Home
Subscribe
Knowledge Center
About Pipeline
Innovation Awards
Executive Summits

December 2022, Volume 19, Issue 2

Past Issues
News Center
Research Center
Webinars
Events
Sponsors
Members

FEATURED SPONSOR:



IN THIS ISSUE

Speeding Sustainability with BT
The Subsea Data Highway
Blackchain for Telecom
Preparing for the Metaverse
The Supply Chain Revolution
Owning the 5G Home with
Cloud
Advancing Enterprise Analytics
Essential Security Practices
Al Inclusion, and Virtual Work
Managed Networking & Security
Letter from the Editor
Technology Industry News



Article Index



NEWSWIRE



Agi, for distribution



of Reference of the state of th



CONNECT WITH US

Follow @PipelineWire

Back More

Agi, Rot. distribution

Latest Issues









Advertising Placements

Sponsor Articles and Issues

View More Issues

TRENDING NEWS

Comcast Supports Easterns Automotive with Digital Transformation

Full Story>

NTT DOCOMO and Accenture Accelerate Blockchain Technology

Full Story>

Endor Labs Secures
Investment for Open Source
Cybersecurity

Full Story>

CloudSmartz Wins for Digital Transformation in 2022 Innovation Awards

Full Story>

IMARC Releases Telecom Infrastructure Forecast

Full Story>

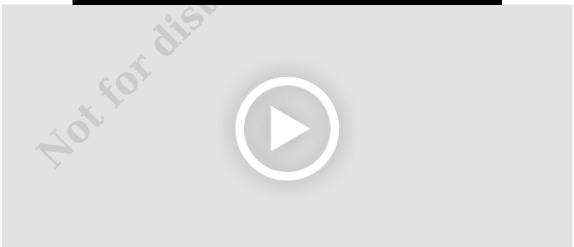
Joint Venture for Regional Telecom in Uzbekistan

Full Story>

View More News

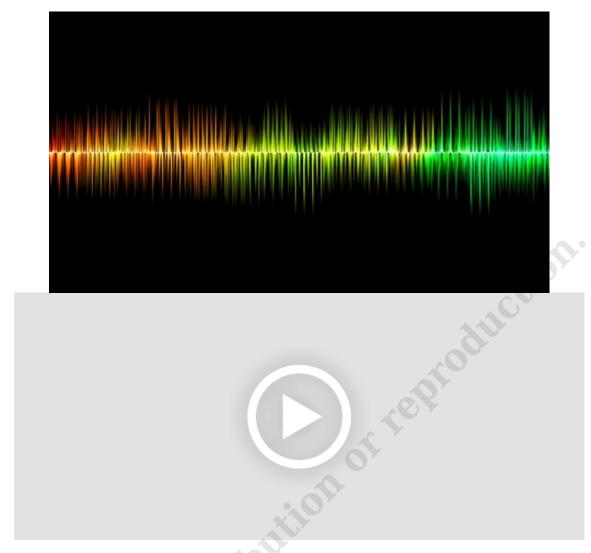
Featured Content





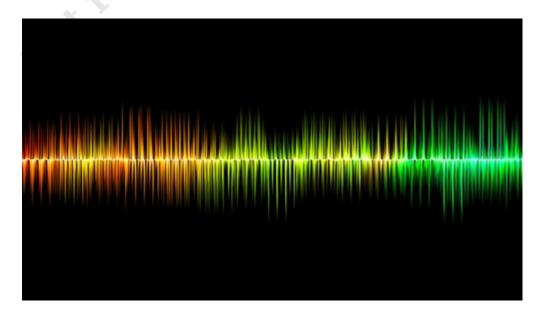
End-to-End Solutions for Broadband Networks

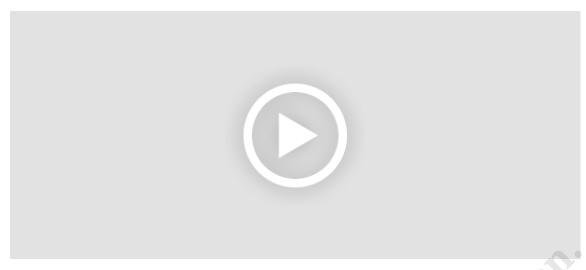
In case you missed Lindsay Broadband - a division of Technetix group at the SCTE Cable-Tec Expo, this video highlights the must-have, end-to-end solutions for your network.



