a computer, which means less processing power is needed, opening up the range of laptops, desktops and connected devices, like smart TVs, that will be able to support high-quality video calling.

Subscribe: http://www.fierceenterprisecommunications.com/signup?sourceform=ViralTynt-FierceEnterpriseCommunications-FierceEnterpriseCommunications

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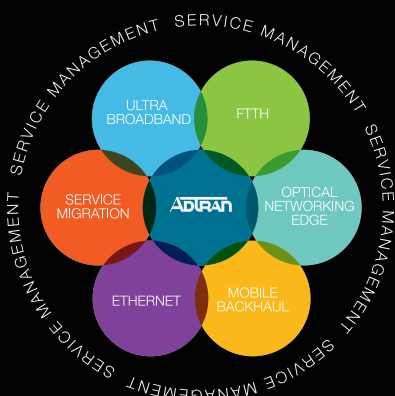
Jim O'Neill is editor of FierceEnterpriseCommunications, FierceOnlineVideo and FierceIPTV. He works from his home in western Michigan and regularly uses video-conferencing technology and online video daily in his freelance business.

The only constant is change.

Customers are accessing the network from a broad array of devices and new media, causing service providers to reexamine how they define access. **ADTRAN** is working with customers to deliver innovative solutions for every ingress point in the network. This innovation helps **ADTRAN** service provider customers accelerate change and quickly launch new revenue generating services.

For more information, visit **www.adtran.com/access** and discover how **ADTRAN** is *Reinventing Access*.

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Walker Gives Back

Distributing Hope and Love In Local Communities

By Donna Nichols
Secondary Market Manager
Walker and Associates

As a solid member of the local community, associates at Walker have established strong reputations for volunteerism and community involvement. Giving time, talents and funds, associates go the extra mile in efforts to "pay it forward" and provide hope and resources for a variety of causes.

Walker and Associates celebrated its 5th Annual Breast Cancer Awareness event on October 21, 2011. Now a company tradition that increases in visibility each year, this event brought in over $2500.00 through associate contributions alone. Under the slogan "Fighting for the Cure One Day at a Time!", money came in through a bake sale, silent auction of donated items from local businesses, and a Chili Cook-off. All donations went to the Susan G. Komen Breast Cancer Awareness Foundation.

Associates Donna Crotts (Materials Management) and Rodney Wise (Technology Director) participated in the "Running of the Lights for the 2nd Harvest Food Bank". This event is a locally favorite event when participants celebrate with family and friends on a midnight run through the holiday light show at Tanglewood Park. Salute, to Donna and Rodney for supporting such a great cause!

Debbie Bailey and Lezlie Loftis in the Materials Management Department organized an event to participate in Ani-meals in Forsyth County. They compared their event to a Meal on wheels for pets. Both Debbie and Lezlie are avid Animal Lovers and are always striving to find ways to protect the innocent animals. This year they put up a tree in their department asking for donations for dog house ornaments. They sold ornaments, asked for dog or cat food. Associates also brought toys or dog bones as a special treat.

The Materials Management/Operations Department adopted Senior Citizens for the holidays. Each member of the team chose an individual from the local nursing home and found out what they needed or wanted and then surprised them with special, personal gifts.

In December the company made a large donation to The Childress Institute for Pediatric Trauma, which is part of the Brenner Children's Hospital at Wake Forest Baptist Health in Winston-Salem, NC. This organization is focused on changing the statistic that "traumatic injury is the number one cause of death in children ages one to 18."

Additionally, numbers of other associates volunteer throughout the year in local churches, schools and civic organizations. Making a difference in the community is a priority for Walker and its associates, and it is our honor to share with others the resources we have available. Please join us in saluting these tireless volunteers and generous people who make solid differences in the lives of others.

ADTRAN Optical Networking Edge (ONE) Reprises Role Made Famous by SONET

Kurt Raaflaub
Ethernet & Optical Solutions
ADTRAN

So here's the deal – it's the same old story but with new characters in a new setting. The last time this story played out it was about 15 or so years ago. Back then we were concerned about scaling services to meet the demand for new higher speed DS1 or DS3 access driven by home internet, 100s of new TV channels and the mobile phone explosion – 64k access to homes, businesses and cell sites just wasn't going to cut it anymore. So here we are again but this time we are concerned about scaling site access to 100Mbps or even 1Gbps Ethernet to support once again residential and mobile broadband deployments as well as cloud computing business models.

