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Michael J. Arena, Andras Vicsek, John Golden, and Scott Hines use a network lens to illuminate their preliminary research on cultivating culture across a physical environment, an entirely remote environment, and a hybrid work model.

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hen the pandemic forced companies into remote work, we were surprised that many maintained, or even improved, their productivity. When we combined this result with employee flexibility, greater access to diverse labor, and potentially lower operating costs, the future of work began to look like a hybrid model.

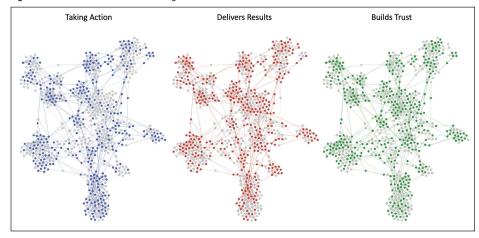
At the same time, many leaders became increasingly concerned about the toll remote work would have on their company's culture. We know that culture is a major factor in a company's long-term success. Indeed, for many organizations, culture is the magic of how they operate. Leaders now face a core question: how in the world can they cultivate their culture in a hybrid context? While we are still in the early days of exploring this question, emerging research can provide us with some direction.

Behaviors Cluster within the Organizational Network

Executives often base culture change initiatives on the erroneous belief that behaviors are monolithic. Many of us have been taught that leaders push organizational culture down from the top through rigorous change programs, and that those changes are adopted uniformly throughout the organization. This is rarely the case. Cultural behaviors tend to cluster in discrete pockets within the organization, in accordance with the needs and interactions of a given group.

Consider a division of one Fortune 100 organization consisting of 690 employees divided into various teams (see figure 1). Each year, the company's leaders assess all the employees in terms of ten cultural attributes. They then record the top three rated attributes of each worker as their behavioral strengths. When we map out the three most prominent behavioral strengths, treating each employee as a node in the

Figure 1. Most Prominent Behavioral Strength.



network, we discover distinct pockets of nodes in each color, marking clusters of these behaviors. For example, you can see clear clusters of the behavior "delivers results" (blue nodes) in the diagram on the left. In other words, employees who deliver results tend to be connected with other employees who do the same. The same is true for employees who tend to take action (red nodes) and for those who build trust. People are far more likely to adopt the behaviors of their network neighbors. In fact, our research suggests that, year over year, individuals in the network are three times more likely to absorb a behavioral strength from their closest peers than by chance.

One of the most consistent findings in network analysis is that through repeated interaction, employees tend to become more like each other. As they develop the strong bonds of close working relationships, people begin to hold more closely aligned cultural beliefs, and those beliefs reinforce behaviors reciprocally.³

The following scenario demonstrates why this pattern is unsurprising: You reach out to a close colleague to check in with them on the progress of a project. Your colleague tells you that she just left a one-on-one meeting with her boss in which she was berated for not

checking in with him before proposing a solution to the whole team. Your colleague is enraged and, in the meeting, was so stunned by his attack that she was speechless. In her conversation with you, though, she expresses her anger, "how dare he?" and "why would he?" Not knowing the whole story, you choose to simply listen and respond sympathetically. Nonetheless, by the end of this ten-minute interaction, you notice yourself feeling emotionally distraught - you have moved from sympathy to empathy. People experience this shift every day. Our colleagues dramatically affect our emotions and, with them, our behaviors. Behaviors, therefore, flow through a network, from person to person.

Behaviors flow through a network, from person to person.

What may be surprising is that this effect was stronger in fully remote working conditions than in the same company's traditional office environment before the pandemic. In fact, we found that the likelihood of employees transmitting behaviors from one to the next was 3 to 15 percent greater in a fully remote environment than

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in a traditional office. The more prominent a given behavior was, the higher it fell in this transmission range. One possible explanation for this effect is that, when the organization shifted to fully remote work, the number of interactions between members of a given team increased by 17 percent. With each employee interacting more with their network neighbors, their chances of absorbing behaviors also increased.

In parallel with this increase in interactions inside each team. however, we also saw declines in interactions along the bridging connections, which promote idea sharing between teams. These bridging connections, which are essential to stoking innovation and avoiding stagnation, dropped between 25 and 30 percent in fully remote conditions. As a result, the transmission of behaviors between teams dropped. Because the vast majority of workplace interactions are within a given team, the broader effect of this reduction is minimal. Nonetheless, its long-term consequences could be significant. Over time, reinforcement within teams and the diminishing transmission between groups could fortify subcultures throughout the organization.

The transition of many companies to a truly hybrid work model, however, should mitigate this concern. As employees return to the office, at least part of the time, they begin to reestablish bridging connections, which should improve the transmission and reinforcement of behavioral strengths. So even this preliminary research should ease the concern that many leaders feel in regard to the deterioration of their company's core culture under the influence of hybrid work.

