

# Habits as Change Levers

By Daniel Denison and Levi Nieminen

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*Lasting changes must be embedded deeply within the fabric of an organization. Changes that don't "stick" won't improve the performance or effectiveness of an organization. A useful framework for understanding the deeper human and social elements of organization change is the organizational culture perspective.*

Over 30 years of scholarship has shown that culture can be either a potential springboard or a potential barrier to change within organizations, and that ultimately, culture is a key driver of business performance (Sackmann, 2011). Recent advancements in practice now allow change professionals to use a well-researched set of tools to diagnose organizations and to plan interventions to create change. ►

## Embedding Change in “the Deep Levels of Culture”

The “iceberg model” is the dominant way of representing the multiple layers of culture (Schein, 1985). Above the water’s surface, *artifacts* are the visible, tangible manifestations of culture in various attributes of the physical workplace. Just below the surface, *espoused values* characterize the preferences and aspirations that are shared within the organization and which contribute to a shared sense of identity and meaning. *Behavioral norms* and *work practices* also reside at this level, constituting “the way things are done around here.” And in the deeper water, far below the surface, lie the *beliefs and assumptions*—the underlying mindsets—which shape the culture at a fundamental level and influence its manifestation at all other layers. Together, these visible and invisible layers comprise the culture of an organization (see Exhibit 1).

As a conceptual model, the iceberg creates an awareness of depth for practitioners, reinforcing the idea that much of what drives behavior in the organization is hidden from plain view. This, of course, encourages us all to look for those deeper factors, making necessary a set of diagnostic tools and methodologies that are up to the task. The iceberg also focuses the point of change intervention at the deepest level, at the layer of underlying beliefs and assumptions. According to the theory, it is this deepest layer that is the most consequential for the organization—this is the part of the iceberg that “sinks the ship”—and hence where the most crucial action needs to be focused. Accordingly, change needs to be embedded at this same depth to have a lasting impact within the organization.

The iceberg model has had a profound influence on both the academic study of culture and the way in which practitioners affect culture change in organizations. This three-level model has often been interpreted to suggest that changes must be targeted at one of the three different levels. Interventions at the levels of visible behaviors or values are sometimes downplayed in favor of the points of leverage that exist in “the deeper levels of culture.” Because beliefs and assumptions are cognitive, in that they reside in the mindsets of people, this suggests the most impactful interventions ought to be “psy-

chological” in nature. In a practical context, this frames the intervention in a way that might either be construed as ‘off limits’ (i.e., not modifiable) or “off putting” to business leaders (i.e., generating skepticism or negative stereotypes). More importantly, we think it misses an opportunity to address the targets of change that span *across* these three levels emphasized by the iceberg model.

The *habits and routines* that span these three levels of culture guide much of what happens within organizations, yet they have received little attention from organizational scholars

For the individual, habits are both functional and, sometimes, problematic. Personal habits provide structure and constancy, reduce uncertainty, and free up cognitive resources for a select number of complex tasks. Habits can also be dysfunctional, such as when they are expressed rigidly despite a context mismatch (i.e., mindlessness) or when individuals fail to appropriately switch between automatic and effortful behavior (Luis & Sutton, 1991). The powerful effect of personal habits has been studied in a wide range of situations, from healthcare to the workplace and competitive sports (e.g., Grant & Schempp, 2013).

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and practitioners. It is here, in these “automatic” and repetitious behaviors that practitioners can find a powerful point of leverage to affect the change process, deep within organizations.

## Habits: Old and New, Good and Bad

Drawing on neuroscience, Graybiel (2008) provides a technical definition of habits as the:

sequential, repetitive, motor, or cognitive behaviors elicited by external or internal triggers that, once released, can go to completion without constant conscious oversight (p. 361).

Decades of research has shown that habits are:

- predominantly acquired through experience and interaction with the environment;
- are repetitious and can become resistant to change, such as in addiction;
- are performed with little conscious thought or effort;
- can be elicited by environmental or internal cues; and finally,
- the expression of habits can be behavioral or cognitive, such as in habits of thought (Graybiel, 2008).

