December 2022, Volume 19, Issue 2

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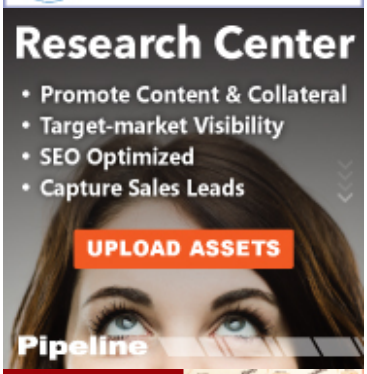

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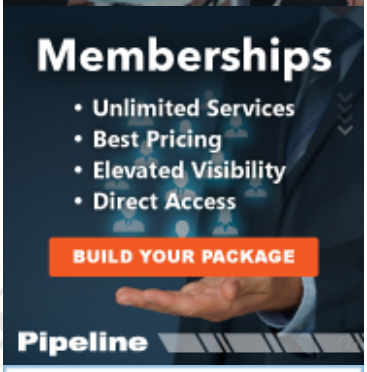

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Featured Content

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End-to-End Solutions for Broadband Networks

In case you missed Lindsay Broadband - a division of Technetix group at the SCTE Cable-Tec Expo, this video highlights the must-have, end-to-end solutions for your network.

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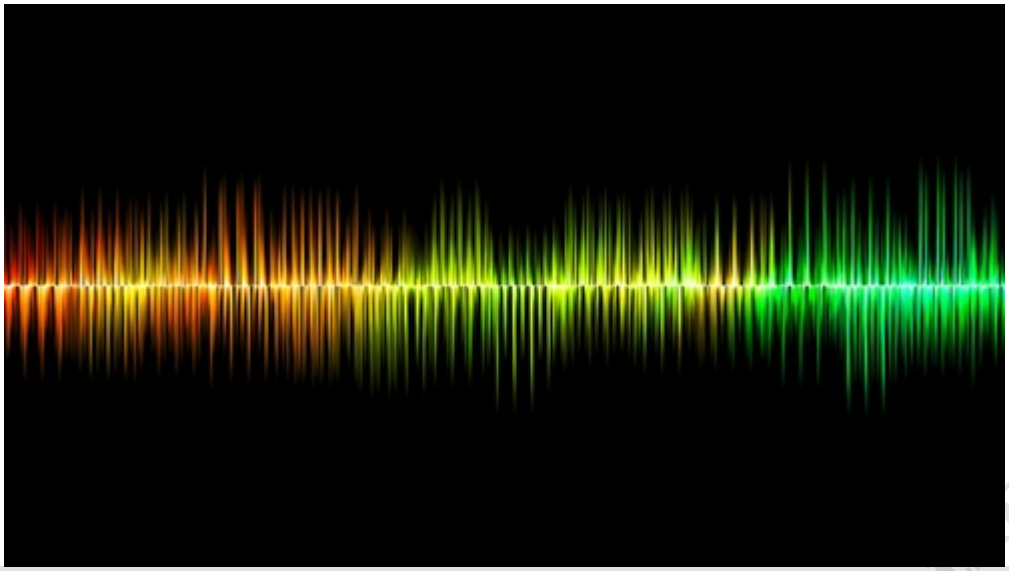
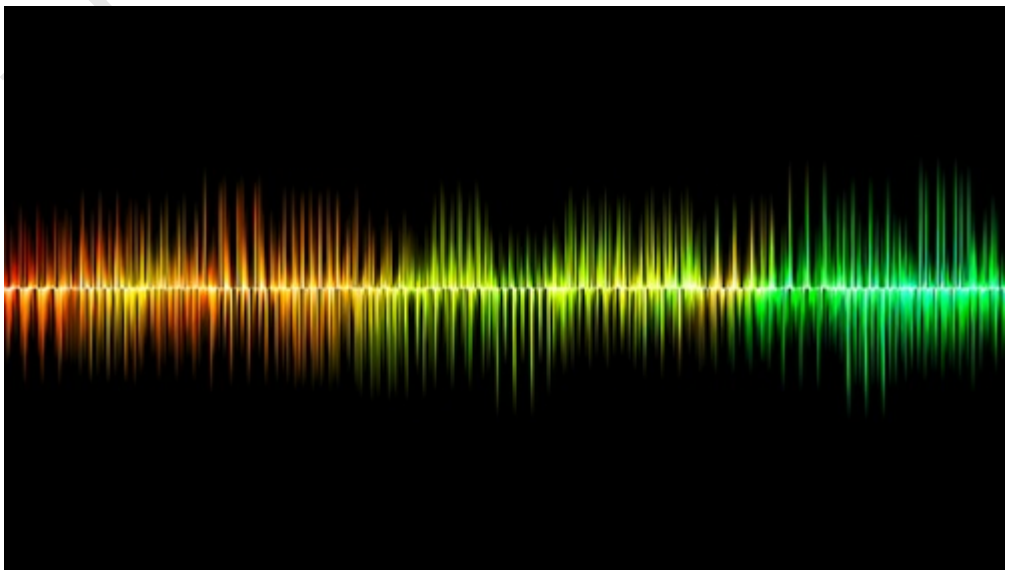


