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BT Exact

BT Exact helps BT maintain excellent customer service by using Trillium Software® Discovery to help ensure the accuracy of data sources.

BT

Project Type
Data Analysis and Profiling

Industry
Telecommunications

Challenges
Complex Data Environment
ROI Quantification

Trillium Software® Discovery Sets the Standard for Data Quality at BT Exact

BT is ahead of many other large organizations in recognizing the strategic value of data, information, and knowledge. These key assets are critical to the company's ability to deliver effective customer service, generate business intelligence, and enable accurate decision-making.

BT uses Trillium Software® Discovery, data analysis and profiling software, to confirm the accuracy and consistency of its data. The solution helps BT to increase business effectiveness by supporting the preparation of business cases for data quality improvement projects. Discovery also facilitates the cost-effective resolution of conflicts between different data sources, helping to increase business effectiveness.

Data Quality Matters

BT is structured into four principal operating businesses that work together to meet the needs of its customers. Boundaries between businesses and functions are minimized to ensure the company's skills, technology, and other resources can be applied to best effect. The goal is to deliver a better service across the business and raise customer satisfaction, leading to increased market share, profitability, and returns to shareholders.

BT's ability to deliver the excellent standards of service its customers expect depends upon the accuracy of multiple data sources, such as the information BT holds about its customers and the company's network records. The quality of data is therefore very much on senior management's agenda, especially in

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Case Study: *BT Exact*

areas of the business where new systems are being introduced or growth in demand for services is high, such as in broadband. The challenge is to ensure that weaknesses in BT's data are spotted before they can impact service to customers and that work undertaken is necessary, cost-effective, and ultimately beneficial.

The task of ensuring that BT has the right systems, infrastructure, and databases in place often falls to BT Exact, BT's research, technology, and IT operations business. As Nigel Turner, manager of BT Exact's data quality consultancy, explained, "We have helped to develop the comprehensive information policy that BT's CIO uses to manage data across our business. My team helps to implement that policy, evaluating and ensuring the quality of enterprise-wide data sources."

A critical initial step in evaluating data quality is data analysis. "We need tools that enable us to evaluate data quality quickly," said Turner. "We have no intention of processing millions of records in multiple systems by hand!"

Discovery Takes the Strain
To acquire the necessary capability, BT Exact turned to Trillium Software, a leading data quality solutions provider. BT tested Trillium Software Discovery, the company's highly regarded automated data profiling and analysis solution.

BT Exact's investigations suggested that Discovery would handle data profiling and analysis at least 10 times faster—and certainly more accurately—than painstaking manual analysis. Following an evaluation period against a competing product used by the company at that time, BT selected Discovery based on several criteria. These included speed and accuracy of analysis, quality of data presentation and reporting, interface usability, drill-down capability, and ability to export data after investigation. BT Exact was further reassured by recommendations from businesses that were already using Discovery.

BT Exact has now named Discovery as its preferred tool for data analysis. "Discovery is one of the best data tools available, and

BT Group plc

Company
- One of Europe's largest providers of telecommunications services, with more than 21 million corporate and residential customers.

- BT operates more than 28 million exchange lines, as well as providing network services to other licensed operators.

- BT Group plc consists principally of four lines of business: BT Retail, BT Wholesale, BT Global Services, and BT Openworld.

Industry
- Telecommunications services.

Customer Challenge
- To maintain customer service levels by ensuring the accuracy of data sources, such as those supporting information BT holds about its customers and the company's network records.

- To identify issues precisely, to identify the net benefit of resolution, and to make a business case for resolution.

Solution
Trillium Software® Discovery is now the preferred data profiling and analysis solution of BT Exact, the company's research, technology, and IT operations business.

Key Benefits
- BT's board and top management can now observe and control data quality levels.

- The profile of data quality with business managers has been raised.

- Customer service objectives have been protected in both mature businesses and rapid growth areas such as BT Broadband.

- Improved performance of CRM investments.

- Improved inventory management.

- More effective customer fault resolution.

- Data analysis takes some 5 to 10% of the time it would have taken manually and is 100% accurate.

- Close control of data quality is now much more possible and cost effective.

Case Study: *BT Exact*

it is critical to maintaining BT's high standards for data quality. Without Discovery's detailed analysis and reporting, our analysts would not know where data problems truly lie and we would not be able to raise the profile of data quality with business decision makers, or resolve issues so cost-effectively," said Turner.

Making the Case
For data quality to be recognized as important by business managers and for improvement projects to be sanctioned, a business case must be made. Many companies struggle with cost justification, but Discovery has shown itself invaluable in helping to "get the message across" at BT.

"Trillium Software Discovery is helping us to build strong business cases for data quality improvement projects," said Turner. "It helps us to highlight data issues in clear terms so that business owners can quickly see the likely impact and understand the importance of resolving them. In this way, Discovery is helping us raise the profile of data quality across the business."

Discovery across BT
Discovery was first used by BT's Retail business. The organization used Discovery to check and identify issues in data relating to customer details, orders, inventory, and billing. Reports from Discovery were used to build a business case for data re-engineering work. Once project approval had been obtained, the BT Exact team used Discovery to resolve issues quickly and cost-effectively, automatically pinpointing anomalies in data.

