A global bank knew it had to digitize—and fast. The bank was struggling to keep up with rising customer expectations and stiffening competition, including new players from outside the financial services industry.

To begin a digital transformation, the bank analyzed customer and employee journeys. It identified the steps in critical end-to-end business processes to automate first. It even launched pilot projects on deep learning and robotic process automation.

The bank also pushed the digitization team to conduct a sprint session on a critical customer journey. That effort led to 20,000 new lines of code and an implementation plan that called for piloting a new customer journey in stages. But eight weeks later, less than half of the stages had been completed.

Why did the effort stall despite a commitment from top leaders? The answer is complicatedness. It extended throughout the organization. The symptoms included blurred accountabilities, vague IT requirements and governance, unclear ownership of cost centers, and high administrative hurdles. These issues hindered the bank’s ability to respond effectively to customers’ demands and competitors’ moves.

In a world where being a digital organization is vital for survival, companies can’t afford to fail in this way. To successfully transform, companies must understand what causes complicatedness and then adopt a disciplined approach to combating it. Results from our Annual Complicatedness Survey suggest that organizations that have addressed complicatedness stand the best chance of successfully implementing their digital initiatives. (See the sidebar “About BCG’s Annual Complicatedness Survey.”)

Equally important, additional research shows that companies that address complicatedness achieve valuable bottom-line benefits. Indeed, when we compared organizations that are in the top quartile for simplicity with their peers in the bottom quartile, we found that the simpler organi-
Organizations are more likely to have share price growth of 20% or more, higher rates of revenue growth and larger profit margins, and employees who are three-and-a-half times happier, three times prouder, and two-and-a-half times more likely to stay.

Where Does Complicatedness Come From?

In BCG’s view, complicatedness arises from what a company does internally. It contrasts with complexity, which stems from external developments in the business environment that an organization can’t control. We define complicatedness as the increase in the number of organizational structures, processes, procedures, decision rights, metrics, scorecards, and committees that companies impose to manage escalating complexity in their external business environment. By taking such steps, companies think they are being proactive and meeting external complexity head-on, but they are exacerbating their complicatedness. The resulting changes slow reaction time and erode productivity. For instance, if a company seeks to tackle the problem of declining product quality by adding a dedicated organization unit to monitor production, it may introduce yet more rules, governance mechanisms, and meetings. In other words, complicatedness takes root in the context of the organization.

Excessive complicatedness can be found in one or more of the following eight areas that are related to context:

- **Leadership**, including how managers lead by example, act as role models, and adhere to rules and procedures
- **Strategy and the transformation agenda**, including the overall vision, processes for executing initiatives and cascading them throughout the organization, and values

The Annual Complicatedness Survey has canvassed 3,000 global companies across 50 subindustries over the past three years. We have benchmarked the data gathered and compared participating organizations’ levels of complicatedness in order to provide insights into complicatedness. By taking the survey, executives can see their company’s level of complicatedness not only in absolute terms but also in relation to a customized peer group of similar organizations. (See the exhibit.) The results provide a solid foundation on which a company can build simplification programs.
• **Organization structure**, including management layers, reporting lines, and spans of control

• **Activities and roles**, including the roles and responsibilities of units and employees

• **Processes, systems, and IT**, including the rules and policies for business processes as well as the supporting IT systems and infrastructure

• **Decision making**, including the hierarchy of decision-making authority and the way decisions are escalated through the organization

• **Performance management**, including the processes, KPIs, and rewards

• **People and interactions**, including staff development, career paths, engagement, and meeting culture

Reducing complicatedness must begin with changes in the leadership area, which binds together and affects the other areas. (See Exhibit 1.)

When combating complicatedness, the perceptions of leadership can hamstring any efforts. Most notably, many senior leaders don’t realize how complicated their organization really is. Our research shows that top executives in an organization often see it as less complicated than nonmanagerial employees see it. The reason for this difference in perceptions is that senior executives can often bypass the rules in the interest of “getting things done,” while junior staff are expected to follow all the rules.

When upper-level executives aren’t affected by their organization’s complicatedness, they don’t support initiatives to combat it. And if top leaders don’t sponsor efforts aimed at eliminating sources of complicatedness, the problem persists—and can even get worse.

