Customer Data Mining

« Updating Your Approach »

The nature of UMTS systems means that operators will have a wealth of potential data and latest information available on customers and usage. Part of an operator's task will be to resolve this volume of data into useful information. Having achieved this, the operator needs to use this knowledge effectively and to gain competitive advantage, despite the complexity of offerings, the uncertainty of consumer demand, and the likelihood of stiff competition.

Data will be available from new types of billable usage of services, such as video or high volume downloads. At the same time, factors such as where and when services are

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being used will become critical market information for an operator offering distinct tariffs/plans.

A new Wealth of Information

Not only will the operator need to resolve different types of information, the operator will also need to gather this data from a large number of sources. Sources include infrastructure vendors, application platforms vendors, content providers and aggregators, mobile portals, network operators/WISPs and device manufacturers. Furthermore, this information will need to be converged amongst various services including IP, VOD, VoIP, Web Billing, Customer Care, m-Commerce, UMTS, WAP, GPRS, wireline, video streaming, pre-paid, voice and warehousing. With all this data processed effectively, the operator has a new wealth of information at hand. When properly utilised, the operator can identify the real value within IP services, identify the impact of new services and ultimately offer relevant options to the consumer. By seeing a customer's reaction to new services, the operator can determine what is "value-added" on an individual and personalised basis.

By analysing usage patterns, the operator can adopt dynamic pricing models to ensure that tariffs stay in tune with the

customer usage patterns. Customer data can be mined within corporate clients to offer customised plans for the corporate clients' individual users. Vendor information can be mined to keep up to speed on customer usage of 3rd party vendors and therefore help define how margins are split appropriately. Information on physical points of access can be used to offer QoS contracts based on usage/location patterns. Furthermore, this information can be used to determine which vendors are the most profitable partners for location based services.

An Information Vendor to other Businesses

The operator can also in turn become an information vendor to other businesses. For example, if an operator offers an m-wallet package, information regarding when a customer visits retail locations, how much, and how often this customer spends, can be re-sold to vendors for future marketing. This can also be offered as a service to attract e-commerce to the operator's network (data protection legislation permitting).

Individual usage patterns can also be analysed to offer personalised discounts/promotions to encourage non-peak usage and drive revenue.

There are a number of software packages available to the operator, for the automated analysis and provisioning of this information. An operator not using this data is inevitably missing an ideal opportunity to gain a competitive edge. With many sources of data and a vast volume of information, resolving this information is a task within itself. However, given an uncertain 3G market, an operator needs to analyse results and re-

act quickly. Furthermore, with increasing competition due to deregulation, the operator needs to better understand customers in order to gain a competitive advantage. Proper data analysis will help the operator to quickly understand the market, analyse the impact of new offerings and offer new products/services that will both maximise revenue and reduce costs. $\boxed{5}$

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