

RURAL Telecom

MARCH - APRIL 2013

The Magazine
of Rural Telco
Management



Pushing Technology Trends

**HOW TELCOS
ARE STAYING
AHEAD OF THE
(ADOPTION)
CURVES**

18

**Cellphone Theft:
Taking a Bite Out of
'Apple Picking'**

22

**How Machine-
to-Machine
Communications Is
Changing Telecom**

32

**Telcos Tackle
Social Gaming**

Unified
Messaging

Automated
Notification

SIP Feature
Server

Many Advanced
Features

Middleware
&
Encryption

Blended
Services

Video Quality
Monitor

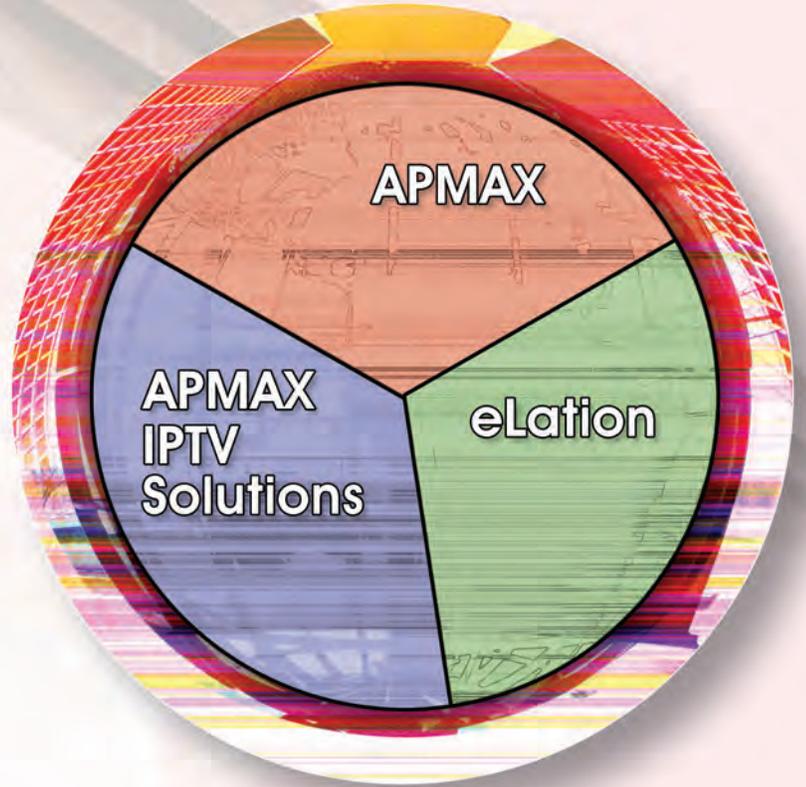
Video Streaming
& Ad Insertion

Billing
CABS

Automated
Provisioning

Financial
System

Staking
Mapping



**More Integrated Solutions for the Tier 3
Telco Market Than Any Other Vendor!**

*We have deployed over 1,200 advanced,
pre-integrated TDM Voice, SIP, IPTV and
OSS/BSS solutions to the ILEC market.*



**Innovative
Systems**



Game-Changer

Looking for a way to score with customers in the clutch?

Giving your customers ways to connect with you on-the-go not only increases your level of customer service, it also is the best defense against a growing field of competitors. Place the power in their hands to pay their bills, report a service interruption and communicate with you whenever, wherever.

The ball's in your court.



866.999.6472

www.NISC.coop

powered by



CONTENTS

In Every Issue

- 6 **FROM THE EDITOR**
- 8 **SHORT TAKES**
- 10 **CONNECTIONS**
Harnessing Our Power
With a United Voice
By Shirley Bloomfield
- 12 **PERSPECTIVE**
A Land(line) of Opportunity
By David S. Wolf
- 41 **ADVERTISERS INDEX**
- 50 **COMMUNITY HEARTBEAT**

Departments

- 38 **MARKETING MATTERS**
How to Act Like a Salesperson
By John R. Graham
- 42 **RISK MANAGER**
Protecting Your Property
From Copper Thieves
By Marilyn A. Blake

45 **EXCHANGE NEW!**

**ITC Members Approve Merger;
Three Companies Become One**
By Kathy Weitala

**MCC: Enriching the Lives of
All Those It Serves**
By Joshua Stefan

Bringing Fiber to the Farm
By Mendi Alexander



Pushing Technology Trends: How Telcos Are Staying Ahead of the (Adoption) Curves

By Anna Henry

Consumer behavior has been studied for years and has provided some valuable insights about purchasing behaviors. Now some rural telcos are leveraging those buying profiles to push technology and tap into profit potential. Telcos willing to take the initiative and learn about new technologies can help customers in each stage of the adoption curve see the benefits of these emerging products.

ILLUSTRATION BY ALISON SEIFFER

MORE ONLINE NOW AT

ruraltelecom.org

- > 3-D Printing and the Legacy Network
- > Full-Issue Access for Subscribers
- > Exclusive Online Articles
- > Subscription Information

RURAL telecom

Rural Telecom (ISSN: 0744-2548)
March • April 2013
Bimonthly, Vol. 32, No. 2

Subscriptions to Rural Telecom are \$35 for NTCA—The Rural Broadband Association members; \$135 for nonmembers. A one-year subscription to Rural Telecom also includes six issues of the Exchange newsletter. To order or for questions about a current subscription, email publications@ntca.org.

Change of address should include recent mailing label and new address with ZIP code.

4121 Wilson Boulevard, Tenth Floor,
Arlington, VA 22203
Phone: 703-351-2000, Fax: 703-351-2001
Email address: publications@ntca.org
Website address: www.ntca.org

Publisher: NTCA—The Rural Broadband Association
Chief Executive Officer:
Shirley Bloomfield, sbloomfield@ntca.org
Director of Communications:
Wendy Mann, wmann@ntca.org
Managing Editor:
Christian Hamaker, chamaker@ntca.org
Senior Writer/Editor:
Tennille Shields, tshields@ntca.org
Advertising:
Lisa Freedman, lfreedman@ntca.org
Graphic Design by Ferro+Ferro Graphic Communication, Arlington, Va.
Printed by Colorcraft, Sterling, Va.

Rural Telecom, established in 1981, is the bimonthly magazine published by NTCA—The Rural Broadband Association, a nonprofit, cooperative corporation formed in 1954 under the laws of the District of Columbia.

NTCA's Mission: NTCA—The Rural Broadband Association, an association of small, rural, community-based communications providers, is dedicated to improving the quality of life in rural communities through the advocacy of broadband and other advanced communications infrastructure and services.

NTCA represents nearly 900 small, rural, locally owned and operated telephone cooperatives and commercial companies in the United States and abroad, as well as state and regional telephone associations and companies that are the suppliers of products and services to the small and rural telephone industry. Our readers are the managers, directors, attorneys and key employees of these telephone companies as well as consultants, government officials and telecommunications experts.

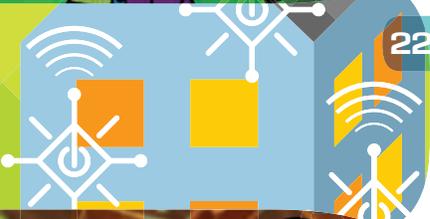


18

Cellphone Theft: Taking a Bite Out of 'Apple Picking'

By Rachel Brown

When most people hear the phrase "apple picking," they conjure up images of a simple country activity, but big-city law enforcement officials say it's the street lingo for the theft of iPhones, iPods and iPads. In urban areas, it's not uncommon for thieves to snatch these devices and other devices out of users' hands, and then make an easy and quick getaway. In rural areas of the country, the story is different.



22

How the Era of Machine-to-Machine Communications Is Changing Telecom

By Masha Zager

Machine-to-machine connections include more than 2 billion devices worldwide, of which about 146 million are connected to cellular networks. By 2022, those numbers will rise to 18 billion connected devices, 2.6 billion of them cellular. This rapid growth presents tremendous opportunities—and challenges—for telcos.



28

Telcos Tackle Latency as Social Gaming Grows

By Christian Hamaker

More multiplayer video games means more challenges for telcos, particularly in the area of latency. A small but passionate customer segment, gamers are quick to let telcos know when their experience is disappointing. What are companies doing to work with social gamers—those who play video games with others who are usually in remote locations? How are they keeping them happy?



32

Annual Meeting Recap

By Laura Withers

A vote on unification highlighted the Rural Telecom Industry Meeting & EXPO in Lake Buena Vista, Fla. Keynote speakers, educational sessions and telecom vendors shared their insights and products with NTCA and OPASTCO members at the first joint meeting of rural telecom industry leaders. Our event wrap-up includes national award recipients and EXPO booth awards.

NTCA Board of Directors, General Counsel and Chief Executive Officer

Co-Presidents: Rhonda Armstrong, Terry Force
Vice President: Donald D. Miller
Secretary-Treasurer: Ronald J. Laudner Jr.

Regional Directors

Region 1: James Kail, Allen Russ, R. Craig Smith
Region 2: Larry Windham
Region 3: Gregory A. Hale
Region 4: James M. Dauby
Region 5: Doug Boone, Ronald J. Laudner Jr.
Donald D. Miller
Region 6: Robert J. DeBroux, Paul Schuetzler
Region 7: Benjamin Foster, Terry Force,
Catherine Moyer
Region 8: Tom Young
Region 9: Rhonda Armstrong, Mitchell A. Moore
Region 10: Godfrey Enjady, Mark Gailey,
Sandy Vandevender

Commercial Company Advisers

Loren Duerksen, Kevin Hranicka

General Counsel Don Richards
Chief Executive Officer Shirley Bloomfield

The Editorial Purpose of Rural Telecom is threefold: to inform readers of public policy issues affecting the industry; to provide insight on developing businesses and technology; and to share expertise and experience on management, marketing and customer service.

Invitation to Contributors—Please email (publications@ntca.org) or fax (703-351-2088) an outline of a proposed article to the managing editor. All articles should be prepared according to our writer's guidelines, available on NTCA's website.

Statements of Opinion and Fact are the individual views of the authors and not necessarily the positions of NTCA, its officers, directors, members or staff.

© 2013 NTCA—The Rural Broadband Association



Editorial, advertising and subscription offices: Periodicals postage is paid at Arlington, Va., and at additional mailing offices. Postmaster, send address changes to "Rural Telecom," 4121 Wilson Boulevard, Tenth Floor, Arlington, VA 22203-1801.

It is illegal under federal law to send facsimile advertisements without first obtaining the express written consent of all recipients. The inclusion of fax numbers any place in this publication does not mean that consent has been given to receive facsimile advertisements.



A Good Marriage

Perhaps you don't remember the bloom of your first romance, or the giddiness of your first date or the excitement of getting engaged. However, you may remember others telling you that you are still in "the honeymoon period" when you first were married. Perhaps you've made that observation to a young, newly married couple you know.

Most relationships start off with a sense of excitement, discovery, getting to know one another and a bit of adventure. That's true for both personal and business relationships. When two people come together they may be shy or reticent, they may be reluctant to share too much information at the outset—preferring instead to watch and observe and see how things unfold in the relationship.



You may have suggested to other couples that a wedding is one thing, marriage is a whole different story. As time goes on, two people settle into a marriage. But it's important not to take it for granted. A good marriage takes work. And if you are married, you know what I mean!

Where am I going with all of this marriage talk? Unification, of course. I was reflecting on the steps both NTCA and OPASTCO took over the past two years, and they reminded me of a courtship. We spent time talking, getting to know one another and going back and forth negotiating a new relationship. The fact that we've been partners for a very long time and believed we knew and understood one another notwithstanding, there was still much ground to cover to really move the relationship to another level.

And like any relationship, there was give and take. We needed to introduce new "family" members to the circle and help them feel welcome and engaged. There was excitement early in the process and a sense of all the possibilities. Certainly there were some concerns about giving too much on one side or not enough on the other. There was a need for balance, communication and respect.

As you know from your own business partnerships, the beginning of a new relationship can be exciting and fluid. Then comes the execution stage of implementing the partnership product or service. Finally, you settle in for the long haul. You realize there will be some bumps in the road, and you know that feedback and communication will be key to resolving any issues and advancing the relationship.

The bottom line? Like a good marriage, unification will take work. The wedding has occurred, but now the hard work of a day-to-day marriage begins. Will we get every program right? Every product? Not necessarily. But we are committed to this relationship, and we all want the best for the rural telecom industry.

As our relationship evolves and the cultures of both organizations mesh together, we will see the dedication pay off. The rural telecom industry will change and advance through the hard work of all members. I've been inspired watching this process from the beginning and now more than ever am encouraged about the industry's future. With everything that is changing in your business, NTCA—The Rural Broadband Association is one thing you can count on moving forward.

