

TALKING HEADS ▶

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LTE OPTIMISATION

It all depends on the content consumed

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14 TALKING HEADS
Tim Spencer, president
COO of Sigma Systems



20 LTE OPTIMISATION



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Autonomy loses its autonomy – and its value



George Malim,
Editor:
VanillaPlus

Imagine the scene: A year ago I spent a vast sum on a new off-road vehicle in preparation for an overland trip around the globe. I bought a desirable vehicle with many features and additional options. The vehicle had only just been released and because of that I had to pay over the list price in order to get the vehicle I wanted and avoid delivery delay. However, my plans changed and I decided not to go on the trip. Instead, I took the vehicle out for a drive through some local woodland during which I scratched the paintwork and dented some of the panels.

I then parked the vehicle up and haven't done anything with it for almost a year. I haven't kept up with maintenance schedule or even invested in washing it. It's now worth maybe half what I paid for it. They tyres are flat and the bodywork is beginning to rust where I scratched it. I don't think the dealership or the manufacturer would be keen to reimburse me for the loss in value of the vehicle.

At a similar date, HP bought unstructured search software provider Autonomy as part of a software-focused strategy led by former chief executive Leo Apotheker. Its plans have changed under new chief Meg Whitman and Autonomy, which it has done little to integrate, is now the subject of a substantial write-down. Whitman bluntly wants some of HP's money back and has complained to authorities in the US and the UK that Autonomy misrepresented its performance at the time of its sale.

It's accepted in the industry and by Autonomy founder Dr Mike Lynch that HP paid a full price for Autonomy. Indeed Larry Ellison founder of rival vendor Oracle took great pleasure in crowing about the price HP paid for the company at the time of its sale. Ellison might have found Autonomy a

useful addition to his portfolio – but not at US\$10 billion.

Apotheker, though, identified Autonomy's technology as something that could become central to HP's software-oriented strategy. It certainly has myriad uses within the telecoms industry. However, HP's new leadership and changed strategy has seen Autonomy pushed to the sidelines. The company has also failed to keep Autonomy's senior management and the resulting write-down in the company's value looks fair. That's something Lynch acknowledges, although he points out that the value has been destroyed by HP – much like the value of the off-roader has been destroyed by an uncaring owner.

The technology industry is littered with failed mergers and acquisitions but HP seems to be particularly bad at them. As Lynch has commented, when he joined HP it was like getting on a plane to find out that the engines are on fire and the pilots are fighting each other.

Let's hope the recently acquired companies in the OSS/BSS sector find more welcoming environments at their purchasers.

Enjoy the magazine

George Malim



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PUBLISHED BY
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Suite 28,
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Printed in the UK by
The Magazine Printing Company
using only paper from FSC/PEFC suppliers
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Jan Karlsson:
Mediation is a
source of
performance

SAP and DigitalRoute sign reseller agreement

SAP and Digital Route have announced a global reseller agreement whereby SAP will offer DigitalRoute's MediationZone solution to its customers as the SAP Convergent Mediation application by DigitalRoute. This scalable software facilitates connectivity to the charging solution that supports key use cases for telecoms, high-tech, banking, postal and logistics companies across the globe.

The mediation layer is a critical component of a competitive billing solution, which seamlessly integrates network elements and data sources with the SAP Convergent Charging application. SAP Convergent Mediation helps customers optimise data streams to shorten time to market for new services and respond quickly to changes in network infrastructure or regulatory demands. As networks evolve and consumers demand an increasingly complex array of innovative services, the ability to support new offerings is a critical source of competitive advantage

for service providers. SAP's reseller agreement with DigitalRoute supports growth in a rapidly changing market, enabling companies to expand markets, offer innovative services and quickly address customers' changing needs without being constrained by their billing solution.

"SAP Convergent Mediation allows our customers to address new business requirements and drive profitable growth," said Jens Amail, senior vice president, Services Industries, SAP. "Working with DigitalRoute to provide out-of-the-box integration with SAP Convergent Charging for transaction rating and charging allows us to extend our support for the billing requirements of new Telco 2.0 services and evolving customer demands."

Jan Karlsson, CEO of DigitalRoute, added: "Mediation software is a key source of performance and efficiency benefits. The combination of SAP Convergent Mediation and SAP Convergent Charging delivers an end-to-end solution that will empower customers in the service industries to achieve real competitive advantages."

InfoVista acquires Mentum to create SON migration path

InfoVista has acquired Mentum, a provider of RAN and backhaul network planning and optimisation systems. The acquisition is part of InfoVista's strategy to strengthen its solution set across the network lifecycle and customer experience domains, enabling operators to better plan, operate, optimise and monetise their networks. InfoVista expects the acquisition to enhance its ability to offer a reliable path to self-organising networks (SON).

This is the first acquisition for InfoVista since it was acquired by Thoma Bravo in March 2012 and brings a combined user community of thousands of experts spread over 250 mobile operator customers in more than 120 countries. Mentum, which was established 20 years ago, claims 100 LTE customers.

"I'm excited about the vast expertise in the mobile market that the talented

Mentum employees, customers and partners will bring to InfoVista," said Philippe Ozanian, CEO of InfoVista. "This acquisition brings together extensive radio and IP expertise, uniquely positioning InfoVista as a solution provider that can tackle the increasing complexity of next-generation mobile networks."

Mark Mortensen, principal analyst at Analysys Mason, added: "Following the launch of InfoVista's SON solution at Management World 2012, the company's acquisition of Mentum demonstrates its commitment to become a major player in providing hybrid SON," he said. "Incorporating real-time information and forecasted network intelligence into the RAN and IP transport planning processes will enable InfoVista to offer the accuracy and efficiency essential for optimised and just-in-time RAN and backhaul investments."

NEWS UPDATE

Wipro Technologies invests in CAST

CAST, a provider of Software Analysis and Measurement (SAM) systems, has entered into a strategic partnership with Wipro Technologies, the global information technology, consulting and outsourcing business of Wipro Limited, to equip its delivery centres with the CAST Application Intelligence Platform for Quality.

The CAST Application Intelligence Platform analyses and measures applications against the emerging CISQ (Consortium for IT Software Quality) standards that encapsulate system-level coding and architecture best practices for security, reliability, performance efficiency and maintainability. By deploying CAST, Wipro is positioning itself to effectively respond to customers' SLAs which are increasingly including structural quality requirements.

Actuate acquires Quitarian to deliver big data analytics

Actuate Corporation has acquired Quitarian, a privately held software company that provides visual data mining, social media analytics and predictive analytics for business and other non-technical users.

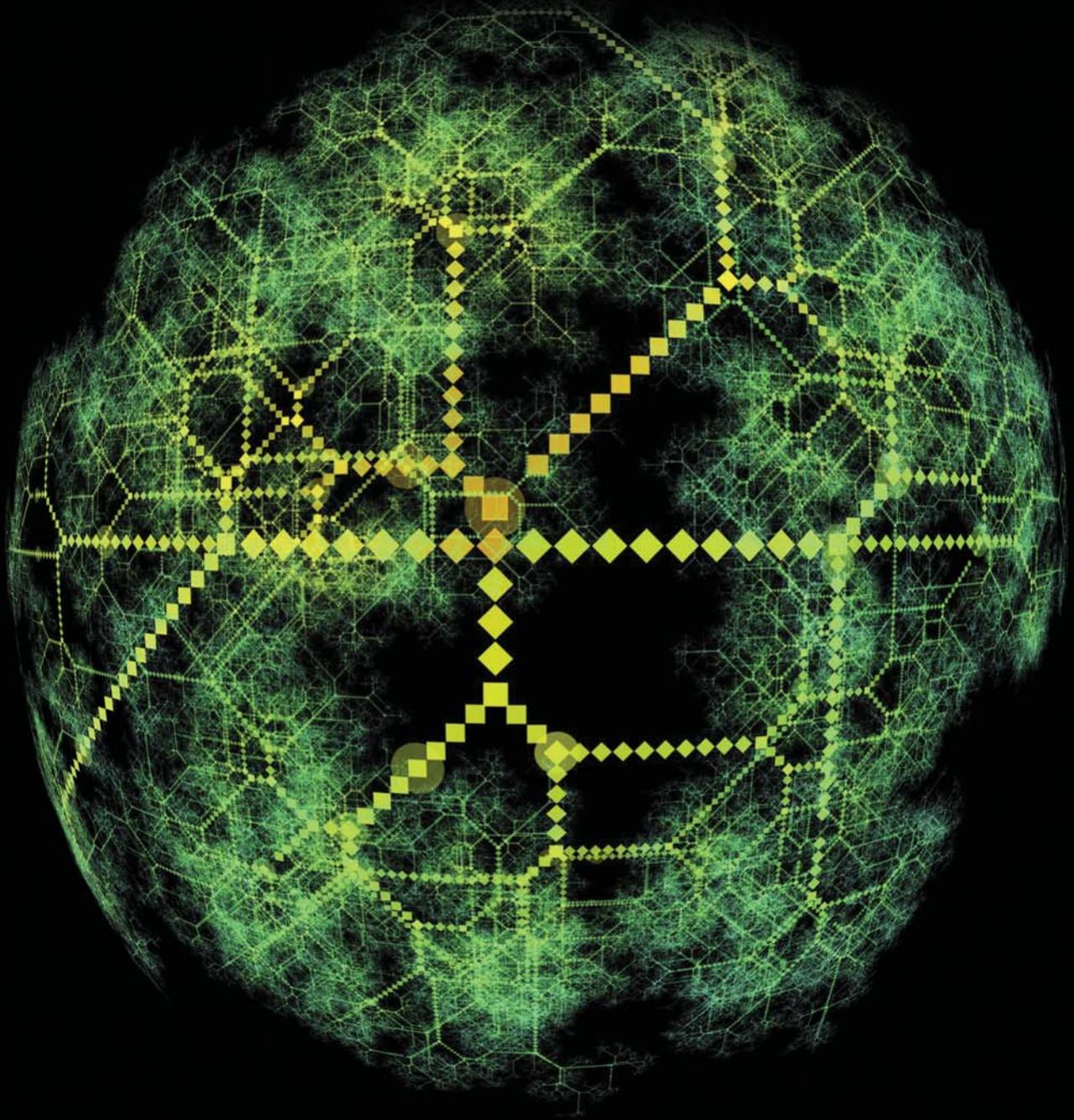
Quitarian Analytics will be integrated into Actuate's flagship product, ActuateOne, and will be known as BIRT Analytics. BIRT Analytics will empower business users far beyond the capabilities of existing data discovery and business intelligence technologies to present them with a combination of analysis, visualisation and information delivery options.

"By acquiring world-class technology and talent at Quitarian, we're taking powerful analytics and visual data mining technologies that have demonstrated traction in Spain to the rest of the world via our direct, OEM and partner channels," said Pete Cittadini, president and CEO at Actuate.



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Daniel Kurgan: Opening new remittance corridors

BICS and Xpress Money expand mobile remittances to Africa

BICS, a provider of wholesale carrier services and a pioneer in the mobile financial services market, has announced an agreement with Xpress Money to open new mobile remittance corridors towards Africa. The agreement will facilitate money transfers to mobile subscribers in the region.

The African diaspora will be enabled to transfer money back home in various increments instantly and cost effectively using Xpress Money's safe and secure service. Xpress Money has international reach with 135,000 agent locations across the world. Mobile subscribers in Africa that use mobile wallet services will be eligible to receive the money transfers facilitated by the agreement.

The international remittance is facilitated by HomeSend, a global hubbing service that enables mobile-centric money transfers. HomeSend is a BICS service, based on technology from its strategic business partner, eServGlobal, and connects a community of telecoms service providers, banks and financial organisations. It facilitates money transfers in real-time, enabling person-to-person transfers of cash, credit card payments or direct bank

transfers.

Daniel Kurgan, chief executive officer of BICS, said: "This agreement with Xpress Money will open up new remittance corridors and expand the scope of international money transfers. The first phase of this implementation has made it possible to send money easily and rapidly through Xpress Money's agents to mobile wallet users in Africa. Xpress Money now has access to the network of service providers connected to the HomeSend Hub, contributing to our goal of building a global mobile remittance ecosystem."

Sudhesh Giriyan, vice president of Xpress Money, added: "We at Xpress Money have been looking to provide our customers with increasingly innovative products and services that match their hectic lifestyle; this partnership with BICS is a step in the same direction. We are happy to offer our customers around the world an easy to use service that will enable them to send money to their loved ones in Africa even when they are on the move. Mobile money transfers are the future of the remittance business, with BICS onboard as our partner we will be able to leverage their superior technology platform to offer our customers with a money transfer service right at their finger-tips."

