Transforming IT:
A German success story

A once-underperforming IT function has become one of Europe's leading public-sector IT providers—due in large part to the leadership of Klaus Vitt, chief information officer of the German Federal Employment Agency. In this interview, Vitt reflects on the challenges of IT transformation and how to do it right.

Sebastian Muschter and Katrin Suder

Effecting change in large organizations is notoriously difficult—particularly in the public sector, where entrenched employees, complex procedures, and disparate stakeholder agendas constrain ambitious change efforts. But the challenges are surmountable, as shown by recent transformations in certain agencies. The German Federal Employment Agency (Bundesagentur für Arbeit, or BA), for one, is on a multiyear journey to transform its IT function, and its efforts have already yielded dramatic improvements in performance, flexibility, and reliability. Benchmarking of European public-sector IT organizations shows that the 90,000-employee BA—Germany's largest government agency—is best practice in a variety of performance metrics, including cost per user and IT infrastructure integrity.

The BA's IT transformation began in 2006, when Klaus Vitt, an IT executive with almost 30 years of private-sector experience, joined the agency as chief information officer (CIO). Vitt came to the BA from Deutsche Telekom, where he served in a variety of IT leadership positions from 1996 to 2006. Prior to that, he spent 14 years at the media company Bertelsmann. In an annual ranking of the country's best CIOs in both the private and public sectors, German magazine *CIO* has twice named Vitt among its top 10.

Klaus Vitt

Recently, Vitt spoke to McKinsey's Sebastian Muschter and Katrin Suder in Nuremberg.

***McKinsey on Government*:** *What was the BA's IT department like when you took over?*

Klaus Vitt: When I came on board, the situation at the BA was worse than I had anticipated. Some of the technologies it was using were so outdated, especially the legacy applications in human resources and finance, that only a handful of soon-to-retire employees were still able to make changes to the code. I remember one situation where we had a problem with the payroll system and we had to think about how we could pay salaries in cash that month.

Some major projects were facing serious difficulties, and urgent action was needed to get them back on track. There was no strategic framework, let alone a five-year plan, for how the IT landscape was supposed to evolve. No system of objectives was in place that could help determine whether investments were truly moving the IT landscape forward. There was a lack of effective management structures, and there were no clear lines of communication. As a result, employees had a critical view of IT, with departments complaining in particular about the lack of transparency and resources. In short, there was plenty to do. The first thing we did was develop an IT strategy for the next five years and broadly communicate it to our employees and the general public.

***McKinsey on Government*:** *That strategy called for major changes in several areas, including IT infrastructure, applications, and large-project management. We would like to better understand the changes in those three areas. Let's start with IT infrastructure: what has happened there?*

Klaus Vitt: The BA originally had a decentralized structure; IT was decentralized as well. We sought to bring the scattered elements of IT together. We started by centralizing the databases and applications. Today, we're working on the final step, which is consolidating the BA's 178 data centers into 11. We're setting up our operations and infrastructure like an IT factory—with no operator on site, but with standardized processes, products, and production. All processes are organized according to the ITIL framework,[1] and we've identified indicators that allow us to compare actual and target performance for each process every month.

Another important consideration as we were thinking about IT infrastructure was energy efficiency. The BA has been interested in "green IT" since before there was even a name for it. Rising energy costs have always been a concern for us; after all, we have 170,000 networked PCs and the corresponding IT infrastructure. At one point, we calculated that the energy costs for running a server over five years are practically equal to the purchase price of a new one.

***McKinsey on Government*:** *Indeed, a few months ago, the BA received the federal government's Green IT Flagship Project Award for 2010. What are some of the things you're doing on that front?*

Klaus Vitt: We've developed a comprehensive green IT strategy, as part of which we set an ambitious target of reducing energy use in IT by 40 percent by 2013—a reduction of about 53,000 megawatt hours. We now require information on

[1] The Information Technology Infrastructure Library (ITIL) is a set of widely adopted best practices in IT service management.

energy consumption in our requests for bids. And we're not just taking these steps because of an obligation at the federal level, but because it really pays off for us. We achieve enormous cost savings for the BA—we're talking about millions of euros each year for electricity alone.

