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SPOTLIGHT ON STRATEGY

Simple Rules for a Complex World

Any strategy is more effective if employees have straightforward guidelines for making critical decisions. ***by Donald Sull and Kathleen M. Eisenhardt***

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Spotlight

ARTWORK Nuala O'Donovan
Pinecone Heart, 2008
Porcelain, unglazed, 27 x 22 x 24 cm

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SIMPLE RULES FOR A COMPLEX WORLD

Any strategy is more effective if employees have straightforward guidelines for making critical decisions. *by Donald Sull and Kathleen M. Eisenhardt*

A decade ago, in the course of studying why certain high-tech companies thrived during the internet boom, we discovered something that surprised us: To shape their high-level strategies, companies like Intel and Cisco relied not on complicated frameworks but on simple rules of thumb. This was true even though they were in extraordinarily complex, challenging, and fast-moving industries. The rules were not only simple, we found, but quite specific. Typically, managers had identified one critical process—making acquisitions, for example, or allocating capital—where a bottleneck impeded growth, and then crafted a handful of guidelines to manage that process. This approach helped companies to bridge the gap between strategy and execution—to make on-the-spot decisions and adapt to rapidly changing circumstances, while keeping the big picture in mind.

We reported our findings in HBR ("Strategy as Simple Rules," January 2001). At the time, we knew that simple rules worked in practice, but now—as a result of subsequent research that we and others have done—we have a much richer understanding of *why* they are effective and *how* to construct them.

Simple Rules in Action

The story of América Latina Logística (ALL) illustrates how simple rules can help companies shape strategy in an uncertain environment. It also demonstrates that this approach can be useful in a setting beyond the technology sector—such as a dilapidated freight railway in southern Brazil.

In the late 1990s the government of Brazil privatized the country's freight lines. After decades of neglect, the nation's freight-rail infrastructure was run-down: Half the bridges needed repair; a fifth were on the verge of collapse. Twenty steam

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locomotives that were decades out-of-date were still in use. Rail accounted for only 20% of long-haul shipments in Brazil, compared with 80% in most countries.

ALL was spun off from the Brazilian railway authority in 1997 to manage one of the country's eight freight lines. Its new management team took over an organization that was bureaucratic, overstaffed, and bleeding cash. Transport on the line was so unreliable that crops in the areas it served were routinely left to rot in the fields during the harvest season. Middle managers were confused about what to do, and many pushed their local agendas at the expense of the company's overall best interests.

The team decided to adopt a simple-rules approach to the work ahead. Let's look at how that approach helped ALL's executives achieve alignment, adapt to local circumstances, foster coordination across units, and make better decisions.

Aligning activities with corporate objectives. To set a clear direction, the senior managers decided on four companywide priorities: cut costs, expand services to existing customers to grow revenues, invest selectively to improve infrastructure, and build an aggressive corporate culture. The company had only $15 million available for capital spending—less than a tenth of the total funding requested by managers—but it desperately needed to upgrade the infrastructure and trains so that it could expand services. Accordingly, the management team identified capital budgeting as a critical bottleneck keeping the company from achieving its objectives.

Next, ALL's CEO assembled a cross-functional team to develop simple rules for prioritizing capital spending. Any proposal, the rules said, should:

- remove obstacles to growing revenues,
- minimize up-front expenditure,
- provide benefits immediately (rather than paying off in the long term), and
- reuse existing resources.

The simple rules aligned key decisions with corporate objectives. In addition, they translated the broad priorities "expand services to existing customers" and "cut costs" into clear guidelines that managers and employees understood and could act upon. The rules helped people avoid the paralysis that often strikes when they're confronted with too many alternatives. (See the sidebar "How Simple Rules Make It Easier to Act.")

The rules helped employees avoid the paralysis that often strikes when people confront too many alternatives.

