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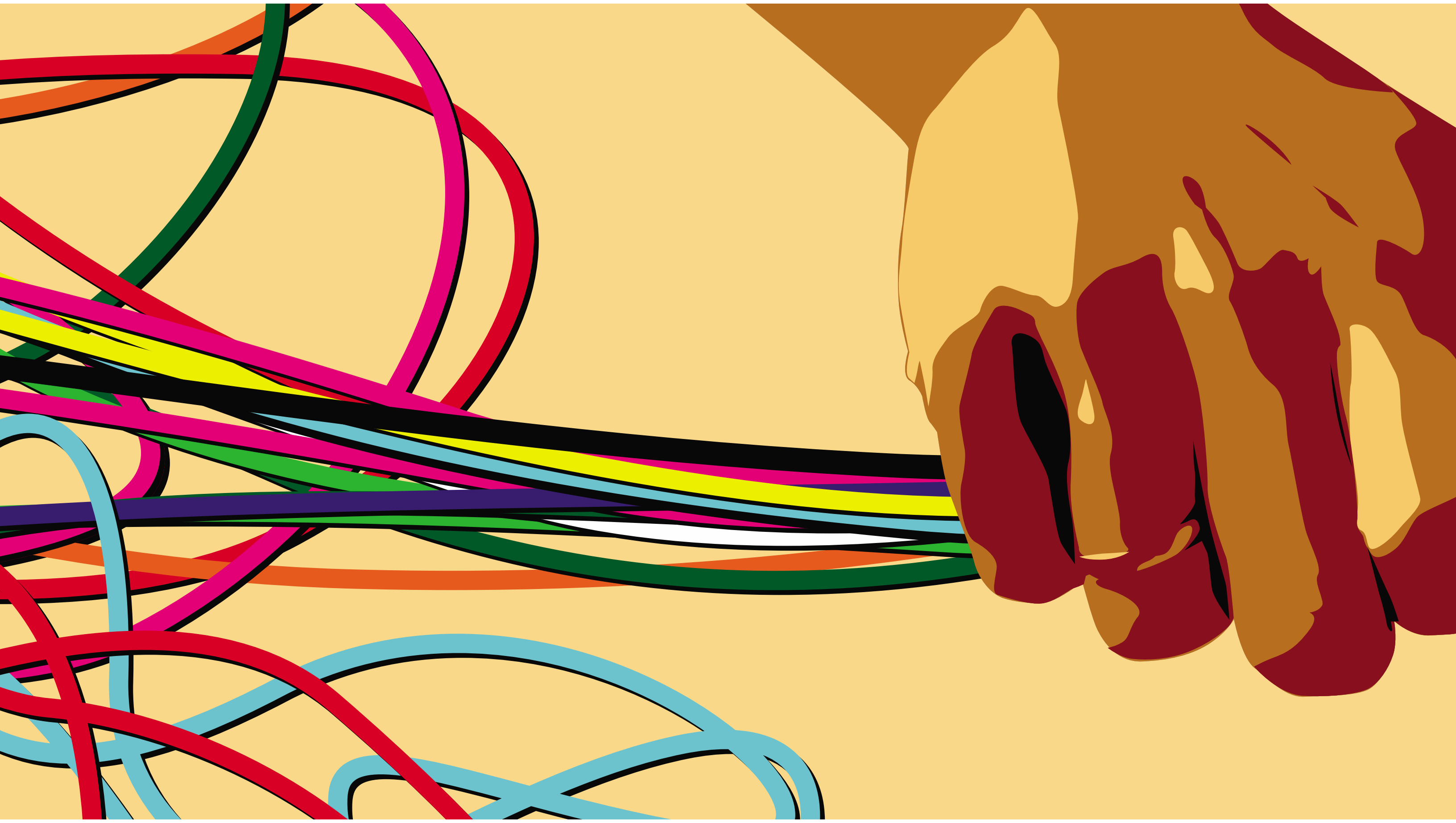

Managing IT transformation on a global scale: An interview with Shell CIO Alan Matula

Shell's executive vice president and CIO talks about the company's never-ending transformation process.

Leon de Looff

Over the last decade, Shell has been undergoing an IT transformation that is remarkable for the scope of change it is seeking in one of the world's largest and most complex organizations—one with 25 business portfolios and operations across more than 100 nations. The transformation is defined by four phases, says Alan Matula, executive vice president and group CIO.

The first was about going back to basics—allowing Shell's IT leaders to better align IT with the business units by stabilizing operations, establishing project discipline, and tracking costs, people, and assets. Matula says that this solid foundation is essential to any successful IT transformation.