Predicting Colonial Pipeline: Mitigating Risk and Compliance

Mitigating risk and compliance for lawful intercept using lawful intelligence is explored in this Pipeline article feature SS8. Learn how CSPs can comply with lawful intercept regulation, while empowering law information with critical, real-time data.



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Podcast: The Evolution to 6G

The world’s eyes are already looking forward to the potential of 6G. Demands resulting from innovative use cases, for instance specific requirements from different industries and other user groups, as well as overarching goals like sustainability, are driving the standardization and development of mobile technologies.

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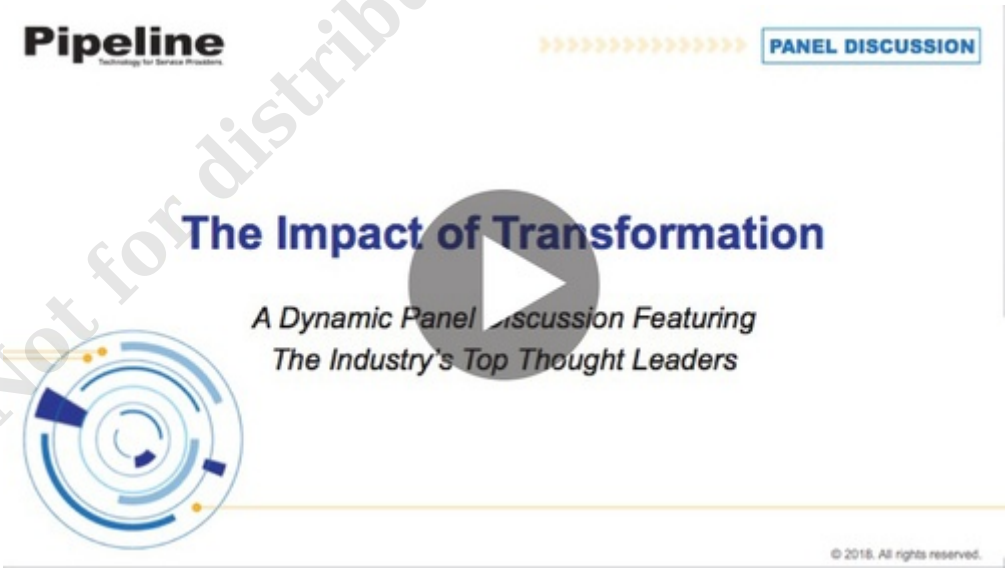

