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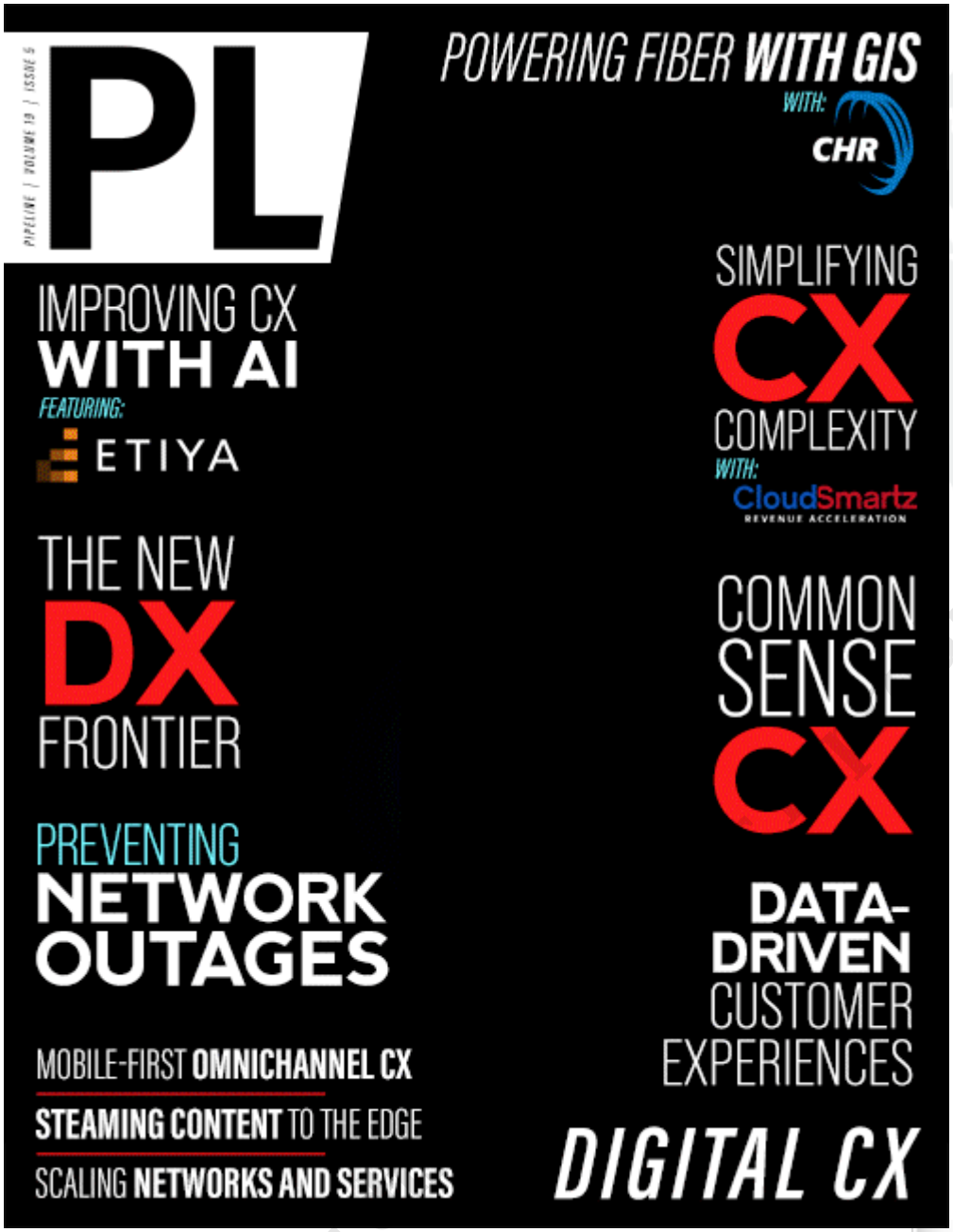

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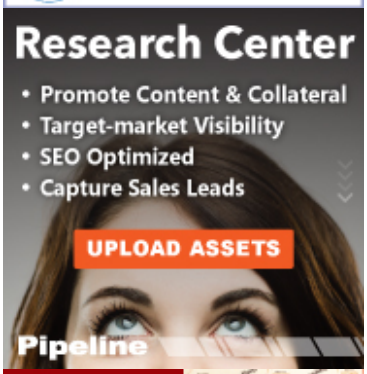

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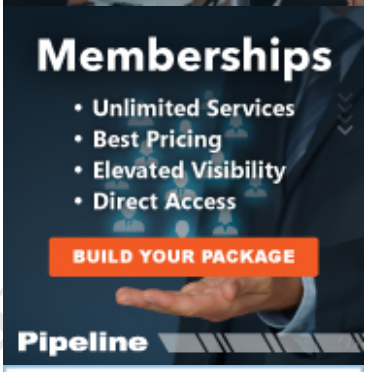