But one question remains: how can leaders cultivate less prominent, or secondary, behaviors in remote and hybrid workers? Our research suggests this task requires a much more thoughtful approach.

The Power of Exemplars and Influencers

While the most prominent behaviors appear in strong clusters in the network, less prominent desired behaviors are less likely to do so. When an organization's leaders advocate a new behavior, very few people are likely to have mastered it, which means that not many can model it. These secondary behaviors are still transmitted through local interactions. Yet with fewer people modeling these behaviors. there is less opportunity for them to cluster, especially given that they compete with more prominent behaviors for interaction time.

So, in order to intentionally spread new, secondary behaviors, we need to find employees who already demonstrate the desired behavior. By connecting these exemplars with the true influencers in the network, we can leverage the inherent power of these employees to encourage these behaviors, creating a desire to adopt them among their colleagues. This combination will spread the desired behaviors more rapidly, helping our cultural initiative to succeed.

Finding the exemplars of a given behavior is not so difficult; we simply need to consider which employees best model that behavior or. better still, present the question to our employees. Managers tend to select those who are most visible and active in their own limited orbit, workers they know and trust. They often miss the people in their team who support others, are widely trusted, but who have a tactful or subtle approach. In our experience, a top-down approach tends to miss nearly 50 percent of exemplars. Colleagues or peers, by contrast, can often identify them all.

You may find it more challenging to locate your biggest influencers. Influencers are the most connected and recognized employees, uniquely positioned to affect those around them. Their colleagues go to them for advice, feedback, inspiration, and meaningful discussions on a weekly or even daily basis. Making use of the influence and respect these employees command among their peers will help you to build trust, alignment, engagement, and support from your entire workforce, allowing you to more easily spread new behaviors.

Influencers do not necessarily have the most connections, but they are connected to other highly influential people. Imagine that there is only one person in the organization who reaches out to you before making an important decision. Your role might seem insignificant. But what if that one person is a very highly regarded vice president? Through that one connection you are wielding significant influence in the organization.

So, if we want to understand how to spread less prominent behaviors through an organization, we need to find a way to measure the influence of individual employees. One of the best ways to quantify social influence is through the algorithm Google uses to determine which websites are the most important, assigning a PageRank.

Cultivating Culture through the Network

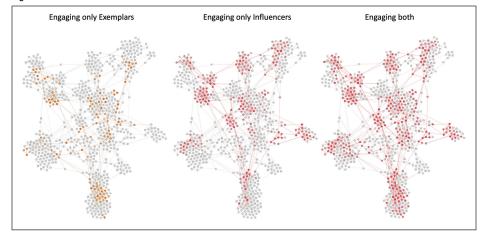
By recruiting both exemplars and influencers to promote less prominent desired behaviors, we can far more efficiently cultivate our intended organizational culture. These workers are ideally positioned to spread new behaviors throughout their networks. The first diagram on the left side of figure 2 shows the year-over-year transmission effects of the thirty most successful behavior exemplars. These are the few people who exhibited the desired behavior as one of their top three strengths. While they have achieved modest success in spreading the new behavior, it will clearly take years for them to gain significant traction.

The center diagram shows the transmission impact of the top thirty influencers (as determined by the PageRank algorithm). They have more success, as you can see from the more substantial clustering across the network. However, while these influencers are broadly trusted and can spread their influence across the network, using them alone presumes that they can quickly learn and model the new behavior. The risk is that they might model an unintentionally altered version of the behavior.

We saw a demonstration of this risk in a consumer goods organization that was trying to improve diversity and inclusion. The organization's leaders decided to advocate a new behavior which they termed "seeking broader perspectives." Their purpose was to ensure that their decisions were informed by a diversity of views. The exemplars were quite graceful in inviting comment. In a meeting, they might ask "are there any other perspectives" to open up the dialogue. Or, they might pull a particular colleague into a conversation by saying, "Jenny, you expressed a very interesting perspective in our conversation the other day, would you mind sharing it with the group?" Even with the best intentions, an influencer might be less tactful. In the consumer goods group, people trying to achieve the goal started asking questions like, "what would our more diverse people think about that?" As you can imagine, this clumsy approach created uneasiness in the room, particularly among employees who already felt marginalized.

A better method, both for transmission rate year-over-year and for modeling the nuances of the new behavior, is to engage both exemplars and influencers in cultivating the culture, creating a multiply-

Figure 2. Less Prominent Behaviors



ing effect. In the diagram on the right side of figure 2, the combined power of exemplars and influencers improves transmission nearly fourfold year-over-year while also preserving the essence of the new behavior. As employees emulate the behavior being modeled by exemplars, the company reaches a tipping point, creating a new set of self-sustaining cultural norms.