Vodafone joins HomeSend international mobile money hub

Vodafone is set to help more people without access to conventional banking by broadening the reach of its secure mobile money transfer service, M-Pesa.

Vodafone will connect its M-Pesa service to international remittance hub, HomeSend operated by BICS. This will allow M-Pesa customers to send and receive funds via their mobile phone accounts by connecting directly to more than 21 international money transfer businesses in 35 countries.

M-Pesa was launched by Vodafone in 2007 and is currently available in seven countries including India, Kenya and Tanzania. The service allows customers to send and receive money via their mobile phones as securely and simply

as sending a text message. Prior to M-Pesa, many people in developing markets had no choice but to move cash around in person or by public transport, exposing them to corrupt middlemen and thieves.

Vodafone director of Mobile Money Michael Joseph said: "Mobile changes lives. It also transforms societies and economies: a 10% increase in mobile penetration in a country equates to a 1.2% increase in GDP growth. We are now at the next stage of that growth. By breaking down national barriers to make mobile money transfer truly global and ubiquitous across all competing networks, just like text messaging today, we can further connect the world's huge unbanked population."

NEWS UPDATE

MasterCard expands mobile payments partnerships

MasterCard has announced two new partnerships with T-Mobile and Orange in Poland. These most recent mobile partnerships join a growing global trend toward wireless telecoms providers rolling out mobile contactless payment options to its customers.

"2012 has been a significant year for MasterCard as we have put our focus on being the partner of choice for telecoms service providers around the world," said Jorn Lambert, head of Emerging Payments at MasterCard Europe. "The combination of MasterCard's leading innovation and technologies combined with the technological advancements in the handsets and service provider networks is fuelling the enthusiasm for strong and meaningful partnerships."

Ogone completes acquisition of Tunz.com

Payments specialist Ogone has completed its acquisition of Tunz.com. The newly acquired company has the status of European e-money issuer and is therefore able to provide financial services in the European Union, for which a licence as an accredited institution for electronic money is required. Ogone can in the meantime provide various local and international payment methods with a single contract, under the terms of which web merchants can reach millions of consumers abroad.

Ogone says it is capitalising on the global trend towards payment via mobile technology by incorporating Tunz.com, which can offer mobile wallets as a part of its services. This virtual wallet allows customers to use their mobile phone as a means of payment, and it even supports multiple currencies and products such as vouchers, coupons and tickets.



NEWS UPDATE

Midcontinent signs NetCracker contract extension

Midcontinent Communications has signed a contract extension for NetCracker's convergent, next-generation BSS solutions to enable seamless transition to the next-generation of services oriented architecture (SOA) and create a foundation for business agility.

Midcontinent Communications is a provider of data, video, phone and cable services for residential and business customers in communities located throughout the U.S. Midwest. The CSP will continue utilising NetCracker's BSS solutions for its billing and customer care and will also be implementing NetCracker's secure SOA, including web services, for a standardised approach to customer and service management.

Gary Shawd, vice president of Information Systems at Midcontinent, said: "The adoption of NetCracker's SOA and web services to our BSS solution will enable us to deliver a superior experience to our customers in the near term and these services will also enable us to address customer needs and business challenges as we grow and expand in the future."

Astellia to supply CEM system to Vodacom Mozambique

Vodacom Mozambique has chosen Astellia to implement its VIP Care CEM solution. The application is intended to improve customer satisfaction and customer loyalty – particularly amongst high value subscribers.

Vodacom is the second largest mobile operator in Mozambique and since 2009 has been majority owned by Vodafone. By using Astellia's customer centric VIP Care solution, Vodacom plans to monitor the quality of experience of its subscribers from a single subscriber up to a group of users. VIP Care also helps Vodacom define and monitor service level agreements (SLAs) with their customers based on Key Quality Indicators.

Wataniya Kuwait to deploy CSG International wholesale billing



John Rainger: Wholesale can become a cost centre as CSPs grow

Wataniya Telecom has selected CSG Interconnect as the wholesale billing management system for its operation in Kuwait. Wataniya Telecom Kuwait has multiple domestic and international telecoms partners including for voice, data and

SMS/MMS interconnection. CSG Interconnect will automate partner management, carrier-to-carrier rating, billing and settlement and help speed disputes management and reconciliation. It will provide the CSP with detailed financial reporting as well as interfaces to other systems. Previously wholesale billing was handled manually.

"With the growth of our wholesale operation we recognised the

opportunity to review and improve our partner agreements and settlement management processes," said Hisham Siblani, chief technology officer at Wataniya Telecom in Kuwait. "We chose to implement CSG Interconnect knowing our parent company QTel and our operations in Algeria and Tunisia have had great results from doing so. We valued being able to work closely with CSG's regional services team in Dubai."

John Rainger, vice president of EMEA at CSG International, added: "As operators grow, the wholesale business either becomes an important revenue-generator, or an expensive cost centre. CSG Interconnect offers all operators – local, regional and global – the opportunity to optimise their carrier-to-carrier billing and settlements processes and we welcome Wataniya Telecom in Kuwait as our newest customer in the region."

VimpelCom chooses Amdocs for BSS consolidation

VimpelCom, Russia's third-largest CSP, has selected Amdocs CES software to consolidate its business support systems (BSS) following the company's acquisition of Golden Telecom and Corbina Telecom. The solution will converge multiple lines of business, providing VimpelCom with a single view of its customers, enabling the company to improve the customer experience, maximise revenue opportunities and reduce operational costs.

In the project led by local systems integrator AT Consulting, Amdocs will integrate multiple existing customer management systems across different lines of business with solutions from Amdocs' BSS suite, into a single, unified BSS system. An integral part of the solution, Amdocs Enterprise Product Catalog will be the master repository for all product information

allowing VimpelCom to quickly and efficiently define, blend, price, bundle, maintain, update and retire product and service offerings.

"By consolidating our BSS systems not only do we gain operational efficiencies with fewer systems to manage, we become even more competitive by simplifying and enhancing the customer experience," said Andrey Godunov, CIO of VimpelCom Russia. "For example, with a single view of our customer, we can provide faster, more accurate customer services to a customer with mobile, fixed line and Internet services, while also reducing call times to our call centres. In addition, we will be able to introduce dynamic pricing bundles for our customers, increasing opportunities for up-sell and cross-selling across different lines of business to maximise revenue opportunities."

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TelOne deploys FTS Leap billing in Zimbabwe

Zimbabwe's TelOne has successfully implemented Leap Billing software from FTS in a comprehensive end-to-end billing and customer care solution.

TelOne is Zimbabwe's national telecoms operator and provides a wide range of services to its residential and business customers, including wireline telephony, wireless, broadband and satellite communications. TelOne's billing transformation project includes the implementation of FTS' convergent billing and charging, interconnect billing, invoicing, order management, customer management, network management, mediation and more.

"Following the successful implementation of Leap Billing, we can already see the benefits of the FTS' solution," said Hampton Mhlanga, TelOne's CEO. "The flexibility of the system will enable us to provide a richer offering to our customers through the rapid implementation of new services, as well as immediate additional sources of income from interconnect fees.

MTN South Africa selects Celcite for network optimisation

Celcite Management Solutions has announced that cellular operator MTN South Africa has adopted its COPS-AIC software solution, as a service, towards maximising optimisation of its growing 2G and 3G networks.

MTN's planning and optimisation engineers will use COPS-AIC software to complement their existing tools with further efficiencies to assist in accelerating the ongoing improvement of network quality indicators.

"MTN was looking for a tool to empower its engineers and further improve efficiencies," said Graham Kemp, Celcite's regional managing director for Africa. "COPS-AIC will enable MTN to further optimise its 2G and 3G radio networks, giving it an even more stable base from which to roll out additional 3G capacity."



Jeff Gordon: Prepare for LTE roaming complexities

SmarTone chooses Syniverse for Hong Kong LTE roaming trials

Syniverse has announced an agreement to provide its IPX Network and Diameter signalling service to Hong Kong mobile network operator SmarTone. The agreement supports

SmarTone's participation in Syniverse's comprehensive LTE roaming trials, which allow the operator to test end-to-end LTE roaming functionality and launch commercial service with partners globally.

"It is critical that mobile service providers anticipate and prepare now for the technical complexities of LTE roaming so that end users enjoy a seamless experience during the transition from legacy services to LTE," said Jeff Gordon, president and CEO of Syniverse. "The Syniverse LTE solutions enable SmarTone to test, resolve and guarantee the quality of its LTE roaming processes. In addition, SmarTone's integration of our IPX network is a critical step as it offers LTE

interoperability to its end users."

Syniverse's IPX Network and Diameter Signaling Service are core components of the company's LTE portfolio offering carrier-grade, five-nines connections that are fully enabled to deliver the quality and class of service required for LTE. Diameter Signaling Service is a leading-edge solution that addresses routing, interoperability and mediation services to enable seamless LTE roaming. SmarTone is among the more than 80 operators worldwide that are connected to Syniverse's IPX.

Stephen Chau, CTO of SmarTone, added: "During our LTE rollout, we must continue to deliver a high level of service and ensure our networks interoperate flawlessly to provide the ubiquitous reach our end users have come to expect. With Syniverse's IPX and LTE roaming solutions, we are able to address the challenges of LTE interoperability and interworking now to ensure the best quality of experience for end users once LTE roaming is launched commercially."

Redknee signs converged billing and customer care deal with Malea MMS in Niger

Redknee has signed a new converged billing and customer care deal with Malea Multimedia Mobile and Services (Malea MMS) that will see the company launch a new mobile brand in Niger. The multi-million dollar, multi-year term licence deal adds to Redknee's extensive footprint in the African market.

Redknee's real-time converged billing and customer care solution is set to enable Malea MMS to launch mobile marketing, multimedia and customer loyalty services as well as provide advanced customer care by offering its customers real-time visibility of their usage and balance, including real-time usage notifications. Redknee's solution will also allow Malea MMS to launch data, voice, content and media services for prepaid, postpaid and hybrid customers.

Lionel Ekabouma, managing director of

Malea MMS said: "Operating in a fast moving market meant that we required a next generation converged billing and customer care solution that could support our aggressive growth strategy. Its reputation to support operators in competitive markets, to elevate the customer experience and its professional services approach was pivotal to the decision to select Redknee to support our launch strategy and ongoing success."

Lucas Skoczkowski, CEO of Redknee, added: "We are extremely pleased to be supporting Malea MMS launch its brand to the market in Niger. CSPs are increasingly looking to diversify their business while delivering an advanced customer experience. This new customer win reinforces Redknee's growing momentum in the market and expansion of its geographical footprint."