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Featured Content

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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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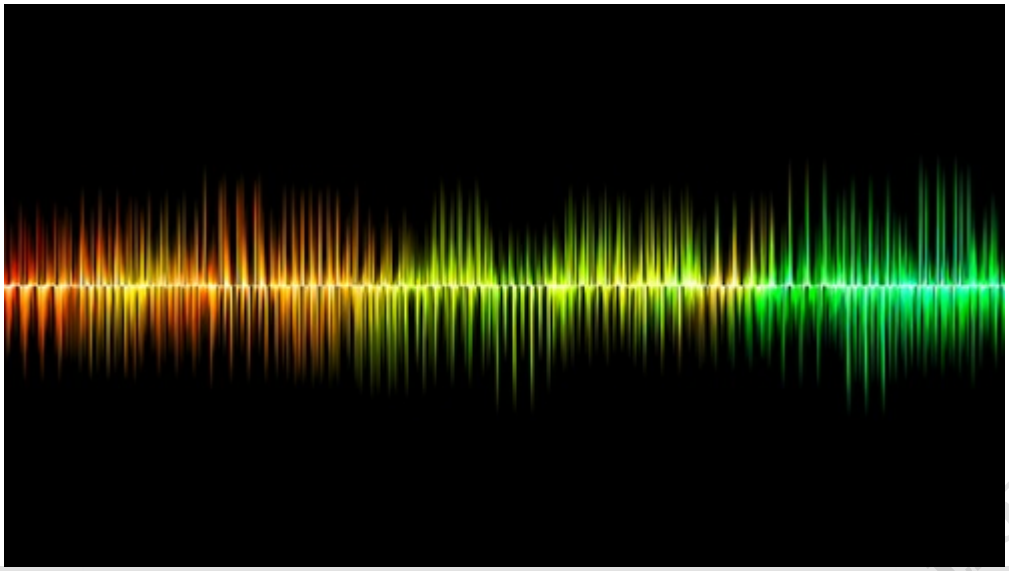
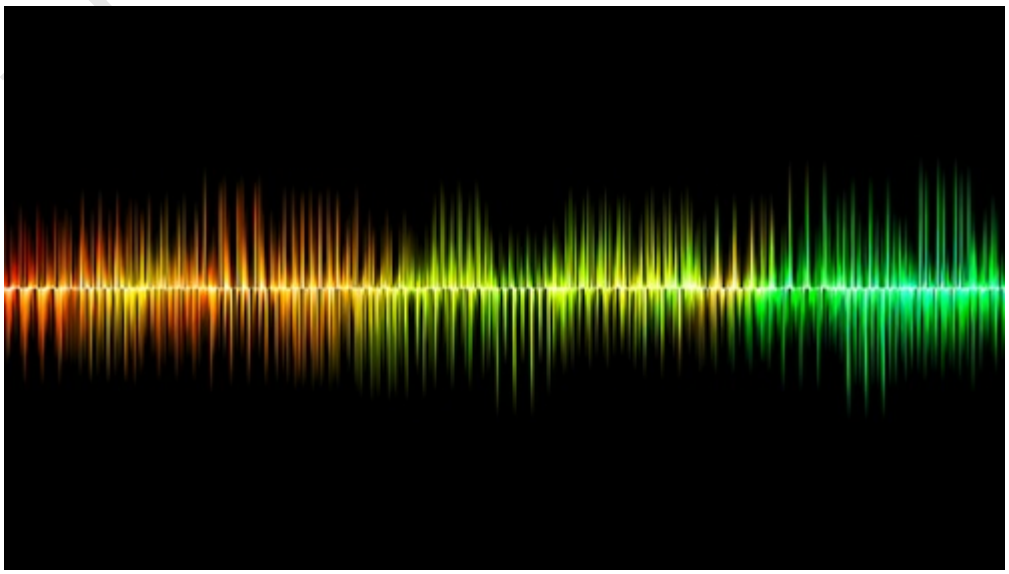


Predicting Colonial Pipeline: Mitigating Risk and Compliance

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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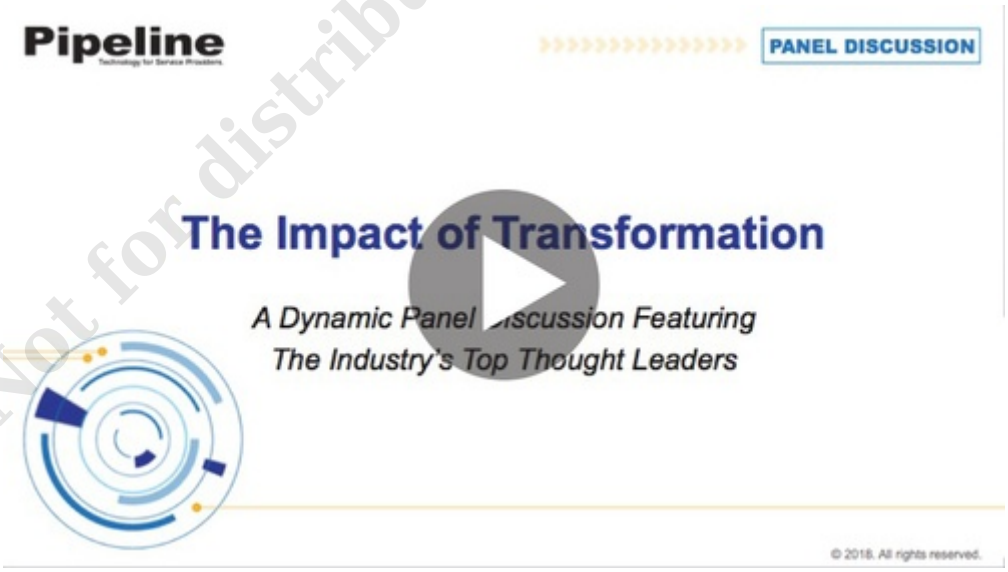