To combat these new network crashers, the starring role this time around is not a SONET platform, as it was back in the 90s, but a new version of Packet Optical Networking Platform (PONP) and more specifically one using Optical Transport Networks (OTN) as defined by ITU-T G.709.

Spoiler alert: Tablet mobile devices subscribing to over-the-top video services like NetFlix (Qwikster) and YouTube put 100 times the demand on the network than that of typical feature phones. FCC is pushing their 100M squared initiative for 100Mbps to 100M homes by 2020. Cloud computing is seeing a migration from 100Mbps intra-building LAN service to 100Mbps inter-building LAN as database servers are consolidated, are centralized. Your computer is not accessing content stored down in the basement of the building you're currently in but likely a building on the other side of the city or country.

In the classic version of the story, new SONET multi-service provisioning platforms (MSPP) allowed our networks to scale the delivery and transport of huge amounts of TDM services. DS1s, DS3s access services were bundled up into OC-3, OC-12 or even by the hundreds in near 10Gbps chunks using OC-192. But now what was once the high water mark for aggregation can be considered a viable service size – we're talking about 10Gbps Ethernet. We no longer look to aggregate up to 10Gbps of service on our access platforms but are now needing to aggregate multiple 10Gbps services on our access platforms. Now this
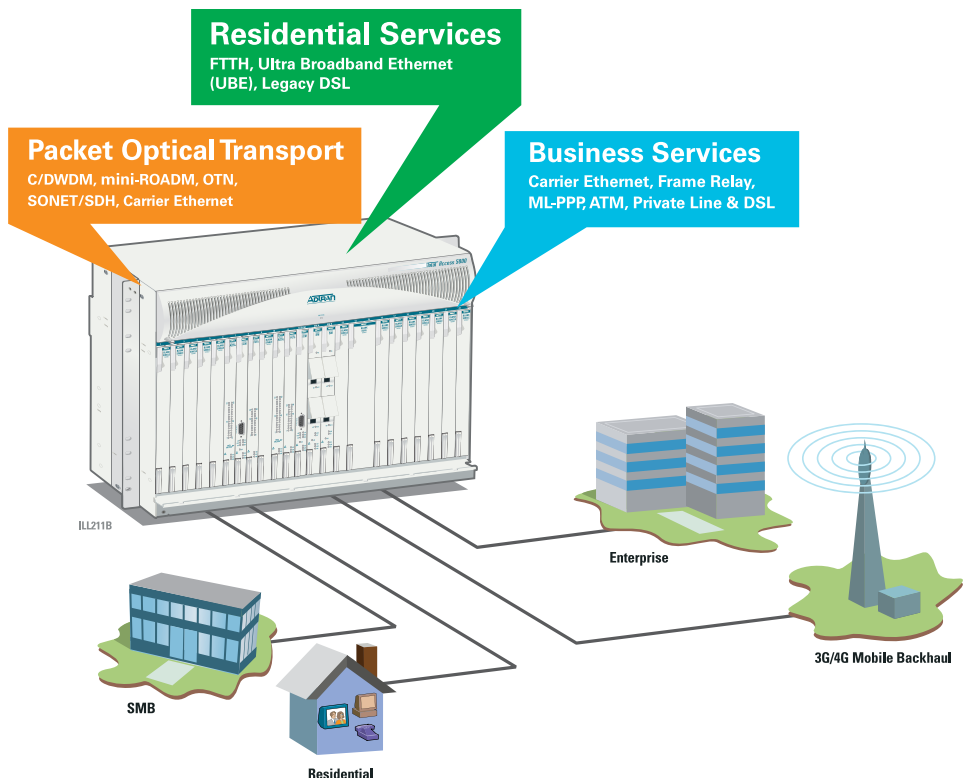
is where optical networking comes in. OTN is a technology that allows both the SONET aggregated services as well as the new Ethernet services to be aggregated onto their own separate 1.25, 2.5 or 10Gigabit digital containers. That's hundreds of gigabits of mixed services traffic on a single fiber facility. This is perfect for migrating away from SONET and ramping up Ethernet networks.