VanillaPlus Hot List: December/January 2013

The Hot List below shows the companies informing us of recent contract wins or product deployments. If your contract is not listed here email the details to us now marked "Hot List" <editorial@vanillaplus.com>

Vendor(s)	Client, Country	Product / Service (Duration & Value)	Awarded
Aircom International	H3G, Italy	Selected to improve quality of network using AIQ intelligent optimisation managed services and consultancy	11.2102
Aircom International	MTN, Afghanistan	Deployment of Aircom Optima software to provide end-to-end view of LTE network performance	11.2012
Allot Communications	Millicom International (Africa and Latin America)	Allot Service Gateway deployed at nine affiliates in Latin America and Africa for Millicom's Tigo branded operators	11.2012
Amdocs	Vimpelcom, Russia	Amdocs CES software selected for BSS consolidation project following Vimpelcom's acquisition of Golden Telecom and Corbina Telecom	11.2012
Amdocs	Melita Group, Malta	Delivery of BSS and CES software and hardware for end-to-end BSS consolidation project	10.2012
Amdocs	Sprint, USA	New seven-year managed services deal agreed for billing and customer care systems	11.2012
Amdocs	Telefónica Czech Republic	Amdocs Document Designer deployed to provide customers with a single bill for fixed and mobile services	11.2012
Astellia	Digicel, Haiti	Renewal of 3G network assurance contract to provide visibility from RAN to core network	11.2012
Astellia	Vodacom, Mozambique	Implementation of VIP Care CEM system to improve customer satisfaction and loyalty for high value subscriber in particular	11.2012
BICS	Airtel Africa (pan-region)	Agreement to facilitate mobile money transfer services across Africa using HomeSend money transfer	11.2012
Celcite	MTN, South Africa	Adoption of Celcit COPS-AIC software as a service to maximise optimisation of 2G and 3G networks	11.2012
CSG International	Wataniya Telecom, Kuwait	Deployment of CSG Interconnect as wholesale billing management system for Kuwaiti operation of Qtel	11.2012
FTS	TelOne, Zimbabwe	Deployment of Leap Billing software including convergent billing and charging, interconnect billing, invoicing, order management, customer management, network management and mediation	11.2012
i-conX solutions	Vodafone, Qatar	Deployment of I-conX Revenue Optimisation system encompassing specialised quality and reporting tools alongside core least cost routing functionality	11.2012
Netcracker Technology	Midcontinent Communications, USA	Netcracker convergent BSS solutions chosen to enable transition to next generation services oriented architecture (SOA)	11.2012
Redknee	Malea MMS, Niger	Converged billing and customer care system to support launch of new mobile brand	11.2012
Subex	True Corporation, Thailand	Subex Revenue Operations Centre Revenue Assurance deployed by Thailand's largest ISP and cable provider and third largest mobile operator	11.2012
Sybase 365	Globe Telecom, Philippines	Enablement of LTE roaming service with China Mobile Hong Kong using Sybase IPX 365 global IPX network	11.2012
Sybase 365	Zajil International, Kuwait	Partnership to extend IPX services to mobile operators in MENA region using Sybase 365 global IPX network	11.2012
Syniverse	SmarTone, Hong Kong	Provision of IPX network and Diameter Signaling Service to support LTE roaming trials	11.2012

Monaco Telecom completes first phase of Synergie IT transformation project

Monaco Telecom has completed the first phase of Project Synergie, its business and IT transformation focused on convergence, customer-centricity and quality of service. This phase of the programme included the implementation of Oracle Communications Billing and Revenue Management and Oracle Communications Order and Service Management.

Monaco Telecom is the incumbent CSP in the Principality of Monaco, providing fixed, mobile, Internet and television services to both consumer and enterprise customers. Facing new competition, Monaco Telecom needed to launch innovative bundled services more rapidly. However, its legacy IT platform could not support service bundling as needed and had become too expensive to maintain or upgrade.

To overcome these challenges Monaco Telecom is merging multiple service silos into a single billing and customer care platform. Once complete, it will provide a more flexible and scalable IT platform to offer and deliver new services.

Monaco Telecom selected Oracle to provide a convergent billing and customer care platform for all current and future product lines. The CSP also selected Oracle Communications Consulting to manage the product implementation and complete the data migration from the legacy system to the new platform.

Monaco Telecom will continue to work with Oracle Communications Consulting on Synergie Phase Two, which will include the consolidation of its other four legacy billing platforms, implementation of more efficient IT processes and enhanced customer services.

"Customer service is the heart of our business, thus we desired a trusted partner to help protect and grow the customer equity we've built our reputation on. We selected Oracle because of its comprehensive product portfolio and deep expertise helping communications service providers execute IT transformation projects. Oracle was the lowest-risk, most flexible solution for us, in which we have total confidence," said Martin Péronnet, chief executive of Monaco Telecom.



Johan Bergh

DigitalRoute expands leadership team with new CFO, COO and legal officer

Digital Route, a provider of mediation and data integration solutions for the communications industry, has announced the expansion of the company's leadership team. Three key senior executives, **Johan Bergh**, **Andreas Zartmann**, and **Tobias Edvardsson** have joined the company in positions to support the company's

continued growth.

Arriving as chief operating officer is Johan Bergh, a well-known and highly respected leader in the IT industry for the past two decades, including eleven years in senior roles with **Ericsson**, focused on the telecoms industry. Most recently Bergh has served as divisional managing director of **Logica Sveriga**, where his achievements have included building Logica's Utilities & Telecoms division into one of the company's most consistently profitable units. Before Logica, Bergh served as a director for **WM-Data** and prior to that, as a vice president with **Atos Origin**.

Joining DigitalRoute as chief finance officer is Andreas Zartmann. Zartmann has over a decade's experience as a leader in corporate finance, having most recently helped achieve a significant turnaround at **Sörman Information**, which today operates on best-in-class margins. Zartmann has also been the CFO of publicly listed companies on OMX Nordic Exchange. He has extensive experience in the telecoms and IT security sectors.

Taking up the role of chief legal officer is Tobias Edvardsson. Edvardsson is a lawyer and entrepreneur with a strong focus on technology companies and commercial agreements. Also a leading expert on cloud computing, he authored the first Swedish book on the subject as well as the Swedish standard agreements. Prior to his legal career he co-founded and managed, *inter alia*, **Internet One**, **GlobeCom** and **Spinbox**.

"We are delighted to welcome these experienced leaders to DigitalRoute. They will help the company to achieve its vision of being the market's leading data management solution, and they add new and critical skills to our leadership team," said Jan Karlsson, CEO of DigitalRoute. "I look forward to their contributions to the company's success."

Graeme Ross joins KPMG as global chair of Media and Telecommunications practice

Graeme Ross has been promoted to global sector chair of **KPMG International's Media and Telecommunications practice**. Ross, a partner with the UK firm, serves as the global lead partner for several key clients in the telecoms and media sectors and leads KPMG's global markets group for Europe, the Middle East and Africa (EMA). A partner with KPMG for over 17 years, he is also a EMA region board member and has previously led KPMG's technology, media and telecoms practice for the UK and European member firms.

"It is imperative that we remain relevant to clients' agendas by continuing to bring new solutions and propositions which address the specific issues and challenges they face," said Ross. "We have a highly talented global network of partners and professionals in the sector who work closely together and I'm delighted to be able to contribute to our continued client successes in the sector."

Isabelle Allen, KPMG's global head of sales and markets, added: "Graeme has an impressive track record in making clients' business his top priority. With his deep knowledge of the telecoms and media sectors, as well as his broad experience with a number of very large multinational companies, clients can be assured that KPMG firms' professionals will continue to bring fresh ideas together with our industry skills to help them achieve their business objectives."

Appointments in brief

Acision as announced the appointment of **Michael Frausing** to the position of senior vice president and general manager for its Asia Pacific region. Based in Singapore, Frausing will be responsible for managing Acision's local business operations and will play a pivotal role in cultivating customer and employee relationships, strengthening the company's regional presence and bolstering the business.

Prior to joining Acision, Frausing was the head of global sales at **GE**, where he focused on energy storage for the telecoms, grid and UPS segments and helped implement strategies to grow the sales team, as well as penetrate and increase market share. Frausing also worked at **LGC Wireless** where he grew sales from \$12 million to over \$100 million in less than a five-year period. He also spent 15 years at **Ericsson** in various sales leadership positions, primarily selling a broad range of telecommunications solutions to carriers worldwide.

René Svendsen-Tune has joined **Nokia Siemens Networks** as head of its Customer Operations for Europe. He will be responsible for the company's sales and customer operations across Europe and be a member of the company's Executive Board. Svendsen-Tune will report to chief executive, **Rajeev Suri**.

Previously, Svendsen-Tune was chief executive of **Teleca**, a leading supplier of software services to the mobile industry. He subsequently gained significant experience of working with private equity in this role, following the company's acquisition by **Symphony Technology Group** in 2008. Prior to that, from 1993 to 2006, he spent 13 years with **Nokia Networks**, where he served in a range of positions, including as senior vice-president of global customer and market operations.

Svendsen-Tune will be based in Munich, Germany. He takes over the role from interim Europe head, **Hans-Jürgen Bill**, who will return to focusing on his permanent role as the company's head of human resources.

Alcatel-Lucent has appointed **Craig Thompson** to head up a new business unit managing its intellectual property assets as a dedicated profit centre. With more than 29,000 issued patents, and several thousand patent applications filed each year, the new unit will be key in Alcatel-Lucent's new operating model, announced in September.

Thompson joins Alcatel-Lucent from **Nokia** where he served as vice president of Legal and Intellectual Property affairs of the company's mobile phone business, having originally joined Nokia's IPR team in 2004. In his role as senior vice president of Intellectual Property at Alcatel-Lucent, Thompson will report to Jeong Kim, president of **Bell Labs**, who commented: "We are thrilled to have Craig on board to lead the new business unit we have created to generate additional value from our extremely strong patent portfolio. Appointing an executive of Craig's calibre is a strong statement of our commitment to [maximising] the significant market interest in our intellectual property, and he will be instrumental in converting that interest into a meaningful revenue stream."



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Profitability of new value-added services is elusive without automation and user control

Tim Spencer is co-founder, president and COO of Sigma Systems, the provider of service order management, provisioning and activation, device provisioning and advanced mediation solutions for broadband IP service offerings. Here, he tells VanillaPlus how CSPs can drive new revenue by immersing themselves in the value-added and cloud services market place by relentlessly automating service fulfilment processes and creating attractive service bundles. New revenues, added to the operational cost savings, will help alleviate some of the commoditisation pressures CSPs face.

VanillaPlus: What are the key challenges that service providers face today?

Tim Spencer: They face a number of challenges but certainly revenue on core services is being commoditised and growth in many core service provider businesses is stalling. Cable operators, for example, are seeing subscriber growth in the hundreds per month when in the past they saw growth in

the tens of thousands. For European mobile operators, 4% total growth is expected this year.

Declining or flat revenue, the need to invest massively in new network technology like FTTH and LTE to remain competitive, and the rise of serious over-the-top competition is a bit of a perfect storm for many operators. Service providers must understand how to generate ►



Tim Spencer,
president and COO,
Sigma Systems



additional ARPU from their existing customer base with new innovative services to thrive.

VP: Many CSP's are considering the launch of cloud and value-added services, but can these services really be a differentiator for service providers?

TS: There are hundreds of millions of dollars being poured into the cloud XaaS market by investors. Tapping that innovation successfully can plug the ARPU gap the operators are facing. There's an opportunity for them to fill their pipes and expand the value added services they offer today. I don't believe that service providers will necessarily become market place vendors with thousands of applications for consumers and the small and medium business (SMB) market. What they need to do is focus on a set of value added services that take advantage of their network and system investments, which will position them uniquely to their target markets.

The key for service providers is to improve the whole new product introduction cycle from nine months or more, which is common today to just a few weeks or less. To do that they must embrace bundling of OTT services with network services, and to be successful they require platforms that automate core functions in service fulfilment for on-boarding new services.

VP: Can these cloud and value-added services be profitable for service providers?

TS: I believe they can but automation and self-management capabilities for the new services are absolutely critical here, because we're talking about services that won't have 40 or 50 or 60% market uptake but 10 or 5% or even less. However, the customer loyalty – or stickiness – that can be created by offering these value added services equates to a higher lifetime value of each customer. Automation is absolutely critical to enable such services to be profitable. Key functions such as single sign-on and simple end user interfaces are needed so service providers can bring services on board efficiently.

There's a hidden secret here – OTT and SaaS vendors do not have a lot of automation in their own back offices to support channels. We've done a lot of work isolating vendors that can provide flow-through fulfilment with no call centres and everything done online. The removal of the 'integration tax' required to bring that technology into the service provider's ecosystem is critical to successful and profitable services, but there's no reason why small volume services couldn't be easily adopted with the right level of automation. Service providers can be a trusted advisor to

the SMB/SME market in this space and look for opportunities to aggregate applications and services. There are literally thousands of cloud services and applications in the market place, many of which are likely to disappear as the market matures. Service providers will be looking for sets of services that are equivalent in capability and reliability to the services they provide themselves.

VP: Why does OSS play a critical factor in enabling service providers to overcome these challenges?

TS: If service providers want to tap into value-added services and some of the differentiation they can bring, they need more convergent solutions in their OSS that bring together their network capability along with device management, single sign-on and ordering, as well as capabilities like policy and quality of service. Automation is the key to that. Service providers can't afford to have quality issues or fall-out, they need to reduce manual steps. We've seen companies try to implement cloud service brokerage with an army of call centre representatives and manual processes. That model is flawed and quite expensive – automation is the only efficient way to approach this.

VP: Sigma has customers in both the cable and telecoms markets, how do their challenges differ from one another?

TS: I really don't think they face different challenges. The move to an all-IP core is closing the gap and the line between types of provider is almost obliterated from my perspective. We've just held our annual user conference and the challenges our customers are dealing with are materially very similar. We're focused from a technological perspective on helping service providers deliver converged broadband – whether that's over 4G, LTE, FTTH, DOCSIS or Wi-Fi, it doesn't really matter.

VP: So how does Sigma help service providers to manage these new services efficiently?