Habits also appear and are enacted with consistency among and within groups of people, from families to societies. Organizations, too, have habits and routines (i.e., larger, sequenced bundles of habits) which set them apart and provide internal structure (Pentland & Feldman, 2003). Habits are inherently *cultural*. They reflect all three levels; the underlying assumptions about “the way we do things around here,” the values that those assumption represent, and the visible behavior and artifacts that we can see in action. Functionally, they capture the organization’s specific knowledge that has been created over time and then translate that knowledge into action in an efficient way that conserves energy and resources. Denison, Hooijberg, Lane, and Lief (2012) developed a useful framework (see Exhibit 2) that puts habits and routines into one of four categories based on two aspects: *good or bad* and *old or new*. Each combination calls for a different set of possible actions.

**Bad, Old Habits: Unlearn and Leave Behind.** Bad habits are “like chains that are too light to feel until they are too heavy to carry,” as Warren Buffett said. Often, we are too late to realize how restrictive our old habits have become and miss the opportunity to do something about them. Unlearning these well-established habits can be very difficult, but that is exactly what needs to happen. To leave behind bad, old habits, organizations need a clear focus on the areas of consensus about these targets for change. With a clear

focus, organizations can start building progress and momentum and develop the experience and conviction to take on bigger challenges.

**Good, Old Habits: Preserve and Strengthen.** In the midst of organizational change, it can be easy to forget to protect those elements of the culture that made the organization great. Some of the old and well-established habits and routines from an organization's past are still essential to the organization's success in the future. They are clearly understood by the organizational members, make up a key part of the organization's mindset, and are closely linked to other aspects of the organization's functioning. Therefore, it is vital for organizations to clarify the core habits and routines that they need to preserve and strengthen.

**Bad, New Habits: Rethink and Try Again.** During the time of change initiatives, organizations attempt to create various new habits and routines. However, culture change requires a lot of trial and error. Creating a new set of habits and routines does not always mean that they are going to work as intended the first time and fit the situation well. The culture of every organization represents its wisdom accumulated through years of experimentation. Enlightened trial-and-error is critical when trying to create the new habits and routines to transform an organization's culture.

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**Good, New Habits: Invent and Perfect.** The opportunity to create new habits might be the most exciting part of the culture change process. However, creating new habits and routines is difficult, as there are several pieces to the puzzle. Mindset, behavior, and systems must all change together to reinforce the adaptation process for the organization. Organizations cannot simply change people's mindsets, prescribe a new set of behaviors to follow, or mandate a new system. Instead, organizations need to persistently push harder and harder on all three of those levers at once, until signs of success manifest and encourage others to join in to help build the momentum.

Analyzing an organization's culture as a bundle of habits that fit into these four categories serves to focus the discussion on key areas of consensus that reveal a targeted and practical agenda for change.

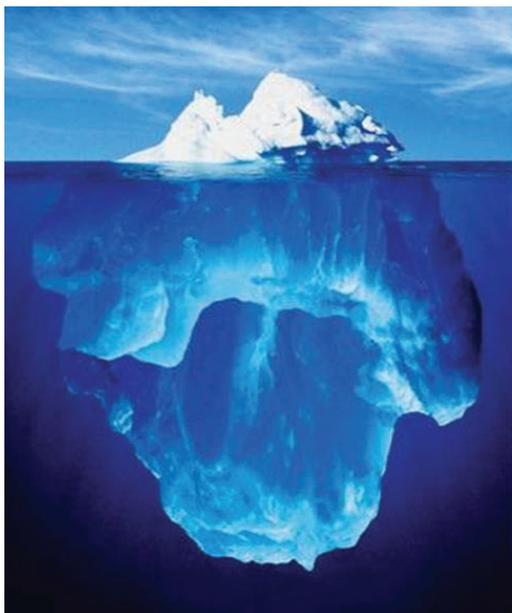
When driving successful changes, leaders choose the "keystone habits" that can have the biggest impact on the organization. Below are three real case examples that illustrate the role of keystone habits in creating successful and sweeping change in organizations.

## Identifying Keystone Habits: Three Case Examples

One of the inspirations for our attempts to understand how organizations identify the keystone habits that are the most promising targets of intervention comes from Charles Duhigg's best-selling book, *The Power of Habit* (2012). In this book, Duhigg tells the story of the early days of Paul O'Neill's term as CEO at Alcoa. After a long struggle to find some targets for improvement that would be supported by both the management and the workers at Alcoa, O'Neill decided to put his emphasis on *safety*. During a time when there was little alignment between management and the workers, this was the area that he saw as being most likely to build collaboration. The organization set the goal of having zero injuries, and the main point of intervention was that all injuries, worldwide, must be reported to the CEO's office within 24 hours. The best way to solve this problem, or course, would be to have no injuries. Though the goal of zero injuries was not achieved, both management and the unions learned to move fast with a level of transparency that was unprecedented.