A handwritten signature in black ink that reads "Wendy Mann".

Wendy Mann
Director, Communications
wmann@ntca.org

Looking to save money and increase your bottom-line profit?

Award Winning Product Development

That fire coming from our computers is Telcom hard at work designing products with this goal in mind. While some others may be using their computers for the same old same old, we're burning ours up designing and launching our new products and services and enhancing our existing ones.

New Products and Services

- **Cell phone recycling program** that collects older unused models and pays or purchases them from the owner.
- **Independent Contractor Program** for the management of the risk of those businesses that you employ. We take on the role of manager of risk and compliance for you and also assist the contractor with insurance placement, if needed. When your Independent Contractors have proper insurance, your policy shouldn't have to respond to a claim. Thus, saving you premium on your insurance policy.
- **Personal Lines Insurance**- Through a partnership with MetLife, a respected and highly regarded national insurer, we now offer comprehensive personal line coverage protection to any NTCA member business. Getting quotes is as easy as calling 877-491-5089.

Enhancements

- **New coverages and higher limits** for telecommunications-specific companies are available in our property casualty program.
- **Improvements in claims handling** have been made to our Stay Connected™ Cellphone Insurance Program. This program pays the telecommunications company for enrolling cell phone customers in the insurance plan.
- **Our risk management and loss prevention services** are now available on an unbundled basis from the insurance program.

Because it has always been a matter of trust...



TELCOM
INSURANCE GROUP

Telcom Insurance Group: The first and only insurer to offer these products and services which save your company money and increase your bottom line.

800-222-4664 • www.TelcomInsGrp.com
6301 Ivy Lane, Suite 506
Greenbelt, MD 20770



TV COMMERCIALS 'CALM' DOWN

The next time you head to your refrigerator during a TV commercial break, you probably won't be able to hear the ads. That's because the CALM law—the Commercial Advertisement Loudness Mitigation Act—is now in effect for commercial broadcasters, cable and satellite operators, and other video distributors. Only public broadcasting is exempt from the new law, so don't be surprised if, while grabbing a snack, you can still hear those PBS underwriting announcements.

►Source: deadline.com

Hidden Job Market Becoming the Rule, Not the Exception

More and more job openings are being filled without being advertised. According to the Wall Street Journal, companies are creating openings and filling them with talent they know is available, all without publicly advertising the job openings. The practice is known as "opportunity hiring," and it's more common when the economy is soft and good talent is more readily available to be hired.

Although federal rules don't require that companies post all job openings, many human resources representatives do require public listings of all job openings. They fear discrimination lawsuits or federal audits if they don't make all job openings public. However, hiring managers see things differently, often finding ways around such internal requirements.

►Source: WSJ.com



For Problem-Solving, Nature Beats a Computer

If you're thinking has become cloudier, all that "screen time" in front of various devices may be to blame.

Two neuroscientists recently measured creativity and intuition among fellow neuroscientists who joined them for a week-long hike through Utah's Grand Gulch, and they found a 45% improvement after the group was a few days into its hike.

Another test of Outward Bound students, who are forbidden from bringing computers and other technological devices on their trips, showed a 50% spike in cognitive abilities after just four days in the wilderness.

►Source: psmag.com

Chasing 'Inbox Zero'? It's Not Worth It

Do you make sure your emails are appropriately filed at the end of each day, leaving your email inbox pristine until the next message arrives? If so, you're wasting your time.

That's the conclusion of Slate's technology columnist Farhad Manjoo, who has resolved to "stop chasing Inbox Zero"—the state of having no messages to read or respond to—in 2013.

"I've got 91,109 unread messages in my inbox, and I feel fine," Manjoo wrote. "Even worse, I have 4,152 messages flagged for follow-up. ... Inbox Zero isn't worth all that time. It's a false god. I haven't seen any evidence that diligently responding to, archiving or otherwise maintaining one's email improves life in any way. Sure, you don't want to fall down on your duties—if responding to your boss is an important part of your job, then of course you should respond to your boss. But if you're good at your job, you'll do that anyway."

►Source: Slate.com



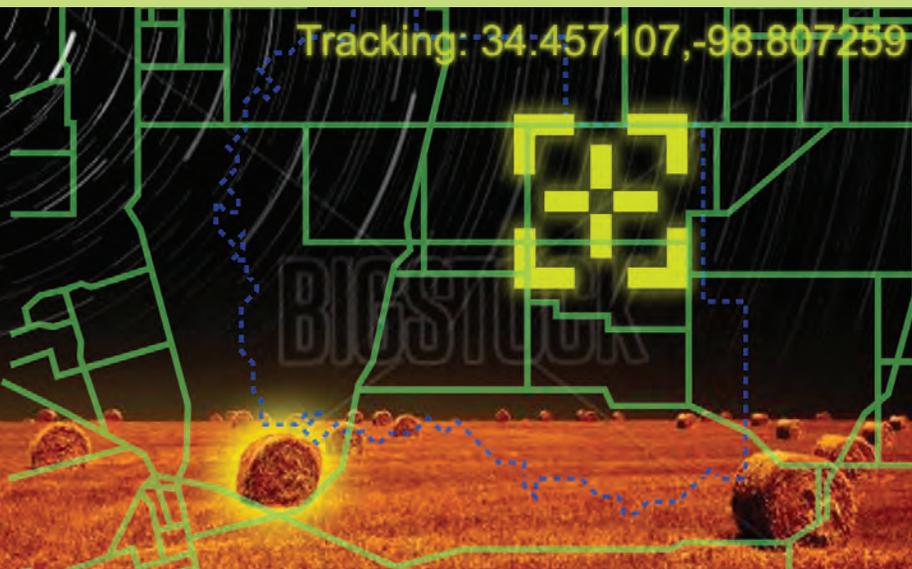
Can Telecom Address the Rise in Agricultural Crime?

Rural crime rates are soaring when it comes to agricultural crimes. In the heartland, the latest scourge is hay rustling—the seizure of bales of hay, which is currently worth more than it has been in ages due to a drought and grass fires in the region.

Hay thieves usually strike in the dark of night and then resell the hay for profit, or feed it to their hungry cattle because they can't afford additional food for the animals. Law enforcement officials in Colorado, Oklahoma, Nebraska and Kansas see the upward trend in hay theft as part of a larger problem with agricultural crime.

One sheriff in Oklahoma fought back by putting a GPS unit in a bale of hay located in a field that thieves had hit before. Soon enough the hay was stolen, and the GPS unit led the sheriff to the culprits.

►Source: nytimes.com



North Dakota Boom Brings Lots of Men, but What About Manners?

North Dakota's oil boom has brought an influx of men to fill the rugged new jobs in the state, but when it comes to pursuit of the opposite sex, they've left their manners behind.

The percentage of single men in the state ages 18–34 has increased 2.5% in the past five years, counter to the broader national trend, and women in the state have noticed the difference. Some women in the state say they feel unsafe even when engaging in things as innocuous as shopping. Why? Because men—flush with cash from their high-paying jobs and high on hopes of finding female companionship—follow them through the stores.

Although the problem with male behavior may be magnified in North Dakota, it's part of a much wider, dispiriting phenomenon, wrote columnist James Taranto. "For the past half century, American society has been breaking down social constraints, customs, legal restrictions and even moral proscriptions that limited women's freedom. Perhaps those constraints also worked to keep in check the most disagreeable aspects of masculinity."

►Source: wsj.com



Al Michaels' Five Tips for Staying Relevant

NBC football broadcaster Al Michaels, one of the best-known figures in his field, offers these five tips for becoming the highest paid, most recognizable individual in your profession.

1. Be flexible. Adjust to your customers' expectations.
2. Limit lingo. Don't use jargon or terminology more likely to be understood by one gender than the other. Less lingo equals wider audiences.
3. Use technology purposefully. New technology is frosting, not cake, and too much frosting can make you sick. Showing off every new technology can backfire.
4. Truth rules. Be authentic. Truthfulness will win you respect from the people who matter in your profession.
5. Propel connections. Know what your customers value most about your company, and create an emotional connection to those aspects of your organization.

►Source: LinkedIn.com



Harnessing Our Power With a United Voice

Note: This column is excerpted from a speech delivered at the Rural Telecom Industry Meeting & EXPO.

Last month at the Rural Telecom Industry Meeting & EXPO in Florida, NTCA and OPASTCO members voted in favor of unifying our two organizations, sending a clear message to the industry and the world that we are stronger and more effective as one entity. As of March 1, our organization will be known as NTCA–The Rural Broadband Association.

I couldn't be more excited and proud of this historic moment in our industry's evolution. A lot of work preceded this important milestone, and I'm especially appreciative of the leadership of both organizations for their thoughtful efforts over the past 18 months. We also would not have been able to accomplish this without our members' commitment. Not only did you vote to pass the proposals, but you also helped guide this transition by asking questions, providing suggestions and being open to evolving into a new, more influential organization. Because of your hard work, the rural telecom industry is stronger as a united voice.

In fact, your dedication and ongoing engagement have already made some significant changes on the policy front, bringing needed clarity to the FCC's Universal Service Fund (USF) reforms and putting pressure on the commission to finally do something about the call completion issue. As of press time, the FCC was expected to issue a sixth order on reconsideration of the 2011 USF/intercarrier compensation reform order making several changes that would, among other things, reduce the number of telcos affected by the caps on USF support to approximately 60 companies with an anticipated combined net loss to all rural carriers of about \$10 million.

Now, that may not sound like progress to some, but consider this: Under the FCC's original plan, the caps were going to hit 280 carriers, with a combined net loss to rural carriers of \$55 million per year. Also last month, the commission indicated its intent to obtain more reliable data on a recurring basis from long-distance voice and VoIP providers that could help isolate and address rural call completion problems. While we're still reviewing the details of the proposal, anything that shines a brighter spotlight on this epidemic of call failures is positive.

I often joke that I'd love to have a magic wand to wave over big problems like these and make them go away. But the truth is these changes



did not come about because of some magical "pixie dust" that I or anyone else sprinkled on the FCC. Rather, it was your willingness to share your story and work with your local and national policymakers as you stayed at the negotiating table with us.

This ongoing engagement will continue to be vital to our efforts this year. As I see it, we have four priorities for the future: 1) working to create more certainty for the rural telecom industry; 2) working to achieve economies of scale and productive partnerships in our increasingly IP-dominated world; 3) re-energizing and promoting the political clout of rural America; and 4) collaborating to create a brighter future for your rural communities.

There's no denying that we are about to enter an uncharted chapter in our industry's development. Change can be difficult—and scary—but I believe that the hard part is behind us. As one organization, we are now ready to face the policy challenges coming our way with vigor, enthusiasm and a strong singular voice. It's a new era for telecommunications, and we're committed to delivering on our promise to lead your companies into the future.

Shirley Bloomfield is chief executive officer of NTCA. She can be reached at sbloomfield@ntca.org.

Is your network stuck in the land of confusion?



REDCOM
can guide you
down the right
migration path.

REDCOM's carrier-class softswitch platforms preserve your investment in legacy assets, while offering safe passage to modern VoIP technology. All with no mandatory maintenance contracts, annual service agreements, or forced upgrades. Contact a REDCOM customer advocate today to learn how you can deploy a new flexible communications network while also lowering your operating costs.



REDCOM[®] [®]
www.redcom.com

A Land(line) of Opportunity

It wasn't so long ago that people called places. "Call me at home." "Call me at the office." "You have a call from the school." "You have a call from the sheriff's department." People do not call places anymore, they call people. This shift in use turned voice service into a commodity overnight. It has changed how minutes of use are generated and regulated because calling people, not places, requires mobility. And mobile data use trends soon followed suit.

Data plans are proving to be incredibly expensive, and all you can eat mobile data service will soon become a thing of the past.

Yet, consumers are willing to pay a premium fee in order to achieve data mobility. To offset this cost, they're disconnecting their traditional wireline services, falsely assuming that a rationed mobile data plan can provide comparable value to traditional DSL service. This often ends in disappointment.

I quiz my teenage daughters on endless subjects. I like to hear how they think. One of my more recent quizzes was about the landline in our house. This, to them, is the lowest form of technology. They would give up the "home phone" (old people call it a "landline") before anything else. When asked what they'd give up second, they debated for at least a minute and then agreed the "backup curling iron" would go next. Yes, that's right, home phone then backup curling iron.

On the other side of the spectrum were their iPhones, which would be the last thing they'd give up. Second runner-up was our high-speed Internet service.

