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PEOPLE

The Hidden Benefits of Keeping Teams Intact

Most managers underestimate the power of familiarity. Use it to drive performance.

by Robert Huckman and Bradley Staats

A few years ago one of us met an orthopedic surgeon with a reputation as the Henry Ford of knee replacements. Most surgeons take one to two hours to replace a knee, but this doctor routinely completes the procedure in 20 minutes. In a typical year he performs more than 550 knee replacements—2.5 times as many as the second-most-productive surgeon at his hospital—and has better outcomes and fewer complications than many colleagues. During his 30-year career he has implemented dozens of techniques to improve his efficiency. For instance, he uses just one brand of prosthetic knee, and he opts for epidurals rather than general anesthesia. But another factor contributes to his speed: Although most surgeons work with an ever-changing cast of nurses and anesthesiologists, he has arranged to have two dedicated teams, one in each of two adjoining operating rooms; they include nurses who have worked alongside him for 18 years. He says that few of the methods he has pioneered would be practical if not for the easy familiarity of working with the same people every day.

Managers understand intuitively that team familiarity—the amount of experience individuals have working with one another—can influence how a group performs. But over the past seven years we've examined teams in corporate, health care, military, and consulting settings to un-

derstand team familiarity and quantify its benefits, and we've found that it is a much more profound phenomenon than most managers believe. They could and should be leveraging it to a far greater extent, especially in an era when teams are constantly forming, disbanding, and regrouping.

To do so they will need to overcome several barriers. Few organizations have integrated systems that track how frequently employees have worked together. Many managers put too much faith in shuffling rosters to prevent staleness and ensure fresh thinking. And realities such as cost pressures, developmental needs, travel limitations, and office politics often make familiarity hard to achieve. But organizations will benefit if leaders learn to surmount those barriers.

Take Advantage of the Learning Curve

We aren't the first to investigate the importance of team familiarity. Prior research by academics such as the Harvard psychology professor Richard Hackman, who studied the performance of flight crews, has established that teams, like individuals, experience a learning curve. They generally do better as their members become familiar with one another. Other researchers have looked at how the performance of pro basketball teams varies according to how long players have been together. (See the sidebar "Stranger Danger.") In our work we have tried to better understand the degree to which performance improves with team familiarity, particularly in project-based environments in which so-called fluid teams frequently form and re-form.

In a study conducted with the University of Oxford professor David Upton at the Bangalore-based software services firm Wipro, we examined 1,004 development projects involving 11,376 employees, using detailed personnel records to determine which employees had worked together before and to what extent. Then we looked at how well teams did, using criteria such as the number of defects in the software each team produced and the groups' adherence to deadlines and budgets. Rather than regard team familiarity as an all-or-nothing proposition, we constructed a continuous measure, counting the number of times team members had worked with one another over the previous three years and scaling the results according to the number of people on the team. We found that when familiarity increased by 50%, defects decreased by 19%, and deviations from budget decreased by 30%. We also found that familiarity was a better predictor of performance than the individual experience of team members or project managers.

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diverse experience among their members and found that although such diversity was generally associated with lower performance, teams with high degrees of familiarity were able to use it to improve. A third study one of us conducted with audit and consulting teams (in collaboration with Heidi Gardner and Francesca Gino, both of Harvard Business School) found a 10% improvement in performance, as judged by clients, when teams had members with a high degree of familiarity.

Why does team familiarity have such an outsize effect? Our research suggests that five factors are primarily responsible.

Coordinating activities. Teams made up of diverse specialists are infamous for their inability to get things done. Despite the best-laid plans of the managers who assemble such teams, the differences among members frequently lead to poor communication, conflict, and confusion. Members new to one another simply don't understand when and how to communicate. Some groups never master this; and even in groups that do, the process takes time, slowing progress toward team goals. Familiarity can help a group overcome this obstacle: Once a team has learned when and how to communicate on one project, it can carry those skills over to the next.

Learning where knowledge lies. Research shows that many teams struggle to tap the knowledge each individual brings to the task, because their members don't know who has what information. Unearthing this knowledge can take time and effort; the more frequently the same individuals work together, the better an organization amortizes this investment.