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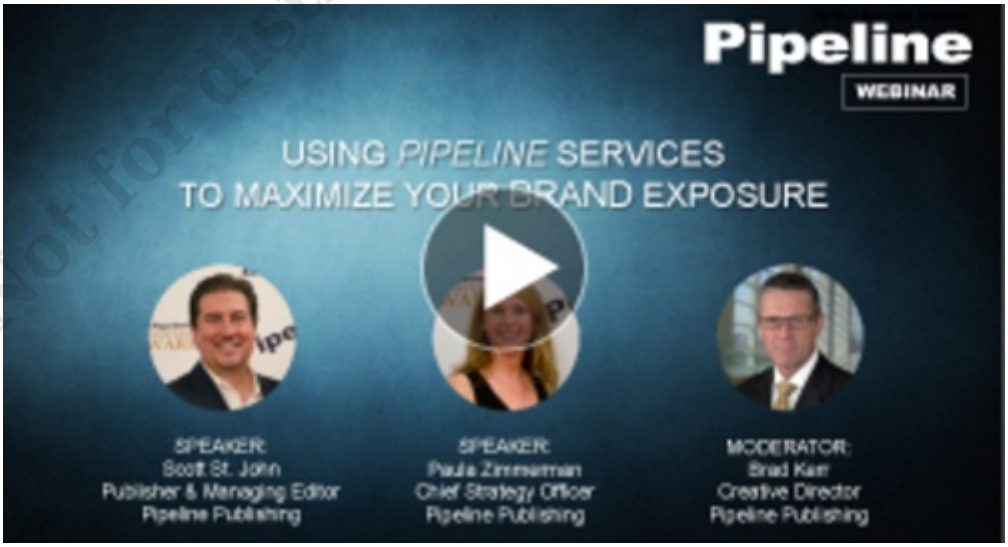

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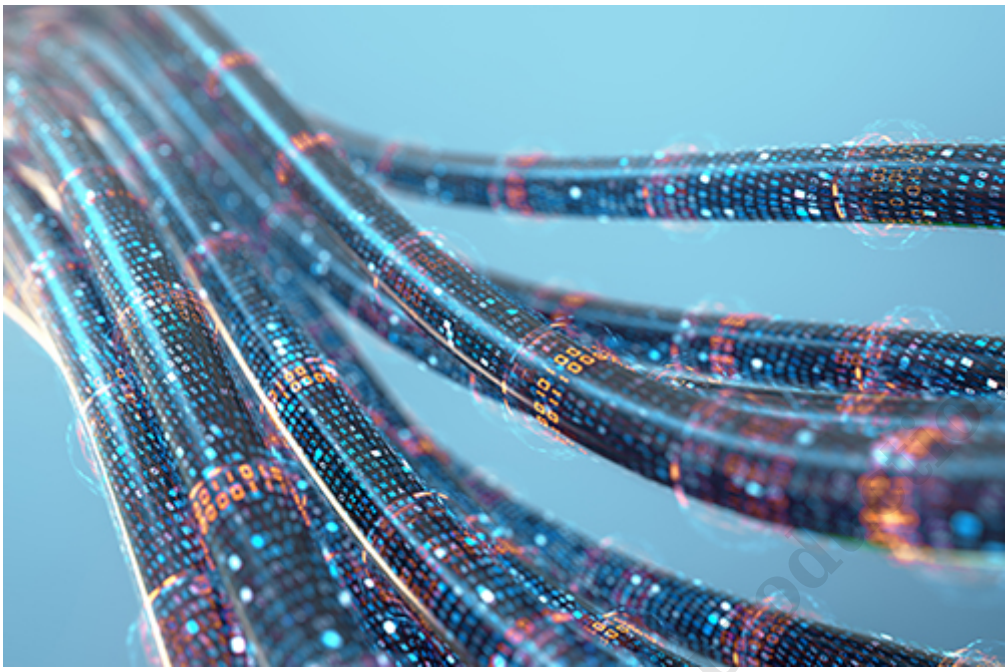

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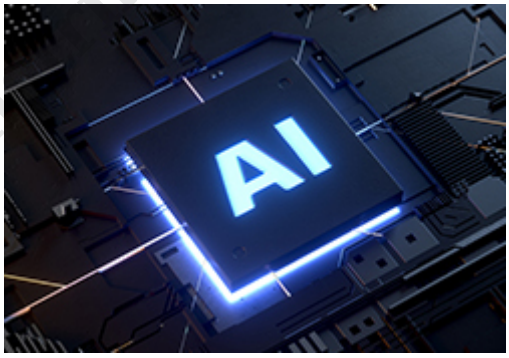

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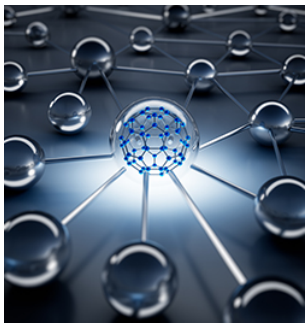

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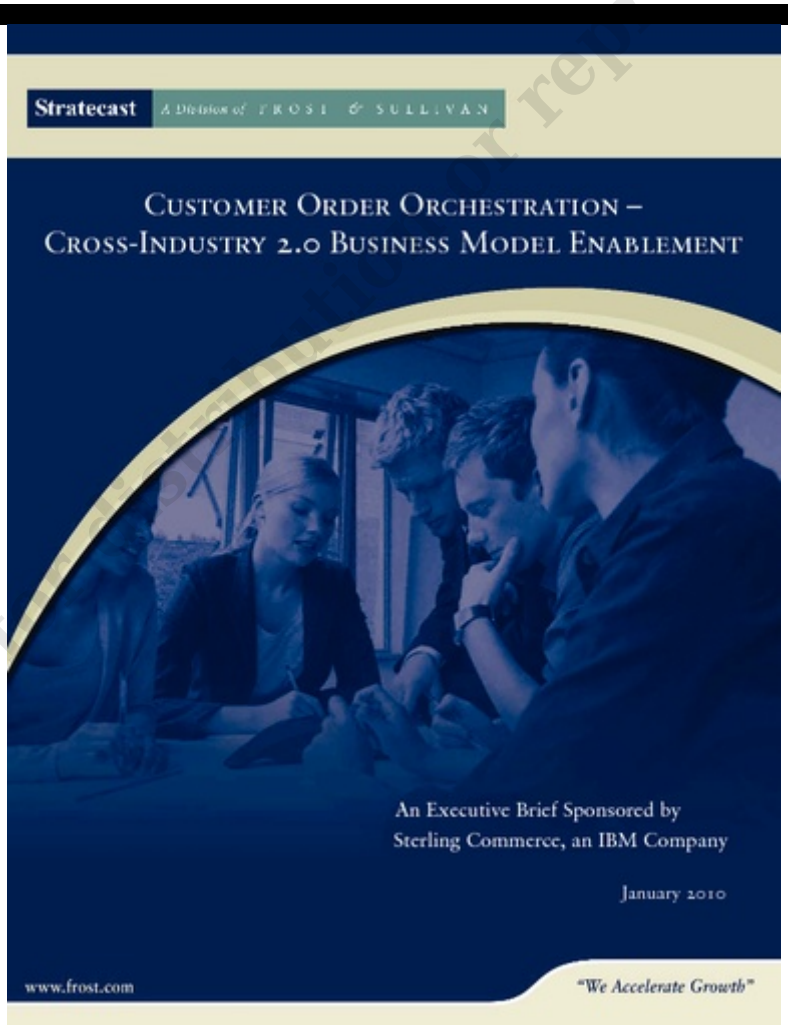