Adapting to local circumstances. Once they understood the rules and their underlying rationale, ALL's employees generated a series of innovative proposals based on what they had to work with. While its competitors were spending lavishly on new equipment, ALL repaired decommissioned engines from its "dead fleet," bought used locomotives from African carriers, and replaced damaged sections of the main line with dismantled tracks from abandoned parking stations. One frontline employee came up with the idea of increasing the size of fuel tanks to lengthen the distance engines could go without refueling, which sharply reduced downtime during the peak harvest season.

That inventive, from-the-ground-up approach contrasted sharply with the way investment decisions had been made in the past. The Brazilian railway authority had issued detailed investment guidelines that left local employees with little scope to exercise their creativity or judgment. That system was efficient, but the new management team decided that, at this moment in its history, the company needed adaptability more than efficiency. (To find out more about the tools that best support efficiency and adaptability, see the sidebar "How Simple Rules Differ from Checklists.")

Fostering coordination. Strategies often falter in execution because of insufficient coordination across the organization. Misunderstandings are inevitable when business units, functions, or subsidiaries have differing worldviews. Employees frequently attribute breakdowns to incompetence or bad faith on the part of colleagues in other departments: "Those bozos in headquarters [or finance or marketing] screw everything up." ALL was no exception: Each functional silo had its own agenda, criteria for evaluating proposals, and long history of distrusting other departments.

The cross-functional team that created ALL's rules included the head of each department as well as the CEO. As a result, the rules functioned as an explicit agreement across units to guide decision making—like a treaty. Negotiated decision criteria didn't eliminate difficult trade-offs: ALL's engineers still favored elegant solutions over quick fixes, and the sales team wanted anything that made customers happy. Like a treaty, the simple rules provided an agreed-upon framework for evaluating specific proposals.

ALL's simple rules also compelled managers to approach difficult decisions that affected different

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Idea in Brief

How can managers make sure that everyone in an organization is focused on the same strategy but has the flexibility to innovate and adapt to local circumstances? The answer is not a complicated framework but a set of simple rules that help employees make decisions on the fly, act on them, and respond quickly to shifts in the environment. Developing such rules involves three steps:

1

Set corporate objectives.

• What are we trying to achieve—profitability, growth, innovation, social good?

2

Identify a bottleneck that keeps you from achieving those objectives.

• Where do opportunities most exceed the resources (time, money, and people) available to pursue them?

• What specific process (or step in a process) would help us manage that problem?

3

Create simple rules for managing the strategic bottleneck.

• What experiences has our company had with that process?

• What worked, what didn't, and why?

departments rationally, thereby limiting the role of emotion and politics. To avoid any misunderstandings, the team members worked hard to increase the transparency of the rules they had agreed to, talking through their decisions with departmental colleagues who were not directly involved in capital budgeting. Transparency did not mean that everyone was happy with every decision, but it did reduce the odds that an undesired outcome would be attributed to incompetence or politics.

Making better decisions. Many people believe that complex problems require complex decision-making models. To prioritize projects, for instance, the ALL team could have forecast future cash flows for every potential investment and ranked all proposals on the basis of their net present value. But like most complicated models, that approach would have had many disadvantages relative to simple rules. Adding more variables leads decision makers to give too much weight to peripheral considerations. In addition, the opacity of black box models prevents users from testing them against their experience, judgment, or common sense. And of course, complex models demand huge volumes of data, are susceptible to computational errors, and hinge on assumptions about unknowable variables such as disruptive technologies that, if wrong, can throw off the results. (The sidebar "How Simple Rules Fare Against Complex Models" looks at research demonstrating that simple rules often lead to decisions that are as good as—often better than—those made using complex decision-support tools.)

Within three years, ALL's Brazilian rail operations had increased revenues by 50% and tripled EBITDA. When the company went public, in 2004, it had grown to be Latin America's largest independent logistics company, had the most extensive rail network in Latin America, was noted for its performance-oriented culture, and was listed among the best employers in Brazil.

