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USING UNTAPPED INFORMATION ON NETWORK SERVICES TO IMPROVE SERVICE PROVIDERS' BUSINESS

There is an enormous amount of information in telecom networks awaiting to be exploited. Untapped information about network services is a resource service providers should employ in order to improve their competitive edge and bottom line. By obtaining information about network services that is currently not available , service providers will be able to launch new innovative offers to subscribers, enhance quality of network services and improve customer care.

But why is all this information important? How much more information is really needed? And can it be obtained in a cost effective manner? This article shows that not only it is possible to obtain additional untapped info but also that the impact it has on the business is immense.

WHERE IS ALL THIS INFORMATION?

There are several factors for untapped information about network services. To start with, some of the information is not even being collected from the network. The information that is being collected is many times siloed within disparate business and operational support systems, often making it essentially unavailable outside each functional silo for the information users in the relevant organizational departments. Finally, even when the raw data is available, converting it into meaningful business information is not easy, and using the available data for purposes beyond charging is frequently overlooked.

THE MISSING PARTS IN THE INFORMATION PUZZLE

The untapped information about network services includes important information about the services usage and the user experience. It can include specific service details such as:

The service usage context: the location where the service was used, the time of day when the service was used, previous service used, etc.

The service usage flavor: the manner in which the basic service was consumed. For example take an MMS service. The usage flavors of the MMS service include a text only MMS, a text plus picture attachment MMS, a text plus video attachment MMS, and so on)

Information regarding service failures and quality of service on the subscriber level (i.e. quality of experience). Quite often this type of information is collected on the service delivery level and is not being associated with the affected subscribers). For example, when a network element crashes, the service provider usually has the information about the potentially affected subscribers' population and not about the actual subscribers' population that was indeed affected.

All this information is critical for developing an innovative and successful competitive business strategy.

BRING IN THE INFORMATION MINER

In order to obtain the missing information, service providers need a flexible convergent mediation system. Such a system is the natural tool for mining the required network services data and for transformation of this raw data into valuable business information. That's done through the mediation system's advanced event processing capabilities. The mediation system collects all relevant network data, processes this raw data into meaningful and easy to use business information, and distributes this information to the business and operations support systems that should use this information (This process is quite different from an ETL (Extraction, Transform, and Load) type of process, as the source of the information is in disparate network elements and not in a database, and the transformation process involves operations that are unique to processing of Call Detail Records/Event Detail Records. The better the Mediation system, the less work is required to achieve the desired level of network services visibility. The value provided by the additional information usually outweighs by far the relatively small investment that's required.

GETTING THE REQUIRED AMOUNT OF INFORMATION

There are three identifiable levels of network services visibility, which depend on the level of information that is available about the network services:

Basic network services visibility – provides only indications that a service was consumed.

Medium network services visibility – provides detailed service usage information that reflects different aspects of the service consumption (service duration, volume of data transferred, type of data transferred, etc.) and general quality of service information at the service level.

High network services visibility – provides information on service consumption context, service consumption flavor (service classification) and quality of service information at the subscriber level.

AN INSTRUMENT TO ACHIEVE YOUR GOALS

Following are examples that demonstrate the benefits of having high network services visibility:

Services offerings enrichment. Each existing network service can be used for multiple marketing offers assuming you have enough information on the way the service is used by your subscribers. Granular services information enables defining more granular offerings (sub–services) based on flavors of basic services. In addition, it is possible to define innovative charging schemes that are based on the service consumption context. For example, if a certain service such as MMS is used when the subscriber is at home or at a popular business location, then the price for an MMS is half the regular price. In general, a more granular offering enables better fit to subscribers' needs and thus increases usage.

Services improvement. There are two ways to improve services by increasing network services visibility. The first way is to use detailed quality of experience information at the subscriber level to find out about all types of problems and correct them. The detailed quality of experience information at the subscriber level reveals all types of service problems and enables handling many problems that would have not been known with a lower level of network services visibility (that provides alerts only on major faults on the service level).

The second way is use the additional information gathered on the services and the context in which they were used, to more effectively learn about usage patterns and trends, better understand services' success and failure factors and thus better plan ahead.

Customer care enhancement. With more information on the individual subscriber's service experience, it is possible to take better care of subscribers. Without subscriber related quality of service information it is impossible to solve each individual's problems properly. In many cases the affected subscriber would turn to the call center or local service center for help or disputes (often after several occurrences of the service problem) and only then will the service provider have a chance to rectify the problem.

In many cases subscribers do not complain on service problems (and therefore the service provider is not even aware that there were service problems), and just quit using the problematic service. A good network services visibility can change this unfortunate situation. With real–time service problems information at the subscriber level, service providers can get an immediate notice on each and every service problem and can proactively act upon this information. One example for proactive action would be to inform a subscriber that the reason she encounters a service problem is due to a specific network problem that is being taken care of. This relatively simple and straightforward action gives the subscriber the feeling that the service provider is aware of her problem, would help her minimize the effect of the problem, and would save her the hassle of contacting the call center to enquire about the problem. Otherwise, she would only be informed that the reason for the problem is unknown and that the issue will be looked into. Hence in addition to a higher customer satisfaction, the costs of unnecessary calls to the call center and dispute handling are reduced.

SUMMARY

Convergent mediation systems, help service providers obtain a high level of network services visibility. This visibility generates great business value. With relatively small investment, service providers can offer new innovative services that are better fit to customers needs. Quality of service can be enhanced as well with tighter monitoring of each subscriber's service experience, and customer care can be enhanced dramatically through proactive response to service problems. Granular information about network services at the subscriber level opens a world of new business opportunities and contributes to better customer service, increased growth and competitive edge.