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ETIYA

DIGITAL BUSINESS PLATFORM

Digital transformation, which is the key for higher agility, efficiency, cost reduction and improved customer experience, is inevitable for CSPs to survive in the new digital economy. However, large-scale digital transformation projects are expensive and risky and may take years to complete. Meanwhile, agile competitors are eroding your market share. Speed to digitalization is imperative.

Why Etiya's Digital Business Platforms??

Etiya Digital Business Platforms, unlike legacy BSS, will create real value for your business. They do not only provide technical capability, but offer an infrastructure to create an all-digital customer experience, with the personalization and flexibility demanded by Connected Customers. All this in a matter of months, while ensuring business continuity and, at the same time, reducing traditional BSS costs.

Advanced technology to enable better customer focus

Etiya's AI expertise and platform capabilities are used to differentiate the BSS platform via better customer insights, more personalized customer experiences and increased process automation. Knowing your customers' behaviour and needs allows personalized customer interactions and service targeting, and supports smart decision making during the customer journey, that will ultimately drive both customer and employee efficiency and satisfaction.

Etiya uses innovative AI technologies, including natural language processing (NLP) techniques and predictive analytics in its platform to help companies transform their businesses and reduce costs.

Modular, flexible, cost effective and scalable digital solutions

Etiya Digital Business Platforms are 5G ready, agile, end-to-end, and fully virtualized digital platforms. They are cloud-native, full-stack platforms that are pre-integrated into partner solutions and include all Etiya's product portfolio: Customer Relationship Management (CRM), Customer Service Management (CSM), Configure, Price, Quote (CPQ), Product Catalog, Order Management, OmniChannel Management, Billing and Charging and API gateways. They support both B2C and B2B customer segment operations.

Since the platforms use a modular, API-driven architecture, they are flexible. CSPs can select to launch a full-stack new BSS platform, to replace their legacy platform, or modernize it step-by-step, by choosing which platform components they want first and add new solutions, as needed, later.

Its cloud-compatible implementation significantly reduces up-front CapEx, and all this enables fast implementation and a cost-effective digital transformation. And easy scalability also means, that the costs grow as the business grows.

Etiya real-time, automated digital platforms use microservices to speed time-to-market for new products and enable easy experimentation with new business models and service concepts.

How does it work?

Etiya Digital Business Platforms contain three main layers: Experience, Engagement, and Enablement. Data analytics, AI, and business intelligence functions are used to add intelligence to these layers and enable personalization, process automation, and efficiency.

Etiya Digital Business Platform Solutions			
Digital Experience	**Online self-care, E-commerce, Mobile App, Content Management**	**Open APIs**	**Data Analytics, AI, Business Intelligence**
Digital Engagement	**CRM, CPQ, Offer Management, Rewards & Loyalty, Community Management, CSM, Recommendation Engine, Order Management**		
Digital Enablement	**Product Catalog Management, Charging & Rating Management, Billing Management, Partner Management, Policy Management**		

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CUSTOMER SUCCESS STORY: SINGTEL OPTUS

Expert Billing For the Top-End of Town

SingTel Optus (Optus) needed to differentiate itself from its competitors and create a valuable service to attract and retain high-value customers. The company wanted to optimise its service to large corporate and government entities and therefore needed a billing and transaction management system to support that market segment.

STRATEGY

As the largest competitor to Australia's incumbent, Optus has taken a very strategic approach to winning high value customers.

Optus introduced superior customer-focused service to the market, along with premium product and service bundles. The corporate and government market in particular was requesting a better method to manage their communications portfolios.

To support this business decision, Optus selected Singleview as the strategic billing and transaction management system for their corporate and government customers. They chose Singleview because of its flexibility and functionality, which supports the concept of a "market of one".

RESULTS

Optus has reduced overall cost of ownership and improved operational efficiencies with lower bill processing cycle times and seamless internal operations, not to mention reduced spend on accessing data and increased time on servicing its corporate and government customers.

OPTUS – AN OVERVIEW

Optus, now owned by telecommunications giant SingTel, commenced operation in 1992 and is one of the largest communications service providers in Australia. It has more than six million customers today and provides a broad range of communications services including mobile, national and long distance services, local telephony, international telephony, business network services, internet and satellite services and subscription television.

ORGANIZATIONAL STRUCTURES REFLECTED WITH EASE

Singleview's hierarchies provide powerful aggregation features, which allow for the management of complex corporate and government accounts. The ability of Singleview to imitate these organizational structures is achieved via its superior and multifaceted hierarchies. Each account is treated individually, allowing billing, reporting and invoicing to be tailored to meet the client's individual business model. These hierarchies can sometimes be 8-9 levels deep with thousands of nodes.