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.





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.

Request Video

View More Videos

Latest Webinars



The Network Transformation Imperative

A Dynamic Panel Ascussion Featuring The Industry's Top Thought Leaders



Pipeline

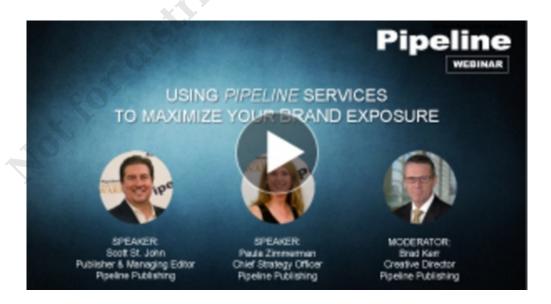
PANEL DISCUSSION

Agile Architecture or Digital Innovation

A Dynamic Fanel Ascussion Featuring
The Industry's Top Thought Leaders



\$ 20 P. All rights received.



Participate in Webinars

Join Next Webinar

View More Webinars

Latest Articles



Speeding Sustainability with BT

Order Article Reprint Read More



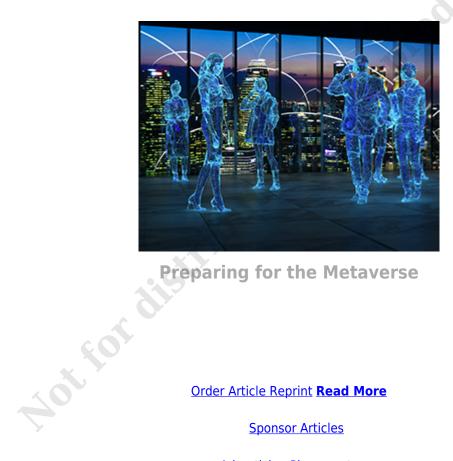
The Subsea Data Highway

Order Article Reprint Read More



Blockchain for Telecom

Order Article Reprint Read More



Advertising Placements

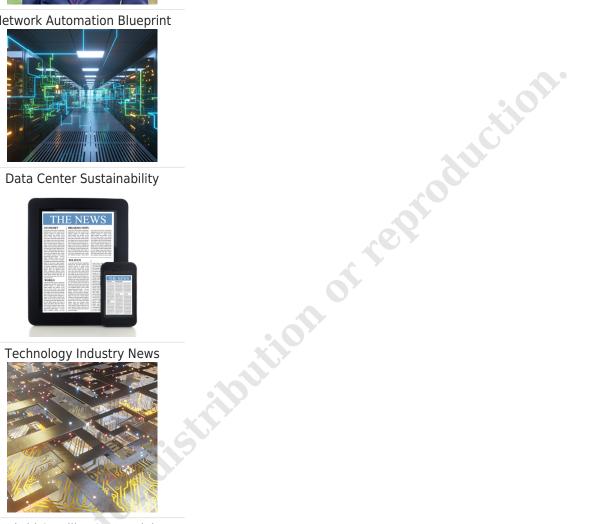
TRENDING ARTICLES



Multi-CSP 5G Slicing for Drones



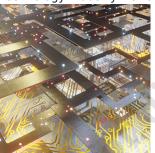
Network Automation Blueprint



Data Center Sustainability



Technology Industry News



Hybrid Satellite Connectivity **View More Articles**

Other Featured Content





WHITE PAPER
FAST ANALYTICS OVER SLOW DATA

VITRIA

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 on these defined nature (APP NEW NEW POTENT)
- How to transform the (access) network towards a distributed cloud platform capable to reshap the first charmically in batter rapid 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
- · Why is it essential to implement control via policies in the NPV/SDN scenario
- How these RECENCE common NPV and who should DES work in real Error?