Responding to change. Teams are increasingly asked to pivot mid-project because of competitive pressures or shifts in customer preferences. This creates stress and requires flexibility. Team familiarity provides a common platform from which the group can work to meet such new demands.

Integrating knowledge in order to innovate. Innovative solutions typically

STRANGER DANGER

Business isn't the only arena in which team familiarity improves performance. Research has shown that it's effective in other spheres as well.

DEFENSE
Leaders try to keep Special Ops teams, such as Navy Seals, intact. Over the past decade commanders of other units have also increased team familiarity, to better deal with dynamic environments such as Afghanistan.

SPORTS
A study of pro basketball teams found that familiarity reduced bad passes—but teams with too much familiarity committed more errors, perhaps because their opponents could predict their moves.

AVIATION
Research shows that 73% of commercial aviation incidents occur on a crew's first day of flying together. And a NASA study found that fatigued but familiar crews make about half as many errors as rested but unfamiliar ones.

SURGERY
A study of surgeons who worked at multiple hospitals found that their performance varied from facility to facility—perhaps because of their varying levels of familiarity with the OR teams at different locations.

come from new combinations of existing knowledge. For this to occur within a team, members must not only impart specific pieces of knowledge to one another but also integrate those isolated pieces of information. Because familiarity helps team members share information and communicate effectively, it makes them more likely to integrate knowledge and come up with a coherent, innovative solution.

Capturing value. Organizations build competitive advantage when they create capabilities their competitors cannot replicate. Familiar teams are a key source of such advantage, because a competitor can't replicate an entire team's capabilities by hiring away an individual member. Each team member's performance is dependent on that of the others.

Create Better Teams

One of the benefits of using team familiarity as a tool is that implementation is relatively straightforward. The first step is to gain awareness. Managers should keep in mind the advantages of allowing individuals to work together frequently and make team assignments accordingly. If this sounds like a limiting factor, remember that a familiar team does not necessarily mean a dedicated team—one whose members rarely change, like the teams the superproductive knee surgeon had. A team with some degree of familiarity is better than a team with none. A little bit can go a long way.

We believe that many organizations should go beyond this first step and systematically measure and report on the prior experience individuals have working with one another. Organizations already use sophisticated IT systems to record employees' work histories and performance; in many cases, tracking familiarity would mean simply adding information to an existing system. Leading consulting firms, for instance, track what industries, customers, and types of projects each consultant has worked with. They should add familiarity—how many times specific combinations of workers have been on projects together—to the dimensions of experience they monitor.

The final step is to begin formally managing around the metric of team familiarity. This does not mean that the most-familiar team members should always be assigned to work together. It means realizing that because familiar teams perform better over the long term, it's in the organization's interest to cultivate familiarity. (For many managers, it also means learning to overcome the instinctive desire to shake things up.) That realization might lead a manager to place two less familiar workers on the same team—the experience they gain with each other will pay off in future projects. It might mean accepting the travel costs of including a far-flung employee. It might mean considering the benefits of team familiarity when deciding whether to try to retain a worker who's considering an outside job offer. It might also mean giving

a key new executive wide latitude to hire former colleagues to join her on an important project.

Many questions about team familiarity remain. For instance, much of the existing research has focused on teams engaged in fairly routinized (albeit sophisticated) tasks, such as surgery, auditing, and piloting an aircraft. Team familiarity may not drive performance in more-innovative work—the kind done by the creative employees in an advertising agency or by the R&D group at a consumer products company. Indeed, although research has shown that familiarity can create the trust thought to be crucial for activities such as brainstorming, it may be that this benefit is trumped by the fresh perspectives that come from adding new voices to creative tasks. We also don't know much about how returns from team familiarity might change over time: Existing research suggests that in some contexts, people who work together *too* long become stale and see their performance drop.

What we do know is that in many cases, people who have collaborated before will work better together than people who haven't—and that most organizations could do a far better job of exploiting this simple but powerful insight. ▽

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