BILLS AND REPORTS AS A SELLING TOOL

Optus is able to use the options provided by Singleview as a key differentiator for high value corporate clients. With Singleview, Optus customers have total control when they want it and how they want it.

There are two key benefits for Optus customers:

- One single bill for all products and service.
- Advanced multiple reporting functionality.

W www.csgi.com

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CHR Solutions

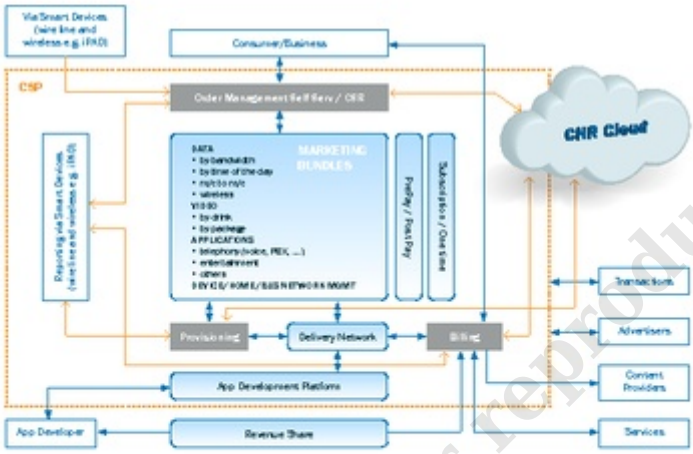
cloud services

Leveraging the power of Cloud Services is crucial to the future of your company. With converging technologies and crippling competitive pressures, CHR's Cloud offers answers in uncertain times. Building your business becomes only a question of how high and how far you want the Cloud to carry you.

GENERATE NEW REVENUE

With CHR Solutions' 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, transactions, services and content. This synergistic environment offers limitless opportunity for creating new revenue without the capital expense.



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White Paper

Preparing the OSS Back Office for New SMB Services & Bundles

Written by:

Alan Breznick, Senior Analyst, Heavy Reading, in cooperation with

Rick Mallon, Vice President, Product Management, Sigma Systems

June 2011

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White Paper

EMC STORAGE RESOURCE MANAGEMENT SUITE

How Storage Resource Management Suite Meets Today's Storage Management Challenges

Abstract

The Storage Resource Management Suite provides comprehensive monitoring, reporting, and analysis for heterogeneous block, file, and virtualized storage environments. It enables you to visualize applications to storage dependencies, analyze configurations and capacity growth, and optimize your environment to improve return on investment. This white paper outlines the common use cases Storage Resource Management Suite addresses.

March 2013

EMC²

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Whitepapers

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White Paper 026

W²CM Smart Replay

Nour Sanadi, Product Manager, EXFO

INTRODUCTION

Along with the phenomenal growth in volume of data on the mobile Internet, there has been an increase in the different types of data flowing through wireless networks. In addition to traditional types of data, such as file transfer protocol (FTP), hypertext transfer protocol (HTTP), voice-over-Internet protocol (VoIP), e-mail and video streaming, there has been a constantly increasing list of over-the-top (OTT) smartphone applications generating new types of data, including peer-to-peer (P2P) data from applications such as BitTorrent and Kazaa. In an effort to differentiate themselves, operators have also been offering their subscribers their own unique applications, which in turn contribute to the variety of data on wireless networks.

Figure 1. The explosive growth in mobile data.

This vast amount and variety of data has created a need for it to be managed effectively. There are several motivating factors to do so, chief among them being:

- Honoring service-level agreements (SLAs) and delivering committed quality of service (QoS) to customers
- Efficiently managing network resources
- Generating revenue as opposed to being just a "dumb pipe" for data
- Securing the network

Let's look at each one of these aspects in a little more detail.

HONORING SLAS

Operators have SLAs with their customers to guarantee a certain minimum performance from their networks. To be able to meet these commitments, the network elements have to be able to ensure that the required amount of resources is made available when needed. A recent study has shown that 5% of users consume 60% of bandwidth. This type of usage pattern can endanger an operator's ability to meet its SLA commitments to the rest of its subscribers. Operators have a strong incentive to manage the data usage of such heavy data users (e.g., by throttling the throughput rates available to such users).

Figure 2. Mobile network operators (MNOs) need to proactively manage network usage.

Honoring SLAs may also mean being able to identify data associated with key customers and giving it preferential treatment in the network. There are strict guidelines in the LTE specifications about the handling of data with different levels of QoS. Gateways in the network have to correctly implement these techniques to ensure that committed QoS is delivered.

EFFICIENT MANAGEMENT OF NETWORK RESOURCES

Another motivation for operators is to manage their CAPEX. Operators are making huge investments in building out their networks to keep up with the growth in data consumption. Unmanaged data usage coupled with the need to deliver on SLAs would result in operators having to deploy more equipment to handle the load. A better alternative is to manage the data usage. The LTE 3GPP specifications introduced the concept of maximum bit rates (MBR). The idea is to limit the maximum throughput used by a subscriber. This is a very critical technique for operators in order to prevent abuse of network resources by a few "bad" subscribers.

REVENUE GENERATION

With an explosion in over-the-top (OTT) applications on the Internet, operators risk becoming mere "dumb" pipes carrying user data back and forth. This is not an enviable situation for operators, considering the enormous investments in infrastructure required to keep up with growth in data usage. Operators want to find ways to generate revenue from the data flowing through their pipes. They can do this by providing the same services as the OTT players, for instance voice-over LTE (VoLTE), but with significantly better and more predictable quality. Operators may want data associated with their own applications to be given preferential treatment as compared to equivalent OTT applications. Additionally, they can add value to the data already flowing through their network (e.g., by signing revenue-sharing deals with service providers in exchange for prioritizing their data, or through targeted advertising based on the content of user data, similar to what Google does with Gmail).