Early successes with this project led to assignments in other parts of BT—for example, in a project to audit the quality of a customer data warehouse and in projects to verify database synchronization. Here, Discovery helped ensure an accurate view of the customer and services inventory, which in turn supported high customer service levels and accurate billing.

A few months later, Discovery was assisting BT Exact in its data quality awareness and assurance mission in BT Openworld, BT's consumer Internet Service Provider, and the entire BT group.

Spotlight on Broadband
Discovery is also helping to ensure that high customer service levels are delivered across BT's high profile broadband services. Supported by the UK government's backing for "Broadband Britain," demand for broadband services is accelerating rapidly. BT achieved its target of supporting one million connections by the summer of 2003 and hopes to hit a target of five million broadband customers by 2005.

Analysis from Discovery is used at boardroom presentations to report on the quality of BT's broadband customer data. "Every week, thousands of new connections are set up to BT's broadband network. Managing the associated customer data in an environment of such growth is a complicated task.

"Trillium Software Discovery is helping us ensure we are in control of customer data quality and that issues are identified and dealt with quickly, well before our high customer service levels might be threatened," said Turner.

For example, BT Exact used Discovery to identify issues in data that were sometimes preventing the use of standard, cost-effective procedures for fault resolution. Having identified the data trouble spots, they were easily resolved. The result was an 8% reduction in the number of faults needing to be addressed through "nonstandard procedures"—a major contribution to the overall effectiveness of the fault resolution process.

Optimizing CRM
BT uses Customer Relationship Management (CRM) software in its broadband operations. This heightens the need to be on top of data quality. "In CRM, the axiom 'garbage in, garbage out' very often applies," Turner stated. "Drawing together data from multiple legacy sources, in multiple formats, and of various quality levels presents complexities that can easily lead to the resulting data being less fit for purpose than it needs to be if CRM applications are to make best use of it. By helping us ensure the integrity of both source and migrated data, Discovery is helping BT optimize the returns from its CRM investments."

"Discovery is one of the best data tools and is critical to maintaining BT's high data quality standards."

Nigel Turner
Manager of the BT Exact data quality consultancy

In this high profile, high growth business, constant management of data quality is essential. Discovery has made close control possible and cost effective. For example, relatively junior data administrators use Discovery to automatically locate issues as they occur. The administrators can then resolve the issues without performing complex SQL analyses or employing costly senior consultants.

Inventory Management

In another area, BT is using Discovery to build an accurate data model that will support the migration of data from multiple sources to a single inventory management system. The more accurate the data migration model, the faster and more cost effectively the actual migration process will proceed, and the higher the quality of the migrated data and its value to the business.

In the process, Discovery is also helping to identify assets mislaid due to lost or missing data. These items are being returned to stock, averting unnecessary capital expenditure.

"Producing a single, totally accurate view of inventory is extremely difficult. On the face of it, the information just does not agree. Discovery enables us to get to the truth," said Turner. BT has over 21 million customers; accurate data is essential in the company's ability to provide a significantly better service experience than its competitors.

Using Discovery, BT Exact has been able to verify customer name and address information in both that data source and multiple "downstream" systems, such as sales and marketing databases to which data is migrated. For example, it can be very time consuming and difficult to match large corporate parent companies with their subsidiaries, in order to build a hierarchical structure for determining appropriate customer communications. Discovery helped BT Exact to resolve such complex issues quickly.

Leading with Discovery

BT Exact is convinced of the value of automated data analysis. And with data quality being held as increasingly important by BT's top management, Turner's team expects to use Discovery ever more widely.

"Our use of Discovery is currently key to our ability to ensure the quality of our data assets. It's a solution that gives us a leading edge when proposing and delivering data quality projects," Turner stated.

Data Excellence

Overall, Discovery gives BT the power to understand and evaluate the quality of data held in its systems, regardless of platform.

Turner explained, "To us, Discovery is a key tool to enhance productivity. It speeds up the collation of data profile information. With Discovery, we can drill down to the finest levels of detail to 'discover' what data exists in a single field."

Discovery can also provide a summary view of an entire database. "We can see how data has evolved or identify the structure of data in a multimillion-record sequential legacy database," noted Turner.

"Data analysis using Discovery takes 5 to 10% of the time consumed by manual approaches and is totally accurate," said Turner.

All in all, Discovery makes the data analysis process a highly efficient one. The solution can prepare a detailed analysis of data from any system in a matter of seconds and after examining the data only once. It can display data parameters (or ranges) for any data element, such as a name or age, across databases of tens of millions of records. "Discovery's summary information is invaluable in the resolution of data problems and quality issues," Turner said.

"Because Discovery stores all data in its own repository from which the data can be viewed and analyzed," Turner summarized, "the problem of having to access data from different operating systems, databases and legacy systems is removed. Our users don't have to rely on technical specialists to provide the necessary data."

About Trillium Software®

Dedicated to increasing the value of information across organizations, Trillium Software®, a division of Harte-Hanks, is the most trusted provider of technologies for Total Data Quality. Today, more than 1400 companies worldwide use the Trillium Software System® and Trillium Software® Discovery to turn raw, chaotic data into usable, valuable information through continuous global data profiling, cleansing, enrichment, and monitoring.