The issues for "switchless" resellers

Next Generation Billing

The Issues for "Switchless" Resellers

The convergence between digital data communications channels promises challenging times. This is particularly the case as mobile networks converge with the Internet. With an ability to download large amounts of data and carry out transactions "on the move", customers will be offered e- and m-commerce services that take advantage of the unique attributes of wireless communications.

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These services include real-time access to highly personalised information in time-sensitive and location-specific situations. But the UMTS business case is uncertain and most of the focus has so far been on the network operator's response to the challenges of 3G.

Communication Networks

However, many other companies are also manoeuvring to gain competitive advantage within the value chain for next generation services. These include the owners of major consumer brands and retail customer relationships. They are starting now to offer telephony and Internet services, and see these also as new sales channels for existing services. Given this background, the role of switchless resellers is therefore set to change significantly.

E- and m-commerce service implementation will lead to the evolution of new ways of delivering services. Constantly evolving partnerships will be formed between many players, including operators, service providers, technology-enabling companies and content providers. The realisation is growing that the provision of broadband networks is a means to an end rather than an end in itself. It will not by itself stimulate massive growth in mobile device use or guarantee profitable revenue streams. Operators and switchless resellers alike must add value to the services that are being delivered across the new networks.

There has been some confused thinking in this area. Even if consumers pay premium prices for high-value content delivered over an operator's network, there is no justification for the operator taking a high percentage of this revenue unless it adds value in the process. The Post Office for example, cannot charge you more for carrying a box of diamonds than a similar box of glass, unless it adds value, for instance by insuring the diamonds whilst in transit. In the same way, any telco will be relegated to the role of bit-pipe provider (earning declining revenues from commodity transport services charged by the minute or megabyte) if all it does is transport high-value content for other players in the value chain.

The key points are that the value a telco can provide may have very little to do with use of its network and that future revenues may come not only from the traditional source – end users – but from other parties in the value chain. Ultimately, what is emerging is the creation of a new "value web", where companies form relationships aimed at delivering profitable value-added services over converging communications networks.

Requirements for Switchless Resellers

In this changing situation, switchless resellers need to plan where and how they can create their own value-added business models and compete effectively with operators. They need to understand the impact of current changes on their own businesses and on their relationship with their customers. In fact, in this context, the concept of "customer" is being re-defined. All participants in a commercial transaction within the "value web" are potentially customers. The focus needs to shift from the current pre-occupation about who owns the customer to who is the customer.

This is where a convergent billing system comes in. Rating and billing is now much more complex than it was in the days of single service billing. Today's billing systems must also support:

- multi-party billing
- true convergence that gives a single view of the customer across multiple services
- convergent prepay
- active real-time rating
- carrier-grade functionality with scalability and real-time performance.

The relevance of these five requirements for switchless resellers can be seen when the importance of "own brand" billing is considered. This is usually a vital element in the commercial relationship between service providers and their customers and needs to be protected in fast changing markets. So far this relationship has been relatively simple. But as future delivery of content-based services becomes more complex, with more partners involved, additional requirements are placed on the customer care and billing infrastructure in order to allow resellers to deliver branded services. A level of sophistication will be required that cannot be met by existing legacy systems.

Multi-party Billing

This is the most obvious market driven issue for switchless resellers with two particular aspects of the "value web" affecting next generation billing solutions.

The first centres on multi-party billing, whereby charges and credits resulting from a single event or transaction must be apportioned between the various parties involved. A single transaction may

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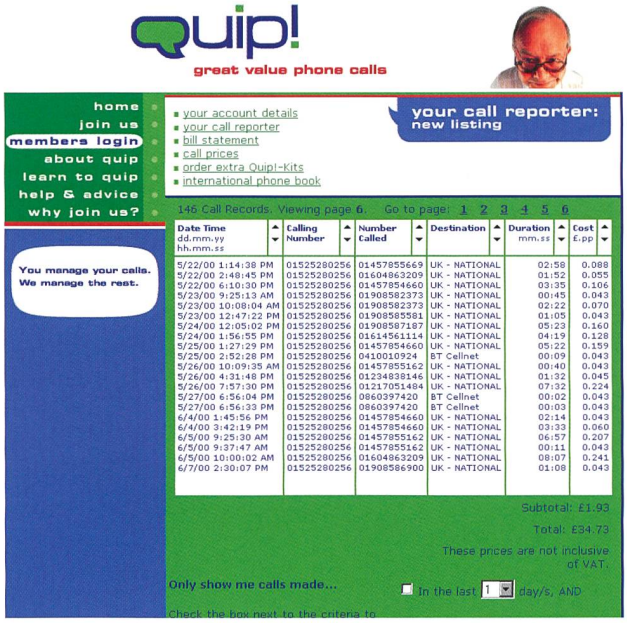
Quip is also offering a billing service to partners, including the option of a single converged bill incorporating all of a partner's products and services.



have billing consequences for several parties, some of whom will pay, whilst others will be paid, for the service involved. An event may be priced in any number of different ways and each party to the transaction needs transparent access to their appropriate share of the revenues.

The second involves service provider billing, allowing companies to operate a billing service on behalf of third parties – now their customers – in the "value web". Many of these companies will want to offer products and services, via the telco's web site for example, and be able to bill for these without themselves incurring the costs of installing their own billing system.