EXFO

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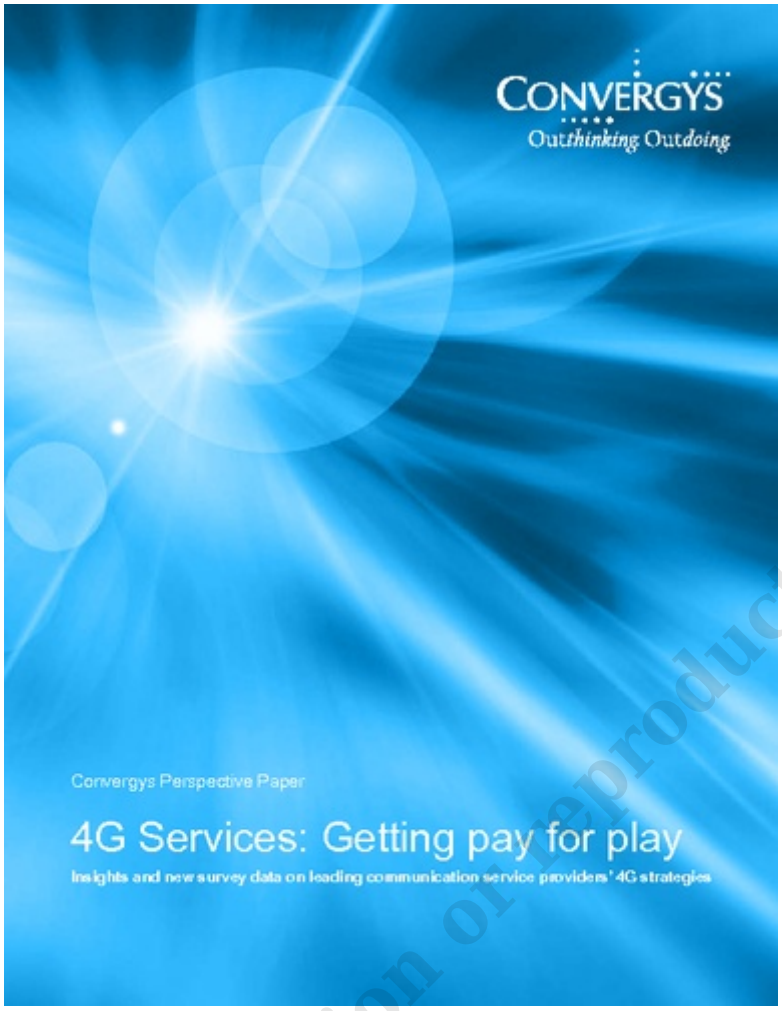

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VIRYANET

3 WAYS YOU WILL OVERPAY FOR YOUR
MOBILE WORKFORCE MANAGEMENT SOLUTION
AND 3 STRATEGIES TO AVOID IT

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accelerate business, anywhere.

Know Your Customers, Keep Your Customers: Five Key Benefits of Using Automated Surveys to Gauge Customer Satisfaction

CSG International | September 2011

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DIFFERENTIATE, ACCELERATE & DRIVE PROFITABILITY

MATRIXX ONLINE CHARGING

The Need for Speed and Real-Time

Everything is moving to real-time. Consumers want ubiquitous connectivity and instant access to applications, media, information and social networking. In today's diverse communications marketplace, there are a number of factors that are driving service providers to interact with subscribers in real-time:

- **Increased adoption of prepaid services and payment methods**
- **Bill Shock prevention and spend control**
- **Third party content and applications**
- **4G and LTE network rollouts**

As these forces create a new Telco 2.0 marketplace, three trends are apparent: IP networks are the de facto standard. The usage events from these networks and the services that run on them are growing exponentially. Services providers need to interact with subscribers in real-time to deliver the exemplary customer experience and control required in the all IP environment.

As these trends converge, network bandwidth becomes a coveted asset where the return on investment needs to be maximized. This can be achieved through the shaping of subscriber consumption with a subtle combination of segmented pricing models, service class options, personalized offers and subscriber policies. Get it wrong and the customers will head to the call center or even churn. Get it right and you've created an informed, dynamic relationship with the subscriber, turning bandwidth usage threats into opportunities and delivering an individual and compelling customer experience.

Service providers are challenged to keep up with subscribers' growing appetite for real-time-based services, keep their competitive edge, and keep costs and operational expenses from spiraling out of control.

MATRIXX Online Charging Empowers Operators to Meet the Real-Time Challenge

MATRIXX Online Charging helps service providers meet the challenges of the Telco 2.0 market by providing the industry's fastest, most efficient real-time charging application.

MATRIXX is the only real-time charging solution that can provide the scalability and speed needed to move to an all real-time world, while providing an extremely low and predictable Cost Per Transaction (CPT).

MATRIXX Online Charging delivers sophisticated real-time rating and discounting capabilities, giving operators the edge to differentiate, personalize and successfully compete.

Its extreme performance supercharges operators to accelerate their service offerings and easily scales to cost-effectively manage surging network traffic.

Its stability and efficiency drive increased profitability by providing operators with predictable and measurable costs so that service profitability is determined and ensured before services are launched.

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DATA SERVICES OVER 25 YEARS, 150,000 MILES OF DATA

SAVE money on data services
GUARANTEE best practices
ENSURE data accuracy
AVOID government regulatory obstacles

Enghouse Data Services (formerly Moore Resource Systems) is a specialized team of GIS experts who make it possible for organizations to create and maintain geo-spatial enabled data for their next generation enterprise IT applications. The services that Enghouse provides can involve large data entry tasks to help populate unique data models or specific data updates based on field changes to a company's assets.

