Six Ways to Reduce Telco IT Complexity

Simplifying processes and reducing inefficiencies in how companies set up IT can bring impressive savings—even for those with complex business models.
Tapping into Huge Savings

It’s little surprise that IT simplification tops the list of priorities for the CIOs we talk to on a daily basis. Across industries, a spaghetti soup of issues is increasing IT complexity: misaligned and inefficient organizations and governance, slow and costly delivery, complicated application portfolios, and highly heterogeneous infrastructures. In a recent A.T. Kearney survey, IT executives rated complexity the most common reason IT is reducing business value. Higher IT complexity is linked to higher operating and capital costs, our research finds, and it brings revenues down as time to market lengthens.

So where does this IT complexity originate? Interestingly, not from business complexity—that is, complexity caused by product portfolios, rate plans, rebate rules, and other factors—but rather from inefficiencies in how companies set up their IT. Our recent analysis of IT costs for 66 telecom companies in Europe found little to no connection—and in some cases, a reverse correlation—between business complexity and IT costs. At the same time, we found a close correlation between IT complexity and IT costs (see figure 1).

Even in a landscape of complex product offerings, the leading CIOs are keeping costs down. By simplifying IT—for example, by reducing the number of applications or clearly describing a collaboration model with suppliers, including responsibilities—they are generating huge savings while maintaining broad product ranges and even investing in future lines.

Complexity and Cost

Our study was based on our Global Competitive Benchmarking, which collects detailed cost structures of participants on an annual basis and evaluates company performance. To create a like-for-like comparison, cost data (most of which is from 2014) is normalized to reflect differences in wages and buying power across countries. We measured business complexity based...
on the number of products, tariffs, and tariff changes per year and then compared a company’s complexity as a percentage of the most complex company.

These telecom companies have generally comparable business models and offer much the same products, yet IT costs vary widely—from less than €5 per customer up to €33. Some of the companies with the most business complexity also have some of the lowest IT costs (see figure 2).

Figure 2

**Even with high business complexity, low IT costs are possible**

One major cause of this variation comes from IT complexity, including the number of applications and the level of customization. Of course, complexity is hard to measure. In addition to application and database varieties, we also looked at the infrastructure and reflected number of server types. Companies with below-average IT complexity show IT costs of around €11 per customer—about 40 percent lower than those with higher complexity (€18).

When we compare business complexity with IT complexity, the link is weak. Although many cite business obstacles such as product portfolios and pricing rules as reasons IT complexity persists, many CIOs are able to reduce their IT complexity without any corresponding reduction in business complexity. Of course, maintaining old applications to manage a few customers using legacy products has a negative impact on IT costs, yet leading companies are finding ways to solve that problem.

“IT simplification is not about reducing; it’s about enabling,” Andrey Peshy, an IT manager of Kyivstar, told us. The Ukrainian mobile network operator consolidated and optimized its
billing environment with a focus on increasing time to market for new products and reducing complexity and costs in billing. “Our digital end-user products need to be simple, and so should IT,” Peshy said.

Simplifying IT in Six Moves

So what do leading companies do differently? How do they keep IT costs down while still having a broad and complex offering? Six moves are essential:

1. **Improve IT-business collaboration.** Using standard off-the-shelf applications with minimal customization, adopting clear governance on how to approve changes, and standardizing infrastructure are just a few common steps toward minimizing complexity. Yet leading companies make sure that business and IT leaders work together to ensure IT capabilities are aligned with business processes.

The first step to simplification is streamlining the link between IT and business. Avoid complexity as much as possible, for example when deciding about new projects. Every decision about new functionality should be governed by the idea that standardization should be used and customization avoided if at all possible. Along the same lines, the long-term costs and complexity of using heavily customized software must be transparent to all decision makers early on.

A zero-based approach can challenge the current setup and staffing levels and help eliminate non-value-added activities.

“Business needs to formulate requirements on the ‘what’ and not so much about the ‘how,’” Lukas Müller, IT manager for Swisscom, said to us. When discussing new functionalities for his company’s customer relationship management (CRM) systems, for example, he tries to separate the business functionalities from the technical solution. IT experts can best decide which solution fits the existing landscape to secure agility.

The best business-IT collaborations can be quite valuable, as the experience of one European telecom demonstrates. For this company, many CRM systems had existed in parallel, with different processes and no progress in consolidation and harmonization. Business and IT started a joint effort to establish streamlined processes and a new IT target architecture that could save money. IT simplification was done in parallel with business-sponsored process streamlining. As a result, one consolidated CRM application was established across products and customer groups. The resulting process improvements, such as higher automation in order processing, and IT cost savings, such as easier product launches, brought ongoing cost reductions of 30 percent.

2. **Create a lean IT organization.** An IT organization designed to have simple interactions with business, fewer management layers, and greater functional centralization will by its nature be much less complex. A zero-based approach to organizational design can challenge the current setup and staffing levels and help eliminate non-value-added activities.
Some examples highlight this. One European telco faced rising IT budget pressure—the need for innovations in cloud application offerings on one side and an overall budget limit set by the CFO on the other. Starting from scratch in building a budget, all support activities (including reports and decision boards) were challenged. By abandoning unnecessary tasks, the company achieved 20 percent savings, which were reallocated toward value-driving innovation.