**Complicatedness and Culture**

Digital transformation is not so much about technology as it is about culture. Leaders generally recognize that technology is only one ingredient in a successful digital transformation and that cultural change is equally if not more important. But all too often, even if executives recognize the need for cultural change, this awareness leads to neither a successful digital transformation nor effective changes in the organization’s culture.

Why? In some cases, leaders unwittingly introduce even more complicatedness into organization structures while seeking to implement digital programs. For instance, leaders may set up independent multidisciplinary teams responsible for various digital initiatives, but then leaders maintain the company’s traditional reporting hierarchies. This creates confusion over who reports to whom and who will handle which tasks. Layers of complicatedness are added on because people must now deal with both the old and new constructs.

In other cases, leaders of initiatives aimed at changing the culture fall into the trap of setting up independent multidisciplinary teams responsible for various digital initiatives, but then maintain the company’s traditional reporting hierarchies.
trying to modify behavior directly by telling people to change. Influencing mentalities, mindsets, values, and attitudes—and thereby, behaviors—solely through bold communication campaigns is nearly impossible. Leaders will be much more effective if they change the context of the organization. By doing so, they can foster the behaviors that will create the new culture that they aspire to have.

Simplifying for a Digital Transformation: Four Steps

Understanding what’s driving an organization’s complicatedness is vital for implementing a successful digital transformation. But it’s not enough. Leaders must also take a disciplined approach to eradicating its root causes and preventing them from taking hold again.

To that end, BCG has designed a four-step approach called Smart Simplicity. (See Exhibit 2.)

We have used this approach to help companies in an array of industries launch digitization efforts. By deploying this approach, the companies successfully eliminated the complicatedness that was hindering their efforts to turn their digital vision into reality, and they generated measurable business value. Let’s look at each step in turn.

1. Get off to a smart start. To start smartly, companies should identify the digital transformation problems that have arisen from complicatedness. They should prioritize problems that take up significant resources, account for large chunks of operating costs, hinder innovation, or create delays in important business processes. Such problems are causing measurable harm to the business and would unlock the most value if they were solved.

   Next, companies should quantify the benefits of addressing each problem. For example, if the organization shortened the average development cycle for new mobile apps, could it get products to market twice as quickly?

   Take a close look at each of the eight context areas and identify the symptoms and levels of complicatedness in each. Consider benchmarking the organization’s complicatedness against that of other organizations to establish a baseline for the company.

   Ultimately, an organization’s leaders should arrive at an agreed-upon answer to this question: “What are the most important ways in which complicatedness is hindering our digital transformation?”

2. Diagnose what’s behind the complicatedness. Determining the root causes of complicatedness in an organization re-
quires analyzing problematic behavior on the part of executives, managers, and employees. It also requires identifying which areas of the organization’s context are causing that behavior.

Use socio-organizational interviews to drill down to the root causes of the behavior. Though such behavior creates difficulties, it arises for rationale reasons; people have an incentive to behave in certain ways. The interviews are particularly in-depth, responsive to individuals’ feedback, and interactive. As such, they’re especially valuable for creating a detailed understanding of the system that’s at work in the organization.

Drawing on findings from these interviews and from the context diagnosis, look for links between the organization’s context and people’s problematic behavior. Those links will point to the areas of the company’s context that need simplifying to eradicate those problems.

Here’s an example: A company’s IT staff members get bonuses and promotions if they keep total IT costs down. Given this incentive system, the staff denies new ad hoc IT resource requests coming from the business units. As a result, the business units start building their own shadow IT teams to get their work done. Though the behavior of the IT staff and the business unit employees makes sense for their respective organizations, it ends up costing the enterprise far more than if the groups collaborated.

3. Craft targeted solutions. Leaders should ask themselves, “How could we modify the organization’s context to reduce or eliminate the sources of complicatedness and the value-destroying behaviors that hinder our digitization transformation?” The answer lies in identifying new behaviors to encourage. Then consider which areas should be adjusted to foster those behaviors. Using the earlier example, the company could eliminate the problem behavior by making IT and the business units jointly responsible for keeping costs down. That would align the incentives for the organizations and benefit the company overall.

