Getting paid: Convergence can help operators weather the crisis

Convergent charging and billing helps operators **manage costs** while gaining agility and competitive advantage. Convergence is not about technology: The only way to get there is to **base it on business objectives**.

THE TELECOMMUNICATION industry can't avoid being affected by the global financial crisis. It is probable that we will see a shift in service usage as consumers try to limit and control their spending by turning to prepaid and bundle plans as is evident in the United Kingdom already.

In response, operators will need to cut costs in order to keep margins where they should be. Business support systems (BSS), an important part of the infrastructure, are vital to the operator as they provide competitive advantage and enable customer satisfaction; hence, BSS in general, and convergent charging and billing in particular, is an investment area regardless of an operator's maturity or the market it operates in.

Operators need to offer packages that are specific to consumers' needs and present them with value, else the users will go elsewhere. Loyalty decreases when times are tough.

Cost efficiency means doing more with less. It can come from a combination of soft (human resources), hard (infrastructure), and running (operational) costs that must be kept as low as possible.

Convergence addresses all these costs by eliminating duplication in soft, hard, and running expenses. At the same time, it yields improvements in how services and offerings can be bundled and cross-sold.

What convergence means

The term "convergence" can mean any of the following things in conjunction with BSS:

Access convergence – When telecom, IT, and media come together. It is achieved by getting rid of the vertically integrated service-specific networks of today and moving to a layered architecture. Convergent charging and billing systems must be able to handle all types of access networks.

Payment option convergence – This means having one convergent charging and billing solution that handles subscriber data, product offerings and charging for all users and services. This is also called prepaid-postpaid convergence.

Retail and wholesale convergence – Traditionally, retail and wholesale billing were done on separate systems in the operator's BSS environment. Retail and wholesale charging and billing can now be done at the same time, increasing efficiency because the transaction is finalized when it occurs. And because retail and wholesale is done at the same time, the risk of losing revenue from data loss is minimized.

Consumer and enterprise (corporate) convergence – Usually, only management is given a mobile phone sponsored by a company, even though enterprises see the benefits if most of their employees had one. It is a great business opportunity for operators that can provide enterprises with solutions that increase efficiency and help them manage their cost exposure by allowing private usage to be charged to a private account. Such an offering would allow both the company and private subscriptions to exist on one mobile phone and number.

Data convergence – When access technologies, payment options, retail, wholesale, and consumer enterprise capabilities converge into one BSS solution, data duplication automatically decreases. This leads to cost savings for the operators. Further opportunities for data consolidation come when data held in the BSS system is online and readily available for use by other network elements, which provides greater efficiencies in the serving network connected such a Business Support System.

Convergence lets consumers control their spending. At the same time, it can also encourage them to use services, because they know what the costs are, and they can control the size of their bill.

For operators, convergence means three things:

1. Flexibility to create and launch services to the entire customer base, as opposed to specific payment option segments. Flexibility also provides the agility to outperform competitors. A convergent charging and billing solution provides a major competitive advantage.
2. Cost efficiency from the elimination of double costs in the form of licenses,

operation, and maintenance. Also, it is more efficient to create a service once than to create it in different systems with different technologies (such as fixed and mobile) or payment options (prepaid and postpaid).

3. Securing revenue, which is vital for operators as they offer more and more services sourced from third-party content and service providers. No operator can deliver a service to a user without assurance of payment. Therefore, the convergence solution must check user accounts and perform business rule-checking and enforcement before allowing users to consume high-value third-party content and services.

The situation today

The telecommunications industry has evolved rapidly the last 10 to 15 years, and operators have embraced many new technologies and offered hundreds of new services. Simultaneously, the new services have changed user behavior. Most incumbent operators have several service- or technology-specific charging and billing systems in operation, which makes their BSS environments inefficient and highly complex, resulting in high cost and poor market agility. The situation is worse in developed countries where operators have been around for many years and have a large collection of legacy charging and billing systems.

The challenge for these operators is to transform their complex environments into a converged charging and billing environment within minimum time and cost. How to achieve this convergence?

For new operators, it is relatively simple: They implement a converged solution

from the start as their main objective is having a competitive advantage over the incumbent. Etisalat in Egypt is one example. Etisalat managed to get more that 15 percent market share by the end of 2008 by being able to launch many more offerings compared to the incumbent operators.

But operators with existing BSS environments face a greater challenge – implementing convergent solutions while keeping the business running. There have been a number of spectacular failures in recent years in which operators undertook massive migrations to new systems. Many projects failed because they tried to define a new, complex solution that was supposed to replace everything in operation and to execute it as one multiphase project.

These projects typically last several years, and this is where the problem lies: The business must continue, and priorities and objectives will change during the project. Constant changes to project scope lead to extra costs and even lost investments. As well, the solution is created by technologists who have no real business responsibility, so the solution becomes technically ideal instead of business enabling.

Technologists want to create a detailed, all-encompassing plan – which is actually too large, based on today's technology (tomorrow's legacy). Most important, the business must stand still while the solution is being implemented.

Take one step at a time

To achieve convergence an operator must of course have a plan, but that plan must be on the right level. As transforming the BSS environment takes several years, the plan should be broad, flexible and include key objectives, such as whether all users will be charged in real-time, and why. The "why" in this case signifies one of the plan's business drivers. The plan should identify the main functional layers and perhaps some detail, but anything more is a waste of time and money.

The next step is to look at the operator's short-term business objectives and the offerings it needs to launch in order to remain competitive. Each new offering should be developed according to the highest level of the plan and not violate any key objectives. Each project should be justified by a specific business need, and its implementation costs should be part of the business case for that product or offering.

In this way the operator can transform a legacy environment into an agile and modern convergent environment step by step. After each step, the long-term plan should be checked. Any lesson that can be applied should be taken into account to see if the plan is still valid, based on the present situation (typically three to six or nine months after the original plan was defined).

The difference between a stepped plan and a "big bang" migration is the operator keeps moving to a defined strategic objective, while maintaining its agility in the market. A stepped plan also lets the operator adopt new technologies and methodologies as it goes.

A convergent charging and billing solution must be access independent and payment option independent, must combine the retail and wholesale flows, and must enable a combination of private and business use on the same phone.

Convergence should not be driven by technology. It must be done only to meet clear business objectives. ●

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