In the second phase, the targets were costs and complexity. Shell rationalized and consolidated infrastructure, substantially reduced the number of business applications, improved procurement procedures, and aggressively offshored. It also strengthened governance by recognizing that a real dialogue with the businesses was needed and recruited high-grade talent to conduct it.

Investments in the future formed the third phase: innovation, functional improvements, and business-driven multiyear investment programs to help the businesses meet their targets. Shell implemented strategic sourcing to consolidate hundreds of suppliers, leaving just 11 key partners with whom it outsourced selected functions. Matula says the change in direction allowed Shell to work with suppliers, "doing things that are not only good for Shell but that also are innovative in the marketplace and help the industry."

Four steps to a successful IT transformation

Step 1:
Put transformation on a solid footing by stabilizing IT operations, enforcing project discipline, and tracking costs, people, and assets.

Step 2:
Take a phased approach—lock in IT efficiencies and reduce complexity early on; then invest in improvements to help businesses meet their goals.

Step 3:
Get business unit support for major change by maintaining precise accountability for the delivery of benefits and by monitoring progress frequently.

Step 4:
Select or recruit top IT talent for the interface in concert with business units to help build the trust needed to sustain transformation.

Shell is now geared up for the harvest-and-sustain phase, to ensure that the benefits of its IT investment are realized. "IT is more important and intense than ever before and that requires an ongoing effort to transform IT and improve its agility, to make the business more productive and competitive," Matula told McKinsey's Leon de Looff in a recent interview (in The Hague) covering Shell's IT transformation, challenges, and the many lessons learned so far.

McKinsey on BT: *Shell has been in the midst of an IT transformation for several years now. Can you tell us about how it started and about the approach you took?*

Alan Matula: It was a phased approach that started in the early 2000s with a drive to get back to basics. I was very fortunate to be a part of that effort from the beginning, continuing over the four phases, since I held positions as a business CIO and now as group CIO. The phases addressed specific goals: back to basics, rationalization and consolidation, investing in the future, and harvest and sustain.

McKinsey on BT: *What do you need to launch an IT transformation at this scale?*

Alan Matula: You have to start out with a solid foundation that builds credibility with the business. That includes stabilizing operations, implementing project discipline, and tracking costs, assets, and people. If you don't have the foundation, then don't even start.

McKinsey on BT: *What did Shell do to be sure that the businesses were aligned on this?*

Alan Matula: Right from the start, we deliberately put "business at the center" of what we do. But the key is that we have been able to strike a balance between an IT foundation that is standard across business units, while differentiating and catering to specific business needs—areas like high-performance computing for our exploration businesses.

McKinsey on BT: *Did the move back to basics stir up any resistance from the businesses? And if so, how did you deal with that?*

Alan Matula: We made the application portfolio transparent, showing the businesses the real cost and the complexity of what they had. They figured out pretty quickly that it didn't fit the changing business models and competitive conditions in the industry, or the globalization agenda the company had set for them.

McKinsey on BT: *It must have been complicated given your historical legacy?*

Alan Matula

Vital statistics
Born November 11, 1960

2 daughters

Education
Graduated with a BS in quantitative business analysis from Indiana University

Earned an Executive MBA from Houston Baptist University

Career highlights
Royal Dutch Shell
CIO (2006–present)

CIO, Shell Downstream (2003–06)

CIO, Shell Chemicals (1996–2003)

Corporate planning, Shell US (1992–96)

Various information technology positions, Shell Oil (1982–92)

Fast facts
Nonexecutive board member of Airbiquity

Enjoys sports, outside recreation, and spending time with friends

Visit mckinseyquarterly.com to watch a video of Alan Matula discussing innovation, cloud computing, and the challenge of managing tech life cycles.

Alan Matula: You have to remember, we came from a nation-based operating model that was successful for many years. We're turning that model on its head. So you basically go nation by nation, region by region, and replace a lot of the legacy assets and start to initiate your standardization agenda to attack costs and complexity.

McKinsey on BT**:** *CIOs debate whether IT should follow business change or lead it—in your case, for example, by furthering Shell's globalization through IT standardization. What is your view?*

Alan Matula: I see it somewhat differently. IT is like cement to the standardization activities. If you don't cement changes with IT, then over time they will erode and revert back. IT provides the transparency that you need for driving standardization in a large, diversified corporation like Shell.

McKinsey on BT**:** *You're now a few years into the campaign. What has changed?*

Alan Matula: We went from hundreds of national enterprise resource programs to about six to eight core platforms that do the heavy lifting in terms of business transactional capability. For example, we now have one HR system, one health system, and three or four big application landscapes per business sector.