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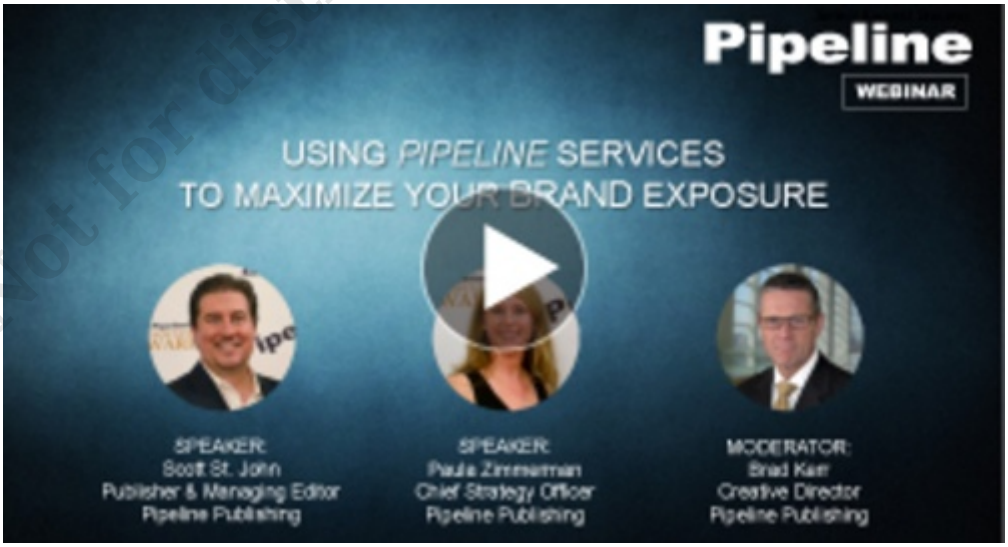

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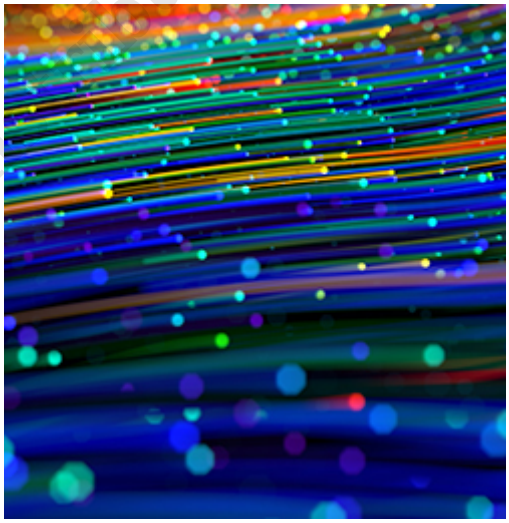

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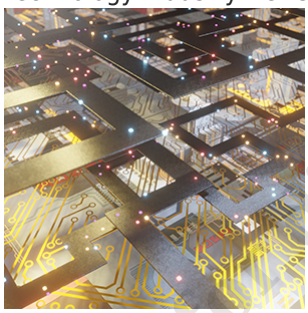

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FAST ANALYTICS OVER SLOW DATA

VITRIA

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COMARCH

WHITE PAPER

The Business Potential of NFV/SDN for Telecoms

How a Network as a Distributed Cloud can Reshape Itself to Better Serve Customer Applications

What will you learn

- What are the potential benefits of implementing Network Function Virtualization (NFV) and software-defined networking (SDN)?
- How to transform the (access) network towards a distributed cloud platform capable to reshape itself dynamically to better serve customer applications?
- How to run network functions and customer cloud applications on the same hardware?
- What are the benefits of colocating network functions and customer applications for improving customer experience?
- Why is it essential to implement control via policies in the NFV/SDN scenario?
- How does BSS/OSS support NFV and why should OSS work in real-time?

Network Function Virtualization (NFV) appears to be a very promising, yet very disruptive, technology. At its simplest, NFV is about decoupling software from hardware and enabling the implementation to run on a farm of commodity hardware. In other words, it means placing network functions (NF) in the cloud.

The Potential Benefits of NFV/SDN technology

From the perspective of network operators, the new technology entails the ability to become a real cloud provider in a new sense, where a network is no longer simply an access network to data centers. On the contrary, the network can become a cloud serving as a platform for customer applications, and it can dynamically reshape its architecture to meet customer needs. This revolution is possible thanks to combining NFV and software defined networking (SDN) technologies, which means that networks can adapt by being reprogrammed. Moreover, network nodes can also become part of distributed data centers that not only can host network functions, but also host applications. From the perspective of customers, this means that applications can be moved "closer to the customer," entailing lower latency and higher speed, thus leading to better customer experience.

The technology also promises to open the network to innovation from the software developer ecosystem. Instead of rigid networks that are difficult to adjust to different application needs, the network is to be programmable, ready for the era of the Internet of Things (IoT), where applications can have their own virtual networks programmed.