Network function Virtualization (NPV) appears to be a very promising, yet very disruptive, technology. At its simplest, NPV is about decoupling software from handware and enabling the implementation to run on a farm of commodity handware, in other words, it means placing retwork functions (IVI) in the colon; of the promise in the promotion of the intervention of the promotion o

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 series, where a network is no longer simply an access retwork to calls centers. On the continey, the network can become a cloud senting as a platform for outsomer applications, and it can dynamically entailed its architecture to meet customer needs. This resolution is possible thanks to combining MV and obteave series or entworking 50 IN) technologies, which means that networks can adopt by being reprogrammed. Moreover, network nodes can also become part of distributed cats centers that not only can host network functions, but also host applications. From the perspective of customers, filts means that applications can be moved 'closer to the customer,' entailing lower latency and higher speed, thus leading 19 better outsomer experience.

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

From the cost savings point of view, the liberation from dedicated (expendive) hardware in favor of commodity (divagi) hardware promises to reduce CAPEI (agastal expenditure). Also, the lotes of Papurely software-based network reconfiguration should reduce CAPEI (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 agastications and thus be much more complex to control, when a traditional agantuach to network management is taken.

From the cost soving's point of view, the liber dison, by an dedicated (expense) less quare in favor of coefficies (cheap) hardwage, promities to reduce CAPEX (coefficies of to purely software-based network reconfiguration whould reduce OPEX (operational)

Neconsconarch.com



Customer Experience Competitive Advantage

Faced with the challenge of how to increase profitability, Communication Service Providers (CSRs) are increasingly locating on customer experience as 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 attoact and retain these key customers and maximize their lifetime value. The eerablement 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, final-line voice, IP data services — with a corresponding increase in billing complexity and, in some cases, a decrease in customer sestifaction due to side of presentation of billing information for each service type. As a corresponding for ways to evolve their customer experience to new largest of intractivity with a single view of services through the provision of unified communication channels. To achieve this goal, CSPs have to be able to obstract the customer experience layer form the underlying billing and OM 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 complicated 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-downto analyze the dataful framings 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 traden, with secure online access to their consolidated accounts and electronic billing information. They permit outsomers to view trends, analyze details of spend and take control of their communication services. The MDS e-billing and analytics solution empowers customers to malia informed business decisions, enhances the loyality and lifetime value of these important customers, provides additional value to attract new customers and readin existing ones, and reduces operational and support costs. tion.

