

WHITEPAPER

Learning from the Cultures of High-Performing Digital Organizations

Digital Transformation Series

Dr. Deborah Soule

ompanies around the globe are collectively investing hundreds of millions on "digital transformation" initiatives, but often invest far less on the *employees* responsible for fulfilling these new digital strategies. Leveraging technology to accelerate business processes and gain competitive advantage is important, but without a clear understanding of the human impact of digital transformation, these investments are unlikely to deliver the anticipated return.

To seize new opportunities and successfully transform into a 21st century operation, organizations must first understand the fundamentals of digital transformation and how this has the potential to impact their business and their *people*.

At Copyright Clearance Center, we help organizations of all sizes clear the path to integrated data and information, accelerate knowledge and advance copyright. And though we've built our brand around creating innovative, award-winning software and licensing products and integrating complex technology solutions, we've built strong, enduring customer relationships by designing what users need. Whether creating a knowledge management workflow solution for one of the world's largest pharmaceutical companies or helping a century-old scientific publisher design and build a new content publishing system, we begin each engagement at the same point: understanding how people need to integrate, access and share information.

Throughout the course of this white paper series, we provide the "why does this matter" foundation for organizations undergoing digital transformation. Dr. Deborah Soule brings decades of experience and targeted research to answer questions like:

- Why is the process of "becoming digital" so difficult?
- How should leadership teams approach digital transformation?
- How are employee needs evolving as they experience digital transformation?

As we move toward this new frontier of digital dexterity, CCC is committed to partnering with organizations in all stages of the digital transformation journey, delivering human-driven solutions that turn information and insights into knowledge.

^{*}This white paper is one in a three-part series on Digital Transformation. To access the full series, please visit https://www.copyright.com/digital-transformation-series

Digital technologies offer new possibilities for generating value in the form of previously unimagined products, services, and solutions. Making the most of these possibilities comes not just from having access to the right resources, suitable skills and effective business processes. Research suggests that organizational culture — in the form of values, beliefs, attitudes and practices — plays an important role in success.

But what are the characteristics that help a digital organization succeed? This paper looks at the values and practices that scaffold high performance in our fast-moving and highly connected digital world.

ORGANIZATIONAL CULTURE SHAPES ORGANIZATIONAL PERFORMANCE

Shared values and assumptions can be seen in how people in the enterprise dress, act, perform their work, and interact with each other and with the outside world. In a company's early years, founders can have a strong influence on culture formation by explicitly articulating and embodying values and attitudes. As an organization grows, its culture solidifies into taken-for-granted values, unspoken attitudes, unwritten rules and routine behaviors as people learn responses that appear to work well over time.

The aphorism that "culture eats strategy for breakfast," often attributed to Peter Drucker, captures the insight that organizational performance is often due to culture more than to strategy. For example, a thoughtful strategy may be undermined by the beliefs, values and attitudes of those who must implement that strategy. On the other hand, because culture shapes and guides collective attention, energy and effort, it can enable a group or organization to function efficiently and effectively, especially in a familiar and well-understood environment.

ORGANIZATIONAL ENVIRONMENT INFLUENCES ORGANIZATIONAL CULTURE

The label "digital native" describes an individual who has grown up in a world of ubiquitous computing and connectivity and thus demonstrates a natural and instinctive facility with digital resources. Just as individual "digital natives" are culturally conditioned to navigate the digital world easily, so too are "digitally native" companies culturally conditioned to benefit from opportunities arising in the digital economy. The digital economy favors companies that are decisive, innovative, and fast growing. Companies like Hubspot, Netflix, Google and Amazon, for example, have thrived precisely because they have cultivated cultures to fit the dynamic environments in which they operate.

Because digital technologies and applications are becoming pervasive across industries, all organizations need to adapt to the digital economy. Their effective adaptation to this faster moving, more connected environment will require shifting their cultures as well as their strategies and operations.

Organizational culture is a system of shared assumptions, attitudes, values and beliefs which governs how people behave in organizations.

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INSIGHTS INTO THE CULTURES OF HIGH-PERFORMING DIGITAL ORGANIZATIONS

Our study¹ of successful digital firms reveals cultures that support organizational performance in a data-intensive, highly-connected and fast-changing environment.

It is common to think of cultures in terms of their more visible artifacts like buildings, offices and facilities, style of dress and recognizable logos. For instance, much attention focuses on the fancy corporate office complexes, bright, colorful and open workspaces, free personal services, upscale cafeteria food and casual jeans-and-hoodie uniforms. Although these visible organizational features may make life more comfortable for employees, they are not the source of new ways of working or higher levels of performance. More important are the organization's underlying values, which may be manifest through these visible markers. Values lie at the root of distinct practices that, in turn, influence performance.

We analyzed cultural accounts of both high-performing digital firms and high-performing digital units of traditional firms. We characterize a "digital" culture in terms of values and prominent behavioral practices (values-in-practice). Our analysis uncovered a small set of common values, which collectively shape subsequent choices and practices throughout these organizations.

