



Real Time Billing – Challenges and Opportunities



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For any telecom industry to sustain and grow, billing has been playing a vital role. It not only helps invoice the customers and collect revenue but also helps market the product effectively.

Nepal Telecom has seen the many generations of billing; from manual log keeping billing to advanced ABS systems. With the rapid growth and diversification in the telecom industry, across both fixed and mobile sectors, the trend is for new data and multimedia services, offered with a variety of tariff combination, subscriptions, bundles and promotions. Real time rating/billing offers enormous advantages for putting these new services into practice effectively.

What is real –time billing?

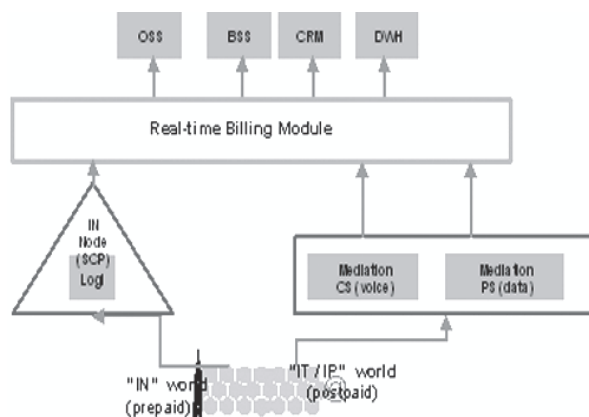
In a conventional billing system, call records are generated and stored in switching elements. These are periodically transferred to billing system in batches (online or offline) where they are rated according to tariff definition and later invoiced.

In real-time scenario, services are rated during the service consumption, its credit status checked before service is delivered and keep checking during the service session. Among other things, it is an integral part of the service, not an after-service activity.

To some extent, Nepal Telecom has implemented real-time rating for prepaid subscribers using IN. However, IN are limited in functionality and can not be

used for postpaid or contract subscribers. Applying the real-time charging model to postpaid or contract subscribers brings the direct benefit of cost-control to the contract subscribers. It also allows the operator to minimize bad-debt and potential fraud from existing and potential postpaid subscribers. Applying real-time charging to postpaid subscribers can also provide a significant competitive edge to the operator, by enabling hybrid tariffs and mixed accounts, which may increase customer loyalty, win new customers and increase overall revenues and ARPU.

With the implementation of real-time billing, the billing network will look as below:



It will provide the consolidated view of both prepaid and postpaid subscribers allowing a single rating engine and single BSS.



Opportunities

Apart from bundling of services and quick access to market, these are the key benefits:

- Single number range for prepaid and postpaid
- Control on revenue leakages
- Increase ARPU through hybrid payment services (prepaid , post paid , pay now)
- Increase customers with hybrid accounts such as family and corporate having mixed prepaid and postpaid services
- Reduced churn rate
- Personalized credit control utilities
- Third party payment options
- Dynamic discount and cross product discounts

Challenges

New generation switching equipment are compatible for real-time rating. But old generation circuit switched equipment are not compatible as serving element need to have some intelligence. Definitely work around is available but they proved to be costly and time consuming. For uniformity of services offered by telecom, they need to be upgraded or phased out.

Real-time charging architecture requires that every service request to be additionally processed by billing server; hence delay in service setup will be introduced. But that delay is maintained at not more than 100 ms.

Similarly existing billing systems shall be replaced with new systems requiring more investments.

Conclusion

Billing is now more strategic than ever. It is the key enabler for product and service innovation and customer centric propositions. Next generation billing will be the winner in the race. Overnight implementation is impossible but stepping forward is current demand.

The final test of a leader is that he leaves behind him in other men the conviction and the will to carry on.

- Walter Lippman

God places heaviest burden on those, who can carry its weight.

- Reggie White