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

E-Billing and Analytics Solution



	Pipeline Annual Membership Packages				
	Mendanting section	Matering Mambaship	Premier Manife rollip	File Markethip	Bespelle Marrile tribp
Hot for	Sponsored Thoughe leadership Articles Is were defined phone in	***		141- April 181-	
	Arrival fare noise Substitution and substitution and supplies coming and distributions are all supplies.	,	,	,	
	Acressed the search Center Subscription solitate realize see the tig. dominate, ad any presistance for utdapper, one state, view, boduse and man	,	,	,	
	Pipeline Innovation Javands Participation Autoroperison by Autoroperison by Autoroperison (Autoroperison Autoroperison Autoroper	,	,	,	
	Annual Member Directory Listing balabra corpus, tips, public, until tide, continuing, call calls depict, it con	,	,	,	
	Monthly Web Advertising Placements with DirectConnect key, smooths advertisease could dain its actic payed furire. In their like time time the steady which direct makes to form that confering on its, and in which imprise, not confer the payer, and monthly not compare, the first first above and.		*****	.p. 13p.,m.	
	Monthly New detter Advertising Placements strong placements at a first placement is a facility to see the second in a facility to see the second in a facility page.		** 6.**	цо Прера	
*	Weekly have detter Advertising Placements strating placement is forever a well, or obstact this to year wis its or hading page		14 to 26 pages	upo Silperpar	
	Social Media Support Padiage Solden code; and accoding cold code are up to Pyrite's sold code books and post-pediag to you as blood in book		,	,	
	Markering Content and Writing Services Package Addressig those of readering under maken to the presenters of the took subleyages, one studies and other enabling sublead		-	-	
	Digital Asset Syndication Program Smithelin singularization program and the separate intention in the separate intention in making interesting the separate intention in making interesting the separate intention of the separate intention in the separate		**1***	1410 Z par par	***
	Pipeline Report Sponsorship Sponsorship of the star 's posterol,' appear cloth in take bounding code from soci body cos, wheating calline for experiments blocks of your coupon; code to the fire sponsorship for experi			101200	
	No owierdage Cash Websinar Address the profession and proceedings of the stage of one classes, websites they and had presented be not filess that interest with provincial metals and they are written.			1912 \$24.900	
	Pipeline Executive Summit Spansorship a delar pality detail parti patte in the letter tils consiste elle secusi lysnic transfer basell in billing most falls rapit to the and parti patte in the links the storper couled true prospe			,	***
		\$1,005 #1,005	\$4,995 #27050	\$4,440	Custom
		Marylan General 17%	1 de séption 1 de séption 2 de séption 1 de séption 2 de	Manager 1675	Talendaption Observed Gardinoss







CLOUD PARTNERS

The quickest and best way to join the Cloud

- Email & Gellaberstien Robust corporate-dass productivity solutions Well Besting Keep your website running it st and a secure Serues Besting Power bit, sept-to-us scalable cloud servers Backup & Recessny Never worry about loss and recovery again

We've done all the work. You collect the reserve!

Visitus at N W W.CHR Solutions.com/JoinThe Cloud



ph 713.351.5111

e mail in fo OCHRS of utions com



A VODACOM CASE STUDY

CAPACITY ISSUES DRIVE MEDIATION SYSTEM REPLACEMENT



Whitepapers





Opportunity in the Air

Congestion Management and the Mobile Broadband Revolution

AOU GISLIN **Whitepapers**





The Cable Customer of the Future:

More Autonomous, Mobile & Personalized

3 Key Trends that will Dramatically Change the
Cable Industry Over the Next 5 Years

CSG International | May 2012

Brochures



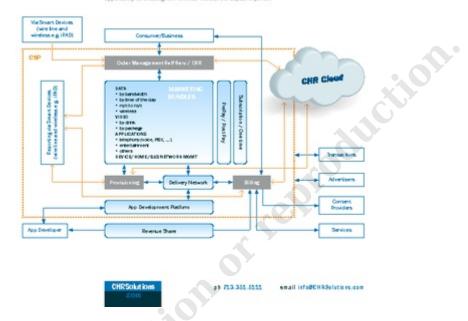
cloud services

Leveraging the power of Cloud Services is crucial to the fature of your company. With converging technologies and crippling competitive pressures, CRFS Cloud offers asswers in uncertain
times. Building your busitiess becomes only a question of now high and how far you want the
Cloud business you.

GENERATE NEW REVENUE

With CHR Soutions' Cloud Services, the sky is the limit. Drive down operating costs, improve efficiencies and create new revenue streams to elevate your business.

Over the last several years, CHR has constructed a leading edge ecosystem which supports advertising, applications, terrections, services and content. This syneightic environment offers limitless opportunity for creating new revenue without the capital expense.



Whitepapers



Keep your distributed network ship-shape by ensuring that globally dispersed access points don't represent security leaks. Our Secure Access and Single Sign-on Solution gives you a crows-nest view of who is accessing network elements, and the potential impact.

Know your crew

Securing large, multi-vendor, multi-technology networks can be a daunting task. With thousands of personnel accessing thousands of network elements, the problem is clear flut a consistent. set of security procedures can help—as long as you know they are being followed. Still, how can you manage security in an environment who is different element manage ment systems all handle uper accounts and auditing differently? Secure Access and Single Sign-on from Nakina Systems solves these complex issues by assigning security privileges by user in a central location and tracking activity in easy to access reports.

