Defining India's BSS solutions for the 3G world

by Bikram Bedi, VP, Intec India

New business models are required in the 3G world to build value-added brands that attract and retain subscribers. Service providers will need to harness their customer care, billing and revenue management systems to provide a single view of the customer. The business intelligence potential, within their operations support systems and business support systems infrastructure, can enable new services such as m-commerce, convergent customer care, and highly interactive account access and management, that ultimately increase both average revenue per user and average margin per user.

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In the complex landscape of next-generation wireless services, it is essential not just to gain customers using cost-effective methods, but to retain them as well. Reducing churn drives down costs and provides a platform for building average revenue per user (*ARPU*) and boosting margins. An increasingly important element of the process of attracting and retaining customers revolves around brand affinity. When customers both recognise and associate with the things that a service provider's brand represents (for example, good quality, attractive content, ease of use, customer service excellence), then attracting them to want to sign up, and stay signed up, with the service becomes easier. An understanding of how to build brand characteristics in order to deliver something that is both recognisable and different is a fundamental objective of today's wireless service provider marketing programmes.

A proliferation of messages and brands in the market means that it is important to move as close as possible to the customer in order to ensure brand affinity, focusing on a brand communication strategy which has resonance for each sub-segment of the market to be served. This requires quite granular customer and segment specific demographic information as well as the ability to market directly to customers or prospective customers through the provision of attractive pricing, compelling content and innovative service bundles – in short it requires real-time responsiveness and a single view of the customer.

Data need to be transformed into information and information must yield intelligence. With such intelligence service providers can create innovative mobile service packages for greater customer intimacy. Equally such an approach should improve customer interactions with their service provider.

The new 3G business model

With prepaid-only services, the relationship between the customer and the service provider is somewhat tenuous. Increasingly regulatory pressure is placing a requirement for a minimum name, address and related contact information to be validated before prepaid services are offered. In many markets such information is not captured, so customer knowledge starts and ends with the international mobile subscriber identity (*IMSI*)/mobile identification number (*MIN*) and possibly a credit card number. This quite clearly creates a barrier for a service provider if they wish to utilise conventional approaches to marketing their services and build a strong brand proposition. As has been identified above, the customer must be at the heart of their business – that requires considerably more information – and a better way to turn that information to commercial advantage.

A new business model for success in the management of next generation services must be built around the customer, their interaction with the service provider, their service preferences, even their relationships with third party content providers, enabled using the service provider's network. This is not just about the relationship between the customer, service providers, and their commercial partners and merchants, but could conceivably include the use of intelligence about a customer's family, friends, acquaintances, personal interests, careers, behaviour and lifestyle.

The new 3G business model requires a complete, single view of the customer. To support this new business model, service providers must first recognise and understand how to utilise the business intelligence potential within their operations support systems (*OSS*) and business support systems (*BSS*) infrastructure. Mediation and billing systems represent a cost-effective source of business intelligence. But intelligence on its own is only one part of the equation. Customer care and billing systems need to be enabled to actually allow customers to model their personal preferences and requirements. In billing terms, this could mean providing a customer with the opportunity to access and model their own account hierarchy preferences, thus yielding significant cost and service improvements over existing processes for the set-up and manipulation of such hierarchies.

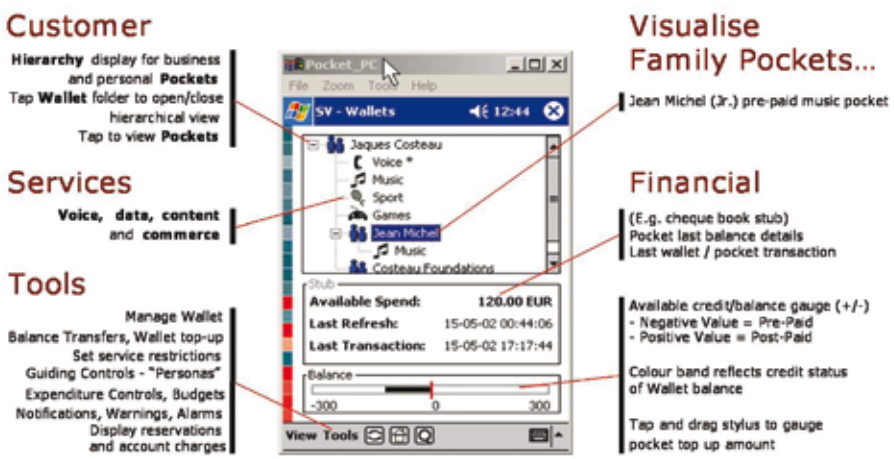

Figure 1: PDA client application

Customers may wish to manage a number of their own sets of relationships within the system and therefore be associated with more than one account hierarchy – work hierarchy, family hierarchy, club hierarchy, indeed any user-defined hierarchy.