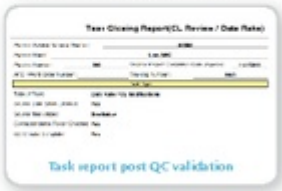
Our Enghouse Data Services team specializes in providing seamless project management support for an organization's own team. Data Services works with an organization's staff to assist in the tracking and completion of tasks on a daily basis to meet specific and prioritized needs.

DATA VALIDATION & QA

The Enghouse Data Services team offers specialized tools that enable validation of source data before conversion to the target. These specialized tools can highlight problem areas that need to be corrected (e.g. data integrity rules) that might be broken by migrating to the target system.

DATA TRANSFORMATION

In a complex data cleansing and migration effort, data very often needs to be transformed between one or more formats. The Enghouse Data Services team accurately transforms the most challenging data, whether spatial or non-spatial.


Task report post QC validation

GIS data aligned to imagery

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HEAVY READING

White Paper

Real-Time Streaming Analytics for Telecom: The Essential Guide

Prepared by

Ari Banerjee
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on behalf of

VITRIA

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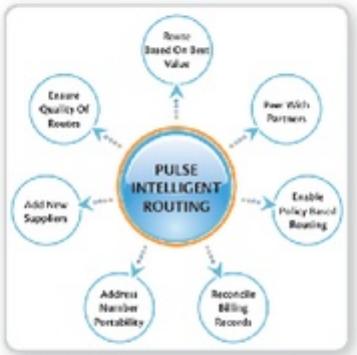
Pulse INP Comprehensive End-to-End Revenue Assurance

REAL-TIME INTELLIGENT ROUTING FROM AN INDUSTRY PIONEER

SAVE on local and LD costs
ROUTE based on best value
PEER with partners
ENABLE policy-based routing
ADDRESS number portability
NEGOTIATE with suppliers
ENSURE quality of routes
RECONCILE billing records
EMPOWER decision making



The Pulse Intelligent Network Platform (INP) offers advanced analytics into supplier diversity, margins, and profitability. It enables real-time margin assurance by centralizing and automating routing policies and network control. Pulse addresses unique requirements of the Interconnect team to negotiate better rates, increase the number of suppliers, lower costs, and improve operating margins. For the Network Operations team, Pulse INP can deliver the ability to translate several hundred rate decks from one or more suppliers, in disparate formats, into real-time switch routing actions. It also prevents revenue leakage by providing the ability to apply routing policies in real-time, bypassing or overriding routes, or diverting suspected incoming traffic for specialized handling. Pulse empowers key decision makers with valuable network insight to make informed and timely decisions.

Modular, flexible, real-time solution

Pulse is an industry pioneer in real-time, intelligent least cost routing solutions. Pulse is flexible, modular, and can be scaled to meet the growing needs of your organization. Start with basic least Cost Routing and add new modules as your needs grow.

Enghouse Networks

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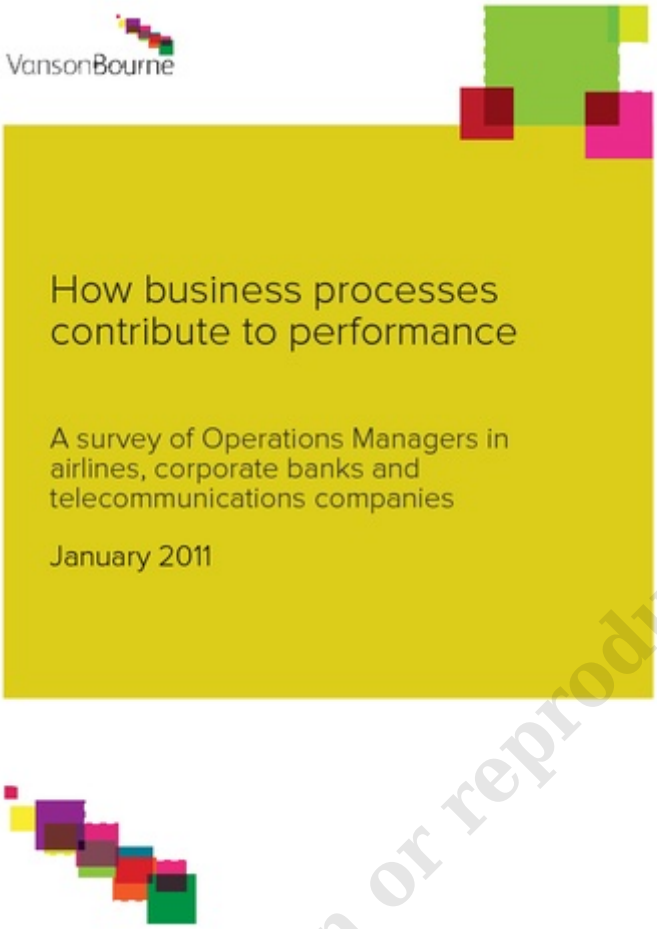