Studying the usage of one of these iPhones, my 15-year-old daughter averages sending and receiving 3,947 text messages per month and moves about half a gigabyte of data through our cell carrier's network per month. Her texting consumption peaked at right around 8,000 messages per month. Yes, I said 8,000. I can only assume a boy is the target of this unfathomable swarm of thumb memos.

The most interesting fact about these smart devices is that up to 90% of the data moved through them does not route through a cell carrier's

network. I mentioned my daughter moves about half a gigabyte of data through our cell carrier's network each month. Her iPhone, like other smart devices, will first try to link to a wireless hot spot, powered by a different broadband source, before it'll ship data over the cell carrier's network.

If up to 90% of her data consumption does not travel on the cell network, that means she is moving more than four gigabytes of data through that device in a given month. That's incredible! Yet in her mind, the iPhone is on the Internet, and she doesn't care where it comes from. It could be the school, McDonald's or any Wi-Fi hot spot.

I am fairly certain cell carriers today cannot ship all of the data mobile devices consume, especially when adding Kindles, iPads and other tablets to the never ending list of gadgets. They all rely on other data networks to handle nearly 90% of the data they utilize.

My point is that my daughter pays—or, I mean, dad pays—a hefty premium on just 10% of her total data usage. Our cell carrier gets a nice reward for such a small piece of what she uses. Fixed broadband providers like all of us haul the bulk of her usage for significantly less money, almost seven times less.

Being more than dumb pipe providers, our evolution is rapidly and inevitably moving us, the telcos, toward becoming virtual carriers. Cloud-based voice applications will soon replace traditional mobile voice service. One consumer, several devices, all linked together in the cloud.

This is our new land of opportunity. It's a place where communications will no longer be tethered to a single device, like an iPhone. ■



David S. Wolf is chief executive officer of Gardonville Cooperative Telephone Association in Brandon, Minn. He can be reached at dewolf@gctel.net.

NOW APPEARING ON A SCREEN NEAR YOU



The TV Everywhere Solution from NRTC

Make **MyTimeTVSM** from NRTC the cornerstone of your broadband strategy—and enable customers to watch today’s most popular movies and programs on their supported devices. It’s an affordable, scalable solution, with full support for online authentication, designed specifically for rural telcos.

- Access to an approved integration partner for HBO GO® and MAX GO®
- A gateway to programmers using Adobe® Pass and Akamai
- Fast subscriber credential updates and authentication for better customer service and management
- Advanced programming rights for TelcoVideo members and rights acquisition support available for all NRTC members

To learn more about MyTimeTVSM, contact your Regional Business Manager or email TV@nrtc.coop for a PowerPoint presentation, demo and Jump Start Checklist.



National Rural Telecommunications Cooperative
866-672-6782 ▪ www.nrtc.coop/MyTimeTV

Pushing Technology Trends

**HOW TELCOS ARE
STAYING AHEAD OF
THE (ADOPTION) CURVES**





BY ANNA HENRY

CONSUMER BEHAVIOR has been studied for years and has provided some valuable insights about purchasing behaviors. Now some rural telcos are leveraging those buying profiles to push technology and tap into profit potential.

Innovating Opportunity

One result of studying the consumer psyche generated what is known as a product diffusion curve. More recently it's been called the technology adoption lifecycle. It groups buyers based on how quickly they adopt a new product. Innovators are a mere 2.5% of consumers willing to lead the charge. At the other end of the spectrum are the laggards. Accounting for 16% of buyers, laggards are resistant to change and are prone to avoiding new products until traditional alternatives are no longer available.

The majority of consumers fall into three groups between the innovators and laggards: early adopters, early majority and late majority. These three groups share some common ground: What triggers buying behavior is recommendations from others familiar with the product. It is that tendency that has some rural telcos taking the lead to get the process moving. ▶



Valley Telephone Cooperative (Raymondville, Texas) found in one of its service areas many consumers needed to see the basic advantages of having Internet access. It responded by providing a free, two-hour class on things consumers can do using the Internet.

While not everyone is ready to trust buying online, David Osborn, general manager at Valley Telephone, explained that the class focused more on fundamental uses. “We don’t have any local newspapers, and the nearest Macy’s is 30 miles away. Dillard’s is about 20 miles. We showed them how using the Internet would allow them to see in advance what Macy’s and Dillard’s had to offer,” he stated. “From that, they saw how doing some preliminary Internet shopping could save them time and gas, so when they physically went shopping they’d know where to buy.”

“WE’VE FOUND CONSUMER EDUCATION DOES TWO THINGS. ONE, CONSUMERS BECOME MORE CONFIDENT, AND TWO, THEY WANT MORE BANDWIDTH.”

One of Osborn’s favorite sites is Google Earth. He explained that during the class, instructors would show attendees how they could use that site to find a hotel near

the Eiffel Tower so they’d know where to stay on their next trip to Paris. For most, it was a far-fetched idea. “Then we’d show them how the concept could more realistically be applied to their lives—say, finding hotels near Disneyland or near a place they planned to visit in Houston,” he explained.

Osborn added, “We’ve found consumer education does two things. One, consumers become more confident, and two, they want more bandwidth.”

Another Day, Another Curve

Most consumers that are past the Internet adoption curve are moving on to other technology adoption curves. These curves present telcos with revenue opportunities as well, but with the tech industry churning out new gadgets at unprecedented rates, keeping pace presents challenges.

Citizens Mutual Telephone Co. (Bloomfield, Iowa) is finding success through its new Funding Useful Employee Learning (FUEL) program created by General Manager Joe Snyder. He explained that even though the company was spending a lot of money on training, he wanted to be sure his employees were learning how and why customers were using technology.

FUEL allows employees to purchase a gadget of their choosing that uses data or voice service. The employee is allowed to keep the device and be reimbursed up to \$500 for the purchase. In exchange, during a monthly meeting the employee has to demonstrate to the staff what the

product does. An item qualifies for reimbursement only once, and all employees are given the opportunity to participate before previous participants can take advantage of the program again.

Employees have presented on gadgets such as an iPad 2, Nook, security cameras, a laptop, Roku, Slingbox and a smart TV. “It’s helped our employees get comfortable with the technology,” Snyder explained. “It’s also been successful in helping our employees understand that we’re not delivering a big pipeline, but something they [customers] can do with it.”

Snyder had another motivation to start FUEL. Citizens Mutual is an LG dealer and operates a retail store with items such as TVs, laptops, tablets and towers. “In some respects, it’s like the old way where we provided everything from the copper to the customer-premise phone,” he stated. “It’s been profitable, and [has] helped us show our customers how to use technology and that we are a full-service provider. The biggest thing was for customers to know we have an end-to-end solution.”

Snyder acknowledged that his company isn’t “the solution for everyone.” With a Wal-Mart and Best Buy “about 20 miles down the road,” consumers willing to drive can find a better price. “But a certain group of customers are willing to pay a bit more to know there’s someone here to help them. We also offer installation. Our town is out of Best Buy’s support area, so they don’t provide that service here.”

Snyder noticed another benefit: Customer service representatives (CSRs) are getting better at up-selling. Being more familiar with equipment has helped customer service representatives taking orders to ask questions and help customers realize what can be done. For example, if a customer has asked for 6 Mbps Internet service and has also said he wants to do gaming, the CSR is now more comfortable recommending 12 Mbps or 20 Mbps service instead.

Prior to the program, learning about new products was ad hoc. Snyder presented information about a Wi-Fi speaker he installed in his own home. He explained to his employees that while he lacks over-the-air reception there, he and his wife can now access Pandora on the computer and use the Wi-Fi speaker to listen to music anywhere in the house. During nonbusiness hours, he has been shown how an app allows a Slingbox to be used from a cellphone. (FUEL also will reimburse for apps.)

At Adams Telephone Co-Operative (Golden, Ill.), Chief Executive Officer Jim Broemmer shared that his plant supervisor has been provided with a Nest Learning Thermostat. It allows the supervisor to manage his energy usage remotely using a smartphone or tablet.

“We’re trying to introduce technologies to our employees because we see us getting deeper and deeper with customers because of broadband availability,” Broemmer explained.

Leading the Way

Broemmer also has formal plans for incorporating emerging technology in telco operations. At press time, he was poised to put iPads in the hands of the company's nine field employees. He believes the investment will be well worth it when use of the devices in the field creates discussions at customer sites.

He explained, "We are a communications company, and I think we need to be on the cutting edge to show how we use the technology. We're in the process of deploying a 4G LTE [Long Term Evolution] network, and they [technicians] need to be in the field promoting it and showing how technology can be used on a mobility basis."

Broemmer believes that approach will help with more than customer relations. He sees it saving time and money too.

The iPads will replace the laptops Adams' techs currently carry and use to process and clear service orders. "We're also evaluating virtual desktops, and when it's fully deployed, it will look like an application. They'll be able to go straight into our network from a customer premise and access all the information they could if they were sitting in our office," he said. He also explained that the virtual desktop solution is expected to free up the time other employees at the office currently spend helping to resolve on-site issues.

Valley Telephone Cooperative provides iPads to its board members. Osborn explained that by using myboardpacket.com it's no longer necessary for the company to print and mail 100-page hard copies. Instead, directors receive emails on their iPads letting them know that the information's been updated and can be viewed once they log in.

The company's boardroom is equipped with new technology as well: a projector that runs with an iPad via Wi-Fi. One of its benefits is that it allows financials in a PowerPoint presentation to be sent to the iPad, opened and flipped through as though one were perusing a magazine.

Putting solutions like this in the hands of board members has the potential to groom innovators who can talk about the technology with other key members in the business community.

In 2012 Valley Telephone opened eight exchanges, and it plans to open three more this year. With this growth, the financial benefit of putting technology in the hands of employees has been significant.

Osborn explained, "To keep pace with growth, we were looking at hiring 65 to

70 people. Given our new systems and the efficiency we've gained, we now think we can probably just hire 23 and relocate some employees. That will allow us to hold expenses down and get \$12 million out of the new exchanges.

"By next summer our goal is that service reps can call up and get CPNI [customer proprietary network information], billing information, accounts receivable status, trouble history and fiber infrastructure," he continued. "It's a piece we're having programmed to provide service reps with a one-stop view of the customer."

Future Curves?

From smartphones to streaming content on televisions, the Internet continues to create new markets for applications and, in turn, create product adoption curves. To optimize sales, telcos willing to take the initiative to learn about new technologies are well positioned to help customers in each stage of the adoption curve see the benefits of using the emerging products, and that, in turn, creates opportunities to sell consumers new or enhanced telco services. ■

Anna Henry is a freelance writer. She can be reached at Headlineink@comcast.net.



The advertisement features a central graphic of several interlocking puzzle pieces. One prominent piece is dark blue and shaped like a person, with the text "COMMSOFT" in white, bold, sans-serif font across its chest. Other puzzle pieces are light gray and labeled with business terms: "Campaign Management", "Service Activation", "Billing", "Business Intelligence", "Web Self-Care", "Workforce Management", and "ACC". Below the puzzle pieces, the text "OUR SOLUTIONS FIT YOUR BUSINESS NEEDS" is written in large, bold, orange and blue letters. Underneath that, a blue banner contains the text "OVER 25 YEARS OF BSS/OSS EXPERIENCE" in white. At the bottom left, the phone number "1.888.COMMSOFT" is listed, and at the bottom right, the website "WWW.COMMSOFT.NET" is provided.



BY RACHEL BROWN

Cellphone THEFT

Taking a Bite Out of "Apple Picking"



When most people hear the phrase “apple picking,” they conjure up images of a simple country activity, but big city law enforcement officials don’t envision an innocent pastime. Instead, they say it’s the street lingo for the theft of iPhones, iPods and iPads. Urban police departments around the country reported that in 2011, smartphone and cellphone thefts made up 30%–40% of all robberies in major U.S. cities, totaling as many as 27,000 thefts.

In urban areas, it’s not uncommon for thieves to snatch the devices (and not just those with the Apple brand) out of users’ hands on crowded buses or subway cars and then jump off for an easy and quick getaway. In some cases, victims have been attacked and even killed while being robbed of their devices. Police consider it the modern-day version of purse snatching because a stolen phone is worth hundreds of dollars on the black market. Mobile security firm Lookout estimates that stolen and lost phones cost American consumers \$30 billion per year.

In rural areas of the country, the story is different.





A Call to Action

With more than 50% of all Americans now owning smartphones—and with that rate rising each year—the Major Cities Police Chiefs Association, which represents 60 U.S. cities, issued a declaration calling for action. That call was heard by politicians, the Federal Communications Commission (FCC) and the industry.

