Teams Have Changed: Catching Up to the Future

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Although global trends are changing the face of teams, the focal article (Tannenbaum, Mathieu, Salas, & Cohen, 2012) remains anchored in the present and the past and barely acknowledges the future. It is clear that radical changes are ahead for teams, and unless we refocus on truly modern team phenomena, anticipate the future, and alter our theorizing and methods accordingly, we will never catch up. Although Tannenbaum

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et al. propose incremental next steps in the evolution of teams scholarship, we suggest something bolder: What if we were to leapfrog research questions that have barely caught up to the present and focus instead on teams of the future? Telecommunications provides a useful analogy. Rather than investing in infrastructure to extend wired telephone service to remote locations, many developing nations have moved directly to cellular technologies—leapfrogging a generation in telecom's ''natural'' evolution. We urge our colleagues who study teams to do likewise. Let's take the three areas the authors identify and imagine what it would look like to study modern team phenomena in ways that could inform practice rather than trail it.

Self-Governing Teams Instead of ''Empowerment''

Empowerment refers to an increase in the decision authority (in a hierarchical organization) of the people actually doing the work, which entails teams themselves controlling their own work processes, formerly the domain of managers. In Table 3 of the focal article, we see questions like ''What are the circumstances that derail team empowerment efforts?'' and ''How do organizations best handle threats to higher level leaders when team-based designs are adopted?'' Yes, there are still old-fashioned companies asking whether they should empower their workers, how, and how much—but these are twentieth-century questions. A number of the questions in Table 3 turned up in the discussion sections of articles published well before 2000, and some have already been addressed (see, e.g., Cohen & Ledford, 1994; Cohen, Ledford, & Spreitzer, 1996; Kirkman & Rosen, 1999; Wall, Kemp, Jackson, & Clegg, 1986). Rather than extrapolating from existing trends in old-fashioned organizations such as ''continuing to push authority and governance down the organizational hierarchy,'' let's envision the teams we may be seeing 20 years from now as a consequence of global trends.

Consider this: Greater individualism in career choices and the global spread of value pluralism mean that more people are crafting unique life and career paths for themselves in a quest to find personal meaning and autonomy. They are not joining traditional firms. Simultaneously, digitalization and globalization are exponentially increasing the chances that somewhere in the world they will find a handful of people who share precisely the same aims. In many such cases, they will form teams that hold authority over *everything* they do. Moreover, climate-related crises such as floods, wildfires, and epidemics are demanding cross-entity collaborations between people working for municipalities, nongovernmental organizations, and the private sector, all with critical leadership roles in the process. Such cases demand complex leadership teams with shared authority to govern their action.

Thus, rather than simply seeing more self-managed teams, we are seeing an explosion in *self-governing* teams that form themselves, determine their own purposes, composition, processes, and systems, and frequently work with other teams across organizational, geographic, and sectoral boundaries. These teams are not far in the future: One Internet-based organization that supports the formation of teams has seen the launch of more than 20,000 self-governing teams in the past few years.

Given these projected manifestations of team authority, a more useful set of questions might be: Under what conditions do self-governing teams make excellent collaborative decisions in line with a self-defined purpose? Under what conditions might such teams revert to hierarchies instead of maintaining collective self-governance, despite the negative consequences? Under what conditions can members sustain collective self-governance and create alignment across multiple teams? What are the critical challenges to self-formed and self-determining teams in developing their own capacity to learn?

Such phenomena require a different approach to research than merely adding

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a few more survey questions. Let's imagine ''modernizing'' the study by Kirkman and Rosen (1999), an empowerment study that proposed some of the questions posed in Table 3 of the focal article. The authors surveyed managers about team performance and organizational features and team members about their attitudes and behavior to predict experienced team empowerment. To tackle the questions in Table 3, we could redo Kirkman and Rosen's survey with minor modifications: Expand it to another organization, add a few questions about team learning to the team survey, and run the surveys more than once to address the ''waxing and waning'' of empowerment over time. Yet we would get no nearer to understanding the critical questions about, nor be any more relevant to the challenges of teams leading collectively and determining their own purposes than we were in 1999.

Instead, we need new ways of thinking about different antecedents (no external leaders, no organizational evaluation system, and no existing hierarchy or boundaries), processes (team self-formation and launch, interteam governance, multilevel learning, to name a few), and above all new ways of studying teams—outside organizational boundaries, up close and personal—to begin to get a handle on the future.

Dynamic Ecology of Technology Instead of ''Technology and Distance''

The authors rightly recognize that technology is advancing at dizzying speeds, resulting in more teams working across space, time, nationalities, cultures, and languages. They focus on understanding how these technologies shape team dynamics: for example, ''To what extent can telepresence or other technologies realize the benefits of direct face-to-face interactions in team settings, and what are their limitations?'' and ''What is the potential for social media to enhance team communications, identity, and cohesion?''