From the cost savings point of view, the liberation from dedicated (expensive) hardware in favor of commodity (cheap) hardware promises to reduce CAPEX (capital expenditure). Also, the idea of a purely software-based network reconfiguration should reduce OPEX (operational expenditure). This may not be that obvious if one of the goals is to make the network more dynamic, reshaped to meet the needs of applications and thus be much more complex to control, when a traditional approach to network management is taken.

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e-billing and Analytics Solution

Increase billing transparency and control, enhance customer experience and loyalty, reduce support costs, and deliver faster ROI.

Customer Experience Competitive Advantage

Faced with the challenge of how to increase profitability, Communication Service Providers (CSPs) are increasingly focusing on customer experience as a way to differentiate from the competition, maximize revenues and reduce costs. Business customers represent a significant source of revenue for many CSPs and, as such, it's vital to provide high levels of customer service to attract and retain these key customers and maximize their lifetime value. The e-enablement of customer experience is an important factor in improving customer experience while improving efficiency and driving down costs.

In the continuing search for new revenues, CSPs have expanded the range of services they provide to their business customers to include mobile voice and data, fixed-line voice, IP data services — with a corresponding increase in billing complexity and, in some cases, a decrease in customer satisfaction due to the siloed presentation of billing information for each service type. As a consequence, CSPs are looking for ways to evolve their customer experience to new levels of interactivity with a single view of services through the provision of unified communication channels. To achieve this goal, CSPs have to be able to abstract the customer experience layer form the underlying billing and CRM infrastructure, which often means dealing with multiple complex legacy source data systems that can hinder the development and delivery of e-enabled customer experience.

Customer Needs

In maturing markets, business customers are increasingly basing their purchasing decisions on service quality and support rather than on price alone. Hard-working managers are demanding access to systems and tools that enable them to become more productive, simplify their tasks, take control of their organizational spend, and allow them to effectively manage their relationship with the CSP. Specifically, these customers want to have convenient and secure access to their consolidated service and usage information in a single online location; with the ability to view summary spend information across their organization, view out of the box and custom reports and, drill-down to analyze the detail of service usage.

MDS e-billing and Analytics Solution

MDS e-billing and analytics solution provides businesses of all sizes, from global corporate enterprises to SMBs and sole traders, with secure online access to their consolidated accounts and electronic billing information. They permit customers to view trends, analyze details of spend and take control of their communication services. The MDS e-billing and analytics solution empowers customers to make informed business decisions, enhances the loyalty and lifetime value of these important customers, provides additional value to attract new customers and retain existing ones, and reduces operational and support costs.

Utilizing a powerful analytics engine, MDS e-billing and analytics solution simplifies the task of integration with legacy billing and CRM systems; delivering rapid go-to-market, low-risk integration, accelerated time-to- value and lower total cost of ownership.

E-Billing and Analytics Solution

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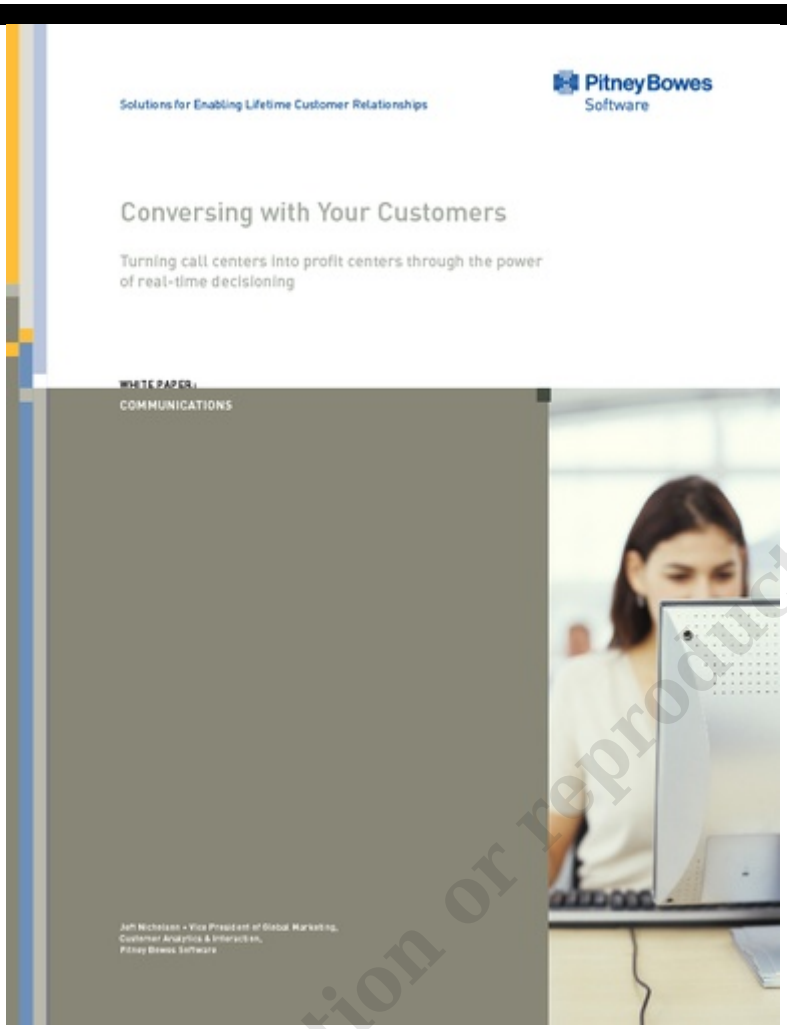