Here are some additional examples of solutions that leaders can apply in each context area to tackle complicatedness in their organizations:

- **Leadership.** Hire, fire, and promote people in ways that reward cooperation and transparency.

- **Strategy and the Transformation Agenda.** Translate the company’s strategy into required initiatives to ensure alignment.

- **Organization Structure.** Remove unnecessary layers to streamline top-down communication while empowering lower-management levels.

- **Activities and Roles.** Eliminate duplicate activities to reduce work that doesn’t add value and to make navigating the organization easier.

- **Processes, Systems, and IT.** Abolish handoffs between departments to boost end-to-end responsibility and simplify interactions between units.

- **Decision Making.** Clarify the mandates of managers and committees to avoid escalating decisions through multiple layers and to promote cooperation.

- **Performance Management.** Introduce KPIs that foster collaboration to help managers encourage teamwork and to ensure recognition for cooperative employees.

- **People and Interactions.** Eradicate silos and structure career management programs to reduce the importance of personal connections in promotions.

4. Implement the solutions. After crafting solutions, establish a program management office (PMO) to prioritize the solutions that will best harness the company’s competitive strengths and deliver on its strategic priorities. The PMO can create an implementation roadmap for each priority, drive the change process, and monitor progress.
Sustaining Digital Change

This disciplined four-step approach to Smart Simplicity lies at the heart of our approach for implementing and sustaining a digital transformation and securing a competitive advantage. It enables leaders—and the overall management team—to take greater ownership of change, remain engaged, and cooperate on actions to successfully manage the changes that come with digital transformation programs. It does this by identifying the interventions required to foster the desired behaviors and by providing transparency into priorities, program plans, and progress, as well as into impediments and the plans to remove them.

In the case of the global bank, management used the Smart Simplicity approach to set up an integrated team of journey members, tech employees, and program experts. The new team was charged with continuously monitoring the program’s implementation progress, fixing issues as they arose across project teams, and overcoming administrative hurdles that would have stymied progress. The team led a focused effort that had clear goals, continuous improvement cycles, the support of leadership, and optimized business-as-usual processes—setting themselves up for a more agile and sustainable implementation. To ensure this wasn’t a one-off success, the team used these learnings and the Smart Simplicity framework to make changes across the organization—and to set the stage for achieving a step change in overall performance.

Next Steps

Digitization programs—whether for a single process or a global transformation—are more common than ever. But most organizations haven’t tackled the complicatedness that causes all too many of these programs to fail. Before embarking on a digital journey, target complicatedness. By starting off with the right mindset—simplify first, then digitize—companies can set the stage for a successful digital transformation.

About the Authors

Reinhard Messenböck is a managing director and senior partner at Boston Consulting Group’s Melbourne office. You may contact him at messenboeck.reinhard@bcg.com.

Yves Morieux is a managing director and senior partner at BCG’s Dubai office. Yves leads the BCG Institute for Organization, and he created Smart Simplicity—a tool to help manage complexity in companies. You may contact him at morieux.yves@bcg.com.

Jaap Backx is a managing director and partner at BCG’s Amsterdam office. You may contact him at backx.jaap@bcg.com.

Jens Jahn is a partner and director at BCG’s Stuttgart office. You may contact him at jahn.jens@bcg.com.

Francisco Martin-Rayo is a project leader at BCG’s Washington, DC, office. You may contact him at martin-rayo.francisco@bcg.com.

Neeraja Ramjee is a knowledge expert and team manager for Smart Simplicity at BCG’s New York office. You may contact her at ramjee.neeraja@bcg.com.

Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we help clients with total transformation—inspiring complex change, enabling organizations to grow, building competitive advantage, and driving bottom-line impact.
To succeed, organizations must blend digital and human capabilities. Our diverse, global teams bring deep industry and functional expertise and a range of perspectives to spark change. BCG delivers solutions through leading-edge management consulting along with technology and design, corporate and digital ventures—and business purpose. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization, generating results that allow our clients to thrive.

© Boston Consulting Group 2019. All rights reserved. 8/19

For information or permission to reprint, please contact BCG at permissions@bcg.com. To find the latest BCG content and register to receive e-alerts on this topic or others, please visit bcg.com. Follow Boston Consulting Group on Facebook and Twitter.