Our research demonstrated that, in remote and hybrid work modes, this level of intentionality is critical. While we found that, among remote workers, it was easy to sustain the momentum of prominent behaviors, encouraging secondary or new behaviors presented managers with a greater challenge. The diagram on the left side of figure 2 reveals several pockets of workers who have no access to the exemplars. Without ongoing exposure to the desired behavior, these teams have no local reinforcement. This separation is exacerbated by the dwindling of bridging connections, creating cultural black holes in the network. In this situation, the reach of influencers is indispensable.

Mobilizing for Cultural Change

Managers who intend to change an organization's culture across all three work modes must understand the natural interplay between culture and network dynamics. Spreading the new behavior requires guidance from the organization's leaders, excellence from its exemplars, and the reach of its influencers.

A small European telecom company used this approach after becoming a subsidiary of a larger organization before the pandemic. The larger organization was well known for its strong emphasis on performance, while the subsidiary was justly proud of its agility. Its leaders knew their company had to shift, but they also wanted to preserve its cultural roots. They launched an initiative aimed at refining the company's cultural values while preserving transparency and ensuring that employees and managers continued to have access to one another.

The organization's leaders knew they would need to engage key employees, so they conducted a broad analysis of its network, using the PageRank metric, to identify more than 200 influencers. From this group, they used information gathered from other employees to select exemplars capable of modeling the desired behaviors. The chosen forty-five employees were asked to help mobilize the cultural shift. These *mobilizers*, who were both influencers and exemplars, were

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instructed to model the desired behaviors, spread stories that represented the new values of the organization, and support their colleagues through the uncertainties that arose in the wake of the acquisition.

Managers launched these mobilizers with a two-day kickoff during a company retreat. During the kickoff, they discussed the mobilizers influence, including the aim that others would copy their behavior and turn to them for guidance during the changes. They established working routines for the mobilizers and communication channels with them. including formal meetings once a month and a continuous dialogue that would ensure transparency. After the event, the mobilizers shared personal stories involving the desired behaviors with colleagues, asking them to share their own stories and providing valuable feedback about what was and wasn't working well.

When the pandemic hit, the mobilizers' role changed. As trusted partners of the top managers, with extensive reach throughout the organization's various pockets, they were were in a position to assess and share the concerns of their colleagues. Their insight was essential as the organization quickly pivoted to an efficient work-fromhome model. They helped to set up new ways of working and to manage the well-being of their colleagues. Mobilizers collected unused laptops and redistributed them to workers whose home computers were insufficient. They set up online wellness programs to support the physical and mental health of their colleagues during the lockdown.

As the pandemic eased, the mobilizers stepped into another gap, helping the company transition to hybrid work. They contributed to a series of workshops to design a hybrid work environment that would allow their fellow employees to be productive, engaged, and

connected. By representing their colleagues' perspectives, the mobilizers helped the organization's leaders to make critical decisions about new ways of working, discussing the ideal number of in-office days, the new norms for meeting tools and policies, and ways to redesign the office space. They set an example of best etiquette in virtual meetings, turning their cameras on during all calls and discouraging colleagues from scheduling meetings on Fridays.

Their effectiveness was quite evident. Not only did the subsidiary's team swiftly change the organization's culture, they did so in the midst of the largest work disruption in a generation. One of the primary metrics used to evaluate progress is the Employee Net Promoter Score (eNPS), which measures how willing employees are to recommend their organization as a good place to work. After the acquisition, the subsidiary's eNPS dropped to 32 percent. After its leaders engaged the mobilizers to cultivate its new culture, its eNPS nearly doubled, to 56 percent. After the company's response to the pandemic, its eNPS reached 75 percent, its highest score ever. A survey found that more than 70 percent of employees were satisfied with their new ways of working.

By engaging mobilizers who are both local influencers and behavior exemplars, we can generate a multiplying effect in cultivating organizational culture. Using such a strategy is essential in a hybrid context in which bridging connections are limited.

Culture is more emotional than rational.

Fostering Positive Energy

Our research on transmitting less prominent behaviors also revealed that the sentiment of individual groups can amplify or dampen the transmission of new behaviors. Traditional approaches to culture change often assume that the process is rational, that leaders will communicate a vision with compelling logic and employees will be persuaded to commit to new ways of working. We found that, on the contrary, culture is often more emotional than rational. Two employees are much more likely to share a behavioral strength if their connection is energizing, emotionally engaging, and strong.