TS: There are four key aspects to what we bring to the table to help. The first is our extensible platform that automates the order management and service provisioning of core services and new value-added services. The second is our solutions portfolio - we've invested in productising configurable solutions relative to the types of services our customers want to offer. The third aspect is our focus on customer enablement and self-sufficiency. We achieve that by providing training and knowledge management with

There are hundreds of millions of dollars being poured into the cloud XaaS market by investors



Visit: <http://marketing.sigma-systems.com/vanilla-plus-monetizing-cloud>

We span the globe with customers in 22 countries in all facets of communications and IP services

toolkits, development and regional support. Many of our customers have become self-sufficient on our platform which differentiates us from our competitors who often need dozens of engineers to implement the smallest of changes that operators would prefer to be able to handle themselves. Finally, our latest launch, Cloud ServiceBroker, helps to drive the opportunity for service providers to become that market place for a targeted set of SaaS applications. By offering the Cloud ServiceBroker as an extension of our existing OSS fulfillment platform, Sigma has created a way for service providers to rapidly and efficiently realize new revenue opportunities from SaaS applications.

VP: Can you give some examples of service providers that Sigma has helped approach these new opportunities?

TS: We span the globe with customers in 22 countries in all facets of communications and IP services. América Móvil, for example, offers triple play voice, video and data services over cable and we've helped with value-added services deployments such as video-on-demand.

In Canada, with TELUS, we've helped them through a series of network architecture changes from 2G to 3G to 4G with a library of value-added services over mobile. Also in Canada, we've worked with Bell Aliant, as they have rolled out FTTH and IPTV to their customers. In Europe, we've worked with Zon in Portugal to automate their quad-play bundle over both cable and fibre networks and another European fixed line operator launch a new LTE service, in addition to a series of OTT value added services on their roadmap.

VP: What are the perils of the lack automation when rolling out services?

TS: The problems are many. McKinsey has found, for example that, when introducing new services over broadband and fibre in particular, up to 33% of FTTH customer orders fail after order entry and only 20% of FTTH

installations are incident free. Couple that with tremendous downward pressure on budgets and I see many operators avoiding the issues related to order fall-out. For example, one operator in South Africa I have talked to was experiencing almost 40% order fall-out for IP video. Another in the US required 100% of its orders to have some form of manual intervention for SMB SaaS services. CSPs can't afford this inefficiency and, more importantly, SMBs will not give them the opportunity to delay, they'll simply buy elsewhere.

Our focus is on helping CSPs reduce order fall-out and bring their order success rate to 99% or greater..

VP: These are all issues that have impacted the industry for years. Why is so much attention being paid to it today?

TS: There are a number of reasons but commoditisation and pressure on pricing is adding significant challenges to the service provider business. Inefficiency could be masked in the past by the higher margins service providers achieved. We really think that this realm of services that are available to service providers to offer will continue to expand but the whole functionality of new product introduction needs an overhaul. Automation and customer self-management is a key element of that.

VP: What keeps your customers awake at night?

TS: The key issue is how service providers drive more revenue via their existing pipes. Costs can continue to be driven lower which will drive profit but the market is mature and pressure on profit will continue to be severe. Helping to deliver value-added services by tapping into the significant innovation we've seen and by embracing the OTT-as-a-service concept and the fundamental differentiation a CSP can enable by bundling network and OTT services together will solidify their position in the value chain. 🍷🍷



Nowhere to grow so quality becomes paramount

Many TV markets are saturated and growth is isolated to winning customers from rivals. To do that, providers must seek to differentiate on QoS. Here George Malim explores the scale of the challenge and what providers are doing to overcome it.

Saturated markets mean there is nowhere to grow for TV service providers. Worse still, their existing customers have plenty of alternatives. They can consume TV on their mobiles and online and that means TV providers have to offer a demonstrably better proposition that rivals on other platforms. Premium content such as sports coverage is part of their proposition certainly but sustained high quality service provision is another.

Of course, there remains a substantial opportunity for TV providers to capitalise on if they can attract new users to their service rather than a rival's.

"Proactively working to reduce churn rates by automatically identifying customers at risk, and

of course the issues behind their problems, is a high-potential opportunity for all TV operators," says Johan Gör sjö, director of product management at **Agama Technologies**. "We've had the privilege of working in close cooperation with a number of leading operators for several years, giving us extensive real-world experience in advanced quality and customer satisfaction management and analytics. This has proved essential when developing our new Churn Identification Application extension to our solution."

Milya Timergaleyeva, vice president of market strategy at **Oregan Networks**, points out that QoS in TV is not the same thing as plain old quality of transmission – there are many other dimensions of the user experience to consider.





The last decade has seen global IP traffic predicted to quadruple by 2014 and Gartner estimates that 50% of workloads will be running on virtual machines by the end of 2012

"In IPTV and broadcast alike, QoS is represented in multiple facets of the user experience, starting from the ease of content discovery, speed of the user interface rendering engine and ultimately the quality of video streaming," she says. "We see that tier-1 MSOs who have invested heavily into infrastructure build-out, such as **British Telecom** and **Deutsche Telecom** in Europe, are embracing multicast over IP for linear television, as well as leveraging over the air broadcast methodologies to address regular data traffic challenges. Technologies such as RET (Retransmission) and FEC (Forward Error Correction) are weaved into the various touchpoints of the delivery network from server – to last mile access, and finally the CPE."

However, it's not just traditional players that are determining users' quality of experience. "The over the top (OTT) part of the content industry has been leaning heavily on the widely adopted Adaptive Streaming Technologies, which fragment and adapt the streams to real and variable network conditions," she adds. "This prevents interruptions to the video streaming, but may mean the video resolution is reduced. In Oregon's deployments and generic software offering, HLS (HTTP Live Streaming) and the move towards MPEG DASH standardisation play an important part, particularly relevant in territories where high bandwidth DSL or fibre infrastructures are not yet available."

The last decade has seen global IP traffic predicted to quadruple by 2014 and Gartner estimates that 50% of workloads will be running on virtual machines by the end of 2012. Broadcast companies are feeling the impact of this data burden, with the quality and quantity of content becoming increasingly heavyweight, from high-definition video to streaming mobile and web feeds.

"Consumer tolerance for poor quality transmissions or slow access is rapidly dwindling," points out Mukesh Bavisi, managing director of **Exponential-e**. "Subscribers now demand instant access to a range of resources and, if such services are not available, TV providers not only miss out on revenue opportunities but their customers may become frustrated and look to competitors. Meanwhile, a new breed of global competitors, from **Apple** to **Google**, are touting OTT content and starting to show their teeth."

"While TV providers have vastly improved the end-user experience, so that quality audio and video content can be delivered in real-time to increasingly global audiences, they need to look inwards at their internal workflow systems as well," says Bavisi. "The burden of sharing large

files internally and among suppliers and partners has been steadily growing heavier over the past decade. Other challenges include bottlenecks across production workflows, caused by the handling of large content media, legacy networks not designed to support new media and the expense of traditional satellite and microwave links. With broadcasters facing such a deluge of data to store and process, they are increasingly turning to IP networks to deliver content more quickly and streamline their workflow."

TV providers are becoming more savvy in analysing the habits of their users, explains Timergaleyeva: "Recommendation engines are becoming commonplace thanks to the effort by service operators – both OTT and managed – to personalise the service, and the new possibilities that the internet brings into the marketing mix," she says. "The wealth of historical and real-time data related to recent purchasing, pre-views and title browsing is collected by the head-end as well as the STB middleware, analysed by a recommendation engine and put to the subscriber in the form of suggestions, with a single click purchase or stream initiation button. **The Filter**, **Jinni** and **TV Genius** have been leading the fray and have been deployed by some of the major OTT players and telecoms operators."

While user adoption of these technologies has not yet reached a critical mass because users often shy away from the marketing push, increasingly efficient algorithms are being explored.

Non-linear TV watching continues to grow in popularity. **Accenture** recently announced that 49% of consumers in the US and UK are viewing OTT services on their televisions. To cater for these changing viewer demands, TV providers need to adapt their business models and build out new compelling hybrid platforms that provide consumers with the best of both worlds – web and interactive, as well as broadcast services all available through their television. "Such an offering has the potential to create high value loyal customers but only if the service is up to scratch," adds Timergaleyeva. "This means not only that there is good content on offer, but also that the system is easy to use, has a good graphical interface and is available when consumers want it. The latter can be difficult, especially when relying on networks for content delivery that have limited or no QoS."

This then, is the battleground where traditional TV providers can differentiate themselves from best-effort OTT providers and demonstrate real value to their customers. 



EXPERT OPINION:

The untapped potential of proactively reducing churn

Managing service quality to retain customers is fundamental for TV operators' growth and profitability, says Johan Görnsjö

Churn, the process of losing subscribers over time, is a major headache for TV operators worldwide. As the pay TV market develops, all operators – be they direct-to-home, cable, OTT or IPTV – face greater competition. The digital switchover is now completed in many markets and operators now grow mainly by winning over customers from competing digital TV platforms.

Offering the right content at competitive prices is vital, but managing the service quality to retain customers is equally important for growth and profitability. Losing customers before they have started to generate revenue is a recipe for red numbers – not to mention the risk to the corporate brand value that can come from dissatisfied customers swiftly sharing their experiences in social media.

A reduced churn rate has very clear business implications. Let's say you have one million customers and in total grow by 10,000 customers per year. With a churn rate of 8%, you lose 80,000 customers so, if you add 90,000 new customers, you achieve that growth of 10,000 customers. By lowering the churn rate to 7%, you would instead have lost 70,000 customers, resulting in growth of 20,000 customers during the year. Congratulations, you've just doubled your growth rate.

Greater customer loyalty automatically also brings higher revenues, due to their ARPU directly contributing to the bottom line after initial costs, such as the CPE and installation, have been covered. In essence, your total customer base will be more profitable. With better profitability, the higher margins could allow for creating new and even more competitive end-customer offerings.

Insight into and understanding of the customer experience and quality distribution is essential in identifying customers at risk of churning. You simply cannot act on information you don't have, and you need objective information before it's too late.

At Agama, we are convinced that utilising a solution for real-time 24/7 service quality

monitoring combined with intelligent analytics is a winning strategy for operators to reduce churn. This facilitates rapid reaction to a customer's problem and makes it possible to take proactive steps to retain the customer – before they move to the competition.

Such a solution must of course support automation and proactive workflows; manually finding customers experiencing problems scales poorly for millions of subscribers.

Proactively working to reduce churn rates by automatically identifying customers at risk, and the issues behind their problems, is a great opportunity for operators that thus far has not been exploited to the fullest. Agama has had the privilege of working in close cooperation with a number of leading operators for several years, giving us extensive real-world experience in such advanced quality and customer satisfaction management and analytics.

Visit www.agama.tv for more information, and please feel free to contact us to discuss churn reduction strategies and how Agama's solutions can support you in this challenge. 📞



The author, Johan Görnsjö, is director of product management at Agama Technologies





Content consumed drives LTE optimisation approaches

Some traditional network optimisation tools won't be an option for communications service providers (CSPs) when they manage LTE. But other solutions beckon, writes Nick Booth



Jeff Sanderson: Speed and data volume tariffs confused users

As enthusiastic early adopters throng to LTE, analysts predict that video will be the most popular weapon of choice as they proceed to eat up all the bandwidth. According to a Q4 Mobile Analytics Report from Citrix ByteMobile, video applications are expected to account for 50% of all data traffic consumed across all regions, closely followed by TV streaming. The Apple iPad will be the most bandwidth hungry device, consuming 78% of all data on the mobile network. Web browsing will only account for around 8%. So much for the power workers and the pro-sumers. The early adopters will more likely be the pornsumers and the chat surfers.

Not that anyone will care as long as the revenue streams are healthy. "Mobile operators aren't worried about LTE resources being fully used up: that's exactly what they want, why deploy it otherwise?" asks Jeff

Sanderson, product marketing director at **Citrix** Service Provider Platforms.

Instead, he says, the CSPs will fret about something else: giving the customer they quality of experience (QoE) that they paid for, he says. "It's not about speed and data volume tariffs – those confused users anyway. It's about promoting higher value services to customers willing to pay a premium."

This calls for the CSPs to create new business models and new revenue streams. **Deutsche Telekom's** partnership with Spotify and **Telenor's** with Deezer both exemplify how CSPs can work with OTT music streaming content providers. They also hint at the optimisation challenge these CSPs face. While they sub-contract content providers to create the entertainment, they will have to make sure they fine-tune the networks to provide them.