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A VODACOM CASE STUDY

CAPACITY ISSUES DRIVE MEDIATION SYSTEM REPLACEMENT

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Every bit counts.

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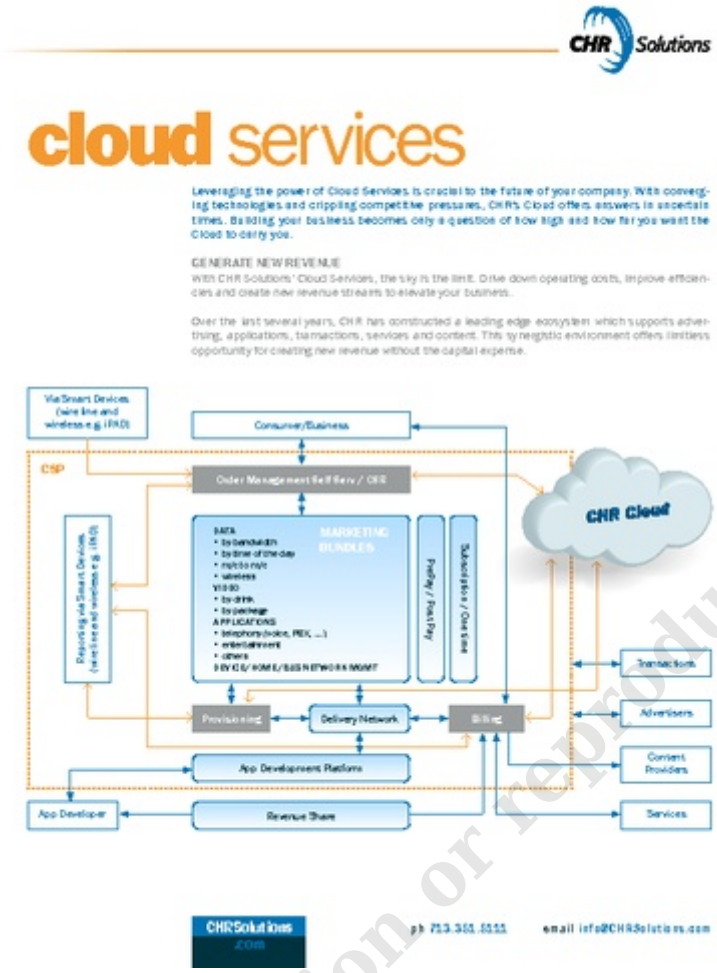