Sen. Charles E. Schumer (D-N.Y.) introduced legislation last spring to make it a federal crime to tamper with a phone's International Mobile Equipment Identity number. Since then, the bill has stalled in committee, and telecommunications lawyers said they doubt if it will be passed in the near or distant future. "The proposed legislation is being used to highlight the problem in hopes that the industry will fix it," explained Carri Bennet, managing principal for Bennet & Bennet, a communications law firm.

Tony Veach, an attorney with the same firm, agreed, adding that most companies would rather take voluntary measures than face regulations that force them into specific actions. "This is a noncontroversial issue," he said. "Most of the carriers view it as a pretty easy initiative to sign on to."

Working with the FCC, police departments, as well as handset manufacturers and operating system developers (which include Apple, Motorola, Qualcomm, Microsoft, Nokia and Research in Motion), CTIA—The Wireless Association, has coordinated a nationwide database to prevent reactivation of stolen phones. Currently, this database is only for GSM phones; by November, it should be expanded to include phones on the Long Term Evolution network.

Thus far, rural providers Cellcom (serving areas in Wisconsin and Michigan) and Nex-Tech Wireless (operating in central and western Kansas, as well as parts of Colorado) have joined with nationwide wireless providers AT&T, Sprint, T-Mobile and Verizon in the voluntary program.

"We encourage all carriers—large and small—to participate. The more that participate, the more successful it will be," said Brian Josef, CTIA's assistant vice president of regulatory affairs.

The other component of the antitheft initiative is educating consumers to report lost or stolen phones. A recent study by Pew Research Center, an independent opinion research group, found that 36% of urban residents have had a phone lost or stolen, and 29% of suburban residents have reported lost and/or stolen phones. This compares with 26% of rural residents who have experienced either a lost or stolen phone.

Aaron Smith, senior research specialist with Pew, said that the center was surprised that the percentages for suburban and rural areas were so similar. He added that, in this study, Pew did not further delineate between loss and theft.

More Loss Than Theft in Rural Areas

Rural crime expert Ralph Weisheit, professor of criminal justice at Illinois State University, said he doubts if rural theft rates are as high as urban or suburban theft rates. "Crime of all types is less prevalent in rural areas, but robbery represents the biggest gap of all because it requires the use of force to take something from somebody," he explained. "In a rural area, you're likely to know everyone, so it's easy to identify the perpetrator. On the other side, there's the guilt from stealing from somebody you know."

The only exception to that theory could possibly be rural tourist areas, Weisheit said. "I could see device theft being an issue in a rural tourism spot because somebody could steal from a tourist because that person is unlikely to have the time or resources to pursue the matter," he said.

But Angelika Senn—customer relations manager for Horry Telephone Cooperative (HTC; Conway, S.C.), which provides service in the Myrtle Beach area—said its incidence of stolen devices is very low. "The majority of HTC customers report cellphones as lost rather than stolen," she said, adding that of those reported stolen, it's typically thefts of high-end smartphones.

Educating Consumers

It's an educational process, said Johnnie Johnson, president and chief executive officer of Nex-Tech Wireless, a subsidiary of Rural Telephone, Golden Belt Telephone and Mutual Telephone. "Every phone operating system—whether it's Apple, BlackBerry or Android—has applications that allow customers to back up pictures, contacts and other important information," he explained. All of this data can be sent to the "cloud," or remote server. "If the customer finds the lost phone, all of that data can be restored. If the phone is lost for good, there are apps to wipe it clean."

Nex-Tech customers are also encouraged to put passwords on their phones so unauthorized users cannot tap into sensitive information, such as bank accounts, Social Security numbers and date of birth, Johnson said. He encouraged other rural telcos to take similar steps, as well as to join the antitheft initiative. "It's the right thing to do because it ensures that your customers are protected and have a great experience with your company," he said.

Brigid Riordan—director of public affairs for Cellcom, a wireless communications company that is a subsidiary of Nsight, which began operations as Northeast Telephone Co. in Pulaski, Wis.—agreed that joining the antitheft effort and training customers about security measures is another way that local rural providers can add value. "This type of consumer education helps differentiate the regional carriers from the nationwide carriers," she said. "We are the local choice. We're here to inform, educate and help our customers."

The sales process at Cellcom takes quite a long time, Riordan explained. "We want our customers to feel comfortable using their phones, understanding how they work, and making sure they understand how to protect their phones and the information that they have on them," she said. "We follow that up with email, on Facebook posts and through a portion of our website. Let's face it: People are busy and this is a topic they don't often think about."

HTC's Senn also said her co-op works to educate customers about safety precautions. "On the front end, HTC encourages customers to password-protect their phones," she said. During the sales process, customer relations associates also explain and demonstrate various safeguarding applications. "There are several options, including locking, remote tracking, remote wiping, Apple iCloud, Windows mobile apps and more."

As an authorized retailer of AT&T, HTC is participating in the antitheft initiative, which, the telco points out, is helpful not only in terms of combatting loss and theft but also in preventing fraud. "Customers may report stolen devices to receive new phones," Senn explained. "Through the block-listing database, HTC can limit the number of fraud cases."

Nex-Tech's Johnson explained that the antitheft effort is not a new concept but rather an expansion to deal with the explosive growth of users. "Back in the dinosaur days when people carried brick phones, there was a nationwide negative list as a safeguard in case a freight truck or train car carrying these phones was hijacked," he said, explaining that a "negative list" tracked which cellphones had invalid roaming information or unpaid bills, both of which signaled theft. "Now, it's been expanded from the manufacturers to the carriers."

Before, devices were tracked via the numbers on the subscriber identification module (SIM) cards, but thieves learned how to swap out these cards on stolen phones, put in new SIM cards and thus reactivate them for use. By tracking the phones via the numbers engraved into the devices and listing them in a nationwide database of stolen and lost phones, it makes it harder for thieves to recirculate stolen phones back into use.

Nex-Tech currently has its own data-

base of phones. "Once a nationwide database is set up, it'll be a simple matter of downloading and merging with that," Johnson said. There likely will be a small subscription fee to manage the database once the database is fully online. "But we view that as a minimal cost of doing business." ■

Rachel Brown is a freelance writer. She can be reached at rachelsb@aol.com.



FOCUSED ON OUR CUSTOMERS, POSITIONED FOR THE FUTURE.

Our commitment to serving rural America has never been stronger than it is today. We've been here for over 90 years and we're not going anywhere. We remain dedicated to the rural communications industry and proud of the strength and spirit of our customers.



800-542-8072
www.cobank.com

Proud Member of the Farm Credit System 

How the Era of MACHINE-TO-MACHINE COMMUNICATIONS Is Changing Telecom

BY MASHA ZAGER





In a farm in central Kansas, a farmer monitors his farm from the comfort of his office. Hundreds of wireless sensors keep him apprised, via his computer, of the temperature and moisture levels in his fields. Responding to what the sensors tell him, he clicks his mouse to adjust an irrigation pivot point and redirect the flow of water. Because he no longer has to drive around fields checking on pivot points, he can save on fuel and labor—and deliver just the right amount of irrigation to every field at all times.

Like many others, this farmer subscribes to an application called WagNet that is supplied by AgSense, a Huron, S.D.-based company. Though the farmer may not realize it, AgSense relies on cellular connections from Nex-Tech Wireless, a mobile operator owned by three rural telcos, to transmit sensor data from the fields to its online database. AgSense contracts with a number of mobile operators in different areas, paying a fixed amount for each connected device, and it resells their connectivity as part of the WagNet service.

Nex-Tech Wireless, AgSense and the Kansas farmer are all on the forefront of a revolution that promises to profoundly affect both the telecom business and the role of the Internet in people's lives. The number of landlines peaked more than a decade ago, and the number of cellular lines is nearing its saturation point—the United States already has more cellphones than people. However, devices still remain to be connected to communications networks. Unlike the number of people, the number of devices is unlimited.

A simple, low-cost sensor can be attached to almost anything that needs to be monitored, and it can be programmed to send information to its owner or to control machinery.

The so-called "Internet of Things"—according to Techopedia, "a computing concept that describes a future where everyday physical objects will be connected to the Internet and will be able to identify themselves to other devices"—made up of machine-to-machine (M2M) connections already includes more than 2 billion devices worldwide, of which about 146 million are connected to cellular networks, according to a study by Machina Research. By 2022, Machina forecasts there will be 18 billion connected devices, 2.6 billion of them cellular, and annual revenues will rise from \$200 million to \$1.2 trillion.





For more on M2M applications, go to the "Online Exclusives" section of www.ruraltelecom.org.



This rapid growth presents tremendous opportunities for telecom companies. However, there are still challenges for telcos in general and for rural telcos in particular in taking advantage of these opportunities.

The World of M2M

In general, the "machines" in an M2M system consist of sensors in the field and a Web-enabled server that collects, processes and acts on data from the sensors. Sensors attached to moving objects (cars, tractors, cows) or fixed outdoor objects (silos, irrigation pivot points) usually communicate via cellular data networks or Wi-Fi; sensors attached to objects in and around houses (thermostats, door locks, lights) or business premises (gates, perimeter cameras) are more likely to use low-power wireless protocols such as Z-Wave or ZigBee and connect via on-premises gateways to the wired broadband network. Thus, both mobile and wired network operators have M2M opportunities.

Serving unmanned devices is more complex than serving people. As Kurt Schaubach, chief technology officer of the National Rural Telecommunications Cooperative (NRTC), explained, "Devices don't have the ability to manage data consumption, and they don't have someone on the other end of the line to tell you there's a problem. They need tools and capabilities in place to do this more actively on behalf of the customer, who isn't as directly involved in managing devices."

Telecom carriers must either put software and processes in place to handle those functions or else engage with third-party organizations such as AgSense that buy connectivity in bulk, resell it and manage the connections. Most such resellers, according to Schaubach, specialize in a particular vertical market, such as meter reading, home security or automobile telematics.

However, although large providers have invested substantially into M2M capabilities over the last two years, rural telcos have encountered difficulties negotiating deals with third-party enablers. Aaron Gillespie, carrier relations supervisor for Nex-Tech Wireless, explained that, while most of these companies typically look for commitments of 10,000 to 20,000 customers before striking a deal,

"it would be tough for us to find a thousand customers." (Nex-Tech Wireless has about 500 subscribers signed up for AgSense, its most widely used M2M application.)

Even when negotiating as part of a buying consortium—Nex-Tech Wireless is a member of the Associated Carrier Group—Gillespie said, "It's hard for us to get a foot in the door."

In addition to farmers using AgSense, Nex-Tech customers include energy companies that use M2M applications to monitor wind turbines, check the status of oil wells and oil tanks, and monitor power-generation equipment. In these cases, the customers themselves initiated the necessary arrangements with application providers. "We stepped back and they did the heavy lifting," Gillespie said of the wind-farm operator.

Schaubach thinks telcos could take the initiative to find platform partners and develop similar specialized applications for local enterprises. For example, he said, if the biggest business in town is petroleum, a telco could "go to a big petroleum interest, charge \$30 per month per derrick, and get a couple of thousand connections—and that could be a pretty good business." NRTC is hoping to help telcos expand their M2M opportunities in this way, he said.

Home-Automation Applications

Rather than pursue specialized vertical applications, many rural telcos—both wired and wireless carriers—are looking at home monitoring and control as the entry point into M2M. These applications include energy controls, lighting controls, home security and video surveillance. (Many of these can be used for small-business premises as well.)

Home-automation applications present several advantages: First, even small markets have many potential customers. Second, many telcos have historically offered security monitoring services, and home automation is seen as a natural follow-on. Finally, and most importantly, there are third-party enablers for these applications that are willing to deal with smaller telcos.

One of these companies is Clear2there, an Oklahoma City-based company that began as a video surveillance provider, expanded into Internet-based video storage and recently developed a flexible M2M platform that easily accommodates a variety of sensor devices in addition to video cameras.

Craig Steen, Clear2there's president and chief executive officer, said, "We're having a lot of success in the Upper Midwest, where retirees go south for the winter. Typically, when these snowbirds went to Florida, they would disconnect their broadband service or go on a vacation plan. Offering them a smartphone solution gives them the ability to know if there's water in their basement or the furnace has gone off ... [and is a reason to] keep year-round broadband connectivity."

Badger Communications (Durand, Wis.), a distributor of





telco equipment owned by a group of rural telcos, works with Clear2there in the Upper Midwest to help its member telcos enter the M2M business. Cliff Albertson, Badger's executive vice president and general manager, said more than a dozen Wisconsin and Minnesota telcos are actively investigating the Clear2there solution. Many are preparing to launch the services after receiving positive responses from demonstrating a pilot kit to potential customers.