These successful organizations all place high value on:



They value having big aspirations to change the world, one customer at a time, and using technology to get there.

SPEED

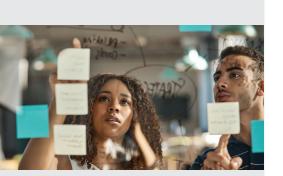
They value an action orientation, preferring to move fast and iterate rather than waiting to have all the data or all the answers before acting.

OPENNESS

They value open and broad engagement with diverse sources of information, rather than being secretive or selective in seeking and sharing information.

AUTONOMY

They value having high levels of discretion to engage flexibly in productive and experimental activities, more than relying on controls and formally structured coordination.



Impact: Through customer intimacy AND immense scalability

Valuing impact means having big aspirations to change the world by reaching and responding effectively to millions of customers. Value for impact is reflected in two complementary values:

1. Customer Responsiveness

2. Scalable Design

Firms like Amazon and Hubspot use language like "obsessing" over customers, demonstrating how intensely they value customer responsiveness and service. Amazon talks about being "the earth's most customer-centric company." Many digital firms put huge effort into analyzing the behavioral patterns of customers to better understand their individual needs and market to them more intimately. At the same time, high-performing digital firms value the ability to scale this level of intimate service to millions of customers.

In the past, companies typically had to choose between scale and intimacy. Operations might have varied on the spectrum between job-shop and batch processing, delivering relationship-based customization or consistency at speed but rarely both. It was almost impossible to offer high customization at both high speed and large scale. But this trade-off need not persist in the presence of a digitized, real-time and connected data foundation and with the application of artificial intelligence and automation. In valuing both customer intimacy and scalable design, high-performing digital firms develop practices that position them to achieve and sustain a huge impact in the world. Recognizing the immense scalability of digital solutions, they typically focus on creating social impact and assume profit will follow.

This pair of values draws attention to the complementarity of designing for scale and being able to deliver with sensitivity to 'a market of one' in the digital world.

Speed: Act fast AND iterate to improve

A value for speed means valuing an action orientation, preferring to move fast and iterate rather than waiting to have all the data or all the answers before acting. Value for speed is reflected in two related value choices:

1. Speed over Perfection

2. Improvement over Success

High-performing digital firms have a strong action orientation, preferring to decide or act quickly, even in the absence of complete information. In dynamic environments, perfection is not an option; there will always be uncertainties making it impossible to know exactly what will happen or what will be the best action. On the contrary, taking some initial action can generate new insight to





help guide future action. For example, firms like Uber, AirBnB and Amazon moved rapidly into different markets and regions. These proactive moves triggered responses from regulators and communities as well as consumers, but the new information helped these companies adapt and fine-tune their offerings.

By necessity, choices of action often produce incomplete or temporary solutions, and a tendency to "rest on one's laurels" can undermine the ongoing learning through necessary action. High-performing digital firms value rapid, repeated improvements more than success — because even clear successes can be temporary in dynamic environments.

These dual value choices focus attention on rapid execution and ongoing learning as essential and complementary capabilities in the digital world.

Openness: Learning from machines AND humans

Valuing open and broad engagement with diverse sources of information shows in two seemingly opposite but complementary choices:

Data over Intuition

2. Talent over Title

High-performing digital firms increasingly value data and its analysis over the intuition and experience of even senior managers. The emphasis on data and analytics is unsurprising. Digital businesses capture immense amounts of data about customers, operations and products, and robust analysis of this data can help to identify novel insights, improve decision-making, predict longer-term outcomes and guide future actions. Also, in certain domains, relying on past experience may no longer be appropriate, because exponentially improving technologies are driving novel and complex relationships between events and outcomes.

At the same time, high-performing digital firms place huge value on having the right talent to advance their innovation goals. They recruit aggressively and are selective in their hiring, but also value key skills and expertise regardless of role, title or formal affiliation. Their rich digital resources augment human skills, enabling individuals to access information, follow conversations, discover needs and contribute specialized knowledge to issues — independently of their location or discipline. When firms value openness and sharing rather than secrecy, they work at integrating diverse sets of specialized knowledge and perspectives, and benefit more from the collective power of their human capital.

With this combination of values, high-performing digital firms get the best of both worlds. They become skilled at using analytics and automation in situations where data is abundant and skilled at cross-boundary collaboration in novel situations that are (still) beyond the power of machine learning and automation.

Autonomy: Independent authority AND transparent accountability

A value for autonomy means valuing the independent actions of individuals while holding them accountable for those actions. In the digital context, value for autonomy links two ideas:

1. Independent Authority

2. Transparent Accountability

High-performing digital companies typically allow their employees great latitude in their work, because the ability to engage flexibly in productive and experimental activities is a major advantage in an environment where speed is important. Delegating authority and high levels of discretion are also consistent with showing value for individuals' unique expertise and skills. In these firms, individuals might choose what to work on and with whom. They might self-select into team projects, make major decisions independently of bosses, or work flexible hours and locations. Extensive digital resources support flexible but productive engagement without the need for formal controls and formally structured coordination.