These questions have been around since the 1980s and have already informed management practice (see, e.g., Daft & Lengel, 1986; Hinds & Mortensen, 2005; Jarvenpaa & Leidner, 1999; Sproull & Kiesler, 1986; Straus & McGrath, 1994). Undoubtedly, managers and scholars who understand how a given technology affects team dynamics can better understand the processes of a team relying on that technology. However, this approach is increasingly out of sync with trends in teams' *actual adoption and use of technology*.

The speed of technological innovation means that the so-called cutting-edge technology remains cutting edge for shorter and shorter periods of time. By focusing on today's novel technologies, we condemn our scholarship to the same obsolescence as the technology. Technology must be regarded as a dynamic phenomenon rather than a stable entity.

Moreover, the utilization of technologies is increasingly variable across team members. Collocated versus virtual teams is an issue of the past. Members in the same office send each other e-mails; teammates working in field offices thousands of miles apart get together for face-to-face meetings. Not only do team members turn over but so do the technologies they choose to employ. Rather than waiting to be upgraded by corporate information technology, they embrace new technologies independently. App stores with inexpensive collaboration tools allow teams to adopt (or discard) technologies with ease. We cannot pinpoint the way that a team ''uses technology'' because a heterogeneous ecology of tools for team members is constantly evolving.

These changes require a shift in our perception of team technology and virtuality as emergent and dynamic processes. We might ask: What conditions allow teams to adapt effectively to technological shifts both among and between members? Rather than studying how a team utilizes a particular technology, let's cross levels and ask how particular configurations of individual members and subgroups shape a teams' ability to effectively adopt new

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technologies that are themselves heterogeneous and dynamic.

Similar to the case of self-governing teams, such pressing questions require a methodological shift that is more substantial than merely updating the technologies studied in earlier research. Take, for example, Straus and McGrath (1994), in which the authors compare the effectiveness of face-to-face and computer-mediated groups performing idea generation, intellective, or judgment tasks. It would be a simple task to rerun the same study using telepresence or remote monitoring. But how relevant would that knowledge be to a team in which different subsets of members use differing and changing combinations of these and other technologies to collaborate? Would that understanding help organizations cope with the realities of technological heterogeneity?

We need a richer, more contextualized, and more nuanced understanding of how individuals in teams work with differing permutations of multiple technologies. The focal article rightly suggests exploring what drives adoption behavior, but we need to situate that question in the context of heterogeneous teams, varied technologies, and strong path dependencies shaping team member choices. The complexity of these interdependencies underlines the importance of getting into the field and using interviews and observations of real teams to capture how these dynamics occur over time. We need a more bottom-up study of technology within organizations, approaching it as an emerging and evolving system that combines hardware, software, wetware, and the social systems in which they are embedded.

''Dynamic Composition'' Should Change How We Study Teams

Fluid team composition, members who belong to multiple teams simultaneously, and nontraditional forms (e.g., core-periphery teams) continue to create major challenges for teams. But is the research agenda the authors propose radical enough to capture the different implications of these phenomena?

Consider this: With increasingly dynamic team composition, members have little time to establish shared perspectives on the task, their context, or each other. Shared mental models, culture, identity, and values are even less likely when teams work across organizational boundaries. Questions in Table 1 of the focal article such as ''How are critical team states such as trust, identity, and shared cognition influenced by dynamic composition?'' continue to focus on the average, shared constructs within teams. Instead, let's assume that sharedness is at risk and be more ambitious in our theorizing about members' differing experiences and perceptions, like some recent papers examining members' disagreement about team efficacy (De Rue, Hollenbeck, Ilgen, & Feltz, 2010), trust (Dirks, forthcoming), and conflict (e.g., Jehn, Rispins, & Thatcher, 2010). Instead of scrapping data that exhibit low intermember agreement, ask what is really happening to produce low agreement and investigate where those varied perspectives come from and how they affect team processes and outcomes.

Understanding fluid composition requires longitudinal studies. Studies on teams with dynamic composition may reach the wrong conclusions unless data are captured at multiple points in time. For example, in stable teams, cohesion and positive affect increase team viability; but the stronger a group's bonds, the harder it may be for new members to break in, reducing longer term viability of the collaboration. Similarly, we know that strong transactive memory boosts performance for a stable group, but it may well undermine it when new members join. We need to study team performance over time, because strong performance at Time 1 may decrease the chances of high performance at Time 2.

Finally, let's understand the cross-level effects of dynamic composition for a team, its individual members, and their organization(s). When ''leavers'' take their knowledge with them and ''joiners'' bring

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new knowledge, it may undermine learning or capacity at one level but enhance it at another. Hence, we need to consider levels of analysis more explicitly in our studies, developing multilevel models to account for today's team phenomena.

Conclusion

This commentary was inspired by our experience over the past year in editing a special issue of the *Journal of Organizational Behavior*, dubbed ''The changing ecology of work teams'' (forthcoming, early 2012). Our call for papers invited research that considered the novel phenomena facing today's teams and studied them in new ways. But among the 40 manuscripts submitted was an avalanche of cross-sectional survey studies examining decades-old team phenomena. Although we are delighted that some truly cutting-edge research appears in that issue, we hope that the present commentary will inspire more scholars to take up the challenge of not just studying teams in the future, but teams *of* the future.

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