



BUSINESS TECHNOLOGY OFFICE

Raising performance by reducing IT complexity: An interview with TalkTalk's CIO

David Cooper discusses revamping siloed IT systems that were raising costs, hurting customer service, and dampening growth opportunities.

Gerrit Einhoff and Stéphane Rey

Since TalkTalk's inception, in 2003, the company has grown both organically and through acquisitions to become the United Kingdom's second-largest broadband provider, serving more than four million customers. Rapid growth, however, left the company with fragmented and inflexible operations and IT, which raised operating costs and made it harder to manage the customer base and maximize revenues across brands.

David Cooper joined TalkTalk as CIO in early 2009 and embarked on an ambitious transformation program to consolidate all of the company's IT onto one unified platform while transforming the IT organization in the process. He spoke with McKinsey's Gerrit Einhoff and Stéphane Rey

about his ongoing efforts to reduce the complexity and improve the performance of information technology.

McKinsey on Business Technology: *What was the state of TalkTalk's IT when you joined?*

David Cooper: The company had experienced a period of massive growth, both in our TalkTalk customer base but also through acquisitions such as One.Tel, AOL, Tiscali, and Pipex. I inherited a highly complex IT landscape, with several complete but separate business support systems, which were distributed across a number of data centers. Each system had its own set of products, functionality, and processes, and each business had its own support group.

So not only were we spending more money than we needed on IT and operations, but the structure also was negatively affecting the customer experience and our ability to manage the customer base across brands.

While the business had been phenomenally successful, it had clearly outgrown its IT architecture, systems, and processes, making it difficult to be the flexible and value-oriented market leader we aspired to be.

McKinsey on Business Technology: *Explain how these IT issues were affecting TalkTalk's businesses.*

David Cooper: First and foremost was our inability to manage our customer base effectively. The sheer fragmentation of our systems made it impossible to market to our customer base as a whole. For example, our call centers were highly siloed, and we could not manage across brands. That led to inefficiencies and lost opportunities. Development of new products was time consuming, and even simple price changes in reaction to competitors' moves had to be replicated simultaneously across a number of systems.

Second, the IT cost base had risen significantly and disproportionately to the customer base. Given our comparatively simple network, products, and business model, we should have had a lower cost base than your average telco. But this was not the case, as many of the systems were old and inefficient, resulting in high maintenance costs. We also had parallel operations teams for each brand, increasing costs further.

Third, fragmentation negatively affected customers. Agents in any given call center were unable to

support more than one brand and could not even transfer calls between different call centers.

McKinsey on Business Technology: *So you moved to a consolidated system?*

David Cooper: Over a period of about 20 months, we will have migrated over four million customers, or about 95 percent of the relevant base, to the strategic target system and fully shut down the four largest legacy business support systems. The remaining ones are significantly less complex and smaller, and we will tackle them this year.

McKinsey on Business Technology: *What has been the result?*

David Cooper: The impact is already massive in terms of cost, quality, and speed, and the improvements will continue. We will have reduced our full IT budget by about 50 percent in under two years, including both operating and capital expenses. We also will have delivered a 65 percent reduction in data center size and costs over three years. There will be significant benefits on the business operations and call center side—improvements that will continue to increase over the next year. And apart from the financial savings, we have used the transformation to significantly shorten development times: we deliver changes considerably faster, improving time to market for new products and price changes.

Behind all of this are an architecture and processes that fit our business strategy. One example is how we have been able to speed up the delivery of reference data by a factor of three. That's because our new architecture unifies data repositories and automates data distribution, enabling us to reduce manual steps and run



David Cooper

Vital Statistics

Born December 9, 1956, in Stoke-on-Trent, Staffordshire, United Kingdom

Married, with 2 children

Education

Graduated with a PhD in solid-state physics in 1981 from the University of Liverpool

Career highlights

TalkTalk Residential
(2009–present)

- Chief information officer

Hutchison 3G
(2002–08)

- Chief operations and technology officer (2006–08)

- Chief technical officer (2003–06)

- IT director (2002–03)

British Telecommunications (BT)

- Various roles, from semiconductor laser design and build to IP network design and build via IT

Fast facts

Hobbies include cycling and do-it-yourself projects

far fewer tests. This allows the business to adapt products and pricing much faster than it did before.

McKinsey on Business Technology:

Tell us about some of the factors needed to manage the transition successfully.

David Cooper: Most important was the definition of a clear strategy for harmonizing business processes and customer offerings across different brands. Each separate customer base had significant legacy products and processes. So the only way to move to a new system without drowning in complexity was to be pragmatic about how to handle affected customers under the new system without losing significant value in the process. Since all the business brands were delivering the same fundamental products to customers, we reasoned that it would be possible to harmonize the processes. But getting there required strong management from the start.

Furthermore, to make the transformation happen, we needed the agreement of key stakeholders on the overall vision, as well as their determination to make the changes succeed. This had to come not only from the IT side but also from the business side. In our case, we had the support of our CEO, who set out the vision for a unified IT landscape as the way forward and united the organization.

Finally, it was critical to communicate, strongly and repeatedly, why we had embarked on this transformation and what the expected benefits would be. It helped that we were able to deliver some benefits relatively quickly. For example, nine months into the integration, it was suddenly possible to market to the entire TalkTalk base, and AOL customers suddenly could access TalkTalk products and features.

McKinsey on Business Technology:

How important was the fact that you came from the outside?

David Cooper: When I arrived, it was quite difficult to find people inside with sufficient experience to define the strategy that would help navigate TalkTalk out of its problem areas. This is where resources from outside can help you jump-start your strategy, without the baggage of the organization. In the end, as the CIO, you have to truly own and drive the strategy you are defining. You cannot be a hands-off manager.

McKinsey on Business Technology: *What did you do to avoid the loss of key people and knowledge on the teams that were part of the “losing” systems?*

David Cooper: We shared our vision with the IT teams very early on. Over time, some people did choose to leave; however, we did not experience any critical losses. It was actually an opportunity to inject fresh blood into the organization. The bigger issue was actually getting the leadership team aligned. Having management share the vision is critical to success. I did need to bring some new people on to the team to help change the culture.

McKinsey on Business Technology: *How did you deal with requests from the businesses for changes during the period of migration?*

David Cooper: It's unrealistic to freeze the source and target systems while you manage integration. However, we did limit additional

changes to systems that drive significant revenue or customer retention or that were required by regulation or a new strategy. For example, we implemented completely new products, like IPTV¹ and fiber access, at the same time we were going through all the system consolidations and customer migrations. As if that wasn't enough, TalkTalk also went through a de-merger with its parent company, requiring me to uncouple our shared infrastructure at the same time.

You have to be pragmatic about unplanned requirements like that. I have found that human beings can be extremely creative and, when pushed, can usually find a solution that achieves the desired outcome with less complexity.

McKinsey on Business Technology: *If you had to start over, what would you do differently?*

David Cooper: I would probably be more forceful in pushing for absolute process harmonization. We allowed some leeway for brand-specific processes, but over time it has become obvious that it's a major benefit to have completely standardized processes. Having this insight earlier could have saved us some work. I was also slightly too aggressive on the migration timelines. We did make it on time in the end, but this was a very complex undertaking, and I would give myself a little more time if I had to do it again. ○

¹Internet protocol television.