Again in the classic version of pushing new optical technologies out to the edge of the network to improve services scale, ease of provisioning played a key role. Point and click stuff, which is the same with the 2011 version. By adding to an optical networking platform something called a reconfigurable optical add-drop multiplexing (ROADM) we can greatly simplify the provisioning and successive re-provisioning of these next generation Ethernet and legacy OC-n services.

So the common theme has been the development of new high-performance optical technologies for the core of the network and then adapting them for the edge of the network as that inevitably becomes the network bottleneck. This transition from

core to edge has also been burdened with inefficiency—overlay and mid-sized solutions which require new infrastructure and operational requirements. Edge solutions must be optimized for where they sit and what they do for the network. This saves costs attributed to space, power and procedural upgrades.

Simplified operations and the reduced network costs are attributed to right-sizing and integrating various networking capabilities. Thus, integrating the latest Packet Optical Transport technology into the installed base that currently supports your services access and aggregation would be a great advantage. As a proof point, the ADTRAN Total Access 5000 multi-service access platform allow network operators to leverage the bandwidth efficiencies of the optical core all the way to the network access and edge. As the demand for access bandwidth continues to explode, ADTRAN's Optical Networking Edge (ONE) solution provides unmatched services aggregation and optical transport capabilities for last and middle mile broadband delivery while accelerating time to revenue, eliminating multi-box complexity, simplifying operations and reducing costs.

Residential Services
FTTH, Ultra Broadband Ethernet (UBE), Legacy DSL

Packet Optical Transport
C/DWDM, mini-ROADM, OTN, SONET/SDH, Carrier Ethernet

Business Services
Carrier Ethernet, Frame Relay, ML-PPP, ATM, Private Line & DSL

ILL211B

Enterprise

3G/4G Mobile Backhaul

SMB

Residential

Walker Partners With BTOP Awardee, Iowa Communications Network

By Lori Larsen
Public Information Officer
Iowa Communications Network

Walker and Associates announces its involvement to help increase broadband access to communities in Iowa by assisting in enhancing a state-wide fiber-optic Network infrastructure.

Partnering with multiple manufacturers over several months, Walker provided equipment, engineering and integration services for ICN. Using its Winston-Salem, NC facility as a staging area and nerve center, Walker worked closely with ICN, manufacturer engineers, and a variety of external resources to guarantee timely delivery of integrated systems ready for immediate service deployment upon delivery.

Walker and Associates provided engineered systems to Iowa communities, which will enhance the high-speed Internet access to over 51 locations with last mile fiber-optic connections. With the speed and reliability of fiber-optics, Iowans will see educational enhancements, improved technology opportunities, and increased economic development.

Mark Walker, President of Walker and Associates, stated "Walker is proud to have participated in this important project as part of our country's recovery and reinvestment programs. Broadband in America continues to drive new opportunities for global competition. Partnering with ICN and our manufacturers in such a significant way is a powerful example of putting people to work, planning for future job growth, and utilizing existing jobs for strategic initiatives."

The opportunity for Walker and Associates was made possible through Iowa Communications Network's (ICN) federal broadband grant received in July 2010 through the Broadband Technology Opportunities Program (BTOP). The project will enhance the ICN Network to a ten (10) Gbps (gigabytes per second) backbone that would reach all 99 counties in Iowa. The middle-mile network advancement will also provide one (1) Gbps of symmetrical Ethernet connectivity to education facilities, hospitals, libraries, public safety, workforce development, and other Community Anchor Institutions throughout the state. With ICN's overall project, almost 1,000 installations over the course of a two-year period will impact 450 new sites, over 560 direct locations, and indirectly enhance 3,081 locations.

The federal broadband program was created by the American Recovery and Reinvestment Act of 2009 to expand access to broadband services in the United States. To find out additional information regarding the federal broadband initiative visit www2.ntia.doc.gov.

