

**Telecoms operators need to use better business intelligence so that managers can take decisions and can tackle key issues such as revenue leakage, asset management, customer contact and the perennial problem of churn**

# Data is money



**Rob Simonds: four key business functions have been at the top of the agenda for telcos for years and haven't been adequately addressed**

HP describes its Neoview platform, launched in April 2007, as an enterprise data warehouse that enables businesses to capitalise on their information at a dramatically lower cost, offering scaling to hundreds of terabytes.

It is an integrated hardware, software and services platform, acting as a business outcomes engine, providing HP's telco customers with a fuller view of essential business information, such as metrics on sales and customer trends.

HP Neoview Enterprise data warehouse aims to provide companies with broader access to operational business intelligence: real-time business information that improves insight and decision making.

Neoview aims to deliver a firm's reports and dashboards without slowing everyday operations to a crawl. With several different configurations of up to 256 processors, HP Neoview can handle heavy backroom analysis without choking on thousands of information requests from workers who need data immediately to make decisions regarding everyday risks and opportunities.

Neoview began shipping to trial customers in October 2006, with HP claiming to speed up business intelligence operations thirteen-fold for a trial customer. Now it's working on a version 2.4 of Neoview, out this year, which will offer suggestions to users on how to more effectively organise data and fine tune the platform's query optimiser.

HP has followed up its interest in business intelligence by unveiling a set of BI services designed to help business improve decision making, regulatory compliance and competitive advantage. This service offering was enhanced by HP's acquisition of 700-strong US-based BI consultancy Knightsbridge Solutions.

Representing telecommunications industry initiatives for Neoview is Rob Simonds, managing communications and media solutions practice principal for business intelligence optimisation (BIO) at HP, who insists that there is more to BI than simply cutting costs.

"I've been working with telcos around the world to help them understand the value of data to their business," he says. "All the details collected in business support systems today have an intrinsic value. Technology enablers, whether that involves lower cost, higher reliability, or faster speed, have to be connected with business value. Cost reduction in itself is only mildly interesting. Everybody wants to save money, but to us that's not transforming in any way."



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However, when it comes to storing, or accessing vast amounts of data — and telcos are prodigious data creators, as Simonds points out — telcos suffer from budget restrictions.

He believes there are four business functions that are at the top of the agenda for telcos today: "All four have been there for years and still haven't been adequately addressed yet, which tells us something. There's a quality lacking in the infrastructure, the know-how or capability, within the telecoms business to address these challenges."

The first, he says, is revenue leakage. "I've worked with HP for about 15 months in various capacities and have worked with at least a dozen phone companies during that time. This topic always comes up. It's a significant problem."

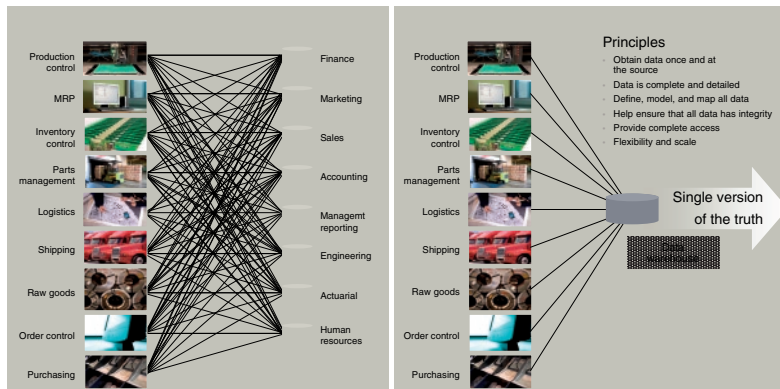
Simonds estimates that the typical telco loses between 5% and 15% of its revenue in this way. "It comes from a variety of sources. Fraud is one that's well known. Less well-known is that switches sometimes fail to record billable calls. Service orders are transacted, but the bills are not actioned properly."

A common reason for leakage is that phone companies have built out new generation networks rapidly, but there is a failure to update the supporting business and operational systems accordingly. "Data is dropped as it flows from one point to another. HP thinks that by combining more data at a more detailed, granular level, we can identify and rectify those leakage problems."