These two partnerships are just the start and we can expect plenty more of these CSP/OTT joint ventures in future. But the problem with outsourcing has always been identifying where bottlenecks happen and who takes responsibility for fixing glitches. Though the tools to manage these arrangements are already in place from 3G predecessors, today's LTE networks differ from earlier generations because they have new challenges to deal with. For example, 3G networks didn't have the problem of overly aggressive pre-fetching of video data or unoptimised transmission of images, both very common problems that have a dramatic impact on performance without providing any end user benefits.

Users and their bandwidth hogging video grabbing apps aside, the other unique problem that LTE operators face is in the service delivery chain. Previous generations faced this but it gets much worse with LTE and the various OEMs, OTTs and device manufacturers who affect its performance, says Richard Stone, senior solutions manager for mobile at **Compuware**. "CSPs need to see inside the entire service delivery chain, not just their networks, to find out what's really causing data congestion," says Stone.

As the number of different providers that must work together increases, the power of LTE could be neutralised by the complexity of the content being delivered and the supply chain for delivering it, says Stone. "Creating a picture of performance for the end-user is much tougher," he adds.

There may not be a problem with a CSP's network, but there could be a snag with anything from the end-user device, the application or the game or video they want to access. It's the interactions between these that affect the user experience and tackling this is one of the keys to optimisation.

Understanding the type, nature and relative value of the content is part of the challenge, says Citrix's Sanderson. CSPs need to emulate **Google** and invest heavily in data analytics technology if they are to stay ahead of the game, he argues.

But rushing into optimisation will be a mistake if the CSPs don't define what they want to achieve, he says. "CSPs must know when to optimise traffic and why. It can be based on a variety of conditional inputs," says Sanderson. Such as? "Is the network congested? Does the user have sufficient entitlements? This calls for much smarter optimisation technology that can adapt in real time to a specific set of conditions."

The historic approach – to optimise everything optimisable – isn't suited to LTE and ultimately it won't optimise your investment in LTE technology. The simpler – some say flatter – IP centric nature of LTE also lends itself to taking new approaches to new optimisation and caching solutions.

"The small cell concepts of managing LTE create new ways to optimise LTE," says Dan Ramasamy, technology director at **Tech Mahindra**. Femto cell and Home E-NodeB can be used relatively easily to micromanage tiny units of the network. Some companies, such as **IP Access**, advocate self-management of small cells, by providing user friendly web interfaces so that end users can provision their own services. These management tools also include algorithms that are used for self-healing networks.

Ultimately, the cloud will change the way software is used to fine tune network. Individual mini-apps will be created to fix specific problems and this will change the way network optimisation software is brought to market. **\$**



Dan Ramasamy: Small sell concepts create new ways to optimise

As the number of different providers that must work together increases, the power of LTE could be neutralised by the complexity of the content being delivered and the supply chain for delivering it



Automation unlocks wholesale cloud opportunity for KPN

CSPs across the world recognise the opportunity presented by becoming the enabler of cloud services to enterprises and third parties. However, they face a series of challenges in doing so profitably. Here, KPN's project to create new revenue streams for its wholesale operation by becoming a white-label cloud services broker in the Netherlands is explored.

KPN is also using a new module within Parallels Automation to support the syndication of Microsoft Office 365

Like all incumbent CSPs whose markets have been opened up to competition, KPN is always looking for new revenue streams to help it stay competitive. This is just as important in the wholesale market as it is in retail, especially when it comes to cloud computing, with new cloud services providers entering the market all the time. KPN identified that it needed a platform to help it enable its network distributors, resellers and service providers to take advantage of the new business opportunities provided by cloud-based applications.

The CSP already had a long-standing relationship with Parallels, having implemented the vendor's Parallels Automation platform for its consumer web hosting services in 2004, and for its business customer operations in 2007. Implementing a complete Parallels Automation solution for its wholesale operations was therefore a logical step for KPN.

KPN selected Parallels Operations Automation and Parallels Business Automation as its preferred platform for automating its wholesale web-hosting and cloud services offering. The system features an application marketplace function that enables KPN's distributors and resellers to provide private label cloud applications as a service, in addition to their own hosting services and KPN Wholesale's telephony and internet access services. This enables KPN to build new revenue streams quickly and easily and to differentiate its offering in an increasingly competitive market.

An important element of the infrastructure is the Application Packaging Standard (APS) which defines a standard for packaging and

automating the delivery of Software-as-a-Service (SaaS) applications via platforms that contain an APS controller such as Parallels Automation. As a result, new apps and services can be delivered very quickly and cost effectively.

KPN is also using a new module within Parallels Automation to support the syndication of Microsoft Office 365. This enables the operator to offer the Office 365 productivity suite, while maintaining control of the billing and provisioning of accounts and mailboxes via Parallels Automation. In other words, it can offer business applications as a service, without needing to manage the underlying application infrastructure.

Microsoft Office 365 is one mainstream application that the CSP can now provide to its wholesale customers as Norbert Van der Knaap, manager of Hosted Applications at KPN Wholesale, points out: "We're already seeing a lot of success with Office 365 in our business customer operations, so making it available for wholesale partners is critical for us."

New applications, available quickly

Initially, KPN Wholesale used the new system to empower distributors, resellers and service providers to offer domain registration, web hosting, Virtual Private Server hosting and Microsoft Office 365. But APS is enabling the operator to add new applications to its portfolio quickly and regularly. "This is a huge advantage when compared with other systems that require resellers to make big investments and wait much longer for new applications," adds Van der Knaap. "Using the APS standard was really a no-brainer for us, and it gives us a real competitive advantage." ▶

Continued on page 24



EXPERT OPINION:

Direct billing is all gain, with no pain

People have been paying through their mobile phones for a while now – but often only for products designed for mobiles, such as ringtones. Now mainstream purchases on your communications service provider's (CSP) invoice through smartphones are becoming a reality, thanks to direct billing, which connects a merchant directly through an enabler to the CSP's billing system. Here, Frédéric Deman, chief executive officer of Netsize, a direct billing enabler, explores what this means for end users, application stores and CSPs.

For the end user, the benefits of direct billing are obvious. Imagine Jake, a rugby fan who wants to watch the final match. He goes online with his smartphone, finds his team's website and is transported to the pitch. He clicks to pay to view the match, then lands on an unknown web page asking for his credit card details. He decides against it.

With direct billing, Jake clicks once to pay to watch his match – without leaving the website and with no credit card details. One second later, Jake can watch the match. Direct billing is real-time, simple and creates no interruption in the user's browsing environment.

In addition, users benefit from clear billing text and can buy from any device – mobile phone, desktop or tablet.

The application store opportunity

Application stores provide the user experience that will make or break an OS (operating system) platform. It is crucial to get them right – which implies making the purchasing experience as smooth as possible. Direct billing brings a convenient purchasing experience, removing the unnecessary disruption of credit-card registration. And the experience does not end with buying an application: the next step is using it. With direct billing, it is easy for consumers to buy additional content within the application. Direct billing also ensures better targeting with flexible price points. Content providers can choose the price they want – and change it whenever they want.

So why should application stores do direct billing through a third party such as Netsize? Can't they connect directly to the CSP?

Maybe, but it would probably increase time to market. Application stores sell in many countries with several operators and different regulations. CSP integrations can be complex and in-market experience also helps to choose the best flows to optimise the return on investment. This is where the experts can help: Netsize, for example, covers almost 40 countries through approximately 80 operators.

Netsize will also help stores optimise their conversion rates. How you authenticate someone can vary depending on the device – mobile, tablet or PC – and the network – CSP network, WiFi or LAN. Netsize has both the expertise and the experience to manage such issues.

New CSP revenues

Direct billing gives CSPs access to the revenue streams resulting from new applications and services. It is a good means to generate growth.

With Netsize's PCS service for CSPs, deployment can be quicker. Netsize has experience in integrating various protocols with CSP platforms and on-board merchants and removes the burden on CSPs' technical teams. With expertise in handling multiple merchants – both local and international – Netsize PCS can handle the whole on-boarding process on behalf of the CSP, fulfilling regulatory requirements and even taking care of the payment process. Merchants get help in defining the right flows, so more value is created for everyone.

If you fancy watching the latest Hollywood film on your tablet, with direct billing, you just click and pay, then sit back to enjoy – while your application store can focus on the next movie. 💰



The author, Frédéric Deman, is chief executive officer of Netsize

With direct billing, Jake clicks once to pay to watch his match – without leaving the website and with no credit card details



About KPN

KPN is the former incumbent CSP in The Netherlands. It offers wireline and wireless telephony, internet and TV to consumers. KPN Corporate Market—previously known as Getronics—offers global IT services and is the Benelux market leader in the area of infrastructure and network related IT solutions. In Germany and Belgium, KPN pursues a multi-brand strategy in its mobile operations and holds number three market positions through E-Plus and BASE.

Some examples of solutions recently added to the platform include hosted voice, hosted infrastructure and several hosted applications. Companies using the platform include: goMobi, a mobile website builder; IASO, an online backup system; Minoto, a video-hosting service; and SpamExperts, a server spam protection solution.

Enable tailored solutions

KPN Wholesale is also focused on ensuring that distributors, VARs and service providers can offer a portfolio of applications tailored to their markets, rather than taking a one-size-fits-all approach. Van der Knaap confirms this: "It's very important that we listen to our partners and get them to tell us the applications they want, and then tailor the platform to their requirements, rather than not giving them a choice with a fixed offering," he says. "It makes the whole offering more attractive."

To support their partners' efforts, KPN Wholesale has created a road to success for distributors, VARs and service providers, which explains in three steps how to launch new cloud services business in just eight weeks. These steps include:

- Contracting, negotiation and agreement
- Commercial and technical on-boarding
- Acceleration, go-to-market strategy and tactics

KPN is also one of the five Parallels Automation partners working together to encourage software vendors to adopt the APS standard and help expand the portfolio of SaaS products available to be sold through the channel. In addition, the operator is planning to host regular monthly get-togethers between distributors, VARs, service

providers and ISVs. The intention is that these events will help create a cloud services ecosystem, the members of which can then generate profitable new business relationships and support each other with knowledge sharing.

KPN Wholesale is making a long-term commitment to offering cloud services to its distributors, VARs and service providers. It will be stepping up its marketing and PR effort to help it achieve its ambitious growth targets for 2015. Once the business case has been proven in the Netherlands, it will also look to replicate the model in its other key markets including Germany and Belgium. 





EXPERT OPINION:

LTE and the legacy network – the challenges of concurrent offerings

The opportunities of LTE are here and they're here now. The dilemma is that they bring a raft of sizeable challenges with them. CSPs are concerned about integration and handovers, among other things – straddling what will eventually become a transition from the 2G and 3G environment to the new world of LTE. Richard Kenedi explores the pressures CSPs face. It's about more than creating a roadmap to get there, he suggests; it's about gathering real and actionable insights into the landscape that awaits at the final destination.

A recent survey from the independent research organisation Heavy Reading suggests that CSPs perceive a state of flux is in place at the moment, driving re-evaluations of their services. When asked about the challenges of EPC implementation, the three most common concerns identified by the research were:

- Integration and handovers (45% of carriers)
- The growth of data services and its effect on policy control and charging (43%)
- Vendor interoperability and its effect on network equipment manufacturer implementations (40%)

One thing is clear; it's that knowing exactly where to begin, in creating a winning strategy to deal with data congestion and get the data flowing through the network, with no hold-ups or fall-overs, and keeping a high bar on customer experience is not very clear at all. The new challenges of LTE present a new beginning for the industry. It's time to look again at network services, capabilities and quality, from end-to-end and assume that total preparation is the only reliable strategy for ensuring total success.

*The simple view of
a complex future*

Tektronix Communications has one of the

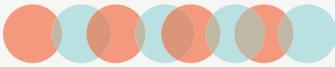
largest deployments of LTE monitoring and service assurance systems in the world and is already monitoring commercial services over LTE. In its networks analytics involvement with CSPs, the company finds that while many are concerned about potential revenue loss to OTT service providers, or simply through not being fully prepared for the transition, others are ahead of the curve. They are not only preventing ARPU erosion, they are reversing the trend. These are the companies that are maintaining their challenger CSP status by gathering the real and actionable insights into the customer experience. The trick is in KPI monitoring and vendor benchmarking.