Rules for Developing Simple Rules

Over the past decade we've worked with scores of organizations as they developed and implemented simple rules for strategy. Recently one of us (Don) worked with members of the Young Presidents' Organization (a global network of about 19,000 founders, CEOs, and chairmen under age 45) and codified their experience into a handful of guidelines:

Identify a bottleneck that is both specific and strategic. The first step is to single out a place in the organization where opportunities or investments exceed resources and, as a result, keep the organization from achieving its major objectives. This bottleneck can be described as a process, like capital budgeting at ALL. Sometimes the bottleneck is a substep in a broader process. For example, one company we worked with started by focusing on customer acquisition but quickly homed in on the preliminary analysis of proposals.

A note of warning here: The bottleneck needs to be a relatively narrow, well-defined process or process step, not a broad aspiration. Vague goals like *improving quality* are achieved slowly, through thousands of decisions and activities spread across the organization. Attempting to cover all those activities leads to numerous feel-good rules such as "Recognize and reward good quality-improvement practices" rather than explicit ones like "Investment projects must reuse existing resources."

Most organizations face multiple bottlenecks, of course; nobody has *enough* talent, cash, managerial attention, or capacity for cross-functional coordination. Managers should not develop simple rules to address every constraint. Instead, they should focus on one or two critical areas where rules will have the greatest impact. It can take some digging to identify the most important bottleneck.

In IDEO's early days, clients often wanted to rush through the brainstorming process and jump into prototyping. The founders eventually realized that

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the scarcest resource they faced was great ideas—and that the likelihood of developing a great idea increased when more time was spent brainstorming on the front end. They concluded that brainstorming was a strategic bottleneck. The simple rules they wrote to address it, which are stenciled on the walls in IDEO's conference rooms, include "Defer judgment," "Encourage wild ideas," and "Go for quantity."

Let data trump opinion. Before developing simple rules, we ask managers to write down what they think the rules will be. They are almost always wrong. Shoot-from-the-hip rules typically overweigh recent experience, reflect personal biases, and ignore anomalous data. The best rules, in contrast, draw on a thoughtful analysis of historical experience.

In many cases a company will have a small number of strategic events—such as acquisitions, partnerships, or new product launches—to analyze. Though no one can conduct a statistical analysis with a small sample size, a careful comparison of cases often produces valuable insights. When comparing cases, look for what worked, what didn't, and why.

Steel magnate Lakshmi Mittal's first few deals in Indonesia, Trinidad, and Mexico provided experience that his team codified into rules to guide future acquisitions. The analysis revealed that the

The Science

HOW SIMPLE RULES Make It Easier to Act

Complex situations create many possible courses of action, which can confound employees on the front line. A recent body of research by psychologists demonstrates that when faced with a superabundance of alternatives, people are afraid of making the wrong choice. As a result they delay decisions, default to the safest option, or avoid choosing altogether.

In one experiment by Sheena Iyengar and Mark Lepper, shoppers were presented with free samples of six types of jam. Forty percent of passersby approached the table, and 30% bought a jar of jam. However, when 24 types of jam were offered, 60% of shoppers approached the booth, but only 3% bought a jar. Another study found that three-quarters of eligible employees participated in 401(k) plans that offered only two funds, but participation dropped to 61% for plans with dozens of funds.

Because they are easy to put into practice, simple rules can induce action without unnecessarily limiting options. Research by Brian Wansink and colleagues has shown that by following one simple rule, people attempting to lose weight shed, on average, a pound a month. Other research shows that microentrepreneurs who learned accounting as a series of simple rules such as "Separate business and personal accounts" and "Pay yourself a set salary every month" were more likely to improve their accounting practices and business results than those who learned accounting the way it is traditionally taught—as a set of broad principles.

HOW SIMPLE RULES Fare Against Complex Models

A growing body of evidence shows that simple rules match or beat more-complicated analyses across a wide range of decisions. Simple rules outperformed state-of-the-art statistical models in forecasting the likelihood that customers would repurchase in two out of three industries (and tied them in the third). They matched sophisticated algorithms in effectiveness at allocating funds across asset classes. And they tied or beat complicated approaches in a range of nonbusiness applications, including identifying where criminals lived, picking winners at Wimbledon, and guessing which of two cities had a larger population.