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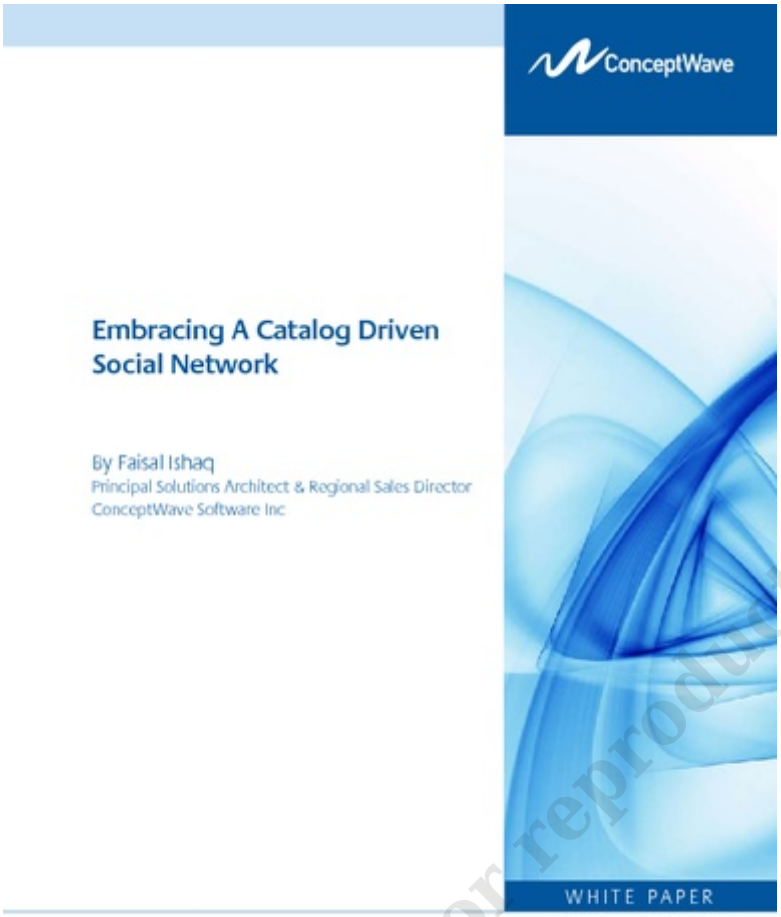

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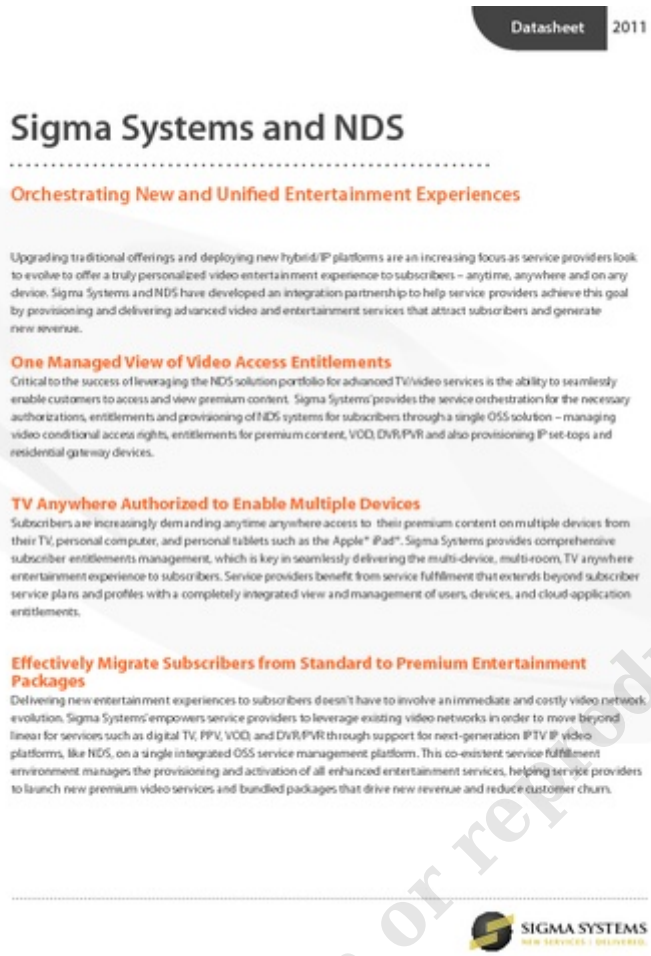

Datasheet 2011

Sigma Systems and NDS

Orchestrating New and Unified Entertainment Experiences

Upgrading traditional offerings and deploying new hybrid/IP platforms are an increasing focus as service providers look to evolve to offer a truly personalized video entertainment experience to subscribers – anytime, anywhere and on any device. Sigma Systems and NDS have developed an integration partnership to help service providers achieve this goal by provisioning and delivering advanced video and entertainment services that attract subscribers and generate new revenue.

One Managed View of Video Access Entitlements

Critical to the success of leveraging the NDS solution portfolio for advanced TV/video services is the ability to seamlessly enable customers to access and view premium content. Sigma Systems' provides the service orchestration for the necessary authorizations, entitlements and provisioning of NDS systems for subscribers through a single OSS solution – managing video conditional access rights, entitlements for premium content, VOD, DVR/PVR and also provisioning IP set-tops and residential gateway devices.

TV Anywhere Authorized to Enable Multiple Devices

Subscribers are increasingly demanding anytime anywhere access to their premium content on multiple devices from their TV, personal computer, and personal tablets such as the Apple® iPad®. Sigma Systems provides comprehensive subscriber entitlements management, which is key in seamlessly delivering the multi-device, multi-room, TV anywhere entertainment experience to subscribers. Service providers benefit from service fulfillment that extends beyond subscriber service plans and profiles with a completely integrated view and management of users, devices, and cloud-application entitlements.

Effectively Migrate Subscribers from Standard to Premium Entertainment Packages

Delivering new entertainment experiences to subscribers doesn't have to involve an immediate and costly video network evolution. Sigma Systems' empowers service providers to leverage existing video networks in order to move beyond linear for services such as digital TV, PPV, VOD, and DVR/PVR through support for next-generation IPTV IP video platforms, like NDS, on a single integrated OSS service management platform. This co-existent service fulfillment environment manages the provisioning and activation of all enhanced entertainment services, helping service providers to launch new premium video services and bundled packages that drive new revenue and reduce customer churn.

SIGMA SYSTEMS

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