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Solving the Customer Service Challenges of Mixed Billing Environments

Billing Challenges in Multiservice Organizations

Communications Services Providers (CSPs) that provide multiple services, such as fixed line, mobile, and data services, face a unique challenge in communicating with and billing their business customers. When delivering multiple services, CSPs often rely on a unique infrastructure to deliver and bill for each service. This situation could have developed over time for several reasons, including:

1. Internal projects to optimize the service delivery and billing processes for the CSP
2. Mergers and acquisitions that brought new infrastructures inside the corporate walls.

Regardless of the cause, many CSPs look across their organizations at a sea of billing systems, including situations where:

- Distinct billing systems are used in each geographic region to deliver the same service
- Different services (e.g., mobile and fixed line services) are billed out of different systems
- Different business units or operating groups exist and may have distinct billing infrastructures
- Technology changes and capabilities encouraged organizations to add new billing systems to their infrastructure to solve specific problems encountered by the CSP

Operating multiple billing systems is a problem for CSPs for several reasons. First, maintenance and overhead costs are higher because each carries its own license and maintenance fees, each has its own unique technologies and requires specialized skills to operate them, each must be configured when pricing changes and promotions are offered, and each requires resources, including space, electricity, and human attention, to keep them running. A second, and potentially more important problem to solve, is the impact that multiple billing systems have on the customer experience. Having multiple billing systems causes operational complexity inside the CSP, such as maintaining marketing promotions through to the billing systems, that is often exposed to the user in fragmented and disjointed communication. Customers, on the other hand, expect communication to be aligned to the services they purchased and they do not want to be exposed to the internal workings or organizational structure of the CSP. This mismatch adversely affects customer loyalty. As competition in the communications industry has intensified, the customer experience has become a key battle ground and addressing these issues sooner rather than later will have a long-term benefit for the CSP.

Impact on Customer Experience

Today customer expectations for service and quality are at an all-time high and are still rising. Online banking and shopping experiences have established the standard that the customer should be in control and be able to access information any time they want it and anywhere they need it through mobile devices. In addition, they expect service providers and stores to know who they are, to be aware of past interactions (just as the customer is), and, in the best cases, to even recommend solutions or products that are tailored to particular interests. These expectations are not limited to simply online shopping experiences, but are pervasive and apply to communication services as well.

Much of the customer service expectations arise from the fact that the best organizations know as much or more about the customer-CSP relationship than the customer knows about the relationship. That allows them to have a strong 1-to-1 relationship with the customer that makes the customer feel valued, important and cared for. CSPs with multiple billing systems, however, can easily appear to the customer as multiple entities, with each entity only knowing about a subset of the overall customer-CSP relationship. This can lead to the following issues that degrade the customer experience:

- **Poor Customer Service** – If the CSP doesn't have a consolidated view of the customer's purchasing behavior, they are likely to have to redirect inbound customer calls to different entities. This increases the time the customer has to invest in customer service inquiries, increases the time to resolve a customer issue, and conveys that the company does not value the customer.
- **Complicated Billing** – If the customer receives multiple bills from the CSP, e.g. one per service or one per geographic region, without the ability to evaluate them in aggregate, it increases the complexity of the relationship by increasing the number of things the customer has to receive, analyze, and process.
- **Lack of Visibility into Overall Expenditures** – Multiple bills prevents the customer from getting a clear picture of the overall spend with the CSP, which is a basic customer need, and prevents the customer from understanding the relationship between the spend of different services so that they could improve their internal processes and policies and optimize or rationalize their telecommunications equipment. Customers needing a comprehensive view of the relationship may be forced to use traditional spreadsheet tools to understand as best they can how the different bills relate to each other. Spreadsheets, however, are usually inadequate for the job and do not allow the customer to understand their expenditures at a detailed level.
- **Poor Sales Experience from Uninformed Sales and Account Teams** – Disconnected bills often mean that sales and account managers can't get a consolidated view of the customer and that leads to a disjointed, complex, uninformed, and non-productive relationship with the CSPs sales and account managers.

These problems lead to lower customer satisfaction and, because the CSPs are unbundling how they present the relationship, it encourages customers to de-bundle services and switch vendors, leading to lower customer loyalty and lower overall relationship value.

The adverse effects of having multiple billing systems are often well understood within the CSP. The extra operational costs show up on the CSP's consolidated financial reports and the customers speak their mind to their sales managers and customer service representatives. What is not as well understood is how to cost-effectively and practically address the issue.

Consolidating or Modifying Systems Are Not Practical Solutions

Several solutions have been proposed in the past to address the adverse effects of multiple billing systems, but they are often deemed too costly and too disruptive to justify the undertaking. These include:

- **Consolidate Systems** – In this approach, the CSP consolidates to fewer systems or to a single system by migrating customer records from one system to another. It may require the CSP to deploy additional billing systems to cover the consolidated load or could even require that the CSP to discontinue use of all their current systems and move to a single new system entirely. This method is costly because it requires new licenses for the additional systems and is disruptive and risky because migrations are major projects that must be undertaken with great care so that they do not interrupt the billing cycle for customers. In addition, while a major initiative that provides both the CSP and the customer a consolidated view of the relationship, this solution should only be viewed as temporary because additional billing systems can re-enter the architecture through continued mergers and acquisitions, leading to the need for more consolidation in the future. Often this approach is dismissed because either the CSP does not have the will to withstand the disruption or the costs to standardize billing systems can outweigh the benefits achieved by savings from consolidating platforms, skills, maintenance fees, and license fees.
- **Modify Existing Systems** – In this approach, the CSP attempts to modify the underlying billing systems to make them more compatible. This is a costly and time consuming method that may not lead to improved results as unforeseen technical issues can derail the project. In addition, maintenance issues could increase if you change systems from manufacturers.