Jamie Goldsmith, marketing manager for Richland-Grant Telephone Cooperative (Blue River, Wis.) and La Valle Telephone Cooperative (La Valle, Wis.), said both those companies, with help from Badger Communications, are installing the Clear2there platform and preparing to market home-automation services. The companies' service areas are popular second-home locations for city dwellers, and even full-time residents include a number of what Goldsmith called "techie people with spendable income." Any of them, he said, would like to be able to turn on their thermostats and lights remotely, whether they're driving up to their front doors or 200 miles away in the city. Being able to let a delivery person into a house remotely, watch the delivery via an Internet camera and have the door lock when the person leaves is also a great convenience.

Goldsmith is still developing marketing strategies for the service, both in and possibly beyond the cooperatives' service areas. He is trying to locate the "sweet spot" for pricing that will allow the cooperatives to recoup system costs without scaring potential customers away. However, he said, the revenue from seasonal customers' keeping their broadband connections year-round may be more important than the potential profits from the home-automation service itself.

The Future of M2M

The catalyst for cellular M2M, said Schaubach, will be the widespread adoption of LTE technology. Under the current release, LTE is too expensive for M2M communications; the new specification will have the capability to support M2M with chips that can be produced at very low cost; the cost per bit delivered over LTE networks also will be very low.

"Until we can deliver M2M at a price point that has mass-market appeal, it's a specialized application," Schaubach said.

Masha Zager is a freelance writer. She can be reached at mashazager@bridgewriter.com.



**50 YEARS OF DEDICATION. 50 YEARS OF CONSISTENCY. 50 YEARS OF RELIABILITY.
50 YEARS OF RELATIONSHIPS.**



**THANKS TO YOU NTCA, AND TO YOUR MEMBERS
FOR MAKING THESE YEARS SO REWARDING.**

2673 YALE AVE MEMPHIS TN 38112 WWW.PTSUPPLY.COM YOUR SUPPLY CHAIN PARTNER

The rules have changed.

Eligible Telecommunications Carriers (ETCs) receiving high-cost USF support are faced with complex new service and reporting requirements. How you respond will determine whether your company is around five years from now.



Fortunately, you can turn to GVNW's regulatory compliance team to manage all of the aspects and complexities of both Federal and State compliance requirements. Give us a call today to assure that you receive the maximum compensation for the service you provide to your customers.

GVNW's Transformation Services

- Strategic, Network, and Services Planning
- Local Benchmark Rate Evaluation & Implementation
- 5-Year FCC Service Quality Improvement Plans (The 5-Year Plan)
- Intercarrier Compensation Analysis and Forecasts
- Corporate Financial Management Support
- Regulatory Compliance Reports
- Mapping Services
- Regression Studies
- Internal Board and Staff Training Program
- Company Education & Communications Program

MIDWEST DIVISION

Colorado Springs, CO

719.594.5800

Springfield, IL

217.698.2700

WESTERN DIVISION

Tualatin, OR 97062

503.612.4400

SOUTHWEST DIVISION

Kerrville, TX

830.896.5200

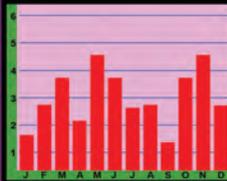
GVNW.com



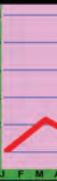
Scan with your smartphone to learn more about our services.



CONSULTING



BUDGET



R

LATENCY BLASTER



**DOWN
LOAD
SPEED**

USERS



BY CHRISTIAN HAMAKER

electronic gaming was once thought of primarily as a solitary activity. Ataris, other gaming consoles, and even video games at the local arcade were usually played by an individual whose biggest form of competition was the previously recorded “high score” for that particular game.

Times have changed, and the gaming industry has changed along with them.

In recent years, game systems such as the Wii have revived home gaming and become cash cows for the industry, but as with other forms of “traditional” media like music and movies, consumers have begun shifting their preference for the gaming experience to the online world.

That shift has given rise to the social gamer—a telco customer who plays video games with other players who are usually in remote locations. That

means telcos need to provide the bandwidth and connectivity necessary for a player to respond quickly to what the other players are doing. If not, the customer’s game character might end up shot, killed or otherwise dispatched, leaving the telco customer disenchanted with his experience.

How can rural telcos keep their gaming customers happy? 

TELCOS TACKLE Latency as Social Gaming Grows





SOCIAL-GAMING FACTS

- 1 Consumers spent \$24.75 billion on video games, hardware and accessories in 2011.
- 2 Digital content brought in \$7.3 billion in revenue in 2011, accounting for 31% of game sales.
- 3 The average U.S. household owns at least one dedicated game console, PC or smartphone.
- 4 The average game player is 30 years old and has been playing games for 12 years.
- 5 The average age of the most frequent game purchaser is 35.
- 6 Women over the age of 18 represent 30% of the game-playing population, while boys age 17 or younger represent 18%.
- 7 Sixty-two percent of gamers play games with others, either in-person or online.
- 8 Thirty-three percent of gamers play games on their smartphones, and 25% play games on their handheld device.

SOURCE: ENTERTAINMENT SOFTWARE ASSOCIATION, [HTTP://THEESA.COM/FACTS/INDEX.ASP](http://theesa.com/facts/index.asp)

More Bandwidth, More Challenges

Social gaming is increasingly popular. Research firm Nielsen reported gains in gaming between 2008 and 2011, with online games now the second most popular online activity, ahead of email. Only social networks and blogs account for more time spent online. The research firm also reported that teens spend twice as much time as other customers playing games during primetime TV hours.

To have a satisfactory experience, those gamers need a fast connection. Online gaming requires bandwidth, and that means telco networks need to provide the speeds necessary to accommodate today's gaming needs. And that demand isn't just one-way.

"We are experiencing not only the growing demand for higher download speeds, but it is also becoming more essential for higher upload speeds," said Mike Akers, chief technology officer at UNITEL (Unity, Maine). "Traditionally gamers have requested larger download and upload speeds, the larger the better. Due to today's social games being graphically intense, integrated with players all over the world and using BitTorrent type connections, the larger speeds are translating to a more satisfied customer base."

But there's more to the story than bandwidth and connection speeds. The higher the level of action a game has, the more quickly the data must move across the network. The time it takes data to move across the network is known as latency. Although many rural telcos have spent years converting copper networks to fiber, thereby increasing the bandwidth they can provide customers, latency remains a challenge.

"We've seen increasing bandwidth caps among all the major players over the past couple of years, but the real test is how much can be done to actually improve latency," said Kevin Tillmann, senior research analyst at the Consumer Electronics Association.

Many telcos have upgraded their networks to provide fiber to the home, and that, in turn, has made for a hap-

pier experience for customers who are spending more time online. But improved capacity hasn't solved the latency problem, which has persisted as games have increased in sophistication.

"We don't generally have complaints about bandwidth in total," explained Derrick Bulawa, chief executive officer and general manager at BEK Communications Cooperative (Steele, N.D.). "The gamers that are really sensitive to network performance are concerned about latency. They're doing military games, shoot-em-up games, team competitions and things that require really good response across the network. Otherwise they get shot before they see the guy that's shooting them."

Satisfactory Speed

Rural telcos interviewed for this article said they are able to deliver satisfactory speeds to customers who live in areas with fiber to the home, but other customers present challenges.

Kris Whitman, manager of network operations at GVTC (New Braunfels, Texas), said his company delivers download speeds of 80 Mbps and upload speeds of 20 Mbps to customers in its fiber territory, but customers that rely on the cable portion of GVTC's network sometimes must exercise patience.

"We know broadband demand is up all across the board, whether you're a social gamer, using multiple devices in the household, using a tablet, working from home, things of that nature," Whitman said. "We're better able to handle gaming customers on our fiber network, but when it comes to our cable-modem network, it's a shared network. There are more restrictions, and there's a less satisfying experience."

That doesn't mean GVTC isn't addressing the problem. It's implementing DOCSIS 3.0 technology for the cable modem portion of its network. "That's going to allow us to alleviate the congestion that comes and then also spread out the network, so to speak, and put fewer people on one pipe at a time," Whitman said. "That's going to increase speed and usability."

Bruce Forey, communications manager at GVTC, added that the company's fiber network, while robust, can be upgraded as needed. For now, the company's speeds are meeting most customers' needs.

"The way the fiber network is now, we feel pretty good about the overall operational efficiency of it," Forey said. "When it comes to fiber, that's one of the advantages. You have a dedicated line, higher upload speeds, faster download speeds. That's why the fiber network is optimal for gaming. Latency is a problem if you're running your games off another network."

Customer Complaints

Customer complaints are part of the telecom business, and gamers, although a relatively small part of a telco's

customer base, can be quick on the draw when they experience a problem. Rural telcos, known for their superior customer service, have learned how to solve those problems where they can—and deliver hard news when they can't address the problem immediately.

Often the problem is on the customer's end, and the telco can quickly diagnose—and remedy—the problem.

"Any latency gamers experience is outside our network," BEK's Bulawa said. "We don't introduce any latency. Generally, when we hear those complaints, it happens in stages. They'll say, 'I was gaming and I ran into this problem. I'm getting killed before I see who's killing me.'"

BEK first does a speed test from the gamer's computer. "The problems are more often in the home, not in our network," Bulawa said. "If we don't see the results within our network that we expect, we start to pick apart the network. In that process, we go in there and find out they're going through a router that's got a PC on it, and that PC might have a virus on it. Or they've daisy-chained a couple of routers together through a switch. So we go out there and say, 'You've got to rewire this or we'll rewire it, and here are the costs.'"

Future Demand

For now, rural telcos—especially those with fiber to the home—can give most of their gaming customers a good experience.

"Our fastest fiber is unbelievably fast, but the demand for that speed is not anywhere near the point where we need to consider increasing it to meet further demands," GVTC's Forey said. "Of course, we're never satisfied. We do get feedback, and we're always looking for ways to improve and make our system more robust. But we do feel pretty good about our current situation in meeting demands of gamers and heavy broadband users in the household."

For Bulawa, the customer experience, regardless of how customers use the network, is crucial to his telco's survival.

"We take a philosophical position that the cost of bandwidth is dropping faster than usage is growing," Bulawa said. "I want to make sure customers have a good experience. Therefore I don't restrict bandwidth, and I don't increase latency. I make sure customers have what they need so it's all a better product. It's to our benefit to

have the best performing connection in the home, whether it's for a download, our own IPTV or a gaming product. If we can have the best connection—I didn't say the cheapest—but if we can have the best connection, we think we'll have the best longevity."

Christian Hamaker is managing editor of Rural Telecom. He can be reached at chamaker@ntca.org.

www.hickorytech-is.com

CAPTURED REVENUE. PROVEN RESULTS.



HickoryTech SuiteSolution[®]

COMMUNICATIONS BILLING + CUSTOMER MANAGEMENT + OSS



When you launch a new product or service, how confident are you that it is being billed correctly? SuiteSolution provides the audit tools to make sure that every service being delivered today is being billed correctly.

Stop revenue erosion. Support for IP and legacy systems. Bill any combination of new and existing services. Eliminate duplicate data entry, automate multi-step manual operations, accurately invoice every billable service, including CABS.

Discover the value of your customer database. Develop targeted marketing strategies. Build brand equity and cultivate add-on sales through gold-standard customer support. Support that keeps your customers coming back for more.

HickoryTech
INFORMATION SOLUTIONS

Call 877.974.8325

WIRELINE | WIRELESS | BROADBAND | DATA | VIDEO

RURAL TELECOM INDUSTRY MEETING & EXPO

LAKE
BUENA
VISTA,
FLA.

BY
LAURA
WITHERS

The first-ever Rural Telecom Industry Meeting & EXPO kicked off with a bang, as nearly 2,500 attendees gathered in Lake Buena Vista, Fla., for the historic joint meeting hosted by NTCA and OPASTCO.

The meeting officially got under way on Sunday, February 3, and the event culminated on Wednesday, February 6, when members of NTCA and OPASTCO voted to unify the two organizations. As of March 1, the new organization will be known as NTCA—The Rural Broadband Association. During the meeting's first full day of events, NTCA and OPASTCO members filed into the Walt Disney World Dolphin Hotel for committee meetings and concurrent sessions exploring mobile apps, cloud computing and smart technologies. Telco employees and directors had an opportunity to hear from industry experts and to share ideas with their peers. The day closed in true Super Bowl Sunday fashion, with a welcome reception and party in the hotel's vast ballroom featuring four big-screen TVs airing the game between the Baltimore Ravens and San Francisco 49ers.

NTCA and OPASTCO leaders Sandy Vandevender, Mike Osborne, Terry Force and Rhonda Armstrong took the stage during the Opening General Session on Monday, February 4, which also featured speeches from OPASTCO President John Rose, NTCA Chief Executive Officer Shirley Bloomfield and longtime NTCA General Counsel Jim Bass, who was honored for his more than 50 years of service to the association.