***McKinsey on Government*:** *The second area we'd like you to talk about is the application landscape, where your goal is to set up a service-oriented architecture (SOA). Why is this new direction necessary?*

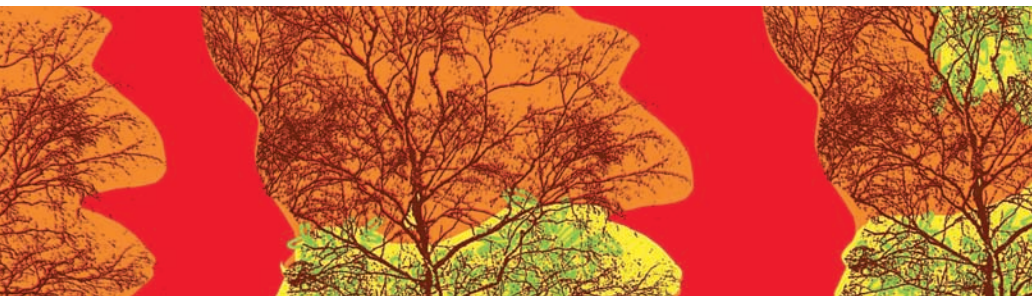
Klaus Vitt: SOA can deliver role-based user interfaces—interfaces that show employees only the IT functions they actually use. This is in stark contrast to how users work with our systems today: an employee in one of our call centers must know how to operate 14 different IT applications to cover all possible customer requests. In the end, he uses just 20 percent of these applications for his area of work, but he still must be familiar with all their functionality to find and select the right 20 percent. Because we employ a large share of temporary employees in our call centers, training them on these applications entails a considerable investment.

We took a close look at SOA and saw that role-based user interfaces that span multiple applications could significantly lower both effort and expense. Call-center employees would see only the IT functions they need for their day-to-day work, in the order in which they need them.

***McKinsey on Government*:** *Implementing SOA is a complex undertaking. What challenges are you facing?*

Klaus Vitt: The biggest challenge is not the technology, but rather breaking down existing IT applications into different kinds of services—that is, understanding which components of applications can be standardized and which cannot—and we have a limited number of people with the skills to do this work. In addition, we must maintain more than one interface per application; we need to keep the existing user interfaces because there are expert users outside the call centers who use only a few applications but use them extensively. Finally, managers in business and IT have to get used to the idea that they no longer have free rein over the look and feel and functionality of their applications.

Implementing a transformation thus requires a step-by-step approach and the intensive support of management on both the IT and business sides. We're building prototypes to help users get accustomed to the new systems, and we're conducting pilots. All in all, we expect implementation to take two to three years.



McKinsey on Government: *A third focus of the BA's IT transformation effort is better management of large projects. What changes have taken place in this regard?*

Klaus Vitt: First we analyzed why problems occurred. One key factor was that the scope of the projects kept increasing over time. Of course, there were good reasons for expanding the projects, but there was no structured process to immediately clarify the impact of the additional requirements on the schedule and costs. To address this issue, we developed a centralized project-management function, provided training to managers and employees, and established guidelines for planning and carrying out projects. In addition, we built up a pool of three top project managers—one we hired externally, and the others we moved from internal roles—for our large projects.

Another thing: we laid out responsibilities clearly. Every project now has a steering committee with well-defined rights and responsibilities. However, this committee provides only overarching management and control. A project manager who meets project milestones and stays within the scope and budget is free to make decisions as he or she sees fit; the steering committee gets involved only if these boundaries are crossed.

We also initiated a cultural shift in IT. The BA is a fairly democratic institution in which decisions are mostly made in committees. This culture creates a lot of buy-in, but it was frequently three steps forward, two steps back—discussions that were concluded months ago were reopened, suddenly everybody was in doubt again about the right direction, and implementation stalled. This, I realized quickly, had to stop if the IT organization were ever to move forward in a lasting way. The IT management team had a team-building workshop during which we had to construct, as quickly as possible, a wooden shelf from prefabricated pieces that only fit together a certain way. The first time, it took us more than 10 minutes to figure out the right sequence. The second time, we learned that agreeing on a plan should be the first step and that diligent execution should follow. We did it in less than two minutes. I still apply this lesson today: we discuss first, make a decision, and then the discussion is over and it's all about implementation.

McKinsey on Government: *You introduced many changes at the BA over a relatively short period of time. What concrete steps did you take to get employees on board with these changes?*

Klaus Vitt: We stressed open communication from the very beginning. We laid out our transformation program in roundtable discussions, making sure employees knew about the coming changes early and in detail. Many also wanted to know how we made upper-level decisions. We therefore communicated how a topic comes up for consideration by the IT leadership and what kind of decision-making process we follow. We repeated these roundtables for a good three years. Today, each of our employees understands the BA's IT strategy, the reasons for it, and its implications for his or her area.