About Iowa Communications Network: The Iowa Communications Network (ICN), a State of Iowa agency, operates a fiber-optic Network throughout Iowa consisting of over 8,500 owned and leased miles. ICN provides Iowans with equal access to education, healthcare, and government through Internet, data, voice (phone), and video conferencing services. For more information about the ICN visit www.icn.state.ia.us.

Walker and Associates is a national distributor of network products for broadband providers, including wireline, wireless, cable TV, government and enterprise network operators. Walker's extensive range of products from over 350 suppliers facilitates carriers' delivery of high speed internet, video, data and voice services to residential, business, and mobile users. Walker supports communications delivery technologies such as IP, VoIP, Ethernet, fiber, FTTX, BLC, MSAP, optical multiplexing, routing, point-to-point wireless, point-to-multi-point wireless, and wireless amplification. In addition, Walker provides a host of physical plant products such as fiber/copper connectivity, power systems, indoor/outdoor enclosures and outside plant products.

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The All IP NETWORK
Delivering Next Generation Ethernet Business Services

By Pam Dodge
Sr. Manager, Product Marketing
Brocade

Service providers are finding that with their enterprise customers, information and communication systems are the lifeblood of the organization and essential for providing employees and customers the means to conduct business in a highly productive and reliable manner. As a result enterprises are demanding high bandwidth and an extremely reliable set of converged services from their service providers. Service providers must be able to offer these applications, whether or not their users work in large corporate offices, small regional branch offices, on the road or at home.

To address this challenge, Brocade® has developed an Ethernet Business Solution that can help transform service providers' networks into highly scalable and profitable solutions.

Enter Ethernet Business Services
The Brocade Ethernet Business Solution will help service providers gain a piece of the rapidly growing IP Ethernet Segment within the enterprise data services market by enabling service providers to offer new MPLS-based and Ethernet Layer 2 services with increased bandwidth, tremendous scale, expanded reach, and highly reliable SLAs. It is worth noting that the deployment of Ethernet Business Services surpassed traditional technologies in 2011 which is attributed to many key benefits to end users that include all IT departments, network application departments as well as service providers.

The Brocade Ethernet Business Solution is delivered as point-to-point (E-Line) or Multipoint (E-LAN) over dedicated or virtual connections. It is consistent, standardized and available in bandwidths from 1mbps to 10Gbs. Key benefits include:
• Scalability, Ubiquity and Reach - Ethernet Business services are now globally available independently of physical access type which dramatically reduces complexity and cost.
• Performance, QoS and Suitability Convergence – Carrier Ethernet provides the bandwidth capacities that are needed to support the unprecedented demand of media rich applications that users are accessing from anywhere in the network. In addition, the technology supports low latency enabling rapid and reliable transfer of data services over the internet. The following applications that have seen the most benefit are site to site access, data center & server consolidation, business continuity, software as a service, and converged networking.
• Provides carrier class failover and availability

Service providers will be able to deliver a rich suite of services based on Carrier Ethernet Business solutions for voice, video and business critical data applications that will help them increase revenue and lower their cost of operations.

To receive this full article contact Jennifer Beck at 336-731-5290 or jennifer.beck@ walkerfirst.com.

Business Ethernet Services

CPE or small site switch for Business Ethernet service providers

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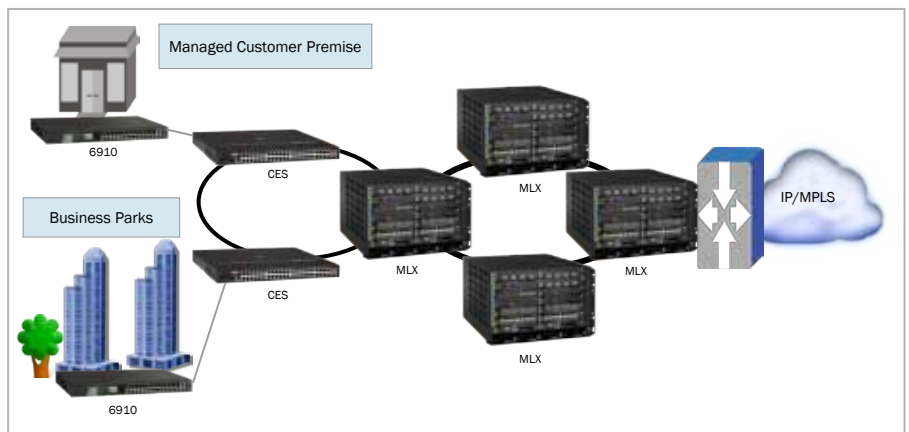
Three Things Managers Should STOP Doing