The adoption of a simple KPI approach, customised for a CSP's specific business and performance goals can cover network, services and subscribers across all technologies and enable a CSP to address issues arising both from legacy networks and from LTE. Since 2G and 3G will remain with us for some time to come, network analytics must straddle the transition. There is no immediate point in time when subscribers will upgrade en masse, so the fact is the CSP has to provide a service that is all things to all subscribers. It has to be sure also that it can benchmark vendors to ensure continuity of service. And that's where continuity of competitive edge ultimately lies. 🌐



The author, Richard Kenedi, is vice president and general manager of monitoring systems at Tektronix Communications

Total preparation is the only reliable strategy for ensuring total success



Will policy management become just a function of billing systems?

Policy management solutions were originally deployed to provide a protection function for networks. Increasingly, these solutions are being used in different ways to create and support new service offerings for service providers. Analysys Mason's recent industry survey expects that over 50% of newly implemented policy management solutions will be in support of new service offerings. This change in usage is redefining the landscape in which the more traditional policy management vendors were operating, writes Justin van der Lande.



The author, Justin van der Lande, is senior analyst at Analysys Mason

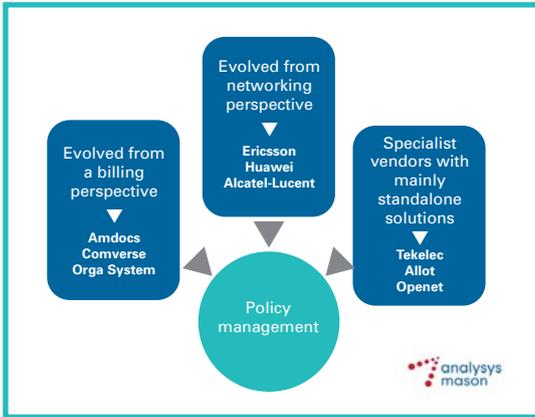
Policy management solutions enable real-time inspection of live multimedia services and the application of a policy to the network layer to change their characteristics. Policy management was created primarily to provide traffic management solutions and ensure that a network did not become overloaded. An example of traffic management is 'fair usage', whereby a communications service provider (CSP) is able to monitor heavy users of 'unlimited' service offerings and reduce their bandwidth or even block the service upon reaching a certain threshold. This ensures that some bandwidth is preserved for other users of the network.

Legislation in Europe has helped move policy management solutions from entirely network-centric deployments towards more billing-focused ones to prevent what is known as 'bill shock'. OSS/BSS system interfaces were defined by the GSMA for both off-line and on-line charging. They enable service providers to build rules or policies based on information dynamically taken from the subscribers' billing information and combine it to subscriber and other data. This linkage between charging and policy management solutions enables CSPs to create new service offerings based both on network and billing information. Initially, this provided support for 'tiered' pricing plans, whereby subscribers select a service based on data usage. A flat-rate fee for usage is charged up to a given amount of data. Once this figure has been exceeded, policy management rules are applied to: reduce throughput, stop the service entirely, or increasingly to charge for the data. Charging is achieved through re-rating the data usage to generate a fee on a

postpaid bill or to deduct a fee from a prepaid balance.

Tiered pricing is increasingly common place as CSPs move away from 'unlimited' flat-rate price plans to enable them to better monetise the expense of rolling out higher-bandwidth networks for both mobile and fixed line services. Monetisation of data services has been followed with other use cases that include pricing based on a limited time window, on the URLs or applications, quality of service and content type. Content, for example, may be zero-rated in the charging system if it is being supported by the CSP, or a specific partner. There are multiple different charging options for data plans enabling CSPs to bring innovative service plans to market; the initial tranche of policy-based charging services is being followed by many more. This is rapidly changing the nature of vendors within this market as the focus is on billing rather than on network for policy management.

The move by Amdocs to purchase Bridgewater Systems in 2011 was a clear reaction to this trend, and is supported by other strong BSS vendors such as Comverse, Orga Systems, Netcracker (which has acquired Convergys's software business), CSG International and Oracle. These vendors are also joined by network equipment providers, such as Ericsson, Alcatel Lucent and Huawei, which are able to support solutions for both network- and billing-based deployments. Specialist vendors also still provide some standalone policy management solutions to the market. ►



billing systems and policy management systems. The need to link new service offers to pre-defined policies without having to double key information enables new services to be created and launched quicker.

These two factors, combined with the fact that most policy management implementations will be for billing-related use cases, have led to a distinct increase in billing vendor market share. We expect to see significant revenue growth in the whole sector over the next five years, but network-based applications will grow at less than half the rate of billing ones over that period. Also inevitably, and helped through the availability of standards, policy-based charging solutions will not be standalone solutions, but will become a function of current billing and charging solutions. 💰

Legislation in Europe has helped move policy management solutions from entirely network-centric deployments towards more billing-focused ones to prevent what is known as 'bill shock'

The diagram depicts the three significant areas that have evolved to create policy management. In a recent survey carried out by Analysys Mason, the industry is expecting that over 50% of the use of policy management will be in conjunction with charging solutions. This percentage is expected to increase over time as new broadband networks come to market and costs of implementation must be recovered through better data charging.

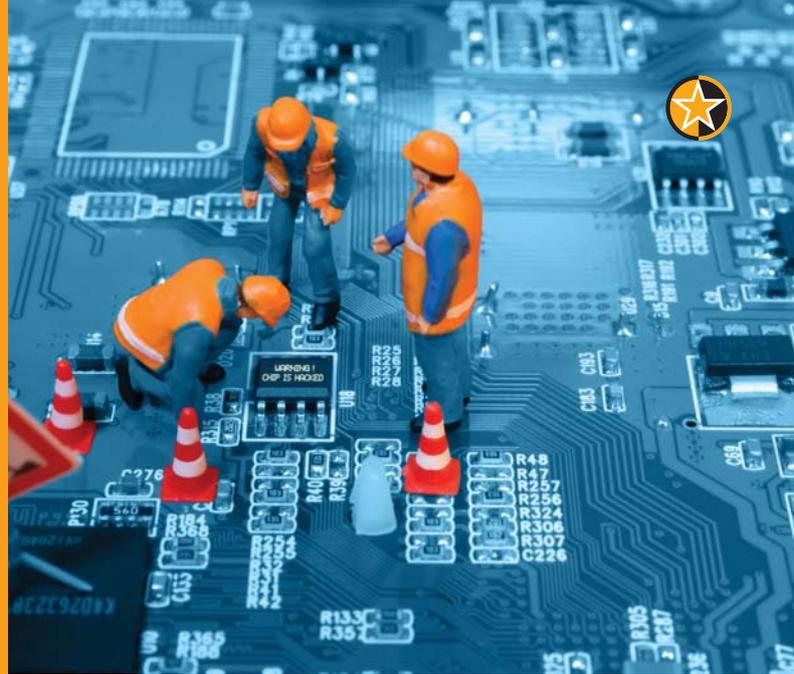
The speed for new services to be created will be down to the integration between the billing functions and the different policies that can be supported within them. This has led to two significant changes:

- First, the simplification of the user interfaces with policy management systems, so as to enable a non-network engineer to create, edit and manage policies without endangering network integrity; and
- Second, the tighter integration between the service design function within





Realize value from the New Network Effect



In October 2012 Microsoft hosted a VanillaPlus webinar entitled 'Demystifying Microsoft's Industry Strategy'. Here, Johan Norvik the acting managing director of Microsoft's Telecommunications Industry division, explains the company's approach to the market.



Johan Norvik: The systems the industry uses today are not fit for handling growth

Microsoft is attracting increasing attention in the telecoms industry, both as a solutions and services provider. The company's strategy for the industry has evolved and it is utilising the wave of new product releases such as Windows 8, Windows Phone 8, Office 2013, SQL Server 2012, Windows Server 2012, and recent acquisitions to continue to grow its presence and relevance to the industry

Billions of new connections and the dynamic interaction of people, services, and devices are factors that drive a New Network Effect in today's communications marketplace; requiring agile new systems and a more responsive partner ecosystem for participants to compete effectively. At Microsoft, we are empowering Communications Service Providers (CSPs) to capitalise on the possibilities of this New Network Effect by enabling them to create new offerings, engage customers in new ways, and to nourish new revenue streams while improving their core businesses.

Engaging the industry

Microsoft has a worldwide Communications and Media organisation to set strategy, attract industry talent, build community, manage industry solution areas, develop awareness and support in the analyst community to achieve its goals. The mission of the organisation is to ensure Communications and Media customers and their partners realize the most business value from their relationship with Microsoft. A related Microsoft group, called Operator Channel, is responsible for alliance and joint go to market activities with the industry covering Windows Phone, Mediaroom IPTV, Office 365 Syndication, and Hosting offerings at major CSPs.

The industry is being shaped and transformed by a number of well-known trends. The world is more connected and there are now almost as many mobile phones as people on the planet. People are connected in more places, even in countries in the early stages of development have mobile phone penetration rates above 60%.

Content is growing explosively, whether generated by companies or users, and we are spending more time with the content, often multiplexing over several devices including phones, tablets, PCs, and TVs, and this large variety of choices enables more and more options to personalise your content.

All of these trends are accelerating change in the industry and standards, policies, and regulations are not evolving at the rate that is required to realize all of the potential benefits of communications and information technology. But more importantly, the pace of change continues to accelerate. It took almost 100 years for telephones to be available in approximately 500 million households, contrasted with less than 35 years to reach five billion mobile users. We believe that eventually every device that can be connected will be, reaching an estimated 50 billion machine-to-machine connections by 2020.

The systems and applications that the industry uses today are not fit for handling this exponential growth and service providers will need to deploy new systems with the required scalability and elasticity, they will have to deploy them in less time in a more agile fashion, and they will need new management capabilities to handle the much larger number of end points and connections. In addition, the value chain has changed from the exclusive relationship between the service providers and the customer to one in which the customer exercises more choice over the products and services that they consume. For example, OTT services and the business models and partnerships in the industry have to change to generate the revenue growth that is needed to support the investments required to evolve networks and services.

Microsoft's strategy

Our strategic intent for the industry has been developed considering these trends, the breadth and depth of our portfolio, and our large and growing partner ecosystem. Microsoft delivers the speed, agility, vision, and resources CSPs need

With a host of powerful solutions and our deep partner ecosystem, Microsoft delivers the speed, agility, vision, and resources CSPs need to compete on the path to new possibilities



to compete on the path to new possibilities. We engage with industry customers and partners to:

- Collaborate to envision the future and drive innovation
- Create solutions to accelerate business processes
- Enhance agility to transform and compete

To envision the future and drive innovation we commission research to develop market intelligence, and utilise Microsoft R&D to expose our customers to future technologies that will help create and deliver new products and services.

Our solutions strategy has three pillars: Best of Breed, Best of Cloud, Best of Microsoft. These are based on partnering with systems integrators (Sis) and independent software vendors (ISVs) that offer innovative and agile solutions that conform to reference architectures and align to industry practices and standards, working with customers to develop the telecoms cloud platform of the future, and ensuring that our customers realize the most business value from their relationship with Microsoft.

Finally, we want to help the industry to be more agile in order to transform and compete. Microsoft is an active contributor to standards defining organisations and industry bodies. We contribute with our platform innovation ranging from consumer devices and experiences to the enterprise grade solutions that our customers require on premise or on the cloud. And we build partnerships through our operator channel organisation to jointly with the CSPs bring a broad portfolio of solutions to the consumer and business markets.

The foundation of our industry Solution Areas is our Best of Breed strategy partnering with SIs and ISVs that offer innovative and agile solutions that conform to reference architectures and that are aligned to industry practices and standards. Our ecosystem of solution partners has been attracting attention from the analyst community and the press. One of the first articles recognizing the value of the ecosystem was published by Mark Mortensen of Analysys-Mason in July 2011, and observed that: "This offers CSPs a new option for their customer care solution – one with high functionality provided by multi-vendor integratable component systems in a flexible architecture, with low vendor lock-in."

Another article by Scott St. John picked-up on the same trend and stated: "Microsoft is putting their money, relationships, reputation and brand behind their partners and has already begun to pay dividends."

The articles mentioned focused on partners that integrate the Microsoft Dynamics CRM solution with their own customer care and billing solutions, but the scope of the ecosystem extends to fulfillment, assurance, network management, and business intelligence solutions and it is constantly growing. With this scope, the

Microsoft Partner Ecosystem offers to the industry a portfolio of solutions to create compelling services and enhance operational capabilities; build customer intimacy, loyalty, and wallet share; and improve business efficiency and flexibility.