In the examples that follow each set of relationships and associated personal settings (budgets, profiled usage and interests, anniversaries) is referred to as a 'persona'. Typical personas are 'employee', 'family man, wife, two children and dog', 'student union member', and so on. The new intimacy that this approach delivers is illustrated well by the opportunity for customers to 'switch' personas manually, or by business rule. For example, based on a time of day rule, to access a new set of relationships, behaviours and experiences, a user could switch from a 'work' persona to a 'social' persona.

This approach encourages the emergence of a far more interactive brand experience, with power users, business, parents and youth markets becoming less defined around segments and more defined around multiple 'personae' – the elusive market of one could indeed become the norm for the consumer wireless market over time.

To enable service providers to support such an approach, a single 'view' must be created on the charging and billing platform, which is presented to users in a simple, understandable way that addresses the customer, available/subscribed services and products, as well as providing a visual financial dimension.

The ideal framework allows a customer to visualise their account, their relationships, their services and their financial balance in real-time using a variety of access devices,

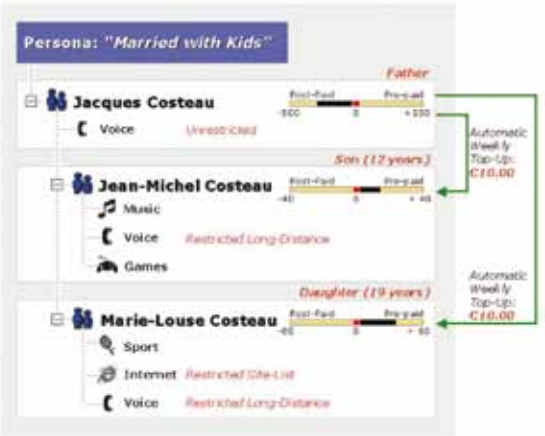

Figure 2: 'Married with Kids' persona

including web browsers, PDAs (personal digital assistant or palmtop computer), mobile phones or in the future even interactive TV. (This also happens to be one of the premises delivered in conjunction with IMS.)

Figure 1 shows a PDA client application and illustrates how service providers could provide users with single-view visualisation for 2.5G and 3G services.

The relationship between personae and account hierarchies is best illustrated by example. Jacques Costeau (no relation to the renowned French marine biologist) has two personae, 'Married with Kids' and 'Work Employee'. 'Married with Kids' operates as a post-paid account (Figure 2). Jacques has also provisioned two prepaid 'wallets' for his children Jean-Michel and Marie-Louise and configured a weekly automatic top-up rule.

Jacques has defined service restrictions for the children's voice services and Internet restrictions for Marie-Louise's Internet access. Jacques has also specified that he is to be notified when the children's respective account balances reach zero.

When he receives an alert that one or other of his children's balances has reached zero, Jacques (being an indulgent father) can either manually top-up the account or activate a switch to charge all children's calls made to the home phone number, to his personal post-paid account.

Jacques also has a company persona called 'Work Employee', illustrated in Figure 3. Such personas can be designed by employers to promote loyalty to the firm and help employees to bridge their working and private lives.

To provide a business rule example, this persona can take a volume discount earned on a corporate account and redistribute it as prepaid credit for personal calls, services or content downloads. Switching between personas is automatically set up at 8am and 6pm each working day.

This type of approach permits affinity calling-list services such as 'Friends and Family', 'Calling-Circle', 'Circle-of-Friends' and other variants to be offered for real-time and prepaid subscribers, both within the 'Work Persona' context and also separately within the 'Married with Kids' persona context. Service providers use such services to build brand loyalty and also sell it to subscribers

Figure 3: 'Work Employee' persona

as an optional premium service feature. By providing some level of discount on the calling circle numbers this obviously also encourages usage, hence driving up ARPU.

To build these types of brand relationships, service providers need to re-engage primarily with their BSS vendors, in order to define specific requirements for new types of revenue management platforms to develop and support new customer behaviours where:

- Multiple users (e.g. family hierarchy) access multiple services simultaneously;
- Users may access services using a selection of personal terminal devices and device types;
- Each service activated by each user may be charged in real-time against one or more accounts, based on the user persona active at a particular time;
- Users consume a variety of products and services from a potentially fast-changing, user defined portfolio;
- Consumption continues to follow the fixed-charge and service-usage model, thus ensuring that users continue to understand and be comfortable with familiar charging models;
- Users manage their personal communications needs by themselves, thus reducing contact centre interaction, but increasing the need for efficient self-service capabilities; and
- Users regularly complete transactions using a number of different payment methods or combination of methods, including prepaid, post-paid, credit/debit cards, loyalty points and promotional coupons.

By providing new services such as m-commerce, convergent customer care and highly interactive account access and management, service providers can build value-added brands that attract and retain subscribers, ultimately increasing both average revenue per user and average margin per user. Such services are possible, but only when the service provider can harness their customer care, billing and revenue management systems to provide a single view of the customer. ●

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