By: Brenda Abdilla
Management Momentum

Managing a team can be a tremendous amount of pressure. Face it, if most managers knew how much pressure it would be to manage others they may not have taken the job. But the challenges, lessons and successes that come from finding ways to get other people to produce results come with positive benefits that cannot be found anywhere else, so we continue managing others—impacting lives and looking for the answers and strategies that will make the job easier.

Sometimes managers with the very best of intentions can inadvertently make life harder for themselves through habits that they may not be aware of—or that they may even think are beneficial. Most managers are unaware of the impact that the following three things can have on their team and ultimately on their success in the role.

#1 Stop Scaring People

I worked with a manager who would worry OUT LOUD every few weeks about whether the company was going to continue to get funding from the investors. While this concern was actually relevant, he often made the mistake of sharing this information with the team. He thought the "reality check" would motivate them to hit their numbers so that they could indeed survive and get continued funding from the investors. Unfortunately, his tactic created exactly the opposite effect. Many members of the team thought he was implying that they should be looking for new jobs, so they spent work time searching for jobs online, causing their numbers to get worse over time, not better. The manager had convinced himself that because he was being "truthful" his actions were acceptable, when really he was just panicking and trying to relieve his own stress—but causing himself more stress in the end.

What To Do Instead: Be conscious about what information you want to share and why you are sharing it.

Managers have access to information that should not be disclosed to their teams even partially. It is important to remember that anything and everything a person in a power position says may be amplified, depending on the listener. As a manager, you should find appropriate people to vent with about your stress, discuss your uncertainties with and even to gossip with—but under no circumstances should any of these people be on your team.

#2 Stop Trying To Appear Perfect

Whether you manage a team of employees, your children, or lead a board of directors or a committee, you probably could use a little more respect. When a manager is respected, things happen faster and easier, and people will work harder than they might have if they did not respect the boss. In the quest for respect, many managers think they have to be perfect—or at least appear to be perfect. But actually, the opposite is true.

There are two very important reasons why managers should admit it when they miss the boat, forget something, miscalculate, or screw up. The first reason why it is good to admit that you are flawed (a.k.a. human!) is that it makes others feel okay with being human themselves. The second reason why admitting to mistakes might work in a manager's favor is because people as a whole tend to have very highly developed brains that let them know when something is not quite right. If someone tries to hide their mistake, although the team may not consciously realize that the boss is covering something up, they may get a funny little feeling that creates a tiny bit of mistrust—and mistrust cannot ever lead to respect.

What To Do Instead: If you really want respect, admit your mistake quickly and then drop it. Trying to hide your humanity by covering up your mistake or blaming someone else is never a good idea, regardless of how embarrassed you may be. Managers are human too. It's okay to make a mistake or not know something. Over time this will build trust, which leads to respect faster than any other quality.

#3 Stop Pushing So Hard

Have you ever heard that saying, "the beatings will continue until morale improves"?

Sure, it is funny, but it is also reflective of a management habit that pervades our often stress-filled, numbers-focused business world. We really, really need the team to hit those targets, and when they don't, it brings out the worst in us. If pushing was what they needed, then it would be working. If you are pushing and it is not effective, it's time to try something different.

One of the most frustrating things about being a manager is that the success of the manager depends almost completely upon the performance of others. This is where leadership comes into play. Sometimes this frustration can give way to tyranny as a leadership style. A tyrant can get results for a while—think of Napoleon, Hitler, Henry VIII—but eventually the troops rebel and that is never a pretty scene.

What To Do Instead: Work with individuals to problem solve.

Set aside your frustration while brainstorming individually with each team member and identifying ways for them to focus on fewer areas overall, but with much more intensity. Then help them do just that.