This safety effort took serious commitment by everyone involved, but in the end it was very effective. The unexpected impact was that changing this single set of habits and routines concerning the way that the organization managed safety incidents created a level of transparency that was new to the organization. The company discovered that

### EXHIBIT 1. ICEBERG MODEL OF ORGANIZATIONAL CULTURE



Artifacts and visible manifestations of culture in the physical workplace

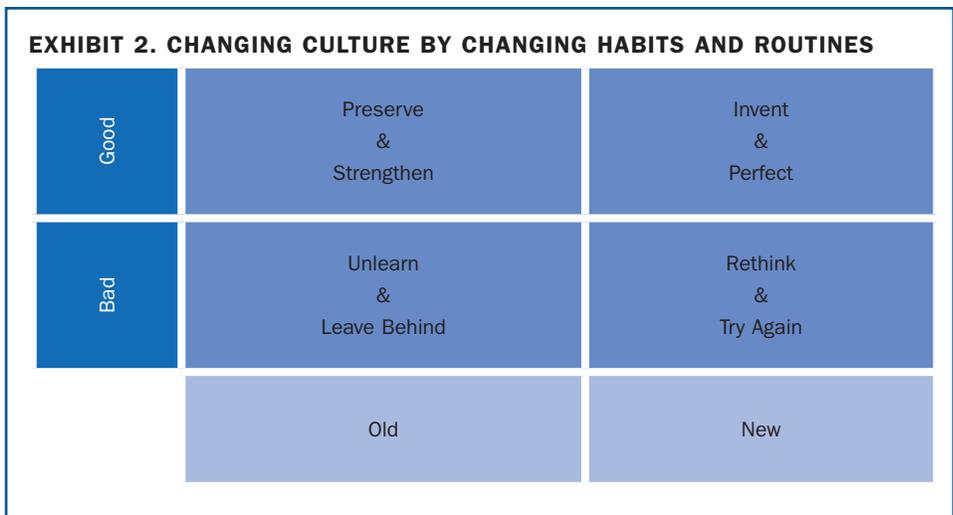
Espoused values and behavioral norms, i.e., "the way things are done around here"

Underlying fundamental beliefs and assumptions

it could share information about performance, about best practices, about business opportunities to a much greater degree than it had in the past. So, these underlying beliefs about transparency and collaboration spread broadly throughout the organization. O'Neill credits this process with leading Alcoa to a dynamic, new level of performance that lasted for most of the decade.

A second habit change example involves the Metropolitan Transit Authority (MTA) of New York City, which manages all public transportation in and out of the city. This includes a high-volume subway system, which carries an average of 5.4 million passengers per day (1.6 billion per year)! Servicing the 820 miles of track comprising the subway system is a major and ongoing task, one of several maintenance functions that are crucial to keeping the trains moving and the people on them safe. In the past, all maintenance to the tracks was done on the weekends, late at night when the train volume was lowest. With the crews repairing the tracks in the short windows between oncoming trains, the maintenance work was slow, expensive, and quite dangerous. However, the old strategy was deeply engrained in one of the MTA's strong points of pride: *keeping the trains moving, no matter what and at all costs!* The keystone habit in this case directly challenged this point.

In 2010, the subway system experienced a number of high-profile safety incidents, culminating in a worker fatality in April and then a blizzard in December that left some passengers stranded in train cars for over 12 hours without food, water, or heat. Following these incidents, an unprecedented decision was made to stop the trains. The president of the Department of Subways, Carmen Bianco, architected a program called *FastTrack* to identify and shut down whole sections of track for maintenance beginning at 10 p.m. and reopening the following day at 5 a.m. For the first time, this allowed service workers uninterrupted access to the tracks, signals, cables, and other rail components. Initially, the public reaction was a widespread outcry. Subway passengers, like MTA workers, were unaccustomed to any interruption to service. Over time, however, the sweeping, positive effects were staggering! *FastTrack* improved productivity, saved money (estimated savings of \$16.7 million in 2012), cut accident rates nearly in half, and increased train reliability by nearly 5%. The successful implementation of this program was no



small strategic and operating feat, but at the core, the MTA achieved a shift in one fairly simple keystone habit: they can stop the trains.