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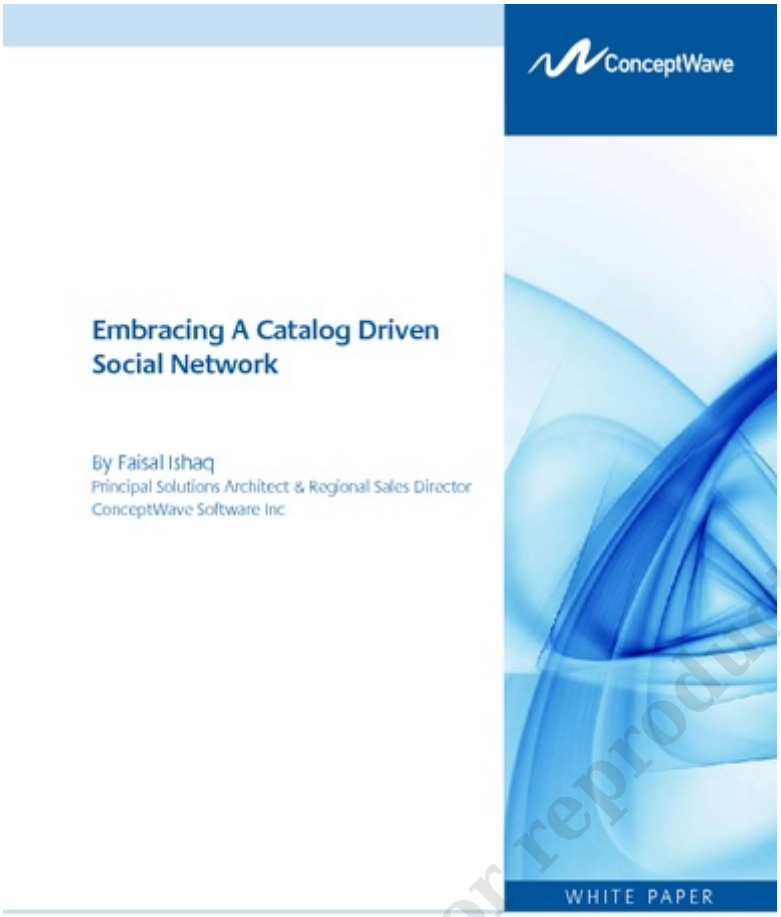

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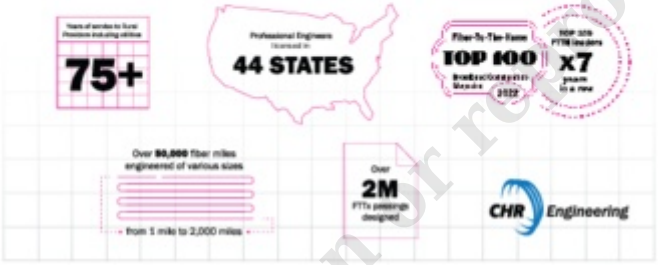
Rural America needs access to broadband. But closing the digital divide can be complicated—and with so many service providers facing increased competition, mounting costs, supply chain issues and eroding revenues, you need more than a quick fix.

CHR Solutions has the technology and the expertise to help you make informed decisions that enable you to get the job done efficiently, on budget and on time. From feasibility studies to network design to construction, we partner with you every step of the way to optimize your operation and increase your speed to market.

> CHR helped to train and guide us through the fiber-to-the-home design, engineering and permitting processes. They have become my go to liaison with city, county and state permitting authorities. If you want to work with people that are willing to help and get your foot in the door in your state right-of-ways, I highly recommend CHR (they even do wireless & tower engineering too)!
>
> *- Jason Pond, CEO, Grizzly Broadband, LLC*

Our Experience. Your Advantage.



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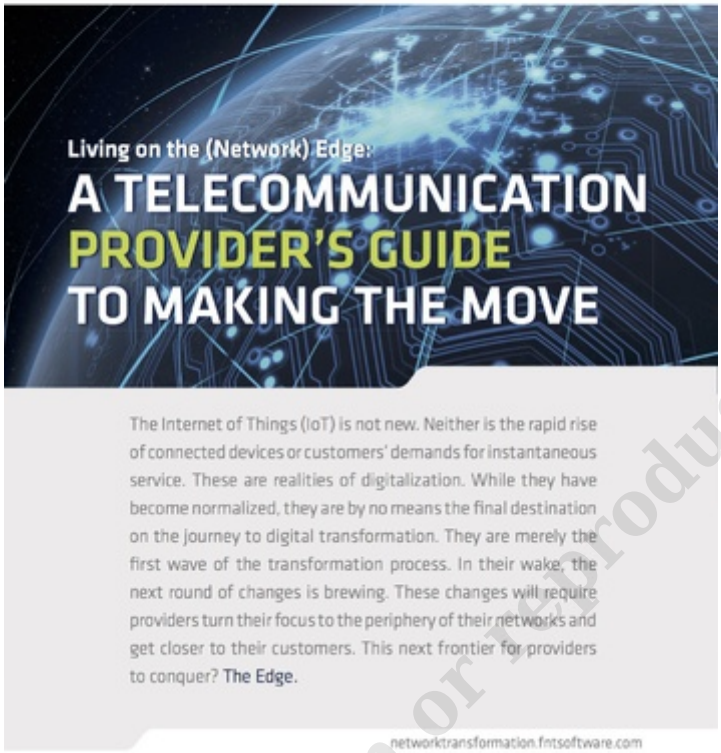
// when transparency matters