While these solutions are technically feasible and may address the immediate customer service needs, they often do not address the cost and flexibility needs of the CSP going forward.

A New, Composite Analytic Approach Serves the Needs of CSPs and Business Customers

The ideal solution to the problems associated with multiple billing systems is one that satisfies the needs of both business customers and CSPs and, therefore, has the following characteristics:

- **Compatible** – Can be implemented easily with minimal disruption to existing billing systems, processes, and procedures.
- **Low-risk** – Can be implemented at a cost significantly below the value that it provides so that it delivers a positive ROI and has a low risk of failure.
- **Flexible** – Provides flexibility to incorporate new or additional billing systems over time as the infrastructure of the CSP changes.
- **Simple for Customers** – Provides the customer with a single, consolidated view of all their bills and services to minimize the complexity for the customer and reduce the risk of de-bundling. Provides multiple customer, invoice, and service views on their own terms so that it is easy for the customer to find the information they need.

- **Uniquely Valuable** - Provides additional value that is not available from the individual billing systems themselves and, therefore, improves the customer's experience and loyalty.

A "composite" analytic application is a technical approach that has been used across enterprises to consolidate disparate applications into purpose-built applications. It offers these advantages and eliminates the heavy lifting associated with the migration approaches discussed before. A composite applications is, according to Gartner, an application that "orchestrates independently developed applications, data and devices to deliver a new solution that none of the previously available applications could deliver on their own."¹ The point of a composite analytic application is that it provides an application layer that integrates the data from its child applications, but presents it in a consolidated, different way to improve the user experience or to tailor the information from the child applications for a specific use or user community. Essentially this means that you assemble a new application from pre-built applications.

In the case of multiple billing systems, the composite analytic application would pull information from the billing systems using available programming interfaces, combine the data from the different billing systems, and present the combined data in an analytic application that suits the customer's desires. The benefits of this approach are that the underlying systems remain intact and require no modification, the user experience is greatly enhanced, deployment time is much shorter compared to the time needed to execute a migration strategy, and the composite application can provide additional analytic functionality, such as aggregations and summarizations by new hierarchical concepts that are not present in the underlying billing systems. Furthermore, the application can be adapted and changed in the future to address new requirements from the customer or new billing systems.

Introducing Lavastorm Spend Analyzer for Communications Services Billing

Lavastorm Spend Analyzer uses a composite analytic application approach to combine the information from multiple billing systems and deliver an e-billing and analytics application that CSPs can make available to their business customers. Spend Analyzer offers the following unique capabilities to CSPs and their business customers:

- **Non-intrusive data federation functionality and standard APIs** – These simplify the capture of data from multiple sources, provide data synchronization and assurance, and allow CSPs to enrich the data from the underlying billing systems with additional information.
- **Customer-centric views** – Business customers gain a single, converged view of their spend and usage across all products and services and a view that can be configured to reflect their organizational structure instead of the structure imposed by the billing system. Views reduce the number of bill inquiries and disputes and can be tailored over time by the customer to meet the changing needs of the business.

¹ IT Glossary, Gartner at www.gartner.com, March 2013.

- **Comprehensive View of the Customer for the CSP** – Customer Service and Sales Representatives from the CSP gain a holistic view of the customer to enhance first-call resolution and the sales experience. Sales representatives, for instance, can analyze the consolidated data of their key accounts in a way that they never could before, enabling a pro-active customer management environment, where CSP staff can easily view spend trends at their key customers and act accordingly, potentially offering new services or bundles, more appropriate tariff plans or some discount to encourage adoption or heavier usage of a particular service.
- **Electronic bill presentment** – Spend Analyzer eliminates the need for paper bills. Paper-free billing lowers operational costs and is a key component of green or eco-friendly initiatives.
- **Custom, advanced analytics** – Customers can create custom reporting entities, dashboards, and alerts, allowing them to analyze expenditures and usage by departments, cost center, individuals, or other entity. Analytics offer transparency that the business customer can use to adjust employee behavior and to optimize their telecoms equipment purchases, such as when to move off legacy equipment due to falling usage.
- **Budget monitoring** – Customers can avoid bill shock by evaluating their expenditure against custom budget criteria.
- **Report distribution** – Customers can save valuable time by automatically generating and distributing reports to colleagues and staff.
- **Branded, custom interface** – Spend Analyzer gives CSPs a branded, billing application that can enhance the experience of existing customers and differentiate their services so that they can attract additional customers.

With its light-touch approach and advanced analytic capabilities, Spend Analyzer satisfies the needs of both CSPs and their business customers.

For additional information on Lavastorm Spend Analyzer, visit <http://www.lavastorm.com/products/applications/spend-analyzer>. To experience the benefits of the Lavastorm Spend Analyzer, request a demonstration by contacting Lavastorm Analytics at <http://www.lavastorm.com/company/contact-us>.