Bloomfield updated attendees on the association's advocacy efforts, including recent successes correcting certain aspects of 2011 Universal Service Fund (USF) reforms, and provided some guidance for the future, telling the crowd that rural stakeholders must work together to "make rural cool again" and urging telcos to "find the time to strategize."

FCC Commissioner Jessica Rosenworcel also addressed the crowd, drawing applause when she called the 2011 USF reforms "extremely complex" and vowed to continue working to simplify the rules to make them more workable for rural telecommunications providers. Rosenworcel also provided an update on the FCC's efforts to address rural call

completion issues with additional data retention requirements on originating long-distance carriers.

Business expert Tim Sanders shared his insights on the people side of business and the importance of building strong professional relationships. A panel of industry experts from Google, Cisco and Hitachi finished the session by speculating on what the future might hold for cloud computing, smart grid technologies and mobile applications.

Tuesday, February 5, brought another packed schedule, with region caucus meetings and the Second General Session featuring Martin Lowery, executive vice president of the National Rural Electric Cooperative Association, and a panel discussion about rural advocacy in the IP-enabled world led by Stuart Polikoff, OPASTCO vice president of





regulatory policy and business development. Polikoff was joined by Michael Romano, NTCA senior vice president of policy, Jennifer McKee of the National Cable & Telecommunica-

tions Association and Hank Hultquist of AT&T. Following an EXPO Luncheon and Open House, attendees took advantage of afternoon learning forums exploring aging in place, broadband adoption strategies and rural small business trends. The day concluded with a trip to Universal Studios' CityWalk and a show by the famous Blue Man Group as supporters of the Telecommunications Education Committee Organization (TECO) participated in the political action committee's annual fundraiser for the PAC's administration fund.

Prior to the separate business sessions for NTCA and OPASTCO members, attendees were given an economic update from Sheldon Petersen of the Rural Telephone Finance Cooperative and an engaging presentation by inspirational author and speaker Sally Hogshead during the Closing General Session on Wednesday, February 6. Hogshead talked about what she calls "the art of fascination," a scientific system to influence others based on hardwired patterns in each person's brain, sharing with the audience how their own personality traits can be better leveraged to improve relationships with co-workers, employees and customers.

An awards banquet featuring entertainment by iL CiRCo closed out the meeting.

EXPO '13 HEATS UP IN FLORIDA

BY CHRISTIAN HAMAKER

Ahead of a successful vote to unify their organizations, NTCA and OPASTCO members gathered at the Rural Telecom Industry Meeting and EXPO in Lake Buena Vista, Fla. The event brought together the rural telco industry not only for educational sessions and networking, but also for an exhibition of the latest products and services aimed at the rural telecom sector.

Held at the Walt Disney World Swan and Dolphin Hotel February 4–5, the EXPO opened when new NTCA President Terry Force joined NTCA Chief Executive Officer Shirley Bloomfield and OPASTCO President John Rose for the traditional ribbon-cutting ceremony on February 4.

Technology Awards

Leaders in the independent-telecom services sector exhibited state-of-the-art technologies at this year's EXPO. Booth awards, based on booth size, went to Calix (20'x20' booth exhibitors), V3 Systems (10'x20' booths) and Frontier Communications (10'x10' booths).

NTCA also presented award ribbons to three exhibitors in the "Hot Technologies" EXPO area. GetWireless took first place, followed by Mapcom Systems and NeoNova Network Services.

NTCA recognized first-place winner GetWireless for



its AirTouch U250 SmartLinX, which connects to a landline and wireless router and allows landline calls to be made using a smartphone.

Mapcom Systems took second place for its M4 Mobile Tech, which delivers to one device—laptop, tablet or smartphone—information

from its M4 Workforce, M4 Inventory and array of M4 modules designed specifically for field technicians. Techs can use a Web browser to manage daily activities online and view trouble tickets, service orders and maintenance priorities geographically.

NeoNova placed third with its app portal, which it said opens a new world to telco subscribers while minimizing the fear of buying on the Internet.

On February 5, telco managers and telco employees downloaded an EXPO Treasure Hunt, which they used during the EXPO luncheon to follow a treasure map through the exhibit hall. iPads were awarded to three people who completed the task.

The products and technologies on display at EXPO '13 showed that the industry is staying on the cutting edge of customer service, tech support and smartphones.



“How can I help you?”

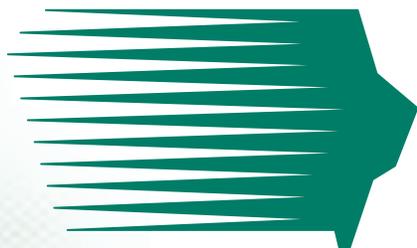


It's a win-win
with INS' Customer
Support Services.

Save on operating
costs as your
customers enjoy
more convenience!

24/7/365 call center
specializing in:

- Internet Technical Support
- Video Technical Support
- Voice Technologies Support
- Answering and
Ticketing Services
- High Resolution Rates



INS

IOWA NETWORK SERVICES

800-CALL-INS
IowaNetworkServices.com

[Let's Chat Live]

CompTel (Booth #316)
IP Possibilities (Booth #414)

AWARD RECIPIENTS



Jim Daubendiek accepts the OPASTCO Chairman's Award on behalf of his father, Eugene (Gene) Daubendiek, for his many contributions to OPASCTO and the rural telecom industry during his lifetime. Jim spoke movingly about his father who had recently passed away. Pictured left to right, Jim Daubendiek, Jefferson Telecom (Jefferson, Iowa) and Roger Nishi, Waitsfield and Champlain Valley Telecom (Waitsfield, Vt.) and chairman of OPASTCO's Awards Committee.



Paul Berg, chief plant officer for Dakota Central Telecommunications (Carrington, N.D.), was honored with the Key Employee Award for his significant contributions to the company's growth and success since 1980. During Berg's tenure as chief plant officer, Dakota Central became a leader in the independent telecom industry, particularly in FTTH and IPTV deployments. Berg also has taken an active role in helping other telcos across the state and nation roll out FTTH, spending countless hours on the phone and giving facility tours to other telcos that want to learn from his experience and success.

Tanya Sullivan, president of Plus One Strategic Communications, LLC (Arlington, Va.), was awarded the Associate Member Outstanding Achievement Award for her exemplary work with several NTCA member companies to promote the rural telecommunications industry.



Harry Thomas, board member and president of Venture Communications Cooperative (Highmore, S.D.), was honored with the Director Life Achievement Award for his 30 years of service on the company's board of directors. Over the past three decades, Thomas helped the telco tackle challenges and implement many important changes, including several strategic exchange purchases and diversifying the company with cable TV, IPTV, Internet and fiber to the home (FTTH).



Chief Executive Officer and General Manager David J. Herron of West Carolina Rural Telephone Cooperative (Abbeville, S.C.) was honored with the Manager Life Achievement Award for leading West Carolina to achieve unprecedented growth and technological improvements during his 26-year tenure.

Cassie Florez, business support specialist for Peñasco Valley Telecommunications (Artesia, N.M.), received the Public Relations Achievement Award for coordinating relief efforts aiding customers in the Little Bear Forest area of Ruidoso, N.M.



Athena Valdez, marketing manager for Peñasco Valley, was honored with the Special Achievement Award for using a childhood concept—a telephone made of two tin cans connected by a piece of string—to publicize issues related to Universal Service Fund reforms.



Several OPASTCO members were recognized with Leadership Awards for their chairmanship on committees. Left to right, Mike Osborne, board chairman, presented awards to Roger Nishi, Regulatory Policy Committee, Ron Laudner, Education Committee, Rhonda Armstrong, Membership Committee, John Granger, Associate Member Committee, Kurt Gruendling, Marketing & PR Committee and George Henney, Business Development Committee. The following individuals were honored with Leadership Awards but were not present to accept: Brian Cornelius, Legislative Policy Committee, Pete Holland, Finance Committee, Matt Schonlau, Technical Committee and Ron Strecker, Wireless Committee.



David Smith, a combination technician from Mid-Rivers Telephone Cooperative (Circle, Mont.), received the Heroism Award for delivering life-saving aid to victims of two different near-fatal auto accidents.



The Management Achievement Award was presented to O'Neal Miller Jr., chief executive, financial operations for Horry Telephone Cooperative (Conway, S.C.).



Roger Nishi, vice president of Industry Relations for Waitsfield and Champlain Valley Telecom, received high honors from Mike Osborne, general manager, Ace Communications, when he was presented with the Excellence in Grassroots Advocacy Award.



How to Act Like a Salesperson

Selling is the world's most personal profession—but not in the way you might think. In fact, many salespeople are downright superstitious. For some, it's the way they shake hands. Others are fanatical about punctuality, wearing certain jewelry or using a favorite pen.

Personal preferences are interesting, but certain actions may reap far more robust sales results.

The list is almost endless. It may be the only time of day to call for an appointment, interpreting a customer's body language or what to order when having lunch with a prospect. Success is all about following a salesperson's "personal rules." Break the rules and something goes wrong.

While all such personal preferences are interesting and sometimes even helpful, there are certain actions that may reap far more robust sales results. Here are eight to think about:

● **Recognize that every prospect isn't a potential customer.** Some may consider this a "negative thought" and choose to focus on the "positive." Always looking at the "bright side," however, can mean missing critical clues that are valuable in properly evaluating prospects.

"Reading" prospects correctly is essential to know how best to work with prospects, and to understand their needs and problems. The goal is not to "sell" the prospect, but to decide if, at some point, the prospect can or should become a customer. If the answer is no, then it's time to move on.

A salesperson's success depends on getting prospects right.

● **Invest in prospects.** While salespeople talk about "building relationships," their performance can tell quite a different story. Cultivating prospects isn't limited to spending time with them or even learning more about their goals and problems, both of which are necessary.

Salespeople often miss what is always clear to prospects: Prospects know you want their money. Most are not willing to say yes easily, particularly today.

One way to help overcome what we call "the dollar doubt" is by investing in our prospects. And why not? We expect them to invest in us.



What should you do? It may be as basic as investing time in helping to solve a problem, conducting a test, creating a mock-up or preparing a detailed report. If you do, you may pass the test.

Later, you can talk about the prospect investing in you.

● **Get relationships right.** There are many salespeople who seem to believe that becoming friends with their customers is the best way to solidify a business relationship. Some put more effort into the friend task than anything else.

Yet, there are indications that point in a different direction; namely, that *customers want to be treated like customers*. It's the combination of competence and performance that creates enduring customer relationships.

It's the same for salespeople.

● **Follow up faithfully.** Salespeople seem to find it quite easy to make promises to customers and prospects, but their performance is something less than 100%.

"Not to worry, it will be here in a day or two," the salesperson assured the customer. That was Monday and there was no word by Friday. The customer



A New Era for Rural Telecommunications

COLLABORATIVE, COMMITTED AND UNIFIED

NTCA–The Rural Broadband Association is the result of dedication and commitment by NTCA and OPASTCO members. With new energy and expanded participation, our unified membership will be a powerful, national voice for the rural telecom industry. From the halls of Congress to the floors of the Federal Communications Commission, our message will be heard and your stories told.

A new name and a new brand, but the same dedication to rural telecommunications:

- Strategic advocacy that advances rural telecom.
- Training and development resources that prepare your work force for the future.
- A powerful network of savvy peers who provide insight and ideas that you can leverage in your company.
- Access to staff experts on call for your questions.

You'll get the most out of your membership by participating.

Check out all the opportunities available to you.

Visit www.ntca.org for more information and access to resources, tools and industry experts.

placed a call. "Oh, yes. It should have been here. I'll check and call you back." A week later, she had not called. "She's out today. Let me see what I can find out."

"Poor follow-up" is near the top of everyone's list of mistakes salespeople make. It may do more damage than just about anything else. Why? Because customers never forget. "Yes, Don is a great guy, but his follow through leaves much to be desired. Just be prepared to remind him what he said he would do."

Success eludes salespeople who are follow-up failures.

● **Avoid the "hot potato" syndrome.** If there's a close second to not keeping promises, it's what happens after getting the order. Whether they're conscious of it or not, customers are particularly sensitive to even infinitesimal changes in a salesperson's behavior once the sale is made: "Will she be as attentive and responsive now that we've signed the contract?" or "Will he drop me like a hot potato now that I'm a customer?"

This is about just one thing: commitment. By making a purchase (the amount

By making a purchase customers make a concrete commitment, and they expect the salesperson to be equally committed.

doesn't really matter), customers make a concrete commitment, and they expect the salesperson to be equally committed. They're on the lookout for "moving on" indications, which translate into a feeling of being "dropped."