Watching the horizon

For distrib

When something goes wrong, the ability to quickly audit who accessed network elements, if they made any changes, and from what network entry point they accessed them, can make the difference in meeting service level agreements. Nakina Systems' Secure Access solution allows security ad ministrations to implement a single use ninterface to control and manage all access

to network elements and element management systems in the network A based ange of security policies can be created and enforced networkwide, and administrators can audit activity at anytime.

Set sail safely

Nakina's multivendor security management solution offers the ability to:

- Centralize security policy at ministration via a single tool that integeries into existing corporate identity management systems
- Standardise the implementation of security policies access multi-vendor environments
- Enforce robust and consistent security policies with automated network-wide security measures like password aging and minimum alphanumeric password requirements.
- Customize security privileges at the individual user it well and define and assign privileges to a user or group of use is based on job responsibilities.

Key Punctions

The Nakina Secure Access and Single Sign-on solution addresses four key problem areas:

Network Element Security

This between soldes the security
administrator to automate and centre by
makege user password management
across all activors demonstrated and a lament
makegement systems.

Duer Security Proxy

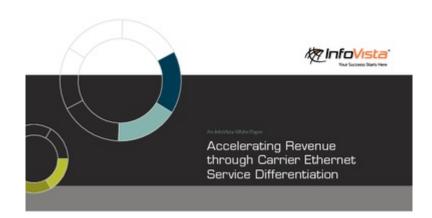
This allows uses a single portal with his or her own unique account cardentals and a list of authorise of applications or elements, significantly simplifying and improving the end-use reoperience.

User Privileges
This eachies the security administrator to assign user access privileges by network element or element mesage ment system.

Restricting

This enables the Security Administrator toce stally log, review the activity of and terminate solect individual serversions.

WWW.NAKINASYSTEMS.COM





Embracing A Catalog Driven Social Network

By Faisal Ishaq

Principal Solutions Architect & Regional Sales Director ConceptWave Software Inc.





DATA DRIVEN. RESULTS ORIENTED. YOUR BROADBAND SUCCESS.

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

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.

Aoi, for distrib

CHR helped to train and guide us through the fiber-to-the-home design, engineering and permitting processes. They have become my go to lisison 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.







The Internet of Things (IoT) is not new. Neither is the rapid rise of connected devices or customers' demands for instantaneous service. These are realities of digitalization. While they have become normalized, they are by no means the final destination on the journey to digital transformation. They are merely the first wave of the transformation process. In their wake, the next round of changes is brewing. These changes will require providers turn their focus to the periphery of their networks and get closer to their customers. This next frontier for providers to conquer? **The Edge**.

Aoi, for distrilo

networktransformation.fntsoftware.com



we focus on your network you can grow your business

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

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

Rot distrib

24x7 Server Monitoring & Management
24x7 Device Monitoring & Management
24x7 PC Management
Baseline Audit & Assessment
Support Center Services
Backup Services
Procurement Services
Vendor Management
Business IT Consulting
And more...

· And more...

ph 713.351.5111 email infe@CHRSolutions.com







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 Cycle 30 order to anth platform is ready to day, so you can get to market quickly.

Order to Cash Services
Today's operator needs to focus on equiting and retaining customers and delivering service. Your operations rely on sort timely reverue assurance.

From the moment of austomer contect and order, the Cycle 30 platform supports your operation by managing and ecounting for the resource accided with your products and services, all the way through two king, reconcileation and collections.

At the start of your interection with customers, Cycle 30 provides corrections for core sales activities such as dhannel sales and retail commission tracking.