Brenda Abdilla is a Certified Professional Coach and works with teams to improve results. Brenda knows what makes people tick and how to put their talents to work. As president of Management Momentum, a Denver firm specializing in business coaching and recruitment, Brenda's insightful approach cuts through the complicated elements of business in today's environment and gets people focused on the results that matter most. Visit her website at www.ManagementMomentum.net

UPCOMING EVENTS

CALENDAR 2012

As an active member of multiple state, regional and national industry associations, Walker and Associates is strategically engaged with organizations supporting telecommunications markets. We demonstrate our commitment through event sponsorships, exhibiting at conferences and expos, and directory advertising. Look for us at the events listed here, and refer to our Upcoming Events section of our website, www.walkerfirst.com, for additional details.

We look forward to seeing you at these events!

Proud Member of:

February

NTCA Annual Expo	San Diego, CA
* UTC Region 8, 9, 10	Reno, NV
* UTC Region 3	Hilton Head, SC
GTA 15th Annual Vendor Showcase	Macon, GA
* Calcom 28th Annual Showcase & Tech Expo	Sacramento, CA

March

* MTA Annual Conference/Technology Expo	Minneapolis, MN
* UTC Region 7	San Antonio, TX
ITA Showcase Northwest	Portland, OR
RIITA Annual Conference & Expo	Des Moines, IA
NCTIA Technology Conference	Winston-Salem, NC
MTIA Show-Me Expo	Columbia, MO
Technet Land Forces SW	Tuscan, AZ

April

COMPTEL PLUS Spring	San Francisco, CA
Broadband Communities Expo	Dallas, TX
* Texas Communications Expo, Inc.	Belton, TX
SCTA Spring Convention	Charleston, SC
OTA Outside Plant Seminar	Newport, OR

May

CTIA Wireless	New Orleans, LA
* UTC Expo 2012	Orlando, FL
* ACE/RUS School & Symposium	Fort Worth, TX
TTA Spring Meeting	Franklin, TN
NDTA TOC Conference and Showcase	Fargo, ND
OTA 117th Annual Convention & Tech Show	Columbus, OH
OTA / WITA 2012 Joint Annual Meeting	Stevenson, WA
Kentucky Tel Assoc - KTA Annual Meeting	Lexington, KY

June

* TIA Inside the Network 2012	Dallas, TX
ITA 92nd Annual Convention	French Lick, IN
Tri State TCI Technology Conference	Charleston, SC

* - Indicates Walker is an event sponsor

Walker and Associates Joins COMPTEL

By Randy Turner
Director, Marketing Communications
Walker and Associates

Walker and Associates recently joined the industry association COMPTEL. As a leading supplier of telecommunications products for competitive communications service providers, Walker found COMPTEL and its mission a natural fit, recognizing the value of joint marketing programs and events targeted toward this important segment of the industry. Walker provides value added services to a broad range of competitive service providers across North America, in addition to its established customer base among incumbent carriers, utilities, wireless carriers and others.

Recognized by customers and suppliers alike, Walker's reputation for quality, service and established industry relationships spans more than four decades. Leading the way with innovative solutions and technology driven customer tools, Walker provides best in class supply chain solutions for members of COMPTEL.

Walker has committed to booth space at both the COMPTEL Plus Spring event, scheduled to begin April 15 in San Francisco, CA, and the COMPTEL Plus Fall event, slated for October in Dallas, TX. Walker anticipates additional opportunities to partner with COMPTEL in efforts to reach competitve service providers and explore business opportunities.

Based in Washington, D.C., COMPTEL is the leading industry association representing competitive communications service providers and their supplier partners. COMPTEL members are entrepreneurial companies driving technological innovation and creating economic growth through competitive voice, video, and data offerings, as well as the development and deployment of next-generation IP-based networks and advanced services utilizing fiber, copper and wireless facilities. COMPTEL advances its members' interests through trade shows, networking, education, and policy advocacy before Congress, the Federal Communications Commission, and the courts. COMPTEL works to ensure that competitive communications providers can continue to offer value pricing, better service, and greater innovation to consumers. COMPTEL's members create economic growth and improve the quality of life of all Americans through technological innovation, new services and affordable prices so customers have a choice.