Convergence

True convergence

If all these different partners are to bring new services any billing system must be convergent to support them. But true convergence is not just about providing multiple services or placing them on a single bill – it will also allow resellers to have a single customer view across any mix of products or services and offer opportunities for price incentives across these products, such as bundled pricing and sophisticated cross-product discounting options.

Convergent prepay

With increasing numbers of users accessing many different kinds of goods and services from mobile devices, the ability of the billing system to handle this in the prepay environment is crucial. Convergent prepay allows multiple services to be paid for in real-time from a single prepay balance. There is also a need for convergence between prepay and postpay accounts according to customer preference and the demands of different kinds of products and services. Real-time interaction is required with the network and the customer where convergent prepay supports the prepaid charging of multiple services. For example, with the offering of loyalty schemes to family groups across a mixture of prepaid and postpaid accounts billing becomes an active enabler for marketing and not just a back-office tool for invoicing and collections.

Active Real-Time Rating

3G services will generate much higher volumes of events. Some of which, such as pricing and transaction authorisation (against prepaid and postpaid accounts) must take place in real-time, whilst the customer is waiting. For example, the rating engine will actively assign a cost to a transaction, utilising multiple criteria, which could include customer location, QoS, date, time (e.g. the ticket price for a West End show at box office time), all priced with relation to packages to which this customer subscribes (e.g. buy two, get one free). Here the rating process becomes part of the service itself.

There will, however, be many other events that do not require immediate processing, which, during peak processing times could easily overwhelm a system designed purely for real-time rating. The principle of tuneable real-time is twofold:

– events must be rated in accordance with their priority, not in the order that they arrive, and

events can be scheduled for off-peak processing if they are not required to be real-time at all. To deal with the high volumes of 3G events faced by tier one operators whilst keeping down hardware costs, rating should be distributed across multiple servers. What Convergys calls Distributed Revenue Processing (DRP).

Carrier Grade Functionality

To support such business models for carriers handling many millions of transactions per day, a billing solution has also to offer carrier-grade scalability, operability, availability and revenue assurance, as well as the functionality to manage a high volume business.

In evolving e- and m-commerce models, utilising customer knowledge to add value to content, commerce and communications services are essential for success. Many telcos realise this and are thinking of becoming service aggregators, with a target customer-market base to whom they aim to sell the largest possible range of services, most, if not all, of which are being provided by third party

service providers. This is where customer-centric systems have the advantage over systems designed to bill for one particular service. The emphasis becomes one of optimising the whole customer management experience for the key customers addressed. To achieve this, the underlying business systems must be radically different in approach from traditional legacy systems.
In summary, new generation billing is moving from being a passive, back-office system which starts working long after all the activity on the network has finished, to playing a much more active role in the service itself. As with operators, switchless resellers will need to invest in such a system in order to compete effectively in a fast changing marketplace. [1]

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This article has been written as part of a series of articles for Billing Systems 2002 – the largest and most important event in the European Billing calendar, running from 22nd–25th April 2002, Earls Court Conference & Exhibition Centre, London. www.iir.co.uk/billing
Convergys is a Gold sponsor and exhibitor at Billing Systems 2002.

Zusammenfassung

Rechnungstellung der nächsten Generation

Die Integration der digitalen Datenübertragungskanäle verspricht verlockende Zeiten, insbesondere dann, wenn die mobilen Netze mit dem Internet zusammenkommen. Mit der Möglichkeit, grosse Datenmengen herunterzuladen und Transaktionen «unterwegs» auszuführen, werden den Kunden E- und M-Commerce-Dienste angeboten, welche die einzigartigen Eigenschaften der drahtloser Kommunikation nutzen. Diese Dienste umfassen Echtzeitzugriff auf personenbezogene Informationen, die von zeit- und ortsbedingten Situationen abhängen. Der UMTS-Business Case ist unsicher, daher liegt der Hauptschwerpunkt weiterhin auf der Reaktion der Netzbetreiber bezüglich den Herausforderungen der 3G.

Billing Systems 2002

IIR's Billing Systems Conference & Exhibition, now in its 9th year, is firmly established as the most important billing event in Europe, with over 2500 participants attending in 2001. The event consists of a conference with over 80 papers and tutorials and 5000 m² of exhibition floor, which will enable billing professionals to compare the products and services from all the leading vendors in a hands-on environment.
The operator-led conference will provide an opportunity for delegates to improve current billing practice, benchmark their own billing and OSS processes and gain a clear insight into the issues that will shape the future of communications billing and financial transaction processing. Topics include Billing Systems Strategy, Content and Usage Billing, Prepaid, OSS and Network Management, CRM, Loyalty and Churn, Revenue Assurance, Convergent Mediation, and much more.
The conference programme has been designed to be flexible, allowing delegates to select papers from any of the streamed sessions to create an individual mix of programmes to match their specific business needs. Other topics across the four-day event include Billing for 3G, Broadband, Corporate and SMEs Billing, Systems Integration, Data Storage, Provisioning, Rating and Pricing. Tax, Account and Financial Issues, Interconnect and Wholesale.
The Billing Systems 2002 exhibition will feature the leading telecoms and utilities billing companies giving visitors the opportunity to meet all the top suppliers under one roof, enabling the development, planning and execution of improved billing strategies. To further enable companies to maximise revenues in a difficult market place, exhibition visitors can attend the free tutorials and product briefings and take advantage of a special "use-once" pass to attend any one of the conference presentations running during exhibition hours for free.

IIR'sBilling Systems 2002
22nd – 25th April 2002
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