McKinsey on BT**:** *And what about the applications that have to be tailored for business needs?*

Alan Matula: In addition to the core platforms, we divided the business into portfolios around key sectors such as upstream, downstream, and corporate functions. But to really align IT directly to the business strategy, you need to go one layer deeper. So for downstream operations, that means retailing and manufacturing; for upstream, it's exploration and production. In total, we have 25 business portfolios.

McKinsey on BT**:** *Are these managed differently?*

Alan Matula: That's where we've put our key talent in terms of IT capability. Because of their business domain knowledge, these are the people who really get a seat at the table with business leadership teams. They understand the business strategies and can create the differentiating IT on top of the business transactional layer. A lot of what we consider competitively differentiating is kept in house. Even though you read a lot about outsourcing, the key differentiating systems are still kept and managed specifically within Shell.

McKinsey on BT: *Stepping back a bit, how does a CIO build the business case—one that demonstrates the benefits of a broad transformation that involves major investments and a lot of change?*

Alan Matula: We've learned for sure that when you make the business case, you have to ensure accountability for delivery of the benefits. You need the names of the people who are going to extract the gains. Then you need to track benefits on an ongoing basis. We're piloting quarterly monitoring where you look at an applications portfolio and examine where benefits are materializing and where they aren't.

Beyond that, you have to have the right people at the business interface. They are invaluable. You will not find a CIO who doesn't struggle with finding talent for the business interface. We've invested in our IT people through a learning program delivered by a business partner program.

McKinsey on BT: *What role is IT playing in Shell's innovation efforts?*

Alan Matula: We review each of our major portfolios every 18 to 24 months, focusing on the key technologies needed to stay in the game as well as what is needed for competitive differentiation. We have done some very innovative things—in telematics, for example, using wireless technology to monitor auto fuel consumption and efficiency. But the key to innovation is having a real dialogue at the business-portfolio level to understand where technology is important. That means a change of mind-set and skills, moving from a focus on the basic infrastructure of business administration to a position as close to the business leaders' needs as possible.

McKinsey on BT: *What was the reasoning behind consolidating suppliers and outsourcing? How did your thinking evolve?*

Alan Matula: We actually tested outsourcing early in phase two, but we backed away from it because we didn't want to outsource IT problems we hadn't fixed. Once we were comfortable with our progress, we started the third phase. We spent almost a year bringing in suppliers—10 or 15 of them—exploring what was working, what wasn't, and what needed changing. It was then that we latched onto multisourcing as a model. For example, in infrastructure, we now have three suppliers that are capable of providing services across the board. This provides us with flexibility and agility as we evolve the delivery model to respond to the changing IT market and Shell business needs. We benchmark the suppliers, and we have written contracts that are very flexible.

McKinsey on BT: *Is there an optimum number of suppliers for a company like Shell?*

Alan Matula: Things do not stay the same forever. But to give you a sense of our thinking, before we consolidated our infrastructure suppliers, we had about 1,500 different contracts, covering licenses, hardware, and services, with an outsourcing model that was very fragmented. We're now down to three infrastructure suppliers, and these are an integral part of what we call our ecosystem of key suppliers.

McKinsey on BT: *Was there a driving philosophy behind the new outsourcing model and the new ways of working with suppliers?*

Alan Matula: We started with the idea that we wanted 70 percent of our spending to be external. Of that, we wanted 80 percent to be focused on the top 11 suppliers. We put those 11 into three groups: First, there are the foundation suppliers, those in which we make long-term bets—Cisco, Microsoft, Oracle, and SAP. Then there's the infrastructure group, with three bundles—AT&T, HP, and T-Systems—for networks, end-user computing, and hosting of storage, respectively. And finally we have four application services suppliers—Accenture, IBM, Logica, and Wipro. What we're doing differently is bringing all 11 of them together to work as a collective.

***McKinsey on BT*:** *Tell us more about that last point.*

Alan Matula: About two years ago, we began meeting with the ecosystem suppliers every quarter. We started out slowly, defining golden rules and how we operate, with the ambition of actually doing things together that not only are good for Shell but that also are innovative in the marketplace and help the industry.

***McKinsey on BT*:** *What kinds of innovation?*

Alan Matula: The boundaries between the traditional suppliers are blurring. Some traditional hardware suppliers are going into software and vice versa. Others are getting into the data center business. As we started to give our top 11 suppliers some big challenges, that gave rise to some innovative approaches. You're starting to see all suppliers wanting to play differently by collaborating to improve the overall delivery to Shell. I think it's going to be an exciting time as we continue to push current industry norms to drive greater degrees of collaboration, change, and innovation.