((((comptel

THE COMPETITIVE COMMUNICATIONS ASSOCIATION

In the Spotlight

By Randy Turner
Director, Marketing Communications
Walker and Associates

Mark Emslie joined Walker and Associates as Regional Account Manager for the Upper Midwest territory, covering the states of Minnesota, North Dakota, South Dakota, Iowa and Nebraska. In this direct sales position, he will be working with customers to learn more about their business and to understand their network, applications, and service delivery requirements to provide the products and solutions that will maximize return on investment.

Mark's background includes experience in building FTTH/xDSL access networks, as well as experience in end-to-end 10GbE network infrastructure solutions. In addition to his Access Networks experience, Mark has also sold voice switching, ATM, and ATM VoDSL equipment to Tier 2 and 3 Telco's in the past. "The telephone industry is fascinating as our customer base is faced with difficult decisions on how to modify their business in the face of changing technology and changing government regulations that play an important role in their bottom line. The delivery of content and access beyond commoditized voice services is a true reflection point in the industry and will play out in an interesting fashion over the next 10 years."

Mark states "I am excited to join the team at Walker and Associates and look forward to meeting customers and responding to their inquiries about Walker's products and services." He resides in Minnesota with his wife and three children.

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Fred Phillips has been promoted to Manager of Engineering Services at Walker and Associates. Fred has proven himself as a valuable customer asset in Walker's engineering department over the years and will be a strong leader of the engineering organization moving forward.

Ken Smith and **Jerry Jones,** engineers for Walker and Associates, successfully achieved their BCNP (Brocade Certified Network Professionals) certification. Ken and Jerry are two of 765 total worldwide BCNP certified individuals, providing additional resources to Walker's customers. Ken was additionally recognized by Brocade as being their 20,000th certification recipient. Congratulations Ken and Jerry!

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Mark Walker has been selected as a member of the TIA Public Policy Committee. This committee is primarily responsible for establishing and advocating TIA positions on domestic public policy issues and strategies that represent the consensus of the membership. Mark has been a TIA Board Member since 2010.

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Graham Gibson joined Walker and Associates in September, 2011 as a Business Development Executive. Prior to joining Walker, Graham's career revolved around marketing, project management and education. Most recently, he completed a yearlong contract teaching English in China. Graham graduated from the University of North Carolina at Greensboro in 2007 with a BA in Communications and a Spanish minor.

Walker's Georgia sales and marketing office has moved to a new location. The new address is:

**Walker and Associates, Inc.
6240 Shiloh Road
Suite 250
Alpharetta, Georgia 30005**

All phone numbers for the office and associates working from the GA office remain the same.

INNOVA*TE*

TE INTRODUCES NEW COMPACT CWDM MODULE

TE Connectivity (TE) compact CWDM module provides increased bandwidth and capacity for future network growth in one of the industry's smallest packages. Its compact size and unique carrier tray set it apart, making it easier to deploy in a variety of field situations.

The compact CWDM is available in 4-or 8-channel configurations and can be installed in the field or in the factory. The module comes with a carrier that allows for fast and easy snap-in mounting to any TE splice tray or closure and can also be installed in most non-TE closures without using the carrier.

KEY BENEFITS:

• Compact size. 1.7"L x 1.0"T x 0.24"D (43mmL x 25mmT x 6mmD)

• Free Space Optics design. Lower overall insertion loss and better uniformity across the channels

• Simplified inventory management. The same component can be used in the head end or outside plant and as a Mux or Demux

Scan the code to
view a CCWDM
demo video

FOR MORE INFORMATION VISIT US AT **te.com/CCWDM**
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Walker and Associates, Inc.
PO Box 1029
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Welcome, NC 27374

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Communications carriers have relied on Walker and Associates since 1970 to **collaborate** with them through industry changes, opportunities for growth, and technological advances. Today's carrier knows that **experience** matters, that product alone is not the sole test of a **partnership**, and that being **more** than a distributor **matters**. You are looking for a business built on **integrity**, who understands your challenges, and your opportunities, and who focuses on you so you can focus on your customers. You deserve **more**, and with Walker you get **more**. Contact us today to learn how you can leverage **MORE** resources in a way that **MATTERS** to you.

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