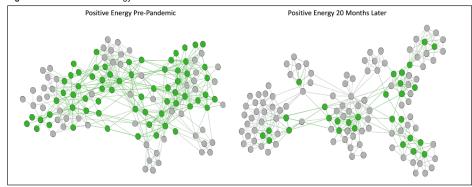
So, within the network, behaviors spread more rapidly through clusters with positive emotion than through those with neutral or negative emotions. Our analysis found that positive energy explained more than 40 percent of the variation in whether employees absorbed the new, secondary cultural behaviors. During energizing interactions, people listened more, offered more encouragement, and willingly explored new possibilities.4 When employees have a lot of these high energy interactions, entire segments of the network buzz. By embracing the power of these high energy pockets, organizational leaders can significantly increase the transmission and adoption of the desired behavior. High energy is a super catalyst for positive culture.

Low energy pockets, conversely, dampen the spread of desired behaviors. The negative emotions, such as fear or resentment, that characterize these low energy pockets stifle the sharing process. People who are feeling negative frequently criticize new perspectives and oppose the views of others, actively shutting down new ideas.5 In one case, we found that when a new employee joined a negative team, their ability to transmit a desired behavior declined significantly, becoming three times lower in the first twelve months than that of those who joined a positive team. This result makes sense; just think about a time when you were part of a team that was overly critical. Chances are you became much more cautious about what you were willing to share or advocate. The same is true with regard to behavior. We are far more likely to settle into existing group norms with low energy teams.

Our study of the three different work modes showed exactly this result. High energy pockets catalyzed the adoption of new cultural behaviors, especially when those behaviors were introduced by trusted influencers and modeled by exemplars. Low energy pockets dampened the spread of these behaviors across the network. And of all our findings, these pockets of low energy were the condition most affected by changes in work mode. Energy levels in the network tended to be high in the physical, in-person environment. After working remotely for nearly two years, employees showed a noticeable decline in positive energy, which dampened the transmission of desired behaviors, especially those that relied upon new or secondary strengths. Figure 3 illustrates this effect. The network graph on the left represents one department of a Fortune 100 company with just over 120 employees, working in person in a physical office before the pandemic. Nearly 55 percent of employees (green nodes) provided strong positive energy to their network neighbors. This environment was conducive to spreading both prominent and secondary behaviors. Only in the few lower energy pockets (grey nodes) on the edge of the network was transmitting desired behaviors more challenging.

The graphic on the right represents the same organization after twenty months of remote work. Two changes jump out: the network has spread out as bridging connections eroded and only 23 percent of the employees are now providing strong

Figure 3. Shift of Positive Energy across Work Modes



positive energy. These changes dampened the transmission of secondary behaviors, especially in the low energy segments of the network (pockets of gray nodes). Leaders who are trying to shift the cultural behaviors of remote workers should be aware of this problematic effect.

The good news is that you can restore both energy and bridging connections, especially when shifting toward a hybrid model. A large consumer products organization conducted a comprehensive analysis of its network and found that remote work had eroded its bridging connections and decreased network energy. As the company's leaders transitioned to a hybrid model, they also turned their attention towards solving these issues. They launched a series of in-person events and interventions intended to restore bridging connections between their teams. They also devised a reengagement strategy to rebuild their employees' sense of owning the company's purpose, which included providing critical resources to underserved populations. These leaders knew that they first needed to reconnect employees with one another and then reconnect them to the company's broader vision. Through this deliberate action, they increased connections by 37 percent and positive energy by 20 percent. Had they left the matter to chance, in a remote environment, the positive employee

energy which remained would very likely have dissipated entirely. Fortunately, great leadership can reverse these patterns.

Because connections are more fragile in hybrid workplaces, it is increasingly important that managers understand the network dynamics of company culture.

Cultivating Culture in a Hybrid Model

While many leaders continue to be anxious about cultivating their organization's culture in a hybrid model, we hope our preliminary research sheds light on some remedies. Because connections are more fragile in hybrid workplaces, it is increasingly important that managers understand the network dynamics of company culture. By grasping how behaviors cluster in the network, how they spread from person to person, and how the energy of employees amplifies or dampens these effects, we are all better able to intentionally cultivate culture.

We also need to know how these effects function in the various work modes. Understanding that remote work erodes bridging connections and dissipates positive energy helps us to adopt an effective approach. Our research illuminates potential areas of concern for managers of remote operations, and for those trying to propagate secondary behaviors in a remote or hybrid context.

Our research also suggests solutions. By taking a network approach to cultivating culture in different work modes, we can more precisely evaluate and target interventions. We become alert to the need to restore

bridging connections between teams, to tap into the natural power of influencers, to engage exemplars to model behaviors, and to reengage the hearts and minds of our employees, generating positive energy.

Author Bios



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