A final example involves GE Healthcare China.<sup>1</sup> GE entered an emerging Chinese market in the early 1990s. In the decade that followed, GE expanded its anesthesia business through the acquisition of two companies, Datex-Ohmeda and Zymed, both of which were strong global brands with a presence in China. Zymed became the center-point of a new and growing business, Clinical Systems Wuxi (CSW) in Wuxi, China. CSW was responsible for the design, engineering, and production of anesthesia equipment. The rapid growth of this business exposed increasing weaknesses in quality and declining customer reputation, eventually resulting in the business halting distribution of products for a period of time.

In 2007, a new general manager was appointed, Matti Lehtonen. It was clear to Lehtonen that restoring quality and customer service should be the top strategic priorities moving forward. Lehtonen and his senior team implemented a simple yet extremely powerful intervention by requiring their engineers to visit operating rooms and witness their anesthesia equipment being used in live surgical procedures. In this case, a single habit—sending people out to where the customers are—had a profound set of cascading effects. Seeing the equipment in use added new meaning and clarity about the purpose of the work and provided the engineers with

a deeper appreciation and understanding of the specific needs of multiple end users, including the patients, the doctors and nurses, and the hospitals and insurers. Over time, this keystone habit *did* help to restore quality and customer reputation. It also broadened the role and skill set of the engineers and became a focal point for talent recruitment and retention. Moreover, it opened up new insights and new product innovations, and by 2010, one of these new products was shipping to emerging markets all over the world!

From these case examples we can begin to learn some useful principles for targeting keystone habits as high impact areas of action. Below, we outline three principles for change management professionals to consider.

## Principles for Intervening on Keystone Habits

*Principle 1: The diagnostic process should differentiate keystone habits from ordinary habits by looking for impact and interconnectedness.*

Like most change efforts, the process begins with diagnosis. The cascading effect seen in Alcoa was described by Duhigg as serendipitous, but acting intentionally to modify or build keystone habits calls for a reliable diagnostic process that pays attention to the right factors. Practitioners need to develop the skills (and methodologies) to identify and distinguish keystone habits from ordinary habits. Each of the case examples above highlights two interrelated factors that can

<sup>1</sup> For more on this case, see Denison, Hooijberg, Lane, & Lief (2012).

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help to focus the diagnostic process: keystone habits are linked to the organization's effectiveness (*impact*), and keystone habits are tightly interwoven with other habits, routines, and processes in the organization (*interconnectedness*). This means that intervening on keystone habits is likely to have a cascading effect, so that change started in one place leads to many other changes in many other places. For example, the act of eating together strengthens the social bonds within the family but also aligns a number of the habits and routines leading up to and following the mealtime.

*Principle 2: Keep the scope of intervention small by tapping into the right habit(s) and affecting scalability through the repetition of this habit.*

When it comes to intervening on keystone habits, the “scalability” of impact is hardly determined by the size or scope of the intervention. Habits are repetitious. Some are repeated on a daily or weekly basis and others moment to moment. This is a powerful reminder that the best interventions will stay focused and tap into the right habits rather than attempting to “boil the ocean.” As one example of a small habit with large implications, Mallidou, Cummings, Schalm, and Estabrooks (2012) found that minor interruptions in nurses' interactions with patients, such as when called to assist another patient or staff member, have a significant deleterious effect on patient care and health outcomes. A simple but powerful intervention in this context could redefine the keystone habit as “staying with your patient to completion of each interaction.” Of course, this might also require unlearning some bad old habits, such as responding to all requests, even the minor and nonessential ones.

*Principle 3: Use storytelling and celebration to “ritualize” the performance of keystone habits.*

New habits are unlikely to take hold in organizations without diligent and concerted

efforts for socializing and embedding them. We think that finding ways to reinforce keystone habits and make their performance *rituals* within the organization is an important part of the solution, so that the desired behaviors take on greater symbolic and psychological meaning over time. The meaning of rituals is often created and reinforced through storytelling and celebrations, or as Durkheim suggested, through the communication of social norms that distinguish the “sacred from the profane” (as cited by Boyce, Jensen, James, & Peacock, 1983). These are opportunities for the organization, often leaders, to clarify the value of the new, good habits and the need to extinguish the bad, old ones.

## Conclusion

Viewing organizational cultures as bundles of habits and routines, we believe that “keystone habits” in particular can serve as powerful leverage points for change management professionals seeking to embed their work deep within organizations. Daunting as culture diagnosis and intervention may be, focusing on small habits with big implications might be the best place to start and a great way to ensure that the change does far more than scratch the surface.

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