When this occurs, customers begin to doubt a salesperson's integrity by finding other ways to justify their belief that the person was interested only in getting the order.

● **Shape the way you're perceived.**

This has nothing to do with a salesperson's wardrobe, car or favorite restaurant. But it has everything to do with the way an individual thinks, particularly a person's knowledge and ability to identify and solve problems. In other words, it has everything to do with being authentic.

The objective is to avoid sending a prospect or customer mixed or misleading messages about you. Such confusion eventually leads to doubt.

First impressions are permanent impressions, which is why, at a first meeting, it's important to clearly formulate the impression you want the customer to have by the time the meeting ends.

● **Always make it right.** Granted, there are some customers who deliberately make it their mission to take advantage of salespeople. Yet, the adept salesperson can help avoid allowing such situations to become disasters by putting himself in the customer's situation.

For example, we all see what we want to see, which can be quite different from what was actually intended, particularly when terms, descriptions, dates and costs are involved. Written communications, including emails, are often so confusing that they open the door wide to misinterpretation. Voice mails are no exceptions, either. These can be huge problems.

To say that "issues" can arise is an understatement, so be prepared to make it right. The consultant sent an invoice to a new client who called and said, "I thought it was going to be half of that." A day later, the consultant responded, "I may not have made the price clear enough. What if we split the difference?"

Making it right is always a gain.

● **Never get comfortable.** A pervasive myth that circulates among salespeople (and others) suggests a time comes when we've "paid our dues" and we have a right to such rewards as more pay with less work, access to prestigious accounts, little or no prospecting and, of course, "special treatment," whatever that means.

Translated, this comes down to "the right to be comfortable." Nothing is in writing and no one talks about it, officially. Even so, it's what we expect, with each of us setting the timetable for when it should kick in.

It's a career killer because, inevitably, we begin to act as if the time has come to be comfortable.

In spite of what we may say or think, it's actions that determine the salesperson's destiny.

John R. Graham of GrahamComm is a marketing and sales consultant and business writer. He can be reached at johnrgraham.com.

cdg Smart Data Solutions
www.cdg.ws
1-888-234-4443

Billing for tomorrow's challenges ...TODAY

We've been preparing for tomorrow's billing challenges since 1970 by collecting billing and CABS revenue with the most efficient and precise invoicing systems available. We've worked with clients through FCC mandates and industry evolutions and built a reputation of accuracy and first-rate service. Our solutions have a proven record of providing results and staying ahead of the game when it comes to regulatory changes.

- ✓ Consumer and Carrier Access Billing
- ✓ Operational Support Systems
- ✓ Data Management
- ✓ Service Provisioning
- ✓ Customer Care

ADVERTISERS INDEX

	Advertiser	Telephone Number	Website
52	CHR Solutions, Inc.	713-995-4778	www.chrsolutions.com
21	CoBank	800-542-8072	www.cobank.com
17	CommSoft	888-CommSoft	www.commssoft.net
40	Communications Data Group, Inc.	888-234-4443	www.cdg.ws
27	GVNW Consulting, Inc.	503-612-4400	www.gvnw.com
31	HickoryTech	507-625-1691	www.is.hickorytech.com
2	Innovative Systems, LLC	605-995-6120	www.innovsys.com
35	Iowa Network Services	515-830-0110	www.iowanetworkservices.com
25	Mid America Computer Corp.	402-426-6222	www.maccnet.com
3	National Information Solutions Cooperative	866-999-6472	www.nisc.coop
13	National Rural Telecommunications Cooperative	703-787-0874	www.nrtc.coop
26	Power & Telephone Supply Co.	901-324-6500	www.ptsupply.com
44	QBE Farmers Union Insurance	800-669-0622	www.farmersunioninsurance.com
11	REDCOM	585-924-6500	www.redcom.com
7	Telcom Insurance Group	800-222-4664	www.TelcomInsGrp.com

in the **NEXT** issue

- **Packaging Power! How to Hook Customers and Reel 'Em In**
- **Mobile Strategy: The Key to Today's Marketing**
- **The Ins and Outs of No-Contract Cellphone Plans**

To submit article ideas, send proposals to the editor at publications@ntca.org.

Check out the Rural Telecom Solution Providers Directory at www.ntca.org.

Visit our website at ruraltelecom.org

The Rural Telecom website includes full-issue content for magazine subscribers and exclusive, online-only articles that can be enjoyed by all visitors.

FOR ADVERTISING INFORMATION, CONTACT LISA FREEDMAN AT 703-351-2089 OR LFREEDMAN@NTCA.ORG.

Protecting Your Property From Copper Thieves

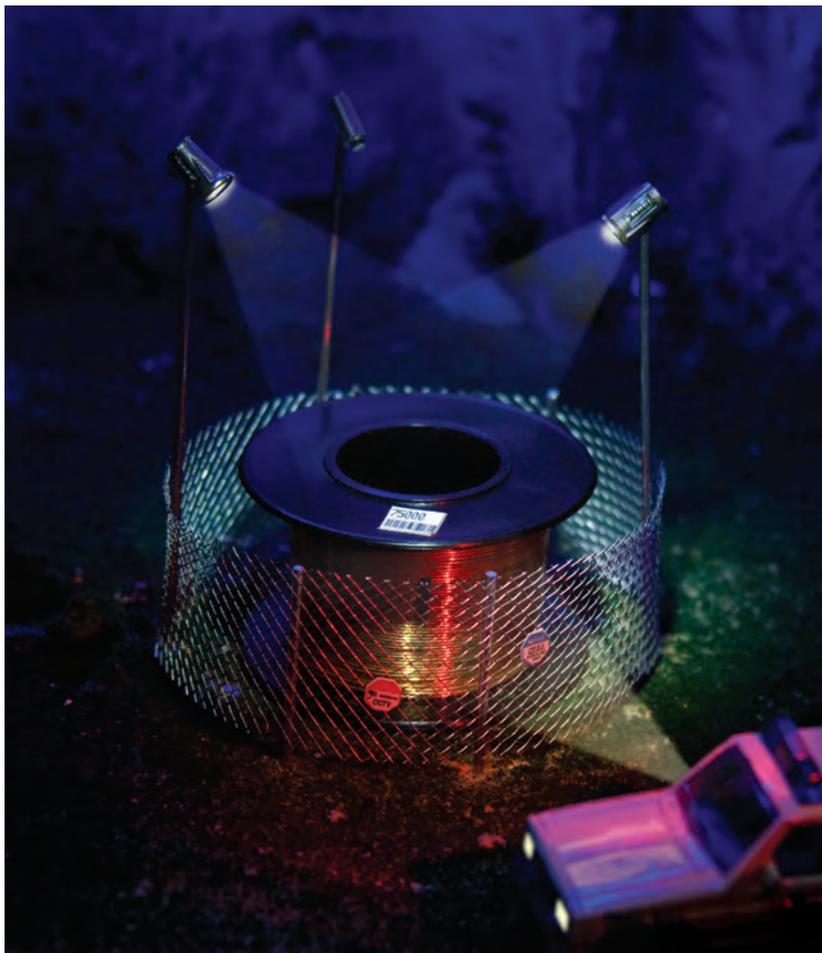
Theft of copper wire is occurring at an alarming frequency as the prices to resell it continue to rise. To a customer, this can lead to blackouts in your community. To the provider of telecommunications services, it can lead to service disruptions, as well as potential insurance claims, not to mention vandalism damage. Historically, most copper was buried, but that is simply not the case anymore. Thieves are creative and often target telecommunication towers, poles with lines, and even communities where you are deploying the triple play.

The Department of Homeland Security issued a warning stating that copper theft is a threat to critical homeland infrastructure.

Think it's not a big deal? An unclassified intelligence assessment by the FBI states that "copper thieves are threatening U.S. critical infrastructure. Targets have increased since 2006 and present a risk to both the public safety and national security." The problem is so severe that the Department of Homeland Security issued a warning stating that copper theft is a threat to critical homeland infrastructure.

The price scrap dealers pay for copper has increased greatly in the last few years and varies from state to state. For example, in 2001, the average price paid per pound was \$0.70. Current averages are more than \$4 per pound. This huge increase makes copper an easy target for thieves trying to make a quick buck. Added to the enticement is the fact that it is impossible to protect/guard copper when your plant is deployed throughout your communities and not just stored in your warehouses. Often during routine inspections or when a customer calls with an outage, the rural telco discovers that thieves have hit their poles/lines looking for copper.

Thirty-three states have enacted laws that regulate the sale of scrap copper. (Go to www.NCSL.org for more information on the specifics in your state.) Arkansas and Utah assess a fine for damaging property during the commission of copper theft; South Carolina and West Virginia classify copper theft as a misdemeanor; Oklahoma defines it



as a felony punishable by fines/imprisonment; and in North Carolina, it's unlawful to transport more than 25 pounds of scrap copper at one time. Most scrap metal yards are required to ask for proof of identification and vehicle registration before mailing the seller a check (instead of instant cash) to his or her home address for the sale. That has certainly helped deter thieves.

A few other measures can help protect your plant from copper theft:

1. Reduce the size of the target. Reduce the amount of copper stored at the warehouse/yard.
2. Make the target harder to attain. Increase security and make it harder for theft to occur.

Preventative Measures

● Keep only what you need.

Implement "just in time" ordering of copper wire spools. Order copper wire in quantities as it is needed.

● **Internal controls.** Let employees and contractors know that you are paying attention to the quantity of copper and its deployment schedule, and that you are doing periodic audits.

2013 Telecom Executive Forum

March 24–26

Hyatt Regency Lost Pines Resort | Austin, Texas

Driving Revenue Growth in a Changing Environment

Learn from your peers.

Attend the **Telecom Executive Forum (TEF)**, the *only* exclusive event for telco executives, to discuss the steps you need to drive revenue in a changing environment.

Share your insight.

To succeed, telco executives need to uncover revenue opportunities and diminish barriers. Fresh ideas are needed to move your organization into the future. It is up to you to lead through innovation and to identify key elements that increase your profit margin.

Register your executive team at
www.ntca.org/TEF

● **Job site security.** Do not leave copper wire spools at a job site overnight. Even fiber optic cable spools should be returned to a secured area in the evening or weekends. Thieves not knowing the difference may steal it or destroy it thinking it is copper.

● **Lock it up.** When possible, copper wire spools should be stored inside a locked warehouse building or your yard. The yard area should be arranged such that it would be difficult to get a vehicle anywhere near the stored cable. Remove keys from equipment used for moving wire spools. Keep the keys in a locked cabinet. Some companies make traceable microchip identifiers that adhere to copper wires/spools.

● **Heighten security.** Warehouse buildings should be equipped with a central station burglar alarm system. If there is a breach in the security system, hire a security guard service until the system has been returned to service. Install security cameras around the perimeter of the warehouse and open yard areas. Make sure the video recording time is set to the maximum amount of time the protected area is idle.

● **Fence it up.** Open yard areas should be fenced with a central station security system connected to the fence. In the event the fence is cut, the alarm company is notified. Install security cameras around the perimeter of the warehouse and open yard areas. Make sure the video recording time is set to the maximum amount of time the protected area is idle.

● **Alert the local police department for increased patrols.** In the event of a line outage, alert the local police department. An outage may not be the result of a routine equipment failure. Some thieves have been known to strip copper lines off of utility poles.

No one measure will eliminate copper theft, but taking steps to reduce the risk of theft; engaging local community leaders and law enforcement; and using sound security practices and appropriate technologies is your greatest chance for preventing future theft. ■

Marilyn A. Blake is chief operating officer at Telcom Insurance Group. She can be reached at mab@tig.com.

From Hi-fi to WiFi – We believe in risks worth taking.

For more than 40 years, we've been a leading partner in the ever-changing telecommunications industry. We use our expertise to design insurance plans that help our clients build faster, stronger networks across the country. Where others see change, we see opportunity. **We're QBE Farmers Union. We make things possible.**

**Get in touch
for a free onsite consultation.**

800.669.0622 | farmersunioninsurance.com



QBE and the Links logo are registered service marks of QBE Insurance Group Limited. Coverages underwritten by National Farmers Union Property and Casualty Company, California Company ID #3078-3. © 2013 QBE Holdings, Inc.

NTCA's Exchange newsletter is now an integral part of Rural Telecom!

EXCHANGE

MARCH•APRIL 2013



ITC Members Approve Merger; Three Companies Become One

During the Interstate Telecommunications Cooperative annual meeting, members vote to unify three companies into one.