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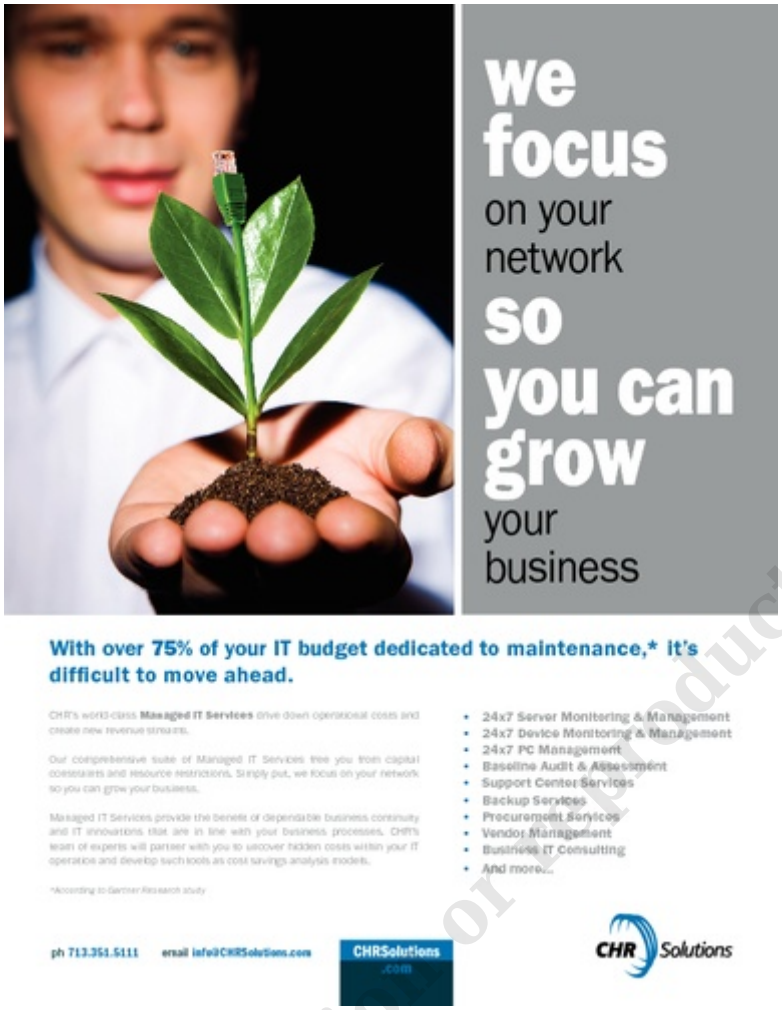

With over 75% of your IT budget dedicated to maintenance,* it's difficult to move ahead.

CHR's world-class **Managed IT Services** drive down operational costs and create new revenue streams.

Our comprehensive suite of Managed IT Services free you from capital constraints and resource restrictions. Simply put, we focus on your network so you can grow your business.

Managed IT Services provide the benefit of dependable business continuity and IT innovations that are in line with your business processes. CHR's team of experts will partner with you to uncover hidden costs within your IT operation and develop such tools as cost savings analysis models.

*According to Gartner Research study

- 24x7 Server Monitoring & Management
- 24x7 Device Monitoring & Management
- 24x7 PC Management
- Baseline Audit & Assessment
- Support Center Services
- Backup Services
- Procurement Services
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cycle30
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Order-to-Cash Billing Services

Cycle30 provides a completely hosted platform for scalable and reliable converged billing. It includes convergent charging, rating and balance management for existing and emerging services across a variety of markets.