Speed is also of the essence when it comes to identifying potential points of leakage. "Once the billing cycle is completed, it's ever more difficult to go back and collect revenue from the customer. If the cycle is 30 days, and those points of leakage happen within a short window, it's often impossible."

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### The solution



Simonds says he not suggesting that telcos automate collection, but that they should explore ways of automating identification, which for most companies remains a manual process. This usually entails running reports, with analysts comparing results to identify where the problem originates and what the magnitude of the situation is — a highly cost-intensive process.

HP also identifies network asset placement as a problem area. With billions of dollars of capital tied up in the network, it's critical that assets are deployed where they need to be, to maximise gross profit.

"It's not unusual to find as much as 20% of assets not in service," Simonds says. "The asset is not being used, is not being fully used, or is in transit in its lifecycle."

Part of the problem is that most phone companies don't manage the lifecycle of an individual asset.

Assets — all the computers and tech that run the network — are generally managed as groups, as a class, and are depreciated in groups.

"That's the financial world's view of an asset, but it's not the business view, which should be more individualised," Simonds suggests. "You want to understand every component part. Is it doing everything it's supposed to be doing? What are the exact performance levels, and has the project failed or succeeded according to expenditure and expectations? From a risk management standpoint, are we vulnerable because an IT or network asset is about to fail?"

It is possible to use a database to collect some information for some of the assets, but the classic problem is it's not consolidated, meaning "it's hard to get a view across the network, or project, or location. Just 3-5% better utilisation of assets means millions of dollars of value back to the provider."

Simonds is keen to stress that HP's Neoview is not providing network capacity planning technology, but a "solution that can make those systems better."

The third challenge HP identifies is that high customer contact channels prevail today. "Of all industries, this is one where the business can use its own technology in innovative ways to stay in touch with the customer, and communicate with them, but at the moment it's failing to do that," Simonds points out.

"Contact centres, real human beings, continue to

be employed as channels for telcos to communicate with their customers, in addition to print methods like mass mailing."

Instead, Simonds suggests that a telco with millions of mobile subscribers might send out highly targeted SMS messages to its subscribers, promoting a new service or call plan. "Some of our customers are desperate to find a way to drive costs out of their customer contact. Every call to a contact centre may cost as much as \$8-10. Even though it's not the preferred channel of communication for many of those customers."

The problem HP sees with operational business intelligence is that human beings are batch-oriented mechanisms.

"We hear something, we synthesise it, and we work out our response. There's a latency involved. So what we want to do is automate business intelligence activities as much as we can. There are reams of data that allows us to draw conclusions so we can automate BI in a way that's never been achieved before."

Customer churn is the fourth major problem noted by HP. "This has been with the industry since the dawn of deregulation. It's almost always worse than telcos expect it to be, always underestimated. In some markets churn rates approach 30% per year; for example, in central and eastern Europe, central and south America, and Asia Pacific."

Simonds believes that if a customer calls, and that customer has made a decision to disconnect or drop a service from that plan, the call centre representative has a 3-4% chance of turning the customer around. "The question is how do we get in front of that? How do we predict it, and how do we approach the customer in the most convenient, practical way for them?"

Some telcos run data warehouses that produce detailed churn reports — that is, a list of customers they think may be at risk of churn — but it can take weeks for the relevant authority to receive those reports, meaning that it's too late to take effective remedial action.

What is needed is the metrics to predict churn, which might be a series of dropped calls, a visit to the website, a call to the call centre, or a similar event to indicate that a customer is more at risk of leaving. Operational BI recognises these in real time, applying them against established analytics, and recommending action, which may involve sending out a promotional SMS.

Until now, telcos have been trying to solve these problems the old-fashioned way. Simonds insists that HP can change all this by building on its heritage as a provider of real-time systems, reliably supporting stock markets, where it handles billions of transactions every day.

Neoview also, he says, allows for the storage of larger amounts of data than was possible before. If telcos can manage vast amounts of detailed information, whether that's trouble tickets, work orders, or customer contact with the business, then they can build more accurate and predictive models.

Additionally, Neoview supports a mixed workload. "We go after the set of problems in a much different way, combining analytics with operational characteristics." ■