One North American wireless provider has used application rationalization principles to drive consolidation in the underlying support organization. “Application rationalization has been a key initiative for us,” one of the company’s senior executives told us. “The program has yielded cost reduction of 5 to 10 percent of overall IT costs, with more on the way. Other results include increases in flexibility and speed by operating a simplified environment.” The provider seeks to turn off unused or underused applications and is targeting consolidation of key platforms such as billing. Other opportunities include broadening the use of packaged software and consolidating the tools used by various support and maintenance groups. One radical idea being considered is shutting down support and maintenance contracts and related staff on applications deemed non-core or non-strategic.

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3. Use best practices in acquiring services. Failed big IT transformation projects have common threads: They take longer than planned, go over budget, do not meet quality standards, and create dissatisfied customers. To combat this, one telecom used agile development methodologies for some key projects. It assembled smaller cross-functional teams of analysts, developers, and testers with clear project targets achievable in a few weeks. This enabled the firm to get results faster and fine-tune the solution where needed. At the same time, this firm was careful about where it deployed agile methods. For smaller, more time-sensitive jobs, dedicated teams (with dedicated budgets, prioritized through business) proved most effective, and for mid-sized projects with clearly described end results, the traditional sequential “waterfall” approach was most effective. This approach cut time to market by 37 percent, lowered costs by 26 percent, improved quality by 63 percent, and improved overall customer satisfaction.

4. Review the IT operating model. Frequent reorganizations, consolidations, and mergers on the business side—not to mention constant changes to the market for IT services—mean that IT must constantly challenge the operating model and regularly reevaluate the optimal level of centralization, outsourcing, and offshoring. Overall, the CIO needs to find the best operational setup to deliver business expectations at an optimal cost.

Market changes are creating a diverging market—trends toward full-service offerings on one hand and clients that want more control over the IT value chain and are splitting IT sourcing buckets into smaller parts on the other hand. While outsourcing data center, field service,
help desk, and application services to different providers can lower costs, it can also increase interface complexity. One way to avoid a complex setup is to assign a lead provider that coordinates the others and manages trouble tickets.

Our IT 2020 study on the future of IT delivery in the telecom industry found that more than 60 percent of companies plan to outsource and offshore IT operations while also consolidating their IT supplier landscapes. This will reduce complexity as outsourcing effectiveness depends on increasing standardization. Offshoring is a clear part of IT delivery models, as it can create cost advantages. One company has optimized its IT operating model by radically consolidating data centers into three locations—the western United States, the Czech Republic, and Malaysia—using a “follow-the-sun” principle that ensures that almost 100 percent of IT services are available 24 hours a day, seven days a week.

5. Rationalize application portfolios. Standardizing and consolidating can help manage complexity within application portfolios and, consequently, manage the retirement of legacy architecture. Standardization is about tradeoffs. The greater the freedom to customize, the more easily systems can fit local business requirements. The greater the standardization, the higher the savings from economies of scale. However, as noted, standardization is hard to achieve if it is not ingrained into IT strategies from the beginning.

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One German telco analyzed its application variety in CRM by functional capabilities and found dozens of applications supporting the same capability. Consolidating applications and harmonizing processes led to 30 percent savings. A Nordic telecom provider that had a sharp increase in its IT portfolio complexity after taking over a smaller rival started over after its own internally developed system proved impossible to scale for new customers, time to market for new products got longer (up to a year), and system outages grew. In its greenfield approach, only standard applications that integrate well were used. New products that could be introduced within two weeks were selected, with flexible software that enabled new features, billing models, and products. Instead of developing its own software features, the IT team focused on keeping service quality high.

6. Consolidate and harmonize IT hardware. Standardizing and harmonizing hardware and increasing consolidation and virtualization can improve IT hardware usage rates. Reducing variety, improving access to outsourcing, and enhancing security can lower costs.

“Virtualizing end-user infrastructure (of more than 700 shops in Germany) saved us 20 percent due to reduced on-site maintenance need,” said Dr. Wolfgang Weniger, IT manager for T-Shop of Deutsche Telekom. “Our salespeople appreciate updated systems without a minute wasted waiting for a software installation.” Another national telecom moved its data center to the cloud and saved 30 percent immediately. Later, the company moved email and collaboration applications to the cloud and significantly reduced office costs. The move also allowed the CIO to more easily adapt volumes as the company expands in Asia and relocates staff throughout Europe.
A Simplification Health Check

With these six moves in mind, A.T. Kearney’s IT simplification health check can pinpoint where to begin:

**Assess the level of complexity and define ambition.** Using questionnaires, interviews, and benchmarking, document gaps by area and define improvement needs. Set a company-wide simplification ambition in workshops and validate with key stakeholders.

**Identify required initiatives.** Determine what actions are needed, prepare a business case, and assign responsibility.

**Prioritize and plan initiatives.** Start with the easy steps—early positive results are important. Define a roadmap to close gaps.

No CIO has to accept IT complexity as-is. There are many ways to simplify the setup and bring savings of as much as 40 percent in a short time. Well-planned optimization with good collaboration with the business, frequent interaction, joint decision making, and clearly defined roles can make IT simplification a reality.

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