Unlike a traditional billing system you need to deploy, maintain and host yourself, the Cycle30 order-to-cash platform is ready today, so you can get to market quickly.

Order-to-Cash Services
Today's operator needs to focus on acquiring and retaining customers and delivering service. Your operations rely on accurate, timely revenue assurance.

From the moment of customer contact and order, the Cycle30 platform supports your operation by managing and accounting for the revenue associated with your products and services, all the way through invoicing, reconciliation and collections.

At the start of your interaction with customers, Cycle30 provides connections for core sales activities such as channel sales and retail commission tracking.

CUSTOMER MANAGEMENT
Manage your customer interactions via integrated systems in the Cycle30 platform. The Cycle30 Customer Management suite enables the major account management functions below.
- Account Management
- Order Entry
- Credit Checking
- Bulk Ordering
- Contact Management
- Serviceability

SERVICE FULFILLMENT
Cycle30 provides pre-built workflows and integration to fulfill the order upon completion.
- Order management
- Activation
- Inventory management
- Workforce management

BILLING AND REVENUE MANAGEMENT
The core of the Cycle30 platform ensures your revenue stream is completely covered, from customer credit worthiness to invoicing and collections.
- Product catalog
- Enterprise Mediation
- Rating & Pricing
- Post-Paid Billing
- EBPP
- Roaming
- Collections
- Invoicing
- Reconciliations
- Clearinghouse Reconciliations
- Financial Reporting

SERVICE ASSURANCE
Cycle30 service assurance helps you maintain your customers' services, diagnose issues, and ultimately drive revenue assurance.
- Trouble Management
- Troubleshooting Tools
- Usage Data Collection

BUSINESS INTELLIGENCE
Unlock the business intelligence inside your converged billing data, and better understand your customers' habits, trends, purchasing behavior and needs, as well as where to focus your efforts.
- Data Quality
- Real-Time Data Warehouse
- Ad Hoc Queries
- Financial, Operational, Marketing, Subscriber and Invoicing Reports

INTEGRATIONS
Cycle30 provides a large set of pre-set workflows and integrations to fulfill orders upon completion. In addition, specific integrations can be customized beyond the integrations below.
- Business to Business
- Financial Feeds
- Content Providers
- Point-of-Sale
- APIs
- Other Third Parties

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CHR Solutions

software solutions

CHR provides integrated business solutions that address today's needs while positioning for future revenue streams, such as cloud based services. CHR software is available through traditional on-site licensing, through our supported cloud service model, or Software as a Service (SaaS). Our cloud based and SaaS options provide all the benefits of a traditional on-site license, and the platform hardware, operating systems, and a team of highly skilled professionals — all in a hosted environment without the upfront capital expense. SaaS and cloud based software are served from one of our four data centers and managed by CHR's 24x7 NOC services team.

ORDER MANAGEMENT (ORDER TO CASH)

CHR's Order Management accelerates cash flow with an integrated order-to-cash process — providing a faster path to revenue, improved operational efficiencies and higher customer satisfaction. Order Management supports complex product bundling, parallel and sequential order flows and end-to-end automation from order capture to fulfillment. Our intuitive tool makes it easy to identify and correct errors. Order Management provides robust pricing and promotion capabilities to include bundling and discounting. We provide a complete solution for credit analysis, order enter, fulfillment and billing.

PRODUCT LIFE CYCLE MANAGEMENT

Clearly defined products drive order entry and service fulfillment. CHR's Product Life Cycle Management takes a product through design, approval, release all the way to retirement. Our team of experts partner with you to craft products that meet customer demand in alignment with available technology and support infrastructure. Products are able to be built by component and managed with expiration dates. Throughout the product life cycle CHR works with you to adapt to new business models, added products and services.

CUSTOMER CARE MANAGEMENT

CHR's Customer Care Management is a powerful tool which provides you a 360 degree view of the customer—allowing you to review all relevant information about a customer's account, add new locations, and launch a service order to add or change data. Customer Care Management offers a combination of search, inquiry and order-entry tools. Our unique "account-at-a-glance" feature provides flexibility for the CSR to manage their view of the customer—helping the CSR deliver efficient and effective service. CHR's Customer Care Management delivers the right tools and necessary authority for CSR's to solve client problems—improving quality of care and reduction in issue resolution time.

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