Every employee also knows our IT targets. We introduced a system of objectives broken down into concrete annual plans, with monthly tracking of relevant targets. We develop the targets bottom up from the teams rather than top down: we created an IT leadership circle that sets focus areas for the year, but each unit defines its targets on its own. We then consolidate the individual team targets and align on overarching targets for the group. This approach not

only makes it easier for different groups to work together but also builds strong employee identification with and commitment to the targets.

We can develop a target system like this in just three months. The IT leadership circle—me, five of my direct reports, and a couple of other functional heads—selects the focus areas in October, and the consolidation process is completed by December. In January, every employee knows the current year's targets.

***McKinsey on Government*:** *You've talked about some of the success factors for a large-scale IT transformation: a comprehensive strategy, clear management structures, and a transparent system of targets. Are there any others?*

Klaus Vitt: Active risk management is also central to success. No project manager enjoys thinking about risks and their consequences, but the fact is, in every area there are risks that could keep a project from meeting its goals. The key is to raise awareness of this simple truth in our day-to-day business. Every project manager now has to file a monthly risk report.

Rigorous performance management is just as important. We currently have 40 projects running in parallel. To be able to reliably track their progress, we introduced a traffic-light system. It offers a monthly portfolio view that shows whether each project is in the green, yellow, or red zone. If a signal switches to yellow or red, we can quickly respond. For our particularly large and important projects, we also now have external reviewers check that we have not missed any hidden issues.

***McKinsey on Government*:** *Do you find it harder to carry out a transformation with public-sector employees than with employees in private enterprise?*

Klaus Vitt: Like private-sector employees, the BA's employees are highly motivated, team-oriented, and knowledgeable in their fields. However, because salary structures in the public sector are quite different from those in the private market, we have difficulty attracting and retaining experienced IT specialists. We compensate for this through our informal apprenticeship program whereby we equip new hires over the course of three to five years to take on management or specialist tasks. We currently have 120 apprentices working for us.

***McKinsey on Government*:** *Aside from salary structures, what have you found to be the biggest differences between the public and private sectors when it comes to implementing change processes?*

Klaus Vitt: The differences in technical requirements are minimal. The BA's IT department is comparable to that of a large insurance company, for example. But two differences from a for-profit company do play a significant role in IT transformations: the first has to do with how we award contracts, and the second involves the political decision-making process.

Public agencies are required to observe strict rules when awarding contracts. I found this hard to get used to. For large projects, the process from the initial description of the needed services to the final award of the contract can

take up to 18 months. Only then can the actual work begin, and it takes another two years or so. Large projects can thus easily require three to four years—a time frame that places many demands on planning.

The political decision-making process also sets the public sector apart. IT is central to implementing a number of political initiatives: approving new benefits, offering new processes, or tracking new statistics. We need a certain amount of lead time to make the changes and conduct the required testing. But because reaching policy decisions often takes longer than planned—and the start dates for programs are not postponed—the time to make the necessary IT changes gets cut. One vivid example of such a situation was the introduction of the benefits program for the long-term unemployed. The BA had to set up a completely new benefits process within a very short period of time. The fact that the implementation window kept getting smaller and smaller was the reason for many of the subsequent problems. We learned from this experience, and since then, we have earned the credibility to tell policy makers how much lead time we need.

McKinsey on Government: *Let's look ahead: what projects will the BA's IT organization tackle next?*

Klaus Vitt: The next challenges will involve keeping our current projects—such as the introduction of our document-management system and our new enterprise-resource-planning system—on schedule. Also, we've developed a 2015 IT strategy, and successfully implementing that strategy will of course constitute a further milestone. Moving IT in the direction of SOA is central to this effort. Another important topic that will increasingly occupy the BA is the switch to e-government—making online transactions user-friendly enough that clients can take care of as many things as possible themselves. Doing so isn't really a big technical challenge, but again, we first need the legal basis that allows us to offer such functions on the Internet.

As you see, we still have plenty on the agenda. The vision has remained the same for years: we want to be the highest-performing IT provider in the public sector in Germany.

Sebastian Muschter is a principal in McKinsey's Frankfurt office. **Katrin Suder** is a director in the Berlin office.