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best deals had occurred in emerging-market countries that other steel producers had ignored. As a result, the team's first rule was to scour the globe for overlooked acquisition candidates. Mittal also discovered that plants using iron pellets and electric arc furnaces could achieve low production costs despite volatile raw material prices—an observation that was translated into a rule to select minimills using iron pellets.

A team can learn from cases beyond its own direct experience as well. One private equity firm raised a fund to invest in early-stage independent power plants in Africa, where the partners had limited experience. To develop rules for selecting opportunities, the team chose nine deals—three successful, three average, and three unsuccessful—comparable with its target transactions. It gathered public data and conducted more than 100 interviews to assess what factors influenced returns. The analysis yielded unexpected insights. The team had initially believed that partnering with multinational energy companies increased the odds of success but found the exact opposite to be true. Large energy companies had different objectives, and their technical and financial heft allowed them to hijack a project's agenda. The team codified those insights into rules and tested them against a second set of past energy projects to determine if they would have picked winners.

Users make the rules. Managers' first instinct is often to draft a set of rules to send down the chain of command. Big mistake. That approach assumes CEOs are best positioned to dictate rules' content and that rules should be used to exercise top-down control. These are bad assumptions. The people who will apply the rules are best able to craft them. They also can test the rules in real time to evaluate whether they are too vague, limiting, or cumbersome.

Letting users develop the rules can help a cross-functional team sort through tough decisions. Consider Skrill, a London-based provider of online payment services. To expand beyond its stronghold in online-gaming customers, Skrill decided to woo business from digital service providers like Skype and Facebook. Skrill was faced with hundreds of ideas for payment options it could develop for such customers. Deciding which opportunities to pursue required complex trade-offs (such as weighing an option's impact on new versus existing clients, or balancing ease of use against the size of its potential market). Selecting which payment options to adopt became Skrill's critical bottleneck.

The CEO and the COO convened a cross-functional team including representatives from the operations, legal, and marketing departments. Before the kickoff meeting, each team member articulated the rules that his or her function would use to evaluate alternatives. Over the course of two workshops, the team negotiated all the ideas down to a handful of rules, such as "The customer can complete payment in fewer than five steps" and "More than one existing customer requested the payment option." The negotiations were intense but helped highlight divergent assumptions that had impeded coordination among functions in the past.

HOW SIMPLE RULES Differ from Checklists

All firms must balance two conflicting but equally important demands: efficiency (which comes from exploiting standard opportunities) and flexibility (which allows an organization to seize unexpected opportunities).

Checklists like the ones that pilots use before takeoff or that surgical teams run through to prepare for an operation are extremely helpful when the challenge is to perform a process repeatedly and efficiently. They lay out clear tasks that together constitute the steps in an optimal process. Simple rules, in contrast, are most useful when the challenge is to adapt quickly to changing circumstances. They set the boundaries of acceptable behavior while leaving ample scope for flexibility within those limits.

Computer simulations have shown that in stable markets, managers can choose between the flexibility of simple rules and the efficiency of codified processes and still do well. As an environment's dynamism increases, however, flexibility grows in importance, and simple rules become imperative.

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Though senior executives should not dictate the rules, they do have an important role to play. Skrill's CEO and COO carefully selected the team and explained to each member why simple rules mattered for Skrill. On the flip side, the lack of top executive commitment is the best predictor that simple rules will fail. Senior executives undermine simple rules for several reasons: They don't trust their team to develop or use the rules, they don't want their personal discretion constrained, or they prefer to keep decision criteria vague. Regardless of the rationale, lukewarm support (let alone outright hostility) from the sponsoring manager dooms simple rules to failure.