***McKinsey on BT*:** *You think of IT in terms of phases. What is the next frontier for IT transformation at Shell?*

Alan Matula: The next phase in our transformation will be a shift to harvesting the benefits from the assets we have put in place—a new system for HR should last 15 years. So the goal now is to leverage these assets to improve business performance. That's a different model of change. It forces us to be more intimate with the business, actually putting business operations and IT operations side by side. In the project mode of recent years, you could keep some distance as you restructured, but in the harvest-and-sustain mode, you have to work to optimize the business processes, with IT delivering business performance improvements. The structural approach will be different, and that's what we're now exploring.

***McKinsey on BT*:** *Going forward, since you're trying to capture benefits outside IT, you need a different steering mechanism and metrics beyond just reducing IT unit costs, right?*

Alan Matula: The pressure to reduce unit costs will never go away in IT. But when you get to harvest and sustain, it's about smarter demand management, to make sure you are using only the IT that you require and are doing only the IT projects that you need to do. It's also about a different set of metrics on the business side, and the ultimate art of this is talking to the businesses in their own terminology, to show exactly where IT contributes to their goals. We're testing a couple of portfolios to see if we can do this. It's something that every CIO would love to be able to do.

***McKinsey on BT*:** *Are you doing your own IT research to develop innovations for the business?*

“It’s about smarter demand management, to make sure you are using only the IT that you require and are doing only the IT projects that you need to do.”

Alan Matula: At the beginning of each year, we carve out key technology areas or domains that we want to mine—things like sensors, high-performance computing, new ways of working. We work with the external providers as well as internally searching for areas where we can make disruptive, differentiating strikes. In terms of structure, we have put all IT technology research into a projects-and-technology organization with a chief technologist whose job is to look for those technology strikes that add the most business value. We want to send the message that the CTO is a business partner at a very different level from standard IT. The projects-and-technology organization is split from the rest of the IT function, and there’s a cut line between the big technology plays and supporting staff—20 percent of the total staff—versus the more incremental activities that remain in the traditional IT line, or 80 percent of the staff.

McKinsey on BT: *You have recently changed how you govern IT, with the business unit CIOs now reporting to the IT function and no longer to the business heads. Is this the optimal model?*

Alan Matula: It’s really about maturity. In the early phases, there was no way you could consolidate IT under one function. We needed to build credibility with the businesses, and they needed to take ownership of their project portfolios. In today’s phases, maturity starts to blossom. The CIOs get more and more credibility. As long as they still have that seat at the business table, are heavily engaged, and serve on business forums and leadership teams, then that is what is really important. If that starts eroding, then we’ll go back to the previous model.

McKinsey on BT: *The change in governance more or less coincided with the start of the recession?*

Alan Matula: That’s right. I now have more levers to pull when it comes to costs and agility. The new governance model has allowed us to move faster and make decisions without working across different business lines to get everyone to agree. Furthermore, we can move IT resources around easier and more quickly.

McKinsey on BT: *In the financial crisis, some CIOs have focused primarily on cutting IT spending, while others have focused on IT’s important role in cutting business costs. What has been your experience?*

Alan Matula: You have to do both. We have, for example, made use of the network for telephone calls, and we have transformation projects in place that use technology so we can work virtually. But it’s a balance. You need to keep driving down pure IT costs on a unit basis while also providing technology that drives business costs down. Of course, it’s always hard to tell that latter story, since it’s often difficult to determine the full cost of a business process.

McKinsey on BT: *While you have pushed standardization and sourcing to the maximum level, is it still possible to squeeze more costs and inefficiencies out of IT operations?*

Alan Matula: There are new models emerging, based on cloud computing and software as a service, that are going to have an impact. Beyond that, we have to be a lot more selective about what projects we do, and most of all we have to work for continuous improvement to get the full potential from our IT assets.

McKinsey on BT: *What are the lessons you have learned from this transformation? What might you have done differently and what would you tell other CIOs?*

Alan Matula: IT is more important and intense to the enterprise than ever before, and that essentially requires an ongoing effort to transform IT; there is always another phase. To support that mental model, the first thing is to never lose the perspective that you're here to make the business more productive and more competitive. Our catchphrase, "business at the center," keeps us grounded. Our position today is a reflection of the tight integration that we have with the business, combined with the efforts of key support functions like HR, finance, and procurement.

A second thing is that you're only as good as the talent that you have. For instance, in the robust sourcing of infrastructure and applications we have put in place, the people at the interface are very important. They manage the critical supplier relationships with CEOs and top executives at these firms, and they have the technical know-how to help guide the suppliers.

Finally, if you don't have the basics right, you won't have any credibility. It only takes one bad "go live" on a project or a flaw in your basic delivery capabilities to set you back very quickly.

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