But digital resources both enable more autonomy and reveal the results of that autonomy. Digital firms already have unprecedented visibility into digitized operations that they can monitor and analyze in real-time. Complete transparency of individual decisions and actions becomes inevitable when outcomes can be traced back to the actions or interventions of a specific individual. It is hard to hide or hide from digital results. Accordingly, many high-performing digital firms choose to value rather than avoid accountability. Instead of managing performance through bureaucratic reviews a few times a year, they adopt the ongoing use of transparent goals and performance metrics at all levels of organization. The consequences can sometimes seem harsh to outsiders, but clear expectations and explicit consequences and benefits can guide insiders to do their most effective work.

This combination of values draws attention to how high-performing digital firms attract and retain highly engaged and self-directed workers who are motivated to achieve the results to which they commit themselves.



Just as a "safety culture" raises an organization's chance of succeeding in an inherently dangerous environment, this "digital culture" positions an organization to thrive in a context of multiple rapidly advancing and interconnected digital technologies.

The values described above are collectively evident in a set of digitally enabled practices, which are regularly and frequently present in high-performing digital firms. These practices include:

- **Rapid experimenting:** Constantly and systematically (e.g. A/B testing) experimenting, learning from the results, and quickly applying new insight.
- **Self-organizing:** Quickly coordinating and collaborating without formal frameworks or structures. fluidly across functional, geographic, and organizational boundaries to solve complex problems and get things done.
- **Driving actions and decisions with data:** Collecting and using accurate data to make decisions, solve problems and design solutions that can scale rapidly and economically.
- **Obsessing over customers:** Intensively focusing on and quickly addressing the stated and unstated needs of both current and potential customers.

Focusing on results: Being accountable for achieving goals and continually striving for measurable results that really make a difference to customers. Our research shows that these practices reinforce one another, creating a unified culture that is an effective expression of the four key digital values. This cultural system of interrelated values and digitally enabled practices is effective in a fast-moving, connected world, because it supports generation of new information, rapid learning, clear feedback and follow-up action through both machine-driven and people-powered avenues. Just as a "safety culture" raises an organization's chance of succeeding in an inherently dangerous environment, this "digital culture" positions an organization to thrive in a context of multiple rapidly advancing and interconnected digital technologies.

SUMMARY: I FARNING FROM A DIGITAL CULTURE

Most organizations face the demands of a ubiquitous digital environment. Many are finding that previously performance-enhancing behaviors are less effective or even downright detrimental in their new environments. They need to adapt their strategies and operations, and develop new capabilities to perform in this new environment. Most importantly, they also need to adapt their cultures to a new environment

In this effort, leaders of traditional organizations can learn from the cultural example of high-performing digital organizations. Some take-aways:

- Culture is a system of values and practices that work together to focus
 collective attention and effort, supporting organizational performance
 in the chosen environment.
- Successful digital firms share a set of values and practices that are well suited to the digital economy.
- Characterizing a "digital culture" in terms of its essential values and practices offers a concrete way to think about an organization's culture.

- Traditional organizations can try to cultivate "digital" values and practices intentionally. Cultural change is not easy but it is possible.
- Cultural change requires a systemic approach and comprehensive effort. Changing culture involves explicitly (re)defining what values are important and promoting different practices.
- Espousing the right values is not enough to influence organizational performance. Those values must be enacted in practice to have real impact. Leaders need to "walk the talk."

About the Author



Dr. Deborah Soule conducts research on the interaction between technology and organizations, with particular attention to the dynamics of learning, collaboration and change. She has over 15 years of experience leading research and development projects in both industrial and academic settings, including MIT and Harvard, plus ten years of client-facing responsibility as an organizational and technical subject matter expert. Earlier in her career, she worked on product development programs for a large chemical company in Europe.

¹ This white paper draws from research conducted at MIT with George Westerman, Principal Research Scientist at MIT. We have studied the organizational aspects of digital transformation for over five years. To understand the cultural challenges and opportunities associated with success in a digital age, we first aimed to characterize a "digital" culture, one that is well adapted to a highly connected, fast-moving digital world. We used a qualitative approach, interviewing successful digital companies about their core values and typical practices. We also interviewed digitally transformed units of traditional companies, asking about their values and practices that were most different from their parent organization. In addition, we studied public accounts of well-known digital firms for insights about their cultural values and practices. Our analysis of these narrative sources highlighted a common set of values and the set of digitally enabled practices that reflected these values (i.e. values-in-practice). The interviews and narratives revealed how these values and values-in-practice interact to support high performance even in a constantly shifting environment.

Findings from our research have also been published in: *Building Digital-Ready Culture in Traditional Organizations*. George Westerman, Deborah L. Soule and Anand Eswaran Sloan Management Review Vol. 60, No. 4, Summer 2019.

https://sloan review.mit.edu/article/building-digital-ready-culture-in-traditional-organizations/.



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