The rules should be concrete. Rules may be developed using sophisticated statistical models or thorough analysis, but they shouldn't be difficult to grasp. Billy Beane, the Oakland A's manager, used regression analyses to glean extraordinary insights about which baseball players to draft. Sophisticated as his statistics were, Beane's rules were expressed in terms longtime talent scouts understood—no high school players, for instance, and no players with problems that the club could not fix, such as alcoholism.

Concrete rules sometimes translate into simple yes-or-no criteria. In screening which product inquiries to respond to, the German manufacturer Weima Maschinenbau immediately green-lighted requests for standard products under €40,000 and did not consider deals unless customers paid at least 70% of the price before the product shipped. At other times rules identify a question to discuss. Another rule for screening potential orders at Weima Maschinenbau was that the hidden costs of installing and servicing a machine had to be limited. This rule allowed dealers and the sales force to tap their knowledge of which installations would cause headaches down the line.

Watch out for rules that use abstract language (such as "innovative" or "strategic") or management buzzwords ("synergy" or "convergence"). Similarly, avoid rules that appear to be simple but actually require massive amounts of analysis (like insisting that a project have a positive net present value).

The rules should evolve. Simple rules should change with the company and the market and as managers gain a richer understanding of what their strategy means in practice. Managers can foster that evolution in a few ways. First, they can build in periodic checkpoints. At Filigran, a German steel girder manufacturer, the top team members meet every month to debrief one another on assumptions, choices, and outcomes, and explicitly discuss how they could improve their simple rules.

Capping the total number of rules at a handful is another way to force ongoing discussion. As teams learn, they will want to add rules to capture their new knowledge, which means they will have to drop less important rules. In practice the rules often evolve from relatively straightforward guidelines for defining opportunities and developing processes, to more-nuanced rules for pacing work, prioritizing it, and pulling out of projects.

In some cases these discussions will lead a team to refine current rules as it learns more about how they work in practice. Consider Pracuj, the dominant online recruitment company in Poland. Limited engineering resources were preventing the company from developing new products fast enough to seize market opportunities. A cross-functional team came up with simple rules to guide new product development, including "Any new product must support at least one of the company's current priorities" and "At least two departments must support a project." After applying the rules for a few months, Pracuj's managers were worried that the rules created too fine a filter and might screen out innovative initiatives. The team added another rule: If "a project introduces a new feature that supports the company's vision, has been proven in another market, and could be tested on a limited scale," it would be considered.

Finally, no rules—not even very good ones—last forever. After a few years of capital rationing, ALL had addressed its most serious capacity constraints and invested in higher-end technologies such as satellite tracking, onboard computers, and electronic derailment detectors.

WHERE DOES STRATEGY live in your organization? If the answer is on a shelf, you have a problem. Strategies don't live in thick binders—that's where they go to die. Simple rules, in contrast, represent the beating heart of strategy. When applied to a critical bottleneck, carefully crafted, and used in a mindful manner, simple rules can guide the activities that matter. In a world of hard trade-offs, they are one of the few ways managers can increase alignment, adaptation, and coordination all at once.

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SPOTTING A BOTTLENECK

Managers understand conceptually that bottlenecks are places where opportunities or investments exceed resources, but they struggle to identify them in practice. Here are some examples that may inspire your own thinking.

ETORO
An online social trading platform

THE BOTTLENECK Customers loved a feature that allowed them to copy trades made by successful traders. The company wanted to grow that business—but needed more star investors to use its services.

THE FIX A process that helped account managers cultivate potential gurus more quickly

PRIMEKSS
A concrete technologies company

THE BOTTLENECK Hundreds of contractors wanted to distribute the company's innovative industrial cement; accommodating all the requests would require more engineering resources than the company had.

THE FIX Rules for identifying potential franchisees that could succeed with minimal support

ALACHUA COUNTY ORGANIZATION FOR RURAL NEEDS
A nonprofit that provides medical care for migrant workers in Florida

THE BOTTLENECK Demand for services was infinite, but volunteer medical professionals had limited time.

THE FIX Rules that clinic staff would handle all paperwork and "hassles" so that doctors could be focused 100% on patient care

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