By Kathy Weitala, ITC Marketing Supervisor

In a move geared toward improving efficiencies and better serving customers, members of Interstate Telecommunications Cooperative (ITC; Clear Lake, S.D.) voted last fall to approve the merger of ITC with Stockholm & Strandburg Telephone Co. (SST) and its wholly owned subsidiary, SSTELECOM, Inc. The merger was effective January 1.

From a functional point of view, it is a significant event. "As you can imagine, operating as one company versus three separate companies will provide various advantages and will allow us to become more efficient in many aspects of our operation," said Jerry Heiberger, ITC general manager. "Through this merger, we are able to expand the footprint of our cooperative to include the exchange areas of SST and SSTELECOM. Customers of both SST and SSTELECOM will now be entitled to cooperative membership benefits, which include representation on the board of directors, voting rights and future capital credit payouts."

Before They Were One

SST was a stock company owned by a number of individuals. In February 2006, ITC bought SST and SSTELECOM, which operated as a competitive local exchange carrier (CLEC) and cable TV provider in the community of Milbank, S.D.

Prior to ITC purchasing the companies, SST provided local telephone services to approximately 680 customers, and SSTELECOM provided cable TV and cable-modem services to approximately 950 customers.

Prior management of SST and SSTELECOM secured a Rural Utilities



MCC: Enriching the Lives of All Those It Serves

By Joshua Stefan, Molalla Communications

Molalla Communications Cooperative (MCC; Molalla, Ore.) is continuing efforts to demonstrate its commitment to not only providing advanced telecommunications services, but also to investing in its community and the people it serves.

In January 2012, the company officially unveiled the MCC plaza and pavilion, a community and employee meeting space located in downtown Molalla for community groups and local nonprofit groups to utilize for meetings and events. The space was created as part of the company's overall vision of long-term community support. MCC funded this project with permanent capital.

The Molalla Area Farmers Markets reserved the space from May to October 2012, and the site has been used for wedding ceremonies, photo shoots and as a gathering place for community





IN REMEMBRANCE Wendel Myers

NTCA extends its condolences to the family and friends of Wendel Myers, 60, a longtime employee and former general manager of Grand River Mutual Telephone Corp. (Princeton, Mo.), who passed away on November 17, 2012. Myers began work at the cooperative in 1975, holding various leadership positions before assuming in January 2004 the general manager's post, a position he held until September 2012 when he resigned due to ill health. Myers was extremely active in the rural telecommunications industry, providing leadership and dedication to not only his company and the communities it serves, but also to numerous state, regional and national committees, including the NTCA Industry Committee. Myers contributions to the industry were many, and his presence will be missed. ☰

MCC: Enriching Lives

from page 45

members—all of which has helped to attract tourism, commerce and industry to benefit the community.

What's more, the space enhances downtown Molalla. The landscape was designed to enrich and beautify throughout the year, day and night. Featuring a large stone paved area, benches, fountain, pavilion, outdoor fireplace and lighting in the evening, the space has given the city a defined, downtown, outdoor meeting area that did not exist before.



The Board of Directors continues to demonstrate civic-mindedness by investing in the community.



Investing in Future Generations

In February 2013, MCC launched a new scholarship program as part of the Molalla Communications Educational Foundation, a nonprofit foundation established in 2011 to assist graduating students with furthering their education.

The foundation provides graduating or GED equivalent students (within its patronage area) a scholarship for up to four years to attend a college, university or trade school. MCC strives to have an objective program so that every student who has a C or better grade-point average will receive scholarship funds. MCC believes this will have a dramatic impact on assisting a greater number of students, and thus make Molalla an even better place to live.

Over the past six years, MCC has given over \$15,000 a year to merit-based scholarship recipients. MCC has seeded the new educational foundation with \$500,000, and the endowment has grown to nearly \$600,000.

MCC supports, with both time and money, over 100 community, school, philanthropic, civic and other organizations each year. ☰

SHARE YOUR STORY

NTCA seeks to spotlight the efforts of member companies across the country. Exchange is a great place to share your company's success stories on economic development, community outreach, technology rollouts, and state and regional collaborative projects. To share your story, contact Tennille Shields, NTCA senior writer/editor, at 703-351-2097 or tshields@ntca.org.

Bringing Fiber to the Farm

By Mendi Alexander, Nex-Tech Economic Development/Networking Specialist

McCarty Family Farms in Rexford, Kan., population 232, and the Dannon Co., headquartered in White Plains, N.Y., recently announced a new and unique collaboration between the companies that has resulted in milk from the McCarty Family Farms' dairy cows being exclusively used to make yogurt at Dannon's Fort Worth, Texas, plant.

Dannon, the leading-selling yogurt maker in the United States, and McCarty were both seeking ways to reduce the impact of volatility in milk pricing and to continuously improve on environmental sustainability.

With assistance from the U.S. Department of Agriculture Rural Development, Kansas Department of Commerce, NetWork Kansas, Kansas Department of Transportation and local real-estate tax abatements, construction began on a milk condensing operation at the farm.

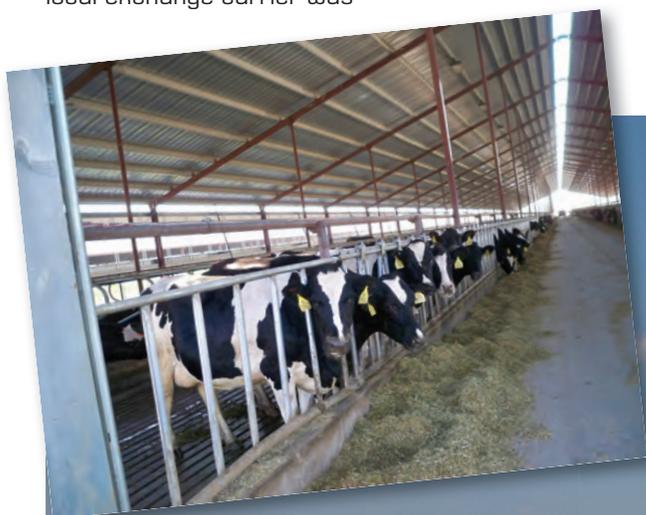
However, the project was at risk. A processing plant of this size which reduces the environmental impact of milk shipping and allows the farm to reuse the water that is removed during condensing of the milk, depends on technology to test and monitor all aspects of the process. The national local exchange carrier was

unwilling to provide the plant anything other than dial-up Internet service due to cost and distance from the central office. A local provider had been offering a 1 Mbps wireless connection, even though it was outside its service area, but neither technology provided the speed or reliability to meet the level of bandwidth required, throughout the farm's production process, leaving the project hanging in the balance.

At that point, the Northwest Kansas Planning and Development Commission contacted NTCA member company Nex-Tech (Hays, Kan.) to explain the situation and ask for assistance.

Although Nex-Tech's closest fiber was over three miles away and the farm was located outside ▶

Nex-Tech (Hays, Kan.) provides the critical advanced services required for the day-to-day operations of the McCarty Family Farms.



Bringing Fiber to the Farm *from page 47*

its service area, Nex-Tech understood the importance of the services to the business and the overall economic development impact this project would have on rural northwest Kansas.

As a result of collaboration between Nex-Tech and the Northwest Kansas Planning and Development Commission, fiber was buried to the facility and installed in the processing plant and business office. This fiber technology meets all the technology and bandwidth needs of today and ensures the ability to increase speeds in the future as the company's business warrants.

"Building a processing facility as technologically advanced as the plant at Rexford without access to high-speed reliable Internet would have been foolhardy," said Ken McCarty, manager at Rexford

Dairy. "Without companies like Nex-Tech supporting this project, it likely would not have gone as smoothly or potentially may not have happened."

McCarty Family Farms has created more than 50 jobs, doubling the size of the operation to more than 100 employees and bringing to realization Nex-Tech's hopes for economic development in northwest Kansas.

"It is imperative for the survival of areas like northwest Kansas that companies come together to support one another, and hopefully our communities, by creating jobs, opportunities and a better way of life," McCarty stated.

The McCarty Family Farms was recently named the 2013 Innovative Dairy Farmer of the Year by the International Dairy Foods Association and Dairy Today magazine. ☰

ITC Members Approve Merger *from page 45*

ITC members vote to merge the cooperative with SST and SSTELECOM.

Service (RUS) broadband loan with the intent of deploying fiber to the home (FTTH) technology to customers within the CLEC operating area. After acquiring the companies, ITC assumed the RUS

broadband loan and proceeded to build out the CLEC area with the new FTTH technology.

ITC currently provides local telephone service, digital video service and high-speed DSL to approximately 1,600 customers in those communities. With the merger, ITC will serve approximately 15,000 members in 30 different exchanges throughout South Dakota and Minnesota.

from board meetings to day-to-day tasks. Heiberger shared several key benefits: "Eliminating some of the intercompany accounting and reporting that was required with the operation of three companies will give our personnel additional time to focus on other priority issues. ITC's marketing personnel will only be required to produce one monthly newsletter, website, etc., versus three.

"They will eventually be able to advertise and market many of the same services and packages to all of our members versus the separation they have had to deal with in the past," he said.

"ITC's customer service representatives are looking forward to the day, in the future, when rates and services will be standardized so they will not have to be concerned about the area in which a member lives," Heiberger continued.

Another way ITC will become more efficient as one company is with the standardization of equipment over a period of time, making it easier for the company's central office and outside plant staff with both installation and maintenance. ☰



Reaping the Rewards

Given the fast-paced, ever-changing telecommunications industry, this merger will allow ITC to be more efficient in all facets of the organization—

IP POSSIBILITIES

Conference & Expo

April 16–18, 2013 • Hyatt Regency Minneapolis • Minneapolis, Minn.

EXPAND



YOUR NETWORK

YOUR KNOWLEDGE

YOUR BUSINESS

PLAN NOW TO ATTEND.
Learn more at www.BuildIPNow.com.

NTCA THE RURAL
BROADBAND
ASSOCIATION

BY RICK EKLEBERRY

Sycamore Telephone Co. (STC)

Sycamore, Ohio



Service Territory

We have three exchanges—Sycamore, McCutchenville and Melmore—1,636 access lines and 1,249 customers.

NTCA
Member Since
1985

General
Manager:
Steve
Ekleberry

Technology

Technology has enabled Sycamore Telephone Co. (STC) to diversify service offerings over the years, taking us from a strictly voice provider to a provider of Internet service and now video service. High-speed Internet is available throughout our service area. With the expansion of our fiber network we are poised to be on the cutting edge of whatever technology comes our way next.

Workforce

Demand for our new offerings thanks to our recent fiber to the home project has enabled us to hire three people in the last six months. We employ 10 full-time people and two part-time. We also are currently employing two temporary installers to keep up with installation demand.

Customer Profile

We recently conducted a survey and found that 56% of our customers are in the 35–59 age group. Only 54 of



the responding subscribers were 34 years of age or younger. That does concern us but does not surprise us. We are hopeful that the new technology we have deployed will attract new business and more people. Our exchange includes many small businesses and the farm community.

History

Our company was founded in 1896 and operated while having many different stockholders. In the 1970s our current owners, Dick Ekleberry and Lynn Fry, were working as technicians and were approached about buying some shares of stock. Both men seized the opportunity and finished purchasing the last outstanding share in the 1990s. Family members make up six of our 10 full-time employees. We have withstood the test of time. Our existence dates back longer than any business in town.

Our company tag line best describes us: "Communication on a first-name basis." We are confident that we provide the best customer service of any of the other providers in our area. When our customers call into the office, they don't ask for a particular department—they know us by name, and they know who to ask for to get the job done.

Our Team Stands Ready to Serve Your Team



NTCA's Member Relations Team stands ready to serve your team. We personally consult with you to help you find the best benefit plans to meet your and your employees' needs. We have great choices and terrific options. We bring it all to you:

- ✓ One-on-one personalized service.
- ✓ Employee meetings at your workplace.
- ✓ Benefit comparisons to help you find the best plans.

We know your business. We understand your needs.

Find your personal benefits consultant at www.ntca.org/memberrelations.



NTCA BENEFITS
THE RURAL BROADBAND ASSOCIATION
Your Trusted Employee Benefits Partner

Guaranteed!

Cost savings of up to **25%** over five years.



CHR Solutions' Guaranteed Cost Savings program offers all the services necessary for you to improve operational efficiency and reduce cost.

- Regulatory Compliance
- Cost Separations
- Financial Services
- CABS
- Provisioning
- Billing Services
- ISP Services
- Customer Support Functions
- Managed IT Services
- Managed NOC and ISP Services
- Managed Service Center
- CAD/GIS

Let our industry experts evaluate your bottom line and help you restructure your costs to make your business run more efficiently.

Learn how one CHR client is on track to save **\$1 million in 5 years**, visit www.CHRSolutions.com/ReduceCost