> *"Our goal was to understand what data we had and develop concise models without having to worry about source systems. The mission was to deliver what the businesses wanted – not what we thought they wanted – so they could achieve quicker insights and more value from the data."*
>
> – Philip Powell, Data Architect, TalkTalk

TalkTalk

ER/Studio®

ORGANIZATION

TalkTalk

APPLICATIONS

Broadband and voice services

TOOLS USED

ER/Studio Data Architect

ER/Studio Repository

CHALLENGES

Limited scalability in meeting growing customer base

Lack of communications between business divisions and developers

Development work prone to errors and revisions

RESULTS

Improved communications leading to fewer revisions

Clearer understanding of data and customer needs

Improved customer service and increased revenue opportunities

Introduction

Established in 2003, TalkTalk has grown to become the leading value provider of broadband, voice and TV services in the UK market. Its broadband, phone, television, and mobile services include Simply Broadband, Essentials TV, Plus TV and the recently launched All-In SIM. Three years ago, TalkTalk embarked on a Make TalkTalk Simpler initiative. Part of the program was focused on optimizing the value derived from its vast sources of data to gain a clearer understanding of their customers in order to develop products to meet evolving demands.

Challenge

Throughout its expansion TalkTalk engaged in a number of acquisitions. According to Philip Powell, Data Architect for TalkTalk, growth was faster than expected; and as a result the company had to scale rapidly to meet demand.

"We were buying other companies to expand our functionality and technology, but in doing so we brought in lots of systems from billing and CRM to provisioning. More importantly, rapid customer growth was leading to increasing churn. We had reached a point where it was increasingly difficult to understand our customers because data was distributed over many different systems. We realized that the company needed to move to a single platform; we needed a way to make customer engagement simpler."

Typically, a business would submit requests to the data warehouse by email. "In between sending the requirement and presenting what we thought they wanted, there was little communication," he adds. "We would fail to deliver what they wanted because something was misunderstood between the initial request and development."

In 2013, TalkTalk launched a program to drive change that encompassed four pillars: people, processes, products, and technology. The technology program, Getting Value from Data, was focused on simplifying reporting and leveraging available data to make critical business decisions.

"We knew that information existed within our systems. However, no one knew what it represented, where it might be available, or how to remodel the customer base. Our goal was to understand what data we had and develop concise models without having to worry about source systems," Powell says. "The mission was to deliver what the business wanted - not what we thought they wanted - so they would be able to deliver value."

Solution

Having previously worked with Embarcadero, Powell decided to use ER/Studio Data Architect as the enterprise modeling tool of choice. According to Powell, "We wanted ER/Studio modeling to serve as the bridge that allowed our technical team to speak to the businesses and change how entities related to source system data."

ER/Studio provides model and metadata collaboration to enable faster and more effective decision-making using more accurate data. Among other features, it has built-in facilities for automating routine modeling tasks so users can analyze and optimize database and data warehouse designs faster.

Powell notes that other modeling tools he had worked with have "certain ways they have to work or you don't get what you need. The logical to physical model replication was very good in ER/Studio."

"A major benefit with ER/Studio is that the user interface is very easy for both a technical and non-technical person to use", he adds. "ER/Studio made it easy for us to educate developers to get the capabilities we wanted. A new person could work with it after about an hour's training. The submodeling within ER/Studio enabled us to break up the larger Enterprise Model into smaller Business focused data models that could be 'project' driven but allowed the sharing of common entities between team members."

Results

With a data modeling engine in place, the technology team can easily communicate structures and attributes for data. Now business teams simply provide a short description of their requirements, and

the team converts them into a technical solution within a logical model framework to enable more effective querying and reporting of data. "With ER/Studio, we could visualize what it is they really wanted and improve our engagement with the businesses," Powell says.

According to Powell, business users can now engage and use the data warehouse more extensively than they ever have before. "This helps them to increase upsell opportunities, better target their customer base, and reduce churn."

While the development cycle time is relatively unchanged, the time savings for the business groups is substantial, Powell reports. "In the case of a price check process for example, with the old process it would take three months for them to define and collect what data was needed to make the decision and who they needed to communicate to. We are now able to reduce that data gathering time by two-thirds."

Overall, IT and business work much more collaboratively throughout the development process. "It's been a big cultural change for our organization. With greater engagement, we have a better understanding of what the businesses need and why, so there is less spent time on revisions. That's the ultimate payoff with ER/Studio."

Most recently TalkTalk has deployed the ER/Studio Repository to improve version and documentation control. The next potential step is expanding information sharing capabilities to the various departments by deploying ER/Studio Team Server. "At the end of every single presentation I've done, people come up and ask if they can have access to the model diagrams. Our next goal is to allow the models to be viewable by all businesses simply by logging in and searching the Repository."

As Powell notes, the industry is going through a consumer revolution, and ER/Studio is playing a key role in driving change on the IT front. "We're stepping up another gear. We really need to understand our data landscape and how to improve it."