CUSTOMER MANAGEMENT
Minage por custome interactions via
inargement systems in the Cycle 10
plantom. The Cycle 10 customer
Minagement such a water to report
account reamagement functions below.
Account Minagement
— Check Checking
— Make Ordaning
— Make Ordaning
— Sand Ordaning
— Control Minagement
— Control Minagement
— Sandocatellity

SERVICE PULLELIMENT
Cycle IX provides pre-built workflow
and image from to stiff the order upon
conglishers.

Observanagement

Activation
Investigation

Transition remagement

Workflow remagement

BILLINS AND REVINUE
MANAGEMENT
The own of the Cycle20 pleatons
whates your results where is
completely convend, from extreme in
completely convend, from extreme
could receive in continues to time doing and
collections.

I froduct centring
Emission Allocation
Basing & Pricing
Fors Neidel Billing
EBI
Basining
Collections
I throthing
Collections
I throthing
Collections
I throthing

*

SERVICE ASSURANCE

BUSINESS WITELL ELEVEL
United the business involves and bester
pour converged billing date, and bester
understand jour controlling date, and bester
understand jour controlling date,
and wite and head of the controlling of

BITEGEATIONS
Gyida Di providente large set origine set
conficion and integrations to still
condens upon completion. Inaddition,
specific integrations to the settorised
beyond the integration to the settorised
beyond the integration below.

• Remote Situation

- Rom-ditime AFA Other Third Farries

Cycletic | 710 Juli America, Sales 1200 | Secreta, MA 92/04 | CycletiCosom | 1477-970-9955 © 2000 CycletiCine, All Physics, Research

action.





tion.

software solutions

CHR provider integrated business solutions that address today's needs while positioning for future revenue streams, such as cloud barred services. CHR software is excitable through studitional on site literating, through our supported cloud service model, or Software as a Service (SadS). Our cloud barred and SadS options provide all the benefits of a sterific (SadS). Our cloud barred and SadS options provide all the benefits of a sterification on site ficense, and the platform bandware, operating systems, and a seam of highly skilded porfessionation—all in a hosted environment without the upfront capital expense. SadS and cloud based software are served from one of our four data centers and managed by CHRY 24s7 NOC services team.



Got distrib

ORDER MANAGE MENT (ORDER TO CASH)
CHR's Order Management accelerates cash flow with an integrated ordereo-cash powers. — providing a faster path to revenue, improved operational efficienties and higher dustoneer satisfaction often Management supports consplex product bunding, parallel and sequential order flows and end-to-end automation from order capture for full filterant. Our insulties tool makes it early to identify and connect enost. Order Management provides robust pricing and promotion capabilities to include bundling, and discounting. We provide accomplete solution for credit analysis, order enter, fulfill-reent and billing.

PRODUCT LIFE CYCLE MANAGE MENT
Clearly defined products drive orderentry and service fulfillment. CHR's Product Life
Cycle Management takes a product through design, approval, release all the way
to settlement. Dur team of experts partners with you to card products that need
custors eridemand in alignment with available technology and support infrastructure.
Products are able to be built by component and managed with explication dister.
Throughout the product life cycle CHR works with you to adapt to new business,
models, added products and services.

CUSTOMER CARE MANAGEMENT
CHOT'S Customere Case Management is a powerful sool which provides you a 300 degree view of the customer-allowing you to review all relevant information about a customer's account, add new locations, and faunch a service-order to add or change data. Customer Care Management offer a contribution of two injury and order entry book. Our unique "account an agrance" feature provides file while to the CSR to manage their view of the customer-beloing the CSR Relevant efficient and effective service. CHSR Customer Care Management delivers for light tools and necessary authority for CSR's to solve olient problems—ling rowing quality of case and reduction in its un resolution time.

ph 713.351.5111 email info@CHR3clutions.com





Upload Content

View More Content

© 2022, All information contained herein is the sole property of Pipeline Publishing, LLC. Pipeline Publishing LLC reserves all rights and privileges regarding the use of this information. Any unauthorized use, such as copying, modifying, or reprinting, will be prosecuted under the fullest extent under the governing law.