Platform innovation

This is the biggest launch year in Microsoft history, on par with a wave of new product releases including Windows 8, Windows Phone 8, Office 2013, SQL Server 2012, and Windows Server 2012. Our platform innovation covers the full spectrum from consumer devices and experiences to the enterprise grade solutions – on-premise, cloud, or hybrid that our customers require.

We are re-imagining Windows to provide cloud-connected experiences that people love, optimal bring-your-own-device solutions and myriad possibilities to broaden the B2C appeal of our customers. Our productivity solutions from the cloud or on premise optimise messaging and collaboration and bring full IP unified communications. Windows Server and System Center offer the best private and public cloud infrastructure, a true Cloud OS, and enterprise grade security. Our application development solutions apply across all platforms, and SQL Server, the cloud-ready information platform offers mission critical confidence, breakthrough insight and cloud on our customers' terms. The changing marketplace puts demands on CSPs to be smarter, faster, and more competitive every day. Microsoft's enabling solutions and technologies, combined with the strength of its rich partner ecosystem, empower CSPs to explore, capture and capitalise on the world of new possibilities

Market collaboration

Microsoft also partners with CSPs in go-to-market scenarios for both consumer and enterprise. The Operator Channel has been working closely with the industry for the last ten years. We have a set of products and services that extend our reach and provide exciting new scenarios with our CSP partners that create new sources of revenue and delight users. These include Windows Phone, a great example of bringing together the best of Microsoft (Bing, Office, IE, Xbox), Windows PCs with Broadband Bundles, more than ten CSP entertainment services integrated into Xbox OTT Service, Mediaroom – the world's number one IPTV platform, Syndication agreements to sell and support Office 365 bundled with CSP services, hosting solutions to offer private and public cloud services and now Skype partnership opportunities for application distribution and marketing.

Microsoft empowers the path to new possibilities by collaborating with customers to envision the future, creating solutions to accelerate business processes, and enhancing our customers' agility to transform and compete. For more information, please visit www.microsoft.com/telco. ★

This is the biggest launch year in Microsoft history, on par with a wave of new product releases including Windows 8, Windows Phone 8, Office 2013, SQL Server 2012, and Windows Server 2012



Customer Experience Management in Telecoms 21-24 January, 2013

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www.customerexperienceevent.com

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TM Forum Middle East Summit 4-5 February, 2013

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www.tmforum.org



M2M Now Money Talks e-Health 20 May, 2013

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Organiser: We Know Media
m2mnowevents.com

TM Forum Big Data Analytics Summit 29-30 January, 2013

Amsterdam, The Netherlands
Organiser: TM Forum
www.tmforum.org

Mobile World Congress 2013 25-28 February, 2013

Barcelona, Spain
Organiser: GSMA
www.mobileworldcongress.com



MWC 2013 explores 'New Mobile Horizons' at new Barcelona venue

Mobile World Congress returns to the Mobile World City of Barcelona, Spain on 25-28 February 2013. Here, VanillaPlus previews the event.

The mobile ecosystem is expanding at lightning speed, with endless innovation and new applications of mobile technology. From contactless payments and augmented reality to embedded devices and connected cities – mobile technology is changing the landscape. The impact mobile will have on the world is limitless.

Even the landscape of Mobile World Congress itself will look different. The event has outgrown its traditional site at Montjuic and is relocating to a state-of-the-art facility at Fira Gran Via.

Highlights of Mobile World Congress 2013 include:

- CEOs of the world's most influential companies will share their visions of the mobile landscape while inspiring attendees in the event's thought-leadership conference
- More than 1,500 of the industry's leading suppliers of mobile devices, services and technologies will be part of the exhibition
- More than 12,000 application developers will gather for App Planet to be educated, energised, and challenged

- The world's largest consumer brands will join the Congress for mPowered Brands, where marketers' knowledge of mobile as a marketing medium will be accelerated
- The GSMA will recognise the industry's greatest achievements, new technologies, innovative devices and ideas through the 18th Annual Global Mobile Awards



During the four-day event, more than 70,000 senior mobile professionals will network and exchange ideas – one of which may further change the landscape of mobile. The theme of this year's event is the New Mobile Horizon. Barcelona, as usual, will provide the platform to explore that. ★

www.mobileworldcongress.com

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13TH EDITION

Vanilla
PLUS

DIRECTORY
2013

George Malim,
Editor, VanillaPlus

Welcome to the 13th Edition of the VanillaPlus Directory. Inside you will find listing for the key companies worldwide in communications Business Support Systems (BSS) and Operations Support Systems (OSS). These are businesses old and new, some address the entire range of telecoms software, others focus on a specific technology or market need. But they all have one thing in common, you'll find their activities reported in VanillaPlus magazine and on our website, www.vanillaplus.com.

As CSPs face the challenges of continued infrastructure investment in the face of declining ARPUs, the technologies, consulting and deployment expertise of these companies have never been more important. CSPs can only preserve their profitability by running leanly and learning to do more for less. These companies can provide the answers whether your challenge is to deploy LTE profitably or to minimise churn on your cable network.

We hope you find the products, skills and services you are looking for within these pages or online at:

www.vanillaplus.com/vanillaplus_directory/

And don't forget to say that we sent you!
Enjoy the new directory!

George Malim,
Editor, VanillaPlus



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Agama Technologies is a specialist in telco-grade end-to-end video quality assurance and monitoring solutions. With world-leading expertise and proven solutions, providing continuous and real-time service assurance of all forms of video delivery from creation to consumption, Agama enables IP, cable, broadcast and OTT TV operators to systematically manage service quality and raise customer satisfaction, whilst reducing opex and quality-induced churn. This includes supporting operators in gaining control and understanding of the service distribution across their deployments, creating a powerful foundation for ensuring the customers' TV experience and for achieving operational excellence in the video delivery.

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Cerillion Technologies

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Established in 1999, Cerillion provides convergent CRM & billing, charging, interconnect, mediation and provisioning solutions to fixed, mobile, cable and multi-service communications providers worldwide. The Cerillion bundled component solution suite supports any deployment model: as an end-to-end pre-integrated business support system, managing the complete

lifecycle of customers, products, services and revenues; in a mixed deployment, where selected modules may be replaced by third party applications; or in a pure best-of-breed solution. The system is also fully operational as a complete managed service solution. Cerillion solutions deliver the business agility needed to respond quickly and effectively in a highly competitive environment.

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Clarity is a leading provider of operational management solutions used globally by CSPs to support more than 500 million subscribers. Clarity provides a full OSS suite and solutions to manage rapid network deployments, create and sell innovative products, automate order provisioning, and assure the quality of networks and correlated services. Clarity's unified portfolio greatly reduces the cost, time and risk to deploy and operate networks and services, providing rapid return on investment. Clarity is dedicated to leading its customers to market success by simplifying their operations - helping them reduce unnecessary complexity and increase their business agility.

Sectors: Customer Experience Management | Customer Interaction Management | Enterprise Resource Planning | Inventory, Asset & Element Management | Network & Service Test & Measurement | Network Configuration Management | Enterprise Resource Management | Network Discovery & Optimisation | Network Performance Management | Number Portability | Order Management | Product Catalogue | Product Lifecycle Management | Service Assurance | 4G, LTE & WiMAX | Backhaul Management

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Comarch is a global supplier of IT products and services for the telecommunications industry, that has been present on the BSS/OSS market for over 19 years. Comarch provides products in the areas of BSS, CRM, OSS as well as a range of comprehensive services, including end-to-end BSS/OSS transformations. Comarch's differentiators lie not only in the compliance of its products with leading industry standards, but mainly in the flexibility of its solutions and approach and the high competences of its engineers. Through projects for almost 50 CSPs, Comarch has gathered experience in the fields of designing, implementing, and integrating IT solutions. Customers include T-Mobile in Austria, KPN in the Netherlands, as well as E-Plus Gruppe, Telekom Deutschland, Vodafone and Telefónica O2 in Germany.

Sectors: Business Intelligence | Data Management | Partner Management | Product & Service Management | Billing & Charging | Customer Care | Network Management | Revenue Management

Comptel

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Since 1986, Comptel has helped more than 280 service providers across 85 countries meet over one billion subscribers' communications and infotainment needs. Comptel's solutions are built on an event – analysis – action strategic framework that leverages the company's strengths in event data processing and advanced predictive analytics to enable real-time action. Comptel's

service fulfillment, mediation, charging and policy control, and predictive social analytics products with implementation and professional services enable service providers to enhance customer engagement and, in turn, create revenue, reduce costs and lessen churn. Comptel has a global team of nearly 700 professionals, and net sales were €77 million in 2011.

Sectors: Billing & Charging

CSG International

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CSG International is a market-leading business support solutions and services company serving the majority of the top 100 global communications service providers including AT&T, Comcast, DISH Network, France Telecom, MasterCard, Orange, T-Mobile, Telefonica, Time Warner Cable, Vodafone, Vivo and Verizon. With over 25 years of experience and expertise in voice, video, data and content services, CSG International offers a broad portfolio of licensed and Software-as-a-Service (SaaS) based products and solutions that help clients compete more effectively, improve business operations and deliver a more impactful customer experience across a variety of touch points.

Sectors: Roaming Clearing & Settlement | Machine to Machine (M2M) | Risk Management | Revenue Management | Revenue Assurance | Revenue Management | Other | Customer Relationship Management | Partner Relationship Management | Mediation & Collection | Partner Management | Billing (Retail) | Billing (Convergent Pre- & Post-paid) | Customer Care | Billing & Customer Care | Billing & Charging

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eGain

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eGain (EGAN) is the leading provider of customer service and contact centre software for cloud and on-premise deployment. Trusted by prominent enterprise worldwide, eGain has been helping businesses achieve and sustain customer service excellence for more than a decade. The eGain Telecommunications proposition will assist your organisation to: Reduce subscriber churn, Improve first call resolution, Drive down operating costs, Manage business consolidations, Increase Customer satisfaction

Sectors: Customer Care | Contact Centres & Hubs | Customer Interaction Management | Customer Experience Management | Customer Lifecycle Management | Customer Relationship Management | Billing & Customer Care | Billing & Charging

Evolving Systems

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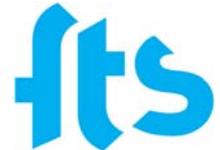
Evolving Systems is a provider of software and services to 50 network operators in over 40 countries worldwide. The company's product portfolio includes market-leading activation products that address subscriber service activation, SIM card activation, mobile broadband activation as well as the activation of connected devices. Evolving Systems' dynamic provisioning solution is a new way of providing service to any mobile or connected device with a SIM card. Marketing initiatives, expanding distribution, and new products can call for massive increases in SIM card supply. Dynamic provisioning allows operators to meet this challenge whilst avoiding the cost and inefficiency of traditional provisioning processes. By provisioning devices dynamically, resources, products and tariffs are not allocated to a

device until it is first used. This creates a "golden moment" when customers can explore relevant services and personalise them. Founded in 1985, the company has headquarters in Englewood, Colorado, with offices in the United Kingdom, India and Malaysia.

Sectors: eBilling, ePayment & ePresentment | Service Adoption Management | Business Process Optimisation | Customer Interaction Management | Product Lifecycle Management | Mediation & Collection

FTS

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FTS provides charging, billing, customer care and policy control solutions that have greater flexibility and provide greater independence for communications and content service providers, resulting in a dramatically lower total cost of ownership (TCO). As the first billing company to provide policy management, by analysing every transaction from a business standpoint, FTS offers a complete package of solutions and services to both growing and major, established providers. FTS deploys its full range of end-to-end and add-on telecom billing and policy control services to customers in over 40 countries and implements solutions in mobile, wireline, cable, broadband, cloud, machine-to-machine (M2M) and content markets including multiple convergent installations.

Sectors: Billing (Utility) | Policy Management | PCC - Policy Control and Charging | Inventory, Asset & Element Management | Partner Settlement | Machine to Machine (M2M) | Partner Relationship Management | Customer Relationship Management | Partner Management | Billing (Retail) | Billing (Convergent Pre- & Post-paid) | Billing (Interconnect & Wholesale) | Customer Care | Billing & Charging | Billing & Customer Care

COMPANY

URL

DNS	dns.co.uk
DragonWave	dragonwaveinc.com
EastWind	eastwind.ru
Easynet	easynet.com
ECI Telecom	ecitele.com
ECT - Telecom	ect-telecoms.com
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i2 (a Silver Lake Sumeru co.)	i2.co.uk
IBM Corp	ibm.com
ICare	icare.it
Identify Networks	identifygroup.co.uk

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Infonova, founded in 1989, specializes in providing technology and business-oriented solutions and services to telecommunications, media, finance, utility and convergent industries. Infonova's BSS solutions have been implemented for incumbent, attacker and cable operators supporting triple & quadruple play service portfolios. Encapsulating decades of knowledge, Infonova's latest BSS product, R6 is a fully J2EE platform that supports real multi-tenant concept-to-cash operations for fully convergent and complex multi-industry 2.0 business models while also supporting Telco 1.0 simultaneously. R6 also delivers transformation scenarios and pre- and post-paid convergence at a fraction the cost and time of traditional integration scenarios.

Sectors: Product & Service Management | Mobile Virtual Network Operators | Credit, Cost & Debt Control | Application Lifecycle Management | Billing (Utility) | Order Management | Customer Experience Management | Revenue Management | Product Lifecycle Management | Machine to Machine (M2M) | Partner Relationship Management | Mediation & Collection | Partner Management | Billing (Retail) | Billing (Convergent Pre- & Post-paid) | Application Management | Billing (Interconnect & Wholesale) | Partner Settlement | Customer Care | Billing & Charging

InfoVista

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InfoVista is the leading provider of service performance assurance software solutions for network and application services transported by all-IP networks. InfoVista empowers communications service providers to deliver high-performing and differentiated services while cost-

effectively monetising, operating and optimising their network. The industry-leading scalability, service modeling flexibility and open integration capabilities of its service performance assurance platform equip 80% of the world's largest operators. InfoVista's application and network performance assurance solutions provide them with the actionable network intelligence they need to deliver optimal quality of service, ensure high-quality user experience, transform and consolidate their OSS/BSS ecosystems while keeping total cost of ownership as low as possible.

Sectors: Network Performance Management | Application Performance Management | Backhaul Management | Network Discovery & Optimisation | Service Assurance

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M2M Now is the sister title to VanillaPlus and the first global magazine dedicated to machine-to-machine communications (M2M) communications. It explores the evolving opportunities and challenges facing M2M service providers, and passes on lessons learned from those who have taken the first steps in next generation enterprise services. M2M Now covers all industries using fixed line, satellite & wireless M2M networks for business-to-business users and consumers' connected devices. These industries include: automotive, energy & water utilities, fleet management & logistics; healthcare, manufacturing, retail & vending, security & access control, telecoms, and transport & telematics. The magazine is supported by a portal (www.m2mnow.biz) featuring exclusive C-Level Interviews (on video & in print) with executives from Network Operators, Service Providers & Aggregators, Device, Platform & Technology Enablers, Solution Vendors, and Corporate End Users.

Sectors: Connected & Embedded Devices | M2M Communication Services

COMPANY

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IIR Telecoms & Technology	iir-telecoms.com
Incognito Software	incognito.com
IgatePatni	igatepatni.com
Indra Sistemas	indra.es
Info Directions	infodirections.com
Infonova	infonova.at
Infor	infor.co.uk
Informa Telecoms & Media	informatm.com
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Information Engineers	idest.co.uk
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Ingenico	ingenico.com
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Innopay	innopay.com
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Intelligentis	intelligentis.com
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Maporama International	http://world.maporama.com

MACH

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MACH is the leading provider of cloud-based, managed communications services for monetizing mobile data, simplifying interoperability between networks, optimizing wholesale processes and protecting revenues. It is fast becoming the provider of choice for real-time, value added services that are essential for communications service providers around the globe to enhance customer experience, optimize wholesale processes and monetize their businesses in 3G and 4G mobile ecosystems. With its long heritage in data and financial clearing, settlement and hub based connectivity models, it provides its 650 operator customers with state-of-the-art tools needed to align business processes. Headquartered in Luxembourg, MACH has offices in 12 countries. Its customers include Orange, Telefonica, T-Mobile, Telus, Verizon Wireless and Microsoft, as well as enterprise messaging customers like KLM.

Sectors: Billing & Charging | Outsourcing | Customer Analysis | Behaviour Analytics | Billing Analysis | Data Analysis | Data Retention & Lawful Intercept | Other | Fraud Control & Prevention | Machine to Machine (M2M) | Billing (Interconnect & Wholesale) | Business Intelligence | eBilling, ePayment & ePresentment | Roaming Clearing & Settlement | Revenue Assurance | Revenue Management | Partner Settlement | Partner Relationship Management | Mediation & Collection | Partner Management

MetraTech

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MetraTech Corp. offers an innovative approach to billing, compensation and customer care. We empower organisations to embrace change through a unique agreements-based billing and compensation solution that models and supports fluid, personalised, multi-party agreements. We automate business processes and business models to address rapidly changing or complex business strategies. Our products are deployed globally, and our customers use MetraTech to innovatively create and securely collect revenue, compensate partners and manage their customer lifecycle in 12 languages, 28 currencies and 90 countries. Customers include TELMORE, Concur, The Depository Trust and Clearing Corporation (DTCC), CETIP, the City of Chicago, Microsoft and PGI. MetraTech is a venture-backed, privately held company whose investors include Accel Partners, Meritech Capital and Vesbridge Partners. We are headquartered in Waltham, with offices in, Rio de Janeiro and London.

Sectors: Billing & Charging | Billing (Utility) | Billing & Customer Care | Billing (Convergent Pre- & Post-paid) | Billing (Interconnect & Wholesale) | Billing (Retail) | eBilling, ePayment & ePresentment | Mediation & Collection | Business Intelligence | Accounting, Recording & Management | Billing | Analysis | Business Analysis & Intelligence | Product & Service Management | Product Catalogue | Revenue Management | Credit, Cost & Debt Control | Revenue Analytics | Revenue Management | Roaming Clearing & Settlement

COMPANY

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MATRIX Software	matrixsw.com
mBlox	mblox.com
MDS	martindawessystems.com
MDS Lavastorm Analytics	lavastorm.com
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MoreMagic Solutions, Inc	moremagic.com
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Nagravision	nagravision.com
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NeoMedia	neom.com
Neptun	neptun.com
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NetEvidence	net-evidence.com
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Netsize	netsize.com
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Network Equipment Technologies (NET)	net.com
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Neural Technologies	neuralt.com
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The Now Factory	thenowfactory.com
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Parallels	parallels.com
Partner Telecom	partnertelecom.com.au
Pega	pega.com
Persistent Systems	persistentsys.com

Openet

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Since the introduction of mobile data services in 1998, Openet has helped service providers capitalize on opportunities and overcome challenges. With competitive pressure accelerating, today's service providers rely on Openet software to evolve business models around how smartphones, M2M devices and third party services interact with their network. Openet's portfolio combines policy and charging control with device and third party interaction to enable innovative charging models, to control operating cost, and to personalise services. More than 80 of the world's largest service providers in 28 countries use Openet's high performance software. For more information.

Sectors: PCC - Policy Control and Charging | Policy Management | Machine to Machine (M2M) | Mediation & Collection | Billing (Convergent Pre- & Post-paid)

Orga Systems

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As the pioneer of GSM billing, Orga Systems has gained highly qualified expertise in real-time charging and billing. Orga Systems focuses on real-time based solutions for customer billing and administration in mobile telecommunication services. It sets important milestones for the industry regularly to further expanded its leading position. Orga Systems high-performance database, InCore, is currently the fastest data technology

worldwide with regards to access speed. Mobile operators need future-proof billing systems which offer clear service and cost benefits. The fully convergent real-time billing platform OPSC Gold guarantees their profitable future growth.

Sectors: Billing & Charging | Loyalty & Churn Management | Revenue Assurance | Customer Relationship Management | Billing (Retail) | Customer Experience Management | eBilling, ePayment & ePresentment | Revenue Management | Mediation & Collection | Billing (Convergent Pre- & Post-paid) | Customer Care

Redknee

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Redknee is a leading global provider of innovative communication software products, solutions and services. Redknee's award-winning solutions enable wireless, multi-service and alternate service providers to monetise the value of each subscriber transaction while personalising the subscriber experience to meet mainstream, niche and individual market segment requirements. Redknee's revenue generating solutions provide advanced converged billing, rating, charging, policy and wholesale settlement for innovative data offerings, messaging, and voice services to over 90 network operators in over 50 countries.

Sectors: Billing & Charging | Billing (Interconnect & Wholesale) | Billing (Utility) | Billing (Retail) | eBilling, ePayment & ePresentment | Mediation & Collection

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VanillaPlus is the leading global magazine and web portal dedicated to communications BSS and OSS. It covers billing, customer care, fraud control, network, service and revenue management. Now in its 14th year of publication, VanillaPlus provides news, views and features on systems for profitable communications, digital media and entertainment. It is available on free subscription to qualifying readers, and on paid subscription to all others. The print edition is circulated worldwide six times a year to 5,641 named directors and senior managers within communications network operators and service providers, and distributed at more than 50 key events on 5 continents each year. VanillaPlus.com gives you and 28,000 other online readers free access to exclusive C-Level video interviews, news, blogs, reviews, webinar podcasts, digital editions of the magazine, and an online directory.



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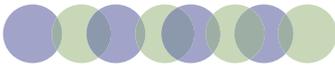
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Net rage comes of age as broadband hoggers clog the LTE fast lane

Spectrum hoggers, whether they're on the motorway or the LTE, need to be discouraged. Surely we have the technology to do so, asks Nick Booth?



The author, Nick Booth, is a contributor to VanillaPlus and a technology journalist.

Nature abhors a vacuum and human nature is no different. That explains why whenever you clear a space somebody will always endeavour to fill it. It doesn't matter if it's desk space, shelf space, rackspace or lanes on the motorway. Or indeed, on mobile networks.

No matter how many lanes they put on busy motorways such as London's M25 or the Paris Périphérique, they will always be full. Not because more traffic is encouraged to use this route – as was popularly thought – but because existing users will want to spread themselves out. No matter that the middle and outside lanes are for overtaking only, there are always people who want to block these lanes for the duration of their journey, so they can cruise along at 50 miles an hour without ever having to pull over or look in the mirror. Or give their fellow human beings any thought. Give some people a metal box – be it a car or an iPhone – and they quickly retreat into their own little world, please themselves and to hell with the rest of humanity.

Car drivers hog the precious resources of a motorway lane because they think it's safe to do so. Arguably, the opposite is true. Imposing a monotonous journey onto every driver stuck behind them has a dangerously soporific effect on the reluctant tailgaters, who have to constantly fight the inclination to fall asleep at the wheel. Middle lane drivers, like bandwidth hoggers, are incredibly selfish though. They can't be made to change without technical measures being applied.

What's true for the road network is equally true for the mobile infrastructure. We've just have a fantastic new mobile superhighway built in LTE, which could bring significant benefits to us all. It could certainly cut the journey time to Homeland on iPlayer dramatically.

But how soon will it be until you find yourself chewing your driving gloves off and shouting at your screen as you're forced to poodle along at what seems like one kilobit per hour. You won't understand what the problem is, as there should be plenty of room. But the problem will be that one selfish driver avails themselves of the full amount of space accorded to them, whether they need it or not.

You can bet they're not in a hurry. Maybe they are downloading a series of videos that they'll never get to watch. This isn't just selfish it's stupid. Who watches films on their mobile phone anyway? Smart phone, stupid user.

Videos aren't the only vehicles blocking the fast lanes of the LTE superhighway. Thanks to monsters like Hauppauge, the inventor of the Broadway 2T, millions of mid lane poodlers will be hogging the bandwidth while they watch TV. The Broadway 2T, though clever, is an instrument of the devil, as it allows iPad users to turn their mobile tablets into TV screens. Again, what's the point of watching TV on a small screen? The visual impact of a TV production is so massively important that they hire and fire newsreaders purely for their looks. Is this possibly because the data – the news being conveyed – pales into insignificance in comparison to the images? This is clearly designed to be a visual media, so why watch it on a small screen?

Surely it's not beyond the bounds of possibility to police the way people use gadgets and ring fence our LTE bandwidth before it gets eaten up.

Personally, I would give people online motorway driving tests. If you're the sort of person that blocks the throughfare, without considering others, you shouldn't be allowed to take a vehicle onto the transport network. You should also be excluded from using LTE too. That's what I call being broad banned.

I tried to put this proposal to the chief executive of a top mobile operator, but he was on the road. Probably watching a video. 📺

What's true for the road network is equally true for the mobile infrastructure



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